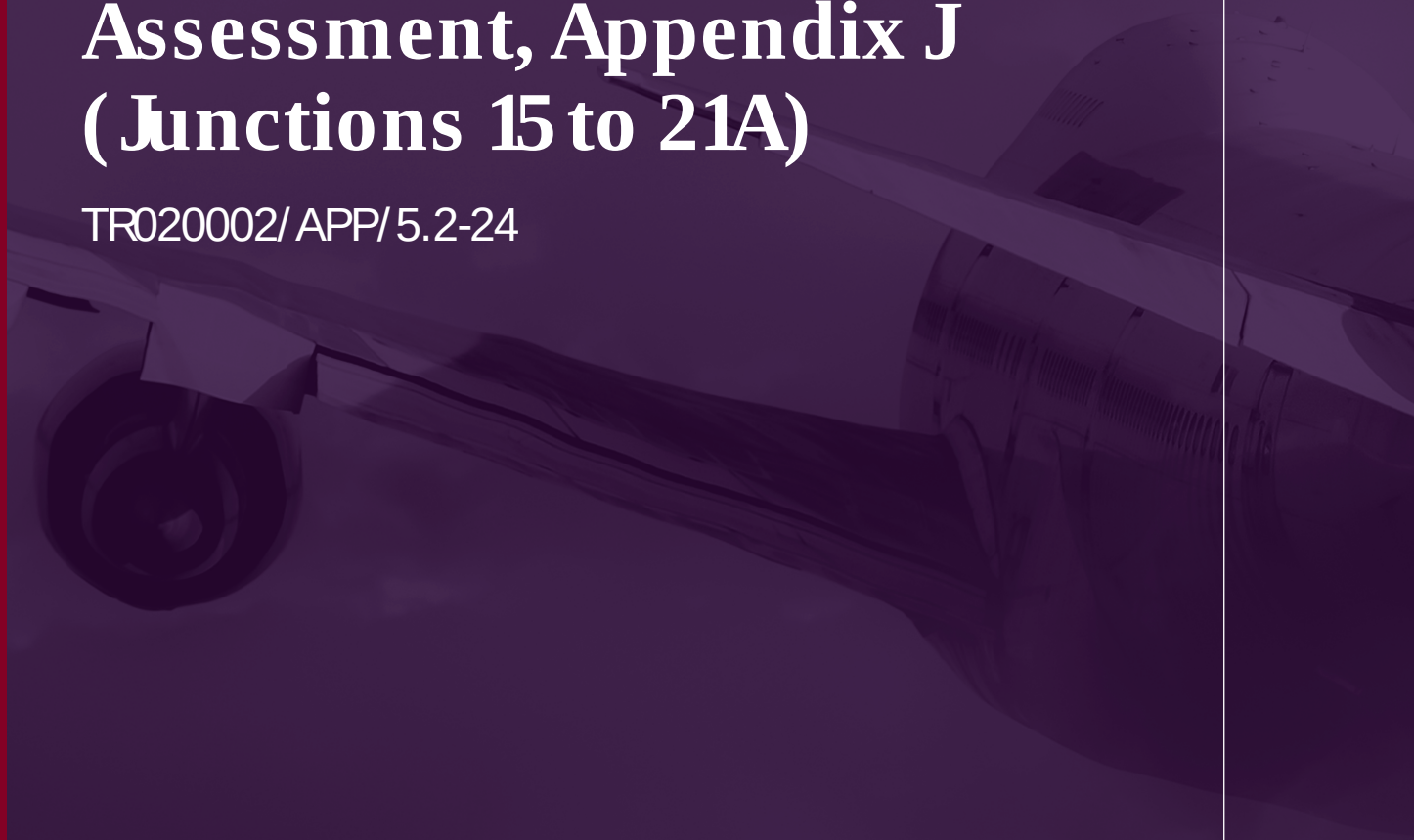
RiverOak Strategic Partners

5.2-24 Environmental Statement Volume 24: Transport Assessment, Appendix J (Junctions 15 to 21A)

TR020002/APP/5.2-24



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

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Volume 24 Contents

Transport Assessment

Appendix J - ST Models (Junctions 15 to 21a)

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Transport Assessment
Appendix J
ST Models

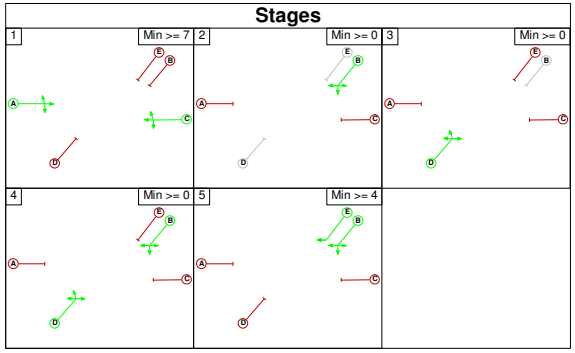
Full Input Data And Results

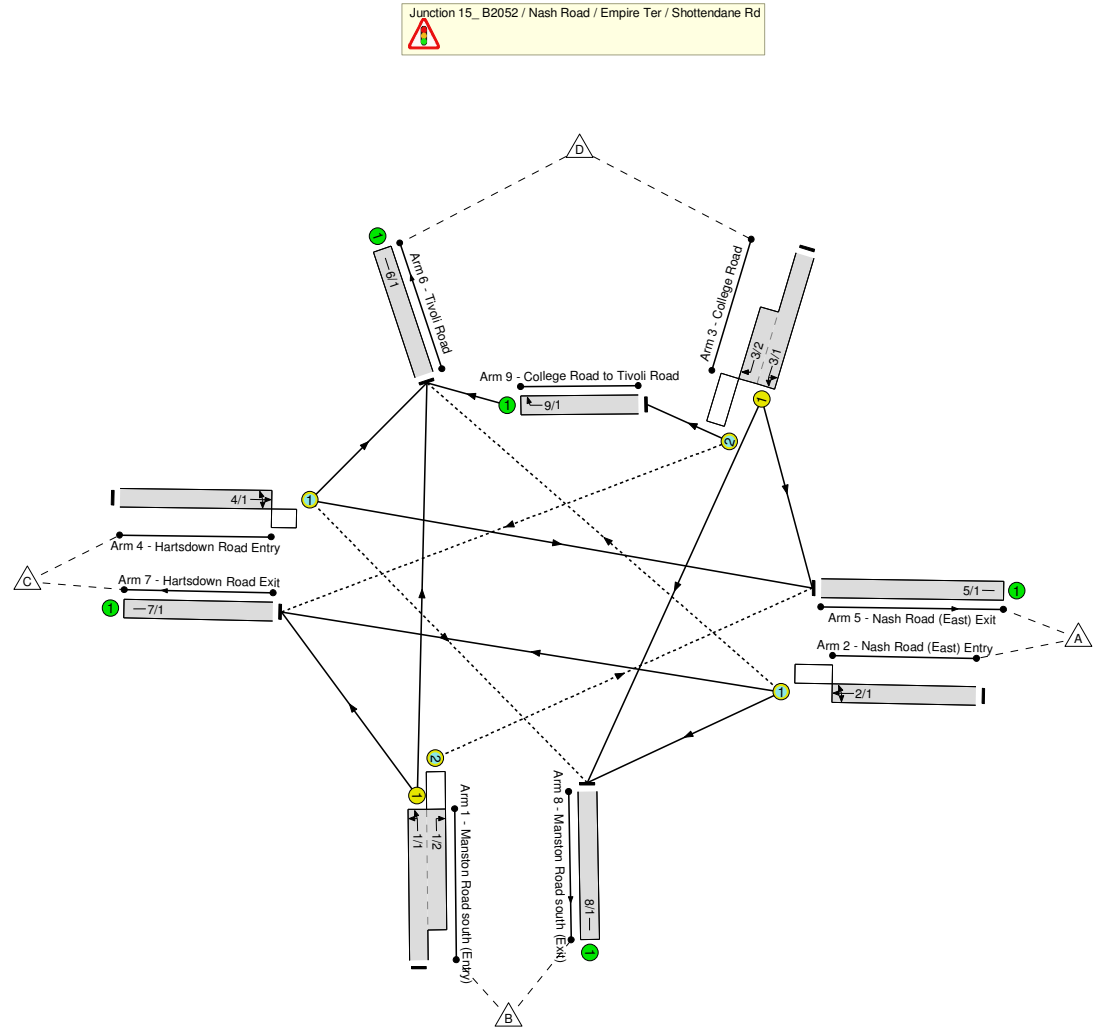
User and Project Details

Project:	**Manston Airport DCO EIA**
Title:	**Junction 15**
Location:	
File name:	Junction 15_Mitigation.lsg3x
Author:	FOUDA
Company:	Wood
Address:	LEAMINGTON SPA- GABLES HOUSE, KENILWORTH-ROAD,WARWICKSHIRE CV32 6JX
Notes:	

Full Input Data And Results

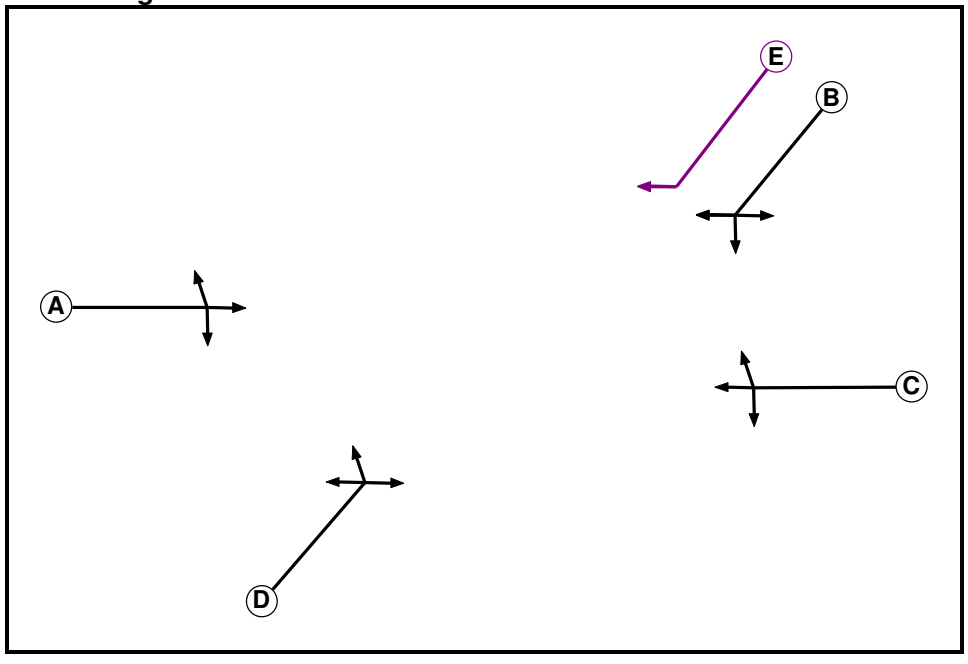
Network Layout Diagram





Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Ind. Arrow	B	4	4

Full Input Data And Results

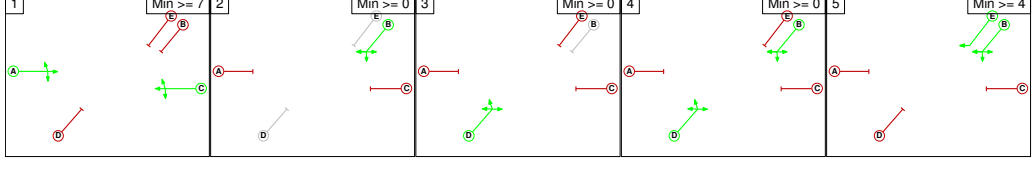
Phase Intergreens Matrix

Terminating Phase	Starting Phase					
		A	B	C	D	E
	A		10	-	10	10
	B	10		10	-	-
	C	-	10		10	-
	D	5	-	5		8
	E	10	-	-	-	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Full Input Data And Results

Prohibited Stage Change

From Stage \ To Stage	1	2	3	4	5
1		10	10	10	10
2	10		2	2	0
3	5	2		2	8
4	10	0	0		8
5	10	0	2	2	

Give-Way Lane Input Data

Junction: Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/2 (Manston Road south (Entry))	5/1 (Right)	1439	0	3/1	1.09	All	3.00	-	0.50	3	3.00
2/1 (Nash Road (East) Entry)	6/1 (Right)	1439	0	4/1	1.09	To 5/1 (Ahead) To 6/1 (Left)	3.00	3.00	0.50	3	3.00
3/2 (College Road)	7/1 (Right)	1439	0	1/1	1.09	All	4.00	4.00	0.50	4	3.00
4/1 (Hartsdown Road Entry)	8/1 (Right)	1439	0	2/1	1.09	To 7/1 (Ahead) To 8/1 (Left)	2.00	2.00	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Manston Road south (Entry))	U	D	2	3	60.0	Geom	-	2.45	0.00	Y	Arm 6 Ahead	Inf
											Arm 7 Left	19.00
1/2 (Manston Road south (Entry))	O	D	2	3	12.0	Geom	-	2.25	0.00	Y	Arm 5 Right	12.00
2/1 (Nash Road (East) Entry)	O	C	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Right	15.00
											Arm 7 Ahead	Inf
											Arm 8 Left	15.00
3/1 (College Road)	U	B	2	3	60.0	Geom	-	3.10	0.00	Y	Arm 5 Left	10.00
											Arm 8 Ahead	Inf
3/2 (College Road)	O	B E	2	3	6.0	Geom	-	3.10	0.00	Y	Arm 7 Right	16.00
											Arm 9 Right	15.00
4/1 (Hartsdown Road Entry)	O	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Left	10.00
											Arm 8 Right	8.00
5/1 (Nash Road (East) Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Tivoli Road)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Hartsdown Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (Manston Road south (Exit))	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1 (College Road to Tivoli Road)	U		2	3	60.0	Geom	-	3.25	0.00	Y	Arm 6 Right	15.00

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
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	
10: '2039 Base + Dev - Net Change - AM Peak'	07:45	08:45	01:00	
11: '2039 Base + Dev - Net Change - PM Peak'	16:45	17:45	01:00	
12: '2039 Base + Dev - Net Change - Airport Peak'	13:00	14:00	01:00	

Full Input Data And Results

Scenario 1: '2039 + Dev Traffic - AM Peak' (FG7: '2039 + Dev Traffic - AM Peak', Plan 2: 'AM Peak Development Traffic Mitigation Early Cut-Off')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	59	208	66	333
	B	142	0	35	414	591
	C	323	77	0	187	587
	D	30	470	322	53	875
	Tot.	495	606	565	720	2386

Traffic Lane Flows

Lane	Scenario 1: 2039 + Dev Traffic - AM Peak
Junction: Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd	
1/1 (with short)	591(In) 449(Out)
1/2 (short)	142
2/1	333
3/1 (with short)	875(In) 500(Out)
3/2 (short)	375
4/1	587
5/1	495
6/1	720
7/1	565
8/1	606
9/1	53

Full Input Data And Results

Lane Saturation Flows

Junction: Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Manston Road south (Entry))	2.45	0.00	Y	Arm 6 Ahead	Inf	92.2 %	1849	1849
				Arm 7 Left	19.00	7.8 %		
1/2 (Manston Road south (Entry))	2.25	0.00	Y	Arm 5 Right	12.00	100.0 %	1636	1636
2/1 (Nash Road (East) Entry)	3.50	0.00	Y	Arm 6 Right	15.00	19.8 %	1894	1894
				Arm 7 Ahead	Inf	62.5 %		
				Arm 8 Left	15.00	17.7 %		
3/1 (College Road)	3.10	0.00	Y	Arm 5 Left	10.00	6.0 %	1908	1908
				Arm 8 Ahead	Inf	94.0 %		
3/2 (College Road)	3.10	0.00	Y	Arm 7 Right	16.00	85.9 %	1759	1759
				Arm 9 Right	15.00	14.1 %		
4/1 (Hartsdown Road Entry)	3.00	0.00	Y	Arm 5 Ahead	Inf	55.0 %	1786	1786
				Arm 6 Left	10.00	31.9 %		
				Arm 8 Right	8.00	13.1 %		
5/1 (Nash Road (East) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Tivoli Road Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Hartsdown Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Manston Road south (Exit) Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (College Road to Tivoli Road)	3.25	0.00	Y	Arm 6 Right	15.00	100.0 %	1764	1764

Full Input Data And Results

Scenario 2: '2039 + Dev Traffic - PM Peak' (FG8: '2039 + Dev Traffic - PM Peak', Plan 3: 'PM Peak Development Traffic Mitigation Early Cut-Off')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	121	317	72	510
	B	111	0	61	536	708
	C	210	28	0	182	420
	D	19	325	449	89	882
	Tot.	340	474	827	879	2520

Traffic Lane Flows

Lane	Scenario 2: 2039 + Dev Traffic - PM Peak
Junction: Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd	
1/1 (with short)	708(In) 597(Out)
1/2 (short)	111
2/1	510
3/1 (with short)	882(In) 344(Out)
3/2 (short)	538
4/1	420
5/1	340
6/1	879
7/1	827
8/1	474
9/1	89

