



RiverOak Strategic Partners

5.2- 22

**Environmental Statement
Volume 22: Transport
Assessment, Appendix F
(Junctions 21B to 27A)**

TR020002/ APP/ 5.2-22

Project Name:

Manston Airport Development Consent Order

Regulation:

Regulation 5(2)(q) of the Infrastructure Planning
(Applications: Prescribed Forms and Procedure)
Regulations 2009, as amended

Date:

July 2018



Volume 22 Contents

**Transport Assessment Appendix F - 2039 Validated Models
(Junctions 21Ab to 27a)**

Junctions 9

ARCADY 9 - Roundabout Module

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Filename: Jct 21A_R2_val.j9

Path: R:\Projects\38199 Manston Airport DCO EIA\4 Design\Transport\Junction Modelling\Base Models\Validated\Jct 21A_A256_Canterbury Rd\Revalidation & Mitigation

Report generation date: 08/02/2018 16:05:00

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- »Arcady Module - 2017 Baseline Traffic, PM
- »Arcady Module - 2017 Baseline Traffic, Airport Peak
- »Arcady Module - 2039 Growthed Traffic, AM
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- »Lane Analysis - 2039 B+Dev Net Change, PM
- »Lane Analysis - 2039 B+Dev Net Change, Airport Peak

Summary of junction performance

	AM					PM					Airport Peak				
	Queue (Veh)	Delay (min)	RFC	LOS	Network Residual Capacity	Queue (Veh)	Delay (min)	RFC	LOS	Network Residual Capacity	Queue (Veh)	Delay (min)	RFC	LOS	Network Residual Capacity
	Arcady Module - 2017 Baseline Traffic														
A - A256 Haine Road	2.0	0.11	0.67	A	40 %	5.0	0.22	0.84	B	12 %	1.3	0.08	0.58	A	63 %
B - A256 Canterbury Road	0.6	0.04	0.38	A	[A - A256 Haine Road]	0.9	0.04	0.47	A	[A - A256 Haine Road]	0.4	0.03	0.28	A	[A - A256 Haine Road]
C - Canterbury Road West	0.6	0.11	0.38	A		1.2	0.16	0.54	A		0.4	0.08	0.27	A	
	Arcady Module - 2039 Growthed Traffic														
A - A256 Haine Road	5.5	0.24	0.85	B	11 %	71.9	2.20	1.07	F	-11 %	3.5	0.17	0.78	B	21 %
B - A256 Canterbury Road	0.9	0.05	0.48	A	[A - A256 Haine Road]	1.4	0.06	0.59	A	[A - A256 Haine Road]	0.6	0.04	0.38	A	[A - A256 Haine Road]
C - Canterbury Road West	1.2	0.17	0.56	B		5.1	0.58	0.85	D		0.7	0.11	0.41	A	
	Arcady Module - 2039 + Dev Traffic														
A - A256 Haine Road	6.1	0.27	0.87	C	9 %	173.0	6.08	1.19	F	-20 %	4.1	0.19	0.81	B	17 %
B - A256 Canterbury Road	1.2	0.05	0.55	A	[A - A256 Haine Road]	1.5	0.06	0.60	A	[A - A256 Haine Road]	0.9	0.04	0.46	A	[A - A256 Haine Road]
C - Canterbury Road West	1.8	0.25	0.64	B		5.8	0.67	0.87	E		0.9	0.14	0.47	A	
	Arcady Module - 2039 B+Dev Net Change														
A - A256 Haine Road	3.4	0.16	0.78	A	17 %	108.4	3.32	1.12	F	-14 %	2.7	0.14	0.73	A	28 %
B - A256 Canterbury Road	1.0	0.05	0.51	A	[C - Canterbury Road West]	1.2	0.05	0.54	A	[A - A256 Haine Road]	0.8	0.04	0.44	A	[A - A256 Haine Road]
C - Canterbury Road West	1.5	0.20	0.60	B		3.3	0.36	0.77	C		0.8	0.13	0.46	A	

	Lane Analysis [Lane Simulation] - 2017 Baseline Traffic														
A - A256 Haine Road	2.8	0.14		A	%	6.2	0.27		C	%	2.1	0.12		A	%
B - A256 Canterbury Road	1.1	0.06		A		1.5	0.07		A		0.8	0.06		A	
C - Canterbury Road West	2.4	0.34		C		7.9	1.05		F		0.9	0.20		B	
	Lane Analysis [Lane Simulation] - 2039 Growthed Traffic														
A - A256 Haine Road	6.9	0.29		C	%	63.3	1.89		F	%	4.6	0.20		B	%
B - A256 Canterbury Road	1.4	0.07		A		2.4	0.09		A		1.0	0.06		A	
C - Canterbury Road West	10.6	1.40		F		86.4	10.51		F		2.4	0.38		C	
	Lane Analysis [Lane Simulation] - 2039 + Dev Traffic														
A - A256 Haine Road	7.4	0.31		C	%	161.5	5.56		F	%	5.3	0.23		B	%
B - A256 Canterbury Road	1.9	0.08		A		2.4	0.09		A		1.4	0.07		A	
C - Canterbury Road West	25.3	3.22		F		89.2	11.21		F		4.6	0.64		E	
	Lane Analysis [Lane Simulation] - 2039 B+Dev Net Change														
A - A256 Haine Road	4.5	0.20		B	%	103.3	3.21		F	%	3.7	0.18		B	%
B - A256 Canterbury Road	1.8	0.07		A		2.0	0.08		A		1.2	0.07		A	
C - Canterbury Road West	16.4	2.10		F		67.4	7.46		F		3.7	0.53		D	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

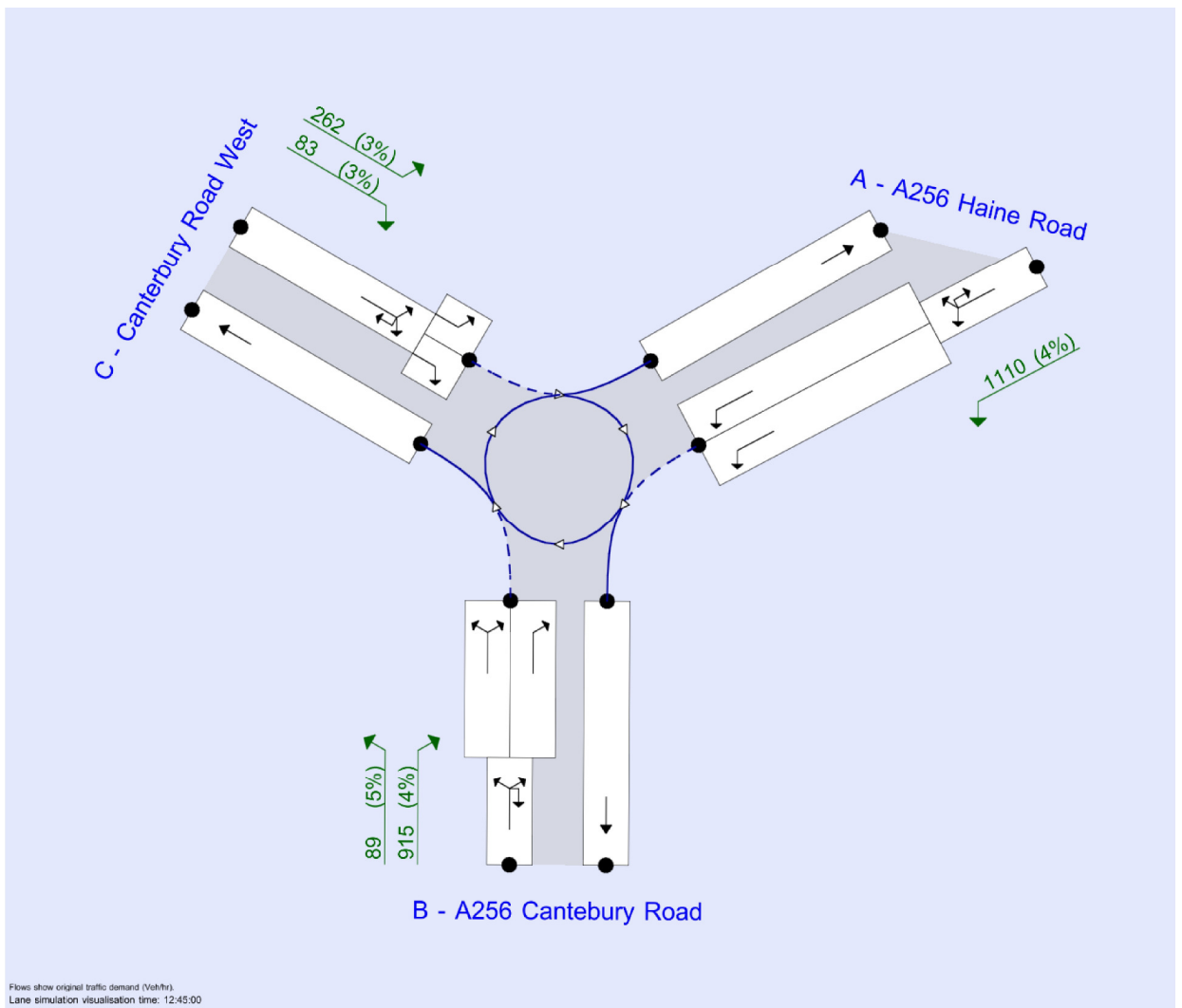
File summary

File Description

Title	21A
Location	A256 - Canterbury Road West
Site number	21A
Date	04/10/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	GLOBAL\jessica.elliott
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	min	-Min	perMin



Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (min)	Queue threshold (PCU)
5.75			✓	Delay	0.85	0.60	20.00

Lane Simulation options

Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Use crossings quick response	Last run random seed	Last run number of trials	Last run time taken (s)
1.00	100000	100000	5	3	1	✓	0	0	0.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2017 Baseline Traffic	AM	ONE HOUR	07:30	09:00	15	✓
D4	2017 Baseline Traffic	PM	ONE HOUR	16:30	18:00	15	✓
D5	2017 Baseline Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓
D6	2039 Growthed Traffic	AM	ONE HOUR	07:30	09:00	15	✓
D7	2039 Growthed Traffic	PM	ONE HOUR	16:30	18:00	15	✓
D8	2039 Growthed Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓
D9	2039 + Dev Traffic	AM	ONE HOUR	07:30	09:00	15	✓
D10	2039 + Dev Traffic	PM	ONE HOUR	16:30	18:00	15	✓
D11	2039 + Dev Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓
D12	2039 B+Dev Net Change	AM	ONE HOUR	07:30	09:00	15	✓
D13	2039 B+Dev Net Change	PM	ONE HOUR	16:30	18:00	15	✓
D14	2039 B+Dev Net Change	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Arcady Module - 2017 Baseline Traffic, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Arcady Module	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	0.08	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	40	A - A256 Haine Road

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2017 Baseline Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

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Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1011	100.000
B - A256 Canterbury Road		ONE HOUR	✓	851	100.000
C - Canterbury Road West		ONE HOUR	✓	315	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	1011	0
	B - A256 Canterbury Road	787	0	64
	C - Canterbury Road West	231	84	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	4	0
	B - A256 Canterbury Road	6	0	2
	C - Canterbury Road West	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	0.67	0.11	2.0	A	928	1392
B - A256 Canterbury Road	0.38	0.04	0.6	A	781	1171
C - Canterbury Road West	0.38	0.11	0.6	A	289	434

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	761	190	63	1684	0.452	758	764	0.0	0.8	0.065	A
B - A256 Canterbury Road	641	160	0	2448	0.262	639	821	0.0	0.4	0.033	A
C - Canterbury Road West	237	59	591	1072	0.221	236	48	0.0	0.3	0.072	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	909	227	75	1676	0.542	907	914	0.8	1.2	0.078	A
B - A256 Canterbury Road	765	191	0	2448	0.313	765	983	0.4	0.5	0.036	A
C - Canterbury Road West	283	71	707	1003	0.282	283	58	0.3	0.4	0.083	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1113	278	92	1665	0.669	1110	1120	1.2	2.0	0.107	A
B - A256 Canterbury Road	937	234	0	2448	0.383	936	1202	0.5	0.6	0.040	A
C - Canterbury Road West	347	87	866	909	0.382	346	70	0.4	0.6	0.106	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1113	278	92	1665	0.669	1113	1121	2.0	2.0	0.109	A
B - A256 Canterbury Road	937	234	0	2448	0.383	937	1206	0.6	0.6	0.040	A
C - Canterbury Road West	347	87	866	909	0.382	347	70	0.6	0.6	0.107	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	909	227	76	1676	0.542	912	916	2.0	1.2	0.079	A
B - A256 Canterbury Road	765	191	0	2448	0.313	766	988	0.6	0.5	0.036	A
C - Canterbury Road West	283	71	708	1003	0.282	284	58	0.6	0.4	0.084	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	761	190	63	1684	0.452	763	767	1.2	0.8	0.065	A
B - A256 Canterbury Road	641	160	0	2448	0.262	641	826	0.5	0.4	0.033	A
C - Canterbury Road West	237	59	593	1071	0.221	238	48	0.4	0.3	0.072	A

Arcady Module - 2017 Baseline Traffic, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Arcady Module	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	0.14	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	12	A - A256 Haine Road

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2017 Baseline Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

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Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1266	100.000
B - A256 Canterbury Road		ONE HOUR	✓	1072	100.000
C - Canterbury Road West		ONE HOUR	✓	402	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	1266	0
	B - A256 Canterbury Road	976	0	96
	C - Canterbury Road West	288	114	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	3	0
	B - A256 Canterbury Road	2	0	4
	C - Canterbury Road West	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	0.84	0.22	5.0	B	1162	1743
B - A256 Canterbury Road	0.47	0.04	0.9	A	984	1476
C - Canterbury Road West	0.54	0.16	1.2	A	369	553

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	953	238	85	1686	0.565	948	949	0.0	1.3	0.081	A
B - A256 Canterbury Road	807	202	0	2532	0.319	805	1033	0.0	0.5	0.035	A
C - Canterbury Road West	303	76	733	1014	0.298	301	72	0.0	0.4	0.084	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1138	285	102	1675	0.679	1135	1135	1.3	2.1	0.110	A
B - A256 Canterbury Road	964	241	0	2532	0.381	963	1237	0.5	0.6	0.038	A
C - Canterbury Road West	361	90	877	931	0.388	361	86	0.4	0.6	0.105	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1394	348	125	1661	0.839	1383	1389	2.1	4.8	0.208	B
B - A256 Canterbury Road	1180	295	0	2532	0.466	1179	1508	0.6	0.9	0.044	A
C - Canterbury Road West	443	111	1074	818	0.541	441	106	0.6	1.2	0.158	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1394	348	126	1660	0.840	1393	1392	4.8	5.0	0.223	B
B - A256 Canterbury Road	1180	295	0	2532	0.466	1180	1519	0.9	0.9	0.044	A
C - Canterbury Road West	443	111	1075	817	0.542	443	106	1.2	1.2	0.160	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1138	285	103	1675	0.680	1149	1139	5.0	2.2	0.117	A
B - A256 Canterbury Road	964	241	0	2532	0.381	965	1253	0.9	0.6	0.038	A
C - Canterbury Road West	361	90	878	931	0.388	363	86	1.2	0.6	0.106	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	953	238	86	1686	0.565	957	953	2.2	1.3	0.083	A
B - A256 Canterbury Road	807	202	0	2532	0.319	808	1043	0.6	0.5	0.035	A
C - Canterbury Road West	303	76	735	1013	0.299	303	72	0.6	0.4	0.085	A

Arcady Module - 2017 Baseline Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Arcady Module	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	0.07	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	63	A - A256 Haine Road

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2017 Baseline Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	869	100.000
B - A256 Canterbury Road		ONE HOUR	✓	637	100.000
C - Canterbury Road West		ONE HOUR	✓	255	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	869	0
	B - A256 Canterbury Road	570	0	67
	C - Canterbury Road West	193	62	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	5	0
	B - A256 Canterbury Road	5	0	4
	C - Canterbury Road West	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	0.58	0.08	1.3	A	797	1196
B - A256 Canterbury Road	0.28	0.03	0.4	A	585	877
C - Canterbury Road West	0.27	0.08	0.4	A	234	351

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	654	164	46	1678	0.390	652	573	0.0	0.6	0.058	A
B - A256 Canterbury Road	480	120	0	2466	0.194	479	698	0.0	0.2	0.030	A
C - Canterbury Road West	192	48	428	1168	0.164	191	50	0.0	0.2	0.061	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	781	195	56	1672	0.467	780	686	0.6	0.9	0.067	A
B - A256 Canterbury Road	573	143	0	2466	0.232	572	836	0.2	0.3	0.032	A
C - Canterbury Road West	229	57	512	1119	0.205	229	60	0.2	0.3	0.067	A

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	957	239	68	1664	0.575	955	839	0.9	1.3	0.084	A
B - A256 Canterbury Road	701	175	0	2466	0.284	701	1023	0.3	0.4	0.034	A
C - Canterbury Road West	281	70	627	1052	0.267	280	74	0.3	0.4	0.078	A

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	957	239	68	1664	0.575	957	840	1.3	1.3	0.085	A
B - A256 Canterbury Road	701	175	0	2466	0.284	701	1025	0.4	0.4	0.034	A

C - Canterbury Road West	281	70	628	1051	0.267	281	74	0.4	0.4	0.078	A
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13:45 - 14:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	781	195	56	1672	0.467	783	687	1.3	0.9	0.068	A
B - A256 Canterbury Road	573	143	0	2466	0.232	573	839	0.4	0.3	0.032	A
C - Canterbury Road West	229	57	513	1119	0.205	230	60	0.4	0.3	0.068	A

14:00 - 14:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	654	164	47	1678	0.390	655	575	0.9	0.6	0.059	A
B - A256 Canterbury Road	480	120	0	2466	0.194	480	702	0.3	0.2	0.030	A
C - Canterbury Road West	192	48	429	1168	0.164	192	50	0.3	0.2	0.062	A

Arcady Module - 2039 Growthed Traffic, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Arcady Module	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	0.16	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	11	A - A256 Haine Road

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2039 Growthed Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

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Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1265	100.000
B - A256 Canterbury Road		ONE HOUR	✓	1065	100.000
C - Canterbury Road West		ONE HOUR	✓	394	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	1265	0
	B - A256 Canterbury Road	985	0	80
	C - Canterbury Road West	289	105	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	5	0
	B - A256 Canterbury Road	6	0	2
	C - Canterbury Road West	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	0.85	0.24	5.5	B	1161	1741
B - A256 Canterbury Road	0.48	0.05	0.9	A	977	1466
C - Canterbury Road West	0.56	0.17	1.2	B	362	542

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	952	238	79	1658	0.574	947	956	0.0	1.3	0.084	A
B - A256 Canterbury Road	802	200	0	2448	0.328	800	1026	0.0	0.5	0.036	A
C - Canterbury Road West	297	74	740	984	0.301	295	60	0.0	0.4	0.087	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1137	284	94	1648	0.690	1134	1144	1.3	2.2	0.116	A
B - A256 Canterbury Road	957	239	0	2448	0.391	957	1228	0.5	0.6	0.040	A
C - Canterbury Road West	354	89	885	898	0.395	353	72	0.4	0.6	0.110	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1393	348	115	1635	0.852	1381	1400	2.2	5.2	0.226	B
B - A256 Canterbury Road	1173	293	0	2448	0.479	1171	1496	0.6	0.9	0.047	A
C - Canterbury Road West	434	108	1083	780	0.556	431	88	0.6	1.2	0.171	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1393	348	116	1634	0.852	1392	1403	5.2	5.5	0.245	B
B - A256 Canterbury Road	1173	293	0	2448	0.479	1173	1507	0.9	0.9	0.047	A
C - Canterbury Road West	434	108	1084	779	0.557	434	88	1.2	1.2	0.174	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1137	284	95	1647	0.690	1150	1148	5.5	2.3	0.124	A
B - A256 Canterbury Road	957	239	0	2448	0.391	958	1245	0.9	0.6	0.040	A
C - Canterbury Road West	354	89	886	897	0.395	357	72	1.2	0.7	0.112	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	952	238	79	1657	0.575	956	960	2.3	1.4	0.086	A
B - A256 Canterbury Road	802	200	0	2448	0.328	802	1035	0.6	0.5	0.037	A
C - Canterbury Road West	297	74	742	983	0.302	298	60	0.7	0.4	0.088	A

Arcady Module - 2039 Growthed Traffic, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Arcady Module	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	1.13	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-11	A - A256 Haine Road

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2039 Growthed Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

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Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1596	100.000
B - A256 Canterbury Road		ONE HOUR	✓	1351	100.000
C - Canterbury Road West		ONE HOUR	✓	507	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	1596	0
	B - A256 Canterbury Road	1230	0	121
	C - Canterbury Road West	363	144	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	3	0
	B - A256 Canterbury Road	2	0	4
	C - Canterbury Road West	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	1.07	2.20	71.9	F	1465	2197
B - A256 Canterbury Road	0.59	0.06	1.4	A	1240	1860
C - Canterbury Road West	0.85	0.58	5.1	D	465	698

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1202	300	108	1672	0.719	1192	1195	0.0	2.5	0.123	A
B - A256 Canterbury Road	1017	254	0	2532	0.402	1014	1299	0.0	0.7	0.039	A
C - Canterbury Road West	382	95	924	904	0.422	379	91	0.0	0.7	0.114	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1435	359	129	1658	0.865	1422	1430	2.5	5.8	0.241	B
B - A256 Canterbury Road	1215	304	0	2532	0.480	1214	1550	0.7	0.9	0.045	A
C - Canterbury Road West	456	114	1105	800	0.570	454	109	0.7	1.3	0.172	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1757	439	155	1642	1.070	1616	1743	5.8	41.1	1.039	F
B - A256 Canterbury Road	1487	372	0	2532	0.587	1486	1770	0.9	1.4	0.057	A
C - Canterbury Road West	558	140	1352	657	0.850	545	133	1.3	4.6	0.488	D

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1757	439	158	1639	1.072	1634	1753	41.1	71.9	2.203	F
B - A256 Canterbury Road	1487	372	0	2532	0.587	1487	1792	1.4	1.4	0.057	A
C - Canterbury Road West	558	140	1354	656	0.851	556	133	4.6	5.1	0.580	D

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1435	359	134	1655	0.867	1632	1444	71.9	22.5	1.795	F
B - A256 Canterbury Road	1215	304	0	2532	0.480	1216	1766	1.4	0.9	0.046	A
C - Canterbury Road West	456	114	1108	798	0.571	471	109	5.1	1.4	0.191	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1202	300	109	1671	0.719	1281	1202	22.5	2.6	0.186	B
B - A256 Canterbury Road	1017	254	0	2532	0.402	1018	1390	0.9	0.7	0.040	A
C - Canterbury Road West	382	95	927	902	0.423	384	91	1.4	0.7	0.116	A

Arcady Module - 2039 Growthed Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Arcady Module	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	0.11	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	21	A - A256 Haine Road

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2039 Growthed Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1160	100.000
B - A256 Canterbury Road		ONE HOUR	✓	850	100.000
C - Canterbury Road West		ONE HOUR	✓	340	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	1160	0
	B - A256 Canterbury Road	761	0	89
	C - Canterbury Road West	257	83	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	6	0
	B - A256 Canterbury Road	6	0	5
	C - Canterbury Road West	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	0.78	0.17	3.5	B	1064	1597
B - A256 Canterbury Road	0.38	0.04	0.6	A	780	1170
C - Canterbury Road West	0.41	0.11	0.7	A	312	468

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	873	218	62	1652	0.529	869	764	0.0	1.1	0.076	A
B - A256 Canterbury Road	640	160	0	2443	0.262	639	931	0.0	0.4	0.033	A
C - Canterbury Road West	256	64	572	1081	0.237	255	67	0.0	0.3	0.073	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1043	261	74	1644	0.634	1040	914	1.1	1.7	0.099	A
B - A256 Canterbury Road	764	191	0	2443	0.313	764	1115	0.4	0.5	0.036	A
C - Canterbury Road West	306	76	684	1015	0.301	305	80	0.3	0.4	0.085	A

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1277	319	91	1634	0.782	1270	1120	1.7	3.4	0.162	A
B - A256 Canterbury Road	936	234	0	2443	0.383	935	1361	0.5	0.6	0.040	A
C - Canterbury Road West	374	94	837	924	0.405	373	98	0.4	0.7	0.109	A

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1277	319	91	1634	0.782	1277	1121	3.4	3.5	0.168	B
B - A256 Canterbury Road	936	234	0	2443	0.383	936	1368	0.6	0.6	0.040	A

C - Canterbury Road West	374	94	838	923	0.405	374	98	0.7	0.7	0.109	A
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13:45 - 14:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1043	261	75	1644	0.634	1050	916	3.5	1.8	0.102	A
B - A256 Canterbury Road	764	191	0	2443	0.313	765	1125	0.6	0.5	0.036	A
C - Canterbury Road West	306	76	685	1014	0.301	307	80	0.7	0.4	0.085	A

14:00 - 14:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	873	218	63	1652	0.529	876	767	1.8	1.1	0.078	A
B - A256 Canterbury Road	640	160	0	2443	0.262	640	938	0.5	0.4	0.033	A
C - Canterbury Road West	256	64	573	1080	0.237	256	67	0.4	0.3	0.073	A

Arcady Module - 2039 + Dev Traffic, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Arcady Module	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	0.18	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	9	A - A256 Haine Road

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2039 + Dev Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)

A - A256 Haine Road		ONE HOUR	✓	1287	100.000
B - A256 Canterbury Road		ONE HOUR	✓	1227	100.000
C - Canterbury Road West		ONE HOUR	✓	397	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	1287	0
	B - A256 Canterbury Road	1147	0	80
	C - Canterbury Road West	292	105	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	5	0
	B - A256 Canterbury Road	5	0	2
	C - Canterbury Road West	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	0.87	0.27	6.1	C	1181	1771
B - A256 Canterbury Road	0.55	0.05	1.2	A	1126	1689
C - Canterbury Road West	0.64	0.25	1.8	B	364	546

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	969	242	79	1658	0.584	963	1080	0.0	1.4	0.086	A
B - A256 Canterbury Road	924	231	0	2469	0.374	921	1042	0.0	0.6	0.039	A
C - Canterbury Road West	299	75	861	917	0.326	297	60	0.0	0.5	0.097	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1157	289	94	1648	0.702	1153	1292	1.4	2.3	0.120	A
B - A256 Canterbury Road	1103	276	0	2469	0.447	1102	1247	0.6	0.8	0.044	A
C - Canterbury Road West	357	89	1030	817	0.437	356	72	0.5	0.8	0.130	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1417	354	115	1635	0.867	1403	1580	2.3	5.8	0.245	B
B - A256 Canterbury Road	1351	338	0	2469	0.547	1349	1518	0.8	1.2	0.054	A
C - Canterbury Road West	437	109	1261	681	0.642	433	88	0.8	1.7	0.238	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1417	354	116	1634	0.867	1416	1584	5.8	6.1	0.271	C
B - A256 Canterbury Road	1351	338	0	2469	0.547	1351	1531	1.2	1.2	0.054	A
C - Canterbury Road West	437	109	1263	680	0.642	437	88	1.7	1.8	0.246	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1157	289	95	1647	0.702	1172	1298	6.1	2.4	0.130	A
B - A256 Canterbury Road	1103	276	0	2469	0.447	1105	1267	1.2	0.8	0.044	A
C - Canterbury Road West	357	89	1033	816	0.437	361	72	1.8	0.8	0.133	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	969	242	79	1657	0.585	973	1085	2.4	1.4	0.088	A
B - A256 Canterbury Road	924	231	0	2469	0.374	925	1052	0.8	0.6	0.039	A
C - Canterbury Road West	299	75	864	915	0.327	300	60	0.8	0.5	0.098	A

Arcady Module - 2039 + Dev Traffic, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Arcady Module	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	3.08	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-20	A - A256 Haine Road

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2039 + Dev Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
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A - A256 Haine Road		ONE HOUR	✓	1777	100.000
B - A256 Canterbury Road		ONE HOUR	✓	1379	100.000
C - Canterbury Road West		ONE HOUR	✓	507	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	1777	0
	B - A256 Canterbury Road	1254	0	125
	C - Canterbury Road West	363	144	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	3	0
	B - A256 Canterbury Road	2	0	4
	C - Canterbury Road West	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	1.19	6.08	173.0	F	1631	2446
B - A256 Canterbury Road	0.60	0.06	1.5	A	1265	1898
C - Canterbury Road West	0.87	0.67	5.8	E	465	698

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1338	334	108	1672	0.800	1323	1213	0.0	3.8	0.165	A
B - A256 Canterbury Road	1038	260	0	2532	0.410	1035	1430	0.0	0.7	0.040	A
C - Canterbury Road West	382	95	942	894	0.427	379	94	0.0	0.7	0.116	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1597	399	129	1658	0.963	1558	1451	3.8	13.7	0.473	D
B - A256 Canterbury Road	1240	310	0	2532	0.490	1239	1687	0.7	1.0	0.046	A
C - Canterbury Road West	456	114	1126	787	0.579	453	112	0.7	1.3	0.178	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1957	489	154	1642	1.192	1637	1767	13.7	93.7	2.105	F
B - A256 Canterbury Road	1518	380	0	2532	0.600	1516	1791	1.0	1.5	0.059	A
C - Canterbury Road West	558	140	1379	642	0.870	543	137	1.3	5.2	0.540	D

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1957	489	158	1640	1.193	1639	1779	93.7	173.0	4.958	F
B - A256 Canterbury Road	1518	380	0	2532	0.600	1518	1797	1.5	1.5	0.059	A
C - Canterbury Road West	558	140	1381	641	0.871	556	138	5.2	5.8	0.667	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1597	399	134	1655	0.965	1645	1468	173.0	161.1	6.085	F
B - A256 Canterbury Road	1240	310	0	2532	0.490	1242	1780	1.5	1.0	0.047	A
C - Canterbury Road West	456	114	1129	786	0.580	473	113	5.8	1.4	0.202	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1338	334	109	1671	0.801	1661	1220	161.1	80.4	4.388	F
B - A256 Canterbury Road	1038	260	0	2532	0.410	1039	1770	1.0	0.7	0.040	A
C - Canterbury Road West	382	95	945	892	0.428	384	94	1.4	0.8	0.119	A

Arcady Module - 2039 + Dev Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Arcady Module	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	0.13	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	17	A - A256 Haine Road

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2039 + Dev Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)

A - A256 Haine Road		ONE HOUR	✓	1213	100.000
B - A256 Canterbury Road		ONE HOUR	✓	1040	100.000
C - Canterbury Road West		ONE HOUR	✓	345	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	1213	0
	B - A256 Canterbury Road	951	0	89
	C - Canterbury Road West	262	83	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	5	0
	B - A256 Canterbury Road	4	0	5
	C - Canterbury Road West	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	0.81	0.19	4.1	B	1113	1670
B - A256 Canterbury Road	0.46	0.04	0.9	A	954	1431
C - Canterbury Road West	0.47	0.14	0.9	A	317	475

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	913	228	62	1668	0.548	908	910	0.0	1.2	0.079	A
B - A256 Canterbury Road	783	196	0	2486	0.315	781	971	0.0	0.5	0.035	A
C - Canterbury Road West	260	65	714	1004	0.259	258	67	0.0	0.3	0.080	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1090	273	74	1660	0.657	1088	1089	1.2	1.9	0.104	A
B - A256 Canterbury Road	935	234	0	2486	0.376	934	1162	0.5	0.6	0.039	A
C - Canterbury Road West	310	78	854	923	0.336	310	80	0.3	0.5	0.098	A

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1336	334	91	1649	0.810	1327	1334	1.9	4.0	0.181	B
B - A256 Canterbury Road	1145	286	0	2486	0.461	1144	1418	0.6	0.8	0.045	A
C - Canterbury Road West	380	95	1046	812	0.468	378	98	0.5	0.9	0.138	A

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1336	334	91	1649	0.810	1335	1336	4.0	4.1	0.190	B
B - A256 Canterbury Road	1145	286	0	2486	0.461	1145	1426	0.8	0.9	0.045	A
C - Canterbury Road West	380	95	1047	811	0.468	380	98	0.9	0.9	0.139	A

13:45 - 14:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1090	273	75	1660	0.657	1099	1092	4.1	2.0	0.109	A
B - A256 Canterbury Road	935	234	0	2486	0.376	936	1174	0.9	0.6	0.039	A
C - Canterbury Road West	310	78	856	922	0.336	312	80	0.9	0.5	0.099	A

14:00 - 14:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	913	228	63	1668	0.548	916	914	2.0	1.2	0.080	A
B - A256 Canterbury Road	783	196	0	2486	0.315	784	979	0.6	0.5	0.035	A
C - Canterbury Road West	260	65	716	1003	0.259	260	67	0.5	0.4	0.081	A

Arcady Module - 2039 B+Dev Net Change, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Arcady Module	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	0.12	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	17	C - Canterbury Road West

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2039 B+Dev Net Change	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

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Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1164	100.000
B - A256 Canterbury Road		ONE HOUR	✓	1145	100.000
C - Canterbury Road West		ONE HOUR	✓	397	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	From A - A256 Haine Road	0	1164	0
	B - A256 Canterbury Road	1065	0	80
	C - Canterbury Road West	292	105	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	From A - A256 Haine Road	0	4	0
	B - A256 Canterbury Road	5	0	2
	C - Canterbury Road West	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	0.78	0.16	3.4	A	1068	1602
B - A256 Canterbury Road	0.51	0.05	1.0	A	1051	1576
C - Canterbury Road West	0.60	0.20	1.5	B	364	546

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	876	219	79	1674	0.524	872	1018	0.0	1.1	0.074	A
B - A256 Canterbury Road	862	216	0	2469	0.349	860	951	0.0	0.5	0.037	A
C - Canterbury Road West	299	75	800	953	0.314	297	60	0.0	0.5	0.091	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1046	262	94	1664	0.629	1044	1219	1.1	1.7	0.096	A
B - A256 Canterbury Road	1029	257	0	2469	0.417	1029	1138	0.5	0.7	0.042	A
C - Canterbury Road West	357	89	957	860	0.415	356	72	0.5	0.7	0.119	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1282	320	115	1650	0.777	1275	1491	1.7	3.3	0.157	A
B - A256 Canterbury Road	1261	315	0	2469	0.511	1259	1390	0.7	1.0	0.050	A
C - Canterbury Road West	437	109	1171	734	0.595	434	88	0.7	1.4	0.198	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1282	320	116	1650	0.777	1281	1494	3.3	3.4	0.162	A
B - A256 Canterbury Road	1261	315	0	2469	0.511	1261	1397	1.0	1.0	0.050	A
C - Canterbury Road West	437	109	1173	733	0.596	437	88	1.4	1.5	0.202	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1046	262	95	1663	0.629	1053	1223	3.4	1.7	0.099	A
B - A256 Canterbury Road	1029	257	0	2469	0.417	1031	1148	1.0	0.7	0.042	A
C - Canterbury Road West	357	89	959	859	0.415	360	72	1.5	0.7	0.121	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	876	219	79	1673	0.524	879	1023	1.7	1.1	0.076	A
B - A256 Canterbury Road	862	216	0	2469	0.349	863	958	0.7	0.5	0.037	A
C - Canterbury Road West	299	75	802	951	0.314	300	60	0.7	0.5	0.092	A

Arcady Module - 2039 B+Dev Net Change, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Arcady Module	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	1.69	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-14	A - A256 Haine Road

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2039 B+Dev Net Change	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

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Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1665	100.000
B - A256 Canterbury Road		ONE HOUR	✓	1252	100.000
C - Canterbury Road West		ONE HOUR	✓	507	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	1665	0
	B - A256 Canterbury Road	1127	0	125
	C - Canterbury Road West	363	144	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	3	0
	B - A256 Canterbury Road	2	0	4
	C - Canterbury Road West	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	1.12	3.32	108.4	F	1528	2292
B - A256 Canterbury Road	0.54	0.05	1.2	A	1149	1723
C - Canterbury Road West	0.77	0.36	3.3	C	465	698

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1253	313	108	1672	0.750	1242	1118	0.0	2.9	0.136	A
B - A256 Canterbury Road	943	236	0	2532	0.372	940	1350	0.0	0.6	0.038	A
C - Canterbury Road West	382	95	846	949	0.402	379	94	0.0	0.7	0.105	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1497	374	129	1658	0.903	1478	1337	2.9	7.7	0.304	C
B - A256 Canterbury Road	1126	281	0	2532	0.445	1125	1607	0.6	0.8	0.043	A
C - Canterbury Road West	456	114	1012	853	0.534	454	112	0.7	1.1	0.150	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1833	458	156	1641	1.117	1626	1633	7.7	59.4	1.395	F
B - A256 Canterbury Road	1378	345	0	2532	0.545	1377	1783	0.8	1.2	0.052	A
C - Canterbury Road West	558	140	1239	722	0.773	550	137	1.1	3.1	0.335	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1833	458	158	1639	1.118	1637	1640	59.4	108.4	3.179	F
B - A256 Canterbury Road	1378	345	0	2532	0.545	1378	1796	1.2	1.2	0.052	A
C - Canterbury Road West	558	140	1241	721	0.774	558	138	3.1	3.3	0.363	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1497	374	132	1656	0.904	1641	1347	108.4	72.3	3.319	F
B - A256 Canterbury Road	1126	281	0	2532	0.445	1127	1773	1.2	0.8	0.043	A
C - Canterbury Road West	456	114	1015	852	0.535	464	113	3.3	1.2	0.158	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1253	313	109	1671	0.750	1529	1124	72.3	3.3	1.021	F
B - A256 Canterbury Road	943	236	0	2532	0.372	943	1638	0.8	0.6	0.038	A
C - Canterbury Road West	382	95	849	947	0.403	384	94	1.2	0.7	0.107	A

Arcady Module - 2039 B+Dev Net Change, Airport Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Arcady Module	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	0.10	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	28	A - A256 Haine Road

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2039 B+Dev Net Change	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1110	100.000
B - A256 Canterbury Road		ONE HOUR	✓	1004	100.000
C - Canterbury Road West		ONE HOUR	✓	345	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	1110	0
	B - A256 Canterbury Road	915	0	89
	C - Canterbury Road West	262	83	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	4	0
	B - A256 Canterbury Road	4	0	5
	C - Canterbury Road West	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	0.73	0.14	2.7	A	1019	1528
B - A256 Canterbury Road	0.44	0.04	0.8	A	921	1382
C - Canterbury Road West	0.46	0.13	0.8	A	317	475

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	836	209	62	1684	0.496	832	883	0.0	1.0	0.070	A
B - A256 Canterbury Road	756	189	0	2486	0.304	754	894	0.0	0.4	0.035	A
C - Canterbury Road West	260	65	687	1020	0.255	258	67	0.0	0.3	0.079	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	998	249	74	1676	0.595	996	1057	1.0	1.5	0.088	A
B - A256 Canterbury Road	903	226	0	2486	0.363	902	1070	0.4	0.6	0.038	A
C - Canterbury Road West	310	78	822	942	0.329	310	80	0.3	0.5	0.095	A

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1222	306	91	1665	0.734	1217	1294	1.5	2.7	0.133	A
B - A256 Canterbury Road	1105	276	0	2486	0.445	1105	1308	0.6	0.8	0.043	A
C - Canterbury Road West	380	95	1007	835	0.455	379	98	0.5	0.8	0.131	A

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1222	306	91	1665	0.734	1222	1296	2.7	2.7	0.135	A
B - A256 Canterbury Road	1105	276	0	2486	0.445	1105	1313	0.8	0.8	0.043	A

C - Canterbury Road West	380	95	1007	834	0.455	380	98	0.8	0.8	0.132	A
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13:45 - 14:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	998	249	75	1676	0.596	1003	1060	2.7	1.5	0.090	A
B - A256 Canterbury Road	903	226	0	2486	0.363	903	1078	0.8	0.6	0.038	A
C - Canterbury Road West	310	78	823	941	0.330	311	80	0.8	0.5	0.096	A

14:00 - 14:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	836	209	63	1684	0.496	838	887	1.5	1.0	0.071	A
B - A256 Canterbury Road	756	189	0	2486	0.304	756	900	0.6	0.4	0.035	A
C - Canterbury Road West	260	65	689	1019	0.255	260	67	0.5	0.3	0.079	A

Lane Analysis - 2017 Baseline Traffic, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A2 - Lane Analysis [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Lane Analysis	✓	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	0.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
A - A256 Haine Road	Evenly split	10.00
B - A256 Canterbury Road	Evenly split	10.00
C - Canterbury Road West	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	B	✓	5.00	0	99999
		2	B	✓	5.00	0	99999

	2	1	(A, B, C)		Infinity		
B - A256 Canterbury Road	1 [Give-way line]	1	A, C	✓	3.00	0	99999
		2	A	✓	3.00	0	99999
	2	1	(A, B, C)		Infinity		
C - Canterbury Road West	1 [Give-way line]	1	A	✓	1.00	0	99999
		2	B	✓	1.00	0	99999
	2	1	(A, B, C)		Infinity		

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	0.298	815
		2	0.298	815
B - A256 Canterbury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.274	696
		2	0.274	696

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Canterbury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Canterbury Road	1 [Give-way line]	1	✓		✓
		2	✓		
	2	1	✓	✓	✓
C - Canterbury Road West	1 [Give-way line]	1	✓		
		2		✓	
	2	1	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2017 Baseline Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1011	100.000
B - A256 Canterbury Road		ONE HOUR	✓	851	100.000
C - Canterbury Road West		ONE HOUR	✓	315	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1011	0
	B - A256 Canterbury Road	787	0	64
	C - Canterbury Road West	231	84	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	4	0
	B - A256 Canterbury Road	6	0	2
	C - Canterbury Road West	3	2	0

Results

Results Summary for whole modelled period

Arm	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	0.14	2.8	A	929	1393
B - A256 Canterbury Road	0.06	1.1	A	782	1173
C - Canterbury Road West	0.34	2.4	C	292	438

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	761	190	66	760	770	0.0	1.2	0.095	A
B - A256 Canterbury Road	648	162	0	648	827	0.0	0.6	0.055	A
C - Canterbury Road West	238	60	597	239	51	0.0	0.7	0.162	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	910	228	76	910	923	1.2	1.7	0.109	A
B - A256 Canterbury Road	772	193	0	773	986	0.6	0.7	0.057	A
C - Canterbury Road West	283	71	716	284	57	0.7	0.9	0.199	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1118	280	91	1117	1110	1.7	2.7	0.139	A
B - A256 Canterbury Road	928	232	0	926	1207	0.7	1.1	0.062	A
C - Canterbury Road West	352	88	855	347	71	0.9	2.1	0.321	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1117	279	91	1116	1121	2.7	2.8	0.144	A
B - A256 Canterbury Road	939	235	0	939	1207	1.1	0.9	0.061	A
C - Canterbury Road West	351	88	868	344	71	2.1	2.3	0.343	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	916	229	77	914	913	2.8	1.7	0.111	A
B - A256 Canterbury Road	761	190	0	759	991	0.9	0.8	0.058	A
C - Canterbury Road West	286	72	702	287	57	2.3	0.9	0.236	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	750	187	63	750	769	1.7	1.2	0.096	A
B - A256 Canterbury Road	642	161	0	643	812	0.8	0.5	0.056	A
C - Canterbury Road West	240	60	592	239	50	0.9	0.6	0.166	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:30 - 07:45

					Total					Start	End		
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Arm	Side	Lane level	Lane	Destination arms	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	queue (Veh)	queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	378	840	0.450	377	0.0	0.6	0.095	A
			2	B	383	841	0.456	383	0.0	0.6	0.094	A
	Exit	2	1	(A, B, C)	761			761	0.0	0.0	0.000	A
			1		770			770	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	339	1228	0.276	340	0.0	0.3	0.055	A
			2	A	308	1223	0.252	308	0.0	0.3	0.055	A
	Exit	2	1	(A, B, C)	648			648	0.0	0.0	0.000	A
			1		827			827	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	172	534	0.323	173	0.0	0.3	0.108	A
			2	B	66	538	0.123	66	0.0	0.1	0.107	A
	Exit	2	1	(A, B, C)	238			239	0.0	0.2	0.054	A
			1		51			51	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	457	838	0.545	456	0.6	0.9	0.109	A
			2	B	454	835	0.543	454	0.6	0.8	0.110	A
	Exit	2	1	(A, B, C)	910			911	0.0	0.0	0.000	A
			1		923			923	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	405	1227	0.330	406	0.3	0.3	0.058	A
			2	A	367	1220	0.301	367	0.3	0.4	0.056	A
	Exit	2	1	(A, B, C)	772			772	0.0	0.0	0.000	A
			1		986			986	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	208	498	0.417	207	0.3	0.4	0.118	A
			2	B	76	500	0.153	76	0.1	0.2	0.118	A
	Exit	2	1	(A, B, C)	283			284	0.2	0.3	0.081	A
			1		57			57	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	557	833	0.669	556	0.9	1.3	0.136	A
			2	B	562	836	0.672	561	0.8	1.3	0.136	A
	Exit	2	1	(A, B, C)	1118			1119	0.0	0.0	0.003	A
			1		1110			1110	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	484	1230	0.394	483	0.3	0.6	0.062	A
			2	A	444	1221	0.363	443	0.4	0.5	0.060	A
	Exit	2	1	(A, B, C)	928			928	0.0	0.0	0.001	A
			1		1207			1207	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	257	456	0.564	256	0.4	0.6	0.131	A
			2	B	91	460	0.198	91	0.2	0.2	0.125	A
	Exit	2	1	(A, B, C)	352			348	0.3	1.4	0.191	B
			1		71			71	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	557	832	0.670	557	1.3	1.3	0.140	A
			2	B	559	833	0.671	559	1.3	1.4	0.140	A
	Exit	2	1	(A, B, C)	1117			1117	0.0	0.1	0.004	A
			1		1121			1121	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	490	1230	0.398	490	0.6	0.5	0.061	A
			2	A	449	1222	0.368	450	0.5	0.4	0.059	A
	Exit	2	1	(A, B, C)	939			939	0.0	0.0	0.001	A
			1		1207			1207	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	253	453	0.559	253	0.6	0.6	0.133	A
			2	B	92	458	0.200	91	0.2	0.2	0.132	A
	Exit	2	1	(A, B, C)	351			345	1.4	1.5	0.210	B
			1		71			71	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	458	839	0.545	456	1.3	0.8	0.111	A
			2	B	458	837	0.548	457	1.4	0.8	0.111	A
	Exit	2	1	(A, B, C)	916			916	0.1	0.0	0.001	A

	Exit	1	1		913			913	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	396	1227	0.322	395	0.5	0.4	0.058	A
			2	A	365	1220	0.299	364	0.4	0.4	0.057	A
	Exit	1	1	(A, B, C)	761			761	0.0	0.0	0.000	A
			1		991			991	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	210	498	0.421	210	0.6	0.4	0.124	A
			2	B	77	506	0.152	77	0.2	0.2	0.120	A
		2	1	(A, B, C)	286			287	1.5	0.4	0.114	A
	Exit	1	1		57			57	0.0	0.0	0.000	A
			1									

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	378	844	0.448	378	0.8	0.6	0.095	A
			2	B	372	841	0.442	372	0.8	0.6	0.097	A
		2	1	(A, B, C)	750			750	0.0	0.0	0.000	A
	Exit	1	1		769			769	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	338	1231	0.275	338	0.4	0.3	0.056	A
			2	A	304	1221	0.249	305	0.4	0.2	0.056	A
		2	1	(A, B, C)	642			642	0.0	0.0	0.000	A
	Exit	1	1		812			812	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	177	536	0.330	177	0.4	0.3	0.112	A
			2	B	63	544	0.115	63	0.2	0.1	0.112	A
		2	1	(A, B, C)	240			240	0.4	0.2	0.054	A
	Exit	1	1		50			50	0.0	0.0	0.000	A

Lane Analysis - 2017 Baseline Traffic, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A2 - Lane Analysis [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Lane Analysis	✓	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	0.30	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
A - A256 Haine Road	Evenly split	10.00
B - A256 Canterbury Road	Evenly split	10.00
C - Canterbury Road West	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	B	✓	5.00	0	99999
		2	B	✓	5.00	0	99999

	2	1	(A, B, C)		Infinity		
B - A256 Canterbury Road	1 [Give-way line]	1	A, C	✓	3.00	0	99999
		2	A	✓	3.00	0	99999
	2	1	(A, B, C)		Infinity		
C - Canterbury Road West	1 [Give-way line]	1	A	✓	1.00	0	99999
		2	B	✓	1.00	0	99999
	2	1	(A, B, C)		Infinity		

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	0.298	815
		2	0.298	815
B - A256 Canterbury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.274	696
		2	0.274	696

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Canterbury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Canterbury Road	1 [Give-way line]	1	✓		✓
		2	✓		
	2	1	✓	✓	✓
C - Canterbury Road West	1 [Give-way line]	1	✓		
		2		✓	
	2	1	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2017 Baseline Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1266	100.000
B - A256 Canterbury Road		ONE HOUR	✓	1072	100.000
C - Canterbury Road West		ONE HOUR	✓	402	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1266	0
	B - A256 Canterbury Road	976	0	96
	C - Canterbury Road West	288	114	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	3	0
	B - A256 Canterbury Road	2	0	4
	C - Canterbury Road West	2	1	0

Results

Results Summary for whole modelled period

Arm	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	0.27	6.2	C	1165	1748
B - A256 Canterbury Road	0.07	1.5	A	982	1473
C - Canterbury Road West	1.05	7.9	F	368	552

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	962	241	83	963	946	0.0	1.6	0.108	A
B - A256 Canterbury Road	802	200	0	802	1046	0.0	0.7	0.056	A
C - Canterbury Road West	302	75	726	302	75	0.0	1.0	0.198	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1139	285	103	1141	1141	1.6	2.4	0.141	A
B - A256 Canterbury Road	963	241	0	964	1245	0.7	0.9	0.059	A
C - Canterbury Road West	363	91	879	366	85	1.0	1.8	0.308	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1421	355	121	1425	1384	2.4	6.1	0.252	C
B - A256 Canterbury Road	1174	293	0	1175	1546	0.9	1.2	0.067	A
C - Canterbury Road West	445	111	1072	434	103	1.8	7.3	0.775	E

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1376	344	125	1383	1393	6.1	5.7	0.267	C
B - A256 Canterbury Road	1188	297	0	1184	1508	1.2	1.5	0.067	A
C - Canterbury Road West	438	110	1078	439	106	7.3	7.8	1.048	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1140	285	103	1140	1136	5.7	2.9	0.154	A
B - A256 Canterbury Road	960	240	0	962	1243	1.5	0.9	0.059	A
C - Canterbury Road West	360	90	878	361	84	7.8	1.9	0.485	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	952	238	86	953	943	2.9	1.7	0.112	A
B - A256 Canterbury Road	803	201	0	804	1039	0.9	0.8	0.056	A
C - Canterbury Road West	300	75	731	298	73	1.9	1.1	0.221	B

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:30 - 16:45

					Total					Start	End		
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Arm	Side	Lane level	Lane	Destination arms	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	queue (Veh)	queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	486	841	0.577	486	0.0	0.8	0.107	A
			2	B	476	842	0.566	477	0.0	0.8	0.108	A
	Exit	2	1	(A, B, C)	962			962	0.0	0.0	0.000	A
			1		946			946	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	422	1263	0.334	422	0.0	0.4	0.057	A
			2	A	380	1266	0.300	380	0.0	0.3	0.055	A
	Exit	2	1	(A, B, C)	802			802	0.0	0.0	0.000	A
			1		1046			1046	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	219	507	0.431	219	0.0	0.4	0.113	A
			2	B	84	513	0.163	83	0.0	0.2	0.111	A
	Exit	2	1	(A, B, C)	302			302	0.0	0.5	0.085	A
			1		75			75	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	569	840	0.678	571	0.8	1.2	0.137	A
			2	B	570	838	0.680	571	0.8	1.2	0.138	A
	Exit	2	1	(A, B, C)	1139			1140	0.0	0.1	0.003	A
			1		1141			1141	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	504	1262	0.399	504	0.4	0.5	0.060	A
			2	A	459	1269	0.362	460	0.3	0.4	0.058	A
	Exit	2	1	(A, B, C)	963			963	0.0	0.0	0.000	A
			1		1245			1245	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	263	464	0.568	263	0.4	0.6	0.126	A
			2	B	103	469	0.219	103	0.2	0.2	0.128	A
	Exit	2	1	(A, B, C)	363			366	0.5	1.1	0.181	B
			1		85			85	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	717	831	0.863	718	1.2	2.5	0.208	B
			2	B	704	832	0.846	707	1.2	2.5	0.209	B
	Exit	2	1	(A, B, C)	1421			1421	0.1	1.2	0.044	A
			1		1384			1384	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	610	1264	0.483	609	0.5	0.6	0.066	A
			2	A	564	1268	0.445	565	0.4	0.5	0.063	A
	Exit	2	1	(A, B, C)	1174			1174	0.0	0.0	0.002	A
			1		1546			1546	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	313	408	0.769	313	0.6	0.8	0.145	A
			2	B	120	411	0.293	121	0.2	0.3	0.143	A
	Exit	2	1	(A, B, C)	445			434	1.1	6.2	0.630	E
			1		103			103	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	686	829	0.827	688	2.5	2.3	0.214	B
			2	B	694	830	0.836	695	2.5	2.4	0.214	B
	Exit	2	1	(A, B, C)	1376			1380	1.2	1.0	0.053	A
			1		1393			1393	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	615	1262	0.487	613	0.6	0.8	0.066	A
			2	A	574	1272	0.451	571	0.5	0.7	0.063	A
	Exit	2	1	(A, B, C)	1188			1189	0.0	0.0	0.002	A
			1		1508			1508	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	314	407	0.772	315	0.8	0.7	0.146	A
			2	B	125	412	0.304	125	0.3	0.3	0.143	A
	Exit	2	1	(A, B, C)	438			439	6.2	6.8	0.904	F
			1		106			106	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	569	837	0.680	570	2.3	1.4	0.147	A
			2	B	571	837	0.682	569	2.4	1.4	0.148	A
	Exit	2	1	(A, B, C)	1140			1140	1.0	0.1	0.008	A

	Exit	1	1		1136			1136	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	506	1268	0.399	506	0.8	0.4	0.060	A
			2	A	454	1268	0.358	456	0.7	0.4	0.057	A
		2	1	(A, B, C)	960			960	0.0	0.0	0.001	A
	Exit	1	1		1243			1243	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	259	464	0.557	258	0.7	0.6	0.131	A
			2	B	103	469	0.219	103	0.3	0.2	0.129	A
		2	1	(A, B, C)	360			361	6.8	1.1	0.356	C
	Exit	1	1		84			84	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	482	843	0.571	481	1.4	0.8	0.109	A
			2	B	471	842	0.559	472	1.4	0.9	0.113	A
		2	1	(A, B, C)	952			952	0.1	0.0	0.001	A
	Exit	1	1		943			943	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	424	1262	0.336	425	0.4	0.4	0.057	A
			2	A	379	1269	0.299	379	0.4	0.4	0.054	A
		2	1	(A, B, C)	803			803	0.0	0.0	0.000	A
	Exit	1	1		1039			1039	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	213	507	0.420	213	0.6	0.5	0.117	A
			2	B	86	512	0.169	86	0.2	0.2	0.120	A
		2	1	(A, B, C)	300			299	1.1	0.5	0.104	A
	Exit	1	1		73			73	0.0	0.0	0.000	A

Lane Analysis - 2017 Baseline Traffic, Airport Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A2 - Lane Analysis [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Lane Analysis	✓	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	0.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
A - A256 Haine Road	Evenly split	10.00
B - A256 Canterbury Road	Evenly split	10.00
C - Canterbury Road West	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
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A - A256 Haine Road	1 [Give-way line]	1	B	✓	5.00	0	99999
		2	B	✓	5.00	0	99999
	2	1	(A, B, C)		Infinity		
B - A256 Canterbury Road	1 [Give-way line]	1	A, C	✓	3.00	0	99999
		2	A	✓	3.00	0	99999
	2	1	(A, B, C)		Infinity		
C - Canterbury Road West	1 [Give-way line]	1	A	✓	1.00	0	99999
		2	B	✓	1.00	0	99999
	2	1	(A, B, C)		Infinity		

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	0.298	815
		2	0.298	815
B - A256 Canterbury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.274	696
		2	0.274	696

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Canterbury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
		2			
B - A256 Canterbury Road	1 [Give-way line]	1	✓		✓
		2	✓		
	2	1	✓	✓	✓
		2			
C - Canterbury Road West	1 [Give-way line]	1	✓		
		2		✓	
	2	1	✓	✓	✓
		2			

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2017 Baseline Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	869	100.000
B - A256 Canterbury Road		ONE HOUR	✓	637	100.000
C - Canterbury Road West		ONE HOUR	✓	255	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	869	0
	B - A256 Canterbury Road	570	0	67
	C - Canterbury Road West	193	62	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	5	0
	B - A256 Canterbury Road	5	0	4

	C - Canterbury Road West	3	3	0
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Results

Results Summary for whole modelled period

Arm	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	0.12	2.1	A	797	1196
B - A256 Canterbury Road	0.06	0.8	A	587	880
C - Canterbury Road West	0.20	0.9	B	236	355

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	649	162	48	647	571	0.0	1.0	0.089	A
B - A256 Canterbury Road	475	119	0	476	695	0.0	0.4	0.053	A
C - Canterbury Road West	196	49	424	195	52	0.0	0.5	0.127	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	772	193	58	773	693	1.0	1.3	0.099	A
B - A256 Canterbury Road	577	144	0	577	831	0.4	0.5	0.054	A
C - Canterbury Road West	231	58	518	232	59	0.5	0.5	0.152	A

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	970	243	68	969	834	1.3	1.7	0.114	A
B - A256 Canterbury Road	693	173	0	692	1037	0.5	0.7	0.056	A
C - Canterbury Road West	278	70	622	280	71	0.5	0.8	0.195	B

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	956	239	73	953	854	1.7	2.0	0.116	A
B - A256 Canterbury Road	713	178	0	711	1026	0.7	0.8	0.056	A
C - Canterbury Road West	288	72	637	290	73	0.8	0.9	0.194	B

13:45 - 14:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	782	195	57	781	692	2.0	1.2	0.098	A
B - A256 Canterbury Road	581	145	0	581	838	0.8	0.4	0.053	A
C - Canterbury Road West	232	58	516	232	65	0.9	0.6	0.160	A

14:00 - 14:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	653	163	50	652	572	1.2	1.0	0.089	A
B - A256 Canterbury Road	480	120	0	480	702	0.4	0.3	0.053	A
C - Canterbury Road West	193	48	431	191	49	0.6	0.5	0.139	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

12:45 - 13:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	325	842	0.386	325	0.0	0.5	0.090	A
			2	B	323	845	0.383	323	0.0	0.5	0.088	A
	Exit	1	1	(A, B, C)	649			649	0.0	0.0	0.000	A
			1		571			571	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	256	1242	0.206	256	0.0	0.3	0.054	A
			2	A	219	1241	0.176	220	0.0	0.1	0.052	A
	Exit	1	1	(A, B, C)	475			475	0.0	0.0	0.000	A
			1		695			695	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	148	588	0.251	147	0.0	0.3	0.098	A
			2	B	48	584	0.082	48	0.0	0.1	0.102	A
	Exit	1	1	(A, B, C)	196			196	0.0	0.1	0.028	A
			1		52			52	0.0	0.0	0.000	A

13:00 - 13:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	388	833	0.466	388	0.5	0.6	0.099	A
			2	B	384	835	0.459	385	0.5	0.7	0.100	A
	Exit	1	1	(A, B, C)	772			772	0.0	0.0	0.000	A
			1		693			693	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	307	1239	0.248	308	0.3	0.2	0.055	A
			2	A	270	1235	0.219	270	0.1	0.2	0.052	A
	Exit	1	1	(A, B, C)	577			577	0.0	0.0	0.000	A
			1		831			831	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	175	559	0.311	174	0.3	0.2	0.104	A
			2	B	59	555	0.106	58	0.1	0.1	0.106	A
	Exit	1	1	(A, B, C)	231			233	0.1	0.1	0.047	A
			1		59			59	0.0	0.0	0.000	A

13:15 - 13:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	474	830	0.572	474	0.6	0.8	0.113	A
			2	B	496	835	0.595	496	0.7	0.9	0.112	A
	Exit	1	1	(A, B, C)	970			970	0.0	0.0	0.001	A
			1		834			834	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	368	1223	0.300	368	0.2	0.3	0.056	A
			2	A	325	1229	0.264	324	0.2	0.3	0.055	A
	Exit	1	1	(A, B, C)	693			692	0.0	0.1	0.000	A
			1		1037			1037	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	211	531	0.399	212	0.2	0.3	0.114	A
			2	B	68	526	0.130	68	0.1	0.1	0.113	A
	Exit	1	1	(A, B, C)	278			280	0.1	0.3	0.082	A
			1		71			71	0.0	0.0	0.000	A

13:30 - 13:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	476	832	0.573	475	0.8	1.0	0.114	A
			2	B	479	832	0.577	478	0.9	1.0	0.116	A
	Exit	1	1	(A, B, C)	956			956	0.0	0.0	0.001	A
			1		854			854	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	384	1237	0.310	382	0.3	0.4	0.057	A
			2	A	330	1228	0.269	329	0.3	0.4	0.055	A
	Exit	1	1	(A, B, C)	713			713	0.1	0.0	0.000	A
			1		1026			1026	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	217	523	0.414	217	0.3	0.4	0.113	A
			2	B	73	526	0.140	73	0.1	0.2	0.113	A
	Exit	1	1	(A, B, C)	288			290	0.3	0.4	0.081	A
			1		73			73	0.0	0.0	0.000	A