Full Input Data And Results

Lane Saturation Flows

Junction: Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Manston Road south (Entry))	2.45	0.00	Y	Arm 6 Ahead	Inf	89.8 %	1845	1845
				Arm 7 Left	19.00	10.2 %		
1/2 (Manston Road south (Entry))	2.25	0.00	Y	Arm 5 Right	12.00	100.0 %	1636	1636
2/1 (Nash Road (East) Entry)	3.50	0.00	Y	Arm 6 Right	15.00	14.1 %	1893	1893
				Arm 7 Ahead	Inf	62.2 %		
				Arm 8 Left	15.00	23.7 %		
3/1 (College Road)	3.10	0.00	Y	Arm 5 Left	10.00	5.5 %	1909	1909
				Arm 8 Ahead	Inf	94.5 %		
3/2 (College Road)	3.10	0.00	Y	Arm 7 Right	16.00	83.5 %	1758	1758
				Arm 9 Right	15.00	16.5 %		
4/1 (Hartsdown Road Entry)	3.00	0.00	Y	Arm 5 Ahead	Inf	50.0 %	1777	1777
				Arm 6 Left	10.00	43.3 %		
				Arm 8 Right	8.00	6.7 %		
5/1 (Nash Road (East) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Tivoli Road Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Hartsdown Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Manston Road south (Exit) Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (College Road to Tivoli Road)	3.25	0.00	Y	Arm 6 Right	15.00	100.0 %	1764	1764

Full Input Data And Results

Scenario 3: '2039 + Dev Traffic - Airport Peak' (FG9: '2039 + Dev Traffic - Airport Peak', Plan 4: 'Airport Peak Development Traffic Mitigation Early Cut-Off')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	93	205	55	353
	B	97	0	53	362	512
	C	169	51	0	180	400
	D	23	437	317	59	836
	Tot.	289	581	575	656	2101

Traffic Lane Flows

Lane	Scenario 3: 2039 + Dev Traffic - Airport Peak
Junction: Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd	
1/1 (with short)	512(In) 415(Out)
1/2 (short)	97
2/1	353
3/1 (with short)	836(In) 460(Out)
3/2 (short)	376
4/1	400
5/1	289
6/1	656
7/1	575
8/1	581
9/1	59

Full Input Data And Results

Lane Saturation Flows

Junction: Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Manston Road south (Entry))	2.45	0.00	Y	Arm 6 Ahead	Inf	87.2 %	1841	1841
				Arm 7 Left	19.00	12.8 %		
1/2 (Manston Road south (Entry))	2.25	0.00	Y	Arm 5 Right	12.00	100.0 %	1636	1636
2/1 (Nash Road (East) Entry)	3.50	0.00	Y	Arm 6 Right	15.00	15.6 %	1886	1886
				Arm 7 Ahead	Inf	58.1 %		
				Arm 8 Left	15.00	26.3 %		
3/1 (College Road)	3.10	0.00	Y	Arm 5 Left	10.00	5.0 %	1911	1911
				Arm 8 Ahead	Inf	95.0 %		
3/2 (College Road)	3.10	0.00	Y	Arm 7 Right	16.00	84.3 %	1758	1758
				Arm 9 Right	15.00	15.7 %		
4/1 (Hartsdown Road Entry)	3.00	0.00	Y	Arm 5 Ahead	Inf	42.3 %	1755	1755
				Arm 6 Left	10.00	45.0 %		
				Arm 8 Right	8.00	12.8 %		
5/1 (Nash Road (East) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Tivoli Road Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Hartsdown Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Manston Road south (Exit) Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (College Road to Tivoli Road)	3.25	0.00	Y	Arm 6 Right	15.00	100.0 %	1764	1764

Full Input Data And Results

Scenario 4: '2039 Base + Dev - Net Change - AM Peak' (FG10: '2039 Base + Dev - Net Change - AM Peak', Plan 2: 'AM Peak Development Traffic Mitigation Early Cut-Off')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	0	278	66	344
	B	0	0	43	517	560
	C	351	85	0	160	596
	D	30	473	253	53	809
	Tot.	381	558	574	796	2309

Traffic Lane Flows

Lane	Scenario 4: 2039 Base + Dev - Net Change - AM Peak
Junction: Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd	
1/1 (with short)	560(In) 560(Out)
1/2 (short)	0
2/1	344
3/1 (with short)	809(In) 503(Out)
3/2 (short)	306
4/1	596
5/1	381
6/1	796
7/1	574
8/1	558
9/1	53

Full Input Data And Results

Lane Saturation Flows

Junction: Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Manston Road south (Entry))	2.45	0.00	Y	Arm 6 Ahead	Inf	92.3 %	1849	1849
				Arm 7 Left	19.00	7.7 %		
1/2 (Manston Road south (Entry))	2.25	0.00	Y	Arm 5 Right	12.00	0.0 %	1840	1840
2/1 (Nash Road (East) Entry)	3.50	0.00	Y	Arm 6 Right	15.00	19.2 %	1928	1928
				Arm 7 Ahead	Inf	80.8 %		
				Arm 8 Left	15.00	0.0 %		
3/1 (College Road)	3.10	0.00	Y	Arm 5 Left	10.00	6.0 %	1908	1908
				Arm 8 Ahead	Inf	94.0 %		
3/2 (College Road)	3.10	0.00	Y	Arm 7 Right	16.00	82.7 %	1758	1758
				Arm 9 Right	15.00	17.3 %		
4/1 (Hartsdown Road Entry)	3.00	0.00	Y	Arm 5 Ahead	Inf	58.9 %	1795	1795
				Arm 6 Left	10.00	26.8 %		
				Arm 8 Right	8.00	14.3 %		
5/1 (Nash Road (East) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Tivoli Road Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Hartsdown Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Manston Road south (Exit) Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (College Road to Tivoli Road)	3.25	0.00	Y	Arm 6 Right	15.00	100.0 %	1764	1764

Full Input Data And Results

Scenario 5: '2039 Base + Dev - Net Change - PM peak' (FG11: '2039 Base + Dev - Net Change - PM Peak', Plan 3: 'PM Peak Development Traffic Mitigation Early Cut-Off')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	0	440	72	512
	B	0	0	70	628	698
	C	232	37	0	160	429
	D	19	329	327	89	764
	Tot.	251	366	837	949	2403

Traffic Lane Flows

Lane	Scenario 5: 2039 Base + Dev - Net Change - PM peak
Junction: Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd	
1/1 (with short)	698(In) 698(Out)
1/2 (short)	0
2/1	512
3/1 (with short)	764(In) 348(Out)
3/2 (short)	416
4/1	429
5/1	251
6/1	949
7/1	837
8/1	366
9/1	89

Full Input Data And Results

Lane Saturation Flows

Junction: Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Manston Road south (Entry))	2.45	0.00	Y	Arm 6 Ahead	Inf	90.0 %	1845	1845
				Arm 7 Left	19.00	10.0 %		
1/2 (Manston Road south (Entry))	2.25	0.00	Y	Arm 5 Right	12.00	0.0 %	1840	1840
2/1 (Nash Road (East) Entry)	3.50	0.00	Y	Arm 6 Right	15.00	14.1 %	1938	1938
				Arm 7 Ahead	Inf	85.9 %		
				Arm 8 Left	15.00	0.0 %		
3/1 (College Road)	3.10	0.00	Y	Arm 5 Left	10.00	5.5 %	1909	1909
				Arm 8 Ahead	Inf	94.5 %		
3/2 (College Road)	3.10	0.00	Y	Arm 7 Right	16.00	78.6 %	1758	1758
				Arm 9 Right	15.00	21.4 %		
4/1 (Hartsdown Road Entry)	3.00	0.00	Y	Arm 5 Ahead	Inf	54.1 %	1786	1786
				Arm 6 Left	10.00	37.3 %		
				Arm 8 Right	8.00	8.6 %		
5/1 (Nash Road (East) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Tivoli Road Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Hartsdown Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Manston Road south (Exit) Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (College Road to Tivoli Road)	3.25	0.00	Y	Arm 6 Right	15.00	100.0 %	1764	1764

Full Input Data And Results

Scenario 6: '2039 Base + Dev - Net Change - Airport peak' (FG12: '2039 Base + Dev - Net Change - Airport Peak', Plan 4: 'Airport Peak Development Traffic Mitigation Early Cut-Off')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	0	282	55	337
	B	0	0	63	436	499
	C	198	62	0	152	412
	D	23	407	241	59	730
	Tot.	221	469	586	702	1978

Traffic Lane Flows

Lane	Scenario 6: 2039 Base + Dev - Net Change - Airport peak
Junction: Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd	
1/1 (with short)	499(In) 499(Out)
1/2 (short)	0
2/1	337
3/1 (with short)	730(In) 430(Out)
3/2 (short)	300
4/1	412
5/1	221
6/1	702
7/1	586
8/1	469
9/1	59

Full Input Data And Results

Lane Saturation Flows

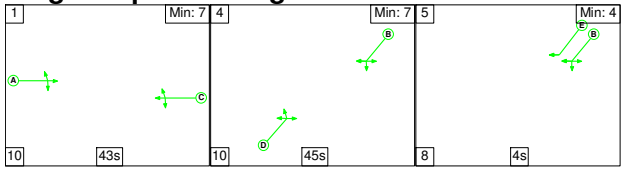
Junction: Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Manston Road south (Entry))	2.45	0.00	Y	Arm 6 Ahead	Inf	87.4 %	1842	1842
				Arm 7 Left	19.00	12.6 %		
1/2 (Manston Road south (Entry))	2.25	0.00	Y	Arm 5 Right	12.00	0.0 %	1840	1840
2/1 (Nash Road (East) Entry)	3.50	0.00	Y	Arm 6 Right	15.00	16.3 %	1933	1933
				Arm 7 Ahead	Inf	83.7 %		
				Arm 8 Left	15.00	0.0 %		
3/1 (College Road)	3.10	0.00	Y	Arm 5 Left	10.00	5.3 %	1910	1910
				Arm 8 Ahead	Inf	94.7 %		
3/2 (College Road)	3.10	0.00	Y	Arm 7 Right	16.00	80.3 %	1758	1758
				Arm 9 Right	15.00	19.7 %		
4/1 (Hartsdown Road Entry)	3.00	0.00	Y	Arm 5 Ahead	Inf	48.1 %	1767	1767
				Arm 6 Left	10.00	36.9 %		
				Arm 8 Right	8.00	15.0 %		
5/1 (Nash Road (East) Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Tivoli Road Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Hartsdown Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Manston Road south (Exit) Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (College Road to Tivoli Road)	3.25	0.00	Y	Arm 6 Right	15.00	100.0 %	1764	1764

Full Input Data And Results

Scenario 1: '2039 + Dev Traffic - AM Peak' (FG7: '2039 + Dev Traffic - AM Peak', Plan 2: 'AM Peak Development Traffic Mitigation Early Cut-Off')

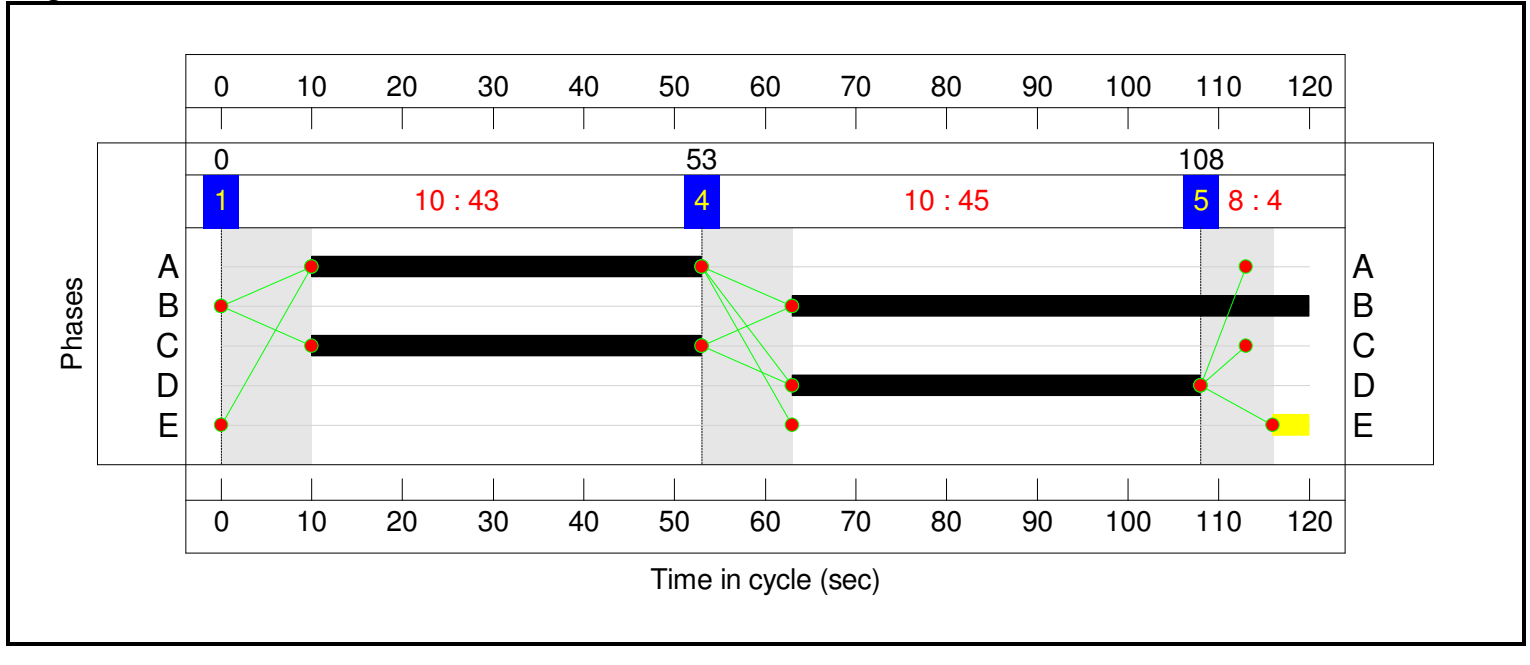
Stage Sequence Diagram



Stage Timings

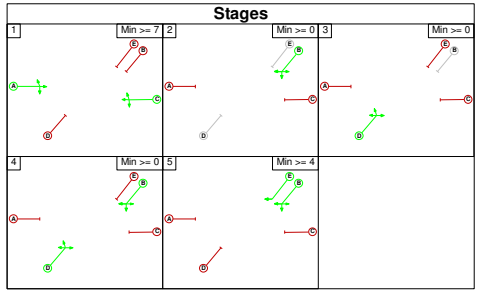
Stage	1	4	5
Duration	43	45	4
Change Point	0	53	108

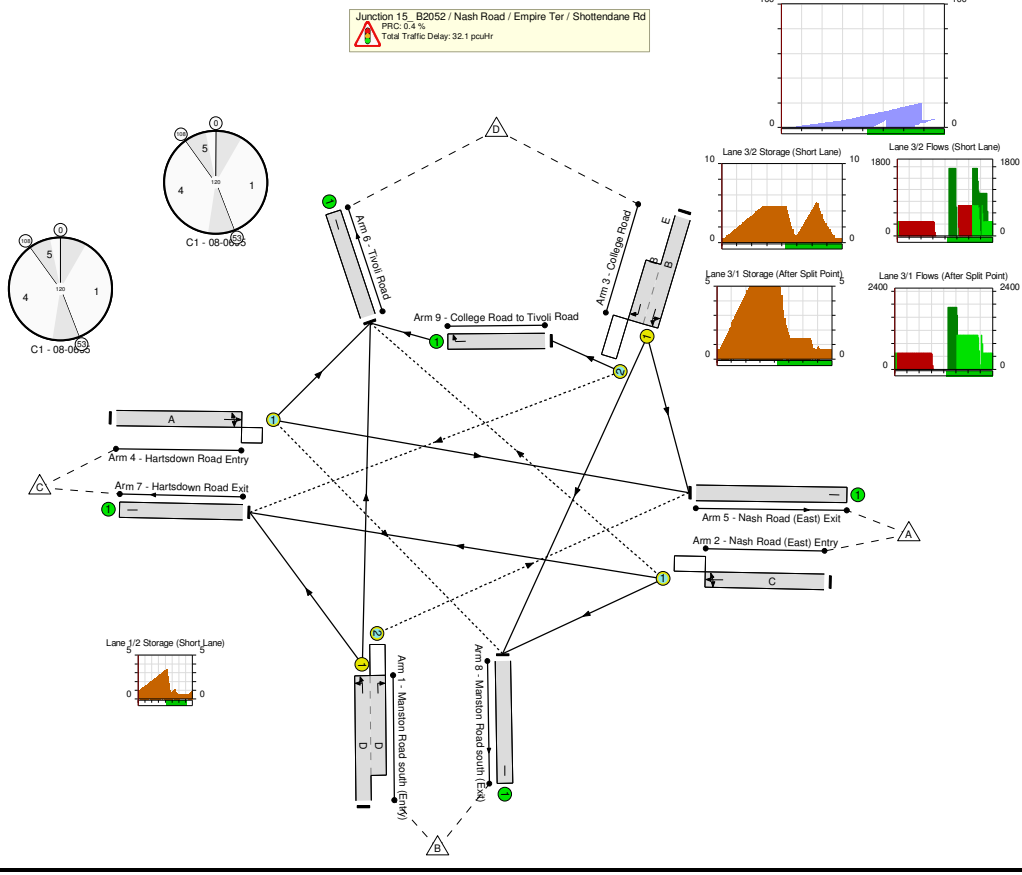
Signal Timings Diagram



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 15	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**89.6%**
Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**89.6%**
1/1+1/2	Manston Road south (Entry) Right Ahead Left	U+O	N/A	N/A	D		1	45	-	591	1849:1636	621+196	72.3 : 72.3%
2/1	Nash Road (East) Entry Right Ahead Left	O	N/A	N/A	C		1	43	-	333	1894	486	68.6%
3/1+3/2	College Road Left Right Ahead Right2	U+O	N/A	N/A	B	E	1	57	4	875	1908:1759	567+425	88.2 : 88.2%
4/1	Hartsdown Road Entry Ahead Left Right	O	N/A	N/A	A		1	43	-	587	1786	655	89.6%
5/1	Nash Road (East) Exit	U	N/A	N/A	-		-	-	-	495	Inf	Inf	0.0%
6/1	Tivoli Road	U	N/A	N/A	-		-	-	-	720	Inf	Inf	0.0%
7/1	Hartsdown Road Exit	U	N/A	N/A	-		-	-	-	565	Inf	Inf	0.0%
8/1	Manston Road south (Exit)	U	N/A	N/A	-		-	-	-	606	Inf	Inf	0.0%
9/1	College Road to Tivoli Road Right	U	N/A	N/A	-		-	-	-	53	1764	1764	3.0%

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 15	**-**	**-**	**443**	**137**	**27**	**19.6**	**9.8**	**2.7**	**32.1**	**-**	**-**	**-**	**-**
Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd	**-**	**-**	**443**	**137**	**27**	**19.6**	**9.8**	**2.7**	**32.1**	**-**	**-**	**-**	**-**
1/1+1/2	591	591	142	0	0	4.8	1.3	0.9	6.9	42.3	12.2	1.3	13.5
2/1	333	333	50	0	16	2.7	1.1	0.5	4.3	46.3	8.5	1.1	9.6
3/1+3/2	875	875	174	137	11	6.3	3.5	1.2	11.0	45.5	19.8	3.5	23.3
4/1	587	587	77	0	0	5.8	3.9	0.1	9.8	60.2	18.4	3.9	22.3
5/1	495	495	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	720	720	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	565	565	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	606	606	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	53	53	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0

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PRC for Signalled Lanes (%): 0.4
PRC Over All Lanes (%): 0.4

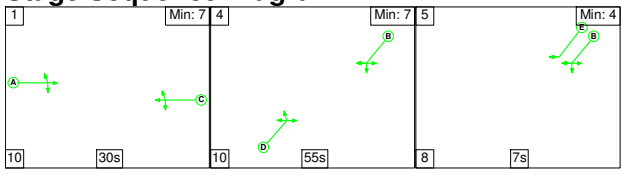
Total Delay for Signalled Lanes (pcuHr): 32.09
Total Delay Over All Lanes(pcuHr): 32.10

Cycle Time (s): 120

Full Input Data And Results

Scenario 2: '2039 + Dev Traffic - PM Peak' (FG8: '2039 + Dev Traffic - PM Peak', Plan 3: 'PM Peak Development Traffic Mitigation Early Cut-Off')

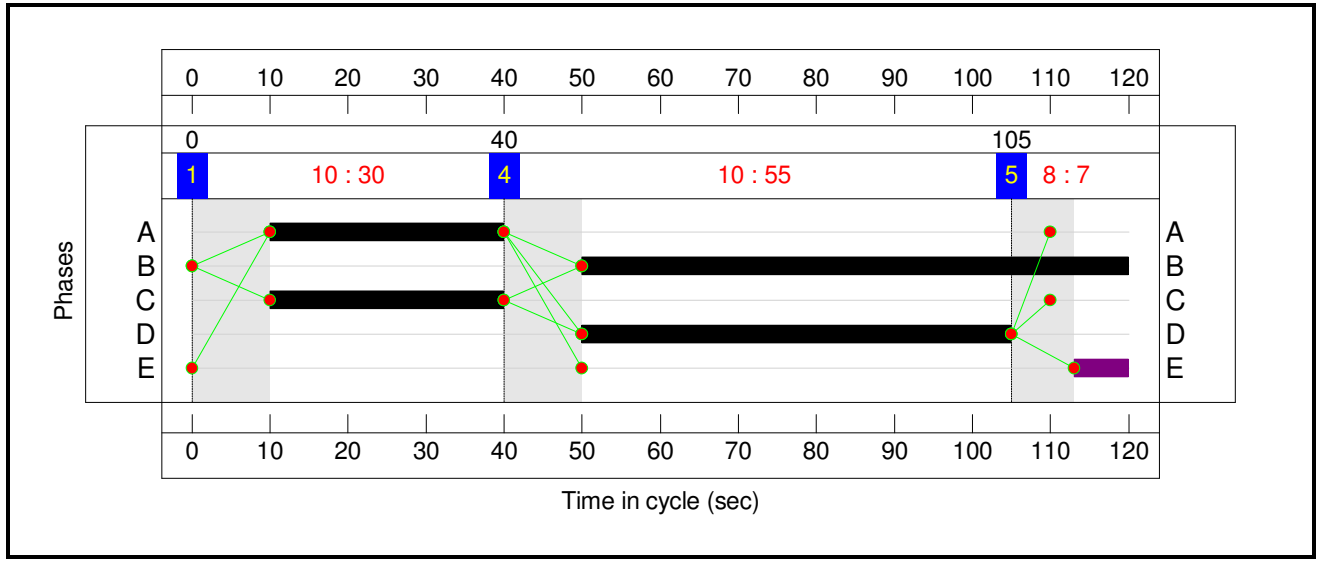
Stage Sequence Diagram



Stage Timings

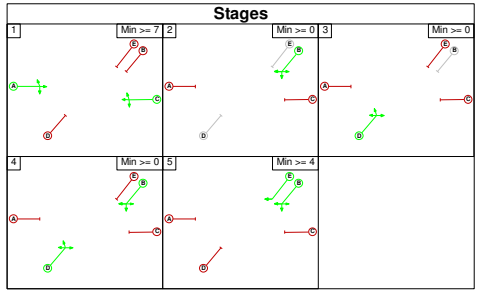
Stage	1	4	5
Duration	30	55	7
Change Point	0	40	105

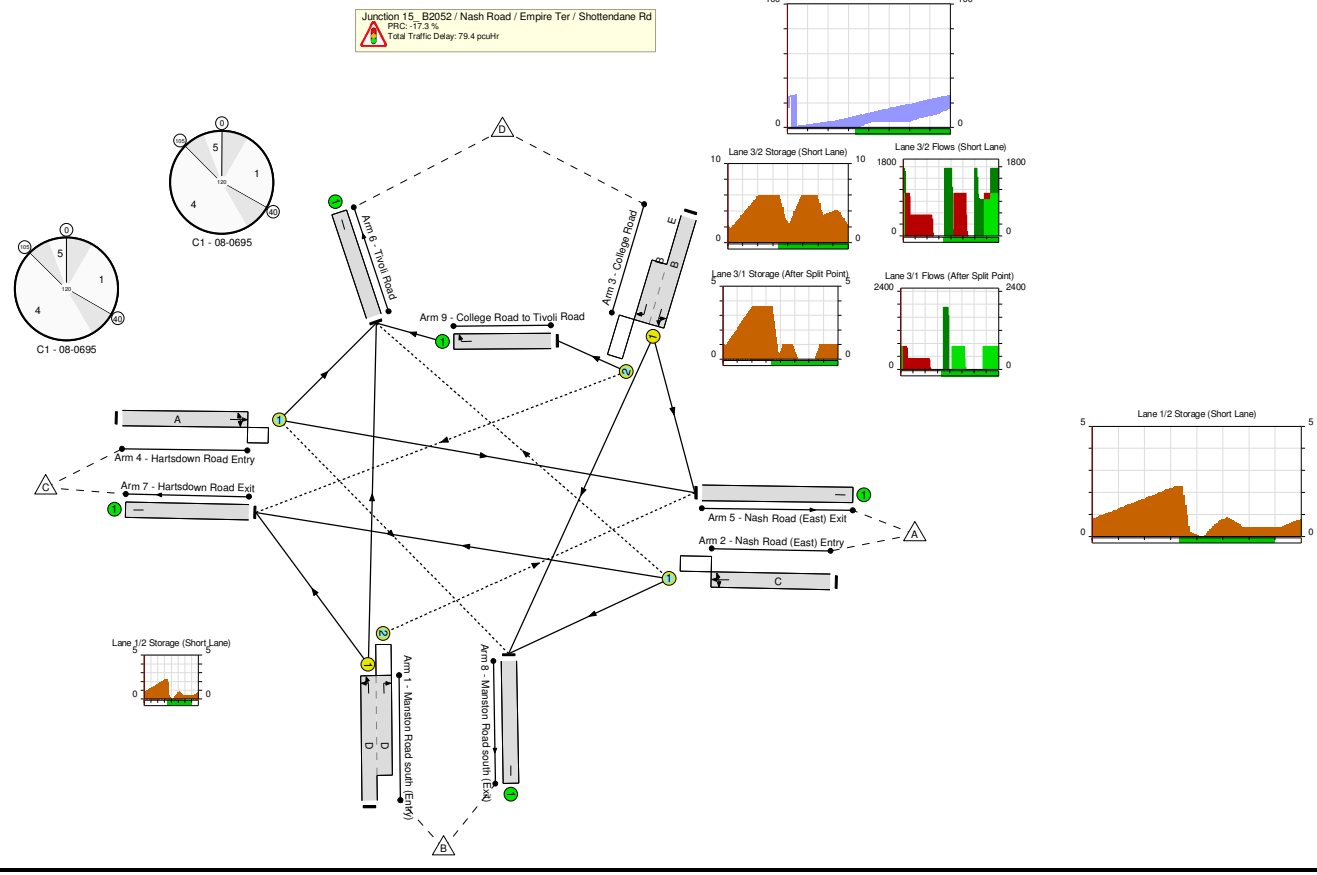
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram





Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 15	-	-	**N/A**	-	-		-	-	-	-	-	-	**105.6%**
Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd	-	-	**N/A**	-	-		-	-	-	-	-	-	**105.6%**
1/1+1/2	Manston Road south (Entry) Right Ahead Left	U+O	N/A	N/A	D		1	55	-	708	1845:1636	779+145	76.6 : 76.6%
2/1	Nash Road (East) Entry Right Ahead Left	O	N/A	N/A	C		1	30	-	510	1893	483	105.6%
3/1+3/2	College Road Left Right Ahead Right2	U+O	N/A	N/A	B	E	1	70	7	882	1909:1758	331+517	104.0 : 104.0%
4/1	Hartsdown Road Entry Ahead Left Right	O	N/A	N/A	A		1	30	-	420	1777	459	91.5%
5/1	Nash Road (East) Exit	U	N/A	N/A	-		-	-	-	340	Inf	Inf	0.0%
6/1	Tivoli Road	U	N/A	N/A	-		-	-	-	879	Inf	Inf	0.0%
7/1	Hartsdown Road Exit	U	N/A	N/A	-		-	-	-	827	Inf	Inf	0.0%
8/1	Manston Road south (Exit)	U	N/A	N/A	-		-	-	-	474	Inf	Inf	0.0%
9/1	College Road to Tivoli Road Right	U	N/A	N/A	-		-	-	-	89	1764	1764	4.9%

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 15	**-**	**-**	**293**	**190**	**156**	**25.6**	**51.5**	**2.3**	**79.4**	**-**	**-**	**-**	**-**
Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd	**-**	**-**	**293**	**190**	**156**	**25.6**	**51.5**	**2.3**	**79.4**	**-**	**-**	**-**	**-**
1/1+1/2	708	708	111	0	0	4.8	1.6	0.1	6.5	33.3	16.6	1.6	18.3
2/1	510	486	27	0	41	7.7	19.9	0.3	27.9	197.0	17.8	19.9	37.7
3/1+3/2	882	848	154	190	87	8.1	25.5	1.7	35.3	144.1	27.2	25.5	52.7
4/1	420	420	0	0	28	5.0	4.4	0.1	9.6	82.0	13.5	4.4	17.9
5/1	339	339	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	872	872	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	795	795	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	456	456	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	86	86	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0

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PRC for Signalled Lanes (%): -17.3
PRC Over All Lanes (%): -17.3

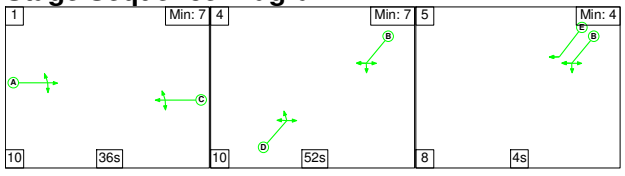
Total Delay for Signalled Lanes (pcuHr): 79.34
Total Delay Over All Lanes(pcuHr): 79.37

Cycle Time (s): 120

Full Input Data And Results

Scenario 3: '2039 + Dev Traffic - Airport Peak' (FG9: '2039 + Dev Traffic - Airport Peak', Plan 4: 'Airport Peak Development Traffic Mitigation Early Cut-Off')

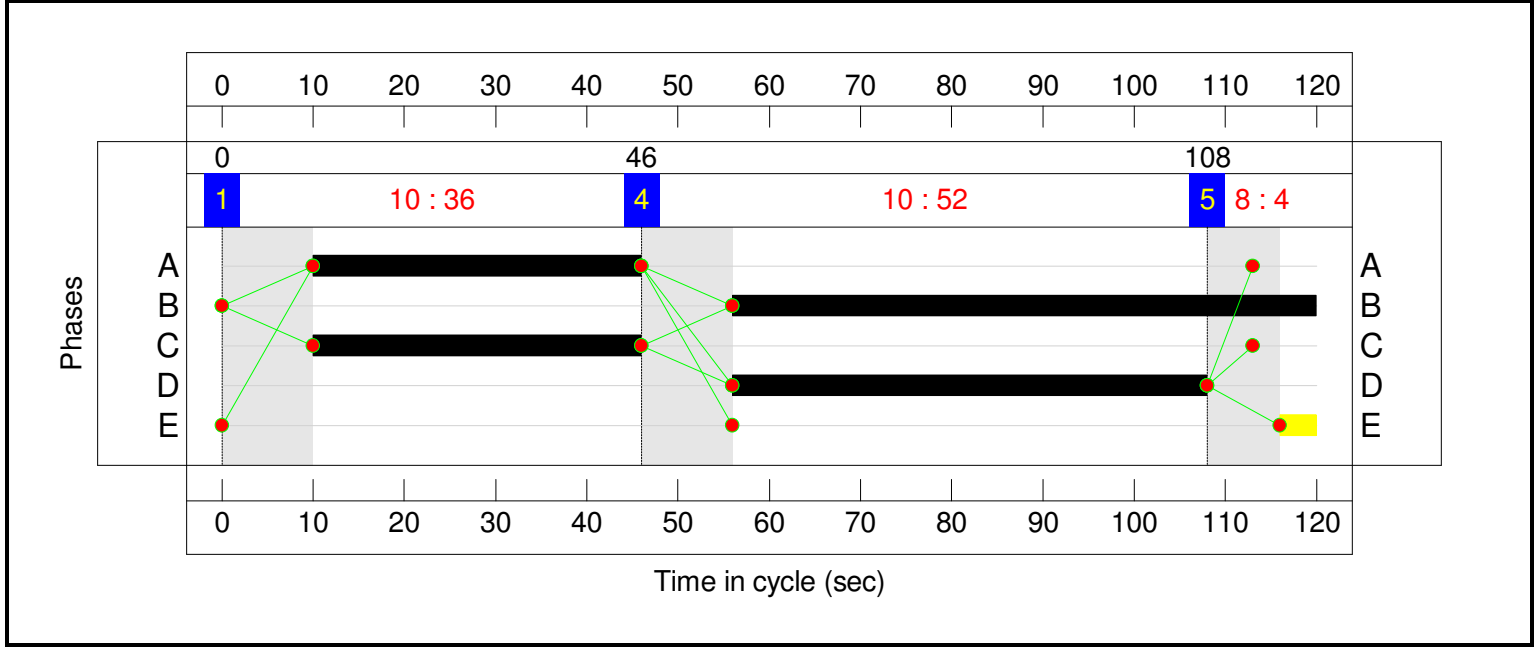
Stage Sequence Diagram



Stage Timings

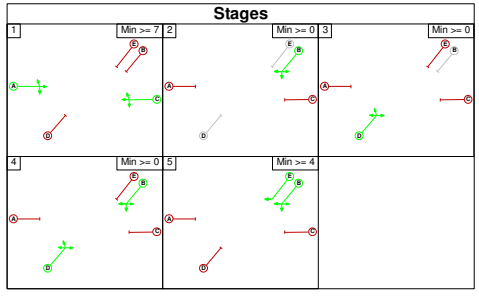
Stage	1	4	5
Duration	36	52	4
Change Point	0	46	108