13:45 - 14:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
	Entry	1	1	B	389	838	0.465	388	1.0	0.7	0.098	A
			2	B	393	837	0.470	393	1.0	0.6	0.097	A

A - A256 Haine Road		2	1	(A, B, C)	782			782	0.0	0.0	0.000	A
	Exit	1	1		692			692	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	310	1238	0.250	309	0.4	0.3	0.055	A
			2	A	272	1235	0.220	272	0.4	0.2	0.051	A
	Exit	1	1	(A, B, C)	581			581	0.0	0.0	0.000	A
			1		838			838	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	176	557	0.315	176	0.4	0.3	0.110	A
			2	B	56	564	0.100	57	0.2	0.1	0.105	A
		2	1	(A, B, C)	232			232	0.4	0.2	0.051	A
	Exit	1	1		65			65	0.0	0.0	0.000	A
			1									

14:00 - 14:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	328	837	0.391	327	0.7	0.5	0.089	A
			2	B	325	839	0.388	325	0.6	0.5	0.089	A
		2	1	(A, B, C)	653			653	0.0	0.0	0.000	A
	Exit	1	1		572			572	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	255	1238	0.206	255	0.3	0.2	0.053	A
			2	A	225	1240	0.182	225	0.2	0.1	0.052	A
		2	1	(A, B, C)	480			480	0.0	0.0	0.000	A
	Exit	1	1		702			702	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	142	584	0.242	141	0.3	0.3	0.105	A
			2	B	50	578	0.087	50	0.1	0.1	0.102	A
		2	1	(A, B, C)	193			192	0.2	0.1	0.035	A
	Exit	1	1		49			49	0.0	0.0	0.000	A

Lane Analysis - 2039 Growthed Traffic, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A2 - Lane Analysis [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Lane Analysis	✓	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	0.36	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
A - A256 Haine Road	Evenly split	10.00
B - A256 Canterbury Road	Evenly split	10.00
C - Canterbury Road West	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	B	✓	5.00	0	99999
		2	B	✓	5.00	0	99999

	2	1	(A, B, C)		Infinity		
B - A256 Canterbury Road	1 [Give-way line]	1	A, C	✓	3.00	0	99999
		2	A	✓	3.00	0	99999
	2	1	(A, B, C)		Infinity		
C - Canterbury Road West	1 [Give-way line]	1	A	✓	1.00	0	99999
		2	B	✓	1.00	0	99999
	2	1	(A, B, C)		Infinity		

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	0.298	815
		2	0.298	815
B - A256 Canterbury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.274	696
		2	0.274	696

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Canterbury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Canterbury Road	1 [Give-way line]	1	✓		✓
		2	✓		
	2	1	✓	✓	✓
C - Canterbury Road West	1 [Give-way line]	1	✓		
		2		✓	
	2	1	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2039 Growthed Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1265	100.000
B - A256 Canterbury Road		ONE HOUR	✓	1065	100.000
C - Canterbury Road West		ONE HOUR	✓	394	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1265	0
	B - A256 Canterbury Road	985	0	80
	C - Canterbury Road West	289	105	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	5	0
	B - A256 Canterbury Road	6	0	2
	C - Canterbury Road West	3	2	0

Results

Results Summary for whole modelled period

Arm	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	0.29	6.9	C	1164	1746
B - A256 Canterbury Road	0.07	1.4	A	974	1462
C - Canterbury Road West	1.40	10.6	F	361	541

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	944	236	76	943	949	0.0	1.9	0.116	A
B - A256 Canterbury Road	794	199	0	795	1019	0.0	0.7	0.059	A
C - Canterbury Road West	288	72	735	289	60	0.0	1.1	0.211	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1136	284	95	1137	1142	1.9	2.9	0.147	A
B - A256 Canterbury Road	960	240	0	962	1232	0.7	0.9	0.063	A
C - Canterbury Road West	344	86	888	348	74	1.1	1.8	0.346	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1415	354	114	1406	1386	2.9	6.8	0.254	C
B - A256 Canterbury Road	1167	292	0	1165	1520	0.9	1.4	0.069	A
C - Canterbury Road West	437	109	1078	422	88	1.8	8.1	0.847	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1379	345	117	1389	1405	6.8	6.0	0.293	C
B - A256 Canterbury Road	1170	292	0	1172	1507	1.4	1.3	0.071	A
C - Canterbury Road West	440	110	1085	437	87	8.1	10.5	1.398	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1150	288	96	1153	1151	6.0	2.8	0.165	A
B - A256 Canterbury Road	959	240	0	958	1249	1.3	1.1	0.063	A
C - Canterbury Road West	355	89	886	362	72	10.5	2.8	0.685	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	959	240	79	959	955	2.8	1.8	0.118	A
B - A256 Canterbury Road	796	199	0	796	1038	1.1	0.7	0.058	A
C - Canterbury Road West	299	75	733	300	62	2.8	1.1	0.261	C

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:30 - 07:45

					Total					Start	End		
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Arm	Side	Lane level	Lane	Destination arms	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	queue (Veh)	queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	473	831	0.569	472	0.0	0.9	0.115	A
			2	B	472	830	0.568	471	0.0	0.9	0.115	A
	Exit	2	1	(A, B, C)	944			944	0.0	0.0	0.001	A
			1		949			949	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	415	1227	0.338	415	0.0	0.4	0.059	A
			2	A	379	1220	0.311	380	0.0	0.3	0.057	A
	Exit	2	1	(A, B, C)	794			794	0.0	0.0	0.000	A
			1		1019			1019	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	214	493	0.433	214	0.0	0.4	0.115	A
			2	B	76	499	0.153	76	0.0	0.2	0.118	A
	Exit	2	1	(A, B, C)	288			290	0.0	0.4	0.095	A
			1		60			60	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	570	824	0.692	571	0.9	1.4	0.142	A
			2	B	567	823	0.687	567	0.9	1.4	0.144	A
	Exit	2	1	(A, B, C)	1136			1137	0.0	0.1	0.004	A
			1		1142			1142	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	502	1225	0.410	503	0.4	0.5	0.063	A
			2	A	458	1217	0.376	459	0.3	0.4	0.060	A
	Exit	2	1	(A, B, C)	960			960	0.0	0.0	0.001	A
			1		1232			1232	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	253	447	0.566	253	0.4	0.6	0.133	A
			2	B	95	449	0.211	95	0.2	0.2	0.133	A
	Exit	2	1	(A, B, C)	344			348	0.4	1.1	0.212	B
			1		74			74	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	713	819	0.870	708	1.4	2.8	0.206	B
			2	B	702	817	0.859	698	1.4	2.6	0.206	B
	Exit	2	1	(A, B, C)	1415			1414	0.1	1.4	0.047	A
			1		1386			1386	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	610	1229	0.496	608	0.5	0.7	0.067	A
			2	A	558	1215	0.459	557	0.4	0.6	0.065	A
	Exit	2	1	(A, B, C)	1167			1167	0.0	0.0	0.003	A
			1		1520			1520	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	309	390	0.792	309	0.6	0.7	0.149	A
			2	B	113	395	0.287	114	0.2	0.3	0.148	A
	Exit	2	1	(A, B, C)	437			422	1.1	7.1	0.697	E
			1		88			88	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	696	818	0.852	697	2.8	2.4	0.223	B
			2	B	690	818	0.843	692	2.6	2.4	0.223	B
	Exit	2	1	(A, B, C)	1379			1386	1.4	1.2	0.071	A
			1		1405			1405	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	608	1226	0.496	610	0.7	0.6	0.069	A
			2	A	561	1217	0.461	562	0.6	0.6	0.066	A
	Exit	2	1	(A, B, C)	1170			1170	0.0	0.1	0.004	A
			1		1507			1507	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	320	390	0.820	320	0.7	0.8	0.153	A
			2	B	118	391	0.301	117	0.3	0.3	0.152	A
	Exit	2	1	(A, B, C)	440			437	7.1	9.5	1.246	F
			1		87			87	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	576	824	0.699	578	2.4	1.4	0.156	A
			2	B	575	824	0.697	575	2.4	1.4	0.154	A
	Exit	2	1	(A, B, C)	1150			1151	1.2	0.1	0.010	A

	Exit	1	1		1151			1151	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	502	1229	0.409	501	0.6	0.6	0.063	A
			2	A	457	1223	0.373	457	0.6	0.5	0.061	A
		2	1	(A, B, C)	959			959	0.1	0.0	0.001	A
	Exit	1	1		1249			1249	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	265	448	0.592	265	0.8	0.6	0.136	A
			2	B	96	452	0.213	96	0.3	0.2	0.134	A
		2	1	(A, B, C)	355			361	9.5	2.0	0.550	D
	Exit	1	1		72			72	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	479	828	0.579	479	1.4	0.9	0.117	A
			2	B	480	832	0.577	480	1.4	0.9	0.117	A
		2	1	(A, B, C)	959			959	0.1	0.0	0.001	A
	Exit	1	1		955			955	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	418	1227	0.341	418	0.6	0.4	0.059	A
			2	A	378	1218	0.311	378	0.5	0.3	0.057	A
		2	1	(A, B, C)	796			796	0.0	0.0	0.000	A
	Exit	1	1		1038			1038	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	221	492	0.449	221	0.6	0.4	0.126	A
			2	B	79	498	0.159	79	0.2	0.1	0.124	A
		2	1	(A, B, C)	299			300	2.0	0.5	0.136	A
	Exit	1	1		62			62	0.0	0.0	0.000	A

Lane Analysis - 2039 Growthed Traffic, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A2 - Lane Analysis [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	C - Canterbury Road West - Lane Simulation	Arm C: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Lane Analysis	✓	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	2.44	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
A - A256 Haine Road	Evenly split	10.00
B - A256 Canterbury Road	Evenly split	10.00
C - Canterbury Road West	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
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A - A256 Haine Road	1 [Give-way line]	1	B	✓	5.00	0	99999
		2	B	✓	5.00	0	99999
	2	1	(A, B, C)		Infinity		
B - A256 Canterbury Road	1 [Give-way line]	1	A, C	✓	3.00	0	99999
		2	A	✓	3.00	0	99999
	2	1	(A, B, C)		Infinity		
C - Canterbury Road West	1 [Give-way line]	1	A	✓	1.00	0	99999
		2	B	✓	1.00	0	99999
	2	1	(A, B, C)		Infinity		

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	0.298	815
		2	0.298	815
B - A256 Canterbury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.274	696
		2	0.274	696

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Canterbury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
		2			
B - A256 Canterbury Road	1 [Give-way line]	1	✓		✓
		2	✓		
	2	1	✓	✓	✓
		2			
C - Canterbury Road West	1 [Give-way line]	1	✓		
		2		✓	
	2	1	✓	✓	✓
		2			

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2039 Growthed Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1596	100.000
B - A256 Canterbury Road		ONE HOUR	✓	1351	100.000
C - Canterbury Road West		ONE HOUR	✓	507	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1596	0
	B - A256 Canterbury Road	1230	0	121
	C - Canterbury Road West	363	144	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	3	0
	B - A256 Canterbury Road	2	0	4

	C - Canterbury Road West	2	1	0
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Results

Results Summary for whole modelled period

Arm	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	1.89	63.3	F	1465	2198
B - A256 Canterbury Road	0.09	2.4	A	1241	1861
C - Canterbury Road West	10.51	86.4	F	464	696

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1200	300	107	1199	1207	0.0	3.1	0.155	A
B - A256 Canterbury Road	1027	257	0	1027	1307	0.0	1.1	0.061	A
C - Canterbury Road West	377	94	934	380	92	0.0	2.4	0.337	C

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1443	361	125	1443	1414	3.1	7.5	0.287	C
B - A256 Canterbury Road	1211	303	0	1212	1569	1.1	1.3	0.068	A
C - Canterbury Road West	455	114	1099	440	113	2.4	8.9	0.925	F

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1763	441	108	1661	1641	7.5	38.5	0.934	F
B - A256 Canterbury Road	1496	374	0	1494	1769	1.3	2.3	0.086	A
C - Canterbury Road West	553	138	1358	391	136	8.9	47.0	4.293	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1753	438	115	1663	1638	38.5	63.2	1.885	F
B - A256 Canterbury Road	1485	371	0	1486	1778	2.3	2.1	0.085	A
C - Canterbury Road West	562	140	1352	401	134	47.0	86.3	9.630	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1435	359	142	1537	1451	63.2	27.2	1.584	F
B - A256 Canterbury Road	1212	303	0	1211	1679	2.1	1.3	0.068	A
C - Canterbury Road West	456	114	1103	490	109	86.3	82.4	10.511	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1198	299	152	1224	1297	27.2	4.1	0.438	D
B - A256 Canterbury Road	1015	254	0	1013	1375	1.3	1.2	0.061	A
C - Canterbury Road West	382	95	920	529	93	82.4	46.3	6.706	F

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

A - A256 Haine Road		2	1	(A, B, C)	1435			1529	53.7	19.9	1.272	F
	Exit	1	1		1451			1451	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	630	1265	0.498	629	1.0	0.7	0.066	A
			2	A	582	1269	0.459	583	0.9	0.6	0.064	A
	Exit	1	1	(A, B, C)	1212			1212	0.2	0.0	0.003	A
			1		1679			1679	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	349	400	0.872	349	0.9	0.9	0.155	A
			2	B	142	403	0.352	142	0.3	0.3	0.153	A
	Exit	1	1	(A, B, C)	456			490	85.1	81.1	10.371	F
			1		109			109	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	613	823	0.745	614	3.7	1.7	0.207	B
			2	B	608	822	0.739	610	3.6	1.8	0.208	B
	Exit	1	1	(A, B, C)	1198			1220	19.9	0.6	0.239	B
			1		1297			1297	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	531	1264	0.420	530	0.7	0.6	0.061	A
			2	A	484	1268	0.382	482	0.6	0.5	0.058	A
	Exit	1	1	(A, B, C)	1015			1014	0.0	0.0	0.001	A
			1		1375			1375	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	377	452	0.835	377	0.9	0.8	0.135	A
			2	B	152	457	0.332	152	0.3	0.3	0.134	A
	Exit	1	1	(A, B, C)	382			529	81.1	45.1	6.575	F
			1		93			93	0.0	0.0	0.000	A

Lane Analysis - 2039 Growthed Traffic, Airport Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A2 - Lane Analysis [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Lane Analysis	✓	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	0.18	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
A - A256 Haine Road	Evenly split	10.00
B - A256 Canterbury Road	Evenly split	10.00
C - Canterbury Road West	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)

A - A256 Haine Road	1 [Give-way line]	1	B	✓	5.00	0	99999
		2	B	✓	5.00	0	99999
	2	1	(A, B, C)		Infinity		
B - A256 Canterbury Road	1 [Give-way line]	1	A, C	✓	3.00	0	99999
		2	A	✓	3.00	0	99999
	2	1	(A, B, C)		Infinity		
C - Canterbury Road West	1 [Give-way line]	1	A	✓	1.00	0	99999
		2	B	✓	1.00	0	99999
	2	1	(A, B, C)		Infinity		

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	0.298	815
		2	0.298	815
B - A256 Canterbury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.274	696
		2	0.274	696

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Canterbury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
		2			
B - A256 Canterbury Road	1 [Give-way line]	1	✓		✓
		2	✓		
	2	1	✓	✓	✓
		2			
C - Canterbury Road West	1 [Give-way line]	1	✓		
		2		✓	
	2	1	✓	✓	✓
		2			

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2039 Growthed Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1160	100.000
B - A256 Canterbury Road		ONE HOUR	✓	850	100.000
C - Canterbury Road West		ONE HOUR	✓	340	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1160	0
	B - A256 Canterbury Road	761	0	89
	C - Canterbury Road West	257	83	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	6	0
	B - A256 Canterbury Road	6	0	5

	C - Canterbury Road West	3	3	0
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Results

Results Summary for whole modelled period

Arm	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	0.20	4.6	B	1066	1599
B - A256 Canterbury Road	0.06	1.0	A	779	1168
C - Canterbury Road West	0.38	2.4	C	314	471

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	878	220	63	877	768	0.0	1.6	0.108	A
B - A256 Canterbury Road	636	159	0	635	940	0.0	0.7	0.056	A
C - Canterbury Road West	261	65	569	261	66	0.0	0.7	0.163	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1045	261	77	1045	918	1.6	2.3	0.132	A
B - A256 Canterbury Road	763	191	0	762	1122	0.7	0.8	0.059	A
C - Canterbury Road West	309	77	683	312	80	0.7	1.1	0.224	B

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1276	319	92	1268	1119	2.3	4.4	0.198	B
B - A256 Canterbury Road	929	232	0	928	1360	0.8	0.9	0.063	A
C - Canterbury Road West	377	94	833	377	95	1.1	2.4	0.353	C

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1274	318	90	1279	1125	4.4	4.1	0.203	B
B - A256 Canterbury Road	943	236	0	942	1369	0.9	1.0	0.063	A
C - Canterbury Road West	374	93	840	376	102	2.4	2.2	0.378	C

13:45 - 14:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1038	260	77	1035	914	4.1	2.4	0.135	A
B - A256 Canterbury Road	764	191	0	763	1112	1.0	0.8	0.059	A
C - Canterbury Road West	306	76	684	307	79	2.2	1.2	0.250	C

14:00 - 14:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	882	221	63	881	768	2.4	1.7	0.110	A
B - A256 Canterbury Road	639	160	0	639	944	0.8	0.5	0.055	A
C - Canterbury Road West	259	65	574	257	65	1.2	0.9	0.183	B

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

A - A256 Haine Road		2	1	(A, B, C)	1038			1037	0.4	0.1	0.003	A
	Exit	1	1		914			914	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	406	1227	0.331	405	0.5	0.4	0.059	A
			2	A	358	1224	0.292	358	0.5	0.4	0.057	A
	Exit	1	1	(A, B, C)	764			764	0.0	0.0	0.001	A
			1		1112			1112	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	229	506	0.453	230	0.6	0.5	0.122	A
			2	B	77	506	0.152	77	0.2	0.2	0.117	A
	Exit	1	1	(A, B, C)	306			306	1.4	0.6	0.130	A
			1		79			79	0.0	0.0	0.000	A

14:00 - 14:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	444	827	0.538	444	1.2	0.8	0.110	A
			2	B	438	824	0.532	437	1.2	0.8	0.109	A
	Exit	1	1	(A, B, C)	882			882	0.1	0.0	0.001	A
			1		768			768	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	341	1221	0.280	342	0.4	0.3	0.056	A
			2	A	297	1225	0.243	298	0.4	0.2	0.054	A
	Exit	1	1	(A, B, C)	639			639	0.0	0.0	0.000	A
			1		944			944	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	194	540	0.360	194	0.5	0.4	0.113	A
			2	B	63	536	0.118	63	0.2	0.1	0.113	A
	Exit	1	1	(A, B, C)	259			257	0.6	0.4	0.070	A
			1		65			65	0.0	0.0	0.000	A

Lane Analysis - 2039 + Dev Traffic, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A2 - Lane Analysis [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Lane Analysis	✓	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	0.60	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
A - A256 Haine Road	Evenly split	10.00
B - A256 Canterbury Road	Evenly split	10.00
C - Canterbury Road West	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	B	✓	5.00	0	99999
		2	B	✓	5.00	0	99999

	2	1	(A, B, C)		Infinity		
B - A256 Canterbury Road	1 [Give-way line]	1	A, C	✓	3.00	0	99999
		2	A	✓	3.00	0	99999
	2	1	(A, B, C)		Infinity		
C - Canterbury Road West	1 [Give-way line]	1	A	✓	1.00	0	99999
		2	B	✓	1.00	0	99999
	2	1	(A, B, C)		Infinity		

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	0.298	815
		2	0.298	815
B - A256 Canterbury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.274	696
		2	0.274	696

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Canterbury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Canterbury Road	1 [Give-way line]	1	✓		✓
		2	✓		
	2	1	✓	✓	✓
C - Canterbury Road West	1 [Give-way line]	1	✓		
		2		✓	
	2	1	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2039 + Dev Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1287	100.000
B - A256 Canterbury Road		ONE HOUR	✓	1227	100.000
C - Canterbury Road West		ONE HOUR	✓	397	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1287	0
	B - A256 Canterbury Road	1147	0	80
	C - Canterbury Road West	292	105	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	5	0
	B - A256 Canterbury Road	5	0	2
	C - Canterbury Road West	3	2	0

Results

Results Summary for whole modelled period

Arm	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	0.31	7.4	C	1183	1774
B - A256 Canterbury Road	0.08	1.9	A	1125	1688
C - Canterbury Road West	3.22	25.3	F	366	548

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	965	241	78	964	1082	0.0	1.8	0.116	A
B - A256 Canterbury Road	920	230	0	919	1042	0.0	1.0	0.061	A
C - Canterbury Road West	299	75	859	301	60	0.0	1.2	0.236	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1159	290	92	1156	1290	1.8	3.1	0.151	A
B - A256 Canterbury Road	1103	276	0	1104	1248	1.0	1.2	0.066	A
C - Canterbury Road West	351	88	1033	348	71	1.2	2.9	0.426	D

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1419	355	103	1422	1548	3.1	7.3	0.293	C
B - A256 Canterbury Road	1347	337	0	1344	1525	1.2	1.9	0.078	A
C - Canterbury Road West	441	110	1259	392	85	2.9	15.7	1.575	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1421	355	106	1421	1554	7.3	7.3	0.307	C
B - A256 Canterbury Road	1347	337	0	1346	1527	1.9	1.8	0.080	A
C - Canterbury Road West	439	110	1258	402	87	15.7	25.3	3.215	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1158	290	109	1160	1331	7.3	3.0	0.170	B
B - A256 Canterbury Road	1106	276	0	1105	1269	1.8	1.3	0.067	A
C - Canterbury Road West	360	90	1034	406	71	25.3	8.9	2.148	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	975	244	82	970	1097	3.0	2.1	0.121	A
B - A256 Canterbury Road	927	232	0	927	1052	1.3	0.9	0.060	A
C - Canterbury Road West	305	76	866	312	60	8.9	2.0	0.587	E

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:30 - 07:45

					Total					Start	End		
--	--	--	--	--	-------	--	--	--	--	-------	-----	--	--

	Exit	1	1		1331			1331	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	571	1236	0.462	571	0.8	0.6	0.065	A
			2	A	535	1230	0.435	535	0.8	0.6	0.064	A
	Exit	2	1	(A, B, C)	1106			1105	0.2	0.1	0.002	A
C - Canterbury Road West	Entry	1	1	A	297	406	0.731	297	0.9	0.7	0.150	A
			2	B	109	410	0.265	109	0.4	0.2	0.150	A
		2	1	(A, B, C)	360			405	24.0	8.0	2.001	F
	Exit	1	1		71			71	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	490	829	0.591	488	1.4	1.0	0.120	A
			2	B	484	826	0.586	482	1.5	1.0	0.121	A
		2	1	(A, B, C)	975			974	0.1	0.1	0.001	A
	Exit	1	1		1097			1097	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	475	1232	0.386	476	0.6	0.4	0.061	A
			2	A	451	1235	0.365	451	0.6	0.4	0.059	A
		2	1	(A, B, C)	927			927	0.1	0.0	0.001	A
	Exit	1	1		1052			1052	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	231	455	0.509	230	0.7	0.5	0.136	A
			2	B	81	461	0.176	82	0.2	0.1	0.132	A
		2	1	(A, B, C)	305			313	8.0	1.3	0.451	D
	Exit	1	1		60			60	0.0	0.0	0.000	A

Lane Analysis - 2039 + Dev Traffic, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A2 - Lane Analysis [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	A - A256 Haine Road - Lane Simulation	Arm A: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Last Run	Lane Simulation	C - Canterbury Road West - Lane Simulation	Arm C: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Lane Analysis	✓	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	4.28	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
A - A256 Haine Road	Evenly split	10.00
B - A256 Canterbury Road	Evenly split	10.00
C - Canterbury Road West	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	B	✓	5.00	0	99999
		2	B	✓	5.00	0	99999
	2	1	(A, B, C)		Infinity		
B - A256 Canterbury Road	1 [Give-way line]	1	A, C	✓	3.00	0	99999
		2	A	✓	3.00	0	99999
	2	1	(A, B, C)		Infinity		
C - Canterbury Road West	1 [Give-way line]	1	A	✓	1.00	0	99999
		2	B	✓	1.00	0	99999
	2	1	(A, B, C)		Infinity		

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	0.298	815
		2	0.298	815
B - A256 Canterbury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.274	696
		2	0.274	696

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Canterbury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Canterbury Road	1 [Give-way line]	1	✓		✓
		2	✓		
	2	1	✓	✓	✓
C - Canterbury Road West	1 [Give-way line]	1	✓		
		2		✓	
	2	1	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2039 + Dev Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1777	100.000
B - A256 Canterbury Road		ONE HOUR	✓	1379	100.000
C - Canterbury Road West		ONE HOUR	✓	507	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1777	0
	B - A256 Canterbury Road	1254	0	125
	C - Canterbury Road West	363	144	0

Vehicle Mix

Heavy Vehicle Percentages

	To		
	A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
A - A256 Haine Road	0	3	0

From	B - A256 Canterbury Road	2	0	4
	C - Canterbury Road West	2	1	0

Results

Results Summary for whole modelled period

Arm	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	5.56	161.5	F	1630	2445
B - A256 Canterbury Road	0.09	2.4	A	1264	1896
C - Canterbury Road West	11.21	89.2	F	463	695

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1342	335	110	1343	1214	0.0	5.1	0.203	B
B - A256 Canterbury Road	1032	258	0	1032	1453	0.0	1.0	0.061	A
C - Canterbury Road West	384	96	940	385	93	0.0	2.6	0.334	C

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1595	399	127	1576	1438	5.1	17.3	0.522	D
B - A256 Canterbury Road	1240	310	0	1242	1703	1.0	1.4	0.070	A
C - Canterbury Road West	452	113	1130	435	112	2.6	9.7	0.985	F

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1951	488	112	1666	1650	17.3	89.4	1.970	F
B - A256 Canterbury Road	1515	379	0	1513	1778	1.4	2.3	0.087	A
C - Canterbury Road West	556	139	1374	388	139	9.7	48.1	4.448	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1955	489	109	1653	1668	89.4	161.4	4.534	F
B - A256 Canterbury Road	1526	381	0	1525	1761	2.3	2.4	0.090	A
C - Canterbury Road West	558	140	1383	394	142	48.1	89.1	10.009	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1590	397	136	1663	1469	161.4	144.7	5.556	F
B - A256 Canterbury Road	1244	311	0	1245	1799	2.4	1.4	0.070	A
C - Canterbury Road West	454	114	1131	475	114	89.1	87.8	11.205	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1345	336	151	1594	1314	144.7	72.5	3.822	F
B - A256 Canterbury Road	1027	257	0	1027	1745	1.4	1.1	0.061	A
C - Canterbury Road West	376	94	935	530	92	87.8	52.6	7.387	F

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:30 - 16:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	669	835	0.801	670	0.0	2.2	0.182	B
			2	B	672	836	0.804	673	0.0	2.1	0.180	B
	Exit	2	1	(A, B, C)	1342			1341	0.0	0.8	0.022	A
			1		1214			1214	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	539	1265	0.426	539	0.0	0.5	0.061	A
			2	A	493	1268	0.388	493	0.0	0.5	0.058	A
	Exit	2	1	(A, B, C)	1032			1032	0.0	0.0	0.001	A
			1		1453			1453	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	275	446	0.614	275	0.0	0.6	0.126	A
			2	B	111	451	0.246	110	0.0	0.3	0.124	A
	Exit	2	1	(A, B, C)	384			385	0.0	1.7	0.208	B
			1		93			93	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	785	829	0.947	784	2.2	3.9	0.275	C
			2	B	793	829	0.957	792	2.1	3.9	0.273	C
	Exit	2	1	(A, B, C)	1595			1578	0.8	9.6	0.246	B
			1		1438			1438	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	648	1263	0.513	650	0.5	0.7	0.068	A
			2	A	592	1267	0.467	592	0.5	0.7	0.066	A
	Exit	2	1	(A, B, C)	1240			1241	0.0	0.0	0.003	A
			1		1703			1703	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	307	391	0.785	307	0.6	0.8	0.150	A
			2	B	127	393	0.324	127	0.3	0.3	0.150	A
	Exit	2	1	(A, B, C)	452			435	1.7	8.6	0.834	F
			1		112			112	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	833	834	0.998	832	3.9	4.9	0.342	C
			2	B	834	834	0.999	833	3.9	4.9	0.341	C
	Exit	2	1	(A, B, C)	1951			1666	9.6	79.8	1.628	F
			1		1650			1650	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	782	1265	0.619	781	0.7	1.0	0.076	A
			2	A	733	1269	0.578	732	0.7	1.0	0.073	A
	Exit	2	1	(A, B, C)	1515			1516	0.0	0.3	0.012	A
			1		1778			1778	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	276	321	0.857	276	0.8	0.9	0.183	B
			2	B	112	325	0.346	112	0.3	0.3	0.178	B
	Exit	2	1	(A, B, C)	556			388	8.6	46.9	4.263	F
			1		139			139	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	823	837	0.984	824	4.9	4.7	0.351	C
			2	B	829	837	0.991	829	4.9	4.9	0.348	C
	Exit	2	1	(A, B, C)	1955			1652	79.8	151.7	4.184	F
			1		1668			1668	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	789	1266	0.623	789	1.0	1.1	0.077	A
			2	A	736	1268	0.580	736	1.0	0.8	0.073	A
	Exit	2	1	(A, B, C)	1526			1525	0.3	0.4	0.015	A
			1		1761			1761	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	286	319	0.895	285	0.9	0.9	0.187	B
			2	B	108	322	0.335	109	0.3	0.3	0.187	B
	Exit	2	1	(A, B, C)	558			394	46.9	87.8	9.840	F
			1		142			142	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
	Entry	1	1	B	831	827	1.005	831	4.7	5.0	0.349	C
			2	B	833	828	1.006	833	4.9	4.9	0.349	C

A - A256 Haine Road		2	1	(A, B, C)	1590			1664	151.7	135.0	5.206	F
	Exit	1	1		1469			1469	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	651	1262	0.516	652	1.1	0.7	0.068	A
			2	A	593	1268	0.467	593	0.8	0.7	0.065	A
		2	1	(A, B, C)	1244			1244	0.4	0.1	0.004	A
	Exit	1	1		1799			1799	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	339	391	0.867	338	0.9	0.9	0.158	A
			2	B	136	395	0.344	136	0.3	0.3	0.157	A
		2	1	(A, B, C)	454			475	87.8	86.6	11.064	F
	Exit	1	1		114			114	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	797	823	0.968	799	5.0	4.4	0.343	C
			2	B	792	822	0.964	795	4.9	4.4	0.341	C
		2	1	(A, B, C)	1345			1589	135.0	63.7	3.470	F
	Exit	1	1		1314			1314	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	541	1263	0.428	541	0.7	0.5	0.061	A
			2	A	486	1267	0.383	486	0.7	0.5	0.060	A
		2	1	(A, B, C)	1027			1027	0.1	0.0	0.001	A
	Exit	1	1		1745			1745	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	379	449	0.846	380	0.9	0.9	0.136	A
			2	B	151	452	0.333	151	0.3	0.3	0.137	A
		2	1	(A, B, C)	376			530	86.6	51.4	7.256	F
	Exit	1	1		92			92	0.0	0.0	0.000	A

Lane Analysis - 2039 + Dev Traffic, Airport Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A2 - Lane Analysis [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Lane Analysis	✓	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	0.22	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
A - A256 Haine Road	Evenly split	10.00
B - A256 Canterbury Road	Evenly split	10.00
C - Canterbury Road West	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	B	✓	5.00	0	99999
		2	B	✓	5.00	0	99999

	2	1	(A, B, C)		Infinity		
B - A256 Canterbury Road	1 [Give-way line]	1	A, C	✓	3.00	0	99999
		2	A	✓	3.00	0	99999
	2	1	(A, B, C)		Infinity		
C - Canterbury Road West	1 [Give-way line]	1	A	✓	1.00	0	99999
		2	B	✓	1.00	0	99999
	2	1	(A, B, C)		Infinity		

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	0.298	815
		2	0.298	815
B - A256 Canterbury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.274	696
		2	0.274	696

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Canterbury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Canterbury Road	1 [Give-way line]	1	✓		✓
		2	✓		
	2	1	✓	✓	✓
C - Canterbury Road West	1 [Give-way line]	1	✓		
		2		✓	
	2	1	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2039 + Dev Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1213	100.000
B - A256 Canterbury Road		ONE HOUR	✓	1040	100.000
C - Canterbury Road West		ONE HOUR	✓	345	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1213	0
	B - A256 Canterbury Road	951	0	89
	C - Canterbury Road West	262	83	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	5	0
	B - A256 Canterbury Road	4	0	5
	C - Canterbury Road West	3	3	0

Results

Results Summary for whole modelled period

Arm	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	0.23	5.3	B	1111	1667
B - A256 Canterbury Road	0.07	1.4	A	955	1433
C - Canterbury Road West	0.64	4.6	E	317	476

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	905	226	61	906	917	0.0	1.6	0.108	A
B - A256 Canterbury Road	784	196	0	784	967	0.0	0.7	0.057	A
C - Canterbury Road West	258	65	718	260	66	0.0	0.8	0.183	B

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1082	270	72	1084	1093	1.6	2.5	0.137	A
B - A256 Canterbury Road	940	235	0	939	1156	0.7	1.0	0.061	A
C - Canterbury Road West	307	77	859	305	79	0.8	1.5	0.267	C

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1334	333	89	1332	1343	2.5	5.2	0.213	B
B - A256 Canterbury Road	1151	288	0	1152	1421	1.0	1.2	0.067	A
C - Canterbury Road West	381	95	1051	381	101	1.5	3.9	0.541	D

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1340	335	90	1339	1344	5.2	5.0	0.232	B
B - A256 Canterbury Road	1154	288	0	1154	1429	1.2	1.3	0.068	A
C - Canterbury Road West	383	96	1056	378	98	3.9	4.6	0.638	E

13:45 - 14:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1093	273	77	1093	1089	5.0	2.4	0.144	A
B - A256 Canterbury Road	931	233	0	931	1170	1.3	1.0	0.061	A
C - Canterbury Road West	311	78	854	312	76	4.6	1.5	0.356	C

14:00 - 14:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	911	228	66	911	906	2.4	1.7	0.111	A
B - A256 Canterbury Road	773	193	0	772	977	1.0	0.8	0.057	A
C - Canterbury Road West	264	66	706	266	66	1.5	0.8	0.211	B

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

12:45 - 13:00

					Total					Start	End		
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Arm	Side	Lane level	Lane	Destination arms	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	queue (Veh)	queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	455	834	0.545	455	0.0	0.8	0.108	A
			2	B	451	835	0.540	451	0.0	0.7	0.108	A
	Exit	2	1	(A, B, C)	905			905	0.0	0.0	0.000	A
			1		917			917	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	416	1245	0.334	416	0.0	0.4	0.057	A
			2	A	368	1242	0.296	368	0.0	0.3	0.055	A
	Exit	2	1	(A, B, C)	784			784	0.0	0.0	0.000	A
			1		967			967	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	199	501	0.396	199	0.0	0.4	0.113	A
			2	B	61	498	0.122	61	0.0	0.1	0.112	A
	Exit	2	1	(A, B, C)	258			259	0.0	0.3	0.069	A
			1		66			66	0.0	0.0	0.000	A

13:00 - 13:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	538	832	0.648	540	0.8	1.2	0.134	A
			2	B	544	831	0.655	545	0.7	1.3	0.135	A
	Exit	2	1	(A, B, C)	1082			1083	0.0	0.0	0.003	A
			1		1093			1093	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	491	1244	0.394	490	0.4	0.6	0.062	A
			2	A	449	1245	0.361	449	0.3	0.4	0.059	A
	Exit	2	1	(A, B, C)	940			940	0.0	0.0	0.001	A
			1		1156			1156	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	234	460	0.508	233	0.4	0.5	0.129	A
			2	B	71	462	0.154	72	0.1	0.2	0.129	A
	Exit	2	1	(A, B, C)	307			305	0.3	0.8	0.138	A
			1		79			79	0.0	0.0	0.000	A

13:15 - 13:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	667	826	0.808	668	1.2	2.2	0.187	B
			2	B	664	825	0.805	664	1.3	2.2	0.187	B
	Exit	2	1	(A, B, C)	1334			1331	0.0	0.8	0.025	A
			1		1343			1343	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	599	1240	0.483	599	0.6	0.6	0.066	A
			2	A	552	1246	0.443	553	0.4	0.6	0.063	A
	Exit	2	1	(A, B, C)	1151			1151	0.0	0.0	0.003	A
			1		1421			1421	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	291	404	0.722	292	0.5	0.7	0.145	A
			2	B	90	404	0.222	89	0.2	0.2	0.147	A
	Exit	2	1	(A, B, C)	381			381	0.8	2.9	0.395	C
			1		101			101	0.0	0.0	0.000	A

13:30 - 13:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	671	824	0.815	671	2.2	2.2	0.192	B
			2	B	669	824	0.812	668	2.2	2.2	0.193	B
	Exit	2	1	(A, B, C)	1340			1341	0.8	0.7	0.039	A
			1		1344			1344	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	601	1244	0.483	601	0.6	0.6	0.066	A
			2	A	553	1246	0.445	552	0.6	0.7	0.064	A
	Exit	2	1	(A, B, C)	1154			1154	0.0	0.0	0.003	A
			1		1429			1429	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	288	403	0.714	288	0.7	0.7	0.149	A
			2	B	90	405	0.222	90	0.2	0.3	0.151	A
	Exit	2	1	(A, B, C)	383			378	2.9	3.6	0.489	D
			1		98			98	0.0	0.0	0.000	A

13:45 - 14:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	547	828	0.661	547	2.2	1.2	0.139	A
			2	B	547	829	0.660	546	2.2	1.2	0.140	A
	Exit	2	1	(A, B, C)	1093			1094	0.7	0.0	0.006	A

	Exit	1	1		1089			1089	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	485	1244	0.390	485	0.6	0.5	0.061	A
			2	A	446	1245	0.358	446	0.7	0.4	0.059	A
	Exit	2	1	(A, B, C)	931			931	0.0	0.0	0.001	A
			1		1170			1170	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	235	461	0.510	235	0.7	0.5	0.134	A
			2	B	77	460	0.168	77	0.3	0.2	0.132	A
		2	1	(A, B, C)	311			312	3.6	0.8	0.223	B
	Exit	1	1		76			76	0.0	0.0	0.000	A
			1									

14:00 - 14:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	453	831	0.545	453	1.2	0.8	0.110	A
			2	B	459	837	0.548	458	1.2	0.9	0.111	A
		2	1	(A, B, C)	911			912	0.0	0.0	0.001	A
	Exit	1	1		906			906	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	407	1241	0.328	406	0.5	0.4	0.057	A
			2	A	366	1244	0.294	365	0.4	0.4	0.056	A
		2	1	(A, B, C)	773			773	0.0	0.0	0.000	A
	Exit	1	1		977			977	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	200	505	0.396	200	0.5	0.4	0.123	A
			2	B	65	506	0.130	66	0.2	0.1	0.122	A
		2	1	(A, B, C)	264			265	0.8	0.3	0.088	A
	Exit	1	1		66			66	0.0	0.0	0.000	A

Lane Analysis - 2039 B+Dev Net Change, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A2 - Lane Analysis [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Lane Analysis	✓	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	0.42	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
A - A256 Haine Road	Evenly split	10.00
B - A256 Canterbury Road	Evenly split	10.00
C - Canterbury Road West	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	B	✓	5.00	0	99999
		2	B	✓	5.00	0	99999

	2	1	(A, B, C)		Infinity		
B - A256 Canterbury Road	1 [Give-way line]	1	A, C	✓	3.00	0	99999
		2	A	✓	3.00	0	99999
	2	1	(A, B, C)		Infinity		
C - Canterbury Road West	1 [Give-way line]	1	A	✓	1.00	0	99999
		2	B	✓	1.00	0	99999
	2	1	(A, B, C)		Infinity		

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	0.298	815
		2	0.298	815
B - A256 Canterbury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.274	696
		2	0.274	696

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Canterbury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Canterbury Road	1 [Give-way line]	1	✓		✓
		2	✓		
	2	1	✓	✓	✓
C - Canterbury Road West	1 [Give-way line]	1	✓		
		2		✓	
	2	1	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2039 B+Dev Net Change	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1164	100.000
B - A256 Canterbury Road		ONE HOUR	✓	1145	100.000
C - Canterbury Road West		ONE HOUR	✓	397	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1164	0
	B - A256 Canterbury Road	1065	0	80
	C - Canterbury Road West	292	105	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	4	0
	B - A256 Canterbury Road	5	0	2
	C - Canterbury Road West	3	2	0

Results

Results Summary for whole modelled period

Arm	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	0.20	4.5	B	1067	1601
B - A256 Canterbury Road	0.07	1.8	A	1051	1576
C - Canterbury Road West	2.10	16.4	F	365	547

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	873	218	77	872	1015	0.0	1.6	0.105	A
B - A256 Canterbury Road	856	214	0	855	949	0.0	0.8	0.058	A
C - Canterbury Road West	296	74	794	297	60	0.0	1.2	0.218	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1045	261	97	1047	1217	1.6	2.4	0.132	A
B - A256 Canterbury Road	1022	256	0	1023	1144	0.8	1.1	0.063	A
C - Canterbury Road West	360	90	951	363	72	1.2	2.3	0.385	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1278	320	106	1276	1472	2.4	4.3	0.192	B
B - A256 Canterbury Road	1261	315	0	1260	1382	1.1	1.6	0.074	A
C - Canterbury Road West	441	110	1171	407	89	2.3	12.4	1.215	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1276	319	107	1276	1490	4.3	4.5	0.202	B
B - A256 Canterbury Road	1275	319	0	1274	1383	1.6	1.8	0.074	A
C - Canterbury Road West	434	108	1182	415	92	12.4	16.4	2.098	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1050	263	102	1052	1234	4.5	2.4	0.138	A
B - A256 Canterbury Road	1030	257	0	1029	1154	1.8	1.1	0.065	A
C - Canterbury Road West	354	89	959	377	70	16.4	4.2	1.171	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	880	220	79	879	1023	2.4	1.6	0.107	A
B - A256 Canterbury Road	859	215	0	861	958	1.1	0.8	0.059	A
C - Canterbury Road West	304	76	803	299	58	4.2	1.5	0.323	C

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:30 - 07:45

					Total					Start	End		
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Arm	Side	Lane level	Lane	Destination arms	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	queue (Veh)	queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	437	838	0.522	436	0.0	0.8	0.105	A
			2	B	436	839	0.520	436	0.0	0.8	0.105	A
	Exit	2	1	(A, B, C)	873			873	0.0	0.0	0.000	A
			1		1015			1015	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	444	1241	0.358	443	0.0	0.5	0.058	A
			2	A	412	1234	0.334	411	0.0	0.4	0.057	A
	Exit	2	1	(A, B, C)	856			856	0.0	0.0	0.000	A
			1		949			949	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	219	478	0.459	220	0.0	0.4	0.119	A
			2	B	78	483	0.161	77	0.0	0.2	0.116	A
	Exit	2	1	(A, B, C)	296			297	0.0	0.6	0.099	A
			1		60			60	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	522	830	0.629	523	0.8	1.2	0.130	A
			2	B	523	831	0.630	524	0.8	1.2	0.129	A
	Exit	2	1	(A, B, C)	1045			1045	0.0	0.0	0.003	A
			1		1217			1217	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	530	1239	0.428	530	0.5	0.5	0.063	A
			2	A	493	1233	0.400	493	0.4	0.5	0.061	A
	Exit	2	1	(A, B, C)	1022			1023	0.0	0.0	0.001	A
			1		1144			1144	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	265	432	0.613	265	0.4	0.6	0.137	A
			2	B	97	436	0.223	97	0.2	0.2	0.135	A
	Exit	2	1	(A, B, C)	360			362	0.6	1.6	0.249	B
			1		72			72	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	640	828	0.773	640	1.2	1.9	0.174	B
			2	B	638	827	0.770	636	1.2	1.9	0.175	B
	Exit	2	1	(A, B, C)	1278			1278	0.0	0.5	0.017	A
			1		1472			1472	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	657	1237	0.531	656	0.5	0.8	0.070	A
			2	A	605	1228	0.492	604	0.5	0.7	0.069	A
	Exit	2	1	(A, B, C)	1261			1261	0.0	0.1	0.004	A
			1		1382			1382	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	301	366	0.823	301	0.6	0.8	0.161	A
			2	B	107	370	0.289	106	0.2	0.3	0.157	A
	Exit	2	1	(A, B, C)	441			408	1.6	11.3	1.054	F
			1		89			89	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	639	829	0.771	639	1.9	1.9	0.181	B
			2	B	636	830	0.767	637	1.9	1.9	0.182	B
	Exit	2	1	(A, B, C)	1276			1275	0.5	0.6	0.021	A
			1		1490			1490	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	661	1236	0.535	660	0.8	0.9	0.070	A
			2	A	614	1233	0.498	614	0.7	0.8	0.069	A
	Exit	2	1	(A, B, C)	1275			1275	0.1	0.1	0.004	A
			1		1383			1383	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	308	362	0.850	308	0.8	0.9	0.163	A
			2	B	107	367	0.291	107	0.3	0.3	0.160	A
	Exit	2	1	(A, B, C)	434			415	11.3	15.2	1.938	F
			1		92			92	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	526	830	0.633	527	1.9	1.2	0.133	A
			2	B	524	831	0.631	525	1.9	1.2	0.135	A
	Exit	2	1	(A, B, C)	1050			1050	0.6	0.1	0.004	A

	Exit	1	1		1234			1234	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	534	1240	0.430	533	0.9	0.6	0.063	A
			2	A	496	1233	0.402	496	0.8	0.5	0.062	A
	Exit	2	1	(A, B, C)	1030			1030	0.1	0.0	0.002	A
C - Canterbury Road West	Entry	1	1	A	275	429	0.641	275	0.9	0.6	0.144	A
			2	B	101	435	0.233	102	0.3	0.2	0.143	A
		2	1	(A, B, C)	354			376	15.2	3.3	1.029	F
	Exit	1	1		70			70	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	439	839	0.524	438	1.2	0.8	0.106	A
			2	B	441	837	0.527	441	1.2	0.7	0.107	A
		2	1	(A, B, C)	880			880	0.1	0.0	0.001	A
	Exit	1	1		1023			1023	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	445	1236	0.360	446	0.6	0.4	0.060	A
			2	A	415	1228	0.338	415	0.5	0.4	0.057	A
		2	1	(A, B, C)	859			859	0.0	0.0	0.001	A
	Exit	1	1		958			958	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	221	473	0.468	220	0.6	0.5	0.127	A
			2	B	79	479	0.166	79	0.2	0.2	0.127	A
		2	1	(A, B, C)	304			300	3.3	0.8	0.196	B
	Exit	1	1		58			58	0.0	0.0	0.000	A

Lane Analysis - 2039 B+Dev Net Change, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A2 - Lane Analysis [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Last Run	Lane Simulation	A - A256 Haine Road - Lane Simulation	Arm A: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Last Run	Lane Simulation	C - Canterbury Road West - Lane Simulation	Arm C: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Lane Analysis	✓	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	2.69	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
A - A256 Haine Road	Evenly split	10.00
B - A256 Canterbury Road	Evenly split	10.00
C - Canterbury Road West	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	B	✓	5.00	0	99999
		2	B	✓	5.00	0	99999
	2	1	(A, B, C)		Infinity		
B - A256 Canterbury Road	1 [Give-way line]	1	A, C	✓	3.00	0	99999
		2	A	✓	3.00	0	99999
	2	1	(A, B, C)		Infinity		
C - Canterbury Road West	1 [Give-way line]	1	A	✓	1.00	0	99999
		2	B	✓	1.00	0	99999
	2	1	(A, B, C)		Infinity		

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	0.298	815
		2	0.298	815
B - A256 Canterbury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.274	696
		2	0.274	696

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Canterbury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Canterbury Road	1 [Give-way line]	1	✓		✓
		2	✓		
	2	1	✓	✓	✓
C - Canterbury Road West	1 [Give-way line]	1	✓		
		2		✓	
	2	1	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2039 B+Dev Net Change	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1665	100.000
B - A256 Canterbury Road		ONE HOUR	✓	1252	100.000
C - Canterbury Road West		ONE HOUR	✓	507	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1665	0
	B - A256 Canterbury Road	1127	0	125
	C - Canterbury Road West	363	144	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West

From	A - A256 Haine Road	0	3	0
	B - A256 Canterbury Road	2	0	4
	C - Canterbury Road West	2	1	0

Results

Results Summary for whole modelled period

Arm	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	3.21	103.3	F	1527	2290
B - A256 Canterbury Road	0.08	2.0	A	1150	1724
C - Canterbury Road West	7.46	67.4	F	465	698

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1254	313	108	1251	1117	0.0	3.9	0.171	B
B - A256 Canterbury Road	938	235	0	939	1359	0.0	0.9	0.059	A
C - Canterbury Road West	383	96	845	380	94	0.0	2.3	0.299	C

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1506	377	125	1496	1341	3.9	9.8	0.345	C
B - A256 Canterbury Road	1131	283	0	1130	1621	0.9	1.3	0.065	A
C - Canterbury Road West	463	116	1015	451	115	2.3	7.5	0.745	E

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1830	458	124	1644	1556	9.8	58.4	1.320	F
B - A256 Canterbury Road	1393	348	0	1392	1768	1.3	2.0	0.079	A
C - Canterbury Road West	564	141	1251	429	141	7.5	38.2	3.188	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1837	459	125	1655	1557	58.4	103.2	2.977	F
B - A256 Canterbury Road	1374	344	0	1377	1780	2.0	1.7	0.077	A
C - Canterbury Road West	548	137	1238	443	139	38.2	67.3	7.234	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1486	372	145	1614	1376	103.2	70.6	3.212	F
B - A256 Canterbury Road	1124	281	0	1125	1760	1.7	1.1	0.065	A
C - Canterbury Road West	452	113	1016	506	109	67.3	56.2	7.465	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1249	312	150	1393	1205	70.6	14.7	1.393	F
B - A256 Canterbury Road	936	234	0	935	1543	1.1	0.8	0.060	A
C - Canterbury Road West	382	95	843	513	92	56.2	19.3	3.704	F

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:30 - 16:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	629	835	0.753	627	0.0	1.8	0.160	A
			2	B	624	835	0.748	624	0.0	1.7	0.160	A
		2	1	(A, B, C)	1254			1253	0.0	0.4	0.011	A
	Exit	1	1		1117			1117	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	498	1262	0.395	499	0.0	0.4	0.060	A
			2	A	441	1266	0.348	440	0.0	0.4	0.057	A
		2	1	(A, B, C)	938			939	0.0	0.0	0.001	A
	Exit	1	1		1359			1359	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	273	474	0.576	272	0.0	0.6	0.121	A
			2	B	108	477	0.227	108	0.0	0.3	0.122	A
		2	1	(A, B, C)	383			381	0.0	1.4	0.178	B
	Exit	1	1		94			94	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	749	830	0.902	748	1.8	3.1	0.240	B
			2	B	747	831	0.899	747	1.7	3.0	0.240	B
		2	1	(A, B, C)	1506			1497	0.4	3.7	0.104	A
	Exit	1	1		1341			1341	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	595	1265	0.470	594	0.4	0.7	0.065	A
			2	A	536	1268	0.423	536	0.4	0.6	0.062	A
		2	1	(A, B, C)	1131			1131	0.0	0.1	0.002	A
	Exit	1	1		1621			1621	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	326	425	0.766	326	0.6	0.8	0.141	A
			2	B	124	430	0.290	125	0.3	0.2	0.136	A
		2	1	(A, B, C)	463			450	1.4	6.5	0.605	E
	Exit	1	1		115			115	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	825	831	0.993	824	3.1	4.8	0.329	C
			2	B	822	832	0.987	820	3.0	4.8	0.331	C
		2	1	(A, B, C)	1830			1647	3.7	48.8	0.987	F
	Exit	1	1		1556			1556	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	720	1262	0.571	721	0.7	0.9	0.074	A
			2	A	673	1268	0.531	671	0.6	0.8	0.069	A
		2	1	(A, B, C)	1393			1393	0.1	0.3	0.007	A
	Exit	1	1		1768			1768	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	305	357	0.856	305	0.8	0.9	0.165	A
			2	B	124	360	0.343	124	0.2	0.3	0.161	A
		2	1	(A, B, C)	564			429	6.5	37.0	3.022	F
	Exit	1	1		141			141	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	833	830	1.004	832	4.8	4.9	0.349	C
			2	B	822	829	0.992	822	4.8	4.9	0.349	C
		2	1	(A, B, C)	1837			1655	48.8	93.5	2.627	F
	Exit	1	1		1557			1557	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	717	1262	0.568	718	0.9	0.8	0.072	A
			2	A	657	1268	0.518	659	0.8	0.7	0.069	A
		2	1	(A, B, C)	1374			1374	0.3	0.1	0.006	A
	Exit	1	1		1780			1780	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	318	361	0.883	318	0.9	0.9	0.167	B
			2	B	124	365	0.341	125	0.3	0.3	0.165	A
		2	1	(A, B, C)	548			443	37.0	66.1	7.076	F
	Exit	1	1		139			139	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
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A - A256 Haine Road	Entry	1	1	B	800	824	0.972	801	4.9	4.6	0.348	C
		2	2	B	813	823	0.987	813	4.9	4.6	0.347	C
	Exit	1	1	(A, B, C)	1486			1613	93.5	61.3	2.864	F
B - A256 Canterbury Road	Entry	1	1		1376			1376	0.0	0.0	0.000	A
		1	1	A, C	588	1264	0.466	588	0.8	0.6	0.065	A
		2	2	A	536	1268	0.423	536	0.7	0.5	0.062	A
	Exit	2	1	(A, B, C)	1124			1124	0.1	0.0	0.002	A
C - Canterbury Road West	Entry	1	1		1760			1760	0.0	0.0	0.000	A
		1	1	A	361	423	0.852	361	0.9	0.9	0.146	A
		2	2	B	145	429	0.338	145	0.3	0.3	0.144	A
	Exit	2	1	(A, B, C)	452			506	66.1	55.0	7.328	F
		1	1		109			109	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	689	821	0.838	697	4.6	2.6	0.289	C
		2	2	B	687	822	0.836	696	4.6	2.5	0.286	C
	Exit	1	1	(A, B, C)	1249			1376	61.3	9.7	1.113	F
B - A256 Canterbury Road	Entry	1	1		1205			1205	0.0	0.0	0.000	A
		1	1	A, C	492	1266	0.389	492	0.6	0.4	0.060	A
		2	2	A	444	1270	0.349	443	0.5	0.4	0.057	A
	Exit	2	1	(A, B, C)	936			936	0.0	0.0	0.001	A
C - Canterbury Road West	Entry	1	1		1543			1543	0.0	0.0	0.000	A
		1	1	A	362	474	0.765	363	0.9	0.7	0.128	A
		2	2	B	149	478	0.312	150	0.3	0.2	0.127	A
	Exit	2	1	(A, B, C)	382			512	55.0	18.3	3.571	F
	Exit	1	1		92			92	0.0	0.0	0.000	A

Lane Analysis - 2039 B+Dev Net Change, Airport Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A2 - Lane Analysis [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Lane Analysis	✓	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
21A	A256 - Canterbury Road West	Standard Roundabout	A, B, C	0.18	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Canterbury Road	
C	Canterbury Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.23	11.2	46.8	45.8	53.0	
B - A256 Canterbury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	7.4	26.1	45.8	50.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	0.596	1630
B - A256 Canterbury Road	0.829	2587
C - Canterbury Road West	0.548	1392

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
A - A256 Haine Road	Percentage		110.00
C - Canterbury Road West	Percentage		105.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
A - A256 Haine Road	Evenly split	10.00
B - A256 Canterbury Road	Evenly split	10.00
C - Canterbury Road West	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)

A - A256 Haine Road	1 [Give-way line]	1	B	✓	5.00	0	99999
		2	B	✓	5.00	0	99999
	2	1	(A, B, C)		Infinity		
B - A256 Canterbury Road	1 [Give-way line]	1	A, C	✓	3.00	0	99999
		2	A	✓	3.00	0	99999
	2	1	(A, B, C)		Infinity		
C - Canterbury Road West	1 [Give-way line]	1	A	✓	1.00	0	99999
		2	B	✓	1.00	0	99999
	2	1	(A, B, C)		Infinity		

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A - A256 Haine Road	1 [Give-way line]	1	0.298	815
		2	0.298	815
B - A256 Canterbury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.274	696
		2	0.274	696

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Canterbury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Canterbury Road	1 [Give-way line]	1	✓		✓
		2	✓		
	2	1	✓	✓	✓
C - Canterbury Road West	1 [Give-way line]	1	✓		
		2		✓	
	2	1	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2039 B+Dev Net Change	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A256 Haine Road		ONE HOUR	✓	1110	100.000
B - A256 Canterbury Road		ONE HOUR	✓	1004	100.000
C - Canterbury Road West		ONE HOUR	✓	345	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1110	0
	B - A256 Canterbury Road	915	0	89
	C - Canterbury Road West	262	83	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - A256 Haine Road	B - A256 Canterbury Road	C - Canterbury Road West
	A - A256 Haine Road	0	4	0
	B - A256 Canterbury Road	4	0	5

	C - Canterbury Road West	3	3	0
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Results

Results Summary for whole modelled period

Arm	Max delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A256 Haine Road	0.18	3.7	B	1019	1529
B - A256 Canterbury Road	0.07	1.2	A	921	1382
C - Canterbury Road West	0.53	3.7	D	316	474

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	835	209	65	835	893	0.0	1.4	0.100	A
B - A256 Canterbury Road	758	189	0	758	900	0.0	0.7	0.056	A
C - Canterbury Road West	264	66	693	265	64	0.0	0.9	0.178	B

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1009	252	74	1009	1054	1.4	2.1	0.121	A
B - A256 Canterbury Road	895	224	0	892	1082	0.7	0.9	0.060	A
C - Canterbury Road West	309	77	816	311	76	0.9	1.2	0.261	C

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1227	307	95	1222	1297	2.1	3.6	0.170	B
B - A256 Canterbury Road	1107	277	0	1107	1317	0.9	1.1	0.066	A
C - Canterbury Road West	383	96	1010	381	97	1.2	3.7	0.510	D

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	1230	307	91	1235	1291	3.6	3.5	0.177	B
B - A256 Canterbury Road	1105	276	0	1105	1326	1.1	1.2	0.066	A
C - Canterbury Road West	372	93	1005	378	101	3.7	3.0	0.531	D

13:45 - 14:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	992	248	76	995	1065	3.5	1.9	0.122	A
B - A256 Canterbury Road	912	228	0	912	1070	1.2	1.0	0.060	A
C - Canterbury Road West	311	78	830	311	82	3.0	1.5	0.302	C

14:00 - 14:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	825	206	60	825	878	1.9	1.4	0.101	A
B - A256 Canterbury Road	753	188	0	754	886	1.0	0.7	0.056	A
C - Canterbury Road West	256	64	686	252	68	1.5	1.0	0.203	B

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

12:45 - 13:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	415	841	0.492	415	0.0	0.7	0.100	A
			2	B	420	840	0.501	420	0.0	0.7	0.099	A
	Exit	2	1	(A, B, C)	835			835	0.0	0.0	0.000	A
			1		893			893	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	396	1242	0.318	397	0.0	0.4	0.057	A
			2	A	362	1244	0.291	361	0.0	0.3	0.055	A
	Exit	2	1	(A, B, C)	758			758	0.0	0.0	0.000	A
			1		900			900	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	199	508	0.392	199	0.0	0.4	0.112	A
			2	B	66	505	0.130	65	0.0	0.1	0.112	A
	Exit	2	1	(A, B, C)	264			264	0.0	0.4	0.066	A
			1		64			64	0.0	0.0	0.000	A

13:00 - 13:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	504	835	0.603	503	0.7	1.0	0.121	A
			2	B	506	841	0.603	505	0.7	1.1	0.119	A
	Exit	2	1	(A, B, C)	1009			1010	0.0	0.0	0.001	A
			1		1054			1054	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	470	1241	0.379	468	0.4	0.5	0.061	A
			2	A	425	1244	0.342	424	0.3	0.4	0.058	A
	Exit	2	1	(A, B, C)	895			895	0.0	0.0	0.001	A
			1		1082			1082	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	237	474	0.500	237	0.4	0.5	0.127	A
			2	B	74	469	0.157	74	0.1	0.2	0.129	A
	Exit	2	1	(A, B, C)	309			311	0.4	0.5	0.134	A
			1		76			76	0.0	0.0	0.000	A