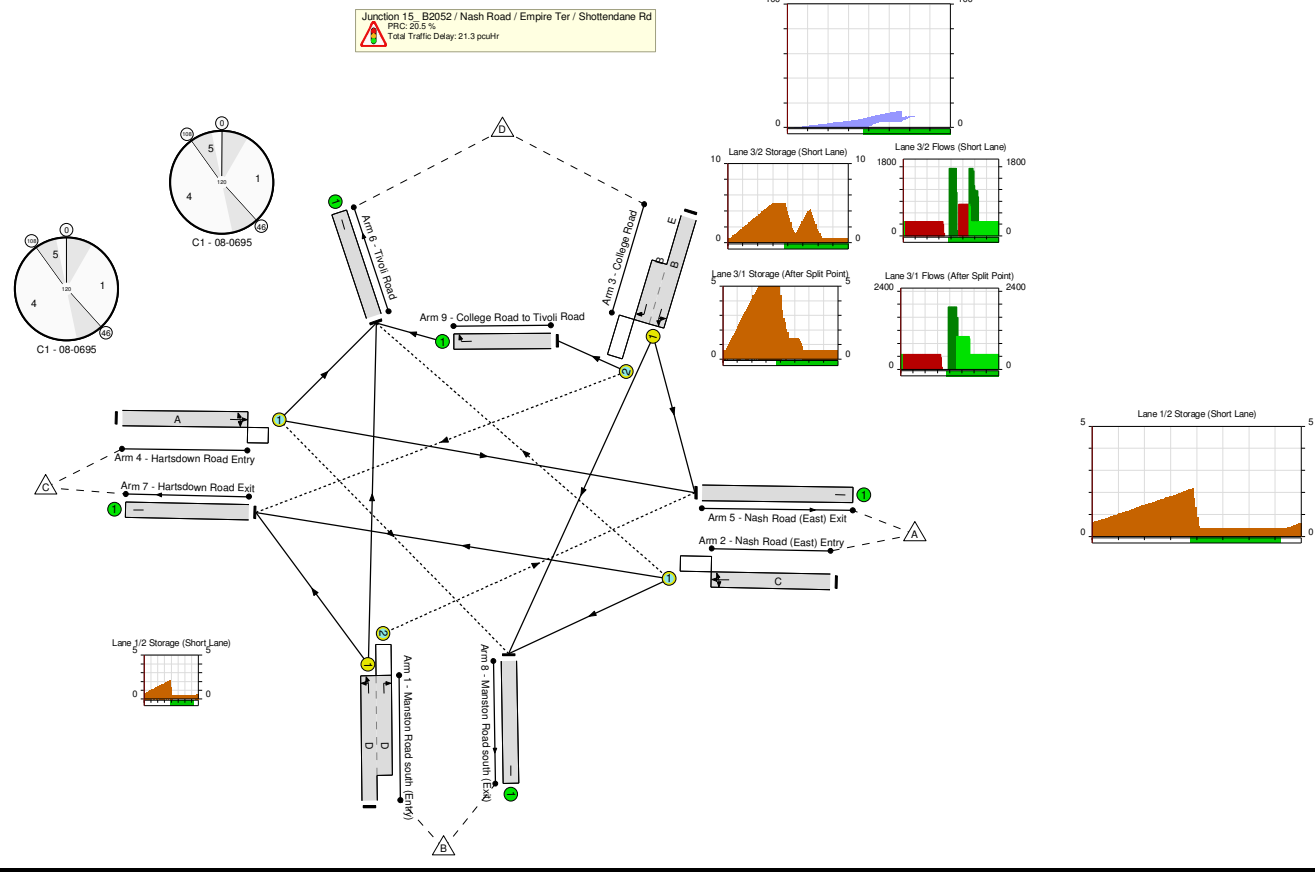
Signal Timings Diagram



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 15	-	-	**N/A**	-	-		-	-	-	-	-	-	**74.7%**
Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd	-	-	**N/A**	-	-		-	-	-	-	-	-	**74.7%**
1/1+1/2	Manston Road south (Entry) Right Ahead Left	U+O	N/A	N/A	D		1	52	-	512	1841:1636	724+169	57.3 : 57.3%
2/1	Nash Road (East) Entry Right Ahead Left	O	N/A	N/A	C		1	36	-	353	1886	561	62.9%
3/1+3/2	College Road Left Right Ahead Right2	U+O	N/A	N/A	B	E	1	64	4	836	1911:1758	631+516	72.9 : 72.9%
4/1	Hartsdown Road Entry Ahead Left Right	O	N/A	N/A	A		1	36	-	400	1755	536	74.7%
5/1	Nash Road (East) Exit	U	N/A	N/A	-		-	-	-	289	Inf	Inf	0.0%
6/1	Tivoli Road	U	N/A	N/A	-		-	-	-	656	Inf	Inf	0.0%
7/1	Hartsdown Road Exit	U	N/A	N/A	-		-	-	-	575	Inf	Inf	0.0%
8/1	Manston Road south (Exit)	U	N/A	N/A	-		-	-	-	581	Inf	Inf	0.0%
9/1	College Road to Tivoli Road Right	U	N/A	N/A	-		-	-	-	59	1764	1764	3.3%

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 15	**-**	**-**	**476**	**33**	**11**	**15.3**	**4.3**	**1.8**	**21.3**	**-**	**-**	**-**	**-**
Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd	**-**	**-**	**476**	**33**	**11**	**15.3**	**4.3**	**1.8**	**21.3**	**-**	**-**	**-**	**-**
1/1+1/2	512	512	97	0	0	3.3	0.7	0.4	4.4	30.6	9.9	0.7	10.6
2/1	353	353	55	0	0	3.5	0.8	0.2	4.5	46.2	10.0	0.8	10.8
3/1+3/2	836	836	273	33	11	4.4	1.3	1.1	6.7	29.0	13.9	1.3	15.2
4/1	400	400	51	0	0	4.1	1.4	0.1	5.7	51.2	11.9	1.4	13.3
5/1	289	289	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	656	656	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	575	575	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	581	581	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	59	59	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0

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PRC for Signalled Lanes (%): 20.5
PRC Over All Lanes (%): 20.5

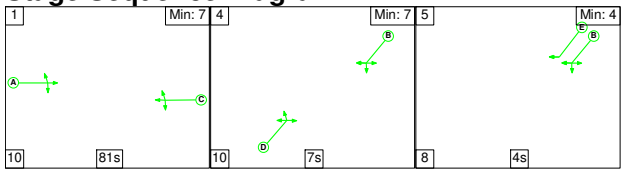
Total Delay for Signalled Lanes (pcuHr): 21.33
Total Delay Over All Lanes(pcuHr): 21.35

Cycle Time (s): 120

Full Input Data And Results

Scenario 4: '2039 Base + Dev - Net Change - AM Peak' (FG10: '2039 Base + Dev - Net Change - AM Peak', Plan 2: 'AM Peak Development Traffic Mitigation Early Cut-Off')

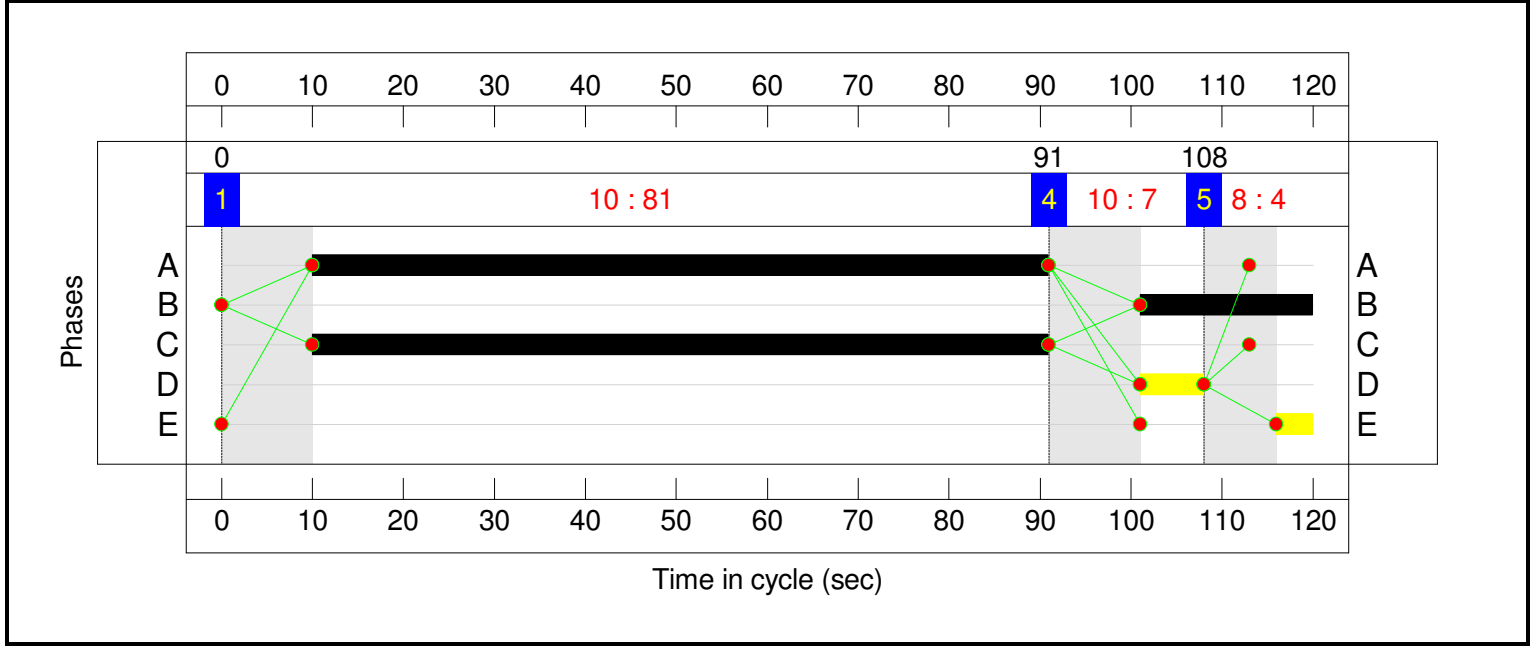
Stage Sequence Diagram



Stage Timings

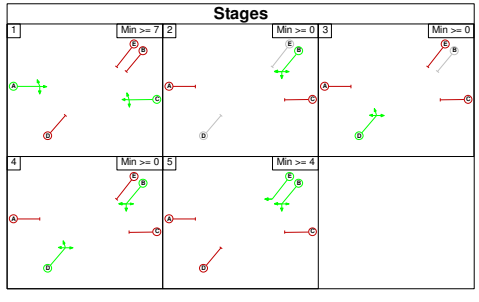
Stage	1	4	5
Duration	81	7	4
Change Point	0	91	108

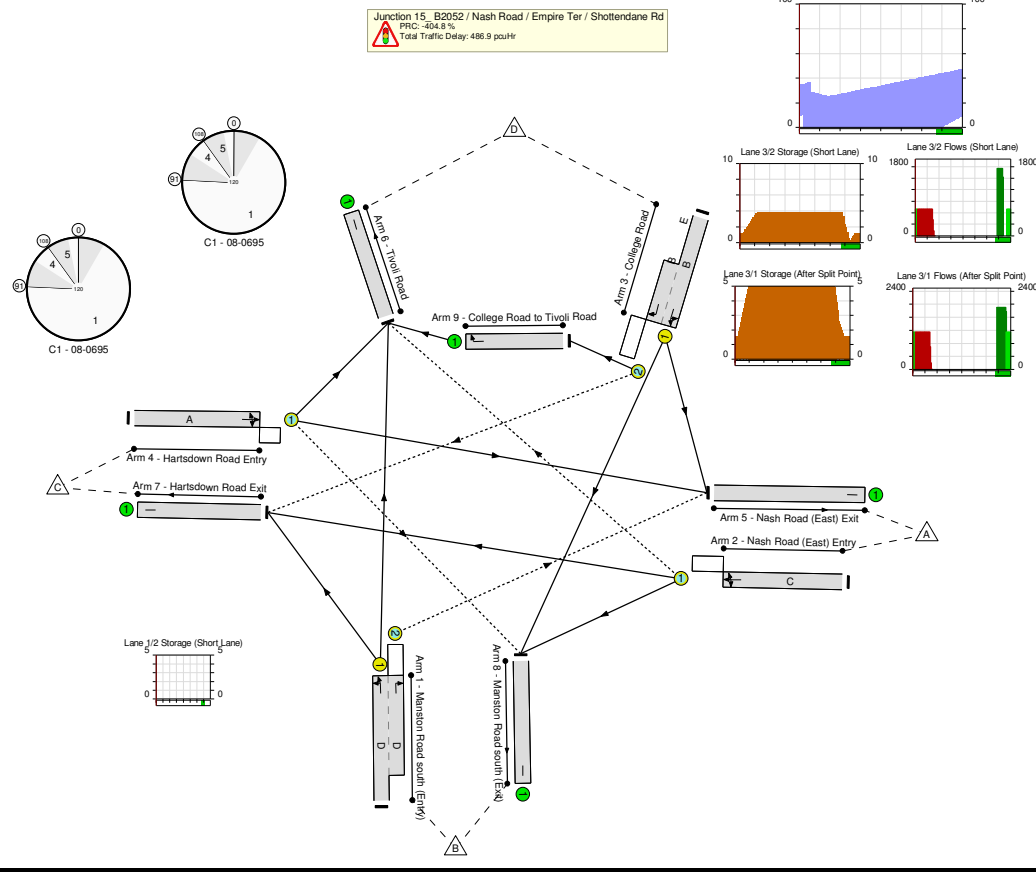
Signal Timings Diagram



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 15	-	-	**N/A**	-	-		-	-	-	-	-	-	**454.3%**
Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd	-	-	**N/A**	-	-		-	-	-	-	-	-	**454.3%**
1/1+1/2	Manston Road south (Entry) Right Ahead Left	U+O	N/A	N/A	D		1	7	-	560	1849:1840	123+0	454.3 : 0.0%
2/1	Nash Road (East) Entry Right Ahead Left	O	N/A	N/A	C		1	81	-	344	1928	1295	26.6%
3/1+3/2	College Road Left Right Ahead Right2	U+O	N/A	N/A	B	E	1	19	4	809	1908:1758	266+162	189.0 : 189.0%
4/1	Hartsdown Road Entry Ahead Left Right	O	N/A	N/A	A		1	81	-	596	1795	1227	48.6%
5/1	Nash Road (East) Exit	U	N/A	N/A	-		-	-	-	381	Inf	Inf	0.0%
6/1	Tivoli Road	U	N/A	N/A	-		-	-	-	796	Inf	Inf	0.0%
7/1	Hartsdown Road Exit	U	N/A	N/A	-		-	-	-	574	Inf	Inf	0.0%
8/1	Manston Road south (Exit)	U	N/A	N/A	-		-	-	-	558	Inf	Inf	0.0%
9/1	College Road to Tivoli Road Right	U	N/A	N/A	-		-	-	-	53	1764	1764	1.6%

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 15	**-**	**-**	**150**	**115**	**20**	**75.4**	**411.2**	**0.3**	**486.9**	**-**	**-**	**-**	**-**
Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd	**-**	**-**	**150**	**115**	**20**	**75.4**	**411.2**	**0.3**	**486.9**	**-**	**-**	**-**	**-**
1/1+1/2	560	123	0	0	0	36.4	219.0	0.0	255.4	1641.6	46.1	219.0	265.1
2/1	344	344	65	0	1	0.7	0.2	0.1	1.0	10.5	4.4	0.2	4.6
3/1+3/2	809	428	0	115	19	36.9	191.5	0.1	228.5	1016.9	47.6	191.5	239.1
4/1	596	596	85	0	0	1.5	0.5	0.0	2.0	12.0	9.3	0.5	9.7
5/1	367	367	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	368	368	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	421	421	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	335	335	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	28	28	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0

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PRC for Signalled Lanes (%): -404.8
PRC Over All Lanes (%): -404.8

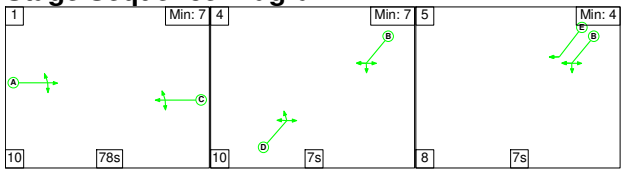
Total Delay for Signalled Lanes (pcuHr): 486.87
Total Delay Over All Lanes(pcuHr): 486.88

Cycle Time (s): 120

Full Input Data And Results

Scenario 5: '2039 Base + Dev - Net Change - PM peak' (FG11: '2039 Base + Dev - Net Change - PM Peak', Plan 3: 'PM Peak Development Traffic Mitigation Early Cut-Off')