13:15 - 13:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	608	832	0.732	607	1.0	1.8	0.159	A
			2	B	618	832	0.742	616	1.1	1.7	0.157	A
	Exit	2	1	(A, B, C)	1227			1226	0.0	0.2	0.012	A
			1		1297			1297	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	580	1244	0.466	580	0.5	0.6	0.065	A
			2	A	527	1243	0.424	527	0.4	0.5	0.063	A
	Exit	2	1	(A, B, C)	1107			1107	0.0	0.0	0.002	A
			1		1317			1317	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	287	415	0.692	287	0.5	0.7	0.140	A
			2	B	95	416	0.229	95	0.2	0.2	0.143	A
	Exit	2	1	(A, B, C)	383			382	0.5	2.8	0.369	C
			1		97			97	0.0	0.0	0.000	A

13:30 - 13:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	615	830	0.740	617	1.8	1.6	0.164	A
			2	B	616	833	0.739	618	1.7	1.6	0.165	A
	Exit	2	1	(A, B, C)	1230			1231	0.2	0.3	0.012	A
			1		1291			1291	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	577	1242	0.465	577	0.6	0.6	0.065	A
			2	A	529	1242	0.426	529	0.5	0.5	0.063	A
	Exit	2	1	(A, B, C)	1105			1105	0.0	0.0	0.002	A
			1		1326			1326	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	285	420	0.679	286	0.7	0.6	0.141	A
			2	B	92	419	0.219	91	0.2	0.2	0.140	A
	Exit	2	1	(A, B, C)	372			377	2.8	2.1	0.390	C
			1		101			101	0.0	0.0	0.000	A

13:45 - 14:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
	Entry	1	1	B	491	838	0.586	491	1.6	1.0	0.120	A
			2	B	501	838	0.598	504	1.6	0.9	0.122	A

A - A256 Haine Road		2	1	(A, B, C)	992			992	0.3	0.0	0.001	A
	Exit	1	1		1065			1065	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	485	1243	0.390	485	0.6	0.5	0.060	A
			2	A	428	1242	0.344	427	0.5	0.5	0.059	A
	Exit	1	1	(A, B, C)	912			913	0.0	0.0	0.001	A
			1		1070			1070	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	235	469	0.501	235	0.6	0.5	0.128	A
			2	B	76	470	0.162	76	0.2	0.2	0.131	A
	Exit	1	1	(A, B, C)	311			311	2.1	0.8	0.174	B
			1		82			82	0.0	0.0	0.000	A

14:00 - 14:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
A - A256 Haine Road	Entry	1	1	B	411	841	0.489	412	1.0	0.6	0.101	A
			2	B	413	843	0.490	413	0.9	0.7	0.101	A
	Exit	1	1	(A, B, C)	825			825	0.0	0.0	0.000	A
			1		878			878	0.0	0.0	0.000	A
B - A256 Canterbury Road	Entry	1	1	A, C	399	1245	0.320	400	0.5	0.3	0.057	A
			2	A	354	1244	0.284	354	0.5	0.4	0.055	A
	Exit	1	1	(A, B, C)	753			753	0.0	0.0	0.000	A
			1		886			886	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	193	510	0.379	192	0.5	0.5	0.119	A
			2	B	61	514	0.119	60	0.2	0.1	0.118	A
	Exit	1	1	(A, B, C)	256			254	0.8	0.5	0.084	A
			1		68			68	0.0	0.0	0.000	A

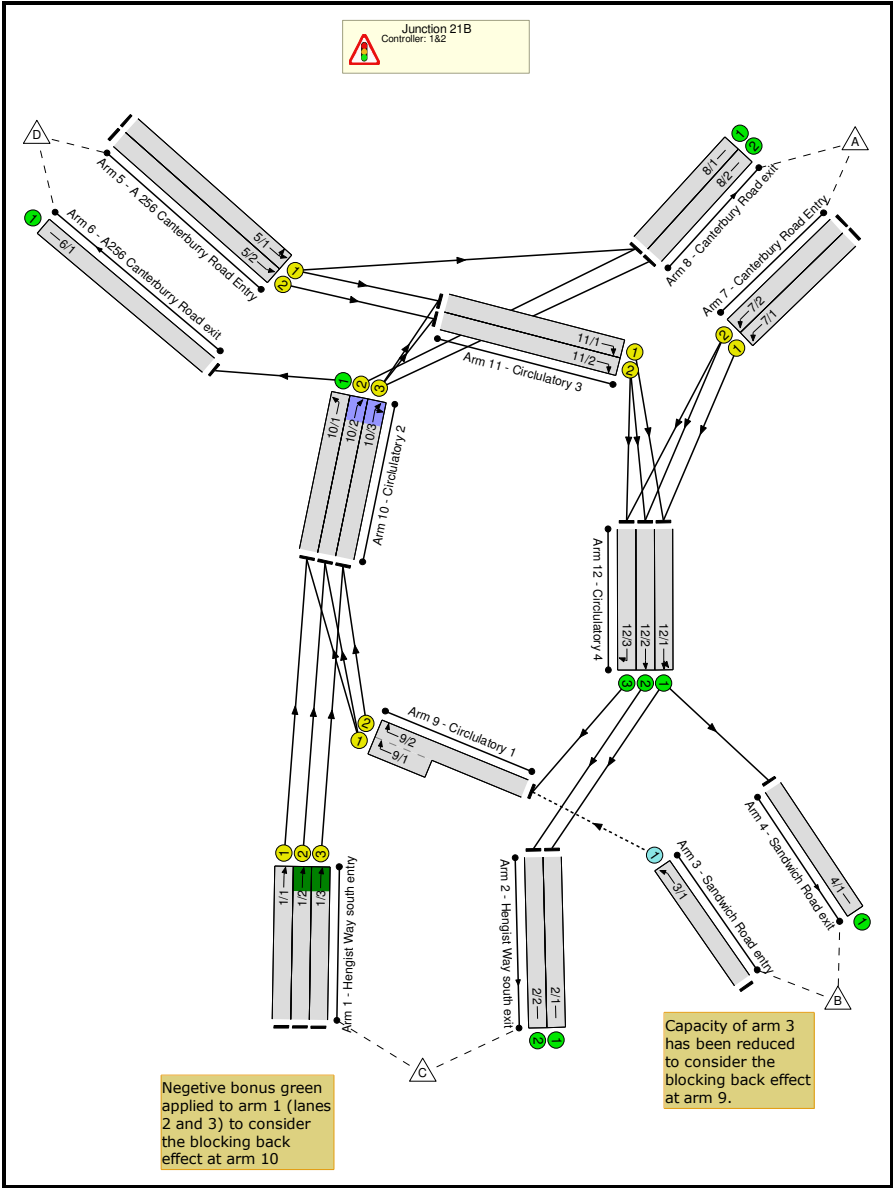
Full Input Data And Results

Full Input Data And Results

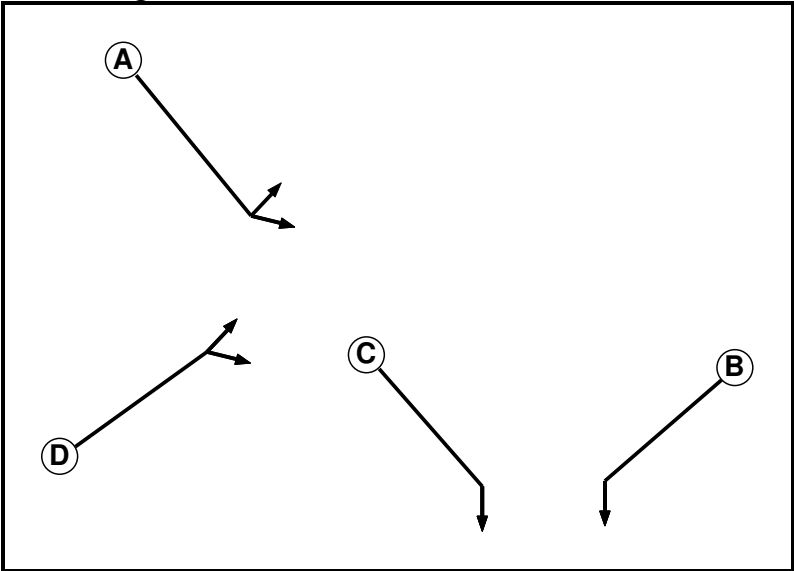
User and Project Details

Project:	Manston Airport DCO EIA
Title:	Junction 21b
Location:	Junction 21b_Validated.lsg3x
File name:	
Author:	
Company:	
Address:	LEAMINGTON SPA- GABLES HOUSE, KENILWORTH-ROAD,WARWICKSHIRE CV32 6JX
Notes:	

Network Layout Diagram



C1 - 08-1078
Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7

Full Input Data And Results

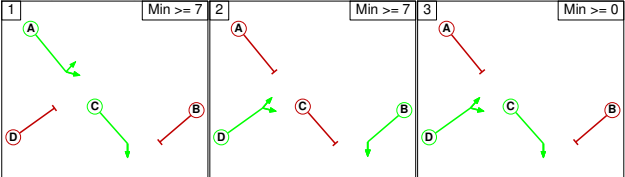
Phase Intergreens Matrix

Terminating Phase	Starting Phase				
		A	B	C	D
	A		5	-	5
	B	5		5	-
	C	-	5		-
	D	5	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A C
2	B D
3	C D

Stage Diagram



Phase Delays

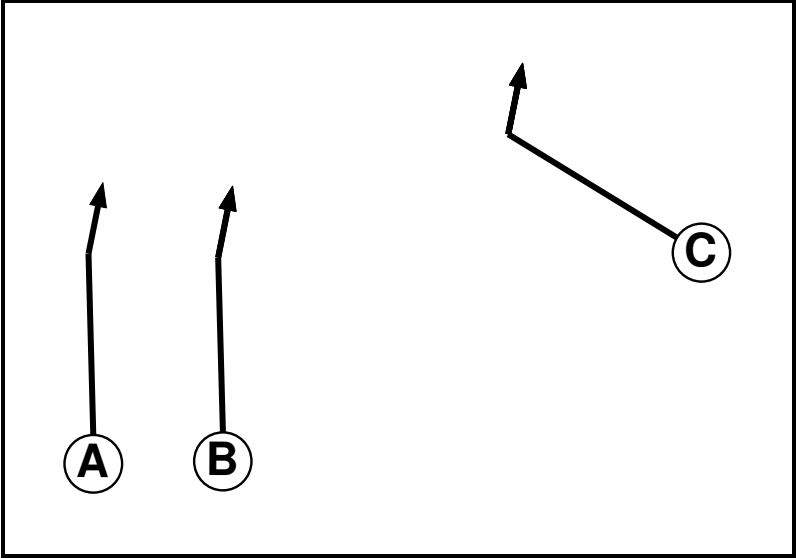
Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	C	Losing	6	6

Full Input Data And Results

Prohibited Stage Change

From Stage	To Stage			
	1	2	3	
	1		11	5
	2	5		5
3	5	5		

C2 - 08-1079
Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7

Full Input Data And Results

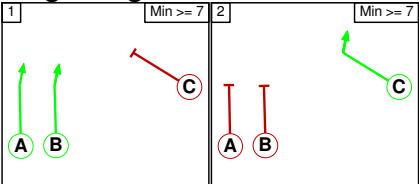
Phase Intergreens Matrix

Terminating Phase	Starting Phase			
		A	B	C
	A		-	5
	B	-		5
	C	5	5	

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	C

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage		
		1	2
	1		5
	2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Junction 21B											
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)
3/1 (Sandwich Road entry)	9/2 (Ahead)	390	0	12/2	0.12	All	-	-	-	-	-
				12/1	0.12	To 2/1 (Ahead)					
				12/3	0.12	All					

Full Input Data And Results

Lane Input Data

Junction: Junction 21B												
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 (Hengist Way south entry)	U	A	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 10 Ahead	Inf
1/2 (Hengist Way south entry)	U	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 10 Ahead	Inf
1/3 (Hengist Way south entry)	U	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 10 Ahead	Inf
2/1 (Hengist Way south exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
2/2 (Hengist Way south exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (Sandwich Road entry)	O		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 9 Ahead	50.00
4/1 (Sandwich Road exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (A 256 Canterbury Road Entry)	U	A	2	3	14.0	Geom	-	4.00	0.00	Y	Arm 8 Left	153.00
5/2 (A 256 Canterbury Road Entry)	U	A	2	3	14.0	Geom	-	4.00	0.00	Y	Arm 11 Ahead	30.00
6/1 (A256 Canterbury Road exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Canterbury Road Entry)	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 12 Left	20.00
7/2 (Canterbury Road Entry)	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 12 Left	20.00
8/1 (Canterbury Road exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/2 (Canterbury Road exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

9/1 (Circlulatory 1)	U	C	2	3	5.0	Geom	-	3.40	0.00	Y	Arm 10 Right	17.00
9/2 (Circlulatory 1)	U	C	2	3	60.0	Geom	-	3.40	0.00	Y	Arm 10 Right	14.00
10/1 (Circlulatory 2)	U		2	3	60.0	Inf	-	-	-	-	-	-
10/2 (Circlulatory 2)	U	D	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 8 Ahead	50.00
10/3 (Circlulatory 2)	U	D	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 8 Ahead Arm 11 Right	50.00 12.00
11/1 (Circlulatory 3)	U	C	2	3	60.0	Geom	-	4.25	0.00	Y	Arm 12 Right	Inf
11/2 (Circlulatory 3)	U	C	2	3	60.0	Geom	-	4.25	0.00	Y	Arm 12 Right	Inf
12/1 (Circlulatory 4)	U		2	3	60.0	Inf	-	-	-	-	-	-
12/2 (Circlulatory 4)	U		2	3	60.0	Inf	-	-	-	-	-	-
12/3 (Circlulatory 4)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2017 Baseline Traffic - AM Peak'	07:45	08:45	01:00	
2: '2017 Baseline Traffic - PM Peak'	16:45	17:45	01:00	
3: '2017 Baseline Traffic - Airport Peak'	13:00	14:00	01:00	
4: '2039 Growthed Traffic - AM Peak'	07:45	08:45	01:00	
5: '2039 Growthed Traffic - PM Peak'	16:45	17:45	01:00	
6: '2039 Growthed Traffic - Airport Peak'	13:00	14:00	01:00	
7: '2039 + Dev Traffic - AM Peak'	07:45	08:45	01:00	
8: '2039 + Dev Traffic - PM Peak'	16:45	17:45	01:00	
9: '2039 + Dev Traffic - Airport Peak'	13:00	14:00	01:00	

Full Input Data And Results

Scenario 1: '2017 Baseline Traffic - AM Peak' (FG1: '2017 Baseline Traffic - AM Peak', Plan 1: 'Base')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	119	931	155	1205
	B	62	0	14	64	140
	C	693	4	0	654	1351
	D	167	102	764	23	1056
	Tot.	922	225	1709	896	3752

Traffic Lane Flows

Lane	Scenario 1: 2017 Baseline Traffic - AM Peak
Junction: Junction 21B	
1/1	654
1/2	338
1/3	359
2/1	753
2/2	956
3/1	140
4/1	225
5/1	538
5/2	518
6/1	896
7/1	603
7/2	602
8/1	548
8/2	374

Full Input Data And Results

9/1 (short)	285
9/2 (with short)	318(In) 33(Out)
10/1	896
10/2	381
10/3	392
11/1	375
11/2	532
12/1	978
12/2	956
12/3	178

Lane Saturation Flows

Junction: Junction 21B								
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 (Hengist Way south entry)	3.70	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1985	1985
1/2 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
1/3 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
2/1 (Hengist Way south exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Hengist Way south exit Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Sandwich Road entry)	3.50	0.00	Y	Arm 9 Ahead	50.00	100.0 %	1908	1908
4/1 (Sandwich Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A 256 Canterbury Road Entry)	4.00	0.00	Y	Arm 8 Left	153.00	31.0 %	1942	1942
				Arm 11 Ahead	30.00	69.0 %		
5/2 (A 256 Canterbury Road Entry)	4.00	0.00	Y	Arm 11 Ahead	30.00	100.0 %	1919	1919
6/1 (A256 Canterbury Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Canterbury Road Entry)	3.50	0.00	Y	Arm 12 Left	20.00	100.0 %	1828	1828
7/2 (Canterbury Road Entry)	3.50	0.00	Y	Arm 12 Left	20.00	100.0 %	1828	1828
8/1 (Canterbury Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (Canterbury Road exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

9/1 (Circlulatory 1)	3.40	0.00	Y	Arm 10 Right	17.00	100.0 %	1796	1796
9/2 (Circlulatory 1)	3.40	0.00	Y	Arm 10 Right	14.00	100.0 %	1766	1766
10/1 (Circlulatory 2 Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (Circlulatory 2)	3.65	0.00	Y	Arm 8 Ahead	50.00	100.0 %	1922	1922
10/3 (Circlulatory 2)	3.65	0.00	Y	Arm 8 Ahead Arm 11 Right	50.00 12.00	95.4 % 4.6 %	1914	1914
11/1 (Circlulatory 3)	4.25	0.00	Y	Arm 12 Right	Inf	100.0 %	2040	2040
11/2 (Circlulatory 3)	4.25	0.00	Y	Arm 12 Right	Inf	100.0 %	2040	2040
12/1 (Circlulatory 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Circlulatory 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Circlulatory 4 Lane 3)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2017 Baseline Traffic - PM Peak' (FG2: '2017 Baseline Traffic - PM Peak', Plan 1: 'Base')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	133	543	133	809
	B	107	0	3	89	199
	C	833	9	0	824	1666
	D	304	153	794	49	1300
	Tot.	1244	295	1340	1095	3974

Traffic Lane Flows

Lane	Scenario 2: 2017 Baseline Traffic - PM Peak
Junction: Junction 21B	
1/1	824
1/2	425
1/3	417
2/1	485
2/2	855
3/1	199
4/1	295
5/1	670
5/2	630
6/1	1095
7/1	405
7/2	404
8/1	780
8/2	464

Full Input Data And Results

9/1 (short)	322
9/2 (with short)	381(In) 59(Out)
10/1	1095
10/2	476
10/3	476
11/1	375
11/2	633
12/1	780
12/2	855
12/3	182

Lane Saturation Flows

Junction: Junction 21B								
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 (Hengist Way south entry)	3.70	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1985	1985
1/2 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
1/3 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
2/1 (Hengist Way south exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Hengist Way south exit Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Sandwich Road entry)	3.50	0.00	Y	Arm 9 Ahead	50.00	100.0 %	1908	1908
4/1 (Sandwich Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A 256 Canterbury Road Entry)	4.00	0.00	Y	Arm 8 Left	153.00	45.4 %	1953	1953
				Arm 11 Ahead	30.00	54.6 %		
5/2 (A 256 Canterbury Road Entry)	4.00	0.00	Y	Arm 11 Ahead	30.00	100.0 %	1919	1919
6/1 (A256 Canterbury Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Canterbury Road Entry)	3.50	0.00	Y	Arm 12 Left	20.00	100.0 %	1828	1828
7/2 (Canterbury Road Entry)	3.50	0.00	Y	Arm 12 Left	20.00	100.0 %	1828	1828
8/1 (Canterbury Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (Canterbury Road exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

9/1 (Circlulatory 1)	3.40	0.00	Y	Arm 10 Right	17.00	100.0 %	1796	1796
9/2 (Circlulatory 1)	3.40	0.00	Y	Arm 10 Right	14.00	100.0 %	1766	1766
10/1 (Circlulatory 2 Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (Circlulatory 2)	3.65	0.00	Y	Arm 8 Ahead	50.00	100.0 %	1922	1922
10/3 (Circlulatory 2)	3.65	0.00	Y	Arm 8 Ahead Arm 11 Right	50.00 12.00	97.5 % 2.5 %	1918	1918
11/1 (Circlulatory 3)	4.25	0.00	Y	Arm 12 Right	Inf	100.0 %	2040	2040
11/2 (Circlulatory 3)	4.25	0.00	Y	Arm 12 Right	Inf	100.0 %	2040	2040
12/1 (Circlulatory 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Circlulatory 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Circlulatory 4 Lane 3)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '2017 Baseline Traffic - Airport Peak' (FG3: '2017 Baseline Traffic - Airport Peak', Plan 1: 'Base')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	101	462	113	676
	B	54	0	5	102	161
	C	501	12	0	409	922
	D	177	123	569	46	915
	Tot.	732	236	1036	670	2674

Traffic Lane Flows

Lane	Scenario 3: 2017 Baseline Traffic - Airport Peak
Junction: Junction 21B	
1/1	409
1/2	250
1/3	263
2/1	408
2/2	628
3/1	161
4/1	236
5/1	471
5/2	444
6/1	670
7/1	338
7/2	338
8/1	459
8/2	273

Full Input Data And Results

9/1 (short)	293
9/2 (with short)	320(In) 27(Out)
10/1	670
10/2	282
10/3	290
11/1	306
11/2	449
12/1	644
12/2	628
12/3	159

Lane Saturation Flows

Junction: Junction 21B								
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 (Hengist Way south entry)	3.70	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1985	1985
1/2 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
1/3 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
2/1 (Hengist Way south exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Hengist Way south exit Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Sandwich Road entry)	3.50	0.00	Y	Arm 9 Ahead	50.00	100.0 %	1908	1908
4/1 (Sandwich Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A 256 Canterbury Road Entry)	4.00	0.00	Y	Arm 8 Left	153.00	37.6 %	1947	1947
				Arm 11 Ahead	30.00	62.4 %		
5/2 (A 256 Canterbury Road Entry)	4.00	0.00	Y	Arm 11 Ahead	30.00	100.0 %	1919	1919
6/1 (A256 Canterbury Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Canterbury Road Entry)	3.50	0.00	Y	Arm 12 Left	20.00	100.0 %	1828	1828
7/2 (Canterbury Road Entry)	3.50	0.00	Y	Arm 12 Left	20.00	100.0 %	1828	1828
8/1 (Canterbury Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (Canterbury Road exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

9/1 (Circlulatory 1)	3.40	0.00	Y	Arm 10 Right	17.00	100.0 %	1796	1796
9/2 (Circlulatory 1)	3.40	0.00	Y	Arm 10 Right	14.00	100.0 %	1766	1766
10/1 (Circlulatory 2 Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (Circlulatory 2)	3.65	0.00	Y	Arm 8 Ahead	50.00	100.0 %	1922	1922
10/3 (Circlulatory 2)	3.65	0.00	Y	Arm 8 Ahead Arm 11 Right	50.00 12.00	94.1 % 5.9 %	1912	1912
11/1 (Circlulatory 3)	4.25	0.00	Y	Arm 12 Right	Inf	100.0 %	2040	2040
11/2 (Circlulatory 3)	4.25	0.00	Y	Arm 12 Right	Inf	100.0 %	2040	2040
12/1 (Circlulatory 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Circlulatory 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Circlulatory 4 Lane 3)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '2039 Growthed Traffic - AM Peak' (FG4: '2039 Growthed Traffic - AM Peak', Plan 1: 'Base')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	149	1166	194	1509
	B	78	0	18	80	176
	C	871	5	0	821	1697
	D	208	128	958	29	1323
	Tot.	1157	282	2142	1124	4705

Traffic Lane Flows

Lane	Scenario 4: 2039 Growthed Traffic - AM Peak
Junction: Junction 21B	
1/1	821
1/2	412
1/3	464
2/1	947
2/2	1195
3/1	176
4/1	282
5/1	677
5/2	646
6/1	1124
7/1	755
7/2	754
8/1	698
8/2	459

Full Input Data And Results

9/1 (short)	381
9/2 (with short)	399(In) 18(Out)
10/1	1124
10/2	490
10/3	482
11/1	474
11/2	664
12/1	1229
12/2	1195
12/3	223

Lane Saturation Flows

Junction: Junction 21B								
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 (Hengist Way south entry)	3.70	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1985	1985
1/2 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
1/3 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
2/1 (Hengist Way south exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Hengist Way south exit Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Sandwich Road entry)	3.50	0.00	Y	Arm 9 Ahead	50.00	100.0 %	1908	1908
4/1 (Sandwich Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A 256 Canterbury Road Entry)	4.00	0.00	Y	Arm 8 Left	153.00	30.7 %	1942	1942
				Arm 11 Ahead	30.00	69.3 %		
5/2 (A 256 Canterbury Road Entry)	4.00	0.00	Y	Arm 11 Ahead	30.00	100.0 %	1919	1919
6/1 (A256 Canterbury Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Canterbury Road Entry)	3.50	0.00	Y	Arm 12 Left	20.00	100.0 %	1828	1828
7/2 (Canterbury Road Entry)	3.50	0.00	Y	Arm 12 Left	20.00	100.0 %	1828	1828
8/1 (Canterbury Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (Canterbury Road exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

9/1 (Circlulatory 1)	3.40	0.00	Y	Arm 10 Right	17.00	100.0 %	1796	1796
9/2 (Circlulatory 1)	3.40	0.00	Y	Arm 10 Right	14.00	100.0 %	1766	1766
10/1 (Circlulatory 2 Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (Circlulatory 2)	3.65	0.00	Y	Arm 8 Ahead	50.00	100.0 %	1922	1922
10/3 (Circlulatory 2)	3.65	0.00	Y	Arm 8 Ahead Arm 11 Right	50.00 12.00	95.2 % 4.8 %	1914	1914
11/1 (Circlulatory 3)	4.25	0.00	Y	Arm 12 Right	Inf	100.0 %	2040	2040
11/2 (Circlulatory 3)	4.25	0.00	Y	Arm 12 Right	Inf	100.0 %	2040	2040
12/1 (Circlulatory 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Circlulatory 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Circlulatory 4 Lane 3)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: '2039 Growthed Traffic - PM Peak' (FG5: '2039 Growthed Traffic - PM Peak', Plan 1: 'Base')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	168	685	168	1021
	B	135	0	4	112	251
	C	1052	11	0	1040	2103
	D	383	193	1003	62	1641
	Tot.	1570	372	1692	1382	5016

Traffic Lane Flows

Lane	Scenario 5: 2039 Growthed Traffic - PM Peak
Junction: Junction 21B	
1/1	1040
1/2	507
1/3	556
2/1	609
2/2	1083
3/1	251
4/1	372
5/1	842
5/2	799
6/1	1382
7/1	511
7/2	510
8/1	1024
8/2	546

Full Input Data And Results

9/1 (short)	476
9/2 (with short)	481(In) 5(Out)
10/1	1382
10/2	641
10/3	561
11/1	470
11/2	803
12/1	981
12/2	1083
12/3	230

Lane Saturation Flows

Junction: Junction 21B								
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 (Hengist Way south entry)	3.70	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1985	1985
1/2 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
1/3 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
2/1 (Hengist Way south exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Hengist Way south exit Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Sandwich Road entry)	3.50	0.00	Y	Arm 9 Ahead	50.00	100.0 %	1908	1908
4/1 (Sandwich Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A 256 Canterbury Road Entry)	4.00	0.00	Y	Arm 8 Left	153.00	45.5 %	1953	1953
				Arm 11 Ahead	30.00	54.5 %		
5/2 (A 256 Canterbury Road Entry)	4.00	0.00	Y	Arm 11 Ahead	30.00	100.0 %	1919	1919
6/1 (A256 Canterbury Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Canterbury Road Entry)	3.50	0.00	Y	Arm 12 Left	20.00	100.0 %	1828	1828
7/2 (Canterbury Road Entry)	3.50	0.00	Y	Arm 12 Left	20.00	100.0 %	1828	1828
8/1 (Canterbury Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (Canterbury Road exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

9/1 (Circlulatory 1)	3.40	0.00	Y	Arm 10 Right	17.00	100.0 %	1796	1796
9/2 (Circlulatory 1)	3.40	0.00	Y	Arm 10 Right	14.00	100.0 %	1766	1766
10/1 (Circlulatory 2 Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (Circlulatory 2)	3.65	0.00	Y	Arm 8 Ahead	50.00	100.0 %	1922	1922
10/3 (Circlulatory 2)	3.65	0.00	Y	Arm 8 Ahead Arm 11 Right	50.00 12.00	97.3 % 2.7 %	1918	1918
11/1 (Circlulatory 3)	4.25	0.00	Y	Arm 12 Right	Inf	100.0 %	2040	2040
11/2 (Circlulatory 3)	4.25	0.00	Y	Arm 12 Right	Inf	100.0 %	2040	2040
12/1 (Circlulatory 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Circlulatory 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Circlulatory 4 Lane 3)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 6: '2039 Growthed Traffic - Airport Peak' (FG6: '2039 Growthed Traffic - Airport Peak', Plan 1: 'Base')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	135	619	151	905
	B	72	0	7	136	215
	C	671	16	0	548	1235
	D	236	164	764	61	1225
	Tot.	979	315	1390	896	3580

Traffic Lane Flows

Lane	Scenario 6: 2039 Growthed Traffic - Airport Peak
Junction: Junction 21B	
1/1	548
1/2	331
1/3	356
2/1	547
2/2	843
3/1	215
4/1	315
5/1	629
5/2	596
6/1	896
7/1	453
7/2	452
8/1	639
8/2	340

Full Input Data And Results

9/1 (short)	420
9/2 (with short)	427(In) 7(Out)
10/1	896
10/2	403
10/3	363
11/1	409
11/2	603
12/1	862
12/2	843
12/3	212

Lane Saturation Flows

Junction: Junction 21B								
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 (Hengist Way south entry)	3.70	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1985	1985
1/2 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
1/3 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
2/1 (Hengist Way south exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Hengist Way south exit Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Sandwich Road entry)	3.50	0.00	Y	Arm 9 Ahead	50.00	100.0 %	1908	1908
4/1 (Sandwich Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A 256 Canterbury Road Entry)	4.00	0.00	Y	Arm 8 Left	153.00	37.5 %	1947	1947
				Arm 11 Ahead	30.00	62.5 %		
5/2 (A 256 Canterbury Road Entry)	4.00	0.00	Y	Arm 11 Ahead	30.00	100.0 %	1919	1919
6/1 (A256 Canterbury Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Canterbury Road Entry)	3.50	0.00	Y	Arm 12 Left	20.00	100.0 %	1828	1828
7/2 (Canterbury Road Entry)	3.50	0.00	Y	Arm 12 Left	20.00	100.0 %	1828	1828
8/1 (Canterbury Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (Canterbury Road exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

9/1 (Circlulatory 1)	3.40	0.00	Y	Arm 10 Right	17.00	100.0 %	1796	1796
9/2 (Circlulatory 1)	3.40	0.00	Y	Arm 10 Right	14.00	100.0 %	1766	1766
10/1 (Circlulatory 2 Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (Circlulatory 2)	3.65	0.00	Y	Arm 8 Ahead	50.00	100.0 %	1922	1922
10/3 (Circlulatory 2)	3.65	0.00	Y	Arm 8 Ahead Arm 11 Right	50.00 12.00	93.7 % 6.3 %	1911	1911
11/1 (Circlulatory 3)	4.25	0.00	Y	Arm 12 Right	Inf	100.0 %	2040	2040
11/2 (Circlulatory 3)	4.25	0.00	Y	Arm 12 Right	Inf	100.0 %	2040	2040
12/1 (Circlulatory 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Circlulatory 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Circlulatory 4 Lane 3)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 7: '2039 + Dev Traffic - AM Peak' (FG7: '2039 + Dev Traffic - AM Peak', Plan 1: 'Base')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	149	1166	236	1551
	B	78	0	18	83	179
	C	871	5	0	938	1814
	D	215	128	975	29	1347
	Tot.	1164	282	2159	1286	4891

Traffic Lane Flows

Lane	Scenario 7: 2039 + Dev Traffic - AM Peak
Junction: Junction 21B	
1/1	938
1/2	410
1/3	466
2/1	973
2/2	1186
3/1	179
4/1	282
5/1	689
5/2	658
6/1	1286
7/1	776
7/2	775
8/1	703
8/2	461
9/1 (short)	426

Full Input Data And Results

9/2 (with short)	444(In) 18(Out)
10/1	1286
10/2	488
10/3	484
11/1	479
11/2	676
12/1	1255
12/2	1186
12/3	265

Lane Saturation Flows

Junction: Junction 21B								
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 (Hengist Way south entry)	3.70	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1985	1985
1/2 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
1/3 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
2/1 (Hengist Way south exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Hengist Way south exit Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Sandwich Road entry)	3.50	0.00	Y	Arm 9 Ahead	50.00	100.0 %	1908	1908
4/1 (Sandwich Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A 256 Canterbury Road Entry)	4.00	0.00	Y	Arm 8 Left	153.00	31.2 %	1942	1942
				Arm 11 Ahead	30.00	68.8 %		
5/2 (A 256 Canterbury Road Entry)	4.00	0.00	Y	Arm 11 Ahead	30.00	100.0 %	1919	1919
6/1 (A256 Canterbury Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Canterbury Road Entry)	3.50	0.00	Y	Arm 12 Left	20.00	100.0 %	1828	1828
7/2 (Canterbury Road Entry)	3.50	0.00	Y	Arm 12 Left	20.00	100.0 %	1828	1828
8/1 (Canterbury Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (Canterbury Road exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

9/1 (Circlulatory 1)	3.40	0.00	Y	Arm 10 Right	17.00	100.0 %	1796	1796
9/2 (Circlulatory 1)	3.40	0.00	Y	Arm 10 Right	14.00	100.0 %	1766	1766
10/1 (Circlulatory 2 Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (Circlulatory 2)	3.65	0.00	Y	Arm 8 Ahead	50.00	100.0 %	1922	1922
10/3 (Circlulatory 2)	3.65	0.00	Y	Arm 8 Ahead Arm 11 Right	50.00 12.00	95.2 % 4.8 %	1914	1914
11/1 (Circlulatory 3)	4.25	0.00	Y	Arm 12 Right	Inf	100.0 %	2040	2040
11/2 (Circlulatory 3)	4.25	0.00	Y	Arm 12 Right	Inf	100.0 %	2040	2040
12/1 (Circlulatory 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Circlulatory 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Circlulatory 4 Lane 3)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 8: '2039 + Dev Traffic - PM Peak' (FG8: '2039 + Dev Traffic - PM Peak', Plan 1: 'Base')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	168	685	173	1026
	B	135	0	4	112	251
	C	1052	11	0	1059	2122
	D	428	197	1133	66	1824
	Tot.	1615	376	1822	1410	5223

Traffic Lane Flows

Lane	Scenario 8: 2039 + Dev Traffic - PM Peak
Junction: Junction 21B	
1/1	1059
1/2	507
1/3	556
2/1	653
2/2	1169
3/1	251
4/1	376
5/1	933
5/2	891
6/1	1410
7/1	513
7/2	513
8/1	1069
8/2	546
9/1 (short)	485

Full Input Data And Results

9/2 (with short)	490(In) 5(Out)
10/1	1410
10/2	641
10/3	561
11/1	516
11/2	895
12/1	1029
12/2	1169
12/3	239

Lane Saturation Flows

Junction: Junction 21B								
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 (Hengist Way south entry)	3.70	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1985	1985
1/2 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
1/3 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
2/1 (Hengist Way south exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Hengist Way south exit Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Sandwich Road entry)	3.50	0.00	Y	Arm 9 Ahead	50.00	100.0 %	1908	1908
4/1 (Sandwich Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A 256 Canterbury Road Entry)	4.00	0.00	Y	Arm 8 Left	153.00	45.9 %	1953	1953
				Arm 11 Ahead	30.00	54.1 %		
5/2 (A 256 Canterbury Road Entry)	4.00	0.00	Y	Arm 11 Ahead	30.00	100.0 %	1919	1919
6/1 (A256 Canterbury Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Canterbury Road Entry)	3.50	0.00	Y	Arm 12 Left	20.00	100.0 %	1828	1828
7/2 (Canterbury Road Entry)	3.50	0.00	Y	Arm 12 Left	20.00	100.0 %	1828	1828
8/1 (Canterbury Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (Canterbury Road exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

9/1 (Circlulatory 1)	3.40	0.00	Y	Arm 10 Right	17.00	100.0 %	1796	1796
9/2 (Circlulatory 1)	3.40	0.00	Y	Arm 10 Right	14.00	100.0 %	1766	1766
10/1 (Circlulatory 2 Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (Circlulatory 2)	3.65	0.00	Y	Arm 8 Ahead	50.00	100.0 %	1922	1922
10/3 (Circlulatory 2)	3.65	0.00	Y	Arm 8 Ahead Arm 11 Right	50.00 12.00	97.3 % 2.7 %	1918	1918
11/1 (Circlulatory 3)	4.25	0.00	Y	Arm 12 Right	Inf	100.0 %	2040	2040
11/2 (Circlulatory 3)	4.25	0.00	Y	Arm 12 Right	Inf	100.0 %	2040	2040
12/1 (Circlulatory 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Circlulatory 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Circlulatory 4 Lane 3)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 9: '2039 + Dev Traffic - Airport Peak' (FG9: '2039 + Dev Traffic - Airport Peak', Plan 1: 'Base')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	135	619	198	952
	B	72	0	7	141	220
	C	671	16	0	687	1374
	D	249	164	803	61	1277
	Tot.	992	315	1429	1087	3823

Traffic Lane Flows

Lane	Scenario 9: 2039 + Dev Traffic - Airport Peak
Junction: Junction 21B	
1/1	687
1/2	333
1/3	354
2/1	583
2/2	846
3/1	220
4/1	315
5/1	655
5/2	622
6/1	1087
7/1	476
7/2	476
8/1	654
8/2	338

Full Input Data And Results

9/1 (short)	472
9/2 (with short)	479(In) 7(Out)
10/1	1087
10/2	405
10/3	361
11/1	422
11/2	629
12/1	898
12/2	846
12/3	259

Lane Saturation Flows

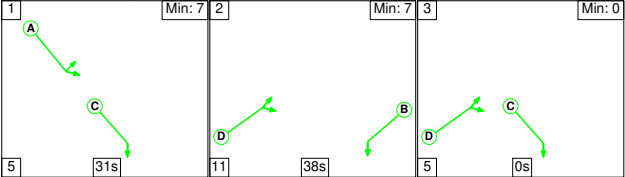
Junction: Junction 21B								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Hengist Way south entry)	3.70	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1985	1985
1/2 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
1/3 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1980	1980
2/1 (Hengist Way south exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Hengist Way south exit Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Sandwich Road entry)	3.50	0.00	Y	Arm 9 Ahead	50.00	100.0 %	1908	1908
4/1 (Sandwich Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (A 256 Canterbury Road Entry)	4.00	0.00	Y	Arm 8 Left	153.00	38.0 %	1947	1947
				Arm 11 Ahead	30.00	62.0 %		
5/2 (A 256 Canterbury Road Entry)	4.00	0.00	Y	Arm 11 Ahead	30.00	100.0 %	1919	1919
6/1 (A256 Canterbury Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Canterbury Road Entry)	3.50	0.00	Y	Arm 12 Left	20.00	100.0 %	1828	1828
7/2 (Canterbury Road Entry)	3.50	0.00	Y	Arm 12 Left	20.00	100.0 %	1828	1828
8/1 (Canterbury Road exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (Canterbury Road exit Lane 2)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

9/1 (Circlulatory 1)	3.40	0.00	Y	Arm 10 Right	17.00	100.0 %	1796	1796
9/2 (Circlulatory 1)	3.40	0.00	Y	Arm 10 Right	14.00	100.0 %	1766	1766
10/1 (Circlulatory 2 Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (Circlulatory 2)	3.65	0.00	Y	Arm 8 Ahead	50.00	100.0 %	1922	1922
10/3 (Circlulatory 2)	3.65	0.00	Y	Arm 8 Ahead Arm 11 Right	50.00 12.00	93.6 % 6.4 %	1911	1911
11/1 (Circlulatory 3)	4.25	0.00	Y	Arm 12 Right	Inf	100.0 %	2040	2040
11/2 (Circlulatory 3)	4.25	0.00	Y	Arm 12 Right	Inf	100.0 %	2040	2040
12/1 (Circlulatory 4 Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (Circlulatory 4 Lane 2)	Infinite Saturation Flow						Inf	Inf
12/3 (Circlulatory 4 Lane 3)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results
Scenario 1: '2017 Baseline Traffic - AM Peak' (FG1: '2017 Baseline Traffic - AM Peak', Plan 1: 'Base')
C1 - 08-1078

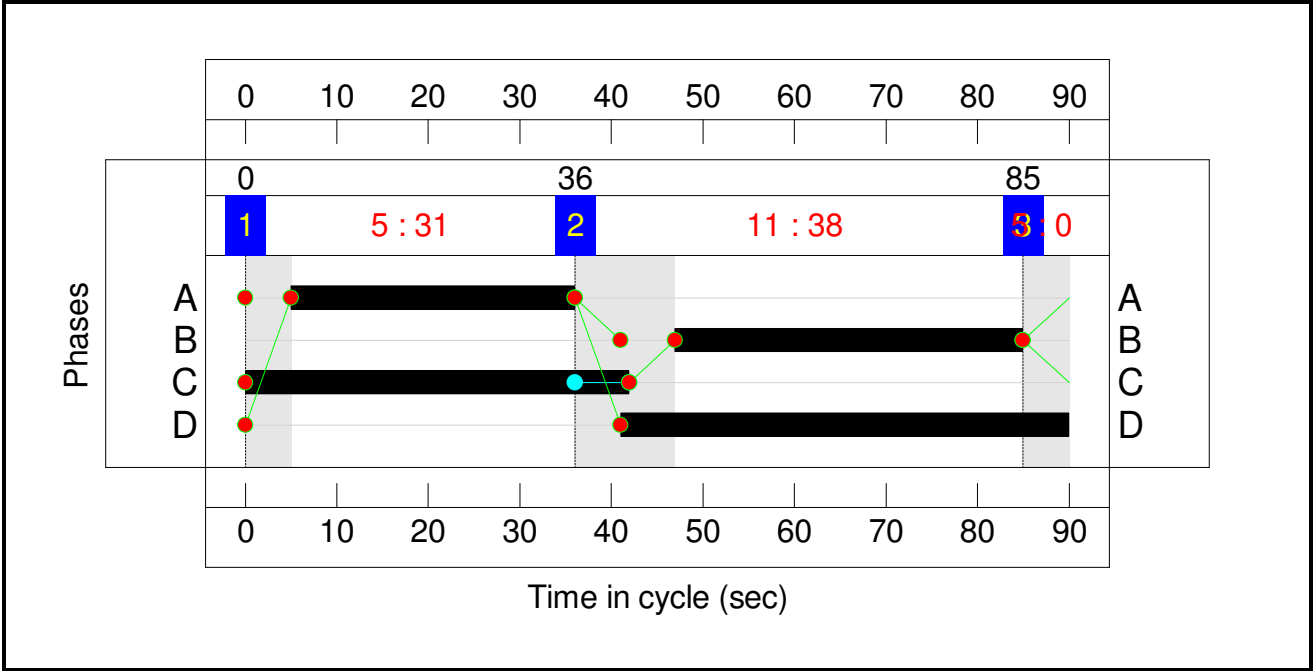
Stage Sequence Diagram



Stage Timings

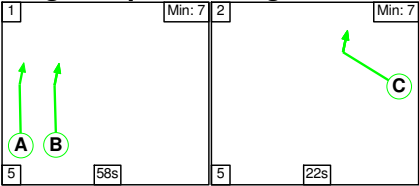
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Change Point	0	36	85

Signal Timings Diagram



Full Input Data And Results

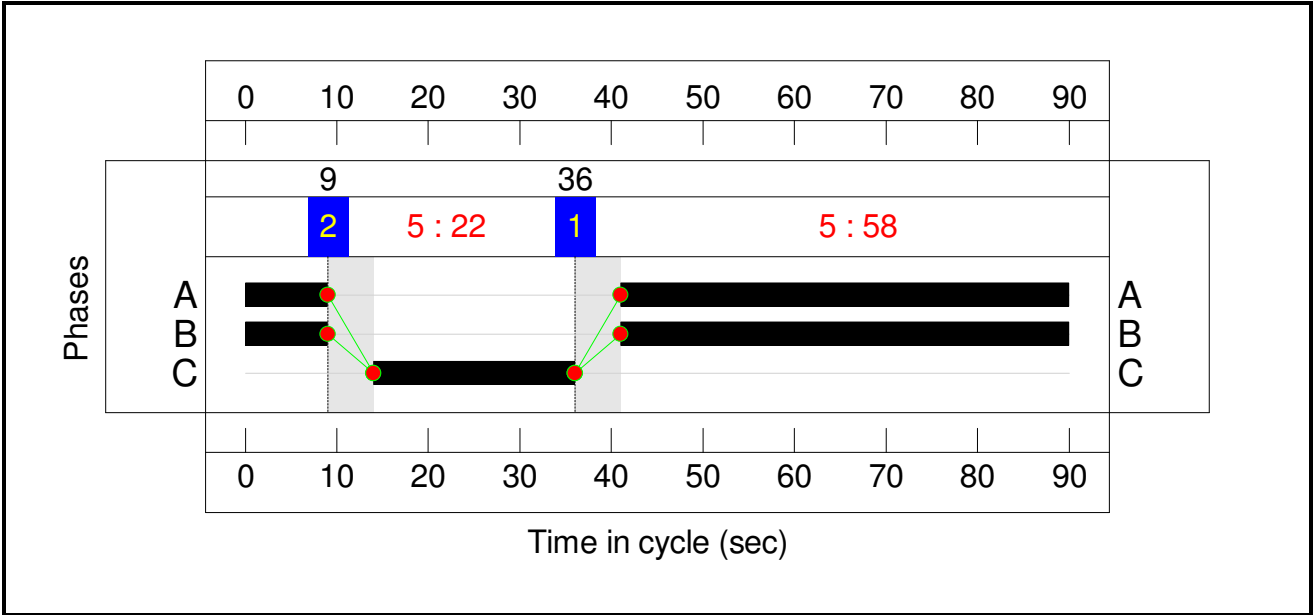
C2 - 08-1079
Stage Sequence Diagram



Stage Timings

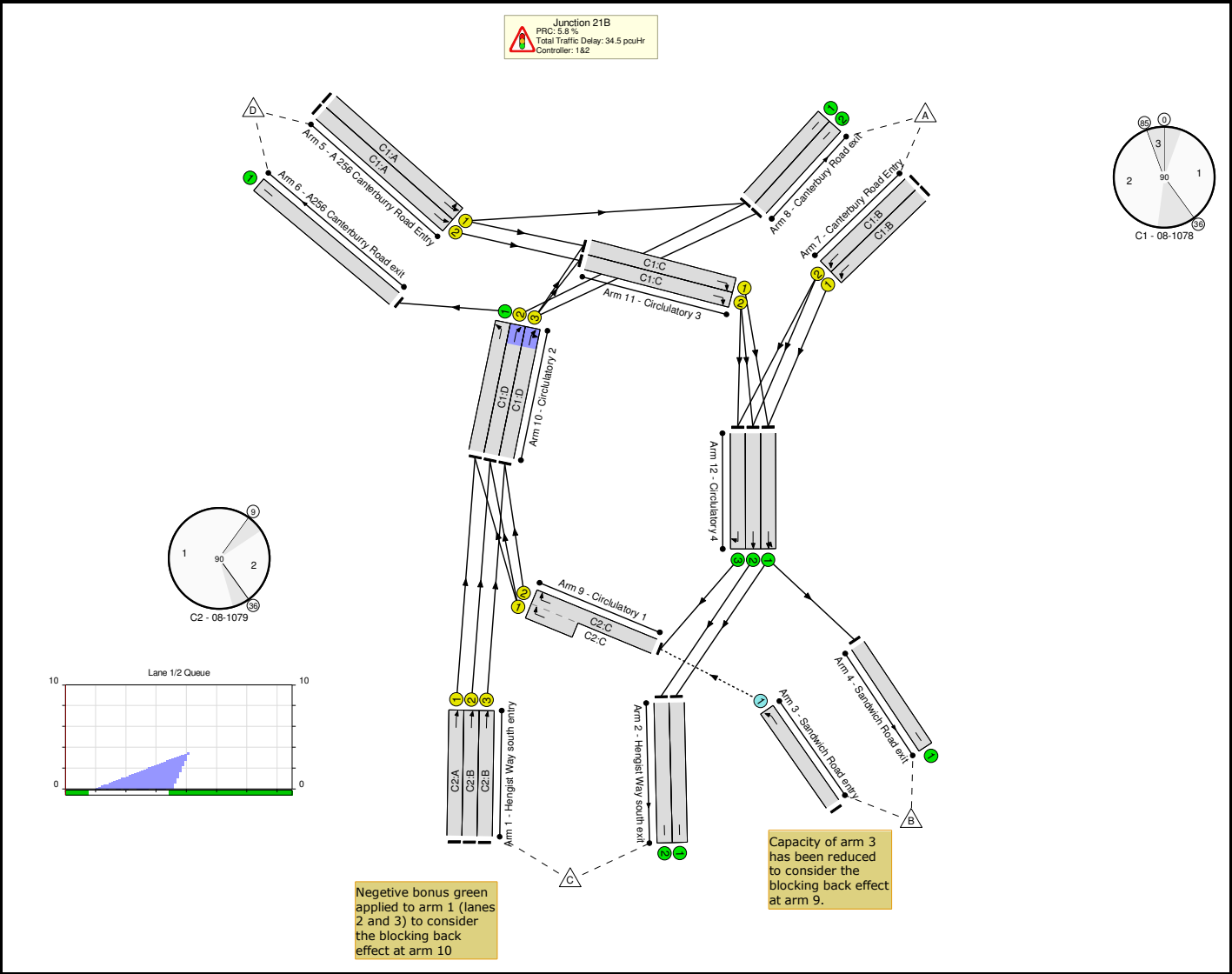
Stage	1	2
Duration	58	22
Change Point	36	9

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: Junction 21b	-	-	N/A	-	-		-	-	-	-	-	-	85.1%
Junction 21B	-	-	N/A	-	-		-	-	-	-	-	-	85.1%
1/1	Hengist Way south entry Ahead	U	N/A	N/A	C2:A		1	58	-	654	1985	1301	50.3%
1/2	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	58	-	338	1980	1298	26.0%
1/3	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	58	-	359	1980	1298	27.7%
2/1	Hengist Way south exit	U	N/A	N/A	-		-	-	-	753	Inf	Inf	0.0%
2/2	Hengist Way south exit	U	N/A	N/A	-		-	-	-	956	Inf	Inf	0.0%
3/1	Sandwich Road entry Ahead	O	N/A	N/A	-		-	-	-	140	1908	165	85.1%
4/1	Sandwich Road exit	U	N/A	N/A	-		-	-	-	225	Inf	Inf	0.0%
5/1	A 256 Canterbury Road Entry Left Ahead	U	N/A	N/A	C1:A		1	31	-	538	1942	690	77.9%
5/2	A 256 Canterbury Road Entry Ahead	U	N/A	N/A	C1:A		1	31	-	518	1919	682	75.9%
6/1	A256 Canterbury Road exit	U	N/A	N/A	-		-	-	-	896	Inf	Inf	0.0%
7/1	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	38	-	603	1828	792	76.1%
7/2	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	38	-	602	1828	792	76.0%

Full Input Data And Results

8/1	Canterbury Road exit	U	N/A	N/A	-		-	-	-	548	Inf	Inf	0.0%
8/2	Canterbury Road exit	U	N/A	N/A	-		-	-	-	374	Inf	Inf	0.0%
9/2+9/1	Circlulatory 1 Right	U	N/A	N/A	C2:C		1	22	-	318	1766:1796	50+432	66.0 : 66.0%
10/1	Circlulatory 2 Left	U	N/A	N/A	-		-	-	-	896	Inf	Inf	0.0%
10/2	Circlulatory 2 Ahead	U	N/A	N/A	C1:D		1	49	-	381	1922	1068	35.7%
10/3	Circlulatory 2 Ahead Right	U	N/A	N/A	C1:D		1	49	-	392	1914	1063	36.9%
11/1	Circlulatory 3 Right	U	N/A	N/A	C1:C		1	42	-	375	2040	975	38.5%
11/2	Circlulatory 3 Right	U	N/A	N/A	C1:C		1	42	-	532	2040	975	54.6%
12/1	Circlulatory 4 Ahead Ahead2	U	N/A	N/A	-		-	-	-	978	Inf	Inf	0.0%
12/2	Circlulatory 4 Ahead	U	N/A	N/A	-		-	-	-	956	Inf	Inf	0.0%
12/3	Circlulatory 4 Right	U	N/A	N/A	-		-	-	-	178	Inf	Inf	0.0%

Full Input Data And Results

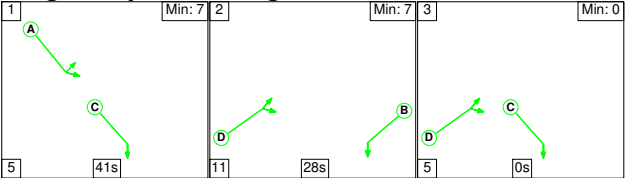
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	140	0	0	22.4	12.1	0.0	34.5	-	-	-	-
Junction 21B	-	-	140	0	0	22.4	12.1	0.0	34.5	-	-	-	-
1/1	654	654	-	-	-	1.4	0.5	-	2.0	10.7	8.4	0.5	8.9
1/2	338	338	-	-	-	0.6	0.2	-	0.8	8.3	3.5	0.2	3.6
1/3	359	359	-	-	-	0.7	0.2	-	0.8	8.4	3.7	0.2	3.9
2/1	753	753	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	956	956	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	140	140	140	0	0	0.3	2.4	-	2.7	70.1	1.8	2.4	4.2
4/1	225	225	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	538	538	-	-	-	3.9	1.7	-	5.6	37.4	12.0	1.7	13.7
5/2	518	518	-	-	-	3.7	1.5	-	5.2	36.4	11.4	1.5	12.9
6/1	896	896	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	603	603	-	-	-	3.6	1.6	-	5.2	30.9	12.7	1.6	14.3
7/2	602	602	-	-	-	3.6	1.6	-	5.2	30.9	12.7	1.6	14.3
8/1	548	548	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	374	374	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	318	318	-	-	-	3.0	1.0	-	3.9	44.7	7.2	1.0	8.2
10/1	896	896	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	381	381	-	-	-	0.7	0.3	-	1.0	9.4	2.4	0.3	2.7
10/3	392	392	-	-	-	0.7	0.3	-	1.0	9.2	2.3	0.3	2.6
11/1	375	375	-	-	-	0.0	0.3	-	0.3	3.3	0.1	0.3	0.4
11/2	532	532	-	-	-	0.2	0.6	-	0.8	5.2	0.4	0.6	1.0
12/1	978	978	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	956	956	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	178	178	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

C1 - 08-1078	PRC for Signalled Lanes (%):	15.5	Total Delay for Signalled Lanes (pcuHr):	24.27	Cycle Time (s):	90
C2 - 08-1079	PRC for Signalled Lanes (%):	36.5	Total Delay for Signalled Lanes (pcuHr):	7.52	Cycle Time (s):	90
	PRC Over All Lanes (%):	5.8	Total Delay Over All Lanes(pcuHr):	34.52		

Full Input Data And Results
Scenario 2: '2017 Baseline Traffic - PM Peak' (FG2: '2017 Baseline Traffic - PM Peak', Plan 1: 'Base')
C1 - 08-1078

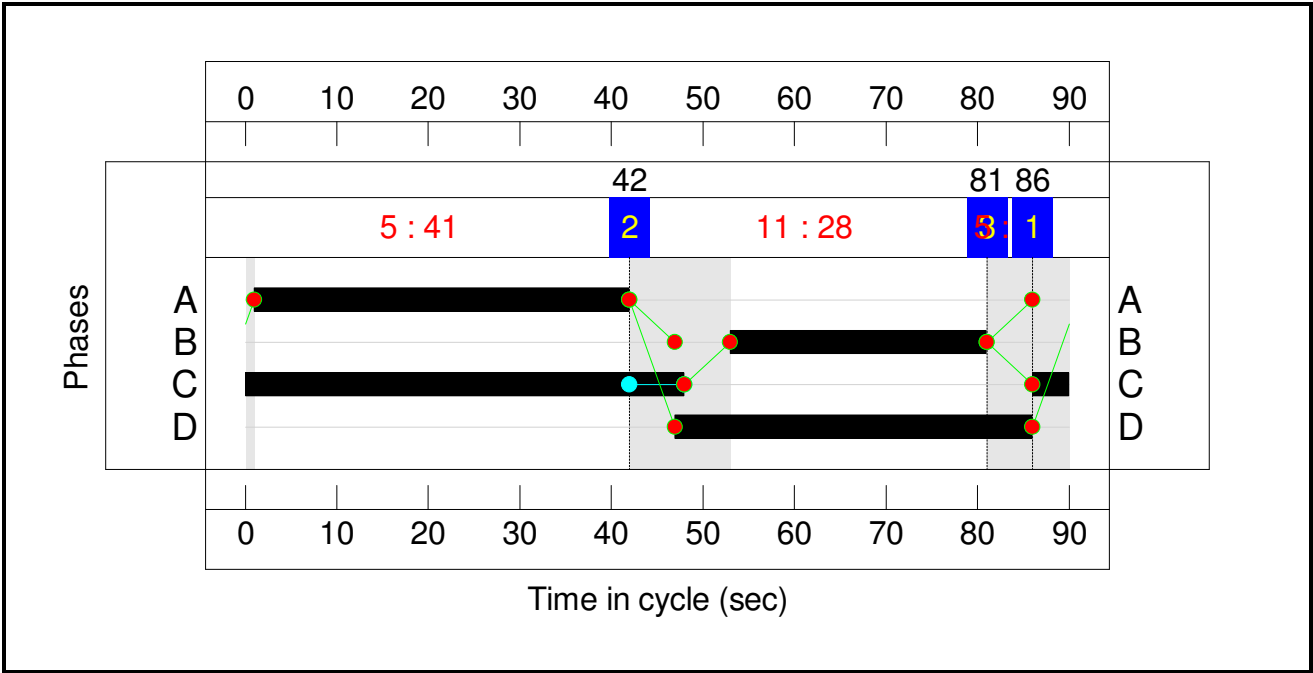
Stage Sequence Diagram



Stage Timings

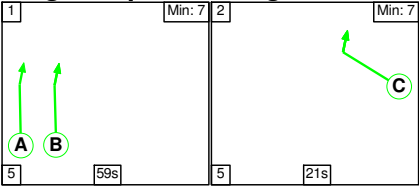
Stage	1	2	3
Duration	41	28	0
Change Point	86	42	81

Signal Timings Diagram



Full Input Data And Results

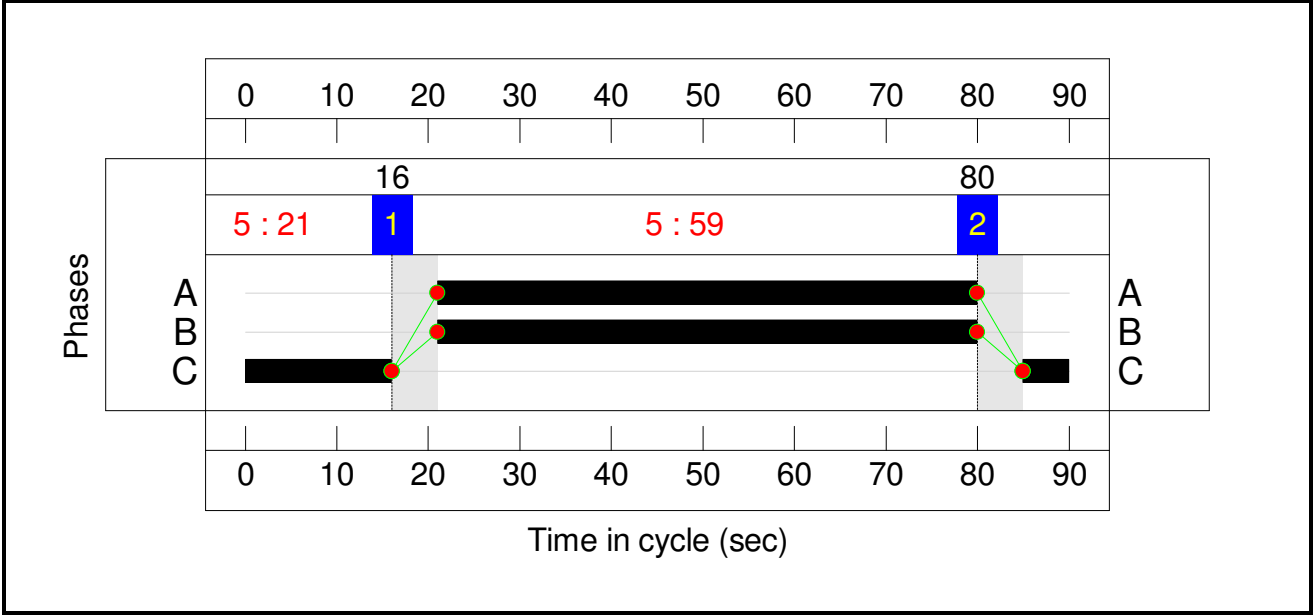
C2 - 08-1079
Stage Sequence Diagram



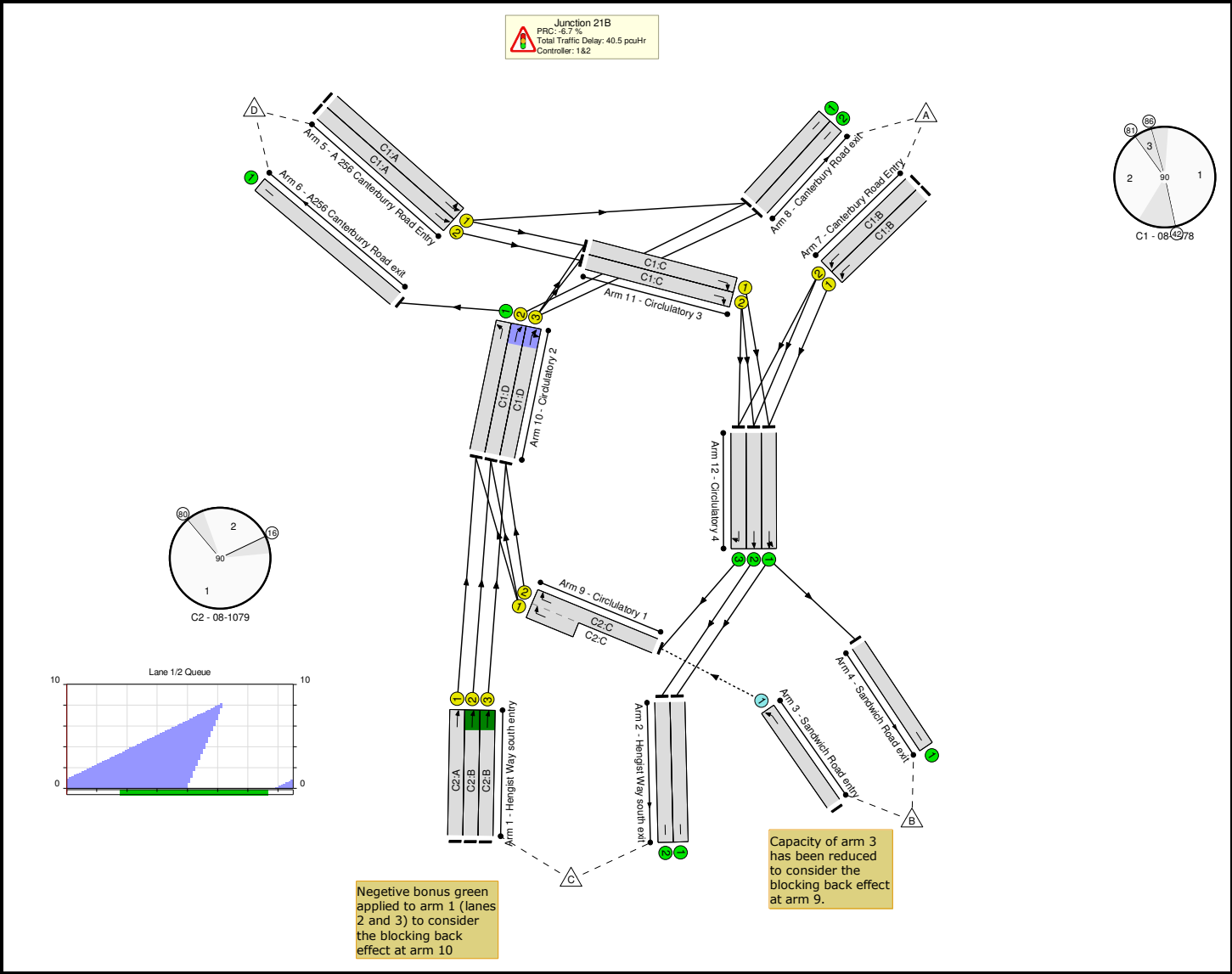
Stage Timings

Stage	1	2
Duration	59	21
Change Point	16	80

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: Junction 21b	-	-	N/A	-	-		-	-	-	-	-	-	96.0%
Junction 21B	-	-	N/A	-	-		-	-	-	-	-	-	96.0%
1/1	Hengist Way south entry Ahead	U	N/A	N/A	C2:A		1	59	-	824	1985	1323	62.3%
1/2	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	59	-	425	1980	770	55.2%
1/3	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	59	-	417	1980	770	54.2%
2/1	Hengist Way south exit	U	N/A	N/A	-		-	-	-	485	Inf	Inf	0.0%
2/2	Hengist Way south exit	U	N/A	N/A	-		-	-	-	855	Inf	Inf	0.0%
3/1	Sandwich Road entry Ahead	O	N/A	N/A	-		-	-	-	199	1908	207	96.0%
4/1	Sandwich Road exit	U	N/A	N/A	-		-	-	-	295	Inf	Inf	0.0%
5/1	A 256 Canterbury Road Entry Left Ahead	U	N/A	N/A	C1:A		1	41	-	670	1953	911	73.5%
5/2	A 256 Canterbury Road Entry Ahead	U	N/A	N/A	C1:A		1	41	-	630	1919	896	70.3%
6/1	A256 Canterbury Road exit	U	N/A	N/A	-		-	-	-	1095	Inf	Inf	0.0%
7/1	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	28	-	405	1828	589	68.8%
7/2	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	28	-	404	1828	589	68.6%
8/1	Canterbury Road exit	U	N/A	N/A	-		-	-	-	780	Inf	Inf	0.0%
8/2	Canterbury Road exit	U	N/A	N/A	-		-	-	-	464	Inf	Inf	0.0%

Full Input Data And Results

9/2+9/1	Circlulatory 1 Right	U	N/A	N/A	C2:C		1	21	-	381	1766:1796	74+402	80.1 : 80.1%
10/1	Circlulatory 2 Left	U	N/A	N/A	-		-	-	-	1095	Inf	Inf	0.0%
10/2	Circlulatory 2 Ahead	U	N/A	N/A	C1:D		1	39	-	476	1922	854	55.7%
10/3	Circlulatory 2 Ahead Right	U	N/A	N/A	C1:D		1	39	-	476	1918	852	55.8%
11/1	Circlulatory 3 Right	U	N/A	N/A	C1:C		1	52	-	375	2040	1201	31.2%
11/2	Circlulatory 3 Right	U	N/A	N/A	C1:C		1	52	-	633	2040	1201	52.7%
12/1	Circlulatory 4 Ahead Ahead2	U	N/A	N/A	-		-	-	-	780	Inf	Inf	0.0%
12/2	Circlulatory 4 Ahead	U	N/A	N/A	-		-	-	-	855	Inf	Inf	0.0%
12/3	Circlulatory 4 Right	U	N/A	N/A	-		-	-	-	182	Inf	Inf	0.0%

Full Input Data And Results

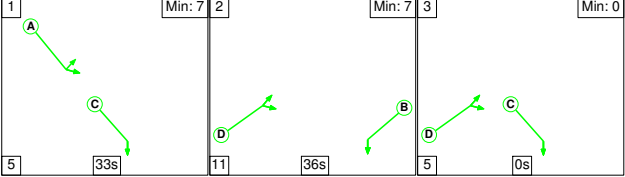
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	199	0	0	24.5	16.0	0.0	40.5	-	-	-	-
Junction 21B	-	-	199	0	0	24.5	16.0	0.0	40.5	-	-	-	-
1/1	824	824	-	-	-	2.0	0.8	-	2.8	12.1	11.7	0.8	12.5
1/2	425	425	-	-	-	2.5	0.6	-	3.1	26.6	8.3	0.6	8.9
1/3	417	417	-	-	-	2.5	0.6	-	3.1	26.4	8.0	0.6	8.6
2/1	485	485	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	855	855	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	199	199	199	0	0	0.4	5.3	-	5.6	102.1	2.5	5.3	7.8
4/1	295	295	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	670	670	-	-	-	3.6	1.4	-	5.0	26.9	13.6	1.4	15.0
5/2	630	630	-	-	-	3.3	1.2	-	4.5	25.8	12.4	1.2	13.6
6/1	1095	1095	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	405	405	-	-	-	3.0	1.1	-	4.1	36.2	8.8	1.1	9.9
7/2	404	404	-	-	-	3.0	1.1	-	4.1	36.2	8.8	1.1	9.8
8/1	780	780	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	464	464	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	381	381	-	-	-	2.9	1.9	-	4.8	45.3	8.2	1.9	10.1
10/1	1095	1095	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	476	476	-	-	-	0.6	0.6	-	1.2	9.2	1.3	0.6	2.0
10/3	476	476	-	-	-	0.7	0.6	-	1.3	10.1	1.5	0.6	2.2
11/1	375	375	-	-	-	0.1	0.2	-	0.3	2.7	0.2	0.2	0.4
11/2	633	633	-	-	-	0.0	0.6	-	0.6	3.3	0.1	0.6	0.6
12/1	780	780	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	855	855	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	182	182	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

C1 - 08-1078	PRC for Signalled Lanes (%):	22.4	Total Delay for Signalled Lanes (pcuHr):	21.06	Cycle Time (s):	90
C2 - 08-1079	PRC for Signalled Lanes (%):	12.3	Total Delay for Signalled Lanes (pcuHr):	13.76	Cycle Time (s):	90
	PRC Over All Lanes (%):	-6.7	Total Delay Over All Lanes(pcuHr):	40.47		

Full Input Data And Results
Scenario 3: '2017 Baseline Traffic - Airport Peak' (FG3: '2017 Baseline Traffic - Airport Peak', Plan 1: 'Base')
C1 - 08-1078

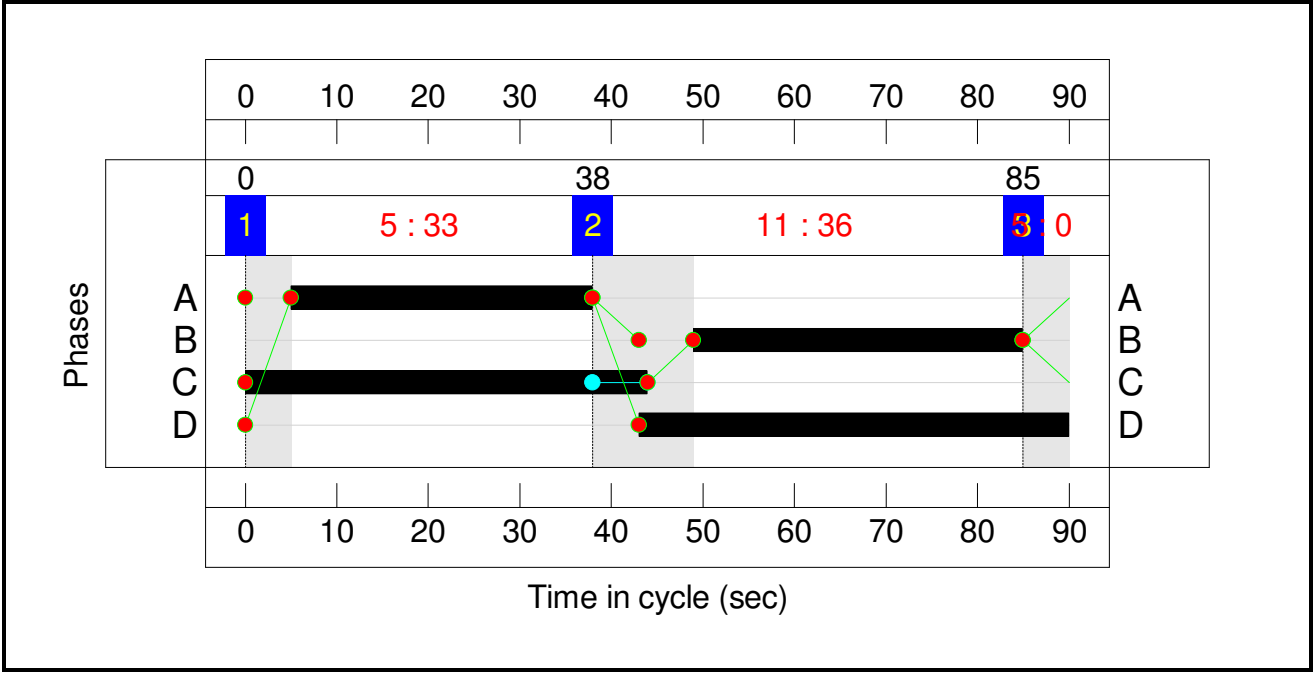
Stage Sequence Diagram



Stage Timings

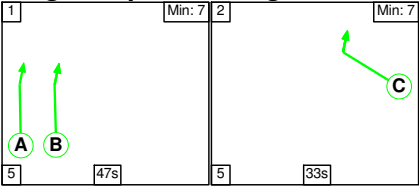
Stage	1	2	3
Duration	33	36	0
Change Point	0	38	85

Signal Timings Diagram



Full Input Data And Results

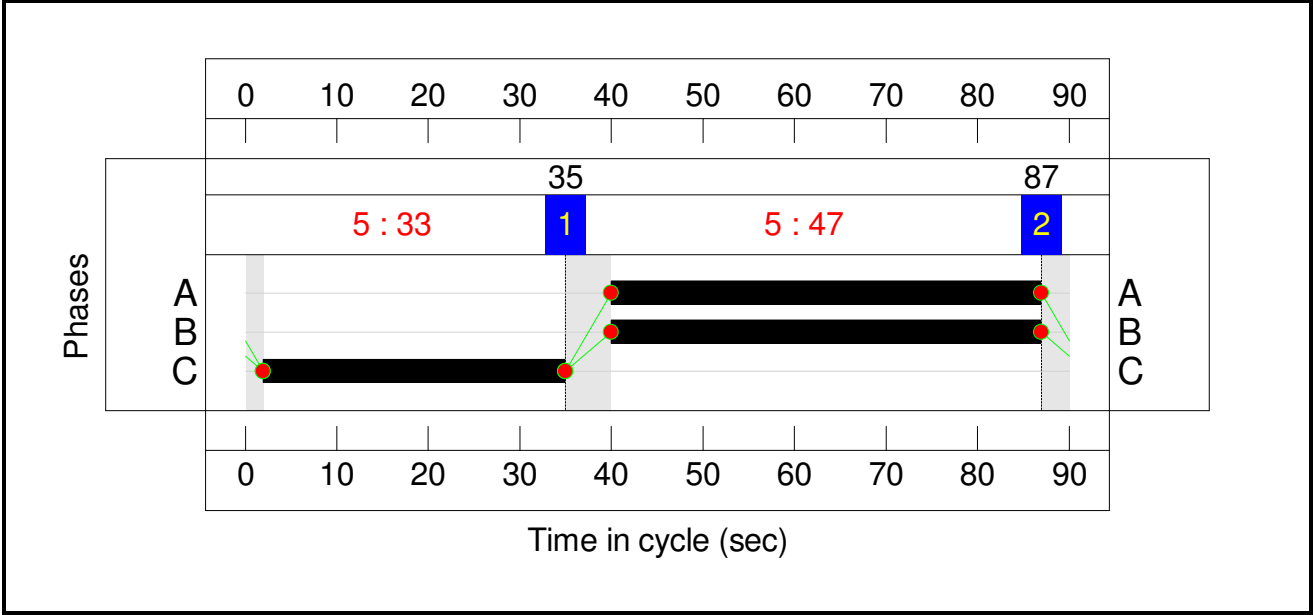
C2 - 08-1079
Stage Sequence Diagram



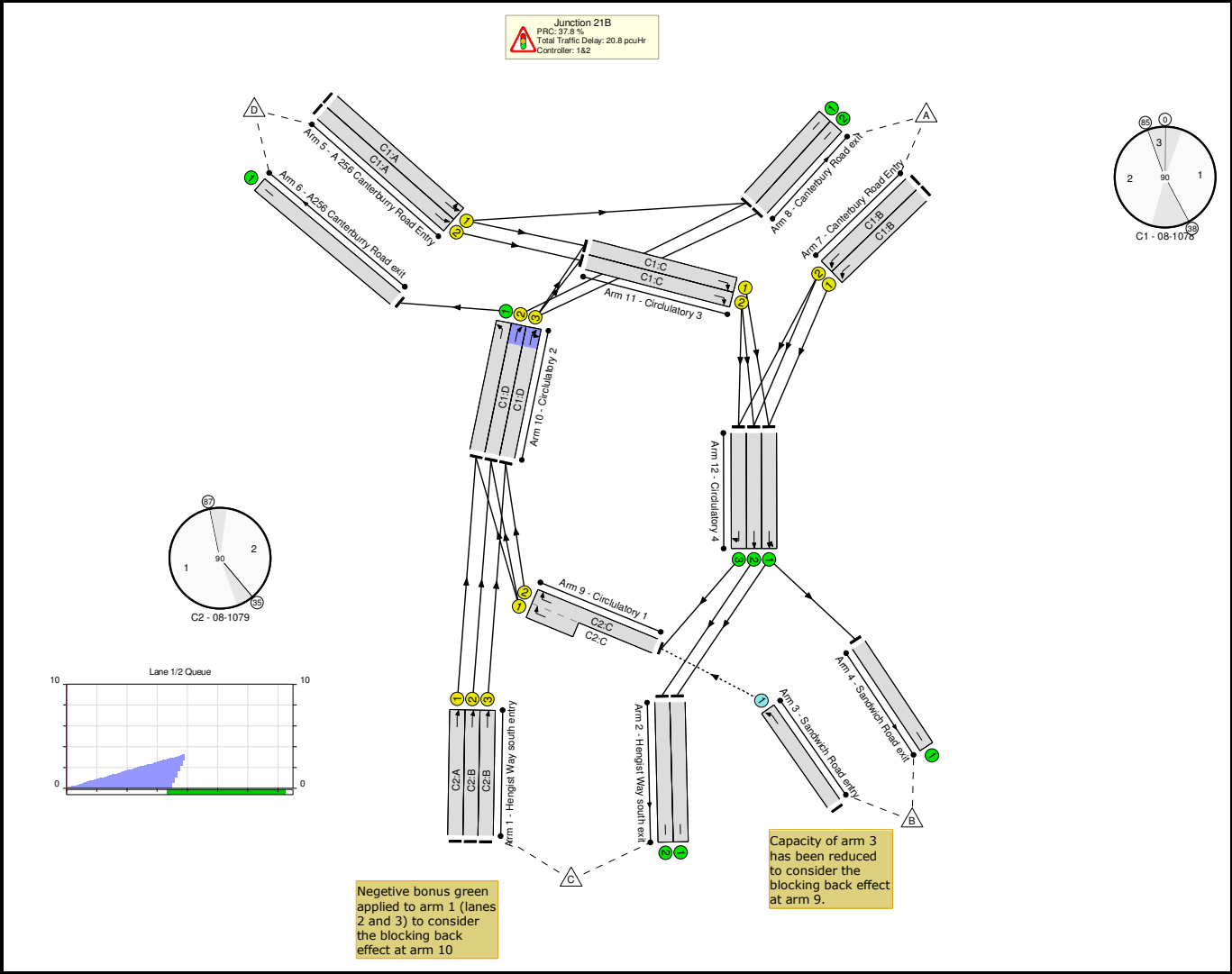
Stage Timings

Stage	1	2
Duration	47	33
Change Point	35	87

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: Junction 21b	-	-	N/A	-	-		-	-	-	-	-	-	65.3%
Junction 21B	-	-	N/A	-	-		-	-	-	-	-	-	65.3%
1/1	Hengist Way south entry Ahead	U	N/A	N/A	C2:A		1	47	-	409	1985	1059	38.6%
1/2	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	47	-	250	1980	1056	23.7%
1/3	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	47	-	263	1980	1056	24.9%
2/1	Hengist Way south exit	U	N/A	N/A	-		-	-	-	408	Inf	Inf	0.0%
2/2	Hengist Way south exit	U	N/A	N/A	-		-	-	-	628	Inf	Inf	0.0%
3/1	Sandwich Road entry Ahead	O	N/A	N/A	-		-	-	-	161	1908	246	65.3%
4/1	Sandwich Road exit	U	N/A	N/A	-		-	-	-	236	Inf	Inf	0.0%
5/1	A 256 Canterbury Road Entry Left Ahead	U	N/A	N/A	C1:A		1	33	-	471	1947	736	64.0%
5/2	A 256 Canterbury Road Entry Ahead	U	N/A	N/A	C1:A		1	33	-	444	1919	725	61.2%
6/1	A256 Canterbury Road exit	U	N/A	N/A	-		-	-	-	670	Inf	Inf	0.0%
7/1	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	36	-	338	1828	752	45.0%
7/2	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	36	-	338	1828	752	45.0%
8/1	Canterbury Road exit	U	N/A	N/A	-		-	-	-	459	Inf	Inf	0.0%
8/2	Canterbury Road exit	U	N/A	N/A	-		-	-	-	273	Inf	Inf	0.0%

Full Input Data And Results

9/2+9/1	Circlulatory 1 Right	U	N/A	N/A	C2:C		1	33	-	320	1766:1796	59+638	45.9 : 45.9%
10/1	Circlulatory 2 Left	U	N/A	N/A	-		-	-	-	670	Inf	Inf	0.0%
10/2	Circlulatory 2 Ahead	U	N/A	N/A	C1:D		1	47	-	282	1922	1025	27.5%
10/3	Circlulatory 2 Ahead Right	U	N/A	N/A	C1:D		1	47	-	290	1912	1020	28.4%
11/1	Circlulatory 3 Right	U	N/A	N/A	C1:C		1	44	-	306	2040	1020	30.0%
11/2	Circlulatory 3 Right	U	N/A	N/A	C1:C		1	44	-	449	2040	1020	44.0%
12/1	Circlulatory 4 Ahead Ahead2	U	N/A	N/A	-		-	-	-	644	Inf	Inf	0.0%
12/2	Circlulatory 4 Ahead	U	N/A	N/A	-		-	-	-	628	Inf	Inf	0.0%
12/3	Circlulatory 4 Right	U	N/A	N/A	-		-	-	-	159	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: Junction 21b	-	-	161	0	0	15.4	5.5	0.0	20.8	-	-	-	-
Junction 21B	-	-	161	0	0	15.4	5.5	0.0	20.8	-	-	-	-
1/1	409	409	-	-	-	1.4	0.3	-	1.7	15.1	5.9	0.3	6.2
1/2	250	250	-	-	-	0.8	0.2	-	0.9	13.5	3.3	0.2	3.5
1/3	263	263	-	-	-	0.8	0.2	-	1.0	13.6	3.5	0.2	3.7
2/1	408	408	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	628	628	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	161	161	161	0	0	0.1	0.9	-	1.0	22.7	1.1	0.9	2.0
4/1	236	236	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	471	471	-	-	-	3.0	0.9	-	3.9	29.7	9.6	0.9	10.4
5/2	444	444	-	-	-	2.8	0.8	-	3.6	29.0	8.9	0.8	9.7
6/1	670	670	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	338	338	-	-	-	1.8	0.4	-	2.2	23.5	6.1	0.4	6.5
7/2	338	338	-	-	-	1.8	0.4	-	2.2	23.5	6.1	0.4	6.5
8/1	459	459	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	273	273	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	320	320	-	-	-	2.1	0.4	-	2.5	28.2	5.9	0.4	6.3
10/1	670	670	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	282	282	-	-	-	0.3	0.2	-	0.5	6.6	1.2	0.2	1.4
10/3	290	290	-	-	-	0.3	0.2	-	0.5	6.3	1.1	0.2	1.3
11/1	306	306	-	-	-	0.1	0.2	-	0.3	3.7	0.3	0.2	0.5
11/2	449	449	-	-	-	0.1	0.4	-	0.5	3.6	0.1	0.4	0.5
12/1	644	644	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	628	628	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	159	159	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

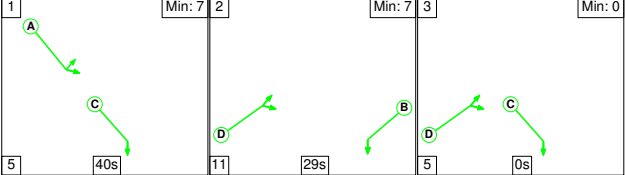
C1 - 08-1078	PRC for Signalled Lanes (%):	40.5	Total Delay for Signalled Lanes (pcuHr):	13.67	Cycle Time (s):	90
C2 - 08-1079	PRC for Signalled Lanes (%):	95.9	Total Delay for Signalled Lanes (pcuHr):	6.15	Cycle Time (s):	90
	PRC Over All Lanes (%):	37.8	Total Delay Over All Lanes(pcuHr):	20.84		

Full Input Data And Results

Scenario 4: '2039 Growthed Traffic - AM Peak' (FG4: '2039 Growthed Traffic - AM Peak', Plan 1: 'Base')

C1 - 08-1078

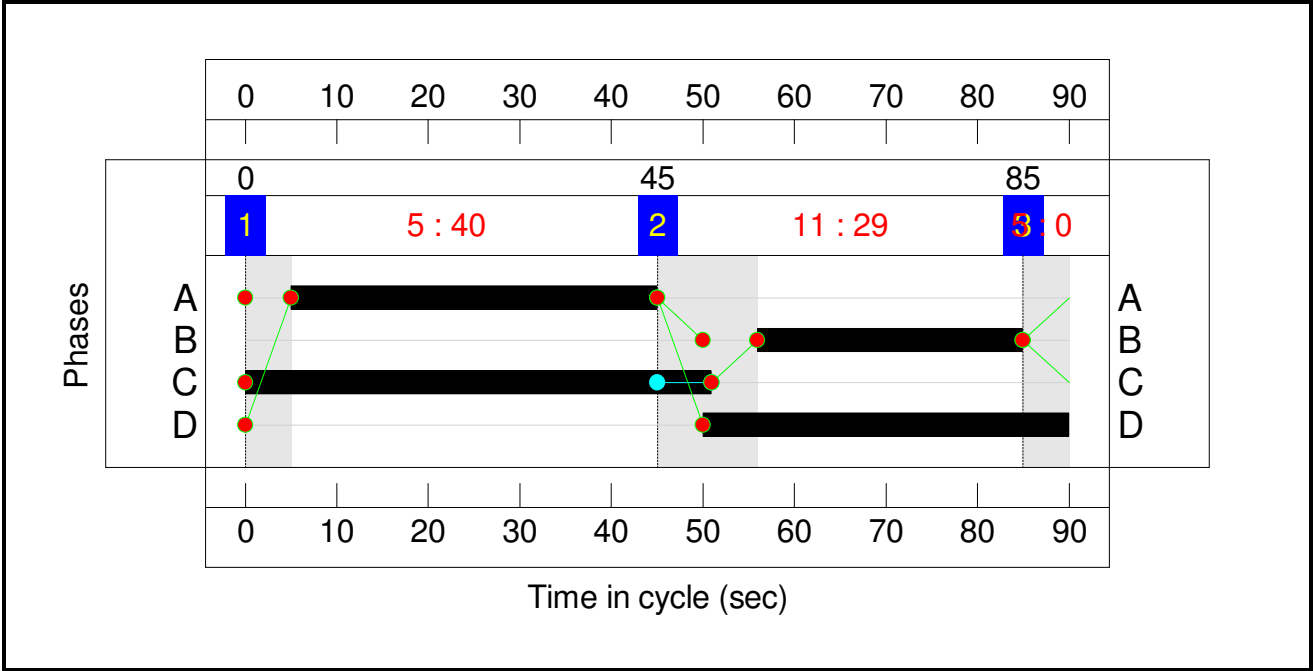
Stage Sequence Diagram



Stage Timings

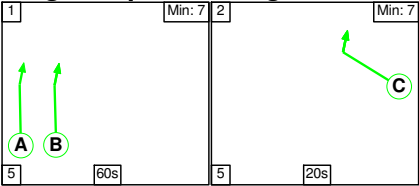
Stage	1	2	3
Duration	40	29	0
Change Point	0	45	85

Signal Timings Diagram



Full Input Data And Results

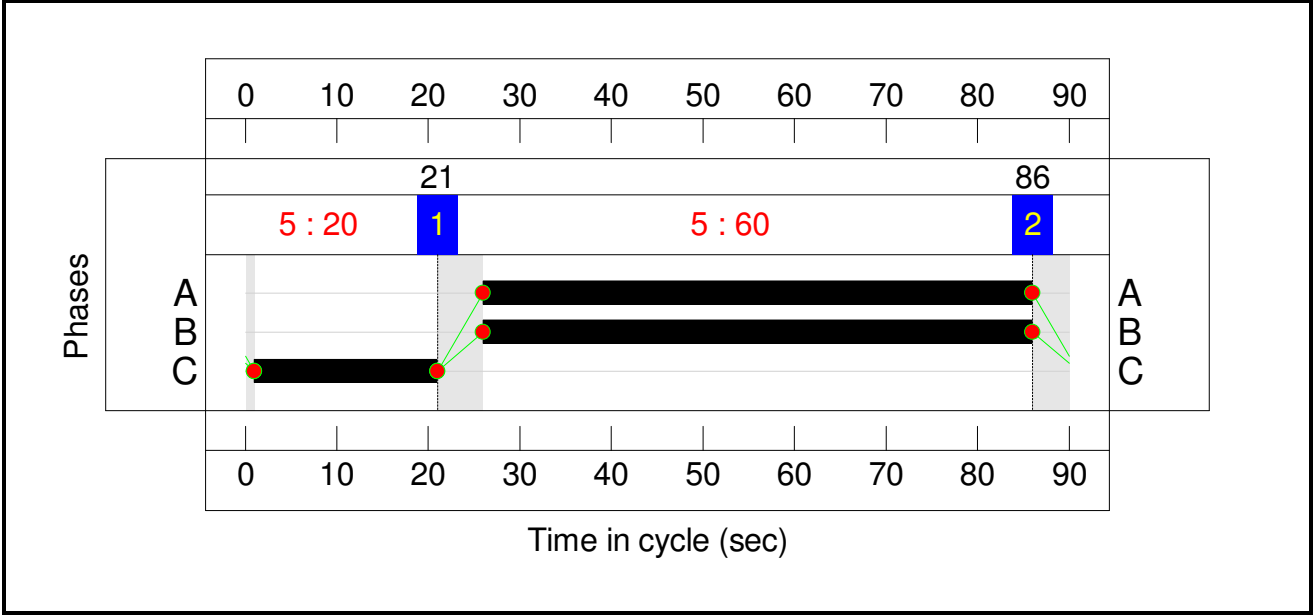
C2 - 08-1079
Stage Sequence Diagram



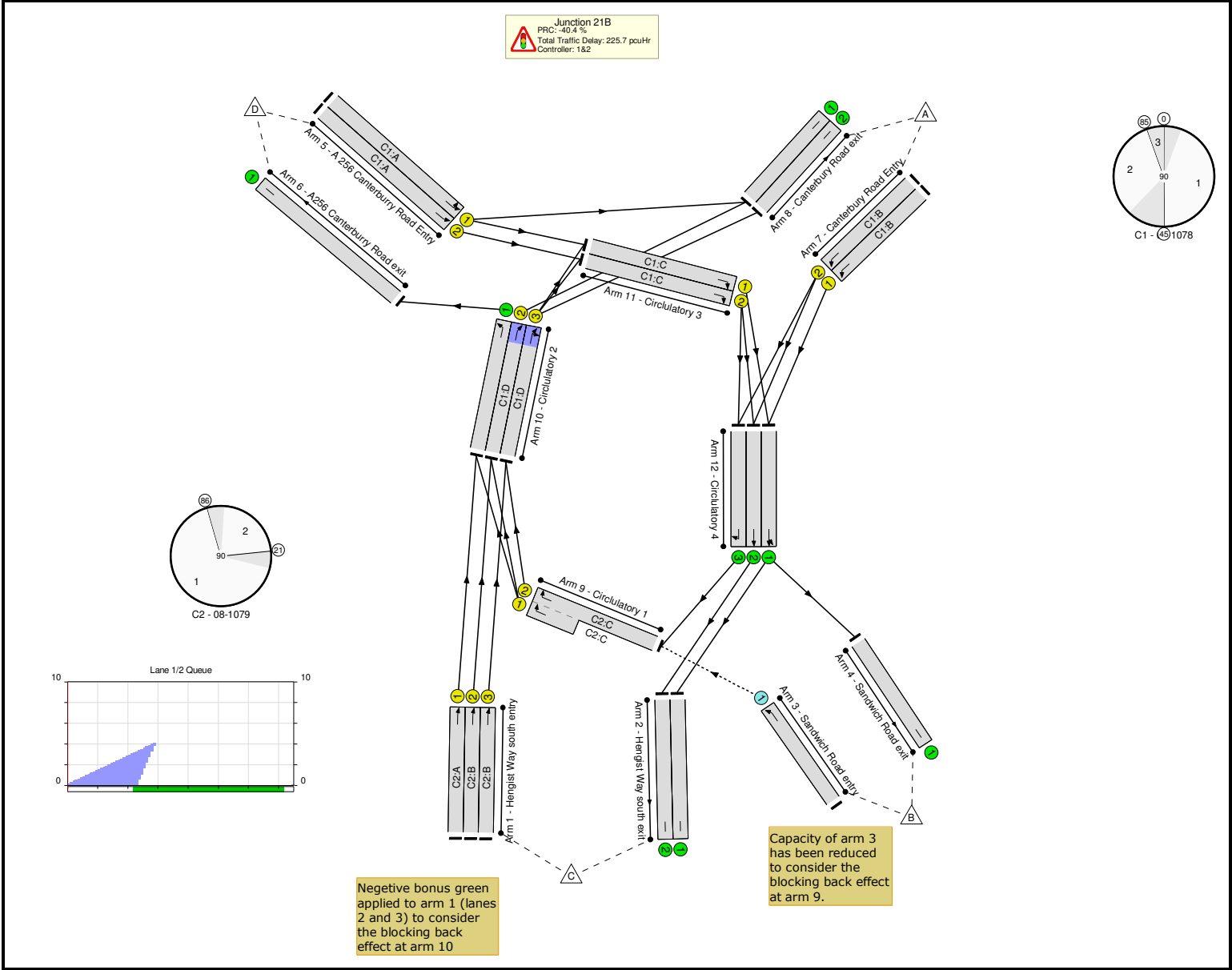
Stage Timings

Stage	1	2
Duration	60	20
Change Point	21	86

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: Junction 21b	-	-	N/A	-	-		-	-	-	-	-	-	126.3%
Junction 21B	-	-	N/A	-	-		-	-	-	-	-	-	126.3%
1/1	Hengist Way south entry Ahead	U	N/A	N/A	C2:A		1	60	-	821	1985	1345	61.0%
1/2	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	60	-	412	1980	1342	30.7%
1/3	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	60	-	464	1980	1342	34.6%
2/1	Hengist Way south exit	U	N/A	N/A	-		-	-	-	947	Inf	Inf	0.0%
2/2	Hengist Way south exit	U	N/A	N/A	-		-	-	-	1195	Inf	Inf	0.0%
3/1	Sandwich Road entry Ahead	O	N/A	N/A	-		-	-	-	176	1908	139	126.3%
4/1	Sandwich Road exit	U	N/A	N/A	-		-	-	-	282	Inf	Inf	0.0%
5/1	A 256 Canterbury Road Entry Left Ahead	U	N/A	N/A	C1:A		1	40	-	677	1942	885	76.5%
5/2	A 256 Canterbury Road Entry Ahead	U	N/A	N/A	C1:A		1	40	-	646	1919	874	73.9%
6/1	A256 Canterbury Road exit	U	N/A	N/A	-		-	-	-	1124	Inf	Inf	0.0%
7/1	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	29	-	755	1828	609	123.9%
7/2	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	29	-	754	1828	609	123.7%
8/1	Canterbury Road exit	U	N/A	N/A	-		-	-	-	698	Inf	Inf	0.0%

Full Input Data And Results

8/2	Canterbury Road exit	U	N/A	N/A	-		-	-	-	459	Inf	Inf	0.0%
9/2+9/1	Circlulatory 1 Right	U	N/A	N/A	C2:C		1	20	-	399	1766:1796	19+409	73.7 : 75.9%
10/1	Circlulatory 2 Left	U	N/A	N/A	-		-	-	-	1124	Inf	Inf	0.0%
10/2	Circlulatory 2 Ahead	U	N/A	N/A	C1:D		1	40	-	490	1922	876	54.1%
10/3	Circlulatory 2 Ahead Right	U	N/A	N/A	C1:D		1	40	-	482	1914	872	54.8%
11/1	Circlulatory 3 Right	U	N/A	N/A	C1:C		1	51	-	474	2040	1179	40.2%
11/2	Circlulatory 3 Right	U	N/A	N/A	C1:C		1	51	-	664	2040	1179	56.0%
12/1	Circlulatory 4 Ahead Ahead2	U	N/A	N/A	-		-	-	-	1229	Inf	Inf	0.0%
12/2	Circlulatory 4 Ahead	U	N/A	N/A	-		-	-	-	1195	Inf	Inf	0.0%
12/3	Circlulatory 4 Right	U	N/A	N/A	-		-	-	-	223	Inf	Inf	0.0%

Full Input Data And Results

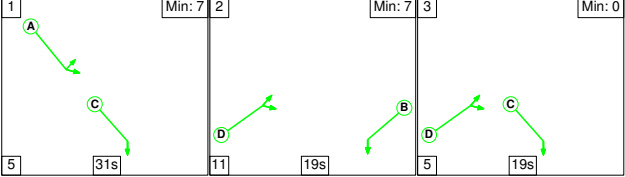
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	139	0	0	47.1	178.6	0.0	225.7	-	-	-	-
Junction 21B	-	-	139	0	0	47.1	178.6	0.0	225.7	-	-	-	-
1/1	821	821	-	-	-	1.8	0.8	-	2.6	11.4	11.2	0.8	12.0
1/2	412	412	-	-	-	0.7	0.2	-	0.9	7.8	4.1	0.2	4.3
1/3	464	464	-	-	-	0.8	0.3	-	1.1	8.2	4.8	0.3	5.0
2/1	830	830	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	1084	1084	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	176	139	139	0	0	2.3	20.5	-	22.8	466.8	12.4	20.5	32.9
4/1	253	253	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	677	677	-	-	-	3.9	1.6	-	5.5	29.0	14.1	1.6	15.7
5/2	646	646	-	-	-	3.6	1.4	-	5.0	27.9	13.1	1.4	14.5
6/1	1070	1070	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	755	609	-	-	-	13.9	75.3	-	89.2	425.3	25.7	75.3	101.1
7/2	754	609	-	-	-	13.8	74.9	-	88.7	423.3	25.7	74.9	100.5
8/1	682	682	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	459	459	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	325	325	-	-	-	2.3	1.5	-	3.8	42.2	7.3	1.5	8.9
10/1	1070	1070	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	474	474	-	-	-	2.2	0.6	-	2.7	20.8	9.1	0.6	9.7
10/3	478	478	-	-	-	1.7	0.6	-	2.3	17.3	8.7	0.6	9.3
11/1	474	474	-	-	-	0.0	0.3	-	0.4	2.8	0.1	0.3	0.5
11/2	660	660	-	-	-	0.1	0.6	-	0.8	4.3	0.4	0.6	1.0
12/1	1083	1083	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1084	1084	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	186	186	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

C1 - 08-1078	PRC for Signalled Lanes (%):	-37.7	Total Delay for Signalled Lanes (pcuHr):	194.51	Cycle Time (s):	90
C2 - 08-1079	PRC for Signalled Lanes (%):	18.5	Total Delay for Signalled Lanes (pcuHr):	8.35	Cycle Time (s):	90
	PRC Over All Lanes (%):	-40.4	Total Delay Over All Lanes(pcuHr):	225.69		

Full Input Data And Results
Scenario 5: '2039 Growthed Traffic - PM Peak' (FG5: '2039 Growthed Traffic - PM Peak', Plan 1: 'Base')
C1 - 08-1078

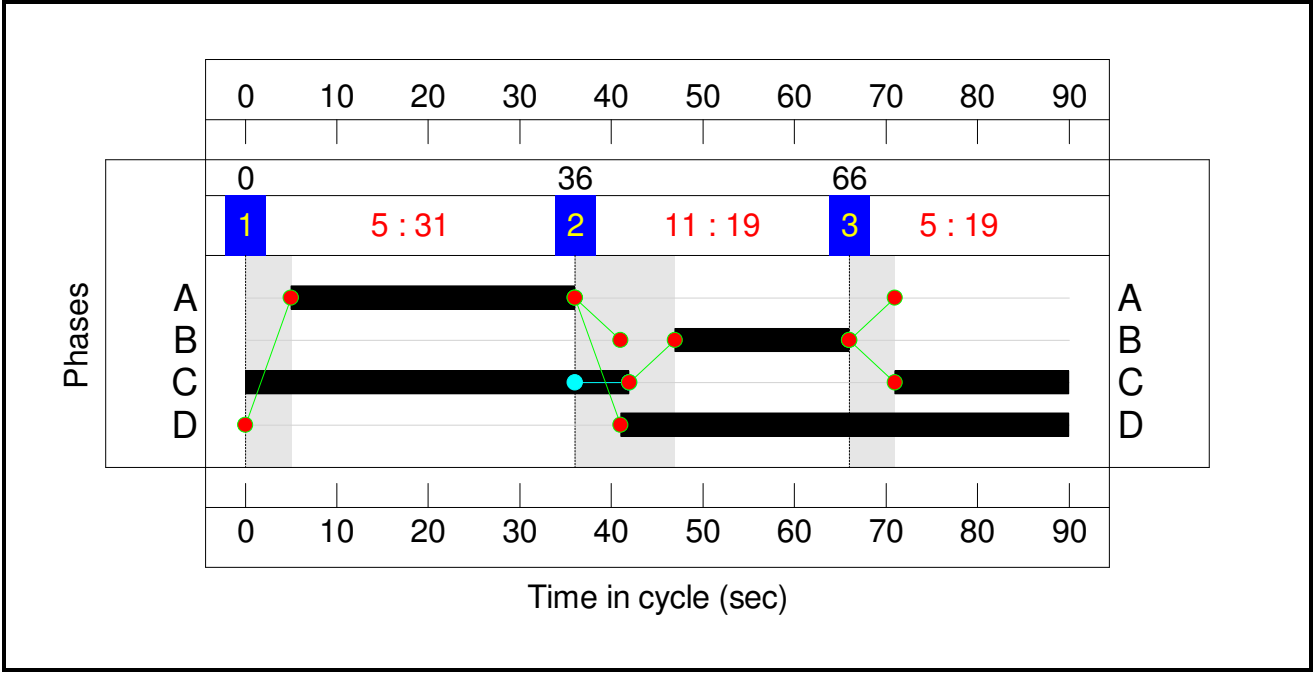
Stage Sequence Diagram



Stage Timings

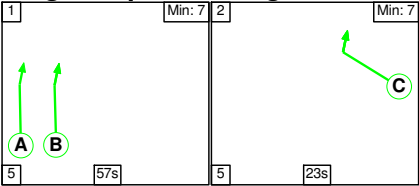
Stage	1	2	3
Duration	31	19	19
Change Point	0	36	66

Signal Timings Diagram



Full Input Data And Results

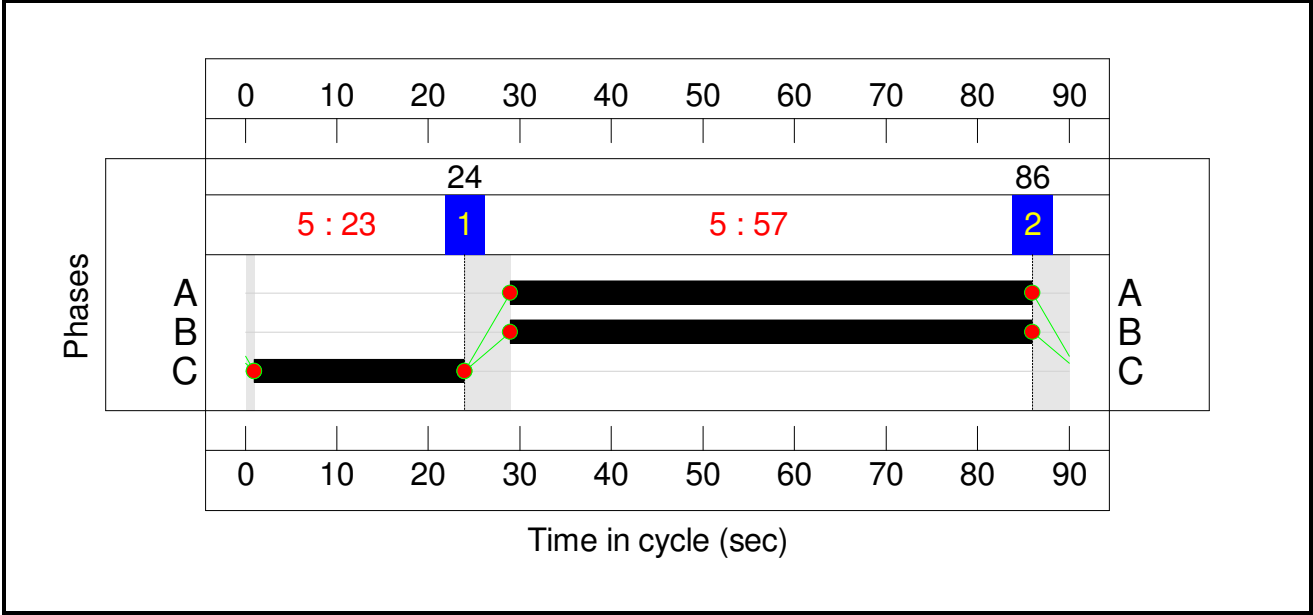
C2 - 08-1079
Stage Sequence Diagram



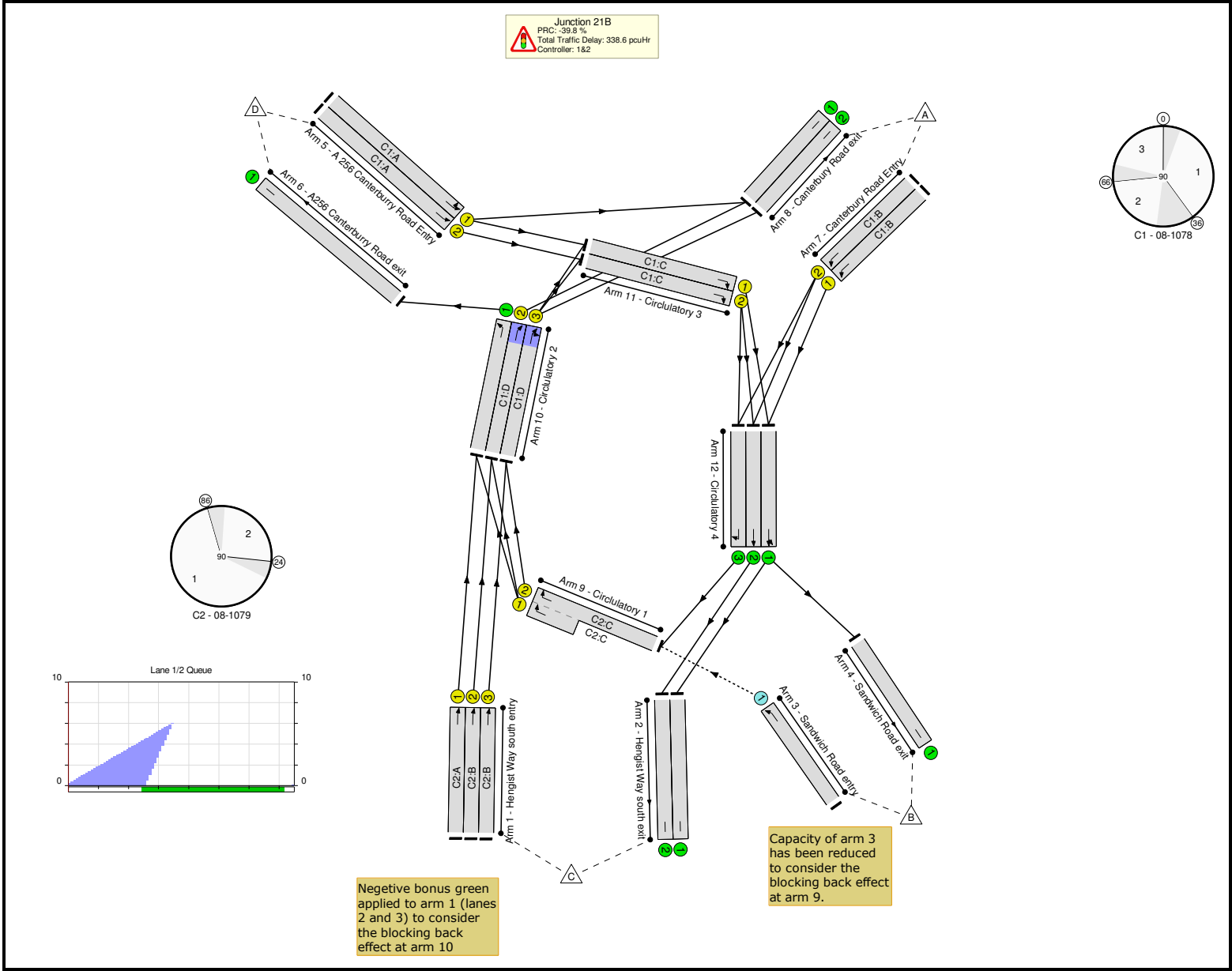
Stage Timings

Stage	1	2
Duration	57	23
Change Point	24	86

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: Junction 21b	-	-	N/A	-	-		-	-	-	-	-	-	125.8%
Junction 21B	-	-	N/A	-	-		-	-	-	-	-	-	125.8%
1/1	Hengist Way south entry Ahead	U	N/A	N/A	C2:A		1	57	-	1040	1985	1279	81.3%
1/2	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	57	-	507	1980	1276	39.7%
1/3	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	57	-	556	1980	1276	43.6%
2/1	Hengist Way south exit	U	N/A	N/A	-		-	-	-	609	Inf	Inf	0.0%
2/2	Hengist Way south exit	U	N/A	N/A	-		-	-	-	1083	Inf	Inf	0.0%
3/1	Sandwich Road entry Ahead	O	N/A	N/A	-		-	-	-	251	1908	200	125.6%
4/1	Sandwich Road exit	U	N/A	N/A	-		-	-	-	372	Inf	Inf	0.0%
5/1	A 256 Canterbury Road Entry Left Ahead	U	N/A	N/A	C1:A		1	31	-	842	1953	694	121.3%
5/2	A 256 Canterbury Road Entry Ahead	U	N/A	N/A	C1:A		1	31	-	799	1919	682	117.1%
6/1	A256 Canterbury Road exit	U	N/A	N/A	-		-	-	-	1382	Inf	Inf	0.0%
7/1	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	19	-	511	1828	406	125.8%
7/2	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	19	-	510	1828	406	125.5%
8/1	Canterbury Road exit	U	N/A	N/A	-		-	-	-	1024	Inf	Inf	0.0%

Full Input Data And Results

8/2	Canterbury Road exit	U	N/A	N/A	-		-	-	-	546	Inf	Inf	0.0%
9/2+9/1	Circlulatory 1 Right	U	N/A	N/A	C2:C		1	23	-	481	1766:1796	5+476	79.5 : 80.3%
10/1	Circlulatory 2 Left	U	N/A	N/A	-		-	-	-	1382	Inf	Inf	0.0%
10/2	Circlulatory 2 Ahead	U	N/A	N/A	C1:D		1	49	-	641	1922	1068	57.5%
10/3	Circlulatory 2 Ahead Right	U	N/A	N/A	C1:D		1	49	-	561	1918	1066	52.6%
11/1	Circlulatory 3 Right	U	N/A	N/A	C1:C		1	61	-	470	2040	1405	27.7%
11/2	Circlulatory 3 Right	U	N/A	N/A	C1:C		1	61	-	803	2040	1405	48.8%
12/1	Circlulatory 4 Ahead Ahead2	U	N/A	N/A	-		-	-	-	981	Inf	Inf	0.0%
12/2	Circlulatory 4 Ahead	U	N/A	N/A	-		-	-	-	1083	Inf	Inf	0.0%
12/3	Circlulatory 4 Right	U	N/A	N/A	-		-	-	-	230	Inf	Inf	0.0%

Full Input Data And Results

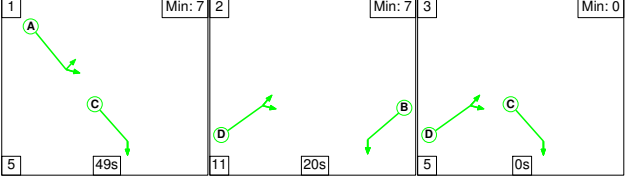
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	200	0	0	56.9	281.6	0.0	338.6	-	-	-	-
Junction 21B	-	-	200	0	0	56.9	281.6	0.0	338.6	-	-	-	-
1/1	1040	1040	-	-	-	3.5	2.1	-	5.6	19.3	19.4	2.1	21.5
1/2	507	507	-	-	-	1.1	0.3	-	1.4	10.0	6.1	0.3	6.4
1/3	556	556	-	-	-	1.2	0.4	-	1.6	10.4	6.8	0.4	7.2
2/1	492	492	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	905	905	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	251	200	200	0	0	3.7	27.8	-	31.5	452.4	17.8	27.8	45.6
4/1	304	304	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	842	694	-	-	-	13.2	76.5	-	89.8	383.9	24.7	76.5	101.3
5/2	799	682	-	-	-	11.5	61.6	-	73.1	329.5	22.9	61.6	84.5
6/1	1316	1316	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	511	406	-	-	-	8.5	54.7	-	63.2	445.4	15.4	54.7	70.1
7/2	510	406	-	-	-	8.5	54.2	-	62.7	442.6	15.3	54.2	69.6
8/1	929	929	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	546	546	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	387	387	-	-	-	3.1	2.0	-	5.0	46.9	9.2	2.0	11.2
10/1	1316	1316	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	614	614	-	-	-	1.8	0.7	-	2.5	14.7	11.3	0.7	11.9
10/3	560	560	-	-	-	0.8	0.6	-	1.3	8.4	8.7	0.6	9.3
11/1	390	390	-	-	-	0.0	0.2	-	0.2	2.2	0.2	0.2	0.4
11/2	685	685	-	-	-	0.0	0.5	-	0.5	2.6	0.1	0.5	0.6
12/1	796	796	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	905	905	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	187	187	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

C1 - 08-1078	PRC for Signalled Lanes (%):	-39.8	Total Delay for Signalled Lanes (pcuHr):	293.39	Cycle Time (s):	90
C2 - 08-1079	PRC for Signalled Lanes (%):	10.7	Total Delay for Signalled Lanes (pcuHr):	13.64	Cycle Time (s):	90
	PRC Over All Lanes (%):	-39.8	Total Delay Over All Lanes(pcuHr):	338.57		

Full Input Data And Results
Scenario 6: '2039 Growthed Traffic - Airport Peak' (FG6: '2039 Growthed Traffic - Airport Peak', Plan 1: 'Base')
C1 - 08-1078

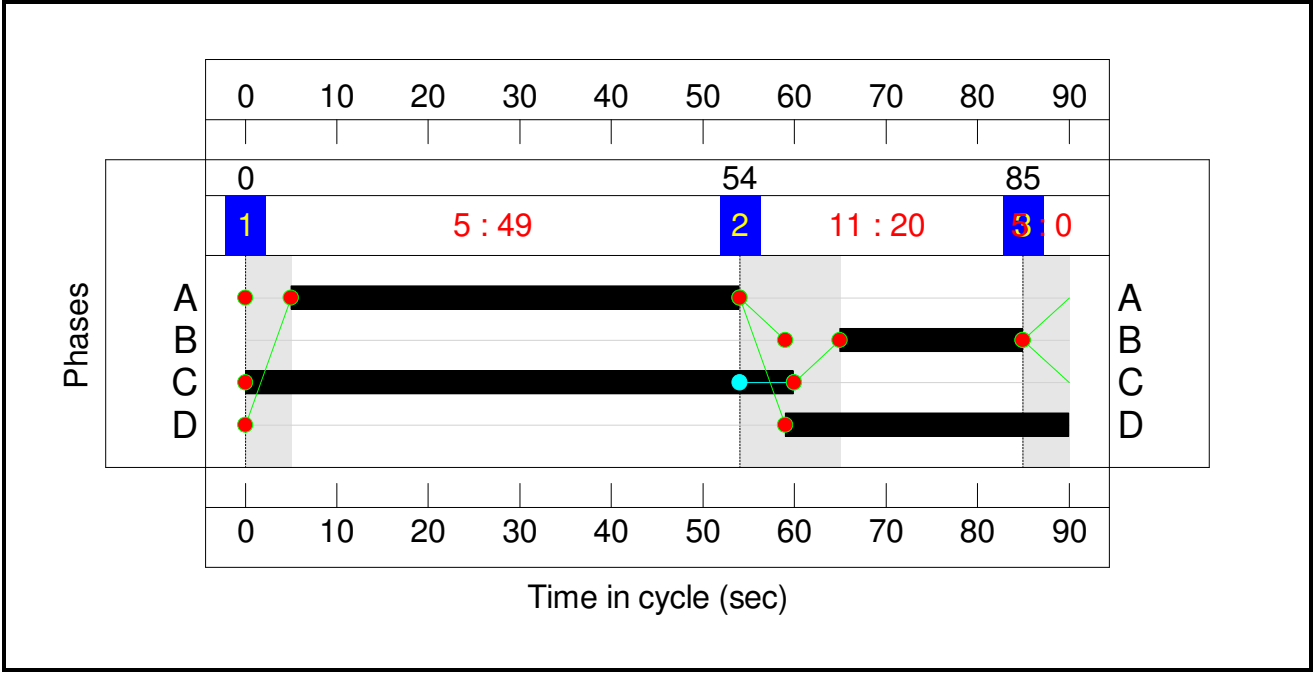
Stage Sequence Diagram



Stage Timings

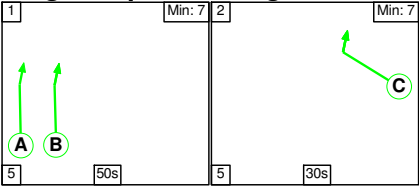
Stage	1	2	3
Duration	49	20	0
Change Point	0	54	85

Signal Timings Diagram



Full Input Data And Results

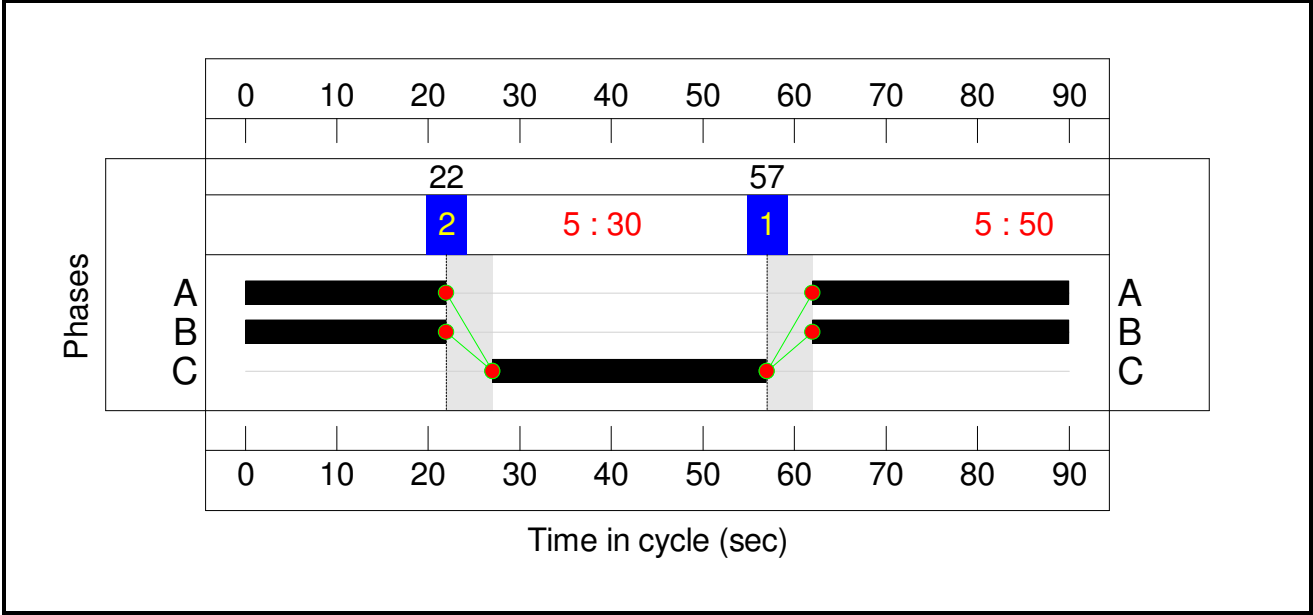
C2 - 08-1079
Stage Sequence Diagram



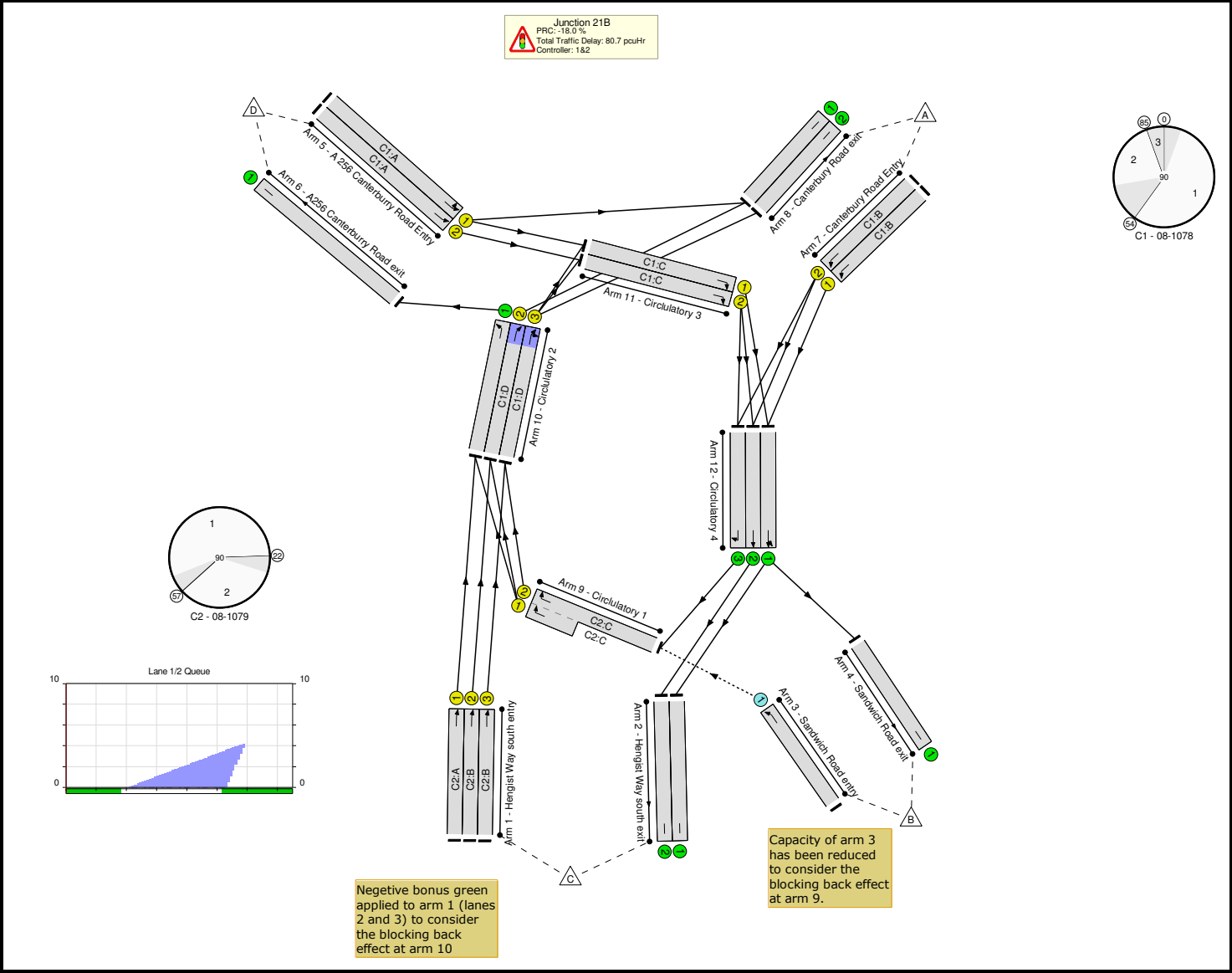
Stage Timings

Stage	1	2
Duration	50	30
Change Point	57	22

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: Junction 21b	-	-	N/A	-	-		-	-	-	-	-	-	106.2%
Junction 21B	-	-	N/A	-	-		-	-	-	-	-	-	106.2%
1/1	Hengist Way south entry Ahead	U	N/A	N/A	C2:A		1	50	-	548	1985	1125	48.7%
1/2	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	50	-	331	1980	1122	29.5%
1/3	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	50	-	356	1980	1122	31.7%
2/1	Hengist Way south exit	U	N/A	N/A	-		-	-	-	547	Inf	Inf	0.0%
2/2	Hengist Way south exit	U	N/A	N/A	-		-	-	-	843	Inf	Inf	0.0%
3/1	Sandwich Road entry Ahead	O	N/A	N/A	-		-	-	-	215	1908	203	105.9%
4/1	Sandwich Road exit	U	N/A	N/A	-		-	-	-	315	Inf	Inf	0.0%
5/1	A 256 Canterbury Road Entry Left Ahead	U	N/A	N/A	C1:A		1	49	-	629	1947	1082	58.2%
5/2	A 256 Canterbury Road Entry Ahead	U	N/A	N/A	C1:A		1	49	-	596	1919	1066	55.9%
6/1	A256 Canterbury Road exit	U	N/A	N/A	-		-	-	-	896	Inf	Inf	0.0%
7/1	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	20	-	453	1828	427	106.2%
7/2	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	20	-	452	1828	427	106.0%
8/1	Canterbury Road exit	U	N/A	N/A	-		-	-	-	639	Inf	Inf	0.0%