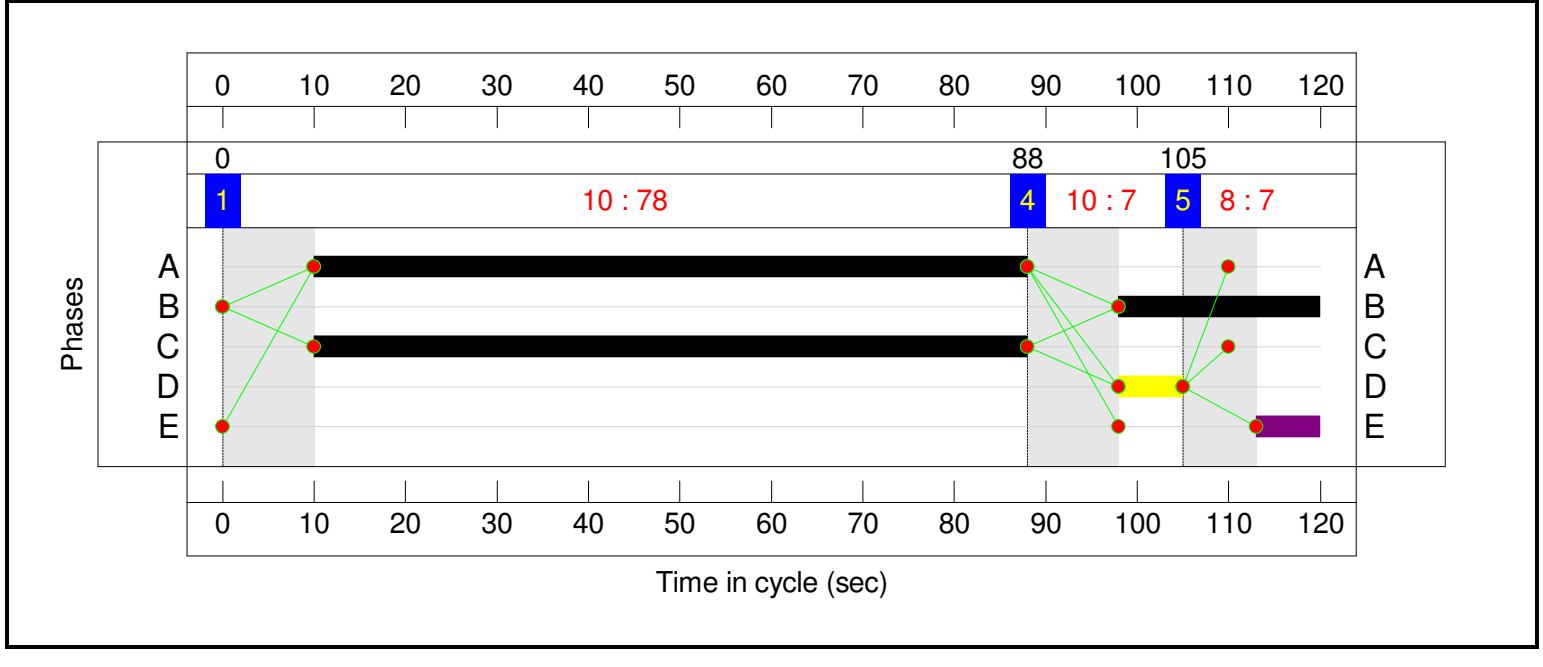
Stage Sequence Diagram



Stage Timings

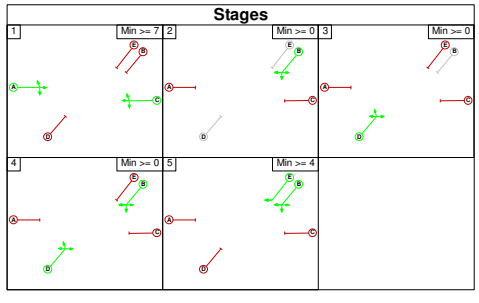
Stage	1	4	5
Duration	78	7	7
Change Point	0	88	105

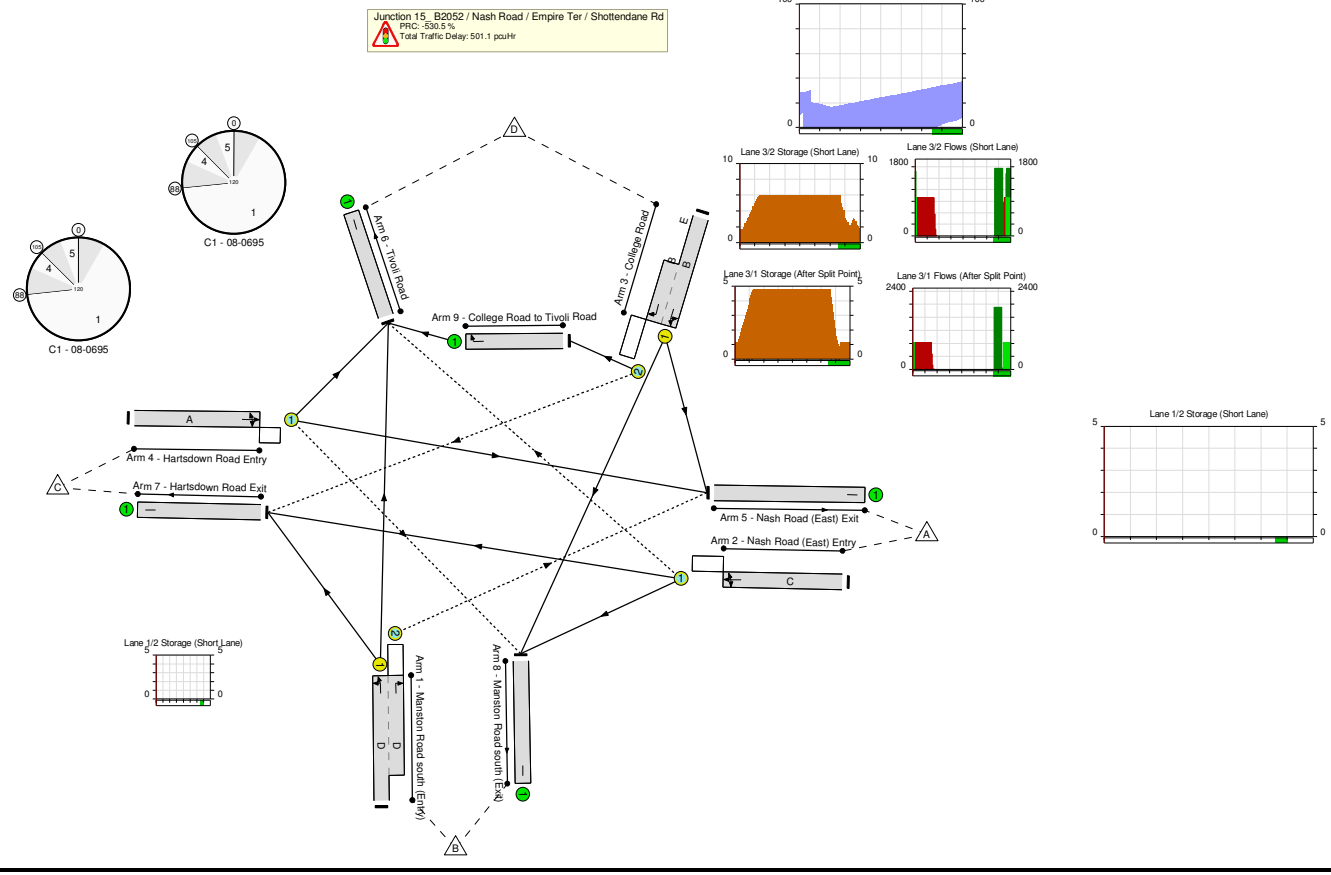
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram





Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 15	-	-	**N/A**	-	-		-	-	-	-	-	-	**567.5%**
Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd	-	-	**N/A**	-	-		-	-	-	-	-	-	**567.5%**
1/1+1/2	Manston Road south (Entry) Right Ahead Left	U+O	N/A	N/A	D		1	7	-	698	1845:1840	123+0	567.5 : 0.0%
2/1	Nash Road (East) Entry Right Ahead Left	O	N/A	N/A	C		1	78	-	512	1938	1276	40.1%
3/1+3/2	College Road Left Right Ahead Right2	U+O	N/A	N/A	B	E	1	22	7	764	1909:1758	227+271	153.5 : 153.5%
4/1	Hartsdown Road Entry Ahead Left Right	O	N/A	N/A	A		1	78	-	429	1786	1176	36.5%
5/1	Nash Road (East) Exit	U	N/A	N/A	-		-	-	-	251	Inf	Inf	0.0%
6/1	Tivoli Road	U	N/A	N/A	-		-	-	-	949	Inf	Inf	0.0%
7/1	Hartsdown Road Exit	U	N/A	N/A	-		-	-	-	837	Inf	Inf	0.0%
8/1	Manston Road south (Exit)	U	N/A	N/A	-		-	-	-	366	Inf	Inf	0.0%
9/1	College Road to Tivoli Road Right	U	N/A	N/A	-		-	-	-	89	1764	1764	3.3%

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 15	**-**	**-**	**108**	**178**	**36**	**77.6**	**423.3**	**0.3**	**501.1**	**-**	**-**	**-**	**-**
Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd	**-**	**-**	**108**	**178**	**36**	**77.6**	**423.3**	**0.3**	**501.1**	**-**	**-**	**-**	**-**
1/1+1/2	698	123	0	0	0	47.4	288.1	0.0	335.5	1730.2	59.3	288.1	347.4
2/1	512	512	71	0	1	1.4	0.3	0.1	1.8	12.3	7.8	0.3	8.2
3/1+3/2	764	498	0	178	36	27.7	134.5	0.2	162.4	765.4	37.1	134.5	171.7
4/1	429	429	37	0	0	1.1	0.3	0.0	1.4	12.0	6.3	0.3	6.6
5/1	244	244	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	401	401	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	665	665	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	251	251	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	58	58	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0

C1 - 08-0695

PRC for Signalled Lanes (%): -530.5
PRC Over All Lanes (%): -530.5

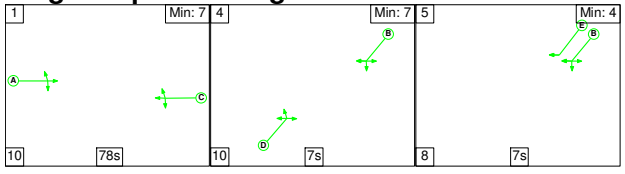
Total Delay for Signalled Lanes (pcuHr): 501.10
Total Delay Over All Lanes(pcuHr): 501.12

Cycle Time (s): 120

Full Input Data And Results

Scenario 6: '2039 Base + Dev - Net Change - Airport peak' (FG12: '2039 Base + Dev - Net Change - Airport Peak', Plan 4: 'Airport Peak Development Traffic Mitigation Early Cut-Off')

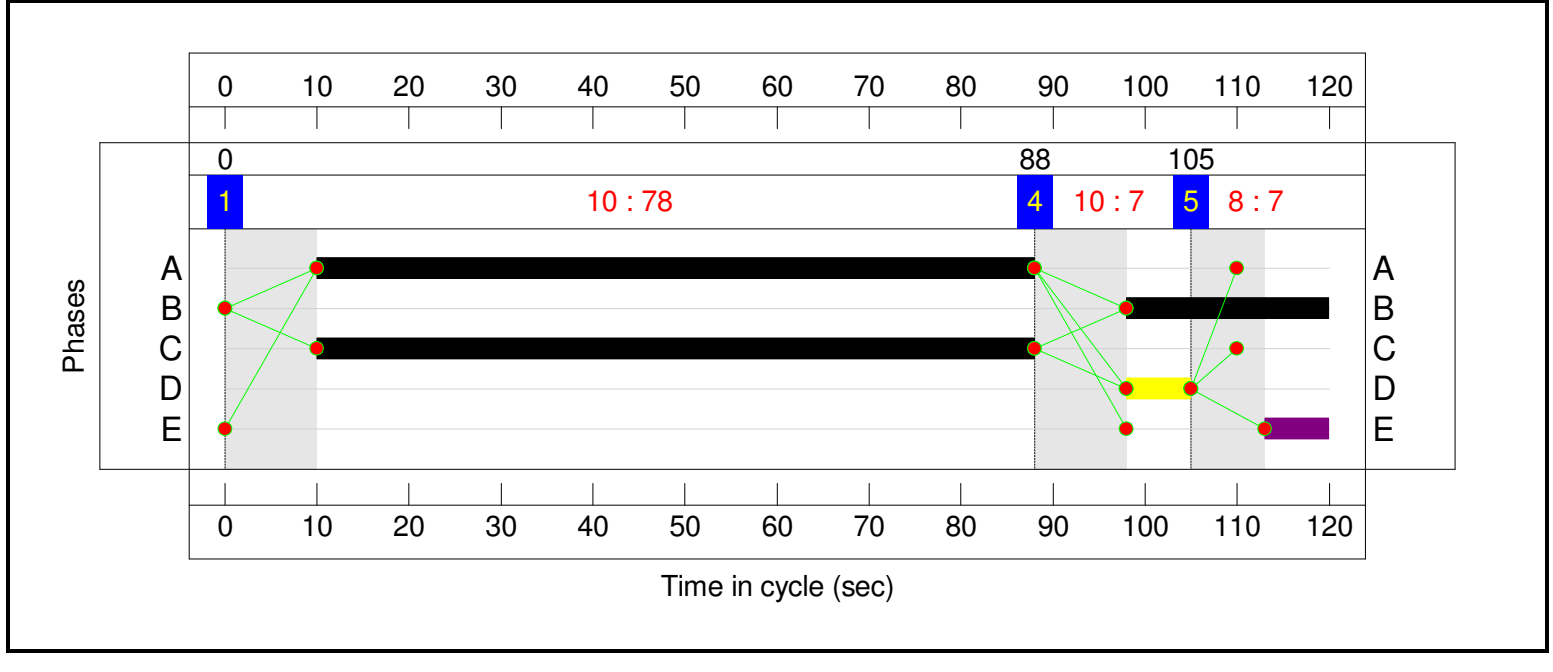
Stage Sequence Diagram



Stage Timings

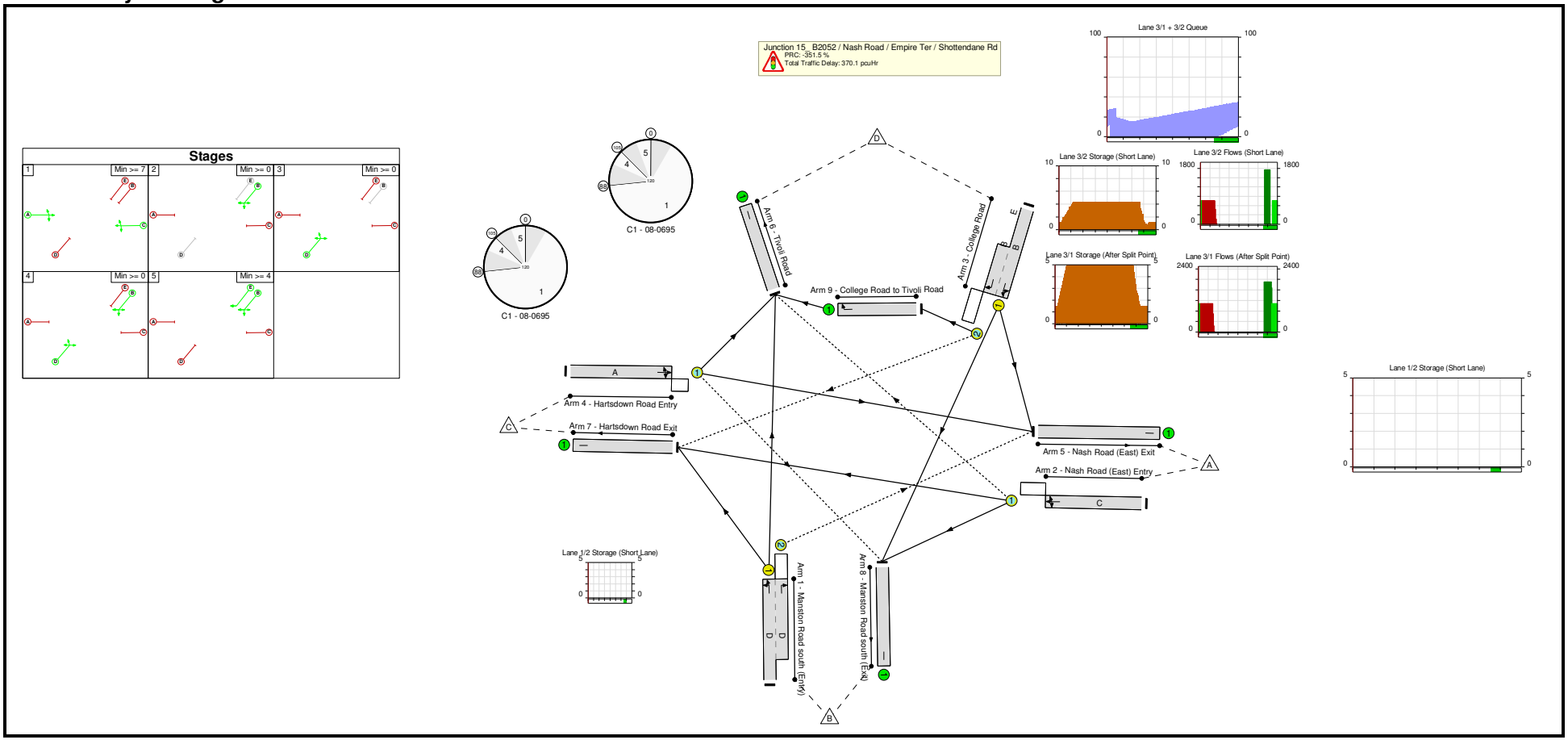
Stage	1	4	5
Duration	78	7	7
Change Point	0	88	105