Full Input Data And Results

8/2	Canterbury Road exit	U	N/A	N/A	-		-	-	-	340	Inf	Inf	0.0%
9/2+9/1	Circlulatory 1 Right	U	N/A	N/A	C2:C		1	30	-	427	1766:1796	10+612	64.8 : 65.3%
10/1	Circlulatory 2 Left	U	N/A	N/A	-		-	-	-	896	Inf	Inf	0.0%
10/2	Circlulatory 2 Ahead	U	N/A	N/A	C1:D		1	31	-	403	1922	683	58.4%
10/3	Circlulatory 2 Ahead Right	U	N/A	N/A	C1:D		1	31	-	363	1911	679	53.4%
11/1	Circlulatory 3 Right	U	N/A	N/A	C1:C		1	60	-	409	2040	1383	29.6%
11/2	Circlulatory 3 Right	U	N/A	N/A	C1:C		1	60	-	603	2040	1383	43.6%
12/1	Circlulatory 4 Ahead Ahead2	U	N/A	N/A	-		-	-	-	862	Inf	Inf	0.0%
12/2	Circlulatory 4 Ahead	U	N/A	N/A	-		-	-	-	843	Inf	Inf	0.0%
12/3	Circlulatory 4 Right	U	N/A	N/A	-		-	-	-	212	Inf	Inf	0.0%

Full Input Data And Results

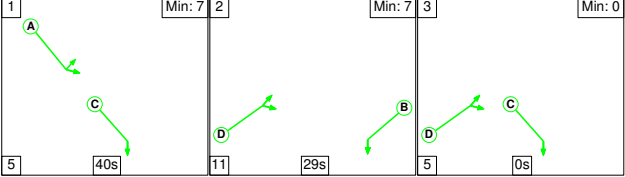
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	203	0	0	26.8	53.9	0.0	80.7	-	-	-	-
Junction 21B	-	-	203	0	0	26.8	53.9	0.0	80.7	-	-	-	-
1/1	548	548	-	-	-	1.8	0.5	-	2.3	14.8	8.1	0.5	8.5
1/2	331	331	-	-	-	0.9	0.2	-	1.1	12.4	4.2	0.2	4.4
1/3	356	356	-	-	-	1.0	0.2	-	1.3	12.7	4.6	0.2	4.9
2/1	528	528	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	826	826	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	215	203	203	0	0	1.1	10.9	-	12.1	202.2	11.8	10.9	22.8
4/1	307	307	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	629	629	-	-	-	2.3	0.7	-	3.0	17.1	10.3	0.7	11.0
5/2	596	596	-	-	-	2.1	0.6	-	2.8	16.7	9.6	0.6	10.2
6/1	880	880	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	453	427	-	-	-	5.5	19.1	-	24.7	195.9	12.4	19.1	31.5
7/2	452	427	-	-	-	5.4	18.8	-	24.2	192.8	12.3	18.8	31.1
8/1	635	635	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	340	340	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	406	406	-	-	-	3.3	0.9	-	4.2	37.2	8.7	0.9	9.7
10/1	880	880	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	399	399	-	-	-	1.7	0.7	-	2.4	21.6	4.8	0.7	5.5
10/3	363	363	-	-	-	1.4	0.6	-	2.0	20.0	2.9	0.6	3.4
11/1	409	409	-	-	-	0.1	0.2	-	0.3	2.5	0.4	0.2	0.6
11/2	603	603	-	-	-	0.0	0.4	-	0.4	2.6	0.2	0.4	0.6
12/1	836	836	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	826	826	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	203	203	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

C1 - 08-1078	PRC for Signalled Lanes (%):	-18.0	Total Delay for Signalled Lanes (pcuHr):	59.75	Cycle Time (s):	90
C2 - 08-1079	PRC for Signalled Lanes (%):	37.8	Total Delay for Signalled Lanes (pcuHr):	8.84	Cycle Time (s):	90
	PRC Over All Lanes (%):	-18.0	Total Delay Over All Lanes(pcuHr):	80.66		

Full Input Data And Results
Scenario 7: '2039 + Dev Traffic - AM Peak' (FG7: '2039 + Dev Traffic - AM Peak', Plan 1: 'Base')
C1 - 08-1078

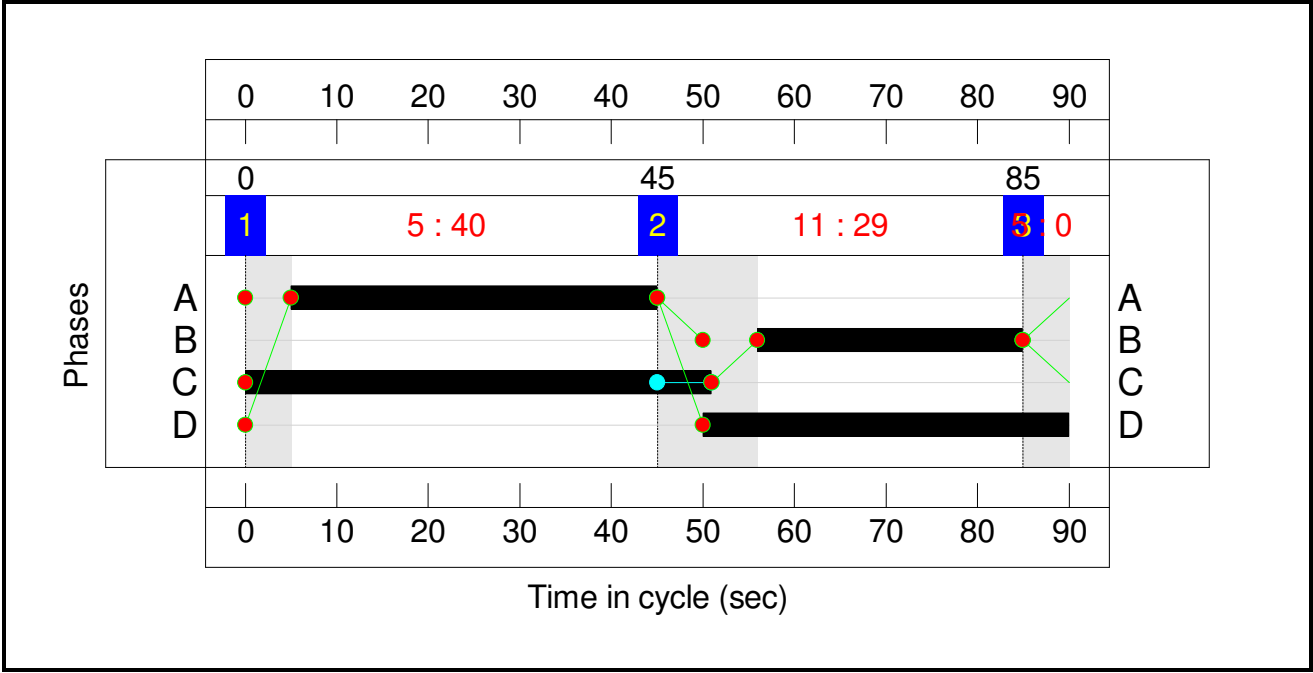
Stage Sequence Diagram



Stage Timings

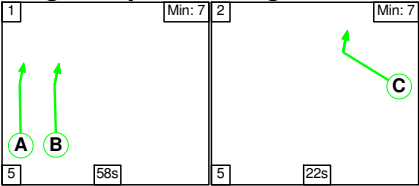
Stage	1	2	3
Duration	40	29	0
Change Point	0	45	85

Signal Timings Diagram



Full Input Data And Results

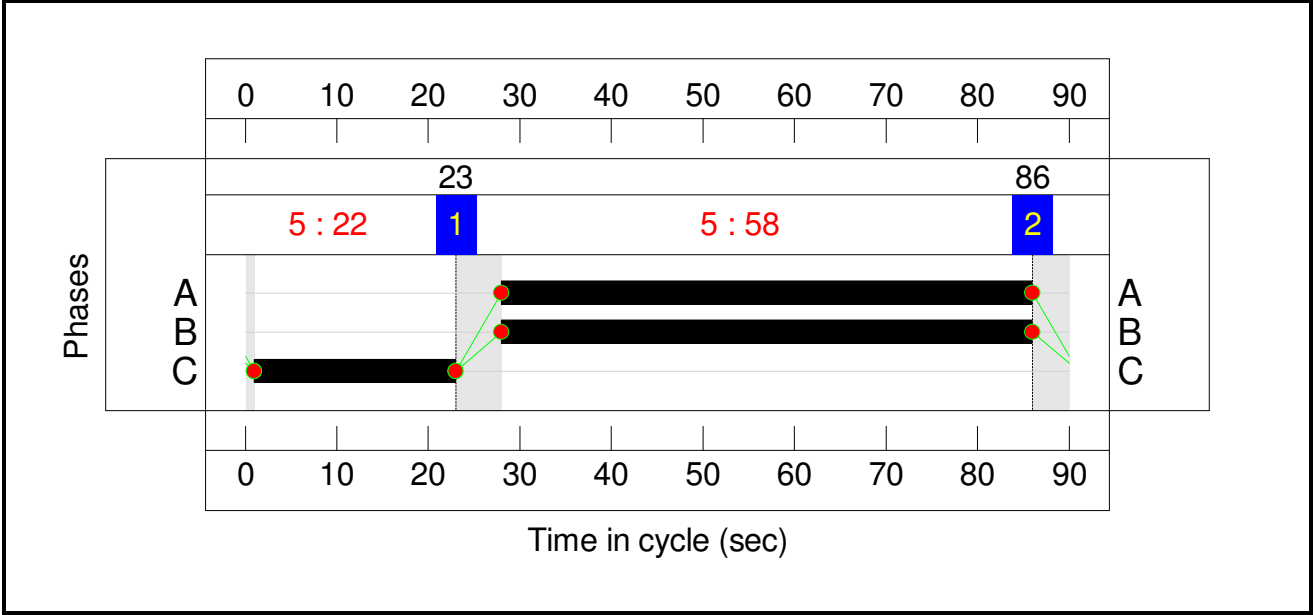
C2 - 08-1079
Stage Sequence Diagram



Stage Timings

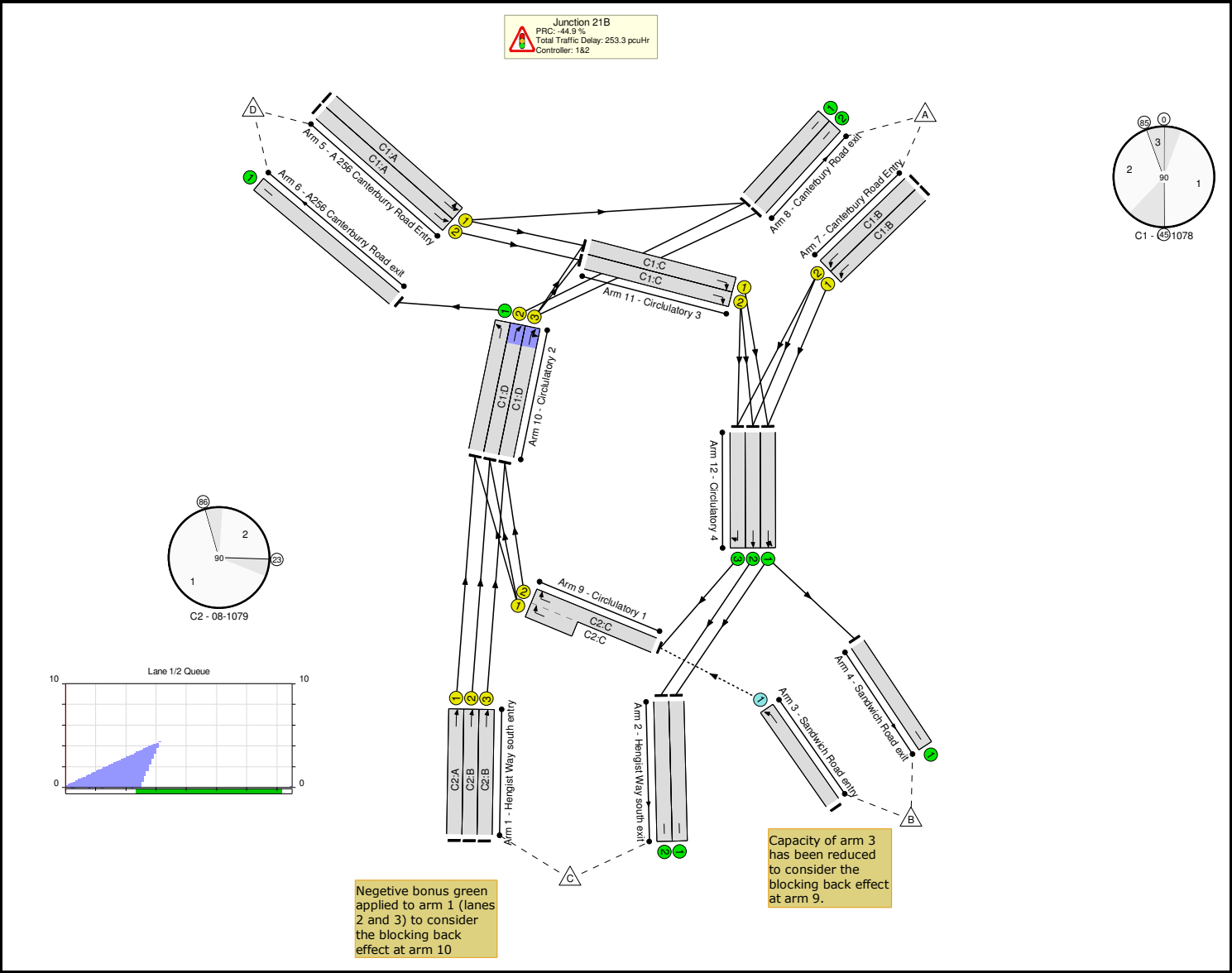
Stage	1	2
Duration	58	22
Change Point	23	86

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: Junction 21b	-	-	N/A	-	-		-	-	-	-	-	-	130.4%
Junction 21B	-	-	N/A	-	-		-	-	-	-	-	-	130.4%
1/1	Hengist Way south entry Ahead	U	N/A	N/A	C2:A		1	58	-	938	1985	1301	72.1%
1/2	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	58	-	410	1980	1298	31.6%
1/3	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	58	-	466	1980	1298	35.9%
2/1	Hengist Way south exit	U	N/A	N/A	-		-	-	-	973	Inf	Inf	0.0%
2/2	Hengist Way south exit	U	N/A	N/A	-		-	-	-	1186	Inf	Inf	0.0%
3/1	Sandwich Road entry Ahead	O	N/A	N/A	-		-	-	-	179	1908	137	130.4%
4/1	Sandwich Road exit	U	N/A	N/A	-		-	-	-	282	Inf	Inf	0.0%
5/1	A 256 Canterbury Road Entry Left Ahead	U	N/A	N/A	C1:A		1	40	-	689	1942	885	77.9%
5/2	A 256 Canterbury Road Entry Ahead	U	N/A	N/A	C1:A		1	40	-	658	1919	874	75.3%
6/1	A256 Canterbury Road exit	U	N/A	N/A	-		-	-	-	1286	Inf	Inf	0.0%
7/1	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	29	-	776	1828	609	127.4%
7/2	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	29	-	775	1828	609	127.2%
8/1	Canterbury Road exit	U	N/A	N/A	-		-	-	-	703	Inf	Inf	0.0%

Full Input Data And Results

8/2	Canterbury Road exit	U	N/A	N/A	-		-	-	-	461	Inf	Inf	0.0%
9/2+9/1	Circlulatory 1 Right	U	N/A	N/A	C2:C		1	22	-	444	1766:1796	19+449	72.8 : 75.3%
10/1	Circlulatory 2 Left	U	N/A	N/A	-		-	-	-	1286	Inf	Inf	0.0%
10/2	Circlulatory 2 Ahead	U	N/A	N/A	C1:D		1	40	-	488	1922	876	53.7%
10/3	Circlulatory 2 Ahead Right	U	N/A	N/A	C1:D		1	40	-	484	1914	872	55.0%
11/1	Circlulatory 3 Right	U	N/A	N/A	C1:C		1	51	-	479	2040	1179	40.6%
11/2	Circlulatory 3 Right	U	N/A	N/A	C1:C		1	51	-	676	2040	1179	57.0%
12/1	Circlulatory 4 Ahead Ahead2	U	N/A	N/A	-		-	-	-	1255	Inf	Inf	0.0%
12/2	Circlulatory 4 Ahead	U	N/A	N/A	-		-	-	-	1186	Inf	Inf	0.0%
12/3	Circlulatory 4 Right	U	N/A	N/A	-		-	-	-	265	Inf	Inf	0.0%

Full Input Data And Results

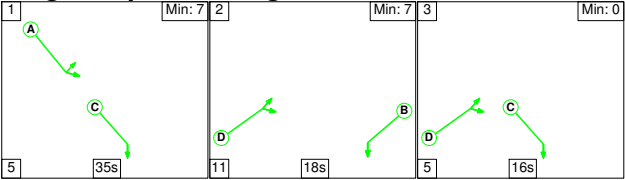
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	137	0	0	51.1	202.2	0.0	253.3	-	-	-	-
Junction 21B	-	-	137	0	0	51.1	202.2	0.0	253.3	-	-	-	-
1/1	938	938	-	-	-	2.6	1.3	-	3.9	15.0	15.1	1.3	16.4
1/2	410	410	-	-	-	0.8	0.2	-	1.0	8.8	4.4	0.2	4.7
1/3	466	466	-	-	-	0.9	0.3	-	1.2	9.1	5.2	0.3	5.5
2/1	838	838	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	1067	1067	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	179	137	137	0	0	2.6	22.8	-	25.5	512.3	12.6	22.8	35.5
4/1	250	250	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	689	689	-	-	-	4.0	1.7	-	5.7	29.7	14.4	1.7	16.1
5/2	658	658	-	-	-	3.7	1.5	-	5.2	28.5	13.5	1.5	15.0
6/1	1216	1216	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	776	609	-	-	-	15.2	85.6	-	100.8	467.5	27.3	85.6	112.9
7/2	775	609	-	-	-	15.1	85.1	-	100.2	465.6	27.2	85.1	112.3
8/1	685	685	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	461	461	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	352	352	-	-	-	2.4	1.5	-	3.9	39.6	8.2	1.5	9.7
10/1	1216	1216	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	470	470	-	-	-	2.0	0.6	-	2.6	19.8	8.9	0.6	9.5
10/3	480	480	-	-	-	1.6	0.6	-	2.2	16.5	8.8	0.6	9.4
11/1	479	479	-	-	-	0.0	0.3	-	0.4	2.8	0.1	0.3	0.5
11/2	672	672	-	-	-	0.1	0.7	-	0.8	4.3	0.3	0.7	1.0
12/1	1088	1088	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	1067	1067	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	215	215	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

C1 - 08-1078	PRC for Signalled Lanes (%):	-41.5	Total Delay for Signalled Lanes (pcuHr):	217.86	Cycle Time (s):	90
C2 - 08-1079	PRC for Signalled Lanes (%):	19.5	Total Delay for Signalled Lanes (pcuHr):	9.98	Cycle Time (s):	90
	PRC Over All Lanes (%):	-44.9	Total Delay Over All Lanes(pcuHr):	253.31		

Full Input Data And Results
Scenario 8: '2039 + Dev Traffic - PM Peak' (FG8: '2039 + Dev Traffic - PM Peak', Plan 1: 'Base')
C1 - 08-1078

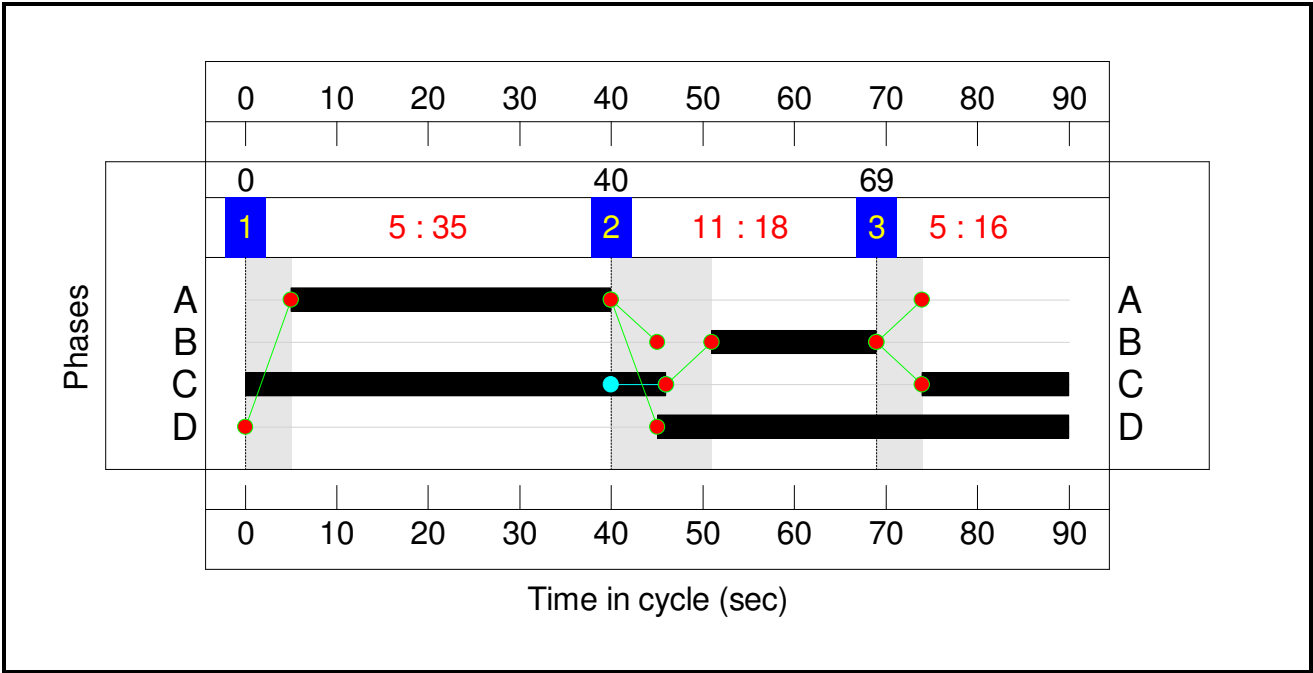
Stage Sequence Diagram



Stage Timings

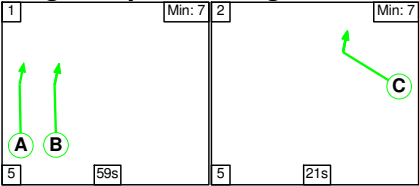
Stage	1	2	3
Duration	35	18	16
Change Point	0	40	69

Signal Timings Diagram



Full Input Data And Results

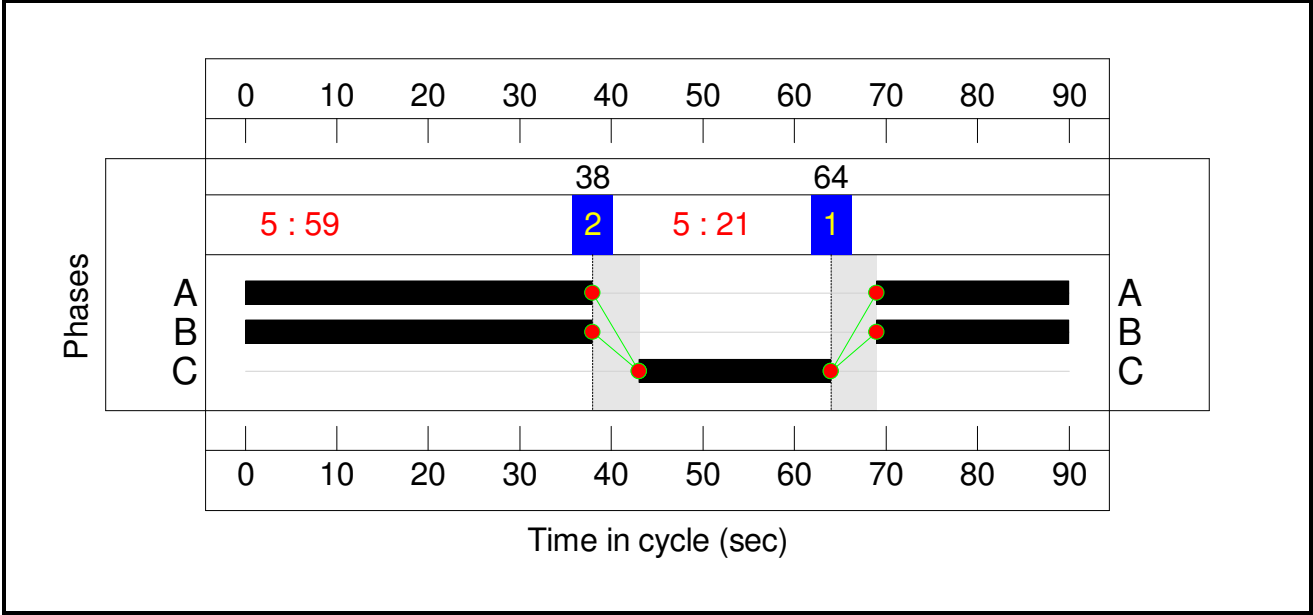
C2 - 08-1079
Stage Sequence Diagram



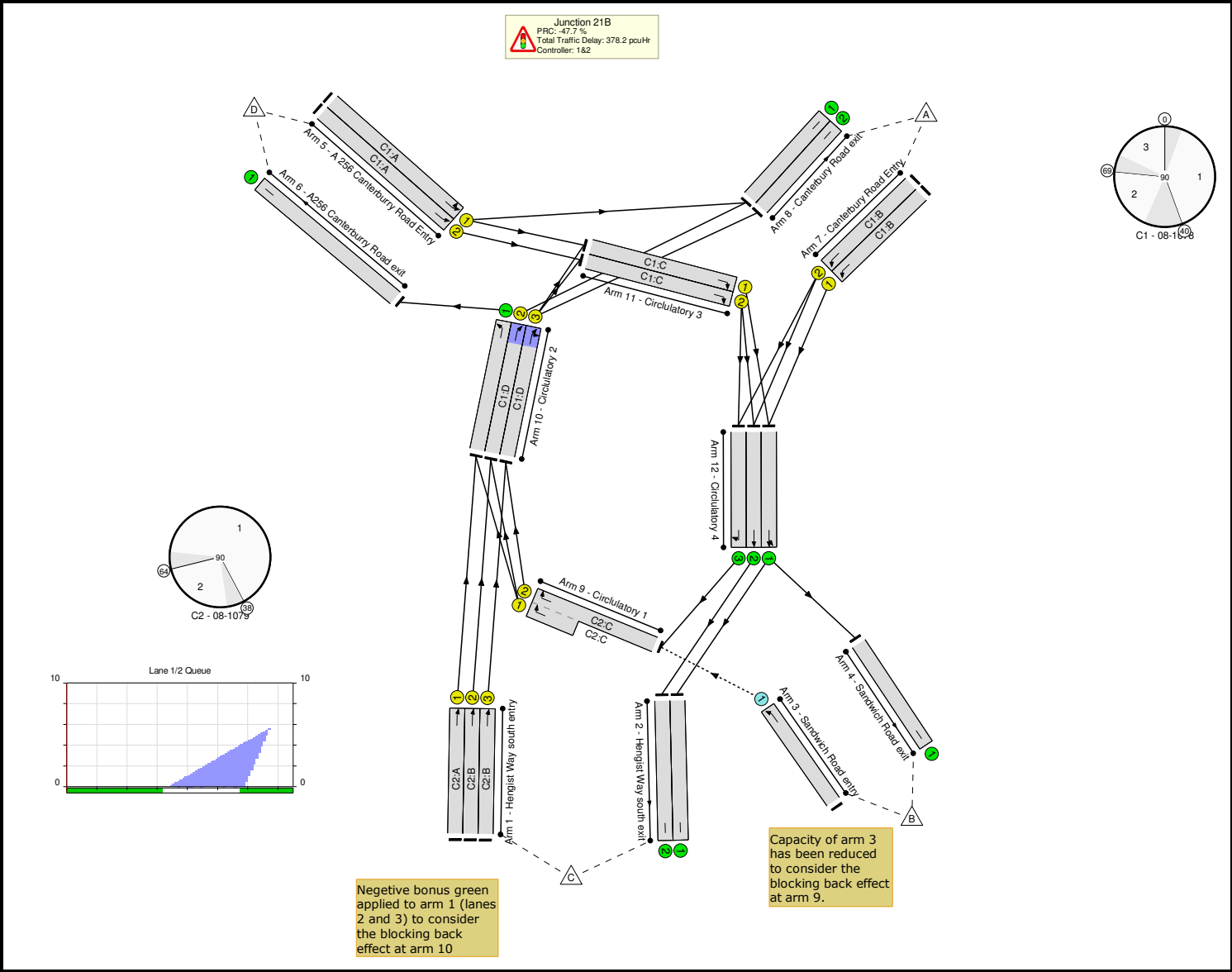
Stage Timings

Stage	1	2
Duration	59	21
Change Point	64	38

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: Junction 21b	-	-	N/A	-	-		-	-	-	-	-	-	132.9%
Junction 21B	-	-	N/A	-	-		-	-	-	-	-	-	132.9%
1/1	Hengist Way south entry Ahead	U	N/A	N/A	C2:A		1	59	-	1059	1985	1323	80.0%
1/2	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	59	-	507	1980	1320	38.4%
1/3	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	59	-	556	1980	1320	42.1%
2/1	Hengist Way south exit	U	N/A	N/A	-		-	-	-	653	Inf	Inf	0.0%
2/2	Hengist Way south exit	U	N/A	N/A	-		-	-	-	1169	Inf	Inf	0.0%
3/1	Sandwich Road entry Ahead	O	N/A	N/A	-		-	-	-	251	1908	189	132.8%
4/1	Sandwich Road exit	U	N/A	N/A	-		-	-	-	376	Inf	Inf	0.0%
5/1	A 256 Canterbury Road Entry Left Ahead	U	N/A	N/A	C1:A		1	35	-	933	1953	781	119.4%
5/2	A 256 Canterbury Road Entry Ahead	U	N/A	N/A	C1:A		1	35	-	891	1919	768	116.1%
6/1	A256 Canterbury Road exit	U	N/A	N/A	-		-	-	-	1410	Inf	Inf	0.0%
7/1	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	18	-	513	1828	386	132.9%
7/2	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	18	-	513	1828	386	132.9%
8/1	Canterbury Road exit	U	N/A	N/A	-		-	-	-	1069	Inf	Inf	0.0%

Full Input Data And Results

8/2	Canterbury Road exit	U	N/A	N/A	-		-	-	-	546	Inf	Inf	0.0%
9/2+9/1	Circlulatory 1 Right	U	N/A	N/A	C2:C		1	21	-	490	1766:1796	5+437	83.6 : 85.2%
10/1	Circlulatory 2 Left	U	N/A	N/A	-		-	-	-	1410	Inf	Inf	0.0%
10/2	Circlulatory 2 Ahead	U	N/A	N/A	C1:D		1	45	-	641	1922	982	61.9%
10/3	Circlulatory 2 Ahead Right	U	N/A	N/A	C1:D		1	45	-	561	1918	980	57.1%
11/1	Circlulatory 3 Right	U	N/A	N/A	C1:C		1	62	-	516	2040	1428	30.4%
11/2	Circlulatory 3 Right	U	N/A	N/A	C1:C		1	62	-	895	2040	1428	54.0%
12/1	Circlulatory 4 Ahead Ahead2	U	N/A	N/A	-		-	-	-	1029	Inf	Inf	0.0%
12/2	Circlulatory 4 Ahead	U	N/A	N/A	-		-	-	-	1169	Inf	Inf	0.0%
12/3	Circlulatory 4 Right	U	N/A	N/A	-		-	-	-	239	Inf	Inf	0.0%

Full Input Data And Results

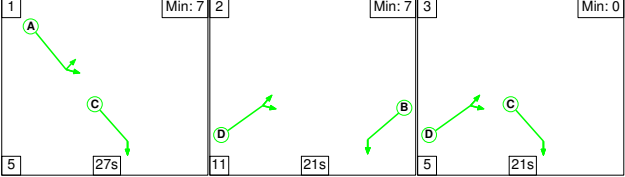
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	189	0	0	62.7	315.5	0.0	378.2	-	-	-	-
Junction 21B	-	-	189	0	0	62.7	315.5	0.0	378.2	-	-	-	-
1/1	1059	1059	-	-	-	3.2	2.0	-	5.1	17.4	18.8	2.0	20.8
1/2	507	507	-	-	-	0.9	0.3	-	1.3	8.9	5.6	0.3	5.9
1/3	556	556	-	-	-	1.1	0.4	-	1.4	9.3	6.3	0.4	6.7
2/1	517	517	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	970	970	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	251	189	189	0	0	4.3	32.9	-	37.2	533.8	17.8	32.9	50.7
4/1	302	302	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	933	781	-	-	-	13.6	78.9	-	92.4	356.6	27.1	78.9	106.0
5/2	891	768	-	-	-	12.0	65.1	-	77.1	311.6	25.4	65.1	90.5
6/1	1330	1330	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	513	386	-	-	-	9.8	65.5	-	75.3	528.7	16.6	65.5	82.1
7/2	513	386	-	-	-	9.8	65.5	-	75.3	528.7	16.6	65.5	82.1
8/1	966	966	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	546	546	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	376	376	-	-	-	3.8	2.7	-	6.5	62.0	8.2	2.7	10.8
10/1	1330	1330	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	608	608	-	-	-	1.9	0.8	-	2.8	16.3	7.6	0.8	8.4
10/3	560	560	-	-	-	2.1	0.7	-	2.8	18.1	6.8	0.7	7.4
11/1	434	434	-	-	-	0.0	0.2	-	0.3	2.1	0.1	0.2	0.4
11/2	771	771	-	-	-	0.0	0.6	-	0.6	2.8	0.1	0.6	0.7
12/1	820	820	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	970	970	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	187	187	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

C1 - 08-1078	PRC for Signalled Lanes (%):	-47.7	Total Delay for Signalled Lanes (pcuHr):	326.63	Cycle Time (s):	90
C2 - 08-1079	PRC for Signalled Lanes (%):	5.7	Total Delay for Signalled Lanes (pcuHr):	14.30	Cycle Time (s):	90
	PRC Over All Lanes (%):	-47.7	Total Delay Over All Lanes(pcuHr):	378.15		

Full Input Data And Results
Scenario 9: '2039 + Dev Traffic - Airport Peak' (FG9: '2039 + Dev Traffic - Airport Peak', Plan 1: 'Base')
C1 - 08-1078

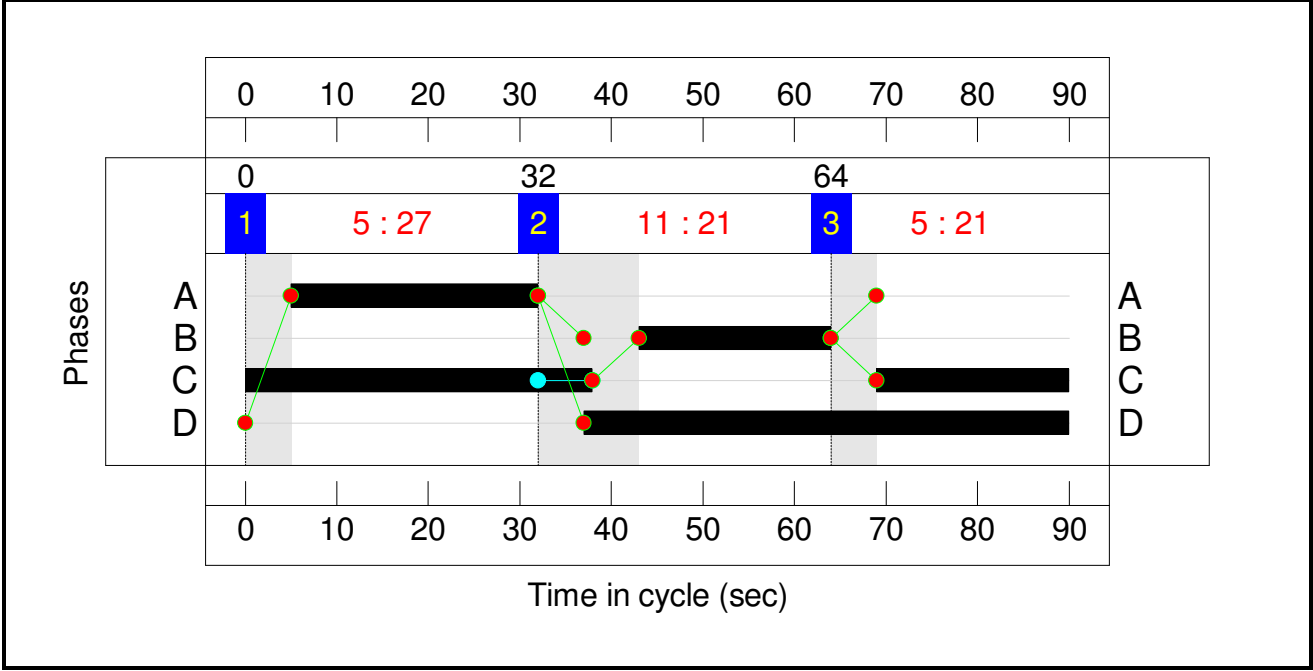
Stage Sequence Diagram



Stage Timings

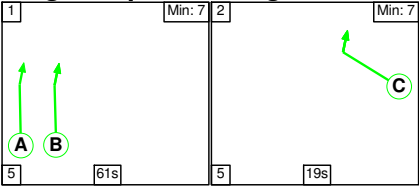
Stage	1	2	3
Duration	27	21	21
Change Point	0	32	64

Signal Timings Diagram



Full Input Data And Results

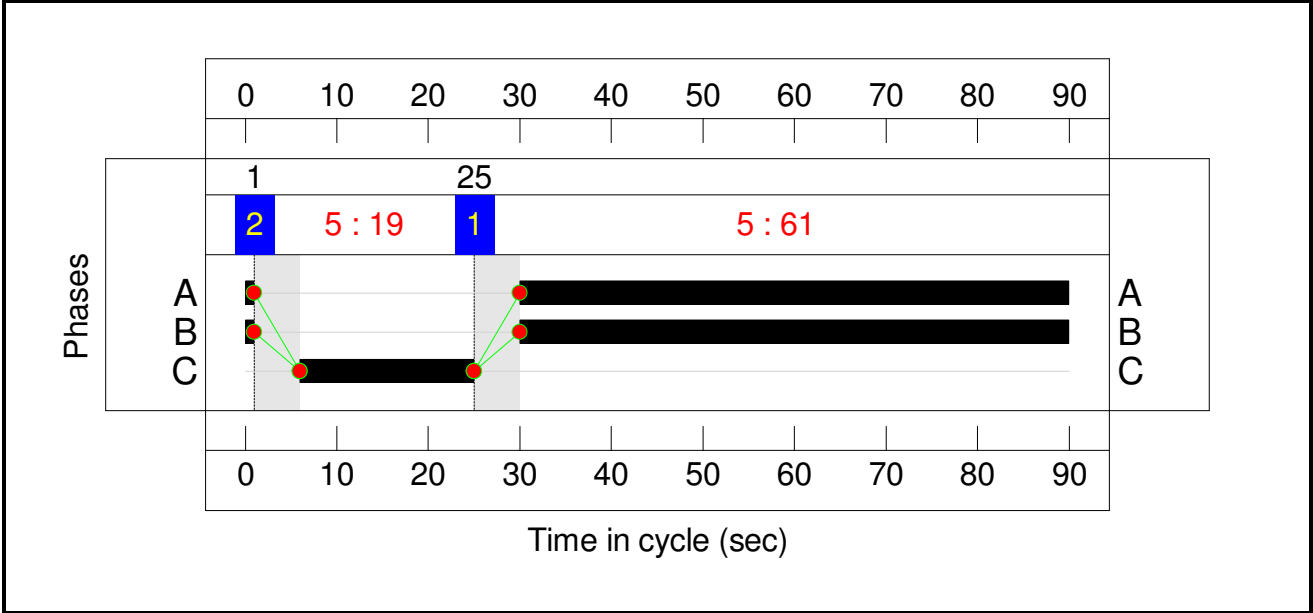
C2 - 08-1079
Stage Sequence Diagram



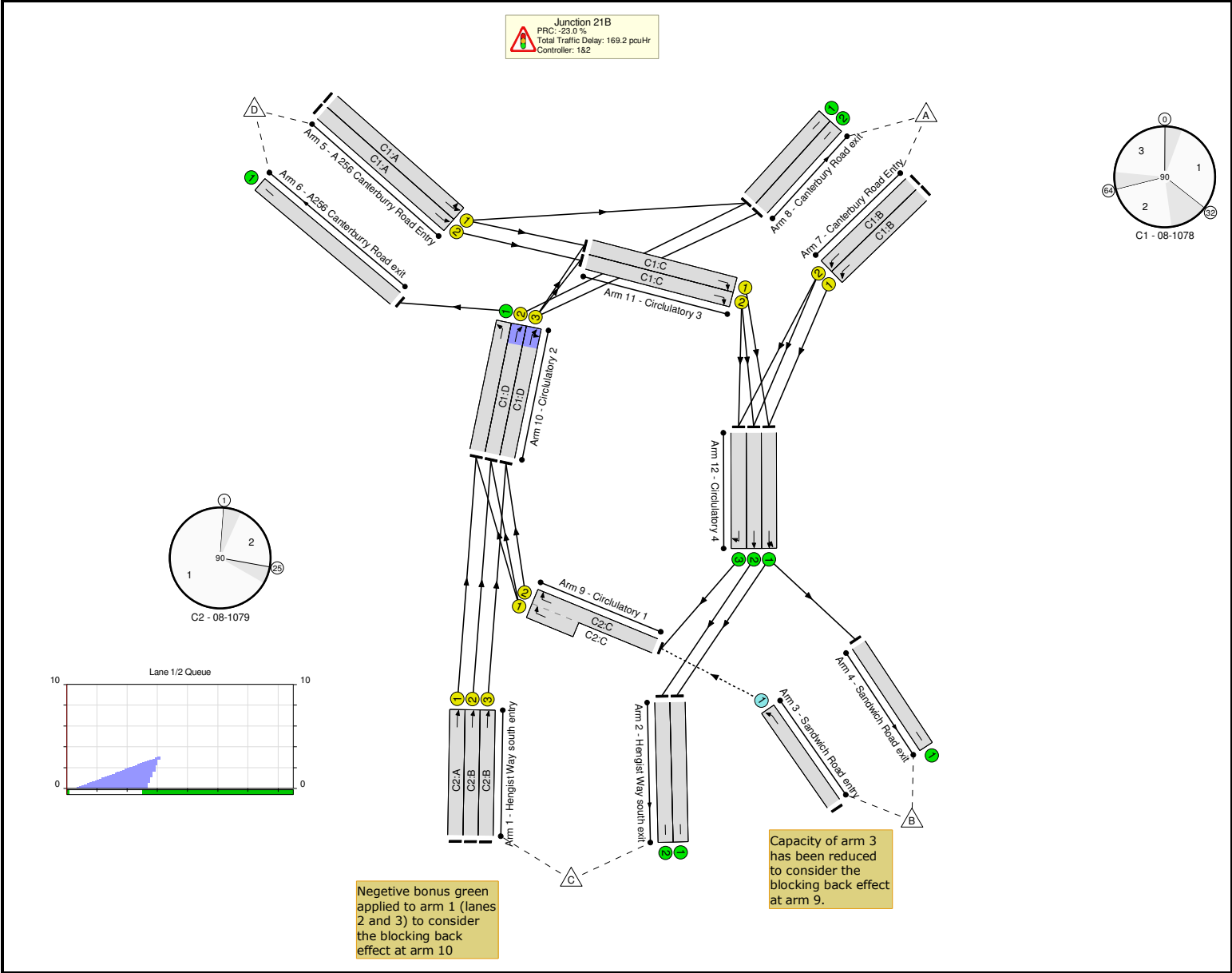
Stage Timings

Stage	1	2
Duration	61	19
Change Point	25	1

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: Junction 21b	-	-	N/A	-	-		-	-	-	-	-	-	110.7%
Junction 21B	-	-	N/A	-	-		-	-	-	-	-	-	110.7%
1/1	Hengist Way south entry Ahead	U	N/A	N/A	C2:A		1	61	-	687	1985	1367	50.2%
1/2	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	61	-	333	1980	1364	24.4%
1/3	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	61	-	354	1980	1364	26.0%
2/1	Hengist Way south exit	U	N/A	N/A	-		-	-	-	583	Inf	Inf	0.0%
2/2	Hengist Way south exit	U	N/A	N/A	-		-	-	-	846	Inf	Inf	0.0%
3/1	Sandwich Road entry Ahead	O	N/A	N/A	-		-	-	-	220	1908	199	110.7%
4/1	Sandwich Road exit	U	N/A	N/A	-		-	-	-	315	Inf	Inf	0.0%
5/1	A 256 Canterbury Road Entry Left Ahead	U	N/A	N/A	C1:A		1	27	-	655	1947	606	108.1%
5/2	A 256 Canterbury Road Entry Ahead	U	N/A	N/A	C1:A		1	27	-	622	1919	597	104.2%
6/1	A256 Canterbury Road exit	U	N/A	N/A	-		-	-	-	1087	Inf	Inf	0.0%
7/1	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	21	-	476	1828	447	106.5%
7/2	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	21	-	476	1828	447	106.5%
8/1	Canterbury Road exit	U	N/A	N/A	-		-	-	-	654	Inf	Inf	0.0%

Full Input Data And Results

8/2	Canterbury Road exit	U	N/A	N/A	-		-	-	-	338	Inf	Inf	0.0%
9/2+9/1	Circlulatory 1 Right	U	N/A	N/A	C2:C		1	19	-	479	1766:1796	6+397	107.5 : 110.2%
10/1	Circlulatory 2 Left	U	N/A	N/A	-		-	-	-	1087	Inf	Inf	0.0%
10/2	Circlulatory 2 Ahead	U	N/A	N/A	C1:D		1	53	-	405	1922	1153	33.3%
10/3	Circlulatory 2 Ahead Right	U	N/A	N/A	C1:D		1	53	-	361	1911	1147	31.3%
11/1	Circlulatory 3 Right	U	N/A	N/A	C1:C		1	59	-	422	2040	1360	28.8%
11/2	Circlulatory 3 Right	U	N/A	N/A	C1:C		1	59	-	629	2040	1360	44.3%
12/1	Circlulatory 4 Ahead Ahead2	U	N/A	N/A	-		-	-	-	898	Inf	Inf	0.0%
12/2	Circlulatory 4 Ahead	U	N/A	N/A	-		-	-	-	846	Inf	Inf	0.0%
12/3	Circlulatory 4 Right	U	N/A	N/A	-		-	-	-	259	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: Junction 21b	-	-	199	0	0	36.9	132.3	0.0	169.2	-	-	-	-
Junction 21B	-	-	199	0	0	36.9	132.3	0.0	169.2	-	-	-	-
1/1	687	687	-	-	-	1.3	0.5	-	1.8	9.3	8.0	0.5	8.5
1/2	333	333	-	-	-	0.5	0.2	-	0.6	7.0	3.1	0.2	3.2
1/3	354	354	-	-	-	0.5	0.2	-	0.7	7.1	3.3	0.2	3.5
2/1	544	544	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	804	804	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	220	199	199	0	0	2.0	14.4	-	16.4	268.8	15.6	14.4	30.0
4/1	294	294	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	655	606	-	-	-	7.8	30.1	-	37.9	208.3	17.6	30.1	47.7
5/2	622	597	-	-	-	6.5	20.2	-	26.7	154.3	16.2	20.2	36.4
6/1	1032	1032	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	476	447	-	-	-	5.5	20.4	-	25.9	196.0	12.6	20.4	33.0
7/2	476	447	-	-	-	5.5	20.4	-	25.9	196.0	12.6	20.4	33.0
8/1	615	615	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	338	338	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	443	402	-	-	-	6.2	24.8	-	31.0	252.0	12.4	24.8	37.2
10/1	1032	1032	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	385	385	-	-	-	0.7	0.2	-	0.9	8.5	5.5	0.2	5.8
10/3	359	359	-	-	-	0.4	0.2	-	0.6	6.1	4.4	0.2	4.6
11/1	391	391	-	-	-	0.1	0.2	-	0.3	2.5	0.3	0.2	0.5
11/2	602	602	-	-	-	0.0	0.4	-	0.4	2.6	0.1	0.4	0.5
12/1	838	838	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	804	804	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	244	244	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

C1 - 08-1078	PRC for Signalled Lanes (%):	-20.1	Total Delay for Signalled Lanes (pcuHr):	118.60	Cycle Time (s):	90
C2 - 08-1079	PRC for Signalled Lanes (%):	-22.4	Total Delay for Signalled Lanes (pcuHr):	34.14	Cycle Time (s):	90
	PRC Over All Lanes (%):	-23.0	Total Delay Over All Lanes(pcuHr):	169.17		

Junctions 9															
PICADY 9 - Priority Intersection Module															
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Filename: Jct 23_R1_val.j9

Path: R:\Projects\38199 Manston Airport DCO EIA\4 Design\Transport\Junction Modelling\Base Models\Validated\Jct 23_Star Lane_Star Ln Link

Report generation date: 29/01/2018 13:40:27

- »2017 Baseline Traffic, AM
- »2017 Baseline Traffic, PM
- »2017 Baseline Traffic, Airport Peak
- »2039 Growthed Traffic, AM
- »2039 Growthed Traffic, PM
- »2039 Growthed Traffic, Airport Peak
- »2039 + Dev Traffic, AM
- »2039 + Dev Traffic, PM
- »2039 + Dev Traffic, Airport Peak
- »2039 B+Dev_Net Change, AM
- »2039 B+Dev_Net Change, PM
- »2039 B+Dev_Net Change, Airport Peak

Summary of junction performance

	AM					PM					Airport Peak				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
	2017 Baseline Traffic														
Stream B-C	0.3	7.77	0.24	A	3.38	0.3	8.40	0.25	A	3.95	0.2	6.93	0.14	A	2.51
Stream B-A	0.3	10.78	0.24	B		0.4	13.04	0.27	B		0.2	9.68	0.16	A	
Stream C-AB	0.5	6.09	0.24	A		1.2	8.19	0.44	A		0.5	6.56	0.24	A	
	2039 Growthed Traffic														
Stream B-C	0.5	9.44	0.33	A	4.18	0.6	11.21	0.36	B	6.12	0.2	8.10	0.20	A	3.20
Stream B-A	0.5	13.85	0.34	B		0.7	19.84	0.41	C		0.3	12.54	0.25	B	
Stream C-AB	0.8	6.50	0.32	A		2.6	11.65	0.62	B		0.9	7.44	0.37	A	
	2039 + Dev Traffic														
Stream B-C	0.5	9.96	0.35	A	5.70	1.0	14.11	0.50	B	7.36	0.3	8.38	0.23	A	4.80
Stream B-A	0.6	15.79	0.37	C		0.8	23.18	0.45	C		0.4	14.08	0.27	B	
Stream C-AB	1.6	9.08	0.52	A		2.8	12.59	0.65	B		1.8	10.45	0.55	B	
	2039 B+Dev_Net Change														
Stream B-C	0.8	11.28	0.46	B	13.74	1.9	19.12	0.66	C	17.10	0.4	8.48	0.27	A	9.61
Stream B-A	0.3	16.65	0.24	C		0.4	25.92	0.32	D		0.2	14.50	0.16	B	
Stream C-AB	6.0	25.59	0.82	D		8.6	33.78	0.87	D		4.5	20.92	0.77	C	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

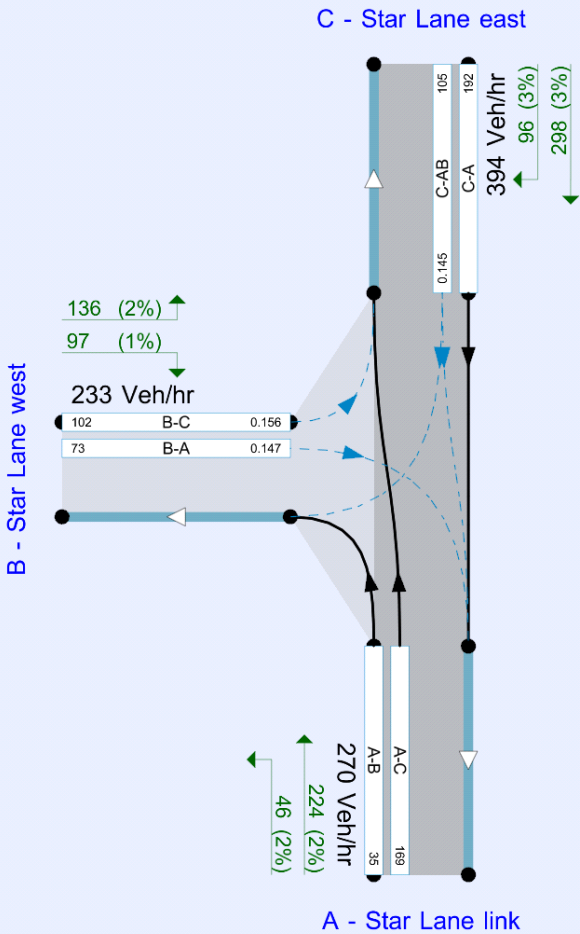
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	29/09/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	GLOBAL\pranav.yadav
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2017 Baseline Traffic	AM	ONE HOUR	07:30	09:00	15	✓
D4	2017 Baseline Traffic	PM	ONE HOUR	16:30	18:00	15	✓
D5	2017 Baseline Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓
D6	2039 Growthed Traffic	AM	ONE HOUR	07:30	09:00	15	✓
D7	2039 Growthed Traffic	PM	ONE HOUR	16:30	18:00	15	✓
D8	2039 Growthed Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓
D9	2039 + Dev Traffic	AM	ONE HOUR	07:30	09:00	15	✓
D10	2039 + Dev Traffic	PM	ONE HOUR	16:30	18:00	15	✓
D11	2039 + Dev Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓
D12	2039 B+Dev_Net Change	AM	ONE HOUR	07:30	09:00	15	✓
D13	2039 B+Dev_Net Change	PM	ONE HOUR	16:30	18:00	15	✓
D14	2039 B+Dev_Net Change	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2017 Baseline Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	3.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Star Lane link		Major
B	Star Lane west		Minor
C	Star Lane east		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Star Lane east	8.85			103.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Star Lane west	One lane plus flare	9.48	4.92	3.86	3.75	3.43	✓	1.00	215	91

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
23	B-A	611	0.097	0.246	0.155	0.352
23	B-C	745	0.100	0.253	-	-
23	C-B	634	0.215	0.215	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2017 Baseline Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	270	100.000
B - Star Lane west		ONE HOUR	✓	233	100.000
C - Star Lane east		ONE HOUR	✓	394	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	46	224
	B - Star Lane west	97	0	136
	C - Star Lane east	298	96	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	2	2
	B - Star Lane west	1	0	2
	C - Star Lane east	3	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.24	7.77	0.3	A	125	187
B-A	0.24	10.78	0.3	B	89	134
C-AB	0.24	6.09	0.5	A	141	212
C-A					220	330
A-B					42	63
A-C					206	308

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	102	26	657	0.156	102	0.0	0.2	6.477	A
B-A	73	18	496	0.147	72	0.0	0.2	8.486	A
C-AB	105	26	723	0.145	104	0.0	0.2	5.813	A
C-A	192	48			192				
A-B	35	9			35				
A-C	169	42			169				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	122	31	639	0.191	122	0.2	0.2	6.954	A
B-A	87	22	473	0.184	87	0.2	0.2	9.316	A
C-AB	135	34	745	0.181	135	0.2	0.3	5.901	A
C-A	219	55			219				
A-B	41	10			41				
A-C	201	50			201				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	150	37	613	0.244	149	0.2	0.3	7.759	A
B-A	107	27	441	0.242	106	0.2	0.3	10.749	B
C-AB	184	46	777	0.237	183	0.3	0.5	6.073	A
C-A	250	63			250				
A-B	51	13			51				
A-C	247	62			247				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	150	37	613	0.244	150	0.3	0.3	7.774	A
B-A	107	27	441	0.242	107	0.3	0.3	10.778	B
C-AB	184	46	777	0.237	184	0.5	0.5	6.085	A
C-A	250	62			250				
A-B	51	13			51				
A-C	247	62			247				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	122	31	639	0.191	123	0.3	0.2	6.974	A
B-A	87	22	473	0.184	88	0.3	0.2	9.350	A
C-AB	135	34	746	0.182	136	0.5	0.3	5.919	A
C-A	219	55			219				
A-B	41	10			41				
A-C	201	50			201				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	102	26	656	0.156	103	0.2	0.2	6.506	A
B-A	73	18	496	0.147	73	0.2	0.2	8.529	A
C-AB	105	26	723	0.145	106	0.3	0.2	5.839	A
C-A	191	48			191				
A-B	35	9			35				
A-C	169	42			169				

2017 Baseline Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	3.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2017 Baseline Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	445	100.000
B - Star Lane west		ONE HOUR	✓	223	100.000
C - Star Lane east		ONE HOUR	✓	497	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	112	333
	B - Star Lane west	92	0	131
	C - Star Lane east	334	163	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	1	1
	B - Star Lane west	0	0	2
	C - Star Lane east	1	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.25	8.40	0.3	A	120	180
B-A	0.27	13.04	0.4	B	84	127
C-AB	0.44	8.19	1.2	A	258	387
C-A					198	297
A-B					103	154
A-C					306	458