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 15	-	-	**N/A**	-	-		-	-	-	-	-	-	**406.4%**
Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd	-	-	**N/A**	-	-		-	-	-	-	-	-	**406.4%**
1/1+1/2	Manston Road south (Entry) Right Ahead Left	U+O	N/A	N/A	D		1	7	-	499	1842:1840	123+0	406.4 : 0.0%
2/1	Nash Road (East) Entry Right Ahead Left	O	N/A	N/A	C		1	78	-	337	1933	1273	26.5%
3/1+3/2	College Road Left Right Ahead Right2	U+O	N/A	N/A	B	E	1	22	7	730	1910:1758	289+201	149.0 : 149.0%
4/1	Hartsdown Road Entry Ahead Left Right	O	N/A	N/A	A		1	78	-	412	1767	1163	35.4%
5/1	Nash Road (East) Exit	U	N/A	N/A	-		-	-	-	221	Inf	Inf	0.0%
6/1	Tivoli Road	U	N/A	N/A	-		-	-	-	702	Inf	Inf	0.0%
7/1	Hartsdown Road Exit	U	N/A	N/A	-		-	-	-	586	Inf	Inf	0.0%
8/1	Manston Road south (Exit)	U	N/A	N/A	-		-	-	-	469	Inf	Inf	0.0%
9/1	College Road to Tivoli Road Right	U	N/A	N/A	-		-	-	-	59	1764	1764	2.2%

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 15	**-**	**-**	**117**	**141**	**21**	**59.1**	**310.7**	**0.2**	**370.1**	**-**	**-**	**-**	**-**
Junction 15_ B2052 / Nash Road / Empire Ter / Shottendane Rd	**-**	**-**	**117**	**141**	**21**	**59.1**	**310.7**	**0.2**	**370.1**	**-**	**-**	**-**	**-**
1/1+1/2	499	123	0	0	0	31.4	188.8	0.0	220.1	1588.2	40.0	188.8	228.8
2/1	337	337	55	0	0	0.8	0.2	0.1	1.0	11.0	4.6	0.2	4.8
3/1+3/2	730	490	0	141	20	25.9	121.5	0.2	147.5	727.5	35.1	121.5	156.6
4/1	412	412	62	0	0	1.0	0.3	0.0	1.4	11.8	6.1	0.3	6.3
5/1	213	213	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	354	354	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	459	459	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	335	335	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	40	40	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0

C1 - 08-0695

PRC for Signalled Lanes (%): -351.5
PRC Over All Lanes (%): -351.5

Total Delay for Signalled Lanes (pcuHr): 370.05
Total Delay Over All Lanes(pcuHr): 370.06

Cycle Time (s): 120

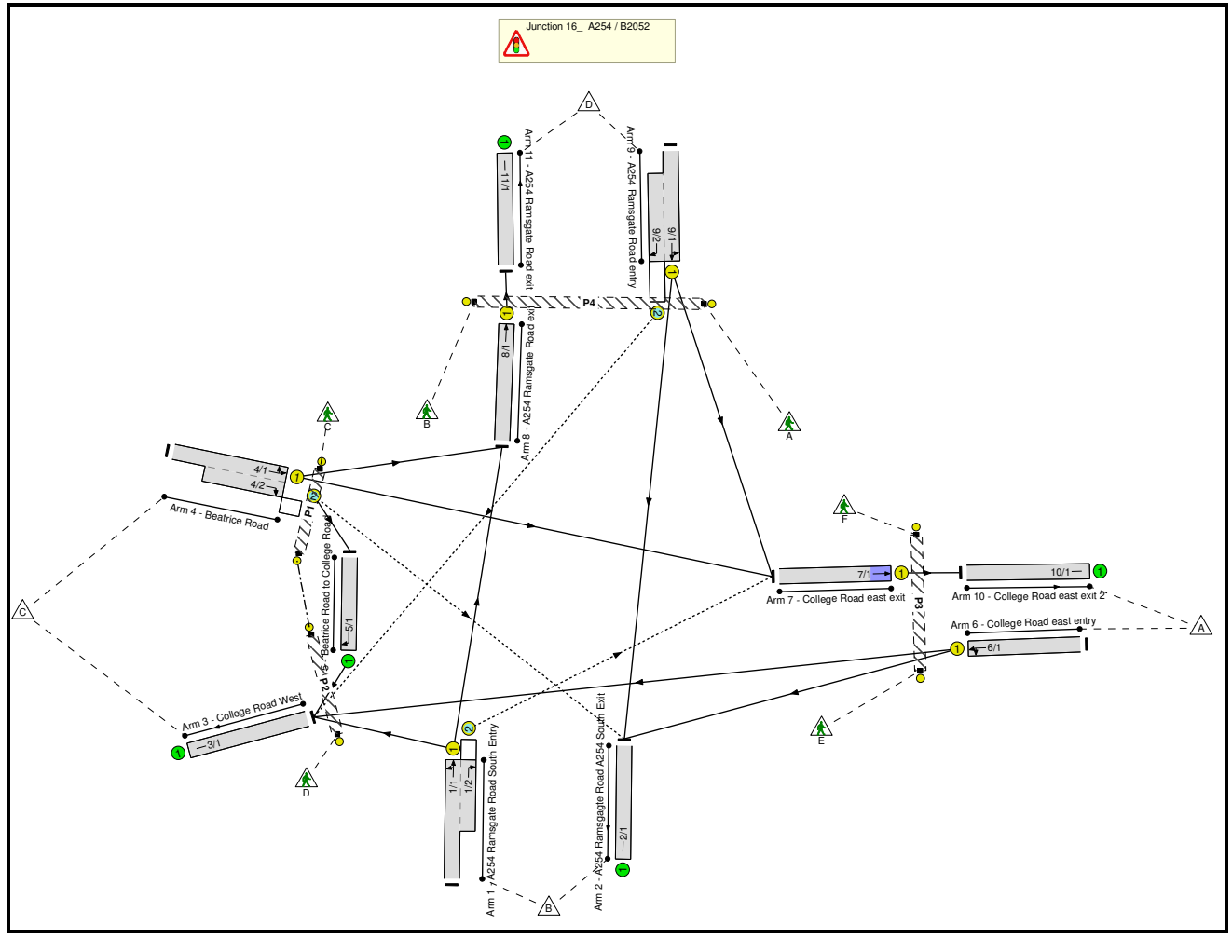
Full Input Data And Results

User and Project Details

Project:	**Manston Airport DCO EIA**
Title:	**Junction 16**
Location:	
File name:	Junction 16_Mitigation_R2.lsg3x
Author:	FOUDA
Company:	Wood
Address:	LEAMINGTON SPA- GABLES HOUSE, KENILWORTH-ROAD,WARWICKSHIRE CV32 6JX
Notes:	

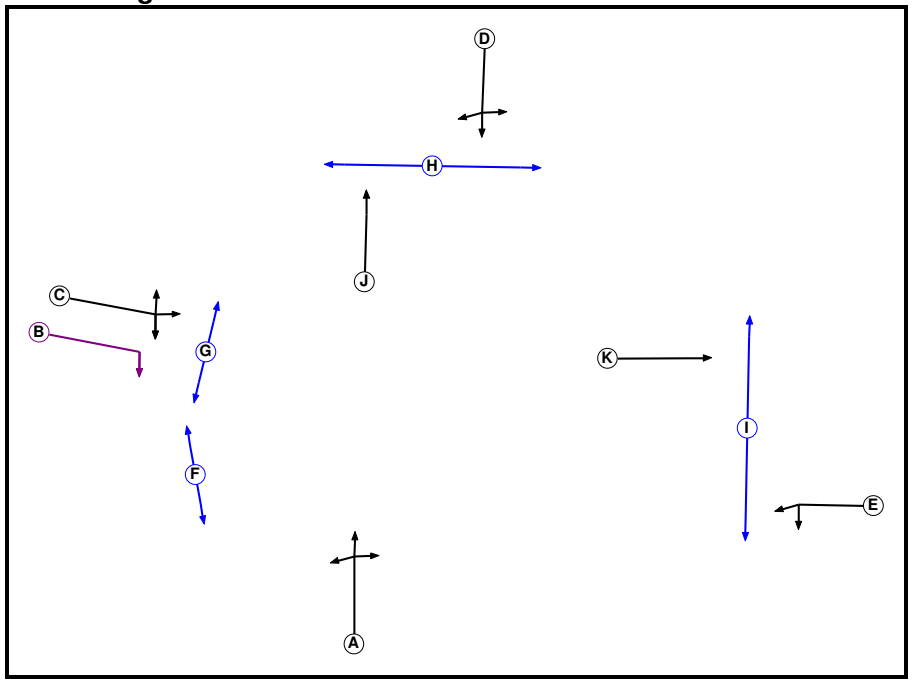
Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Ind. Arrow	C	4	4
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Pedestrian		6	6
G	Pedestrian		6	6
H	Pedestrian		7	7
I	Pedestrian		6	6
J	Traffic		7	7
K	Traffic		7	2

Full Input Data And Results

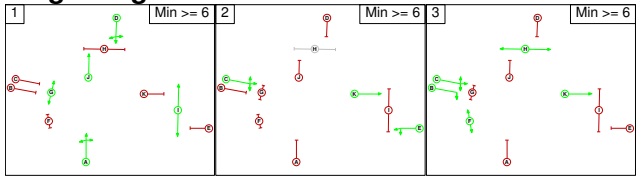
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K
A		6	6	-	6	6	-	-	-	-	-
B	5		-	5	5	-	6	-	-	-	-
C	5	-		5	-	-	6	-	-	-	-
D	-	6	6		6	10	-	6	-	-	-
E	7	6	-	5		10	-	-	6	-	-
F	7	-	-	7	7		-	-	-	-	-
G	-	8	8	-	-	-		-	-	-	-
H	-	-	-	9	-	-	-		-	9	-
I	-	-	-	-	7	-	-	-		-	7
J	-	-	-	-	-	-	-	6	-		-
K	-	-	-	-	-	-	-	-	6	-	

Phases in Stage

Stage No.	Phases in Stage
1	A D G I J
2	C E K
3	B C F H K

Stage Diagram



Full Input Data And Results

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	C	Gaining absolute	7	7
1	2	J	Losing	4	4
2	1	K	Losing	5	5
3	1	K	Losing	5	5

Prohibited Stage Change

From Stage \ To Stage	1	2	3
1		8	10
2	11		10
3	11	7	

Give-Way Lane Input Data

Junction: Junction 16_ A254 / B2052

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/2 (A254 Ramsgate Road South Entry)	7/1 (Right)	1439	0	9/1	1.09	All	2.00	-	0.50	2	2.00
4/2 (Beatrice Road)	2/1 (Right)	1439	0	6/1	1.09	All	2.00	2.00	0.50	2	2.00
9/2 (A254 Ramsgate Road entry)	3/1 (Right)	1439	0	1/1	1.09	All	4.00	-	0.50	4	3.00

Full Input Data And Results

Lane Input Data

Junction: Junction 16_ A254 / B2052

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 (A254 Ramsgate Road South Entry)	U	A	2	3	60.0	Geom	-	2.50	0.00	Y	Arm 3 Left Arm 8 Ahead	8.00 Inf
1/2 (A254 Ramsgate Road South Entry)	O	A	2	3	7.0	Geom	-	2.50	0.00	Y	Arm 7 Right	10.00
2/1 (A254 Ramsgagte Road A254 South Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (College Road West)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1 (Beatrice Road)	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 7 Ahead Arm 8 Left	Inf 15.00
4/2 (Beatrice Road)	O	C B	2	3	8.0	Geom	-	3.00	0.00	Y	Arm 2 Right Arm 5 Right	15.00 8.00
5/1 (Beatrice Road to College Road)	U		2	3	60.0	Geom	-	5.00	0.00	Y	Arm 3 Right	Inf
6/1 (College Road east entry)	U	E	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 2 Left Arm 3 Ahead	Inf Inf
7/1 (College Road east exit)	U	K	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 10 Ahead	Inf
8/1 (A254 Ramsgate Road exit)	U	J	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 11 Ahead	Inf
9/1 (A254 Ramsgate Road entry)	U	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 2 Ahead Arm 7 Left	Inf 8.00
9/2 (A254 Ramsgate Road entry)	O	D	2	3	9.0	Geom	-	3.00	0.00	Y	Arm 3 Right	15.00
10/1 (College Road east exit 2)	U		2	3	60.0	Geom	-	3.50	0.00	Y		

11/1 (A254 Ramsgate Road exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
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	
10: '2039 Base+Dev - Net Change - AM Peak'	07:45	08:45	01:00	
11: '2039 Base+Dev - Net Change - PM Peak'	16:45	17:45	01:00	
12: '2039 Base+Dev - Net Change - Airport Peak'	13:00	14:00	01:00	

Full Input Data And Results

Scenario 4: 'Copy of 2039 + Dev Traffic - AM Peak Mitigation Double Cycle' (FG7: '2039 + Dev Traffic - AM Peak', Plan 5: 'Copy of 2039 + Dev Traffic - AM Peak Mitigation Double Cycle')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	194	406	0	600
	B	114	0	236	353	703
	C	373	328	124	10	835
	D	6	506	114	0	626
	Tot.	493	1028	880	363	2764

Traffic Lane Flows

Lane	Scenario 4: Copy of 2039 + Dev Traffic - AM Peak Mitigation Double Cycle
Junction: Junction 16_ A254 / B2052	
1/1 (with short)	703(In) 589(Out)
1/2 (short)	114
2/1	1028
3/1	880
4/1 (with short)	835(In) 383(Out)
4/2 (short)	452
5/1	124
6/1	600
7/1	493
8/1	363
9/1 (with short)	626(In) 512(Out)

Full Input Data And Results

9/2 (short)	114
10/1	493
11/1	363

Full Input Data And Results

Lane Saturation Flows

Junction: Junction 16_ A254 / B2052

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 (A254 Ramsgate Road South Entry)	2.50	0.00	Y	Arm 3 Left	8.00	40.1 %	1735	1735
				Arm 8 Ahead	Inf	59.9 %		
1/2 (A254 Ramsgate Road South Entry)	2.50	0.00	Y	Arm 7 Right	10.00	100.0 %	1622	1622
2/1 (A254 Ramsgagte Road A254 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/1 (College Road West Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1 (Beatrice Road)	3.00	0.00	Y	Arm 7 Ahead	Inf	97.4 %	1910	1910
				Arm 8 Left	15.00	2.6 %		
4/2 (Beatrice Road)	3.00	0.00	Y	Arm 2 Right	15.00	72.6 %	1704	1704
				Arm 5 Right	8.00	27.4 %		
5/1 (Beatrice Road to College Road)	5.00	0.00	Y	Arm 3 Right	Inf	100.0 %	2115	2115
6/1 (College Road east entry)	3.65	0.00	Y	Arm 2 Left	Inf	32.3 %	1980	1980
				Arm 3 Ahead	Inf	67.7 %		
7/1 (College Road east exit)	3.50	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1965	1965
8/1 (A254 Ramsgate Road exit)	3.50	0.00	Y	Arm 11 Ahead	Inf	100.0 %	1965	1965
9/1 (A254 Ramsgate Road entry)	3.00	0.00	Y	Arm 2 Ahead	Inf	98.8 %	1911	1911
				Arm 7 Left	8.00	1.2 %		
9/2 (A254 Ramsgate Road entry)	3.00	0.00	Y	Arm 3 Right	15.00	100.0 %	1741	1741
10/1 (College Road east exit 2)	3.50	0.00	Y				1965	1965

Full Input Data And Results

11/1 (A254 Ramsgate Road exit Lane 1)	Infinite Saturation Flow	Inf	Inf

Full Input Data And Results

Scenario 5: 'Copy of 2039 + Dev Traffic - PM Peak Mitigation Double Cycle' (FG8: '2039 + Dev Traffic - PM Peak', Plan 6: 'Copy of 2039 + Dev Traffic - PM Peak Mitigation Double Cycle')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	155	350	0	505
	B	98	0	351	413	862
	C	415	280	92	18	805
	D	9	476	92	0	577
	Tot.	522	911	885	431	2749

Traffic Lane Flows

Lane	Scenario 5: Copy of 2039 + Dev Traffic - PM Peak Mitigation Double Cycle
Junction: Junction 16_ A254 / B2052	
1/1 (with short)	862(In) 764(Out)
1/2 (short)	98
2/1	911
3/1	885
4/1 (with short)	805(In) 433(Out)
4/2 (short)	372
5/1	92
6/1	505
7/1	522
8/1	431
9/1 (with short)	577(In) 485(Out)

Full Input Data And Results

9/2 (short)	92
10/1	522
11/1	431

Full Input Data And Results

Lane Saturation Flows

Junction: Junction 16_ A254 / B2052

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 (A254 Ramsgate Road South Entry)	2.50	0.00	Y	Arm 3 Left	8.00	45.9 %	1717	1717
				Arm 8 Ahead	Inf	54.1 %		
1/2 (A254 Ramsgate Road South Entry)	2.50	0.00	Y	Arm 7 Right	10.00	100.0 %	1622	1622
2/1 (A254 Ramsgagte Road A254 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/1 (College Road West Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1 (Beatrice Road)	3.00	0.00	Y	Arm 7 Ahead	Inf	95.8 %	1907	1907
				Arm 8 Left	15.00	4.2 %		
4/2 (Beatrice Road)	3.00	0.00	Y	Arm 2 Right	15.00	75.3 %	1707	1707
				Arm 5 Right	8.00	24.7 %		
5/1 (Beatrice Road to College Road)	5.00	0.00	Y	Arm 3 Right	Inf	100.0 %	2115	2115
6/1 (College Road east entry)	3.65	0.00	Y	Arm 2 Left	Inf	30.7 %	1980	1980
				Arm 3 Ahead	Inf	69.3 %		
7/1 (College Road east exit)	3.50	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1965	1965
8/1 (A254 Ramsgate Road exit)	3.50	0.00	Y	Arm 11 Ahead	Inf	100.0 %	1965	1965
9/1 (A254 Ramsgate Road entry)	3.00	0.00	Y	Arm 2 Ahead	Inf	98.1 %	1908	1908
				Arm 7 Left	8.00	1.9 %		
9/2 (A254 Ramsgate Road entry)	3.00	0.00	Y	Arm 3 Right	15.00	100.0 %	1741	1741
10/1 (College Road east exit 2)	3.50	0.00	Y				1965	1965

Full Input Data And Results

11/1 (A254 Ramsgate Road exit Lane 1)	Infinite Saturation Flow	Inf	Inf

Full Input Data And Results

Scenario 6: 'Copy of 2039 + Dev Traffic - Airport Peak Mitigation Double Cycle' (FG9: '2039 + Dev Traffic - Airport Peak', Plan 7: 'Copy of 2039 + Dev Traffic - Airport Peak Mitigation Double Cycle')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	162	381	0	543
	B	117	0	283	454	854
	C	335	311	84	16	746
	D	12	485	91	0	588
	Tot.	464	958	839	470	2731

Traffic Lane Flows

Lane	Scenario 6: Copy of 2039 + Dev Traffic - Airport Peak Mitigation Double Cycle
Junction: Junction 16_ A254 / B2052	
1/1 (with short)	854(In) 737(Out)
1/2 (short)	117
2/1	958
3/1	839
4/1 (with short)	746(In) 351(Out)
4/2 (short)	395
5/1	84
6/1	543
7/1	464
8/1	470
9/1 (with short)	588(In) 497(Out)

Full Input Data And Results

9/2 (short)	91
10/1	464
11/1	470

Full Input Data And Results

Lane Saturation Flows

Junction: Junction 16_ A254 / B2052								
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 (A254 Ramsgate Road South Entry)	2.50	0.00	Y	Arm 3 Left	8.00	38.4 %	1740	1740
				Arm 8 Ahead	Inf	61.6 %		
1/2 (A254 Ramsgate Road South Entry)	2.50	0.00	Y	Arm 7 Right	10.00	100.0 %	1622	1622
2/1 (A254 Ramsgagte Road A254 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/1 (College Road West Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1 (Beatrice Road)	3.00	0.00	Y	Arm 7 Ahead	Inf	95.4 %	1906	1906
				Arm 8 Left	15.00	4.6 %		
4/2 (Beatrice Road)	3.00	0.00	Y	Arm 2 Right	15.00	78.7 %	1712	1712
				Arm 5 Right	8.00	21.3 %		
5/1 (Beatrice Road to College Road)	5.00	0.00	Y	Arm 3 Right	Inf	100.0 %	2115	2115
6/1 (College Road east entry)	3.65	0.00	Y	Arm 2 Left	Inf	29.8 %	1980	1980
				Arm 3 Ahead	Inf	70.2 %		
7/1 (College Road east exit)	3.50	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1965	1965
8/1 (A254 Ramsgate Road exit)	3.50	0.00	Y	Arm 11 Ahead	Inf	100.0 %	1965	1965
9/1 (A254 Ramsgate Road entry)	3.00	0.00	Y	Arm 2 Ahead	Inf	97.6 %	1906	1906
				Arm 7 Left	8.00	2.4 %		
9/2 (A254 Ramsgate Road entry)	3.00	0.00	Y	Arm 3 Right	15.00	100.0 %	1741	1741
10/1 (College Road east exit 2)	3.50	0.00	Y				1965	1965

Full Input Data And Results

11/1 (A254 Ramsgate Road exit Lane 1)	Infinite Saturation Flow	Inf	Inf

Full Input Data And Results

Scenario 7: '2039 B+Dev - Net Change - AM peak' (FG10: '2039 Base+Dev - Net Change - AM Peak', Plan 5: 'Copy of 2039 + Dev Traffic - AM Peak Mitigation Double Cycle')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	194	406	0	600
	B	114	0	67	353	534
	C	373	241	124	10	748
	D	6	506	114	0	626
	Tot.	493	941	711	363	2508

Traffic Lane Flows

Lane	Scenario 7: 2039 B+Dev - Net Change - AM peak
Junction: Junction 16_ A254 / B2052	
1/1 (with short)	534(In) 420(Out)
1/2 (short)	114
2/1	941
3/1	711
4/1 (with short)	748(In) 383(Out)
4/2 (short)	365
5/1	124
6/1	600
7/1	493
8/1	363
9/1 (with short)	626(In) 512(Out)
9/2 (short)	114

Full Input Data And Results

10/1	493
11/1	363

Full Input Data And Results

Lane Saturation Flows

Junction: Junction 16_ A254 / B2052

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 (A254 Ramsgate Road South Entry)	2.50	0.00	Y	Arm 3 Left	8.00	16.0 %	1811	1811
				Arm 8 Ahead	Inf	84.0 %		
1/2 (A254 Ramsgate Road South Entry)	2.50	0.00	Y	Arm 7 Right	10.00	100.0 %	1622	1622
2/1 (A254 Ramsgagte Road A254 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/1 (College Road West Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1 (Beatrice Road)	3.00	0.00	Y	Arm 7 Ahead	Inf	97.4 %	1910	1910
				Arm 8 Left	15.00	2.6 %		
4/2 (Beatrice Road)	3.00	0.00	Y	Arm 2 Right	15.00	66.0 %	1695	1695
				Arm 5 Right	8.00	34.0 %		
5/1 (Beatrice Road to College Road)	5.00	0.00	Y	Arm 3 Right	Inf	100.0 %	2115	2115
6/1 (College Road east entry)	3.65	0.00	Y	Arm 2 Left	Inf	32.3 %	1980	1980
				Arm 3 Ahead	Inf	67.7 %		
7/1 (College Road east exit)	3.50	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1965	1965
8/1 (A254 Ramsgate Road exit)	3.50	0.00	Y	Arm 11 Ahead	Inf	100.0 %	1965	1965
9/1 (A254 Ramsgate Road entry)	3.00	0.00	Y	Arm 2 Ahead	Inf	98.8 %	1911	1911
				Arm 7 Left	8.00	1.2 %		
9/2 (A254 Ramsgate Road entry)	3.00	0.00	Y	Arm 3 Right	15.00	100.0 %	1741	1741
10/1 (College Road east exit 2)	3.50	0.00	Y				1965	1965

Full Input Data And Results

11/1 (A254 Ramsgate Road exit Lane 1)	Infinite Saturation Flow	Inf	Inf

Full Input Data And Results

Scenario 8: '2039 B+Dev - Net Change - PM peak' (FG11: '2039 Base+Dev - Net Change - PM Peak', Plan 6: 'Copy of 2039 + Dev Traffic - PM Peak Mitigation Double Cycle')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	155	350	0	505
	B	98	0	140	413	651
	C	415	194	92	18	719
	D	9	476	92	0	577
	Tot.	522	825	674	431	2452

Traffic Lane Flows

Lane	Scenario 8: 2039 B+Dev - Net Change - PM peak
Junction: Junction 16_ A254 / B2052	
1/1 (with short)	651(In) 553(Out)
1/2 (short)	98
2/1	825
3/1	674
4/1 (with short)	719(In) 433(Out)
4/2 (short)	286
5/1	92
6/1	505
7/1	522
8/1	431
9/1 (with short)	577(In) 485(Out)
9/2 (short)	92

Full Input Data And Results

10/1	522
11/1	431

Full Input Data And Results

Lane Saturation Flows

Junction: Junction 16_ A254 / B2052

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 (A254 Ramsgate Road South Entry)	2.50	0.00	Y	Arm 3 Left	8.00	25.3 %	1780	1780
				Arm 8 Ahead	Inf	74.7 %		
1/2 (A254 Ramsgate Road South Entry)	2.50	0.00	Y	Arm 7 Right	10.00	100.0 %	1622	1622
2/1 (A254 Ramsgagte Road A254 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/1 (College Road West Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1 (Beatrice Road)	3.00	0.00	Y	Arm 7 Ahead	Inf	95.8 %	1907	1907
				Arm 8 Left	15.00	4.2 %		
4/2 (Beatrice Road)	3.00	0.00	Y	Arm 2 Right	15.00	67.8 %	1697	1697
				Arm 5 Right	8.00	32.2 %		
5/1 (Beatrice Road to College Road)	5.00	0.00	Y	Arm 3 Right	Inf	100.0 %	2115	2115
6/1 (College Road east entry)	3.65	0.00	Y	Arm 2 Left	Inf	30.7 %	1980	1980
				Arm 3 Ahead	Inf	69.3 %		
7/1 (College Road east exit)	3.50	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1965	1965
8/1 (A254 Ramsgate Road exit)	3.50	0.00	Y	Arm 11 Ahead	Inf	100.0 %	1965	1965
9/1 (A254 Ramsgate Road entry)	3.00	0.00	Y	Arm 2 Ahead	Inf	98.1 %	1908	1908
				Arm 7 Left	8.00	1.9 %		
9/2 (A254 Ramsgate Road entry)	3.00	0.00	Y	Arm 3 Right	15.00	100.0 %	1741	1741
10/1 (College Road east exit 2)	3.50	0.00	Y				1965	1965

Full Input Data And Results

11/1 (A254 Ramsgate Road exit Lane 1)	Infinite Saturation Flow	Inf	Inf

Full Input Data And Results

Scenario 9: '2039 B+Dev - Net Change - Airport peak' (FG12: '2039 Base+Dev - Net Change - Airport Peak', Plan 7: 'Copy of 2039 + Dev Traffic - Airport Peak Mitigation Double Cycle')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	162	381	0	543
	B	117	0	103	454	674
	C	335	226	84	16	661
	D	12	485	91	0	588
	Tot.	464	873	659	470	2466

Traffic Lane Flows

Lane	Scenario 9: 2039 B+Dev - Net Change - Airport peak
Junction: Junction 16_ A254 / B2052	
1/1 (with short)	674(In) 557(Out)
1/2 (short)	117
2/1	873
3/1	659
4/1 (with short)	661(In) 351(Out)
4/2 (short)	310
5/1	84
6/1	543
7/1	464
8/1	470
9/1 (with short)	588(In) 497(Out)

Full Input Data And Results

9/2 (short)	91
10/1	464
11/1	470

Full Input Data And Results

Lane Saturation Flows

Junction: Junction 16_ A254 / B2052

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 (A254 Ramsgate Road South Entry)	2.50	0.00	Y	Arm 3 Left	8.00	18.5 %	1803	1803
				Arm 8 Ahead	Inf	81.5 %		
1/2 (A254 Ramsgate Road South Entry)	2.50	0.00	Y	Arm 7 Right	10.00	100.0 %	1622	1622
2/1 (A254 Ramsgagte Road A254 South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/1 (College Road West Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1 (Beatrice Road)	3.00	0.00	Y	Arm 7 Ahead	Inf	95.4 %	1906	1906
				Arm 8 Left	15.00	4.6 %		
4/2 (Beatrice Road)	3.00	0.00	Y	Arm 2 Right	15.00	72.9 %	1704	1704
				Arm 5 Right	8.00	27.1 %		
5/1 (Beatrice Road to College Road)	5.00	0.00	Y	Arm 3 Right	Inf	100.0 %	2115	2115
6/1 (College Road east entry)	3.65	0.00	Y	Arm 2 Left	Inf	29.8 %	1980	1980
				Arm 3 Ahead	Inf	70.2 %		
7/1 (College Road east exit)	3.50	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1965	1965
8/1 (A254 Ramsgate Road exit)	3.50	0.00	Y	Arm 11 Ahead	Inf	100.0 %	1965	1965
9/1 (A254 Ramsgate Road entry)	3.00	0.00	Y	Arm 2 Ahead	Inf	97.6 %	1906	1906
				Arm 7 Left	8.00	2.4 %		
9/2 (A254 Ramsgate Road entry)	3.00	0.00	Y	Arm 3 Right	15.00	100.0 %	1741	1741
10/1 (College Road east exit 2)	3.50	0.00	Y				1965	1965

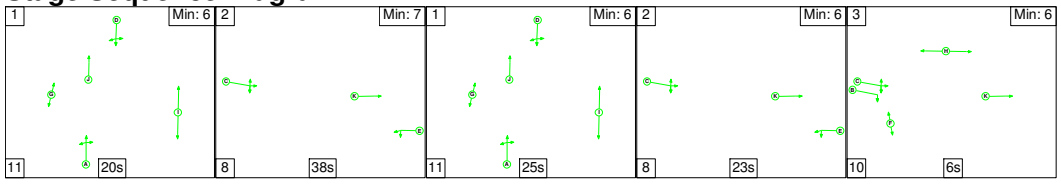
Full Input Data And Results

11/1 (A254 Ramsgate Road exit Lane 1)	Infinite Saturation Flow	Inf	Inf

Full Input Data And Results

Scenario 4: 'Copy of 2039 + Dev Traffic - AM Peak Mitigation Double Cycle' (FG7: '2039 + Dev Traffic - AM Peak', Plan 5: 'Copy of 2039 + Dev Traffic - AM Peak Mitigation Double Cycle')

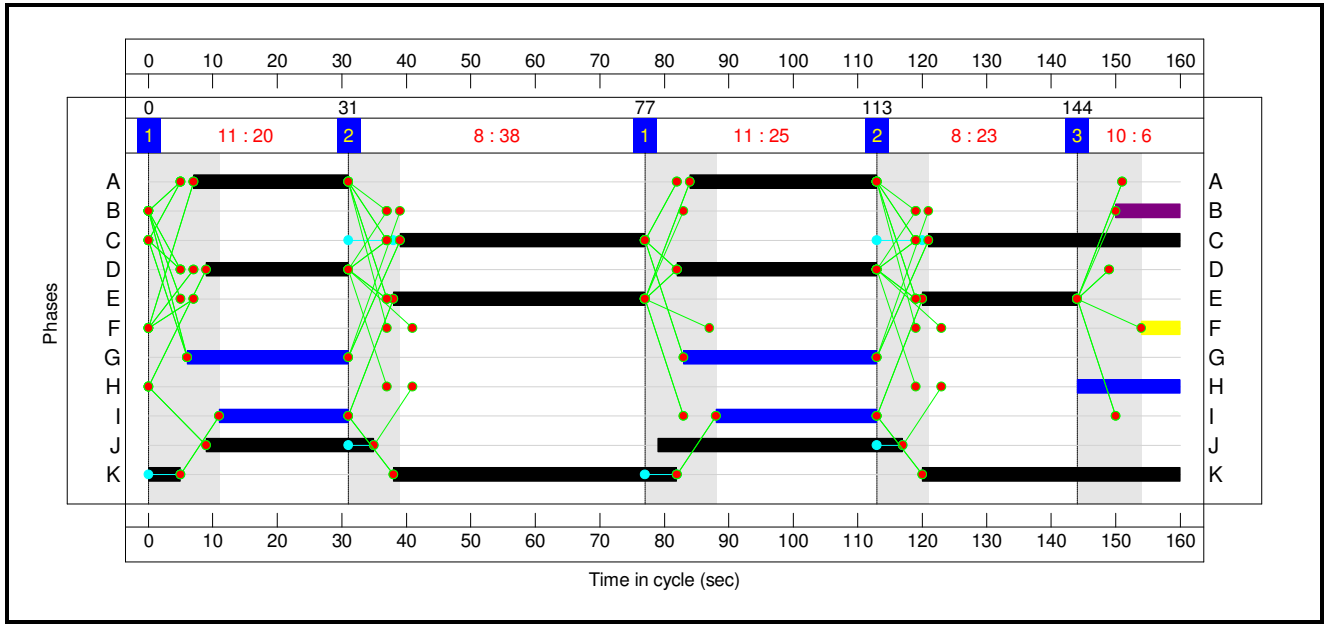
Stage Sequence Diagram



Stage Timings

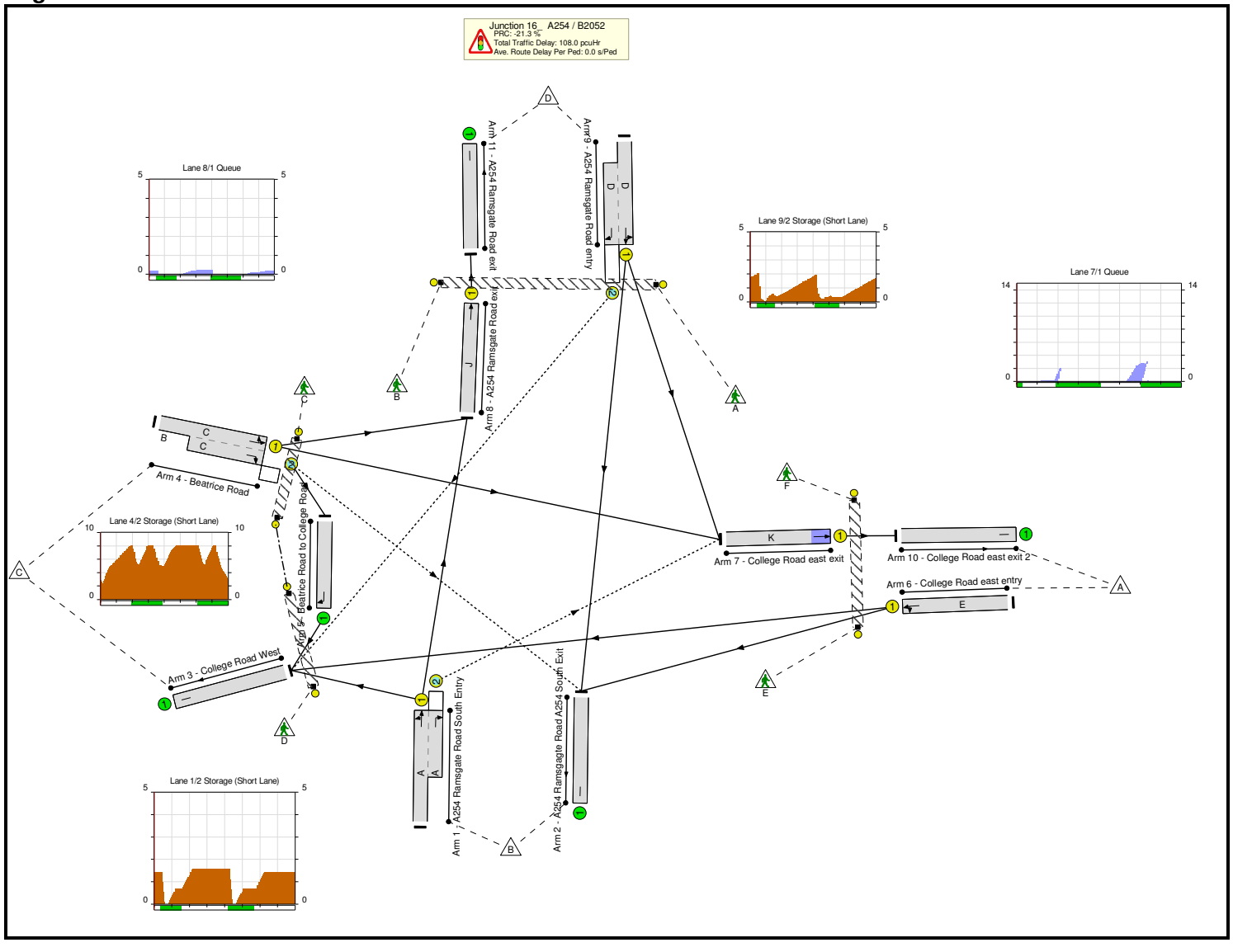
Stage	1	2	1	2	3
Duration	20	38	25	23	6
Change Point	0	31	77	113	144