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	99	25	633	0.156	98	0.0	0.2	6.725	A
B-A	69	17	454	0.152	69	0.0	0.2	9.311	A
C-AB	187	47	728	0.257	186	0.0	0.5	6.622	A
C-A	187	47			187				
A-B	84	21			84				
A-C	251	63			251				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	118	29	609	0.193	118	0.2	0.2	7.316	A
B-A	83	21	423	0.196	82	0.2	0.2	10.576	B
C-AB	245	61	751	0.327	244	0.5	0.7	7.118	A
C-A	202	50			202				
A-B	101	25			101				
A-C	299	75			299				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	144	36	573	0.252	144	0.2	0.3	8.377	A
B-A	101	25	378	0.268	101	0.2	0.4	12.979	B
C-AB	340	85	783	0.435	339	0.7	1.1	8.125	A
C-A	207	52			207				
A-B	123	31			123				
A-C	367	92			367				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	144	36	573	0.252	144	0.3	0.3	8.401	A
B-A	101	25	377	0.268	101	0.4	0.4	13.039	B
C-AB	341	85	784	0.435	341	1.1	1.2	8.191	A
C-A	206	52			206				
A-B	123	31			123				
A-C	367	92			367				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	118	29	609	0.193	118	0.3	0.2	7.341	A
B-A	83	21	422	0.196	83	0.4	0.2	10.641	B
C-AB	246	62	752	0.327	248	1.2	0.7	7.189	A
C-A	201	50			201				
A-B	101	25			101				
A-C	299	75			299				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	99	25	632	0.156	99	0.2	0.2	6.757	A
B-A	69	17	454	0.153	70	0.2	0.2	9.377	A
C-AB	188	47	729	0.258	189	0.7	0.5	6.694	A
C-A	186	46			186				
A-B	84	21			84				
A-C	251	63			251				

2017 Baseline Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	2.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2017 Baseline Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	350	100.000
B - Star Lane west		ONE HOUR	✓	139	100.000
C - Star Lane east		ONE HOUR	✓	346	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	66	284
	B - Star Lane west	65	0	74
	C - Star Lane east	245	101	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	3	4
	B - Star Lane west	0	0	3
	C - Star Lane east	4	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.14	6.93	0.2	A	68	102
B-A	0.16	9.68	0.2	A	60	89
C-AB	0.24	6.56	0.5	A	138	207
C-A					180	270
A-B					61	91
A-C					261	391

Main Results for each time segment

12:45 - 13:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	56	14	640	0.087	55	0.0	0.1	6.151	A
B-A	49	12	499	0.098	49	0.0	0.1	7.978	A
C-AB	104	26	693	0.150	103	0.0	0.2	6.093	A
C-A	157	39			157				
A-B	50	12			50				
A-C	214	53			214				

13:00 - 13:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	67	17	624	0.107	66	0.1	0.1	6.455	A
B-A	58	15	476	0.123	58	0.1	0.1	8.617	A
C-AB	132	33	707	0.187	132	0.2	0.3	6.258	A
C-A	179	45			179				
A-B	59	15			59				
A-C	255	64			255				

13:15 - 13:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	81	20	601	0.136	81	0.1	0.2	6.922	A
B-A	72	18	443	0.161	71	0.1	0.2	9.669	A
C-AB	177	44	728	0.244	177	0.3	0.5	6.533	A
C-A	204	51			204				
A-B	73	18			73				
A-C	313	78			313				

13:30 - 13:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	81	20	601	0.136	81	0.2	0.2	6.927	A
B-A	72	18	443	0.161	72	0.2	0.2	9.682	A
C-AB	177	44	728	0.244	177	0.5	0.5	6.555	A
C-A	203	51			203				
A-B	73	18			73				
A-C	313	78			313				

13:45 - 14:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	67	17	624	0.107	67	0.2	0.1	6.461	A
B-A	58	15	476	0.123	59	0.2	0.1	8.636	A
C-AB	132	33	707	0.187	133	0.5	0.3	6.287	A
C-A	179	45			179				
A-B	59	15			59				
A-C	255	64			255				

14:00 - 14:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	56	14	640	0.087	56	0.1	0.1	6.164	A
B-A	49	12	499	0.098	49	0.1	0.1	8.003	A
C-AB	104	26	693	0.150	104	0.3	0.2	6.129	A
C-A	157	39			157				
A-B	50	12			50				
A-C	214	53			214				

2039 Growthed Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	4.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2039 Growthed Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Am	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	337	100.000
B - Star Lane west		ONE HOUR	✓	291	100.000
C - Star Lane east		ONE HOUR	✓	493	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	57	280
	B - Star Lane west	121	0	170
	C - Star Lane east	373	120	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	2	2
	B - Star Lane west	1	0	2
	C - Star Lane east	3	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.33	9.44	0.5	A	156	234
B-A	0.34	13.85	0.5	B	111	167
C-AB	0.32	6.50	0.8	A	200	300
C-A					252	378
A-B					52	78
A-C					257	385

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	128	32	635	0.202	127	0.0	0.2	7.076	A
B-A	91	23	467	0.195	90	0.0	0.2	9.532	A
C-AB	144	36	752	0.192	143	0.0	0.4	5.908	A
C-A	227	57			227				
A-B	43	11			43				
A-C	211	53			211				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	153	38	610	0.251	153	0.2	0.3	7.862	A
B-A	109	27	437	0.249	108	0.2	0.3	10.939	B
C-AB	190	47	781	0.243	189	0.4	0.5	6.095	A
C-A	253	63			253				
A-B	51	13			51				
A-C	252	63			252				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	187	47	569	0.329	187	0.3	0.5	9.397	A
B-A	133	33	394	0.339	133	0.3	0.5	13.755	B
C-AB	266	66	821	0.323	265	0.5	0.8	6.477	A
C-A	277	69			277				
A-B	63	16			63				
A-C	308	77			308				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	187	47	568	0.329	187	0.5	0.5	9.445	A
B-A	133	33	393	0.339	133	0.5	0.5	13.846	B
C-AB	266	67	822	0.324	266	0.8	0.8	6.502	A
C-A	277	69			277				
A-B	63	16			63				
A-C	308	77			308				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	153	38	609	0.251	153	0.5	0.3	7.910	A
B-A	109	27	437	0.249	109	0.5	0.3	11.025	B
C-AB	190	48	781	0.244	191	0.8	0.5	6.130	A
C-A	253	63			253				
A-B	51	13			51				
A-C	252	63			252				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	128	32	634	0.202	128	0.3	0.3	7.122	A
B-A	91	23	466	0.195	91	0.3	0.2	9.614	A
C-AB	145	36	752	0.193	146	0.5	0.4	5.949	A
C-A	226	57			226				
A-B	43	11			43				
A-C	211	53			211				

2039 Growthed Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	6.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2039 Growthed Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	560	100.000
B - Star Lane west		ONE HOUR	✓	281	100.000
C - Star Lane east		ONE HOUR	✓	626	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	141	419
	B - Star Lane west	116	0	165
	C - Star Lane east	421	205	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	1	1
	B - Star Lane west	0	0	2
	C - Star Lane east	1	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.36	11.21	0.6	B	151	227
B-A	0.41	19.84	0.7	C	106	160
C-AB	0.62	11.65	2.6	B	380	571
C-A					194	291
A-B					129	194
A-C					384	577

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	124	31	602	0.206	123	0.0	0.3	7.508	A
B-A	87	22	413	0.212	86	0.0	0.3	10.997	B
C-AB	265	66	758	0.350	262	0.0	0.8	7.241	A
C-A	206	52			206				
A-B	106	27			106				
A-C	315	79			315				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	148	37	567	0.262	148	0.3	0.4	8.585	A
B-A	104	26	371	0.281	104	0.3	0.4	13.461	B
C-AB	357	89	788	0.453	355	0.8	1.2	8.335	A
C-A	206	52			206				
A-B	127	32			127				
A-C	377	94			377				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	182	45	505	0.360	181	0.3	0.6	11.090	B
B-A	128	32	310	0.412	127	0.4	0.7	19.461	C
C-AB	515	129	831	0.620	510	1.2	2.5	11.282	B
C-A	174	43			174				
A-B	155	39			155				
A-C	461	115			461				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	182	45	503	0.361	182	0.6	0.6	11.214	B
B-A	128	32	309	0.413	128	0.7	0.7	19.835	C
C-AB	518	130	834	0.622	518	2.5	2.6	11.647	B
C-A	171	43			171				
A-B	155	39			155				
A-C	461	115			461				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	148	37	565	0.263	149	0.6	0.4	8.672	A
B-A	104	26	369	0.283	105	0.7	0.4	13.717	B
C-AB	360	90	791	0.455	365	2.6	1.3	8.604	A
C-A	203	51			203				
A-B	127	32			127				
A-C	377	94			377				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	124	31	600	0.207	125	0.4	0.3	7.570	A
B-A	87	22	411	0.212	88	0.4	0.3	11.148	B
C-AB	267	67	760	0.352	269	1.3	0.8	7.398	A
C-A	204	51			204				
A-B	106	27			106				
A-C	315	79			315				

2039 Growthed Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	3.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2039 Growthed Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	467	100.000
B - Star Lane west		ONE HOUR	✓	186	100.000
C - Star Lane east		ONE HOUR	✓	462	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	88	379
	B - Star Lane west	87	0	99
	C - Star Lane east	327	135	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	3	4
	B - Star Lane west	0	0	3
	C - Star Lane east	4	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.20	8.10	0.2	A	91	136
B-A	0.25	12.54	0.3	B	80	120
C-AB	0.37	7.44	0.9	A	213	320
C-A					211	316
A-B					81	121
A-C					348	522

Main Results for each time segment

12:45 - 13:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	75	19	613	0.122	74	0.0	0.1	6.677	A
B-A	65	16	459	0.143	65	0.0	0.2	9.113	A
C-AB	155	39	718	0.216	153	0.0	0.4	6.371	A
C-A	193	48			193				
A-B	66	17			66				
A-C	285	71			285				

13:00 - 13:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	89	22	589	0.151	89	0.1	0.2	7.192	A
B-A	78	20	427	0.183	78	0.2	0.2	10.296	B
C-AB	202	51	738	0.274	202	0.4	0.6	6.715	A
C-A	213	53			213				
A-B	79	20			79				
A-C	341	85			341				

13:15 - 13:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	109	27	554	0.197	109	0.2	0.2	8.082	A
B-A	96	24	383	0.250	95	0.2	0.3	12.492	B
C-AB	281	70	767	0.367	280	0.6	0.9	7.393	A
C-A	227	57			227				
A-B	97	24			97				
A-C	417	104			417				

13:30 - 13:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	109	27	553	0.197	109	0.2	0.2	8.099	A
B-A	96	24	383	0.250	96	0.3	0.3	12.542	B
C-AB	282	70	768	0.367	282	0.9	0.9	7.442	A
C-A	227	57			227				
A-B	97	24			97				
A-C	417	104			417				

13:45 - 14:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	89	22	589	0.151	89	0.2	0.2	7.212	A
B-A	78	20	427	0.183	79	0.3	0.2	10.346	B
C-AB	203	51	739	0.275	204	0.9	0.6	6.784	A
C-A	212	53			212				
A-B	79	20			79				
A-C	341	85			341				

14:00 - 14:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	75	19	612	0.122	75	0.2	0.1	6.704	A
B-A	65	16	459	0.143	66	0.2	0.2	9.168	A
C-AB	155	39	718	0.216	156	0.6	0.4	6.433	A
C-A	192	48			192				
A-B	66	17			66				
A-C	285	71			285				

2039 + Dev Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	5.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2039 + Dev Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Am	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	337	100.000
B - Star Lane west		ONE HOUR	✓	301	100.000
C - Star Lane east		ONE HOUR	✓	566	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	57	280
	B - Star Lane west	121	0	180
	C - Star Lane east	373	193	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	2	2
	B - Star Lane west	1	0	2
	C - Star Lane east	3	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.35	9.96	0.5	A	165	248
B-A	0.37	15.79	0.6	C	111	167
C-AB	0.52	9.08	1.6	A	321	481
C-A					198	298
A-B					52	78
A-C					257	385

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	136	34	635	0.214	134	0.0	0.3	7.184	A
B-A	91	23	446	0.204	90	0.0	0.3	10.097	B
C-AB	231	58	756	0.306	229	0.0	0.6	6.809	A
C-A	195	49			195				
A-B	43	11			43				
A-C	211	53			211				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	162	40	608	0.266	161	0.3	0.4	8.064	A
B-A	109	27	412	0.264	108	0.3	0.4	11.859	B
C-AB	304	76	785	0.387	303	0.6	0.9	7.479	A
C-A	205	51			205				
A-B	51	13			51				
A-C	252	63			252				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	198	50	561	0.353	197	0.4	0.5	9.888	A
B-A	133	33	362	0.368	132	0.4	0.6	15.626	C
C-AB	425	106	826	0.515	423	0.9	1.6	8.958	A
C-A	198	49			198				
A-B	63	16			63				
A-C	308	77			308				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	198	50	560	0.354	198	0.5	0.5	9.957	A
B-A	133	33	361	0.369	133	0.6	0.6	15.793	C
C-AB	427	107	827	0.516	427	1.6	1.6	9.083	A
C-A	196	49			196				
A-B	63	16			63				
A-C	308	77			308				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	162	40	606	0.267	163	0.5	0.4	8.125	A
B-A	109	27	410	0.265	110	0.6	0.4	11.997	B
C-AB	306	76	787	0.388	308	1.6	0.9	7.603	A
C-A	203	51			203				
A-B	51	13			51				
A-C	252	63			252				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	136	34	633	0.214	136	0.4	0.3	7.239	A
B-A	91	23	445	0.205	92	0.4	0.3	10.208	B
C-AB	232	58	757	0.307	234	0.9	0.6	6.913	A
C-A	194	48			194				
A-B	43	11			43				
A-C	211	53			211				

2039 + Dev Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	7.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2039 + Dev Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	560	100.000
B - Star Lane west		ONE HOUR	✓	343	100.000
C - Star Lane east		ONE HOUR	✓	635	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	141	419
	B - Star Lane west	116	0	227
	C - Star Lane east	421	214	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	1	1
	B - Star Lane west	0	0	1
	C - Star Lane east	1	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.50	14.11	1.0	B	208	312
B-A	0.45	23.18	0.8	C	106	160
C-AB	0.65	12.59	2.8	B	397	596
C-A					185	278
A-B					129	194
A-C					384	577

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	171	43	615	0.278	169	0.0	0.4	8.047	A
B-A	87	22	399	0.219	86	0.0	0.3	11.485	B
C-AB	277	69	758	0.365	274	0.0	0.8	7.411	A
C-A	201	50			201				
A-B	106	27			106				
A-C	315	79			315				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	204	51	577	0.353	203	0.4	0.5	9.610	A
B-A	104	26	353	0.295	104	0.3	0.4	14.401	B
C-AB	372	93	788	0.472	370	0.8	1.3	8.644	A
C-A	198	50			198				
A-B	127	32			127				
A-C	377	94			377				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	250	62	508	0.492	248	0.5	0.9	13.787	B
B-A	128	32	285	0.449	126	0.4	0.8	22.512	C
C-AB	538	135	831	0.647	532	1.3	2.7	12.108	B
C-A	161	40			161				
A-B	155	39			155				
A-C	461	115			461				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	250	62	505	0.495	250	0.9	1.0	14.105	B
B-A	128	32	283	0.452	128	0.8	0.8	23.183	C
C-AB	542	135	834	0.649	541	2.7	2.8	12.593	B
C-A	158	39			158				
A-B	155	39			155				
A-C	461	115			461				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	204	51	575	0.355	206	1.0	0.6	9.794	A
B-A	104	26	351	0.297	106	0.8	0.4	14.774	B
C-AB	376	94	792	0.475	382	2.8	1.4	8.979	A
C-A	195	49			195				
A-B	127	32			127				
A-C	377	94			377				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	171	43	614	0.278	172	0.6	0.4	8.153	A
B-A	87	22	397	0.220	88	0.4	0.3	11.671	B
C-AB	279	70	760	0.367	281	1.4	0.9	7.588	A
C-A	199	50			199				
A-B	106	27			106				
A-C	315	79			315				

2039 + Dev Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	4.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2039 + Dev Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	467	100.000
B - Star Lane west		ONE HOUR	✓	203	100.000
C - Star Lane east		ONE HOUR	✓	528	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	88	379
	B - Star Lane west	87	0	116
	C - Star Lane east	327	201	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	3	4
	B - Star Lane west	0	0	2
	C - Star Lane east	4	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.23	8.38	0.3	A	106	160
B-A	0.27	14.08	0.4	B	80	120
C-AB	0.55	10.45	1.8	B	318	477
C-A					167	250
A-B					81	121
A-C					348	522

Main Results for each time segment

12:45 - 13:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	87	22	622	0.140	87	0.0	0.2	6.713	A
B-A	65	16	437	0.150	65	0.0	0.2	9.651	A
C-AB	230	58	718	0.321	228	0.0	0.6	7.332	A
C-A	167	42			167				
A-B	66	17			66				
A-C	285	71			285				

13:00 - 13:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	104	26	597	0.175	104	0.2	0.2	7.294	A
B-A	78	20	402	0.195	78	0.2	0.2	11.114	B
C-AB	302	75	738	0.408	300	0.6	1.0	8.226	A
C-A	173	43			173				
A-B	79	20			79				
A-C	341	85			341				

13:15 - 13:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	128	32	558	0.229	127	0.2	0.3	8.351	A
B-A	96	24	352	0.272	95	0.2	0.4	13.992	B
C-AB	419	105	768	0.546	416	1.0	1.7	10.255	B
C-A	162	40			162				
A-B	97	24			97				
A-C	417	104			417				

13:30 - 13:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	128	32	557	0.229	128	0.3	0.3	8.376	A
B-A	96	24	351	0.273	96	0.4	0.4	14.085	B
C-AB	421	105	769	0.547	421	1.7	1.8	10.452	B
C-A	161	40			161				
A-B	97	24			97				
A-C	417	104			417				

13:45 - 14:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	104	26	597	0.175	105	0.3	0.2	7.324	A
B-A	78	20	401	0.195	79	0.4	0.2	11.204	B
C-AB	303	76	740	0.410	306	1.8	1.0	8.415	A
C-A	172	43			172				
A-B	79	20			79				
A-C	341	85			341				

14:00 - 14:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	87	22	621	0.141	88	0.2	0.2	6.743	A
B-A	65	16	436	0.150	66	0.2	0.2	9.728	A
C-AB	232	58	719	0.322	233	1.0	0.7	7.468	A
C-A	166	41			166				
A-B	66	17			66				
A-C	285	71			285				

2039 B+Dev_Net Change, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	13.74	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2039 B+Dev_Net Change	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	331	100.000
B - Star Lane west		ONE HOUR	✓	304	100.000
C - Star Lane east		ONE HOUR	✓	676	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	29	302
	B - Star Lane west	61	0	243
	C - Star Lane east	383	293	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	2	2
	B - Star Lane west	1	0	4
	C - Star Lane east	3	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.46	11.28	0.8	B	223	334
B-A	0.24	16.65	0.3	C	56	84
C-AB	0.82	25.59	6.0	D	506	759
C-A					114	171
A-B					27	40
A-C					277	416

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	183	46	640	0.286	181	0.0	0.4	7.826	A
B-A	46	11	388	0.118	45	0.0	0.1	10.479	B
C-AB	360	90	744	0.484	355	0.0	1.2	9.193	A
C-A	149	37			149				
A-B	22	5			22				
A-C	227	57			227				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	218	55	620	0.352	218	0.4	0.5	8.939	A
B-A	55	14	347	0.158	55	0.1	0.2	12.313	B
C-AB	477	119	776	0.614	473	1.2	2.1	11.936	B
C-A	131	33			131				
A-B	26	7			26				
A-C	271	68			271				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	268	67	588	0.455	266	0.5	0.8	11.171	B
B-A	67	17	287	0.234	67	0.2	0.3	16.335	C
C-AB	672	168	821	0.819	658	2.1	5.5	22.037	C
C-A	72	18			72				
A-B	32	8			32				
A-C	333	83			333				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	268	67	586	0.456	268	0.8	0.8	11.284	B
B-A	67	17	283	0.237	67	0.3	0.3	16.651	C
C-AB	680	170	826	0.823	678	5.5	6.0	25.586	D
C-A	64	16			64				
A-B	32	8			32				
A-C	333	83			333				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	218	55	619	0.353	220	0.8	0.6	9.035	A
B-A	55	14	342	0.160	55	0.3	0.2	12.572	B
C-AB	485	121	784	0.619	500	6.0	2.4	13.503	B
C-A	122	31			122				
A-B	26	7			26				
A-C	271	68			271				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	183	46	639	0.286	184	0.6	0.4	7.911	A
B-A	46	11	386	0.119	46	0.2	0.1	10.608	B
C-AB	364	91	747	0.487	368	2.4	1.3	9.634	A
C-A	145	36			145				
A-B	22	5			22				
A-C	227	57			227				

2039 B+Dev_Net Change, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	17.10	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2039 B+Dev_Net Change	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	520	100.000
B - Star Lane west		ONE HOUR	✓	385	100.000
C - Star Lane east		ONE HOUR	✓	721	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	71	449
	B - Star Lane west	58	0	327
	C - Star Lane east	433	288	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	1	1
	B - Star Lane west	0	0	2
	C - Star Lane east	1	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.66	19.12	1.9	C	300	450
B-A	0.32	25.92	0.4	D	53	80
C-AB	0.87	33.78	8.6	D	545	817
C-A					117	175
A-B					65	98
A-C					412	618

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	246	62	624	0.394	244	0.0	0.6	9.395	A
B-A	44	11	348	0.125	43	0.0	0.1	11.777	B
C-AB	376	94	770	0.489	371	0.0	1.3	8.977	A
C-A	167	42			167				
A-B	53	13			53				
A-C	338	85			338				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	294	73	597	0.493	293	0.6	0.9	11.794	B
B-A	52	13	293	0.178	52	0.1	0.2	14.932	B
C-AB	507	127	803	0.632	503	1.3	2.4	12.055	B
C-A	141	35			141				
A-B	64	16			64				
A-C	404	101			404				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	360	90	550	0.655	357	0.9	1.8	18.311	C
B-A	64	16	208	0.307	63	0.2	0.4	24.673	C
C-AB	734	184	849	0.864	714	2.4	7.4	26.163	D
C-A	60	15			60				
A-B	78	20			78				
A-C	494	124			494				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	360	90	547	0.658	360	1.8	1.9	19.122	C
B-A	64	16	202	0.315	64	0.4	0.4	25.921	D
C-AB	749	187	858	0.872	744	7.4	8.6	33.777	D
C-A	45	11			45				
A-B	78	20			78				
A-C	494	124			494				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	294	73	595	0.494	297	1.9	1.0	12.239	B
B-A	52	13	285	0.183	53	0.4	0.2	15.574	C
C-AB	521	130	815	0.640	545	8.6	2.7	14.777	B
C-A	127	32			127				
A-B	64	16			64				
A-C	404	101			404				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	246	62	624	0.395	248	1.0	0.7	9.610	A
B-A	44	11	345	0.127	44	0.2	0.1	11.982	B
C-AB	381	95	774	0.492	386	2.7	1.4	9.490	A
C-A	162	41			162				
A-B	53	13			53				
A-C	338	85			338				

2039 B+Dev_Net Change, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	9.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2039 B+Dev_Net Change	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	451	100.000
B - Star Lane west		ONE HOUR	✓	188	100.000
C - Star Lane east		ONE HOUR	✓	612	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	44	407
	B - Star Lane west	43	0	145
	C - Star Lane east	335	277	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	3	4
	B - Star Lane west	0	0	6
	C - Star Lane east	4	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.27	8.48	0.4	A	133	200
B-A	0.16	14.50	0.2	B	39	59
C-AB	0.77	20.92	4.5	C	448	672
C-A					114	171
A-B					40	61
A-C					373	560

Main Results for each time segment

12:45 - 13:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	109	27	637	0.171	108	0.0	0.2	6.801	A
B-A	32	8	391	0.083	32	0.0	0.1	10.006	B
C-AB	322	81	715	0.451	318	0.0	1.1	9.025	A
C-A	139	35			139				
A-B	33	8			33				
A-C	306	77			306				

13:00 - 13:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	130	33	616	0.212	130	0.2	0.3	7.407	A
B-A	39	10	352	0.110	39	0.1	0.1	11.473	B
C-AB	423	106	738	0.574	420	1.1	1.8	11.369	B
C-A	127	32			127				
A-B	40	10			40				
A-C	366	91			366				

13:15 - 13:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	160	40	584	0.273	159	0.3	0.4	8.456	A
B-A	47	12	298	0.159	47	0.1	0.2	14.337	B
C-AB	591	148	770	0.768	582	1.8	4.2	18.987	C
C-A	83	21			83				
A-B	48	12			48				
A-C	448	112			448				

13:30 - 13:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	160	40	584	0.273	160	0.4	0.4	8.483	A
B-A	47	12	296	0.160	47	0.2	0.2	14.499	B
C-AB	596	149	774	0.771	595	4.2	4.5	20.919	C
C-A	77	19			77				
A-B	48	12			48				
A-C	448	112			448				

13:45 - 14:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	130	33	615	0.212	131	0.4	0.3	7.434	A
B-A	39	10	349	0.111	39	0.2	0.1	11.622	B
C-AB	429	107	743	0.577	439	4.5	1.9	12.389	B
C-A	122	30			122				
A-B	40	10			40				
A-C	366	91			366				

14:00 - 14:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	109	27	636	0.172	109	0.3	0.2	6.832	A
B-A	32	8	389	0.083	33	0.1	0.1	10.093	B
C-AB	325	81	717	0.453	328	1.9	1.1	9.394	A
C-A	136	34			136				
A-B	33	8			33				
A-C	306	77			306				

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: Jct 24_R2_val.j9
Path: R:\Projects\38199 Manston Airport DCO EIA\4 Design\Transport\Junction Modelling\Base Models\Validated\Jct 24_Star Ln Link_Nash Rd
Report generation date: 29/01/2018 13:50:54

- »2017 Baseline Traffic , AM
- »2017 Baseline Traffic , PM
- »2017 Baseline Traffic, Airport Peak
- »2039 Growthed Traffic, AM
- »2039 Growthed Traffic, PM
- »2039 Growthed Traffic, Airport Peak
- »2039 + Dev Traffic, AM
- »2039 + Dev Traffic, PM
- »2039 + Dev Traffic, Airport Peak
- »2039 B+Dev_Net Change, AM
- »2039 B+Dev_Net Change, PM
- »2039 B+Dev_Net Change, Airport Peak

Summary of junction performance

	AM					PM					Airport Peak				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
	2017 Baseline Traffic														
1 - Star Lane east	0.5	4.90	0.33	A	9.87	0.9	5.88	0.48	A	6.42	0.5	4.61	0.32	A	5.58
2 - Nash Road south	0.2	3.34	0.14	A		0.3	4.06	0.23	A		0.2	3.43	0.16	A	
3 - Star Lane west	0.4	3.77	0.29	A		0.7	4.57	0.40	A		0.4	3.88	0.30	A	
4 - Nash Road north	2.6	22.55	0.73	C		1.0	12.80	0.52	B		0.8	11.15	0.45	B	
	2039 Growthed Traffic														
1 - Star Lane east	0.8	6.04	0.43	A	26.95	1.6	8.32	0.62	A	9.18	0.8	5.83	0.44	A	7.69
2 - Nash Road south	0.2	3.72	0.18	A		0.5	4.97	0.32	A		0.3	4.02	0.23	A	
3 - Star Lane west	0.6	4.32	0.37	A		1.1	5.89	0.52	A		0.7	4.74	0.41	A	
4 - Nash Road north	10.6	75.93	0.95	F		2.1	20.41	0.68	C		1.7	17.62	0.64	C	
	2039 + Dev Traffic														
1 - Star Lane east	1.0	6.89	0.51	A	27.08	1.7	8.51	0.63	A	9.75	1.0	6.62	0.51	A	8.00
2 - Nash Road south	0.2	3.91	0.19	A		0.5	5.01	0.32	A		0.3	4.25	0.24	A	
3 - Star Lane west	0.6	4.38	0.38	A		1.3	6.55	0.57	A		0.7	4.86	0.42	A	
4 - Nash Road north	11.0	78.95	0.95	F		2.3	22.69	0.70	C		1.8	18.07	0.64	C	
	2039 B+Dev_Net Change														
1 - Star Lane east	1.2	7.53	0.54	A	75.92	2.1	10.26	0.68	B	16.70	1.2	7.59	0.56	A	12.19
2 - Nash Road south	0.4	4.68	0.30	A		0.9	6.67	0.47	A		0.6	5.19	0.36	A	
3 - Star Lane west	0.8	5.11	0.44	A		1.9	8.73	0.66	A		0.9	5.83	0.49	A	
4 - Nash Road north	43.7	238.56	1.12	F		6.1	50.70	0.88	F		3.9	33.23	0.81	D	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

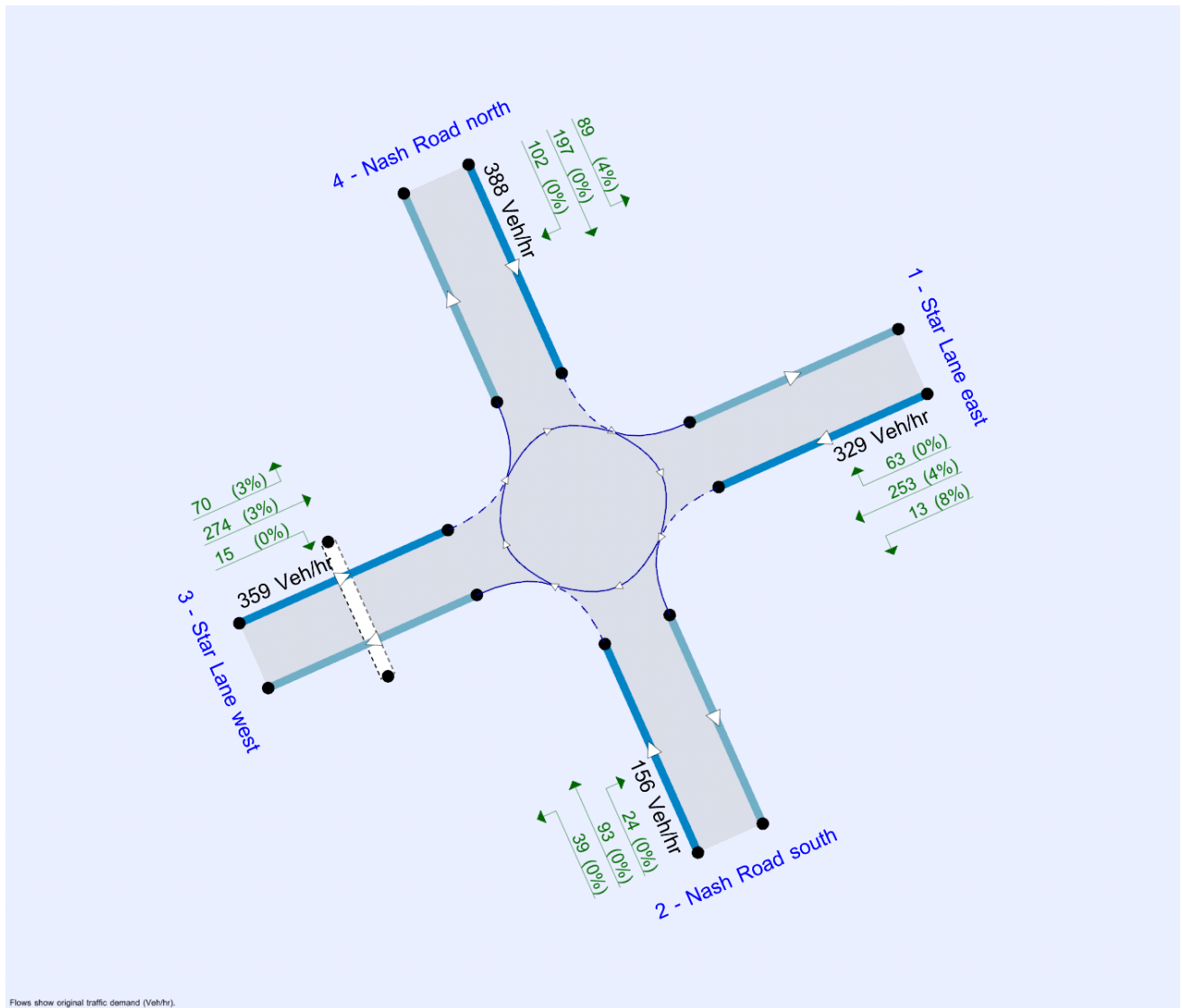
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	29/09/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	GLOBAL\pranav.yadav
Description	

Units

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



Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2017 Baseline Traffic	AM	ONE HOUR	07:30	09:00	15	✓
D4	2017 Baseline Traffic	PM	ONE HOUR	16:30	18:00	15	✓
D5	2017 Baseline Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓
D6	2039 Growthed Traffic	AM	ONE HOUR	07:30	09:00	15	✓
D7	2039 Growthed Traffic	PM	ONE HOUR	16:30	18:00	15	✓
D8	2039 Growthed Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓
D9	2039 + Dev Traffic	AM	ONE HOUR	07:30	09:00	15	✓
D10	2039 + Dev Traffic	PM	ONE HOUR	16:30	18:00	15	✓
D11	2039 + Dev Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓
D12	2039 B+Dev_Net Change	AM	ONE HOUR	07:30	09:00	15	✓
D13	2039 B+Dev_Net Change	PM	ONE HOUR	16:30	18:00	15	✓
D14	2039 B+Dev_Net Change	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2017 Baseline Traffic , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
24	untitled	Standard Roundabout	1, 2, 3, 4	9.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Star Lane east	
2	Nash Road south	
3	Star Lane west	
4	Nash Road north	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Star Lane east	3.62	7.00	7.3	16.4	40.0	64.0	
2 - Nash Road south	4.00	7.00	9.8	19.6	40.0	55.0	
3 - Star Lane west	3.61	7.67	8.0	24.5	40.7	24.0	
4 - Nash Road north	4.08	7.61	7.3	13.8	40.1	48.0	

Pelican/Puffin Crossings

Arm	Space between crossing and junction entry (Signalised) (PCU)	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)
3 - Star Lane west	6.00	3.00	2.90	1.00	6.00	6.00	7.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Star Lane east	0.526	1317
2 - Nash Road south	0.580	1524
3 - Star Lane west	0.631	1610
4 - Nash Road north	0.580	1518

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
4 - Nash Road north	Percentage		45.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2017 Baseline Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Star Lane east		ONE HOUR	✓	329	100.000
2 - Nash Road south		ONE HOUR	✓	156	100.000
3 - Star Lane west		ONE HOUR	✓	359	100.000
4 - Nash Road north		ONE HOUR	✓	388	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Star Lane east		
2 - Nash Road south		
3 - Star Lane west	[ONEHOUR]	40.00
4 - Nash Road north		

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	13	253	63
	2 - Nash Road south	24	0	39	93
	3 - Star Lane west	274	15	0	70
	4 - Nash Road north	89	197	102	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	8	4	0
	2 - Nash Road south	0	0	0	0
	3 - Star Lane west	3	0	0	3
	4 - Nash Road north	4	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Star Lane east	0.33	4.90	0.5	A	302	453
2 - Nash Road south	0.14	3.34	0.2	A	143	215
3 - Star Lane west	0.29	3.77	0.4	A	329	494
4 - Nash Road north	0.73	22.55	2.6	C	356	534

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	248	62	234		1154	0.215	247	290	0.0	0.3	3.960	A
2 - Nash Road south	117	29	313		1338	0.088	117	168	0.0	0.1	2.949	A
3 - Star Lane west	270	68	135	30.11	1406	0.192	269	295	0.0	0.2	3.163	A
4 - Nash Road north	292	73	235		615	0.475	289	170	0.0	0.9	10.931	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	296	74	281		1130	0.262	295	347	0.3	0.4	4.309	A
2 - Nash Road south	140	35	375		1301	0.108	140	201	0.1	0.1	3.100	A
3 - Star Lane west	323	81	162	35.96	1383	0.233	322	353	0.2	0.3	3.395	A
4 - Nash Road north	349	87	281		602	0.579	347	203	0.9	1.3	14.003	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	362	91	342		1099	0.330	362	425	0.4	0.5	4.879	A
2 - Nash Road south	172	43	458		1251	0.137	172	245	0.1	0.2	3.333	A
3 - Star Lane west	395	99	198	44.04	1349	0.293	395	432	0.3	0.4	3.770	A
4 - Nash Road north	427	107	344		585	0.730	423	249	1.3	2.5	21.478	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	362	91	345		1097	0.330	362	426	0.5	0.5	4.896	A
2 - Nash Road south	172	43	460		1250	0.137	172	248	0.2	0.2	3.336	A
3 - Star Lane west	395	99	198	44.04	1351	0.293	395	434	0.4	0.4	3.765	A
4 - Nash Road north	427	107	345		585	0.730	427	249	2.5	2.6	22.554	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	296	74	286		1128	0.262	296	349	0.5	0.4	4.333	A
2 - Nash Road south	140	35	378		1299	0.108	140	205	0.2	0.1	3.108	A
3 - Star Lane west	323	81	162	35.96	1385	0.233	323	356	0.4	0.3	3.390	A
4 - Nash Road north	349	87	282		602	0.579	353	203	2.6	1.4	14.737	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	248	62	238		1152	0.215	248	292	0.4	0.3	3.984	A
2 - Nash Road south	117	29	316		1336	0.088	118	170	0.1	0.1	2.953	A
3 - Star Lane west	270	68	136	30.11	1410	0.192	271	297	0.3	0.2	3.159	A
4 - Nash Road north	292	73	236		614	0.476	294	170	1.4	0.9	11.313	B

2017 Baseline Traffic , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
24	untitled	Standard Roundabout	1, 2, 3, 4	6.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2017 Baseline Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Star Lane east		ONE HOUR	✓	506	100.000
2 - Nash Road south		ONE HOUR	✓	244	100.000
3 - Star Lane west		ONE HOUR	✓	472	100.000
4 - Nash Road north		ONE HOUR	✓	271	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Star Lane east		
2 - Nash Road south		
3 - Star Lane west	[ONE HOUR]	40.00
4 - Nash Road north		

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	35	369	102
	2 - Nash Road south	19	0	42	183
	3 - Star Lane west	314	25	0	133
	4 - Nash Road north	56	125	90	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	0	1	0
	2 - Nash Road south	0	0	0	1
	3 - Star Lane west	1	0	0	0
	4 - Nash Road north	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Star Lane east	0.48	5.88	0.9	A	464	696
2 - Nash Road south	0.23	4.06	0.3	A	224	336
3 - Star Lane west	0.40	4.57	0.7	A	433	650
4 - Nash Road north	0.52	12.80	1.0	B	249	373

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	381	95	179		1213	0.314	379	291	0.0	0.5	4.305	A
2 - Nash Road south	184	46	420		1269	0.145	183	138	0.0	0.2	3.313	A
3 - Star Lane west	355	89	228	30.11	1383	0.257	354	375	0.0	0.3	3.495	A
4 - Nash Road north	204	51	268		612	0.333	202	313	0.0	0.5	8.732	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	455	114	215		1195	0.381	454	349	0.5	0.6	4.858	A
2 - Nash Road south	219	55	504		1221	0.180	219	166	0.2	0.2	3.594	A
3 - Star Lane west	424	106	273	35.96	1350	0.314	424	450	0.3	0.5	3.883	A
4 - Nash Road north	244	61	322		598	0.407	243	375	0.5	0.7	10.104	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	557	139	263		1170	0.476	556	427	0.6	0.9	5.857	A
2 - Nash Road south	269	67	616		1155	0.233	268	203	0.2	0.3	4.058	A
3 - Star Lane west	520	130	334	44.04	1306	0.398	519	550	0.5	0.7	4.570	A
4 - Nash Road north	298	75	394		579	0.515	297	460	0.7	1.0	12.676	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	557	139	264		1169	0.477	557	428	0.9	0.9	5.883	A
2 - Nash Road south	269	67	618		1154	0.233	269	204	0.3	0.3	4.064	A
3 - Star Lane west	520	130	335	44.04	1309	0.397	520	552	0.7	0.7	4.559	A
4 - Nash Road north	298	75	394		579	0.515	298	460	1.0	1.0	12.800	B

17:30 - 17:45

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	455	114	217		1194	0.381	456	351	0.9	0.6	4.887	A
2 - Nash Road south	219	55	506		1219	0.180	220	167	0.3	0.2	3.604	A
3 - Star Lane west	424	106	274	35.96	1355	0.313	425	452	0.7	0.5	3.874	A
4 - Nash Road north	244	61	322		598	0.407	245	376	1.0	0.7	10.234	B

17:45 - 18:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	381	95	181		1212	0.314	382	293	0.6	0.5	4.338	A
2 - Nash Road south	184	46	423		1267	0.145	184	140	0.2	0.2	3.323	A
3 - Star Lane west	355	89	229	30.11	1388	0.256	356	378	0.5	0.3	3.491	A
4 - Nash Road north	204	51	270		612	0.333	205	315	0.7	0.5	8.856	A

2017 Baseline Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
24	untitled	Standard Roundabout	1, 2, 3, 4	5.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2017 Baseline Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Star Lane east		ONE HOUR	✓	336	100.000
2 - Nash Road south		ONE HOUR	✓	186	100.000
3 - Star Lane west		ONE HOUR	✓	354	100.000
4 - Nash Road north		ONE HOUR	✓	244	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Star Lane east		
2 - Nash Road south		
3 - Star Lane west	[ONE HOUR]	40.00
4 - Nash Road north		

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	26	236	74
	2 - Nash Road south	22	0	44	120
	3 - Star Lane west	254	20	0	80
	4 - Nash Road north	51	120	73	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	8	4	1
	2 - Nash Road south	9	0	2	0
	3 - Star Lane west	5	0	0	0
	4 - Nash Road north	2	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Star Lane east	0.32	4.61	0.5	A	308	462
2 - Nash Road south	0.16	3.43	0.2	A	171	256
3 - Star Lane west	0.30	3.88	0.4	A	325	487
4 - Nash Road north	0.45	11.15	0.8	B	224	336

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	253	63	159		1189	0.213	252	245	0.0	0.3	3.836	A
2 - Nash Road south	140	35	287		1332	0.105	140	124	0.0	0.1	3.016	A
3 - Star Lane west	267	67	162	30.11	1380	0.193	266	264	0.0	0.2	3.227	A
4 - Nash Road north	184	46	222		620	0.296	182	206	0.0	0.4	8.196	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	302	76	191		1173	0.257	302	294	0.3	0.3	4.130	A
2 - Nash Road south	167	42	344		1299	0.129	167	149	0.1	0.1	3.180	A
3 - Star Lane west	318	80	194	35.96	1353	0.235	318	317	0.2	0.3	3.477	A
4 - Nash Road north	219	55	266		608	0.361	219	246	0.4	0.6	9.242	A

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	370	92	234		1151	0.321	369	359	0.3	0.5	4.600	A
2 - Nash Road south	205	51	421		1254	0.163	205	182	0.1	0.2	3.431	A
3 - Star Lane west	390	97	238	44.04	1316	0.296	389	388	0.3	0.4	3.883	A
4 - Nash Road north	269	67	326		591	0.454	268	301	0.6	0.8	11.080	B

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	370	92	234		1151	0.321	370	360	0.5	0.5	4.608	A
2 - Nash Road south	205	51	422		1253	0.163	205	183	0.2	0.2	3.432	A
3 - Star Lane west	390	97	238	44.04	1318	0.296	390	389	0.4	0.4	3.878	A
4 - Nash Road north	269	67	326		591	0.454	269	302	0.8	0.8	11.151	B

13:45 - 14:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	302	76	192		1173	0.258	303	295	0.5	0.3	4.140	A
2 - Nash Road south	167	42	345		1298	0.129	167	150	0.2	0.1	3.183	A
3 - Star Lane west	318	80	194	35.96	1356	0.235	319	318	0.4	0.3	3.474	A
4 - Nash Road north	219	55	266		608	0.361	220	247	0.8	0.6	9.321	A

14:00 - 14:15

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	253	63	161		1188	0.213	253	247	0.3	0.3	3.851	A
2 - Nash Road south	140	35	289		1331	0.105	140	125	0.1	0.1	3.024	A
3 - Star Lane west	267	67	163	30.11	1384	0.193	267	266	0.3	0.2	3.223	A
4 - Nash Road north	184	46	223		619	0.297	184	206	0.6	0.4	8.286	A

2039 Growthed Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
24	untitled	Standard Roundabout	1, 2, 3, 4	26.95	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2039 Growthed Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Star Lane east		ONE HOUR	✓	412	100.000
2 - Nash Road south		ONE HOUR	✓	195	100.000
3 - Star Lane west		ONE HOUR	✓	450	100.000
4 - Nash Road north		ONE HOUR	✓	484	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Star Lane east		
2 - Nash Road south		
3 - Star Lane west	[ONE HOUR]	40.00
4 - Nash Road north		

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	16	317	79
	2 - Nash Road south	30	0	49	116
	3 - Star Lane west	343	19	0	88
	4 - Nash Road north	111	246	127	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	8	5	0
	2 - Nash Road south	0	0	0	0
	3 - Star Lane west	3	0	0	3
	4 - Nash Road north	5	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Star Lane east	0.43	6.04	0.8	A	378	567
2 - Nash Road south	0.18	3.72	0.2	A	179	268
3 - Star Lane west	0.37	4.32	0.6	A	413	619
4 - Nash Road north	0.95	75.93	10.6	F	444	666

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	310	78	290		1117	0.278	309	362	0.0	0.4	4.444	A
2 - Nash Road south	147	37	391		1290	0.114	146	208	0.0	0.1	3.145	A
3 - Star Lane west	339	85	169	30.11	1388	0.244	337	368	0.0	0.3	3.422	A
4 - Nash Road north	364	91	294		597	0.610	358	212	0.0	1.5	14.717	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	370	93	349		1088	0.341	370	434	0.4	0.5	5.011	A
2 - Nash Road south	175	44	468		1244	0.141	175	250	0.1	0.2	3.368	A
3 - Star Lane west	405	101	202	35.96	1363	0.297	404	441	0.3	0.4	3.753	A
4 - Nash Road north	435	109	352		582	0.747	430	254	1.5	2.7	22.970	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	454	113	414		1055	0.430	453	527	0.5	0.7	5.968	A
2 - Nash Road south	215	54	569		1184	0.181	214	298	0.2	0.2	3.714	A
3 - Star Lane west	495	124	247	44.04	1327	0.373	495	536	0.4	0.6	4.323	A
4 - Nash Road north	533	133	431		561	0.950	510	311	2.7	8.5	54.264	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	454	113	425		1049	0.432	454	531	0.7	0.8	6.044	A
2 - Nash Road south	215	54	574		1181	0.182	215	305	0.2	0.2	3.725	A
3 - Star Lane west	495	124	248	44.04	1330	0.373	495	541	0.6	0.6	4.315	A
4 - Nash Road north	533	133	432		561	0.950	524	312	8.5	10.6	75.928	F

08:30 - 08:45

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	370	93	375		1074	0.345	371	442	0.8	0.5	5.127	A
2 - Nash Road south	175	44	479		1238	0.142	176	267	0.2	0.2	3.389	A
3 - Star Lane west	405	101	203	35.96	1367	0.296	405	452	0.6	0.4	3.749	A
4 - Nash Road north	435	109	353		582	0.748	464	255	10.6	3.3	35.829	E

08:45 - 09:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	310	78	300		1112	0.279	311	366	0.5	0.4	4.496	A
2 - Nash Road south	147	37	396		1287	0.114	147	215	0.2	0.1	3.157	A
3 - Star Lane west	339	85	170	30.11	1393	0.243	339	373	0.4	0.3	3.419	A
4 - Nash Road north	364	91	295		597	0.610	371	213	3.3	1.6	16.356	C

2039 Growthed Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
24	untitled	Standard Roundabout	1, 2, 3, 4	9.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2039 Growthed Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Star Lane east		ONE HOUR	✓	637	100.000
2 - Nash Road south		ONE HOUR	✓	307	100.000
3 - Star Lane west		ONE HOUR	✓	599	100.000
4 - Nash Road north		ONE HOUR	✓	341	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Star Lane east		
2 - Nash Road south		
3 - Star Lane west	[ONE HOUR]	40.00
4 - Nash Road north		

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	44	465	128
	2 - Nash Road south	24	0	53	230
	3 - Star Lane west	401	31	0	167
	4 - Nash Road north	71	157	113	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	0	1	0
	2 - Nash Road south	0	0	0	1
	3 - Star Lane west	1	0	0	0
	4 - Nash Road north	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Star Lane east	0.62	8.32	1.6	A	585	877
2 - Nash Road south	0.32	4.97	0.5	A	282	423
3 - Star Lane west	0.52	5.89	1.1	A	550	824
4 - Nash Road north	0.68	20.41	2.1	C	313	469

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	480	120	224		1190	0.403	477	371	0.0	0.7	5.032	A
2 - Nash Road south	231	58	528		1206	0.192	230	173	0.0	0.2	3.684	A
3 - Star Lane west	451	113	286	30.11	1350	0.334	449	472	0.0	0.5	3.987	A
4 - Nash Road north	257	64	342		593	0.433	254	393	0.0	0.7	10.520	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	573	143	269		1166	0.491	572	445	0.7	1.0	6.043	A
2 - Nash Road south	276	69	633		1145	0.241	276	208	0.2	0.3	4.138	A
3 - Star Lane west	538	135	343	35.96	1315	0.409	538	566	0.5	0.7	4.625	A
4 - Nash Road north	307	77	409		575	0.533	305	471	0.7	1.1	13.250	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	701	175	328		1135	0.618	699	544	1.0	1.6	8.199	A
2 - Nash Road south	338	85	774		1064	0.318	337	254	0.3	0.5	4.951	A
3 - Star Lane west	660	165	420	44.04	1268	0.520	658	692	0.7	1.1	5.891	A
4 - Nash Road north	375	94	501		551	0.681	372	577	1.1	2.0	19.674	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	701	175	331		1134	0.619	701	546	1.6	1.6	8.317	A
2 - Nash Road south	338	85	777		1062	0.318	338	255	0.5	0.5	4.972	A
3 - Star Lane west	660	165	421	44.04	1274	0.518	660	695	1.1	1.1	5.856	A
4 - Nash Road north	375	94	502		551	0.682	375	578	2.0	2.1	20.409	C

17:30 - 17:45

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	573	143	273		1164	0.492	575	448	1.6	1.0	6.137	A
2 - Nash Road south	276	69	638		1143	0.242	277	210	0.5	0.3	4.161	A
3 - Star Lane west	538	135	344	35.96	1323	0.407	540	570	1.1	0.7	4.604	A
4 - Nash Road north	307	77	411		575	0.533	310	473	2.1	1.2	13.773	B

17:45 - 18:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	480	120	228		1188	0.404	481	374	1.0	0.7	5.101	A
2 - Nash Road south	231	58	533		1203	0.192	231	176	0.3	0.2	3.707	A
3 - Star Lane west	451	113	288	30.11	1358	0.332	452	476	0.7	0.5	3.977	A
4 - Nash Road north	257	64	344		593	0.433	258	396	1.2	0.8	10.823	B

2039 Growthed Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
24	untitled	Standard Roundabout	1, 2, 3, 4	7.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2039 Growthed Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Star Lane east		ONE HOUR	✓	449	100.000
2 - Nash Road south		ONE HOUR	✓	248	100.000
3 - Star Lane west		ONE HOUR	✓	473	100.000
4 - Nash Road north		ONE HOUR	✓	325	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Star Lane east		
2 - Nash Road south		
3 - Star Lane west	[ONE HOUR]	40.00
4 - Nash Road north		

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	35	315	99
	2 - Nash Road south	29	0	59	160
	3 - Star Lane west	339	27	0	107
	4 - Nash Road north	68	160	97	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	8	4	1
	2 - Nash Road south	10	0	2	0
	3 - Star Lane west	5	0	0	0
	4 - Nash Road north	2	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Star Lane east	0.44	5.83	0.8	A	412	618
2 - Nash Road south	0.23	4.02	0.3	A	228	341
3 - Star Lane west	0.41	4.74	0.7	A	434	651
4 - Nash Road north	0.64	17.62	1.7	C	298	447

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	338	85	212		1163	0.291	336	327	0.0	0.4	4.347	A
2 - Nash Road south	187	47	382		1275	0.146	186	166	0.0	0.2	3.304	A
3 - Star Lane west	356	89	216	30.11	1350	0.264	355	352	0.0	0.4	3.612	A
4 - Nash Road north	245	61	296		599	0.408	242	274	0.0	0.7	10.000	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	404	101	254		1141	0.354	403	391	0.4	0.5	4.876	A
2 - Nash Road south	223	56	459		1230	0.181	223	199	0.2	0.2	3.572	A
3 - Star Lane west	425	106	259	35.96	1320	0.322	425	423	0.4	0.5	4.018	A
4 - Nash Road north	292	73	355		583	0.501	291	329	0.7	1.0	12.256	B

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	494	124	310		1112	0.444	493	479	0.5	0.8	5.805	A
2 - Nash Road south	273	68	561		1170	0.233	273	243	0.2	0.3	4.009	A
3 - Star Lane west	521	130	317	44.04	1279	0.407	520	517	0.5	0.7	4.738	A
4 - Nash Road north	358	89	434		562	0.637	355	402	1.0	1.7	17.184	C

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	494	124	313		1111	0.445	494	480	0.8	0.8	5.833	A
2 - Nash Road south	273	68	563		1169	0.233	273	244	0.3	0.3	4.015	A
3 - Star Lane west	521	130	317	44.04	1282	0.406	521	519	0.7	0.7	4.725	A
4 - Nash Road north	358	89	435		562	0.637	358	403	1.7	1.7	17.621	C

13:45 - 14:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	404	101	258		1139	0.354	405	393	0.8	0.6	4.905	A
2 - Nash Road south	223	56	461		1229	0.181	223	201	0.3	0.2	3.582	A
3 - Star Lane west	425	106	259	35.96	1325	0.321	426	425	0.7	0.5	4.009	A
4 - Nash Road north	292	73	356		583	0.501	295	330	1.7	1.0	12.604	B

14:00 - 14:15

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	338	85	215		1161	0.291	339	329	0.6	0.4	4.381	A
2 - Nash Road south	187	47	386		1273	0.147	187	168	0.2	0.2	3.316	A
3 - Star Lane west	356	89	217	30.11	1356	0.263	357	355	0.5	0.4	3.604	A
4 - Nash Road north	245	61	298		599	0.409	246	276	1.0	0.7	10.238	B

2039 + Dev Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
24	untitled	Standard Roundabout	1, 2, 3, 4	27.08	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2039 + Dev Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Star Lane east		ONE HOUR	✓	485	100.000
2 - Nash Road south		ONE HOUR	✓	195	100.000
3 - Star Lane west		ONE HOUR	✓	460	100.000
4 - Nash Road north		ONE HOUR	✓	484	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Star Lane east		
2 - Nash Road south		
3 - Star Lane west	[ONE HOUR]	40.00
4 - Nash Road north		

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	16	390	79
	2 - Nash Road south	30	0	49	116
	3 - Star Lane west	353	19	0	88
	4 - Nash Road north	111	246	127	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	8	4	0
	2 - Nash Road south	0	0	0	0
	3 - Star Lane west	3	0	0	3
	4 - Nash Road north	5	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Star Lane east	0.51	6.89	1.0	A	445	668
2 - Nash Road south	0.19	3.91	0.2	A	179	268
3 - Star Lane west	0.38	4.38	0.6	A	422	633
4 - Nash Road north	0.95	78.95	11.0	F	444	666

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	365	91	290		1125	0.325	363	369	0.0	0.5	4.718	A
2 - Nash Road south	147	37	445		1259	0.117	146	208	0.0	0.1	3.234	A
3 - Star Lane west	346	87	169	30.11	1388	0.250	345	423	0.0	0.3	3.447	A
4 - Nash Road north	364	91	301		595	0.612	358	212	0.0	1.5	14.831	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	436	109	349		1095	0.398	435	443	0.5	0.7	5.452	A
2 - Nash Road south	175	44	534		1206	0.145	175	250	0.1	0.2	3.492	A
3 - Star Lane west	414	103	202	35.96	1363	0.303	413	507	0.3	0.4	3.787	A
4 - Nash Road north	435	109	361		580	0.751	430	254	1.5	2.7	23.295	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	534	133	413		1062	0.503	533	538	0.7	1.0	6.781	A
2 - Nash Road south	215	54	649		1138	0.189	214	297	0.2	0.2	3.899	A
3 - Star Lane west	506	127	247	44.04	1327	0.382	506	616	0.4	0.6	4.378	A
4 - Nash Road north	533	133	442		558	0.955	509	311	2.7	8.7	55.735	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	534	133	424		1056	0.506	534	542	1.0	1.0	6.891	A
2 - Nash Road south	215	54	654		1135	0.189	215	305	0.2	0.2	3.913	A
3 - Star Lane west	506	127	248	44.04	1330	0.381	506	621	0.6	0.6	4.368	A
4 - Nash Road north	533	133	443		558	0.955	524	312	8.7	11.0	78.945	F

08:30 - 08:45

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	436	109	376		1081	0.403	437	452	1.0	0.7	5.606	A
2 - Nash Road south	175	44	545		1199	0.146	176	268	0.2	0.2	3.519	A
3 - Star Lane west	414	103	203	35.96	1367	0.303	414	518	0.6	0.4	3.780	A
4 - Nash Road north	435	109	362		579	0.751	466	255	11.0	3.4	37.392	E

08:45 - 09:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	365	91	300		1119	0.326	366	374	0.7	0.5	4.782	A
2 - Nash Road south	147	37	451		1255	0.117	147	215	0.2	0.1	3.250	A
3 - Star Lane west	346	87	170	30.11	1393	0.249	347	429	0.4	0.3	3.443	A
4 - Nash Road north	364	91	303		595	0.612	371	213	3.4	1.6	16.535	C

2039 + Dev Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
24	untitled	Standard Roundabout	1, 2, 3, 4	9.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2039 + Dev Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Star Lane east		ONE HOUR	✓	646	100.000
2 - Nash Road south		ONE HOUR	✓	307	100.000
3 - Star Lane west		ONE HOUR	✓	661	100.000
4 - Nash Road north		ONE HOUR	✓	341	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Star Lane east		
2 - Nash Road south		
3 - Star Lane west	[ONE HOUR]	40.00
4 - Nash Road north		

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	44	474	128
	2 - Nash Road south	24	0	53	230
	3 - Star Lane west	463	31	0	167
	4 - Nash Road north	71	157	113	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	0	1	0
	2 - Nash Road south	0	0	0	1
	3 - Star Lane west	1	0	0	0
	4 - Nash Road north	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Star Lane east	0.63	8.51	1.7	A	593	889
2 - Nash Road south	0.32	5.01	0.5	A	282	423
3 - Star Lane west	0.57	6.55	1.3	A	607	910
4 - Nash Road north	0.70	22.69	2.3	C	313	469

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	486	122	224		1190	0.409	484	418	0.0	0.7	5.078	A
2 - Nash Road south	231	58	535		1202	0.192	230	173	0.0	0.2	3.699	A
3 - Star Lane west	498	124	286	30.11	1351	0.368	495	479	0.0	0.6	4.199	A
4 - Nash Road north	257	64	388		581	0.442	254	393	0.0	0.8	10.901	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	581	145	269		1166	0.498	580	501	0.7	1.0	6.124	A
2 - Nash Road south	276	69	641		1141	0.242	276	208	0.2	0.3	4.160	A
3 - Star Lane west	594	149	343	35.96	1318	0.451	593	574	0.6	0.8	4.960	A
4 - Nash Road north	307	77	465		561	0.547	305	471	0.8	1.2	13.989	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	711	178	328		1136	0.626	709	612	1.0	1.6	8.380	A
2 - Nash Road south	338	85	783		1058	0.319	337	253	0.3	0.5	4.989	A
3 - Star Lane west	728	182	420	44.04	1274	0.571	726	701	0.8	1.3	6.545	A
4 - Nash Road north	375	94	569		533	0.704	371	577	1.2	2.2	21.663	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	711	178	331		1134	0.627	711	614	1.6	1.7	8.511	A
2 - Nash Road south	338	85	787		1056	0.320	338	255	0.5	0.5	5.012	A
3 - Star Lane west	728	182	421	44.04	1282	0.568	728	704	1.3	1.3	6.490	A
4 - Nash Road north	375	94	570		533	0.705	375	578	2.2	2.3	22.690	C

17:30 - 17:45

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	581	145	274		1164	0.499	583	504	1.7	1.0	6.231	A
2 - Nash Road south	276	69	647		1138	0.243	277	211	0.5	0.3	4.183	A
3 - Star Lane west	594	149	344	35.96	1329	0.447	596	579	1.3	0.8	4.930	A
4 - Nash Road north	307	77	467		560	0.547	311	473	2.3	1.2	14.666	B

17:45 - 18:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	486	122	228		1188	0.409	488	421	1.0	0.7	5.150	A
2 - Nash Road south	231	58	540		1199	0.193	231	176	0.3	0.2	3.719	A
3 - Star Lane west	498	124	288	30.11	1360	0.366	499	483	0.8	0.6	4.182	A
4 - Nash Road north	257	64	391		580	0.442	258	396	1.2	0.8	11.249	B

2039 + Dev Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
24	untitled	Standard Roundabout	1, 2, 3, 4	8.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2039 + Dev Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Star Lane east		ONE HOUR	✓	515	100.000
2 - Nash Road south		ONE HOUR	✓	248	100.000
3 - Star Lane west		ONE HOUR	✓	490	100.000
4 - Nash Road north		ONE HOUR	✓	325	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Star Lane east		
2 - Nash Road south		
3 - Star Lane west	[ONEHOUR]	40.00
4 - Nash Road north		

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	35	381	99
	2 - Nash Road south	29	0	59	160
	3 - Star Lane west	356	27	0	107
	4 - Nash Road north	68	160	97	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	8	4	1
	2 - Nash Road south	10	0	2	1
	3 - Star Lane west	5	0	0	0
	4 - Nash Road north	2	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Star Lane east	0.51	6.62	1.0	A	473	709
2 - Nash Road south	0.24	4.25	0.3	A	228	341
3 - Star Lane west	0.42	4.86	0.7	A	450	674
4 - Nash Road north	0.64	18.07	1.8	C	298	447

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	388	97	212		1162	0.334	386	339	0.0	0.5	4.626	A
2 - Nash Road south	187	47	432		1238	0.151	186	166	0.0	0.2	3.421	A
3 - Star Lane west	369	92	216	30.11	1349	0.273	367	402	0.0	0.4	3.664	A
4 - Nash Road north	245	61	309		596	0.411	242	274	0.0	0.7	10.095	B

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	463	116	254		1141	0.406	462	407	0.5	0.7	5.302	A
2 - Nash Road south	223	56	518		1188	0.188	223	199	0.2	0.2	3.730	A
3 - Star Lane west	440	110	259	35.96	1320	0.334	440	482	0.4	0.5	4.091	A
4 - Nash Road north	292	73	370		579	0.504	291	329	0.7	1.0	12.431	B

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	567	142	310		1112	0.510	566	497	0.7	1.0	6.570	A
2 - Nash Road south	273	68	633		1120	0.244	273	243	0.2	0.3	4.244	A
3 - Star Lane west	539	135	317	44.04	1279	0.422	539	589	0.5	0.7	4.858	A
4 - Nash Road north	358	89	453		557	0.643	355	402	1.0	1.7	17.594	C

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	567	142	313		1111	0.510	567	499	1.0	1.0	6.617	A
2 - Nash Road south	273	68	635		1119	0.244	273	244	0.3	0.3	4.254	A
3 - Star Lane west	539	135	317	44.04	1282	0.421	539	591	0.7	0.7	4.844	A
4 - Nash Road north	358	89	454		556	0.643	358	403	1.7	1.8	18.069	C

13:45 - 14:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	463	116	258		1139	0.407	464	409	1.0	0.7	5.349	A
2 - Nash Road south	223	56	521		1186	0.188	223	201	0.3	0.2	3.740	A
3 - Star Lane west	440	110	259	35.96	1325	0.333	441	485	0.7	0.5	4.079	A
4 - Nash Road north	292	73	371		579	0.505	295	330	1.8	1.0	12.801	B

14:00 - 14:15

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	388	97	215		1161	0.334	388	342	0.7	0.5	4.667	A
2 - Nash Road south	187	47	435		1236	0.151	187	168	0.2	0.2	3.435	A
3 - Star Lane west	369	92	217	30.11	1355	0.272	369	405	0.5	0.4	3.657	A
4 - Nash Road north	245	61	311		595	0.411	246	276	1.0	0.7	10.343	B

2039 B+Dev_Net Change, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
24	untitled	Standard Roundabout	1, 2, 3, 4	75.92	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2039 B+Dev_Net Change	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Star Lane east		ONE HOUR	✓	511	100.000
2 - Nash Road south		ONE HOUR	✓	294	100.000
3 - Star Lane west		ONE HOUR	✓	496	100.000
4 - Nash Road north		ONE HOUR	✓	570	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Star Lane east		
2 - Nash Road south		
3 - Star Lane west	[ONEHOUR]	40.00
4 - Nash Road north		

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
From	1 - Star Lane east	0	16	390	105
	2 - Nash Road south	30	0	49	215
	3 - Star Lane west	353	19	0	124
	4 - Nash Road north	125	302	143	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	8	4	1
	2 - Nash Road south	0	0	0	3
	3 - Star Lane west	3	0	0	3
	4 - Nash Road north	5	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Star Lane east	0.54	7.53	1.2	A	469	703
2 - Nash Road south	0.30	4.68	0.4	A	270	405
3 - Star Lane west	0.44	5.11	0.8	A	455	683
4 - Nash Road north	1.12	238.56	43.7	F	523	785

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	385	96	342		1098	0.350	383	379	0.0	0.5	5.016	A
2 - Nash Road south	221	55	476		1214	0.182	220	249	0.0	0.2	3.620	A
3 - Star Lane west	373	93	262	30.11	1331	0.281	372	434	0.0	0.4	3.746	A
4 - Nash Road north	429	107	301		596	0.720	420	333	0.0	2.4	19.511	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	459	115	407		1065	0.431	459	453	0.5	0.8	5.928	A
2 - Nash Road south	264	66	570		1159	0.228	264	296	0.2	0.3	4.020	A
3 - Star Lane west	446	111	314	35.96	1297	0.344	445	519	0.4	0.5	4.226	A
4 - Nash Road north	512	128	361		580	0.883	500	399	2.4	5.6	39.408	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	563	141	448		1044	0.539	561	541	0.8	1.1	7.426	A
2 - Nash Road south	324	81	681		1094	0.296	323	328	0.3	0.4	4.666	A
3 - Star Lane west	546	137	385	44.04	1249	0.437	545	619	0.5	0.8	5.106	A
4 - Nash Road north	628	157	442		559	1.123	547	488	5.6	25.7	121.817	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	563	141	455		1041	0.541	563	544	1.1	1.2	7.526	A
2 - Nash Road south	324	81	684		1092	0.296	324	333	0.4	0.4	4.684	A
3 - Star Lane west	546	137	385	44.04	1253	0.436	546	623	0.8	0.8	5.090	A
4 - Nash Road north	628	157	443		558	1.124	556	489	25.7	43.7	238.563	F

08:30 - 08:45

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	459	115	460		1038	0.442	461	469	1.2	0.8	6.252	A
2 - Nash Road south	264	66	589		1148	0.230	265	332	0.4	0.3	4.076	A
3 - Star Lane west	446	111	315	35.96	1302	0.342	447	538	0.8	0.5	4.216	A
4 - Nash Road north	512	128	362		580	0.884	567	400	43.7	30.2	236.807	F

08:45 - 09:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	385	96	434		1051	0.366	386	407	0.8	0.6	5.415	A
2 - Nash Road south	221	55	508		1195	0.185	222	311	0.3	0.2	3.697	A
3 - Star Lane west	373	93	264	30.11	1337	0.279	374	466	0.5	0.4	3.742	A
4 - Nash Road north	429	107	303		595	0.721	537	335	30.2	3.1	92.263	F

2039 B+Dev_Net Change, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
24	untitled	Standard Roundabout	1, 2, 3, 4	16.70	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2039 B+Dev_Net Change	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Star Lane east		ONE HOUR	✓	675	100.000
2 - Nash Road south		ONE HOUR	✓	441	100.000
3 - Star Lane west		ONE HOUR	✓	707	100.000
4 - Nash Road north		ONE HOUR	✓	425	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Star Lane east		
2 - Nash Road south		
3 - Star Lane west	[ONEHOUR]	40.00
4 - Nash Road north		

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
From	1 - Star Lane east	0	44	474	157
	2 - Nash Road south	24	0	53	364
	3 - Star Lane west	463	31	0	213
	4 - Nash Road north	84	209	132	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	0	1	0
	2 - Nash Road south	0	0	0	1
	3 - Star Lane west	1	0	0	0
	4 - Nash Road north	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Star Lane east	0.68	10.26	2.1	B	619	929
2 - Nash Road south	0.47	6.67	0.9	A	405	607
3 - Star Lane west	0.66	8.73	1.9	A	649	973
4 - Nash Road north	0.88	50.70	6.1	F	390	585

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	508	127	276		1162	0.437	505	427	0.0	0.8	5.454	A
2 - Nash Road south	332	83	570		1181	0.281	330	211	0.0	0.4	4.224	A
3 - Star Lane west	532	133	408	30.11	1280	0.416	529	492	0.0	0.7	4.779	A
4 - Nash Road north	320	80	388		578	0.553	315	550	0.0	1.2	13.463	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	607	152	332		1133	0.536	605	512	0.8	1.1	6.803	A
2 - Nash Road south	396	99	684		1116	0.355	396	254	0.4	0.5	4.998	A
3 - Star Lane west	636	159	489	35.96	1237	0.514	634	590	0.7	1.0	5.955	A
4 - Nash Road north	382	96	465		558	0.685	379	659	1.2	2.0	19.699	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	743	186	399		1098	0.677	740	624	1.1	2.0	9.952	A
2 - Nash Road south	486	121	833		1029	0.472	484	306	0.5	0.9	6.589	A
3 - Star Lane west	778	195	598	44.04	1184	0.657	775	719	1.0	1.9	8.727	A
4 - Nash Road north	468	117	568		531	0.881	455	805	2.0	5.4	41.228	E

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	743	186	407		1093	0.680	743	628	2.0	2.1	10.262	B
2 - Nash Road south	486	121	839		1026	0.473	486	311	0.9	0.9	6.666	A
3 - Star Lane west	778	195	600	44.04	1198	0.650	778	725	1.9	1.9	8.577	A
4 - Nash Road north	468	117	570		530	0.882	465	808	5.4	6.1	50.703	F

17:30 - 17:45

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	607	152	347		1125	0.539	610	519	2.1	1.2	7.044	A
2 - Nash Road south	396	99	694		1109	0.357	398	263	0.9	0.6	5.067	A
3 - Star Lane west	636	159	492	35.96	1254	0.507	639	600	1.9	1.0	5.888	A
4 - Nash Road north	382	96	468		557	0.686	397	663	6.1	2.3	24.311	C

17:45 - 18:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	508	127	283		1158	0.439	510	432	1.2	0.8	5.564	A
2 - Nash Road south	332	83	577		1177	0.282	333	216	0.6	0.4	4.266	A
3 - Star Lane west	532	133	411	30.11	1292	0.412	534	499	1.0	0.7	4.755	A
4 - Nash Road north	320	80	391		577	0.554	324	554	2.3	1.3	14.448	B

2039 B+Dev_Net Change, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
24	untitled	Standard Roundabout	1, 2, 3, 4	12.19	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2039 B+Dev_Net Change	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Star Lane east		ONE HOUR	✓	541	100.000
2 - Nash Road south		ONE HOUR	✓	360	100.000
3 - Star Lane west		ONE HOUR	✓	527	100.000
4 - Nash Road north		ONE HOUR	✓	405	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Star Lane east		
2 - Nash Road south		
3 - Star Lane west	[ONEHOUR]	40.00
4 - Nash Road north		

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	35	381	125
	2 - Nash Road south	29	0	59	272
	3 - Star Lane west	356	27	0	144
	4 - Nash Road north	80	215	110	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	8	4	2
	2 - Nash Road south	10	0	2	2
	3 - Star Lane west	5	0	0	1
	4 - Nash Road north	2	2	0	0

Results

Results Summary for whole modelled period

Am	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Star Lane east	0.56	7.59	1.2	A	496	745
2 - Nash Road south	0.36	5.19	0.6	A	330	496
3 - Star Lane west	0.49	5.83	0.9	A	484	725
4 - Nash Road north	0.81	33.23	3.9	D	372	557

Main Results for each time segment

12:45 - 13:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	407	102	262		1134	0.359	405	348	0.0	0.6	4.923	A
2 - Nash Road south	271	68	461		1217	0.223	270	206	0.0	0.3	3.797	A
3 - Star Lane west	397	99	319	30.11	1288	0.308	395	411	0.0	0.4	4.024	A
4 - Nash Road north	305	76	309		590	0.517	301	405	0.0	1.0	12.285	B

13:00 - 13:15

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	486	122	314		1107	0.439	485	417	0.6	0.8	5.784	A
2 - Nash Road south	324	81	552		1163	0.278	323	248	0.3	0.4	4.283	A
3 - Star Lane west	474	118	382	35.96	1249	0.379	473	493	0.4	0.6	4.637	A
4 - Nash Road north	364	91	370		573	0.635	362	486	1.0	1.7	16.796	C

13:15 - 13:30

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	596	149	381		1073	0.555	594	509	0.8	1.2	7.489	A
2 - Nash Road south	396	99	674		1092	0.363	396	301	0.4	0.6	5.162	A
3 - Star Lane west	580	145	468	44.04	1196	0.485	579	602	0.6	0.9	5.826	A
4 - Nash Road north	446	111	453		551	0.809	438	594	1.7	3.6	29.898	D

13:30 - 13:45

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	596	149	387		1070	0.557	596	512	1.2	1.2	7.587	A
2 - Nash Road south	396	99	678		1090	0.364	396	304	0.6	0.6	5.187	A
3 - Star Lane west	580	145	469	44.04	1201	0.483	580	605	0.9	0.9	5.798	A
4 - Nash Road north	446	111	454		551	0.810	445	596	3.6	3.9	33.225	D

13:45 - 14:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	486	122	323		1102	0.441	488	421	1.2	0.8	5.876	A
2 - Nash Road south	324	81	558		1160	0.279	324	254	0.6	0.4	4.310	A
3 - Star Lane west	474	118	384	35.96	1255	0.377	475	498	0.9	0.6	4.620	A
4 - Nash Road north	364	91	371		573	0.635	372	488	3.9	1.8	18.618	C

14:00 - 14:15

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	407	102	267		1131	0.360	408	351	0.8	0.6	4.987	A
2 - Nash Road south	271	68	465		1214	0.223	271	210	0.4	0.3	3.823	A
3 - Star Lane west	397	99	321	30.11	1295	0.306	397	416	0.6	0.4	4.015	A
4 - Nash Road north	305	76	311		589	0.517	308	408	1.8	1.1	12.918	B

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.0.2.5947 © Copyright TRL Limited, 2017
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Filename: Jct 25_Tesco Access_R1.j9
Path: R:\Projects\38199 Manston Airport DCO EIA\4 Design\Transport\Junction Modelling\Base Models\Awaiting Signal info & Traffic counts\Jct 25_Tesco Access
Report generation date: 24/11/2017 17:18:18

- »2017, AM
- »2017, PM
- »2017 Baseline Traffic , AM
- »2017 Baseline Traffic, PM
- »2017 Baseline Traffic, Airport Peak
- »2039 Growthed Traffic , AM
- »2039 Growthed Traffic, PM
- »2039 Growthed Traffic, Airport Peak
- »2039 + Dev Traffic, AM
- »2039 + Dev Traffic, PM
- »2039 + Dev Traffic, Airport Peak

Summary of junction performance

	AM					PM					Airport Peak				
	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
	2017														
1 - B2050 Manston Road (E)	0.6	4.50	0.38	A	54 %	0.5	4.20	0.31	A	16 %					
2 - Superstore Access	0.1	2.41	0.11	A	[3 - B2050 Manston Road (W)]	0.2	2.45	0.17	A	[3 - B2050 Manston Road (W)]					
3 - B2050 Manston Road (W)	1.3	9.74	0.56	A		2.9	17.64	0.75	C						
	2017 Baseline Traffic														
1 - B2050 Manston Road (E)	0.6	4.50	0.38	A	54 %	0.5	4.20	0.31	A	16 %	0.5	4.47	0.33	A	50 %
2 - Superstore Access	0.1	2.41	0.11	A	[3 - B2050 Manston Road (W)]	0.2	2.45	0.17	A	[3 - B2050 Manston Road (W)]	0.2	2.46	0.18	A	[3 - B2050 Manston Road (W)]
3 - B2050 Manston Road (W)	1.3	9.74	0.56	A		2.9	17.64	0.75	C		1.2	10.08	0.56	B	
	2039 Grownth Traffic														
1 - B2050 Manston Road (E)	0.9	5.27	0.48	A	22 %	0.7	4.82	0.40	A	-8 %	0.8	5.49	0.45	A	12 %
2 - Superstore Access	0.2	2.61	0.15	A	[3 - B2050 Manston Road (W)]	0.3	2.69	0.22	A	[3 - B2050 Manston Road (W)]	0.3	2.78	0.26	A	[3 - B2050 Manston Road (W)]
3 - B2050 Manston Road (W)	2.4	15.27	0.71	C		14.0	69.85	0.97	F		3.2	19.61	0.77	C	
	2039 + Dev Traffic														
1 - B2050 Manston Road (E)	1.0	5.52	0.50	A	21 %	0.7	4.83	0.40	A	-12 %	0.9	5.75	0.48	A	10 %
2 - Superstore Access	0.2	2.66	0.15	A	[3 - B2050 Manston Road (W)]	0.3	2.69	0.22	A	[3 - B2050 Manston Road (W)]	0.3	2.84	0.26	A	[3 - B2050 Manston Road (W)]
3 - B2050 Manston Road (W)	2.5	15.63	0.72	C		23.1	104.28	1.02	F		3.4	20.96	0.78	C	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

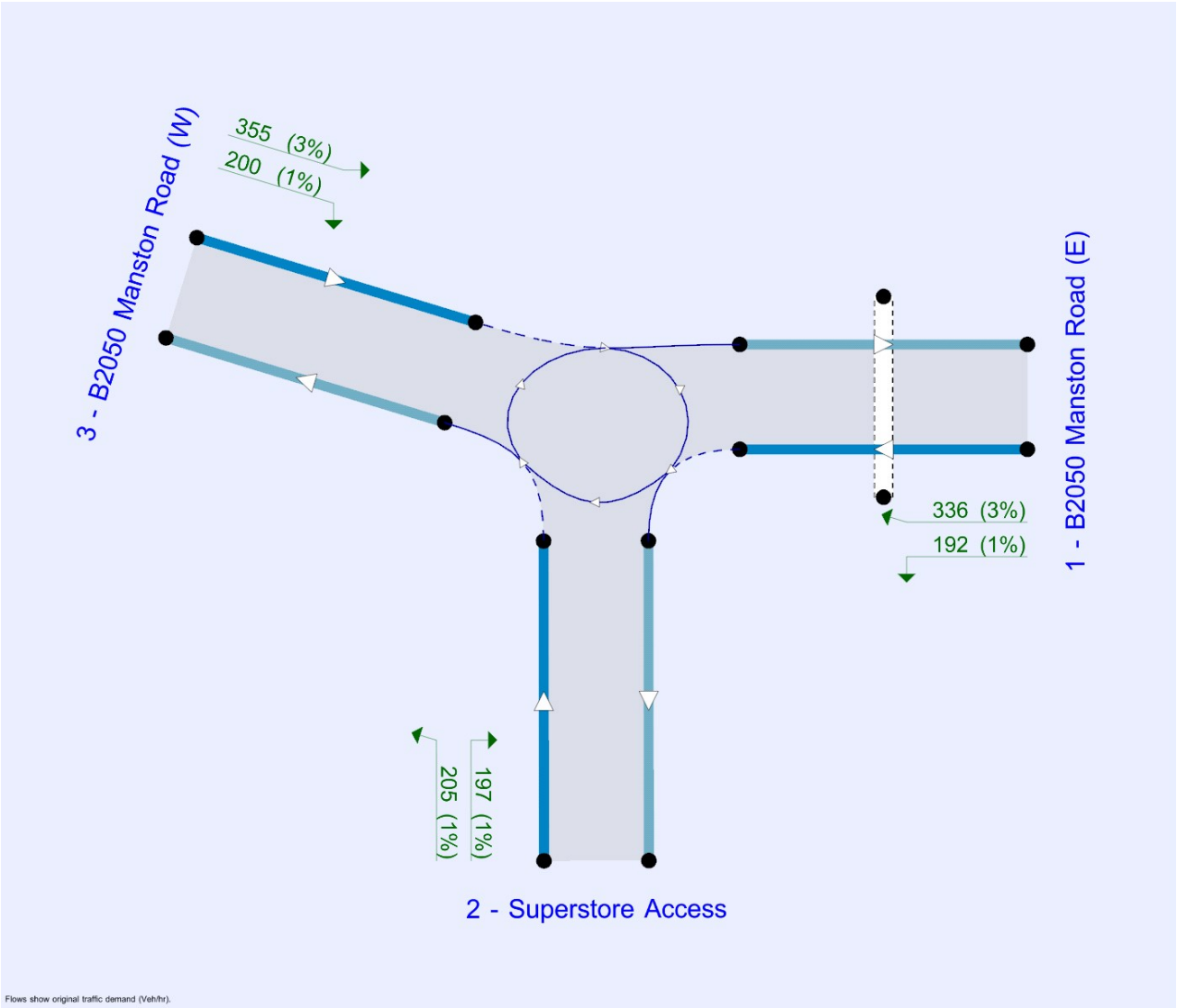
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	29/09/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	GLOBAL\adam.guy
Description	

Units

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



Flows show original traffic demand (Veh/hr).
 The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:30	09:00	15
D2	2017	PM	ONE HOUR	16:30	18:00	15
D3	2017 Baseline Traffic	AM	ONE HOUR	07:30	09:00	15
D4	2017 Baseline Traffic	PM	ONE HOUR	16:30	18:00	15
D5	2017 Baseline Traffic	Airport Peak	ONE HOUR	12:45	14:15	15
D6	2039 Growthed Traffic	AM	ONE HOUR	07:30	09:00	15
D7	2039 Growthed Traffic	PM	ONE HOUR	16:30	18:00	15
D8	2039 Growthed Traffic	Airport Peak	ONE HOUR	12:45	14:15	15
D9	2039 + Dev Traffic	AM	ONE HOUR	07:30	09:00	15
D10	2039 + Dev Traffic	PM	ONE HOUR	16:30	18:00	15
D11	2039 + Dev Traffic	Airport Peak	ONE HOUR	12:45	14:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2017, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	6.31	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	54	3 - B2050 Manston Road (W)

Arms

Arms

Arm	Name	Description
1	B2050 Manston Road (E)	
2	Superstore Access	
3	B2050 Manston Road (W)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - B2050 Manston Road (E)	3.26	7.15	6.4	35.0	32.0	17.0	
2 - Superstore Access	4.02	6.89	32.8	38.7	32.0	20.5	
3 - B2050 Manston Road (W)	2.20	5.67	4.4	13.5	32.0	42.0	

Pelican/Puffin Crossings

Arm	Space between crossing and junction entry (Signalised) (PCU)	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)
1 - B2050 Manston Road (E)	2.00	3.00	2.90	1.00	6.00	6.00	7.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B2050 Manston Road (E)	0.631	1480
2 - Superstore Access	0.735	2005
3 - B2050 Manston Road (W)	0.473	902

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	452	100.000
2 - Superstore Access		✓	170	100.000
3 - B2050 Manston Road (W)		✓	428	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	113	339
	2 - Superstore Access	76	0	94
	3 - B2050 Manston Road (W)	362	66	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	1	0
	2 - Superstore Access	3	0	3
	3 - B2050 Manston Road (W)	2	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.38	4.50	0.6	A
2 - Superstore Access	0.11	2.41	0.1	A
3 - B2050 Manston Road (W)	0.56	9.74	1.3	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	340	49	45.17	1334	0.255	339	0.3	3.614	A
2 - Superstore Access	128	254		1765	0.073	128	0.1	2.198	A
3 - B2050 Manston Road (W)	322	57		853	0.378	320	0.6	6.719	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	406	59	53.94	1319	0.308	406	0.4	3.940	A
2 - Superstore Access	153	304		1729	0.088	153	0.1	2.283	A
3 - B2050 Manston Road (W)	385	68		848	0.454	384	0.8	7.743	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	498	72	66.06	1296	0.384	497	0.6	4.499	A
2 - Superstore Access	187	373		1680	0.111	187	0.1	2.410	A
3 - B2050 Manston Road (W)	471	84		841	0.561	470	1.2	9.655	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	498	73	66.06	1301	0.383	498	0.6	4.480	A
2 - Superstore Access	187	373		1680	0.111	187	0.1	2.411	A
3 - B2050 Manston Road (W)	471	84		841	0.561	471	1.3	9.739	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	406	60	53.94	1325	0.307	407	0.4	3.923	A
2 - Superstore Access	153	305		1728	0.088	153	0.1	2.286	A
3 - B2050 Manston Road (W)	385	68		848	0.454	386	0.8	7.829	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	340	50	45.17	1342	0.254	341	0.3	3.597	A
2 - Superstore Access	128	256		1764	0.073	128	0.1	2.202	A
3 - B2050 Manston Road (W)	322	57		853	0.378	323	0.6	6.802	A

2017, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	10.01	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	16	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2017	PM	ONE HOUR	16:30	18:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	353	100.000
2 - Superstore Access		✓	278	100.000
3 - B2050 Manston Road (W)		✓	545	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
From	1 - B2050 Manston Road (E)	0	135	218
	2 - Superstore Access	166	0	112
	3 - B2050 Manston Road (W)	409	136	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	1	0
	2 - Superstore Access	1	0	6
	3 - B2050 Manston Road (W)	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.31	4.20	0.5	A
2 - Superstore Access	0.17	2.45	0.2	A
3 - B2050 Manston Road (W)	0.75	17.64	2.9	C

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	266	101	45.17	1300	0.204	265	0.3	3.475	A
2 - Superstore Access	209	163		1829	0.114	209	0.1	2.221	A
3 - B2050 Manston Road (W)	410	125		830	0.494	406	1.0	8.424	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	317	122	53.94	1277	0.249	317	0.3	3.750	A
2 - Superstore Access	250	196		1806	0.138	250	0.2	2.312	A
3 - B2050 Manston Road (W)	490	149		819	0.599	488	1.4	10.823	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	389	148	66.06	1244	0.312	388	0.5	4.204	A
2 - Superstore Access	306	240		1775	0.172	306	0.2	2.450	A
3 - B2050 Manston Road (W)	600	183		803	0.747	595	2.8	16.880	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	389	150	66.06	1247	0.312	389	0.5	4.194	A
2 - Superstore Access	306	240		1775	0.172	306	0.2	2.450	A
3 - B2050 Manston Road (W)	600	183		803	0.747	600	2.9	17.640	C

17:30 - 17:45

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	317	124	53.94	1280	0.248	318	0.3	3.740	A
2 - Superstore Access	250	196		1806	0.138	250	0.2	2.313	A
3 - B2050 Manston Road (W)	490	149		818	0.599	495	1.5	11.311	B

17:45 - 18:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	266	103	45.17	1306	0.204	266	0.3	3.463	A
2 - Superstore Access	209	164		1829	0.114	209	0.1	2.222	A
3 - B2050 Manston Road (W)	410	125		830	0.494	412	1.0	8.669	A

2017 Baseline Traffic , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	6.31	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	54	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2017 Baseline Traffic	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	452	100.000
2 - Superstore Access		✓	170	100.000
3 - B2050 Manston Road (W)		✓	428	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
From	1 - B2050 Manston Road (E)	0	113	339
	2 - Superstore Access	76	0	94
	3 - B2050 Manston Road (W)	362	66	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	1	0
	2 - Superstore Access	3	0	3
	3 - B2050 Manston Road (W)	2	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.38	4.50	0.6	A
2 - Superstore Access	0.11	2.41	0.1	A
3 - B2050 Manston Road (W)	0.56	9.74	1.3	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	340	49	45.17	1334	0.255	339	0.3	3.614	A
2 - Superstore Access	128	254		1765	0.073	128	0.1	2.198	A
3 - B2050 Manston Road (W)	322	57		853	0.378	320	0.6	6.719	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	406	59	53.94	1319	0.308	406	0.4	3.940	A
2 - Superstore Access	153	304		1729	0.088	153	0.1	2.283	A
3 - B2050 Manston Road (W)	385	68		848	0.454	384	0.8	7.743	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	498	72	66.06	1296	0.384	497	0.6	4.499	A
2 - Superstore Access	187	373		1680	0.111	187	0.1	2.410	A
3 - B2050 Manston Road (W)	471	84		841	0.561	470	1.2	9.655	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	498	73	66.06	1301	0.383	498	0.6	4.480	A
2 - Superstore Access	187	373		1680	0.111	187	0.1	2.411	A
3 - B2050 Manston Road (W)	471	84		841	0.561	471	1.3	9.739	A

08:30 - 08:45

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	406	60	53.94	1325	0.307	407	0.4	3.923	A
2 - Superstore Access	153	305		1728	0.088	153	0.1	2.286	A
3 - B2050 Manston Road (W)	385	68		848	0.454	386	0.8	7.829	A

08:45 - 09:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	340	50	45.17	1342	0.254	341	0.3	3.597	A
2 - Superstore Access	128	256		1764	0.073	128	0.1	2.202	A
3 - B2050 Manston Road (W)	322	57		853	0.378	323	0.6	6.802	A

2017 Baseline Traffic, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	10.01	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	16	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2017 Baseline Traffic	PM	ONE HOUR	16:30	18:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	353	100.000
2 - Superstore Access		✓	278	100.000
3 - B2050 Manston Road (W)		✓	545	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
From	1 - B2050 Manston Road (E)	0	135	218
	2 - Superstore Access	166	0	112
	3 - B2050 Manston Road (W)	409	136	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	1	0
	2 - Superstore Access	1	0	6
	3 - B2050 Manston Road (W)	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.31	4.20	0.5	A
2 - Superstore Access	0.17	2.45	0.2	A
3 - B2050 Manston Road (W)	0.75	17.64	2.9	C

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	266	101	45.17	1300	0.204	265	0.3	3.475	A
2 - Superstore Access	209	163		1829	0.114	209	0.1	2.221	A
3 - B2050 Manston Road (W)	410	125		830	0.494	406	1.0	8.424	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	317	122	53.94	1277	0.249	317	0.3	3.750	A
2 - Superstore Access	250	196		1806	0.138	250	0.2	2.312	A
3 - B2050 Manston Road (W)	490	149		819	0.599	488	1.4	10.823	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	389	148	66.06	1244	0.312	388	0.5	4.204	A
2 - Superstore Access	306	240		1775	0.172	306	0.2	2.450	A
3 - B2050 Manston Road (W)	600	183		803	0.747	595	2.8	16.880	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	389	150	66.06	1247	0.312	389	0.5	4.194	A
2 - Superstore Access	306	240		1775	0.172	306	0.2	2.450	A
3 - B2050 Manston Road (W)	600	183		803	0.747	600	2.9	17.640	C

17:30 - 17:45

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	317	124	53.94	1280	0.248	318	0.3	3.740	A
2 - Superstore Access	250	196		1806	0.138	250	0.2	2.313	A
3 - B2050 Manston Road (W)	490	149		818	0.599	495	1.5	11.311	B

17:45 - 18:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	266	103	45.17	1306	0.204	266	0.3	3.463	A
2 - Superstore Access	209	164		1829	0.114	209	0.1	2.222	A
3 - B2050 Manston Road (W)	410	125		830	0.494	412	1.0	8.669	A

2017 Baseline Traffic, Airport Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	6.04	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	50	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2017 Baseline Traffic	Airport Peak	ONE HOUR	12:45	14:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	368	100.000
2 - Superstore Access		✓	302	100.000
3 - B2050 Manston Road (W)		✓	408	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
From	1 - B2050 Manston Road (E)	0	144	224
	2 - Superstore Access	148	0	154
	3 - B2050 Manston Road (W)	258	150	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	1	4
	2 - Superstore Access	1	0	1
	3 - B2050 Manston Road (W)	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.33	4.47	0.5	A
2 - Superstore Access	0.18	2.46	0.2	A
3 - B2050 Manston Road (W)	0.56	10.08	1.2	B

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	277	112	45.17	1265	0.219	276	0.3	3.638	A
2 - Superstore Access	227	168		1858	0.122	227	0.1	2.207	A
3 - B2050 Manston Road (W)	307	111		830	0.370	305	0.6	6.822	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	331	135	53.94	1242	0.266	330	0.4	3.947	A
2 - Superstore Access	271	201		1833	0.148	271	0.2	2.305	A
3 - B2050 Manston Road (W)	367	133		820	0.447	366	0.8	7.915	A

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	405	165	66.06	1210	0.335	405	0.5	4.466	A
2 - Superstore Access	333	246		1798	0.185	332	0.2	2.455	A
3 - B2050 Manston Road (W)	449	163		806	0.557	447	1.2	9.992	A

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	405	165	66.06	1214	0.334	405	0.5	4.452	A
2 - Superstore Access	333	247		1798	0.185	333	0.2	2.455	A
3 - B2050 Manston Road (W)	449	163		806	0.557	449	1.2	10.083	B

13:45 - 14:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	331	135	53.94	1247	0.265	331	0.4	3.933	A
2 - Superstore Access	271	202		1832	0.148	272	0.2	2.306	A
3 - B2050 Manston Road (W)	367	133		820	0.447	368	0.8	8.003	A

14:00 - 14:15

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	277	113	45.17	1271	0.218	277	0.3	3.623	A
2 - Superstore Access	227	169		1857	0.122	227	0.1	2.210	A
3 - B2050 Manston Road (W)	307	111		830	0.370	308	0.6	6.910	A

2039 Growthed Traffic , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	8.97	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	22	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2039 Growthed Traffic	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	563	100.000
2 - Superstore Access		✓	213	100.000
3 - B2050 Manston Road (W)		✓	535	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
From	1 - B2050 Manston Road (E)	0	140	423
	2 - Superstore Access	95	0	118
	3 - B2050 Manston Road (W)	452	83	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	0	0
	2 - Superstore Access	3	0	3
	3 - B2050 Manston Road (W)	3	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.48	5.27	0.9	A
2 - Superstore Access	0.15	2.61	0.2	A
3 - B2050 Manston Road (W)	0.71	15.27	2.4	C

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	424	62	45.17	1332	0.318	422	0.5	3.949	A
2 - Superstore Access	160	317		1720	0.093	160	0.1	2.307	A
3 - B2050 Manston Road (W)	403	71		840	0.480	399	0.9	8.109	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	506	74	53.94	1320	0.383	506	0.6	4.416	A
2 - Superstore Access	191	380		1675	0.114	191	0.1	2.425	A
3 - B2050 Manston Road (W)	481	85		833	0.577	479	1.3	10.127	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	620	91	66.06	1301	0.476	619	0.9	5.266	A
2 - Superstore Access	235	465		1615	0.145	234	0.2	2.608	A
3 - B2050 Manston Road (W)	589	105		824	0.715	585	2.4	14.797	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	620	91	66.06	1309	0.474	620	0.9	5.226	A
2 - Superstore Access	235	466		1614	0.145	235	0.2	2.609	A
3 - B2050 Manston Road (W)	589	105		824	0.715	589	2.4	15.269	C

08:30 - 08:45

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	506	75	53.94	1330	0.381	507	0.6	4.382	A
2 - Superstore Access	191	381		1674	0.114	192	0.1	2.427	A
3 - B2050 Manston Road (W)	481	85		833	0.577	485	1.4	10.472	B

08:45 - 09:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	424	63	45.17	1344	0.315	424	0.5	3.919	A
2 - Superstore Access	160	319		1719	0.093	160	0.1	2.309	A
3 - B2050 Manston Road (W)	403	72		839	0.480	405	0.9	8.314	A

2039 Growthed Traffic, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	34.40	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-8	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2039 Growthed Traffic	PM	ONE HOUR	16:30	18:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	445	100.000
2 - Superstore Access		✓	350	100.000
3 - B2050 Manston Road (W)		✓	686	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	From			
	1 - B2050 Manston Road (E)	0	170	275
	2 - Superstore Access	209	0	141
	3 - B2050 Manston Road (W)	515	171	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	1	0
	2 - Superstore Access	1	0	7
	3 - B2050 Manston Road (W)	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.40	4.82	0.7	A
2 - Superstore Access	0.22	2.69	0.3	A
3 - B2050 Manston Road (W)	0.97	69.85	14.0	F

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	335	127	45.17	1286	0.260	334	0.4	3.774	A
2 - Superstore Access	263	206		1792	0.147	263	0.2	2.353	A
3 - B2050 Manston Road (W)	516	157		815	0.634	510	1.7	11.561	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	400	152	53.94	1264	0.316	400	0.5	4.162	A
2 - Superstore Access	315	247		1763	0.178	314	0.2	2.485	A
3 - B2050 Manston Road (W)	617	188		800	0.770	611	3.1	18.446	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	490	181	66.06	1235	0.397	489	0.7	4.823	A
2 - Superstore Access	385	302		1724	0.224	385	0.3	2.689	A
3 - B2050 Manston Road (W)	755	230		781	0.968	724	10.9	47.766	E

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	490	185	66.06	1237	0.396	490	0.7	4.815	A
2 - Superstore Access	385	303		1723	0.224	385	0.3	2.690	A
3 - B2050 Manston Road (W)	755	230		780	0.968	743	14.0	69.853	F

17:30 - 17:45

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	400	164	53.94	1265	0.316	401	0.5	4.171	A
2 - Superstore Access	315	248		1762	0.179	315	0.2	2.488	A
3 - B2050 Manston Road (W)	617	188		800	0.771	658	3.7	30.490	D

17:45 - 18:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	335	131	45.17	1294	0.259	335	0.4	3.758	A
2 - Superstore Access	263	207		1791	0.147	264	0.2	2.358	A
3 - B2050 Manston Road (W)	516	157		815	0.634	524	1.8	12.695	B

2039 Growthed Traffic, Airport Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	10.09	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	12	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2039 Growthed Traffic	Airport Peak	ONE HOUR	12:45	14:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	491	100.000
2 - Superstore Access		✓	402	100.000
3 - B2050 Manston Road (W)		✓	544	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
From	1 - B2050 Manston Road (E)	0	192	299
	2 - Superstore Access	197	0	205
	3 - B2050 Manston Road (W)	344	200	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	1	4
	2 - Superstore Access	1	0	1
	3 - B2050 Manston Road (W)	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.45	5.49	0.8	A
2 - Superstore Access	0.26	2.78	0.3	A
3 - B2050 Manston Road (W)	0.77	19.61	3.2	C

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	370	149	45.17	1246	0.297	368	0.4	4.092	A
2 - Superstore Access	303	224		1815	0.167	302	0.2	2.377	A
3 - B2050 Manston Road (W)	410	148		813	0.504	406	1.0	8.752	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	441	179	53.94	1225	0.360	441	0.6	4.587	A
2 - Superstore Access	361	268		1782	0.203	361	0.3	2.534	A
3 - B2050 Manston Road (W)	489	177		799	0.612	487	1.5	11.438	B

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	541	218	66.06	1195	0.452	540	0.8	5.485	A
2 - Superstore Access	443	329		1736	0.255	442	0.3	2.782	A
3 - B2050 Manston Road (W)	599	217		781	0.767	593	3.0	18.562	C

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	541	220	66.06	1201	0.450	541	0.8	5.453	A
2 - Superstore Access	443	329		1736	0.255	443	0.3	2.783	A
3 - B2050 Manston Road (W)	599	217		781	0.767	598	3.2	19.606	C

13:45 - 14:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	441	182	53.94	1233	0.358	442	0.6	4.562	A
2 - Superstore Access	361	269		1781	0.203	362	0.3	2.538	A
3 - B2050 Manston Road (W)	489	177		799	0.612	495	1.6	12.060	B

14:00 - 14:15

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	370	151	45.17	1256	0.294	370	0.4	4.067	A
2 - Superstore Access	303	225		1814	0.167	303	0.2	2.381	A
3 - B2050 Manston Road (W)	410	148		813	0.504	412	1.0	9.033	A

2039 + Dev Traffic, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	9.17	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	21	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2039 + Dev Traffic	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	596	100.000
2 - Superstore Access		✓	213	100.000
3 - B2050 Manston Road (W)		✓	540	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
From	1 - B2050 Manston Road (E)	0	140	456
	2 - Superstore Access	95	0	118
	3 - B2050 Manston Road (W)	457	83	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	0	0
	2 - Superstore Access	3	0	3
	3 - B2050 Manston Road (W)	3	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.50	5.52	1.0	A
2 - Superstore Access	0.15	2.66	0.2	A
3 - B2050 Manston Road (W)	0.72	15.63	2.5	C

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	449	62	45.17	1333	0.337	447	0.5	4.055	A
2 - Superstore Access	160	342		1702	0.094	160	0.1	2.334	A
3 - B2050 Manston Road (W)	407	71		840	0.484	403	0.9	8.176	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	536	74	53.94	1323	0.405	535	0.7	4.568	A
2 - Superstore Access	191	409		1654	0.116	191	0.1	2.460	A
3 - B2050 Manston Road (W)	485	85		833	0.583	484	1.4	10.253	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	656	91	66.06	1306	0.503	655	1.0	5.521	A
2 - Superstore Access	235	501		1589	0.148	234	0.2	2.657	A
3 - B2050 Manston Road (W)	595	105		824	0.722	590	2.5	15.116	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	656	91	66.06	1314	0.499	656	1.0	5.474	A
2 - Superstore Access	235	502		1588	0.148	235	0.2	2.659	A
3 - B2050 Manston Road (W)	595	105		824	0.722	594	2.5	15.629	C

08:30 - 08:45

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	536	75	53.94	1333	0.402	537	0.7	4.529	A
2 - Superstore Access	191	411		1653	0.116	192	0.1	2.463	A
3 - B2050 Manston Road (W)	485	85		833	0.583	490	1.4	10.619	B

08:45 - 09:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	449	63	45.17	1345	0.333	449	0.5	4.020	A
2 - Superstore Access	160	344		1701	0.094	160	0.1	2.338	A
3 - B2050 Manston Road (W)	407	72		839	0.484	408	1.0	8.389	A

2039 + Dev Traffic, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	51.44	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-12	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2039 + Dev Traffic	PM	ONE HOUR	16:30	18:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	448	100.000
2 - Superstore Access		✓	350	100.000
3 - B2050 Manston Road (W)		✓	720	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
From	1 - B2050 Manston Road (E)	0	170	278
	2 - Superstore Access	209	0	141
	3 - B2050 Manston Road (W)	549	171	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	1	0
	2 - Superstore Access	1	0	7
	3 - B2050 Manston Road (W)	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.40	4.83	0.7	A
2 - Superstore Access	0.22	2.69	0.3	A
3 - B2050 Manston Road (W)	1.02	104.28	23.1	F

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	337	127	45.17	1287	0.262	336	0.4	3.782	A
2 - Superstore Access	263	208		1790	0.147	263	0.2	2.355	A
3 - B2050 Manston Road (W)	542	157		815	0.665	534	1.9	12.513	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	403	152	53.94	1265	0.318	402	0.5	4.173	A
2 - Superstore Access	315	250		1761	0.179	314	0.2	2.488	A
3 - B2050 Manston Road (W)	647	188		801	0.808	640	3.8	21.404	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	493	177	66.06	1237	0.399	492	0.7	4.828	A
2 - Superstore Access	385	306		1721	0.224	385	0.3	2.694	A
3 - B2050 Manston Road (W)	793	230		781	1.015	744	15.8	62.260	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	493	181	66.06	1240	0.398	493	0.7	4.820	A
2 - Superstore Access	385	306		1721	0.224	385	0.3	2.694	A
3 - B2050 Manston Road (W)	793	230		781	1.015	764	23.1	104.282	F

17:30 - 17:45

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	403	171	53.94	1261	0.319	403	0.5	4.204	A
2 - Superstore Access	315	250		1761	0.179	315	0.2	2.490	A
3 - B2050 Manston Road (W)	647	188		800	0.809	720	5.0	57.580	F

17:45 - 18:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	337	132	45.17	1293	0.261	338	0.4	3.771	A
2 - Superstore Access	263	210		1790	0.147	264	0.2	2.359	A
3 - B2050 Manston Road (W)	542	157		815	0.665	554	2.1	14.355	B

2039 + Dev Traffic, Airport Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	10.67	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	10	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2039 + Dev Traffic	Airport Peak	ONE HOUR	12:45	14:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	528	100.000
2 - Superstore Access		✓	402	100.000
3 - B2050 Manston Road (W)		✓	555	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
From	1 - B2050 Manston Road (E)	0	192	336
	2 - Superstore Access	197	0	205
	3 - B2050 Manston Road (W)	355	200	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	1	3
	2 - Superstore Access	1	0	1
	3 - B2050 Manston Road (W)	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.48	5.75	0.9	A
2 - Superstore Access	0.26	2.84	0.3	A
3 - B2050 Manston Road (W)	0.78	20.96	3.4	C

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	398	149	45.17	1254	0.317	396	0.5	4.187	A
2 - Superstore Access	303	252		1796	0.169	302	0.2	2.408	A
3 - B2050 Manston Road (W)	418	148		813	0.514	414	1.0	8.928	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	475	179	53.94	1234	0.385	474	0.6	4.732	A
2 - Superstore Access	361	302		1759	0.205	361	0.3	2.575	A
3 - B2050 Manston Road (W)	499	177		799	0.624	497	1.6	11.800	B

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	581	218	66.06	1206	0.482	580	0.9	5.745	A
2 - Superstore Access	443	369		1708	0.259	442	0.3	2.844	A
3 - B2050 Manston Road (W)	611	217		781	0.783	604	3.3	19.673	C

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	581	220	66.06	1213	0.479	581	0.9	5.702	A
2 - Superstore Access	443	370		1708	0.259	443	0.3	2.845	A
3 - B2050 Manston Road (W)	611	217		781	0.783	610	3.4	20.963	C

13:45 - 14:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	475	182	53.94	1243	0.382	476	0.6	4.700	A
2 - Superstore Access	361	303		1758	0.206	362	0.3	2.580	A
3 - B2050 Manston Road (W)	499	177		799	0.624	506	1.7	12.539	B

14:00 - 14:15

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	398	151	45.17	1265	0.314	398	0.5	4.156	A
2 - Superstore Access	303	253		1795	0.169	303	0.2	2.412	A
3 - B2050 Manston Road (W)	418	148		813	0.514	420	1.1	9.237	A

Junctions 9												
ARCADY 9 - Roundabout Module												
Version: 9.0.2.5947 © Copyright TRL Limited, 2017												
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Filename: Jct 26_R1_AM validated.j9

Path: R:\Projects\38199 Manston Airport DCO EIA\4 Design\Transport\Junction Modelling\Base Models\Validated\Jct 26_Manston Rd_B2014

Report generation date: 29/01/2018 14:15:18

- »2017 Baseline Traffic, AM
- »2017 Baseline Traffic, PM
- »2017 Baseline Traffic, Airport Peak
- »2039 Growthed Traffic, AM
- »2039 Growthed Traffic, PM
- »2039 Growthed Traffic, Airport Peak
- »2039 + Dev Traffic, AM
- »2039 + Dev Traffic, PM
- »2039 + Dev Traffic, Airport Peak

Summary of junction performance

	AM				PM				Airport Peak			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2017 Baseline Traffic												
1 - Newington Road north	3.1	22.91	0.76	C	1.8	16.74	0.65	C	1.9	16.69	0.66	C
2 - Newington Road south	3.9	18.12	0.80	C	2.3	11.56	0.70	B	2.0	10.91	0.67	B
3 - Manston Road	5.3	46.03	0.86	E	17.1	116.61	1.01	F	3.2	28.07	0.77	D
2039 Growthed Traffic												
1 - Newington Road north	13.2	79.62	0.97	F	3.6	27.64	0.80	D	8.7	58.96	0.92	F
2 - Newington Road south	28.2	99.60	1.02	F	7.4	31.14	0.90	D	9.0	38.26	0.92	E
3 - Manston Road	51.2	365.09	1.19	F	123.2	811.18	1.43	F	46.9	284.30	1.17	F
2039 + Dev Traffic												
1 - Newington Road north	13.8	82.88	0.97	F	3.7	28.48	0.80	D	9.0	60.98	0.93	F
2 - Newington Road south	41.4	135.38	1.06	F	7.7	31.91	0.90	D	13.6	54.75	0.96	F
3 - Manston Road	51.1	379.80	1.19	F	155.8	1030.55	1.50	F	51.9	327.90	1.19	F

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

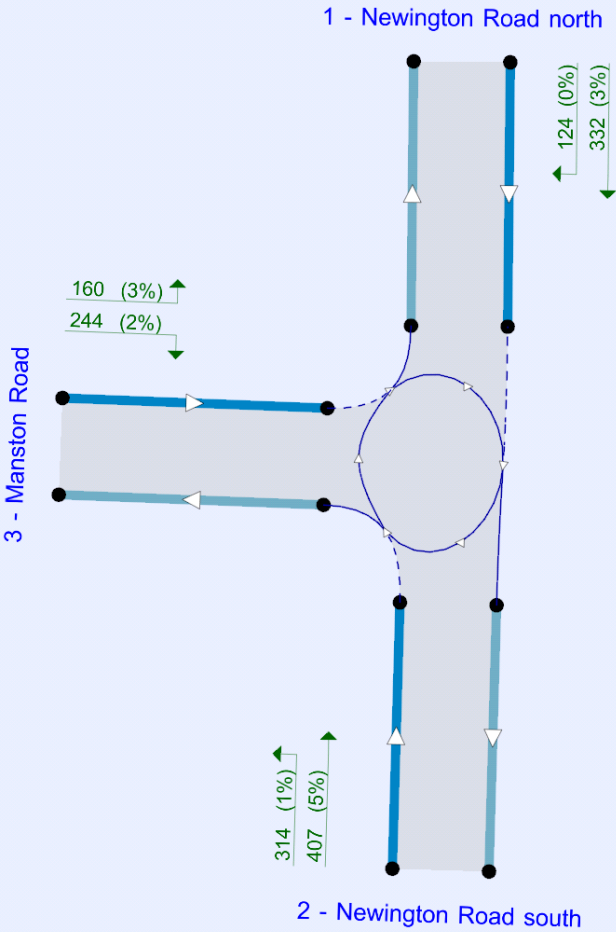
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	05/10/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	GLOBAL\chris.price2
Description	

Units

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



Flows show original traffic demand (Veh/hr).
The junction diagram reflects the last run of Junctions.

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2017 Baseline Traffic	AM	ONE HOUR	07:30	09:00	15	✓
D4	2017 Baseline Traffic	PM	ONE HOUR	16:30	18:00	15	✓
D5	2017 Baseline Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓
D6	2039 Growthed Traffic	AM	ONE HOUR	07:30	09:00	15	✓
D7	2039 Growthed Traffic	PM	ONE HOUR	16:30	18:00	15	✓
D8	2039 Growthed Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓
D9	2039 + Dev Traffic	AM	ONE HOUR	07:30	09:00	15	✓
D10	2039 + Dev Traffic	PM	ONE HOUR	16:30	18:00	15	✓
D11	2039 + Dev Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2017 Baseline Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	26.61	D

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Newington Road north	
2	Newington Road south	
3	Manston Road	

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 - Newington Road north	4.15	4.15	4.15	0.0	19.30	19.30	0.0	
2 - Newington Road south	3.96	3.24	6.13	14.7	15.49	12.00	0.0	
3 - Manston Road	2.79	2.47	5.40	4.7	14.19	9.14	0.0	✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Newington Road north	0.848	1264
2 - Newington Road south	0.672	1114
3 - Manston Road	0.498	762

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - Newington Road north	Percentage		65.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2017 Baseline Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	456	100.000
2 - Newington Road south		ONE HOUR	✓	721	100.000
3 - Manston Road		ONE HOUR	✓	404	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	332	124
	2 - Newington Road south	407	0	314
	3 - Manston Road	160	244	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	3	0
	2 - Newington Road south	5	0	1
	3 - Manston Road	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	0.76	22.91	3.1	C	418	628
2 - Newington Road south	0.80	18.12	3.9	C	662	992
3 - Manston Road	0.86	46.03	5.3	E	371	556

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	343	86	181	704	0.487	340	423	0.0	0.9	9.775	A
2 - Newington Road south	543	136	92	1019	0.533	538	428	0.0	1.1	7.426	A
3 - Manston Road	304	76	304	589	0.516	300	327	0.0	1.0	12.278	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	410	102	218	684	0.599	408	507	0.9	1.4	12.925	B
2 - Newington Road south	648	162	111	1007	0.644	646	515	1.1	1.8	9.899	A
3 - Manston Road	363	91	364	558	0.650	360	392	1.0	1.8	17.902	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	502	126	262	660	0.761	496	615	1.4	2.9	21.228	C
2 - Newington Road south	794	198	135	991	0.801	786	623	1.8	3.7	16.944	C
3 - Manston Road	445	111	444	518	0.859	433	477	1.8	4.7	38.009	E

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	502	126	267	657	0.764	501	623	2.9	3.1	22.914	C
2 - Newington Road south	794	198	136	990	0.802	793	632	3.7	3.9	18.123	C
3 - Manston Road	445	111	448	516	0.862	442	482	4.7	5.3	46.034	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	410	102	227	679	0.604	416	519	3.1	1.6	13.982	B
2 - Newington Road south	648	162	113	1005	0.645	656	530	3.9	1.9	10.534	B
3 - Manston Road	363	91	370	555	0.654	376	399	5.3	2.0	21.411	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	343	86	186	702	0.489	346	430	1.6	1.0	10.178	B
2 - Newington Road south	543	136	94	1018	0.533	546	438	1.9	1.2	7.673	A
3 - Manston Road	304	76	308	587	0.518	308	332	2.0	1.1	13.043	B

2017 Baseline Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	46.48	E

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2017 Baseline Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	356	100.000
2 - Newington Road south		ONE HOUR	✓	661	100.000
3 - Manston Road		ONE HOUR	✓	484	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	279	77
	2 - Newington Road south	408	0	253
	3 - Manston Road	141	343	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	2	3
	2 - Newington Road south	2	0	1
	3 - Manston Road	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	0.65	16.74	1.8	C	327	490
2 - Newington Road south	0.70	11.56	2.3	B	607	910
3 - Manston Road	1.01	116.61	17.1	F	444	666

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	268	67	254	665	0.403	265	409	0.0	0.7	8.943	A
2 - Newington Road south	498	124	57	1057	0.471	494	462	0.0	0.9	6.355	A
3 - Manston Road	364	91	305	601	0.606	358	247	0.0	1.5	14.497	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	320	80	304	638	0.502	319	491	0.7	1.0	11.231	B
2 - Newington Road south	594	149	69	1049	0.566	593	554	0.9	1.3	7.854	A
3 - Manston Road	435	109	366	571	0.762	429	296	1.5	2.9	24.498	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	392	98	352	612	0.641	389	592	1.0	1.7	15.944	C
2 - Newington Road south	728	182	84	1039	0.700	724	657	1.3	2.2	11.285	B
3 - Manston Road	533	133	447	530	1.005	497	361	2.9	11.9	71.560	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	392	98	363	606	0.647	392	598	1.7	1.8	16.742	C
2 - Newington Road south	728	182	85	1039	0.701	728	670	2.2	2.3	11.557	B
3 - Manston Road	533	133	449	529	1.007	512	363	11.9	17.1	116.606	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	320	80	346	615	0.520	323	511	1.8	1.1	12.417	B
2 - Newington Road south	594	149	70	1049	0.567	598	599	2.3	1.3	8.056	A
3 - Manston Road	435	109	369	569	0.765	488	299	17.1	3.8	57.747	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	268	67	264	660	0.406	270	417	1.1	0.7	9.267	A
2 - Newington Road south	498	124	58	1057	0.471	499	476	1.3	0.9	6.480	A
3 - Manston Road	364	91	308	600	0.608	373	249	3.8	1.6	16.431	C

2017 Baseline Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	17.24	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2017 Baseline Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	387	100.000
2 - Newington Road south		ONE HOUR	✓	616	100.000
3 - Manston Road		ONE HOUR	✓	385	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	290	97
	2 - Newington Road south	357	0	259
	3 - Manston Road	124	261	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	3	4
	2 - Newington Road south	4	0	2
	3 - Manston Road	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	0.66	16.69	1.9	C	355	533
2 - Newington Road south	0.67	10.91	2.0	B	565	848
3 - Manston Road	0.77	28.07	3.2	D	353	530

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	291	73	194	691	0.422	288	359	0.0	0.7	8.882	A
2 - Newington Road south	464	116	72	1031	0.450	461	410	0.0	0.8	6.277	A
3 - Manston Road	290	72	267	614	0.472	286	266	0.0	0.9	10.879	B

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	348	87	233	670	0.519	347	431	0.7	1.1	11.085	B
2 - Newington Road south	554	138	87	1021	0.542	552	493	0.8	1.2	7.657	A
3 - Manston Road	346	87	320	587	0.590	344	319	0.9	1.4	14.698	B

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	426	107	283	643	0.663	423	526	1.1	1.9	16.103	C
2 - Newington Road south	678	170	106	1008	0.673	675	600	1.2	2.0	10.697	B
3 - Manston Road	424	106	391	551	0.770	417	390	1.4	3.0	25.838	D

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	426	107	287	641	0.665	426	529	1.9	1.9	16.690	C
2 - Newington Road south	678	170	107	1008	0.673	678	606	2.0	2.0	10.913	B
3 - Manston Road	424	106	393	550	0.771	423	392	3.0	3.2	28.068	D

13:45 - 14:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	348	87	239	667	0.522	351	436	1.9	1.1	11.519	B
2 - Newington Road south	554	138	88	1020	0.543	557	502	2.0	1.2	7.824	A
3 - Manston Road	346	87	323	585	0.591	353	322	3.2	1.5	15.876	C

14:00 - 14:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	291	73	198	689	0.423	293	364	1.1	0.7	9.126	A
2 - Newington Road south	464	116	73	1030	0.450	465	418	1.2	0.8	6.389	A
3 - Manston Road	290	72	270	613	0.473	292	269	1.5	0.9	11.317	B

2039 Growthed Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	161.80	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2039 Growthed Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	570	100.000
2 - Newington Road south		ONE HOUR	✓	901	100.000
3 - Manston Road		ONE HOUR	✓	505	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	415	155
	2 - Newington Road south	509	0	392
	3 - Manston Road	200	305	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	3	0
	2 - Newington Road south	5	0	1
	3 - Manston Road	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	0.97	79.62	13.2	F	523	785
2 - Newington Road south	1.02	99.60	28.2	F	827	1240
3 - Manston Road	1.19	365.09	51.2	F	463	695

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	429	107	225	679	0.632	423	526	0.0	1.6	13.698	B
2 - Newington Road south	678	170	115	1004	0.676	670	532	0.0	2.0	10.548	B
3 - Manston Road	380	95	379	548	0.694	372	407	0.0	2.1	19.612	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	512	128	266	656	0.781	506	627	1.6	3.2	23.026	C
2 - Newington Road south	810	202	138	989	0.819	802	634	2.0	4.1	18.399	C
3 - Manston Road	454	113	453	510	0.890	440	486	2.1	5.6	44.191	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	628	157	280	648	0.968	600	712	3.2	10.2	54.742	F
2 - Newington Road south	992	248	163	973	1.020	934	717	4.1	18.6	56.971	F
3 - Manston Road	556	139	528	472	1.177	464	569	5.6	28.5	152.970	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	628	157	281	648	0.969	616	723	10.2	13.2	79.622	F
2 - Newington Road south	992	248	167	970	1.023	954	729	18.6	28.2	99.602	F
3 - Manston Road	556	139	539	467	1.191	465	582	28.5	51.2	322.127	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	512	128	286	645	0.794	548	696	13.2	4.4	43.848	E
2 - Newington Road south	810	202	149	982	0.825	900	684	28.2	5.6	57.103	F
3 - Manston Road	454	113	509	482	0.942	473	541	51.2	46.5	365.089	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	429	107	320	626	0.685	438	601	4.4	2.3	19.868	C
2 - Newington Road south	678	170	119	1001	0.677	692	639	5.6	2.2	12.121	B
3 - Manston Road	380	95	391	542	0.702	530	420	46.5	9.0	197.001	F

2039 Growthed Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	280.41	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2039 Growthed Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	449	100.000
2 - Newington Road south		ONE HOUR	✓	833	100.000
3 - Manston Road		ONE HOUR	✓	610	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	352	97
	2 - Newington Road south	514	0	319
	3 - Manston Road	178	432	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	2	3
	2 - Newington Road south	2	0	1
	3 - Manston Road	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	0.80	27.64	3.6	D	412	618
2 - Newington Road south	0.90	31.14	7.4	D	764	1147
3 - Manston Road	1.43	811.18	123.2	F	560	840

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	338	85	315	632	0.535	334	513	0.0	1.1	11.879	B
2 - Newington Road south	627	157	72	1047	0.599	621	576	0.0	1.5	8.343	A
3 - Manston Road	459	115	383	562	0.817	444	310	0.0	3.8	27.809	D

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	404	101	355	610	0.661	401	606	1.1	1.9	16.911	C
2 - Newington Road south	749	187	87	1037	0.722	745	669	1.5	2.5	12.130	B
3 - Manston Road	548	137	460	524	1.047	501	372	3.8	15.6	89.586	F

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	494	124	336	621	0.796	488	694	1.9	3.5	25.849	D
2 - Newington Road south	917	229	105	1024	0.895	900	718	2.5	6.7	25.973	D
3 - Manston Road	672	168	555	475	1.413	474	450	15.6	65.0	322.996	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	494	124	334	622	0.795	494	702	3.5	3.6	27.638	D
2 - Newington Road south	917	229	107	1024	0.896	914	721	6.7	7.4	31.138	D
3 - Manston Road	672	168	564	471	1.426	471	457	65.0	115.1	673.307	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	404	101	365	605	0.668	410	624	3.6	2.1	18.996	C
2 - Newington Road south	749	187	89	1036	0.723	768	687	7.4	2.7	14.264	B
3 - Manston Road	548	137	474	517	1.062	516	382	115.1	123.2	811.181	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	338	85	392	590	0.573	341	552	2.1	1.4	14.622	B
2 - Newington Road south	627	157	74	1046	0.599	632	660	2.7	1.5	8.791	A
3 - Manston Road	459	115	390	559	0.822	554	316	123.2	99.5	724.346	F

2039 Growthed Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	111.44	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2039 Growthed Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	516	100.000
2 - Newington Road south		ONE HOUR	✓	821	100.000
3 - Manston Road		ONE HOUR	✓	513	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	387	129
	2 - Newington Road south	476	0	345
	3 - Manston Road	165	348	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	4	4
	2 - Newington Road south	4	0	2
	3 - Manston Road	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	0.92	58.96	8.7	F	473	710
2 - Newington Road south	0.92	38.26	9.0	E	753	1130
3 - Manston Road	1.17	284.30	46.9	F	471	706

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	388	97	257	653	0.595	383	477	0.0	1.4	13.087	B
2 - Newington Road south	618	155	96	1015	0.609	612	544	0.0	1.5	8.806	A
3 - Manston Road	386	97	355	569	0.679	378	353	0.0	2.0	18.193	C

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	464	116	305	627	0.740	459	570	1.4	2.6	20.795	C
2 - Newington Road south	738	185	115	1002	0.736	734	649	1.5	2.7	13.173	B
3 - Manston Road	461	115	425	533	0.865	450	423	2.0	4.9	38.388	E

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	568	142	325	616	0.922	550	666	2.6	7.3	44.881	E
2 - Newington Road south	904	226	137	987	0.916	883	737	2.7	7.8	30.095	D
3 - Manston Road	565	141	512	489	1.155	479	509	4.9	26.3	137.459	F

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	568	142	327	615	0.924	562	677	7.3	8.7	58.962	F
2 - Newington Road south	904	226	141	985	0.918	899	749	7.8	9.0	38.256	E
3 - Manston Road	565	141	521	484	1.166	482	518	26.3	46.9	284.303	F

13:45 - 14:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	464	116	349	603	0.769	484	607	8.7	3.7	33.607	D
2 - Newington Road south	738	185	121	998	0.740	762	711	9.0	3.0	16.599	C
3 - Manston Road	461	115	442	525	0.879	514	441	46.9	33.7	282.156	F

14:00 - 14:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	388	97	347	604	0.643	396	526	3.7	1.9	17.797	C
2 - Newington Road south	618	155	99	1013	0.610	624	643	3.0	1.6	9.380	A
3 - Manston Road	386	97	362	566	0.683	511	361	33.7	2.5	105.201	F

2039 + Dev Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	182.60	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2039 + Dev Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	570	100.000
2 - Newington Road south		ONE HOUR	✓	934	100.000
3 - Manston Road		ONE HOUR	✓	510	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	From			
	1 - Newington Road north	0	415	155
	2 - Newington Road south	509	0	425
	3 - Manston Road	200	310	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	From			
	1 - Newington Road north	0	3	0
	2 - Newington Road south	5	0	1
	3 - Manston Road	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	0.97	82.88	13.8	F	523	785
2 - Newington Road south	1.06	135.38	41.4	F	857	1286
3 - Manston Road	1.19	379.80	51.1	F	468	702

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	429	107	228	677	0.634	422	525	0.0	1.7	13.800	B
2 - Newington Road south	703	176	115	1005	0.700	694	536	0.0	2.2	11.289	B
3 - Manston Road	384	96	378	548	0.701	375	431	0.0	2.2	19.956	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	512	128	270	654	0.783	506	626	1.7	3.2	23.321	C
2 - Newington Road south	840	210	138	990	0.848	829	638	2.2	4.9	21.070	C
3 - Manston Road	458	115	452	511	0.898	444	515	2.2	5.9	45.697	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	628	157	286	645	0.973	598	701	3.2	10.5	56.143	F
2 - Newington Road south	1028	257	163	974	1.056	948	722	4.9	25.0	70.559	F
3 - Manston Road	562	140	516	478	1.175	470	594	5.9	28.7	152.946	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	628	157	287	645	0.974	614	710	10.5	13.8	82.877	F
2 - Newington Road south	1028	257	167	971	1.059	963	734	25.0	41.4	135.377	F
3 - Manston Road	562	140	525	474	1.185	472	605	28.7	51.1	319.969	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	512	128	287	645	0.795	550	709	13.8	4.5	45.572	E
2 - Newington Road south	840	210	150	982	0.855	962	687	41.4	10.9	105.487	F
3 - Manston Road	458	115	524	474	0.967	472	587	51.1	47.7	379.799	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	429	107	319	627	0.685	438	608	4.5	2.3	19.845	C
2 - Newington Road south	703	176	119	1002	0.702	737	638	10.9	2.5	15.150	C
3 - Manston Road	384	96	402	536	0.716	525	454	47.7	12.4	213.569	F

2039 + Dev Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	362.70	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2039 + Dev Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	449	100.000
2 - Newington Road south		ONE HOUR	✓	836	100.000
3 - Manston Road		ONE HOUR	✓	644	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	From			
	1 - Newington Road north	0	352	97
	2 - Newington Road south	514	0	322
	3 - Manston Road	178	466	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	From			
	1 - Newington Road north	0	2	3
	2 - Newington Road south	2	0	1
	3 - Manston Road	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	0.80	28.48	3.7	D	412	618
2 - Newington Road south	0.90	31.91	7.7	D	767	1151
3 - Manston Road	1.50	1030.55	155.8	F	591	886

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	338	85	337	620	0.545	333	512	0.0	1.2	12.361	B
2 - Newington Road south	629	157	72	1047	0.601	623	598	0.0	1.5	8.384	A
3 - Manston Road	485	121	383	562	0.863	466	312	0.0	4.8	32.725	D

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	404	101	369	603	0.670	401	600	1.2	1.9	17.535	C
2 - Newington Road south	752	188	87	1037	0.724	747	683	1.5	2.5	12.236	B
3 - Manston Road	579	145	460	524	1.105	510	374	4.8	22.1	115.919	F

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	494	124	344	617	0.802	488	686	1.9	3.6	26.609	D
2 - Newington Road south	920	230	105	1025	0.898	903	726	2.5	6.9	26.438	D
3 - Manston Road	709	177	555	476	1.491	475	453	22.1	80.6	405.309	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	494	124	341	618	0.800	494	694	3.6	3.7	28.484	D
2 - Newington Road south	920	230	107	1024	0.899	917	728	6.9	7.7	31.909	D
3 - Manston Road	709	177	564	471	1.505	471	460	80.6	140.1	816.711	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	404	101	374	600	0.672	410	617	3.7	2.2	19.486	C
2 - Newington Road south	752	188	89	1036	0.725	771	695	7.7	2.8	14.484	B
3 - Manston Road	579	145	474	516	1.121	516	386	140.1	155.8	1030.554	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	338	85	402	585	0.578	341	543	2.2	1.4	14.935	B
2 - Newington Road south	629	157	74	1046	0.602	634	669	2.8	1.5	8.844	A
3 - Manston Road	485	121	390	559	0.868	555	318	155.8	138.2	953.970	F

2039 + Dev Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	130.91	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2039 + Dev Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	516	100.000
2 - Newington Road south		ONE HOUR	✓	858	100.000
3 - Manston Road		ONE HOUR	✓	524	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	387	129
	2 - Newington Road south	476	0	382
	3 - Manston Road	165	359	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	4	4
	2 - Newington Road south	4	0	2
	3 - Manston Road	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	0.93	60.98	9.0	F	473	710
2 - Newington Road south	0.96	54.75	13.6	F	787	1181
3 - Manston Road	1.19	327.90	51.9	F	481	721

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	388	97	265	648	0.599	383	476	0.0	1.4	13.283	B
2 - Newington Road south	646	161	96	1016	0.636	639	552	0.0	1.7	9.404	A
3 - Manston Road	394	99	355	569	0.693	386	380	0.0	2.1	18.871	C

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	464	116	314	622	0.746	459	569	1.4	2.7	21.397	C
2 - Newington Road south	771	193	115	1003	0.769	766	658	1.7	3.1	14.827	B
3 - Manston Road	471	118	425	534	0.883	458	456	2.1	5.4	41.437	E

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	568	142	331	613	0.927	549	659	2.7	7.5	46.214	E
2 - Newington Road south	945	236	137	987	0.957	914	743	3.1	10.8	38.347	E
3 - Manston Road	577	144	507	492	1.173	483	544	5.4	28.8	147.702	F

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	568	142	332	612	0.928	562	671	7.5	9.0	60.984	F
2 - Newington Road south	945	236	141	985	0.959	934	754	10.8	13.6	54.755	F
3 - Manston Road	577	144	518	486	1.187	485	556	28.8	51.9	310.459	F

13:45 - 14:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	464	116	350	603	0.770	485	611	9.0	3.7	34.334	D
2 - Newington Road south	771	193	121	998	0.773	811	714	13.6	3.7	22.494	C
3 - Manston Road	471	118	450	521	0.904	511	482	51.9	41.9	327.903	F

14:00 - 14:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	388	97	376	589	0.660	395	535	3.7	2.0	19.189	C
2 - Newington Road south	646	161	99	1013	0.637	653	672	3.7	1.8	10.197	B
3 - Manston Road	394	99	362	565	0.698	548	390	41.9	3.4	155.692	F

Junctions 9												
ARCADY 9 - Roundabout Module												
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Filename: Jct 26_R1_PM validated.j9

Path: R:\Projects\38199 Manston Airport DCO EIA\4 Design\Transport\Junction Modelling\Base Models\Validated\Jct 26_Manston Rd_B2014

Report generation date: 29/01/2018 14:18:38

- »2017 Baseline Traffic, AM
- »2017 Baseline Traffic, PM
- »2017 Baseline Traffic, Airport Peak
- »2039 Growthed Traffic, AM
- »2039 Growthed Traffic, PM
- »2039 Growthed Traffic, Airport Peak
- »2039 + Dev Traffic, AM
- »2039 + Dev Traffic, PM
- »2039 + Dev Traffic, Airport Peak

Summary of junction performance

	AM				PM				Airport Peak			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2017 Baseline Traffic												
1 - Newington Road north	52.7	437.61	1.21	F	16.3	151.22	1.03	F	21.2	177.03	1.05	F
2 - Newington Road south	3.6	16.84	0.79	C	2.3	11.44	0.70	B	2.0	10.75	0.67	B
3 - Manston Road	5.3	46.08	0.86	E	17.1	116.63	1.01	F	3.2	28.07	0.77	D
2039 Growthed Traffic												
1 - Newington Road north	180.0	1613.95	1.53	F	71.1	664.53	1.26	F	138.8	1313.19	1.46	F
2 - Newington Road south	18.9	70.43	0.99	F	6.7	27.96	0.88	D	7.2	30.37	0.89	D
3 - Manston Road	53.7	368.16	1.21	F	123.2	811.18	1.43	F	47.3	287.00	1.17	F
2039 + Dev Traffic												
1 - Newington Road north	181.2	1626.54	1.54	F	74.0	700.27	1.27	F	143.1	1378.09	1.47	F
2 - Newington Road south	28.6	98.01	1.02	F	6.9	28.53	0.89	D	10.3	41.82	0.93	E
3 - Manston Road	54.3	388.80	1.20	F	155.8	1029.88	1.51	F	52.7	328.82	1.19	F

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

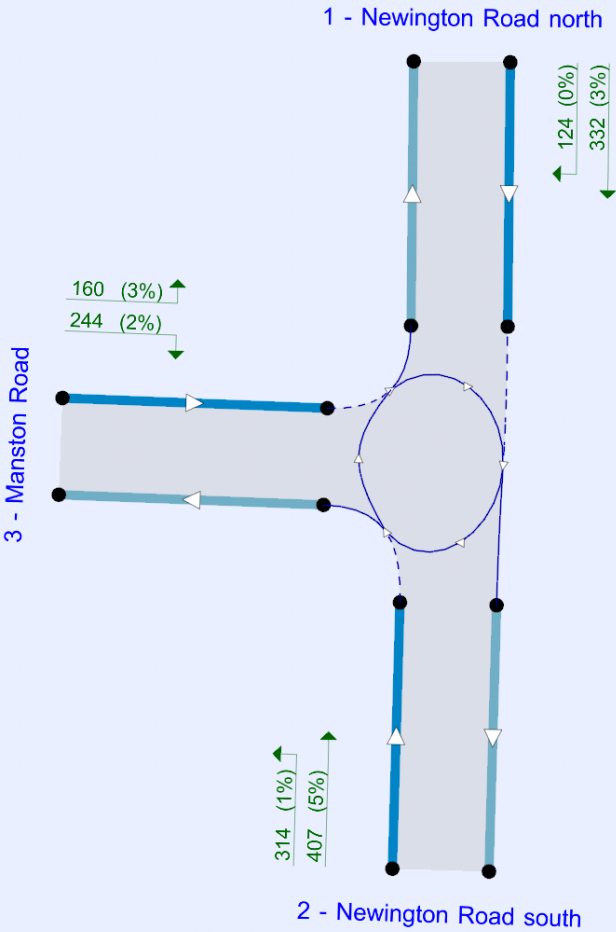
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	05/10/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	GLOBAL\chris.price2
Description	

Units

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



Flows show original traffic demand (Veh/hr).
The junction diagram reflects the last run of Junctions.

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2017 Baseline Traffic	AM	ONE HOUR	07:30	09:00	15	✓
D4	2017 Baseline Traffic	PM	ONE HOUR	16:30	18:00	15	✓
D5	2017 Baseline Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓
D6	2039 Growthed Traffic	AM	ONE HOUR	07:30	09:00	15	✓
D7	2039 Growthed Traffic	PM	ONE HOUR	16:30	18:00	15	✓
D8	2039 Growthed Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓
D9	2039 + Dev Traffic	AM	ONE HOUR	07:30	09:00	15	✓
D10	2039 + Dev Traffic	PM	ONE HOUR	16:30	18:00	15	✓
D11	2039 + Dev Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2017 Baseline Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	145.00	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Newington Road north	
2	Newington Road south	
3	Manston Road	

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 - Newington Road north	4.15	4.15	4.15	0.0	19.30	19.30	0.0	
2 - Newington Road south	3.96	3.24	6.13	14.7	15.49	12.00	0.0	
3 - Manston Road	2.79	2.47	5.40	4.7	14.19	9.14	0.0	✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Newington Road north	0.848	1264
2 - Newington Road south	0.672	1114
3 - Manston Road	0.498	762

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - Newington Road north	Percentage		41.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2017 Baseline Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	456	100.000
2 - Newington Road south		ONE HOUR	✓	721	100.000
3 - Manston Road		ONE HOUR	✓	404	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	332	124
	2 - Newington Road south	407	0	314
	3 - Manston Road	160	244	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	3	0
	2 - Newington Road south	5	0	1
	3 - Manston Road	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	1.21	437.61	52.7	F	418	628
2 - Newington Road south	0.79	16.84	3.6	C	662	992
3 - Manston Road	0.86	46.08	5.3	E	371	556

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	343	86	181	444	0.773	332	423	0.0	2.9	29.495	D
2 - Newington Road south	543	136	90	1020	0.532	538	423	0.0	1.1	7.404	A
3 - Manston Road	304	76	304	589	0.516	300	325	0.0	1.0	12.278	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	410	102	218	432	0.950	391	507	2.9	7.8	66.623	F
2 - Newington Road south	648	162	106	1010	0.642	646	502	1.1	1.7	9.817	A
3 - Manston Road	363	91	364	558	0.650	360	387	1.0	1.8	17.903	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	502	126	262	416	1.206	411	616	7.8	30.5	189.334	F
2 - Newington Road south	794	198	112	1006	0.789	787	561	1.7	3.5	15.933	C
3 - Manston Road	445	111	444	518	0.859	433	455	1.8	4.7	38.082	E

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	502	126	267	414	1.212	413	623	30.5	52.7	375.983	F
2 - Newington Road south	794	198	112	1006	0.789	793	568	3.5	3.6	16.837	C
3 - Manston Road	445	111	448	516	0.862	442	458	4.7	5.3	46.078	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	410	102	227	428	0.957	420	519	52.7	50.1	437.613	F
2 - Newington Road south	648	162	114	1004	0.645	655	533	3.6	1.9	10.496	B
3 - Manston Road	363	91	370	556	0.654	376	400	5.3	2.0	21.380	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	343	86	186	443	0.776	434	430	50.1	27.5	326.197	F
2 - Newington Road south	543	136	118	1002	0.542	545	502	1.9	1.2	7.930	A
3 - Manston Road	304	76	308	587	0.518	308	356	2.0	1.1	13.040	B

2017 Baseline Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	78.54	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2017 Baseline Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	356	100.000
2 - Newington Road south		ONE HOUR	✓	661	100.000
3 - Manston Road		ONE HOUR	✓	484	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	279	77
	2 - Newington Road south	408	0	253
	3 - Manston Road	141	343	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	2	3
	2 - Newington Road south	2	0	1
	3 - Manston Road	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	1.03	151.22	16.3	F	327	490
2 - Newington Road south	0.70	11.44	2.3	B	607	910
3 - Manston Road	1.01	116.63	17.1	F	444	666

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	268	67	254	420	0.639	261	409	0.0	1.7	21.933	C
2 - Newington Road south	498	124	57	1058	0.470	494	459	0.0	0.9	6.348	A
3 - Manston Road	364	91	305	601	0.606	358	246	0.0	1.5	14.497	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	320	80	304	402	0.795	314	491	1.7	3.3	37.880	E
2 - Newington Road south	594	149	68	1050	0.566	593	550	0.9	1.3	7.841	A
3 - Manston Road	435	109	366	571	0.762	429	295	1.5	2.9	24.499	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	392	98	352	386	1.015	361	592	3.3	10.9	92.317	F
2 - Newington Road south	728	182	78	1043	0.698	724	635	1.3	2.2	11.150	B
3 - Manston Road	533	133	447	530	1.005	497	355	2.9	11.9	71.579	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	392	98	363	382	1.025	371	598	10.9	16.3	151.223	F
2 - Newington Road south	728	182	80	1042	0.699	728	653	2.2	2.3	11.442	B
3 - Manston Road	533	133	449	529	1.007	512	359	11.9	17.1	116.625	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	320	80	346	388	0.825	359	511	16.3	6.4	116.762	F
2 - Newington Road south	594	149	78	1043	0.570	598	628	2.3	1.3	8.148	A
3 - Manston Road	435	109	369	569	0.764	488	307	17.1	3.8	57.724	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	268	67	264	416	0.644	286	417	6.4	1.9	30.757	D
2 - Newington Road south	498	124	62	1054	0.472	499	488	1.3	0.9	6.512	A
3 - Manston Road	364	91	308	600	0.608	373	253	3.8	1.6	16.429	C

2017 Baseline Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	62.08	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2017 Baseline Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	387	100.000
2 - Newington Road south		ONE HOUR	✓	616	100.000
3 - Manston Road		ONE HOUR	✓	385	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	290	97
	2 - Newington Road south	357	0	259
	3 - Manston Road	124	261	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	3	4
	2 - Newington Road south	4	0	2
	3 - Manston Road	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	1.05	177.03	21.2	F	355	533
2 - Newington Road south	0.67	10.75	2.0	B	565	848
3 - Manston Road	0.77	28.07	3.2	D	353	530

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	291	73	194	436	0.668	284	359	0.0	1.9	22.712	C
2 - Newington Road south	464	116	71	1032	0.450	461	407	0.0	0.8	6.268	A
3 - Manston Road	290	72	267	614	0.472	286	265	0.0	0.9	10.879	B

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	348	87	233	423	0.823	340	431	1.9	3.8	40.232	E
2 - Newington Road south	554	138	85	1022	0.542	552	488	0.8	1.2	7.639	A
3 - Manston Road	346	87	320	587	0.590	344	318	0.9	1.4	14.698	B

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	426	107	283	406	1.050	386	526	3.8	13.7	103.701	F
2 - Newington Road south	678	170	97	1014	0.669	675	573	1.2	2.0	10.512	B
3 - Manston Road	424	106	391	551	0.770	417	381	1.4	3.0	25.842	D

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	426	107	287	404	1.054	396	529	13.7	21.2	177.029	F
2 - Newington Road south	678	170	99	1013	0.670	678	584	2.0	2.0	10.749	B
3 - Manston Road	424	106	393	550	0.771	423	384	3.0	3.2	28.070	D

13:45 - 14:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	348	87	239	421	0.827	403	436	21.2	7.5	139.459	F
2 - Newington Road south	554	138	101	1012	0.547	557	541	2.0	1.2	7.969	A
3 - Manston Road	346	87	323	586	0.591	353	335	3.2	1.5	15.873	C

14:00 - 14:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	291	73	198	435	0.671	312	364	7.5	2.2	33.406	D
2 - Newington Road south	464	116	78	1027	0.452	465	432	1.2	0.8	6.431	A
3 - Manston Road	290	72	270	613	0.473	292	274	1.5	0.9	11.320	B

2039 Growthed Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	588.83	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2039 Growthed Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	570	100.000
2 - Newington Road south		ONE HOUR	✓	901	100.000
3 - Manston Road		ONE HOUR	✓	505	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	415	155
	2 - Newington Road south	509	0	392
	3 - Manston Road	200	305	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	3	0
	2 - Newington Road south	5	0	1
	3 - Manston Road	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	1.53	1613.95	180.0	F	523	785
2 - Newington Road south	0.99	70.43	18.9	F	827	1240
3 - Manston Road	1.21	368.16	53.7	F	463	695

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	429	107	225	428	1.002	389	526	0.0	10.0	66.365	F
2 - Newington Road south	678	170	106	1010	0.672	670	508	0.0	2.0	10.378	B
3 - Manston Road	380	95	379	548	0.694	372	398	0.0	2.1	19.613	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	512	128	266	414	1.238	410	628	10.0	35.5	220.475	F
2 - Newington Road south	810	202	112	1006	0.805	803	564	2.0	3.8	17.091	C
3 - Manston Road	454	113	454	510	0.890	440	461	2.1	5.6	44.305	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	628	157	278	410	1.532	409	719	35.5	90.0	566.528	F
2 - Newington Road south	992	248	111	1006	0.986	951	576	3.8	14.1	45.810	E
3 - Manston Road	556	139	537	468	1.189	460	525	5.6	29.6	158.568	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	628	157	278	410	1.531	410	732	90.0	144.5	1050.941	F
2 - Newington Road south	992	248	111	1006	0.986	973	576	14.1	18.9	70.433	F
3 - Manston Road	556	139	550	461	1.206	460	535	29.6	53.7	336.502	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	512	128	291	405	1.265	405	681	144.5	171.3	1428.759	F
2 - Newington Road south	810	202	110	1007	0.804	867	586	18.9	4.6	32.455	D
3 - Manston Road	454	113	490	491	0.924	483	487	53.7	46.5	368.157	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	429	107	321	395	1.087	395	599	171.3	180.0	1613.950	F
2 - Newington Road south	678	170	107	1009	0.672	688	608	4.6	2.1	11.542	B
3 - Manston Road	380	95	389	543	0.700	531	407	46.5	8.7	195.710	F

2039 Growthed Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	431.13	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2039 Growthed Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	449	100.000
2 - Newington Road south		ONE HOUR	✓	833	100.000
3 - Manston Road		ONE HOUR	✓	610	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	352	97
	2 - Newington Road south	514	0	319
	3 - Manston Road	178	432	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	2	3
	2 - Newington Road south	2	0	1
	3 - Manston Road	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	1.26	664.53	71.1	F	412	618
2 - Newington Road south	0.88	27.96	6.7	D	764	1147
3 - Manston Road	1.43	811.18	123.2	F	560	840

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	338	85	315	399	0.847	321	513	0.0	4.1	40.535	E
2 - Newington Road south	627	157	69	1049	0.598	621	567	0.0	1.5	8.310	A
3 - Manston Road	459	115	383	562	0.817	444	307	0.0	3.8	27.811	D

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	404	101	355	385	1.048	367	606	4.1	13.4	108.388	F
2 - Newington Road south	749	187	79	1042	0.718	745	642	1.5	2.4	11.941	B
3 - Manston Road	548	137	460	524	1.047	501	365	3.8	15.6	89.628	F

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	494	124	335	392	1.262	389	695	13.4	39.6	265.300	F
2 - Newington Road south	917	229	84	1039	0.883	902	641	2.4	6.2	24.035	C
3 - Manston Road	672	168	557	475	1.414	474	430	15.6	65.1	323.972	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	494	124	333	392	1.260	392	702	39.6	65.2	502.595	F
2 - Newington Road south	917	229	85	1039	0.883	915	641	6.2	6.7	27.959	D
3 - Manston Road	672	168	565	471	1.426	471	435	65.1	115.4	674.377	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	404	101	366	381	1.059	380	623	65.2	71.1	664.531	F
2 - Newington Road south	749	187	82	1040	0.720	765	664	6.7	2.7	13.764	B
3 - Manston Road	548	137	472	517	1.060	517	375	115.4	123.2	811.181	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	338	85	393	372	0.908	367	552	71.1	63.9	662.817	F
2 - Newington Road south	627	157	79	1042	0.602	632	680	2.7	1.5	8.863	A
3 - Manston Road	459	115	390	559	0.822	554	321	123.2	99.5	724.248	F

2039 Growthed Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	461.98	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2039 Growthed Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	516	100.000
2 - Newington Road south		ONE HOUR	✓	821	100.000
3 - Manston Road		ONE HOUR	✓	513	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	387	129
	2 - Newington Road south	476	0	345
	3 - Manston Road	165	348	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	4	4
	2 - Newington Road south	4	0	2
	3 - Manston Road	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	1.46	1313.19	138.8	F	473	710
2 - Newington Road south	0.89	30.37	7.2	D	753	1130
3 - Manston Road	1.17	287.00	47.3	F	471	706

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	388	97	257	412	0.944	360	477	0.0	7.0	54.998	F
2 - Newington Road south	618	155	90	1019	0.607	612	527	0.0	1.5	8.728	A
3 - Manston Road	386	97	355	569	0.679	378	347	0.0	2.0	18.179	C

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	464	116	305	395	1.173	389	570	7.0	25.8	175.141	F
2 - Newington Road south	738	185	97	1014	0.728	734	597	1.5	2.5	12.656	B
3 - Manston Road	461	115	425	533	0.865	449	406	2.0	4.9	38.418	E

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	568	142	324	389	1.461	388	669	25.8	70.8	465.096	F
2 - Newington Road south	904	226	97	1014	0.891	888	615	2.5	6.5	25.746	D
3 - Manston Road	565	141	515	488	1.158	478	470	4.9	26.6	138.865	F

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	568	142	327	388	1.465	388	678	70.8	115.9	889.156	F
2 - Newington Road south	904	226	97	1014	0.891	901	618	6.5	7.2	30.367	D
3 - Manston Road	565	141	523	484	1.168	482	476	26.6	47.3	287.003	F

13:45 - 14:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	464	116	350	380	1.220	380	604	115.9	136.8	1208.664	F
2 - Newington Road south	738	185	95	1016	0.727	756	635	7.2	2.8	14.677	B
3 - Manston Road	461	115	438	527	0.875	516	412	47.3	33.7	282.682	F

14:00 - 14:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	388	97	346	381	1.019	381	525	136.8	138.8	1313.190	F
2 - Newington Road south	618	155	95	1015	0.609	623	632	2.8	1.6	9.280	A
3 - Manston Road	386	97	361	566	0.682	511	357	33.7	2.5	104.817	F

2039 + Dev Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	601.55	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2039 + Dev Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	570	100.000
2 - Newington Road south		ONE HOUR	✓	934	100.000
3 - Manston Road		ONE HOUR	✓	510	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	415	155
	2 - Newington Road south	509	0	425
	3 - Manston Road	200	310	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	3	0
	2 - Newington Road south	5	0	1
	3 - Manston Road	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	1.54	1626.54	181.2	F	523	785
2 - Newington Road south	1.02	98.01	28.6	F	857	1286
3 - Manston Road	1.20	388.80	54.3	F	468	702

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	429	107	228	427	1.005	389	526	0.0	10.1	67.190	F
2 - Newington Road south	703	176	106	1011	0.696	694	511	0.0	2.2	11.092	B
3 - Manston Road	384	96	378	548	0.701	375	422	0.0	2.2	19.961	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	512	128	270	413	1.242	409	627	10.1	35.9	223.809	F
2 - Newington Road south	840	210	111	1007	0.834	831	567	2.2	4.5	19.412	C
3 - Manston Road	458	115	453	510	0.898	444	489	2.2	5.9	45.854	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	628	157	283	408	1.538	408	711	35.9	90.9	574.619	F
2 - Newington Road south	1028	257	111	1007	1.021	969	579	4.5	19.2	57.044	F
3 - Manston Road	562	140	528	472	1.190	465	552	5.9	30.1	159.940	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	628	157	283	408	1.538	408	722	90.9	145.8	1060.985	F
2 - Newington Road south	1028	257	111	1007	1.021	991	580	19.2	28.6	98.013	F
3 - Manston Road	562	140	540	466	1.205	465	562	30.1	54.3	339.408	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	512	128	288	406	1.262	406	693	145.8	172.4	1437.536	F
2 - Newington Road south	840	210	110	1008	0.833	930	584	28.6	6.0	58.374	F
3 - Manston Road	458	115	507	483	0.950	474	534	54.3	50.4	388.799	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	429	107	323	394	1.089	394	599	172.4	181.2	1626.545	F
2 - Newington Road south	703	176	107	1010	0.696	718	610	6.0	2.4	12.889	B
3 - Manston Road	384	96	391	542	0.709	531	434	50.4	13.6	223.819	F

2039 + Dev Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	518.40	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2039 + Dev Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	449	100.000
2 - Newington Road south		ONE HOUR	✓	836	100.000
3 - Manston Road		ONE HOUR	✓	644	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	352	97
	2 - Newington Road south	514	0	322
	3 - Manston Road	178	466	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	2	3
	2 - Newington Road south	2	0	1
	3 - Manston Road	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	1.27	700.27	74.0	F	412	618
2 - Newington Road south	0.89	28.53	6.9	D	767	1151
3 - Manston Road	1.51	1029.88	155.8	F	591	886

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	338	85	337	391	0.864	320	512	0.0	4.5	43.403	E
2 - Newington Road south	629	157	69	1049	0.600	624	588	0.0	1.5	8.346	A
3 - Manston Road	485	121	383	562	0.863	466	309	0.0	4.8	32.729	D

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	404	101	369	380	1.062	364	601	4.5	14.4	116.106	F
2 - Newington Road south	752	188	79	1043	0.721	748	654	1.5	2.5	12.027	B
3 - Manston Road	579	145	460	524	1.106	510	367	4.8	22.1	115.980	F

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	494	124	343	389	1.271	387	688	14.4	41.2	278.833	F
2 - Newington Road south	920	230	84	1039	0.886	905	647	2.5	6.3	24.402	C
3 - Manston Road	709	177	557	475	1.493	474	432	22.1	80.8	406.441	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	494	124	341	390	1.268	389	695	41.2	67.5	523.865	F
2 - Newington Road south	920	230	84	1039	0.886	918	646	6.3	6.9	28.531	D
3 - Manston Road	709	177	564	471	1.506	471	438	80.8	140.3	817.685	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	404	101	374	378	1.067	378	615	67.5	74.0	694.532	F
2 - Newington Road south	752	188	82	1041	0.722	768	670	6.9	2.7	13.928	B
3 - Manston Road	579	145	472	517	1.119	517	377	140.3	155.8	1029.877	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	338	85	402	369	0.916	364	543	74.0	67.5	700.265	F
2 - Newington Road south	629	157	79	1043	0.604	634	687	2.7	1.6	8.906	A
3 - Manston Road	485	121	390	559	0.868	555	323	155.8	138.2	953.841	F

2039 + Dev Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	487.06	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2039 + Dev Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	516	100.000
2 - Newington Road south		ONE HOUR	✓	858	100.000
3 - Manston Road		ONE HOUR	✓	524	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	From			
	1 - Newington Road north	0	387	129
	2 - Newington Road south	476	0	382
	3 - Manston Road	165	359	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	From			
	1 - Newington Road north	0	4	4
	2 - Newington Road south	4	0	2
	3 - Manston Road	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	1.47	1378.09	143.1	F	473	710
2 - Newington Road south	0.93	41.82	10.3	E	787	1181
3 - Manston Road	1.19	328.82	52.7	F	481	721

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	388	97	265	409	0.950	359	476	0.0	7.3	56.442	F
2 - Newington Road south	646	161	90	1019	0.634	639	534	0.0	1.7	9.311	A
3 - Manston Road	394	99	355	569	0.693	386	374	0.0	2.1	18.873	C

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	464	116	314	392	1.182	386	569	7.3	26.6	181.065	F
2 - Newington Road south	771	193	97	1015	0.760	766	603	1.7	3.0	14.167	B
3 - Manston Road	471	118	425	534	0.883	458	438	2.1	5.5	41.482	E

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	568	142	330	387	1.468	386	663	26.6	72.1	477.015	F
2 - Newington Road south	945	236	97	1015	0.931	921	620	3.0	8.8	32.331	D
3 - Manston Road	577	144	511	490	1.178	482	507	5.5	29.3	149.972	F

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	568	142	331	386	1.470	386	673	72.1	117.5	906.246	F
2 - Newington Road south	945	236	97	1015	0.931	939	621	8.8	10.3	41.825	E
3 - Manston Road	577	144	521	485	1.190	483	515	29.3	52.7	315.304	F

13:45 - 14:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	464	116	352	379	1.223	379	605	117.5	138.7	1235.994	F
2 - Newington Road south	771	193	95	1016	0.759	799	637	10.3	3.4	18.349	C
3 - Manston Road	471	118	443	524	0.899	514	450	52.7	41.9	328.820	F

14:00 - 14:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	388	97	376	371	1.046	371	535	138.7	143.1	1378.093	F
2 - Newington Road south	646	161	93	1018	0.635	652	654	3.4	1.8	10.017	B
3 - Manston Road	394	99	362	566	0.697	548	383	41.9	3.4	155.127	F

Junctions 9												
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Filename: Jct 27_R1_AM validated.j9

Path: R:\Projects\38199 Manston Airport DCO EIA\4 Design\Transport\Junction Modelling\Base Models\Validated\Jct 27_B2014_A255

Report generation date: 29/01/2018 14:35:55

- »2017 Baseline Traffic, AM
- »2017 Baseline Traffic, PM
- »2017 Baseline Traffic, Airport Peak
- »2039 Growthed Traffic, AM
- »2039 Growthed Traffic, PM
- »2039 Growthed Traffic, Airport Peak
- »2039 + Dev Traffic, AM
- »2039 + Dev Traffic, PM
- »2039 + Dev Traffic, Airport Peak

Summary of junction performance

	AM				PM				Airport Peak			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2017 Baseline Traffic												
1 - Newington Road north	8.7	53.37	0.92	F	63.5	362.87	1.20	F	3.5	21.50	0.78	C
2 - High Street east	12.2	53.04	0.95	F	7.0	32.51	0.89	D	2.9	15.81	0.75	C
3 - High Street south	8.2	40.10	0.91	E	27.0	100.48	1.02	F	2.2	13.03	0.70	B
2039 Growthed Traffic												
1 - Newington Road north	79.8	446.72	1.22	F	219.7	1364.26	1.49	F	63.8	293.76	1.17	F
2 - High Street east	104.6	407.80	1.20	F	70.2	250.15	1.13	F	28.7	112.61	1.03	F
3 - High Street south	81.3	331.85	1.17	F	195.0	755.53	1.34	F	21.5	91.78	1.01	F
2039 + Dev Traffic												
1 - Newington Road north	80.3	445.45	1.21	F	256.4	1564.78	1.55	F	68.0	325.68	1.18	F
2 - High Street east	129.0	505.98	1.24	F	69.1	242.97	1.13	F	44.1	159.11	1.07	F
3 - High Street south	87.8	371.75	1.18	F	197.6	768.79	1.35	F	26.5	110.40	1.03	F

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

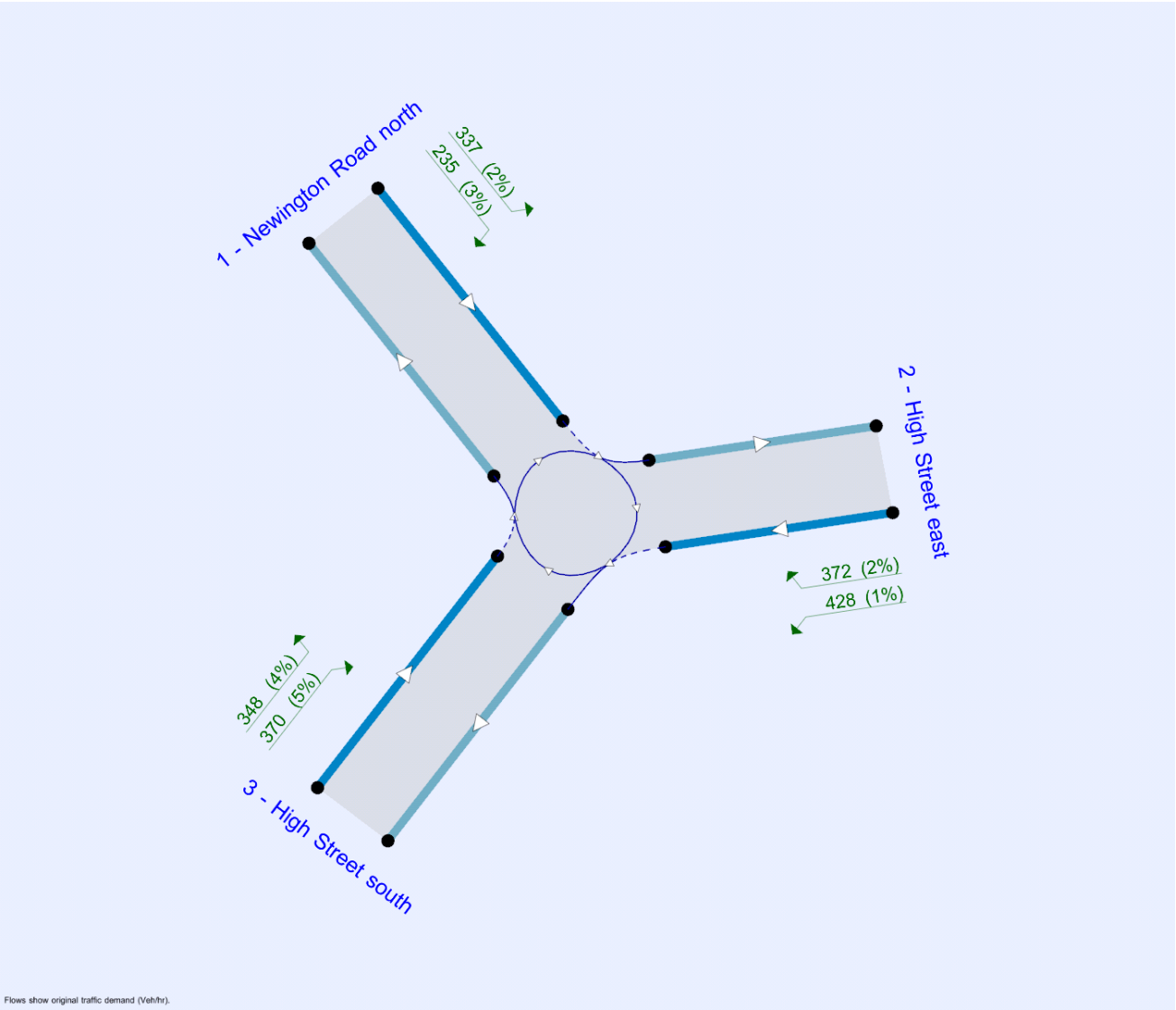
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	05/10/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	GLOBAL\chris.price2
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2017 Baseline Traffic	AM	ONE HOUR	07:30	09:00	15	✓
D4	2017 Baseline Traffic	PM	ONE HOUR	16:30	18:00	15	✓
D5	2017 Baseline Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓
D6	2039 Growthed Traffic	AM	ONE HOUR	07:30	09:00	15	✓
D7	2039 Growthed Traffic	PM	ONE HOUR	16:30	18:00	15	✓
D8	2039 Growthed Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓
D9	2039 + Dev Traffic	AM	ONE HOUR	07:30	09:00	15	✓
D10	2039 + Dev Traffic	PM	ONE HOUR	16:30	18:00	15	✓
D11	2039 + Dev Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2017 Baseline Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	48.61	E

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Newington Road north	
2	High Street east	
3	High Street south	

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 - Newington Road north	3.96	3.71	4.87	1.4	13.95	8.20	0.0	
2 - High Street east	3.64	3.20	4.13	19.6	20.00	17.75	0.0	✓
3 - High Street south	3.58	3.28	5.97	10.0	14.07	9.72	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Newington Road north	0.630	785
2 - High Street east	0.616	1102
3 - High Street south	0.657	1081

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - Newington Road north	Percentage		135.00
3 - High Street south	Percentage		112.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2017 Baseline Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	572	100.000
2 - High Street east		ONE HOUR	✓	800	100.000
3 - High Street south		ONE HOUR	✓	718	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Newington Road north	2 - High Street east	3 - High Street south
	From			
	1 - Newington Road north	0	337	235
	2 - High Street east	372	0	428
	3 - High Street south	348	370	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Newington Road north	2 - High Street east	3 - High Street south
	From			
	1 - Newington Road north	0	2	3
	2 - High Street east	2	0	1
	3 - High Street south	4	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	0.92	53.37	8.7	F	525	787
2 - High Street east	0.95	53.04	12.2	F	734	1101
3 - High Street south	0.91	40.10	8.2	E	659	988

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	431	108	276	794	0.543	426	537	0.0	1.2	9.675	A
2 - High Street east	602	151	175	977	0.617	596	527	0.0	1.6	9.309	A
3 - High Street south	541	135	277	959	0.564	535	494	0.0	1.3	8.405	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	514	129	331	746	0.689	510	643	1.2	2.1	15.033	C
2 - High Street east	719	180	210	955	0.753	714	631	1.6	2.9	14.609	B
3 - High Street south	645	161	332	920	0.702	642	592	1.3	2.3	12.765	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	630	157	398	688	0.916	610	771	2.1	7.1	38.943	E
2 - High Street east	881	220	251	930	0.948	853	757	2.9	9.8	37.649	E
3 - High Street south	791	198	397	873	0.905	772	707	2.3	7.0	30.905	D

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	630	157	405	681	0.924	623	786	7.1	8.7	53.367	F
2 - High Street east	881	220	256	926	0.951	871	772	9.8	12.2	53.042	F
3 - High Street south	791	198	405	867	0.912	786	722	7.0	8.2	40.104	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	514	129	344	734	0.700	539	675	8.7	2.5	20.496	C
2 - High Street east	719	180	222	948	0.759	755	662	12.2	3.4	21.437	C
3 - High Street south	645	161	351	906	0.712	668	625	8.2	2.6	16.386	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	431	108	281	789	0.546	436	548	2.5	1.2	10.325	B
2 - High Street east	602	151	179	974	0.618	609	538	3.4	1.7	10.036	B
3 - High Street south	541	135	283	955	0.566	546	505	2.6	1.3	8.909	A

2017 Baseline Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	151.26	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2017 Baseline Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	623	100.000
2 - High Street east		ONE HOUR	✓	749	100.000
3 - High Street south		ONE HOUR	✓	855	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		1 - Newington Road north	2 - High Street east	3 - High Street south
	1 - Newington Road north	0	331	292
	2 - High Street east	340	0	409
	3 - High Street south	325	530	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		1 - Newington Road north	2 - High Street east	3 - High Street south
	1 - Newington Road north	0	2	1
	2 - High Street east	1	0	1
	3 - High Street south	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	1.20	362.87	63.5	F	572	858
2 - High Street east	0.89	32.51	7.0	D	687	1031
3 - High Street south	1.02	100.48	27.0	F	785	1177

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	469	117	395	709	0.661	462	495	0.0	1.9	14.143	B
2 - High Street east	564	141	216	958	0.589	558	640	0.0	1.4	8.887	A
3 - High Street south	644	161	253	1008	0.639	637	521	0.0	1.7	9.532	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	560	140	472	644	0.870	547	593	1.9	5.2	33.197	D
2 - High Street east	673	168	256	933	0.721	669	762	1.4	2.5	13.396	B
3 - High Street south	769	192	304	971	0.791	761	622	1.7	3.5	16.618	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	686	171	548	579	1.184	571	704	5.2	34.0	141.672	F
2 - High Street east	825	206	268	926	0.890	809	852	2.5	6.4	27.526	D
3 - High Street south	941	235	367	925	1.018	885	709	3.5	17.7	56.672	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	686	171	560	569	1.205	568	717	34.0	63.5	319.305	F
2 - High Street east	825	206	266	927	0.889	822	862	6.4	7.0	32.515	D
3 - High Street south	941	235	373	920	1.023	904	715	17.7	27.0	100.482	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	560	140	532	593	0.945	584	640	63.5	57.6	362.875	F
2 - High Street east	673	168	274	923	0.730	690	842	7.0	2.9	16.429	C
3 - High Street south	769	192	313	964	0.797	859	650	27.0	4.5	48.237	E

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	469	117	406	700	0.670	686	507	57.6	3.2	166.555	F
2 - High Street east	564	141	322	893	0.631	568	770	2.9	1.8	11.226	B
3 - High Street south	644	161	258	1005	0.641	654	632	4.5	1.8	10.571	B

2017 Baseline Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	16.67	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2017 Baseline Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	546	100.000
2 - High Street east		ONE HOUR	✓	608	100.000
3 - High Street south		ONE HOUR	✓	572	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		1 - Newington Road north	2 - High Street east	3 - High Street south
	1 - Newington Road north	0	285	261
	2 - High Street east	331	0	277
	3 - High Street south	284	288	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		1 - Newington Road north	2 - High Street east	3 - High Street south
	1 - Newington Road north	0	2	2
	2 - High Street east	2	0	4
	3 - High Street south	4	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	0.78	21.50	3.5	C	501	752
2 - High Street east	0.75	15.81	2.9	C	558	837
3 - High Street south	0.70	13.03	2.2	B	525	787

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	411	103	215	854	0.482	407	460	0.0	0.9	8.006	A
2 - High Street east	458	114	195	952	0.481	454	428	0.0	0.9	7.178	A
3 - High Street south	431	108	247	990	0.435	428	402	0.0	0.8	6.366	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	491	123	258	817	0.601	489	551	0.9	1.5	10.896	B
2 - High Street east	547	137	234	928	0.589	545	513	0.9	1.4	9.332	A
3 - High Street south	514	129	297	954	0.539	513	482	0.8	1.1	8.121	A

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	601	150	315	768	0.783	594	672	1.5	3.3	19.891	C
2 - High Street east	669	167	284	898	0.746	664	625	1.4	2.8	15.056	C
3 - High Street south	630	157	361	907	0.694	626	586	1.1	2.2	12.604	B

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	601	150	317	766	0.785	600	677	3.3	3.5	21.501	C
2 - High Street east	669	167	287	896	0.747	669	630	2.8	2.9	15.807	C
3 - High Street south	630	157	364	905	0.696	630	592	2.2	2.2	13.032	B

13:45 - 14:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	491	123	261	814	0.603	498	558	3.5	1.6	11.654	B
2 - High Street east	547	137	238	926	0.591	552	521	2.9	1.5	9.778	A
3 - High Street south	514	129	301	951	0.540	518	490	2.2	1.2	8.391	A

14:00 - 14:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	411	103	218	852	0.483	414	465	1.6	0.9	8.266	A
2 - High Street east	458	114	198	950	0.482	460	434	1.5	0.9	7.374	A
3 - High Street south	431	108	250	988	0.436	432	407	1.2	0.8	6.499	A

2039 Growthed Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	391.82	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2039 Growthed Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	715	100.000
2 - High Street east		ONE HOUR	✓	1000	100.000
3 - High Street south		ONE HOUR	✓	898	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Newington Road north	2 - High Street east	3 - High Street south
	1 - Newington Road north	0	421	294
	2 - High Street east	465	0	535
	3 - High Street south	435	463	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Newington Road north	2 - High Street east	3 - High Street south
	1 - Newington Road north	0	2	4
	2 - High Street east	2	0	1
	3 - High Street south	4	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	1.22	446.72	79.8	F	656	984
2 - High Street east	1.20	407.80	104.6	F	918	1376
3 - High Street south	1.17	331.85	81.3	F	824	1236

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	538	135	343	730	0.738	528	666	0.0	2.6	17.069	C
2 - High Street east	753	188	217	949	0.793	739	654	0.0	3.5	16.179	C
3 - High Street south	676	169	344	907	0.746	665	612	0.0	2.8	14.312	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	643	161	404	676	0.951	617	782	2.6	9.1	47.601	E
2 - High Street east	899	225	254	926	0.971	865	767	3.5	12.0	44.059	E
3 - High Street south	807	202	402	865	0.934	784	717	2.8	8.6	36.728	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	787	197	434	650	1.211	645	832	9.1	44.7	165.912	F
2 - High Street east	1101	275	265	919	1.198	914	813	12.0	58.7	151.636	F
3 - High Street south	989	247	425	849	1.165	841	754	8.6	45.6	129.902	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	787	197	436	648	1.215	647	836	44.7	79.8	357.294	F
2 - High Street east	1101	275	266	918	1.199	918	817	58.7	104.6	328.923	F
3 - High Street south	989	247	427	847	1.167	846	757	45.6	81.3	279.680	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	643	161	433	651	0.988	643	830	79.8	79.8	446.716	F
2 - High Street east	899	225	264	919	0.978	911	811	104.6	101.7	407.800	F
3 - High Street south	807	202	423	850	0.950	839	752	81.3	73.3	331.852	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	538	135	432	651	0.827	643	829	79.8	53.5	375.039	F
2 - High Street east	753	188	264	919	0.819	910	811	101.7	62.3	325.980	F
3 - High Street south	676	169	423	850	0.796	838	751	73.3	32.7	230.886	F

2039 Growthed Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	756.12	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2039 Growthed Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	785	100.000
2 - High Street east		ONE HOUR	✓	943	100.000
3 - High Street south		ONE HOUR	✓	1078	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Newington Road north	2 - High Street east	3 - High Street south
	From			
	1 - Newington Road north	0	417	368
	2 - High Street east	428	0	515
	3 - High Street south	410	668	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Newington Road north	2 - High Street east	3 - High Street south
	From			
	1 - Newington Road north	0	2	1
	2 - High Street east	2	0	1
	3 - High Street south	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	1.49	1364.26	219.7	F	720	1080
2 - High Street east	1.13	250.15	70.2	F	865	1298
3 - High Street south	1.34	755.53	195.0	F	989	1484

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	591	148	491	628	0.941	559	618	0.0	8.1	41.521	E
2 - High Street east	710	177	262	926	0.767	698	788	0.0	3.1	15.072	C
3 - High Street south	812	203	317	959	0.846	793	643	0.0	4.8	19.788	C

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	706	176	552	576	1.224	571	715	8.1	41.7	173.645	F
2 - High Street east	848	212	268	922	0.919	828	855	3.1	7.9	32.916	D
3 - High Street south	969	242	376	915	1.059	890	720	4.8	24.4	73.385	F

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	864	216	550	578	1.495	578	750	41.7	113.3	493.521	F
2 - High Street east	1038	260	271	920	1.128	909	857	7.9	40.1	108.722	F
3 - High Street south	1187	297	413	888	1.336	887	768	24.4	99.4	261.663	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	864	216	548	579	1.492	579	753	113.3	184.5	935.977	F
2 - High Street east	1038	260	272	920	1.129	918	856	40.1	70.2	226.548	F
3 - High Street south	1187	297	417	885	1.341	885	773	99.4	174.9	564.044	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	706	176	551	577	1.222	577	750	184.5	216.6	1257.822	F
2 - High Street east	848	212	271	920	0.921	907	857	70.2	55.3	250.155	F
3 - High Street south	969	242	412	889	1.090	889	766	174.9	195.0	754.942	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	591	148	549	579	1.021	579	747	216.6	219.7	1364.260	F
2 - High Street east	710	177	271	920	0.772	904	856	55.3	6.9	130.982	F
3 - High Street south	812	203	410	890	0.912	886	765	195.0	176.5	755.531	F

2039 Growthed Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	162.41	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2039 Growthed Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	728	100.000
2 - High Street east		ONE HOUR	✓	811	100.000
3 - High Street south		ONE HOUR	✓	763	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Newington Road north	2 - High Street east	3 - High Street south
	From			
	1 - Newington Road north	0	380	348
	2 - High Street east	441	0	370
	3 - High Street south	379	384	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Newington Road north	2 - High Street east	3 - High Street south
	From			
	1 - Newington Road north	0	2	2
	2 - High Street east	2	0	5
	3 - High Street south	4	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	1.17	293.76	63.8	F	668	1002
2 - High Street east	1.03	112.61	28.7	F	744	1116
3 - High Street south	1.01	91.78	21.5	F	700	1050

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	548	137	286	793	0.691	540	610	0.0	2.1	13.788	B
2 - High Street east	611	153	258	909	0.671	603	568	0.0	2.0	11.461	B
3 - High Street south	574	144	328	932	0.617	568	533	0.0	1.6	9.746	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	654	164	342	745	0.879	640	729	2.1	5.7	30.913	D
2 - High Street east	729	182	306	880	0.828	720	676	2.0	4.3	21.292	C
3 - High Street south	686	171	391	885	0.775	679	635	1.6	3.2	16.953	C

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	802	200	400	695	1.154	685	849	5.7	34.9	122.843	F
2 - High Street east	893	223	327	867	1.029	835	757	4.3	18.9	64.203	F
3 - High Street south	840	210	454	840	1.000	795	708	3.2	14.4	53.758	F

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	802	200	409	688	1.166	686	867	34.9	63.8	269.159	F
2 - High Street east	893	223	328	867	1.030	853	767	18.9	28.7	112.612	F
3 - High Street south	840	210	464	833	1.009	812	717	14.4	21.5	91.780	F

13:45 - 14:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	654	164	379	713	0.918	702	817	63.8	51.8	293.756	F
2 - High Street east	729	182	336	862	0.846	815	745	28.7	7.2	78.548	F
3 - High Street south	686	171	443	848	0.809	752	708	21.5	4.9	48.837	E

14:00 - 14:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	548	137	296	785	0.699	744	633	51.8	2.9	123.504	F
2 - High Street east	611	153	356	850	0.718	629	684	7.2	2.7	17.394	C
3 - High Street south	574	144	342	921	0.623	587	642	4.9	1.7	11.161	B

2039 + Dev Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	443.23	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2039 + Dev Traffic	AM	ONE HOUR	07:30	09:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	720	100.000
2 - High Street east		ONE HOUR	✓	1033	100.000
3 - High Street south		ONE HOUR	✓	898	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		1 - Newington Road north	2 - High Street east	3 - High Street south
	1 - Newington Road north	0	426	294
	2 - High Street east	498	0	535
	3 - High Street south	435	463	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		1 - Newington Road north	2 - High Street east	3 - High Street south
	1 - Newington Road north	0	2	4
	2 - High Street east	2	0	1
	3 - High Street south	4	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	1.21	445.45	80.3	F	661	991
2 - High Street east	1.24	505.98	129.0	F	948	1422
3 - High Street south	1.18	371.75	87.8	F	824	1236

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	542	136	342	730	0.743	531	689	0.0	2.7	17.314	C
2 - High Street east	778	194	217	949	0.819	761	657	0.0	4.1	17.895	C
3 - High Street south	676	169	367	890	0.760	664	611	0.0	2.9	15.253	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	647	162	402	678	0.955	621	803	2.7	9.3	48.522	E
2 - High Street east	929	232	253	926	1.003	882	769	4.1	15.7	53.573	F
3 - High Street south	807	202	425	848	0.952	780	710	2.9	9.9	41.240	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	793	198	428	655	1.211	650	844	9.3	45.1	166.706	F
2 - High Street east	1137	284	265	919	1.238	916	813	15.7	71.2	182.418	F
3 - High Street south	989	247	441	837	1.182	831	739	9.9	49.4	142.102	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	793	198	431	653	1.215	652	847	45.1	80.3	357.316	F
2 - High Street east	1137	284	266	918	1.239	918	816	71.2	126.1	394.840	F
3 - High Street south	989	247	442	836	1.183	835	741	49.4	87.8	305.461	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	647	162	426	656	0.986	647	843	80.3	80.3	445.452	F
2 - High Street east	929	232	264	919	1.010	917	809	126.1	129.0	505.983	F
3 - High Street south	807	202	442	836	0.965	827	739	87.8	82.9	371.746	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	542	136	427	656	0.826	648	841	80.3	53.9	374.708	F
2 - High Street east	778	194	265	919	0.846	912	810	129.0	95.4	444.041	F
3 - High Street south	676	169	440	838	0.807	828	737	82.9	44.9	280.395	F

2039 + Dev Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	822.18	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2039 + Dev Traffic	PM	ONE HOUR	16:30	18:00	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	819	100.000
2 - High Street east		ONE HOUR	✓	946	100.000
3 - High Street south		ONE HOUR	✓	1078	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		1 - Newington Road north	2 - High Street east	3 - High Street south
	1 - Newington Road north	0	451	368
	2 - High Street east	431	0	515
	3 - High Street south	410	668	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		1 - Newington Road north	2 - High Street east	3 - High Street south
	1 - Newington Road north	0	1	1
	2 - High Street east	2	0	1
	3 - High Street south	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	1.55	1564.78	256.4	F	752	1127
2 - High Street east	1.13	242.97	69.1	F	868	1302
3 - High Street south	1.35	768.79	197.6	F	989	1484

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	617	154	491	631	0.977	575	620	0.0	10.3	48.375	E
2 - High Street east	712	178	259	928	0.768	700	808	0.0	3.1	15.080	C
3 - High Street south	812	203	319	958	0.847	792	640	0.0	4.8	19.940	C

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	736	184	551	580	1.269	577	717	10.3	50.1	204.520	F
2 - High Street east	850	213	259	927	0.917	832	869	3.1	7.8	32.389	D
3 - High Street south	969	242	379	913	1.061	889	712	4.8	24.8	74.451	F

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	902	225	548	583	1.547	583	753	50.1	129.9	566.574	F
2 - High Street east	1042	260	262	926	1.125	915	869	7.8	39.5	106.759	F
3 - High Street south	1187	297	417	885	1.341	884	760	24.8	100.6	265.620	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	902	225	547	584	1.544	584	756	129.9	209.4	1056.618	F
2 - High Street east	1042	260	262	925	1.125	923	868	39.5	69.1	221.895	F
3 - High Street south	1187	297	421	882	1.345	882	765	100.6	176.8	572.083	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	736	184	549	582	1.265	582	753	209.4	248.0	1421.577	F
2 - High Street east	850	213	262	926	0.918	913	869	69.1	53.5	242.975	F
3 - High Street south	969	242	416	886	1.094	886	758	176.8	197.6	766.232	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	617	154	548	583	1.057	583	749	248.0	256.4	1564.775	F
2 - High Street east	712	178	262	926	0.769	906	869	53.5	5.0	122.434	F
3 - High Street south	812	203	413	888	0.914	884	755	197.6	179.6	768.790	F

2039 + Dev Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	195.11	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2039 + Dev Traffic	Airport Peak	ONE HOUR	12:45	14:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		ONE HOUR	✓	739	100.000
2 - High Street east		ONE HOUR	✓	848	100.000
3 - High Street south		ONE HOUR	✓	763	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		1 - Newington Road north	2 - High Street east	3 - High Street south
	1 - Newington Road north	0	391	348
	2 - High Street east	478	0	370
	3 - High Street south	379	384	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		1 - Newington Road north	2 - High Street east	3 - High Street south
	1 - Newington Road north	0	2	2
	2 - High Street east	2	0	5
	3 - High Street south	4	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Newington Road north	1.18	325.68	68.0	F	678	1017
2 - High Street east	1.07	159.11	44.1	F	778	1167
3 - High Street south	1.03	110.40	26.5	F	700	1050

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	556	139	286	793	0.702	547	637	0.0	2.2	14.191	B
2 - High Street east	638	160	258	910	0.701	629	575	0.0	2.2	12.463	B
3 - High Street south	574	144	355	912	0.630	568	532	0.0	1.6	10.273	B

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	664	166	341	745	0.891	649	760	2.2	6.2	32.875	D
2 - High Street east	762	191	305	881	0.865	750	685	2.2	5.3	25.291	D
3 - High Street south	686	171	423	863	0.795	678	633	1.6	3.5	18.786	C

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	814	203	396	699	1.165	690	869	6.2	37.2	129.124	F
2 - High Street east	934	233	325	869	1.074	849	761	5.3	26.5	82.198	F
3 - High Street south	840	210	479	822	1.022	786	695	3.5	17.0	61.623	F

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	814	203	404	692	1.176	690	885	37.2	68.0	284.779	F
2 - High Street east	934	233	325	869	1.074	863	769	26.5	44.1	159.110	F
3 - High Street south	840	210	487	816	1.029	802	702	17.0	26.5	110.395	F

13:45 - 14:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	664	166	386	707	0.940	697	859	68.0	59.9	325.685	F
2 - High Street east	762	191	328	867	0.879	848	755	44.1	22.6	145.595	F
3 - High Street south	686	171	478	823	0.834	767	698	26.5	6.3	72.699	F

14:00 - 14:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	556	139	298	783	0.711	770	697	59.9	6.5	162.633	F
2 - High Street east	638	160	362	846	0.754	715	705	22.6	3.4	39.011	E
3 - High Street south	574	144	403	877	0.655	592	675	6.3	2.0	13.349	B