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 16	-	-	**N/A**	-	-		-	-	-	-	-	-	**109.2%**
Junction 16_ A254 / B2052	-	-	**N/A**	-	-		-	-	-	-	-	-	**109.2%**
1/1+1/2	A254 Ramsgate Road South Entry Left Right Ahead	U+O	N/A	N/A	A		2	53	-	703	1735:1622	540+104	109.2 : 109.2%
2/1	A254 Ramsgagte Road A254 South Exit	U	N/A	N/A	-		-	-	-	1028	Inf	Inf	0.0%
3/1	College Road West	U	N/A	N/A	-		-	-	-	880	Inf	Inf	0.0%
4/1+4/2	Beatrice Road Right Right2 Ahead Left	U+O	N/A	N/A	C	B	2	77	10	835	1910:1704	352+415	108.9 : 108.9%
5/1	Beatrice Road to College Road Right	U	N/A	N/A	-		-	-	-	124	2115	2115	5.4%
6/1	College Road east entry Left Ahead	U	N/A	N/A	E		2	63	-	600	1980	804	74.6%
7/1	College Road east exit Ahead	U	N/A	N/A	K		2	89	-	493	1965	1118	40.5%
8/1	A254 Ramsgate Road exit Ahead	U	N/A	N/A	J		2	64	-	363	1965	811	41.0%
9/1+9/2	A254 Ramsgate Road entry Ahead Right Left	U+O	N/A	N/A	D		2	53	-	626	1911:1741	607+135	84.4 : 84.4%
10/1	College Road east exit 2	U	N/A	N/A	-		-	-	-	493	1965	1965	23.0%
11/1	A254 Ramsgate Road exit	U	N/A	N/A	-		-	-	-	363	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	55	-	0	-	24750	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	6	-	0	-	2700	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	I		2	45	-	0	-	20250	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	H		1	16	-	0	-	7200	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 16	**-**	**-**	**188**	**137**	**195**	**27.9**	**78.3**	**1.8**	**108.0**	**-**	**-**	**-**	**-**
Junction 16_ A254 / B2052	**-**	**-**	**188**	**137**	**195**	**27.9**	**78.3**	**1.8**	**108.0**	**-**	**-**	**-**	**-**
1/1+1/2	703	644	68	0	37	10.1	34.6	0.4	45.2	231.2	21.5	34.6	56.0
2/1	1001	1001	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	850	850	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1+4/2	835	767	115	137	50	10.1	39.5	0.7	50.2	216.5	21.5	39.5	61.0
5/1	114	114	-	-	-	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
6/1	600	600	-	-	-	3.4	1.4	-	4.9	29.2	12.7	1.4	14.1
7/1	453	453	-	-	-	0.3	0.0	-	0.3	2.1	3.0	0.0	3.0
8/1	333	333	-	-	-	0.1	0.0	-	0.1	1.0	0.3	0.0	0.3
9/1+9/2	626	626	6	0	108	4.0	2.6	0.7	7.2	41.5	11.3	2.6	13.9
10/1	453	453	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
11/1	333	333	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0

C1 - 08-0694

PRC for Signalled Lanes (%): -21.3
PRC Over All Lanes (%): -21.3

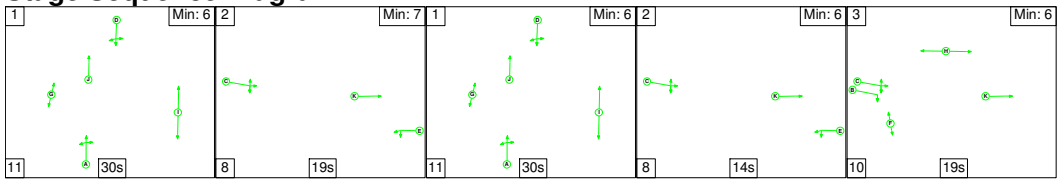
Total Delay for Signalled Lanes (pcuHr): 107.82
Total Delay Over All Lanes(pcuHr): 108.00

Cycle Time (s): 160

Full Input Data And Results

Scenario 5: 'Copy of 2039 + Dev Traffic - PM Peak Mitigation Double Cycle' (FG8: '2039 + Dev Traffic - PM Peak', Plan 6: 'Copy of 2039 + Dev Traffic - PM Peak Mitigation Double Cycle')

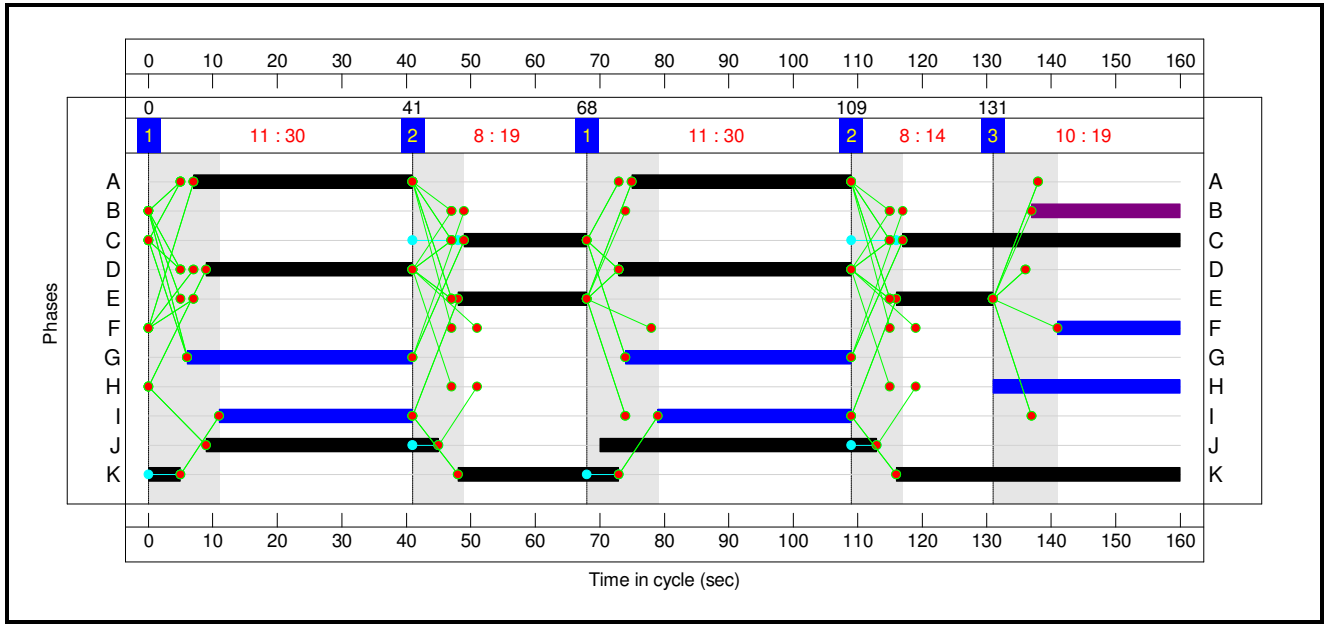
Stage Sequence Diagram



Stage Timings

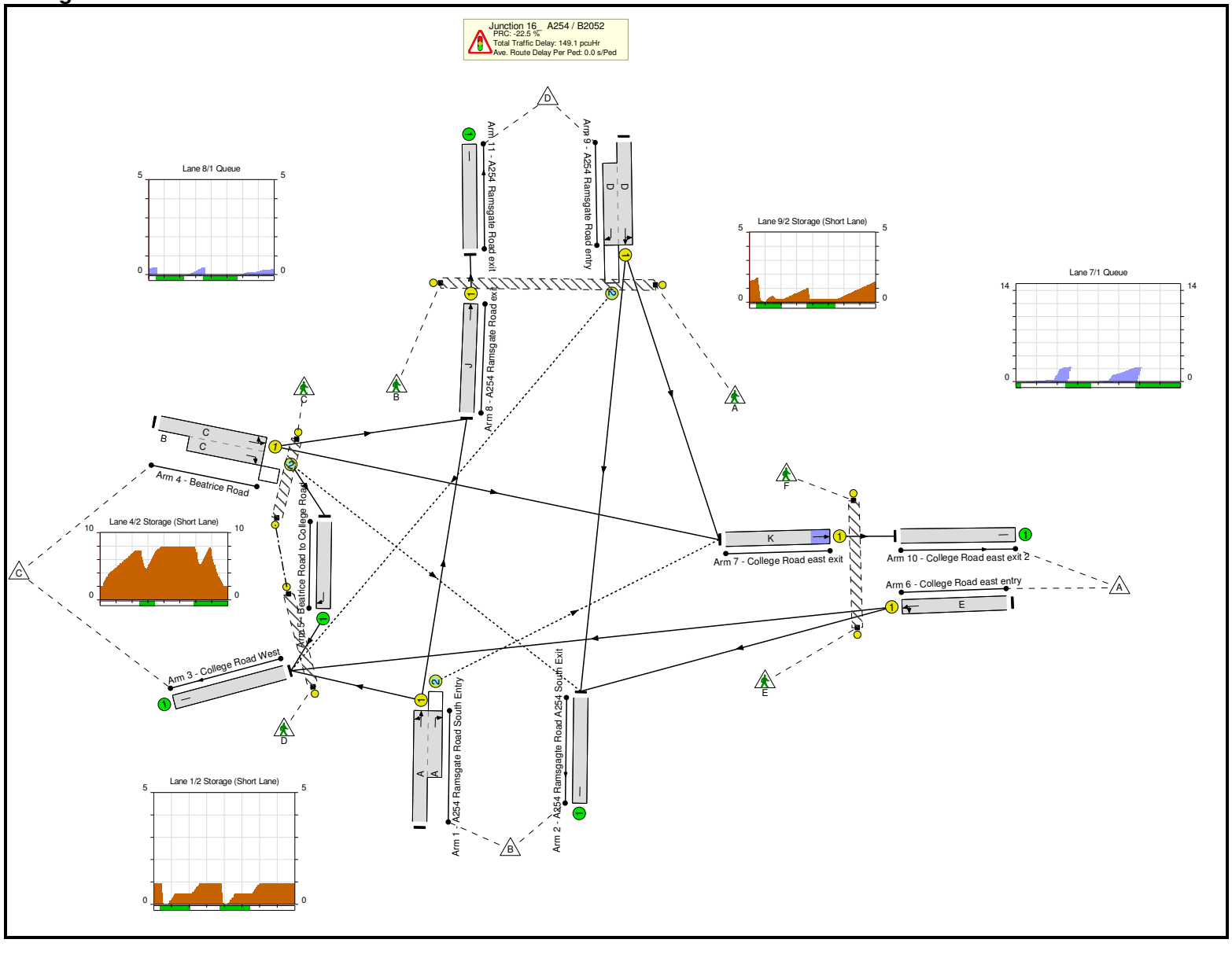
Stage	1	2	1	2	3
Duration	30	19	30	14	19
Change Point	0	41	68	109	131

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 16	-	-	**N/A**	-	-		-	-	-	-	-	-	**110.3%**
Junction 16_ A254 / B2052	-	-	**N/A**	-	-		-	-	-	-	-	-	**110.3%**
1/1+1/2	A254 Ramsgate Road South Entry Left Right Ahead	U+O	N/A	N/A	A		2	68	-	862	1717:1622	693+89	110.3 : 110.3%
2/1	A254 Ramsgagte Road A254 South Exit	U	N/A	N/A	-		-	-	-	911	Inf	Inf	0.0%
3/1	College Road West	U	N/A	N/A	-		-	-	-	885	Inf	Inf	0.0%
4/1+4/2	Beatrice Road Right Right2 Ahead Left	U+O	N/A	N/A	C	B	2	62	23	805	1907:1707	397+341	109.0 : 109.0%
5/1	Beatrice Road to College Road Right	U	N/A	N/A	-		-	-	-	92	2115	2115	4.0%
6/1	College Road east entry Left Ahead	U	N/A	N/A	E		2	35	-	505	1980	458	110.3%
7/1	College Road east exit Ahead	U	N/A	N/A	K		2	74	-	522	1965	933	51.3%
8/1	A254 Ramsgate Road exit Ahead	U	N/A	N/A	J		2	79	-	431	1965	995	39.3%
9/1+9/2	A254 Ramsgate Road entry Ahead Right Left	U+O	N/A	N/A	D		2	68	-	577	1908:1741	760+144	63.8 : 63.8%
10/1	College Road east exit 2	U	N/A	N/A	-		-	-	-	522	1965	1965	24.4%
11/1	A254 Ramsgate Road exit	U	N/A	N/A	-		-	-	-	431	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	70	-	0	-	31500	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	19	-	0	-	8550	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	I		2	60	-	0	-	27000	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	H		1	29	-	0	-	13050	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 16	**-**	**-**	**91**	**204**	**143**	**35.4**	**112.4**	**1.3**	**149.1**	**-**	**-**	**-**	**-**
Junction 16_ A254 / B2052	**-**	**-**	**91**	**204**	**143**	**35.4**	**112.4**	**1.3**	**149.1**	**-**	**-**	**-**	**-**
1/1+1/2	862	782	89	0	0	12.4	44.9	0.2	57.6	240.4	26.6	44.9	71.5
2/1	873	873	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	812	812	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1+4/2	805	739	0	204	53	11.5	38.4	0.4	50.3	225.0	25.0	38.4	63.4
5/1	84	84	-	-	-	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
6/1	505	458	-	-	-	8.0	28.1	-	36.0	256.8	15.7	28.1	43.8
7/1	479	479	-	-	-	0.5	0.0	-	0.5	3.7	2.3	0.0	2.3
8/1	391	391	-	-	-	0.1	0.0	-	0.1	1.0	0.4	0.0	0.4
9/1+9/2	577	577	2	0	90	2.9	0.9	0.7	4.4	27.6	11.1	0.9	12.0
10/1	479	479	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
11/1	391	391	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0

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PRC for Signalled Lanes (%): -22.5
PRC Over All Lanes (%): -22.5

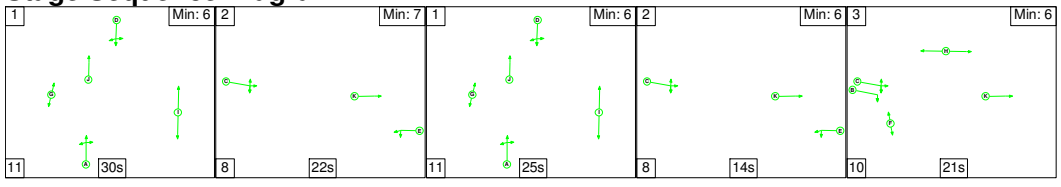
Total Delay for Signalled Lanes (pcuHr): 148.91
Total Delay Over All Lanes(pcuHr): 149.10

Cycle Time (s): 160

Full Input Data And Results

Scenario 6: 'Copy of 2039 + Dev Traffic - Airport Peak Mitigation Double Cycle' (FG9: '2039 + Dev Traffic - Airport Peak', Plan 7: 'Copy of 2039 + Dev Traffic - Airport Peak Mitigation Double Cycle')

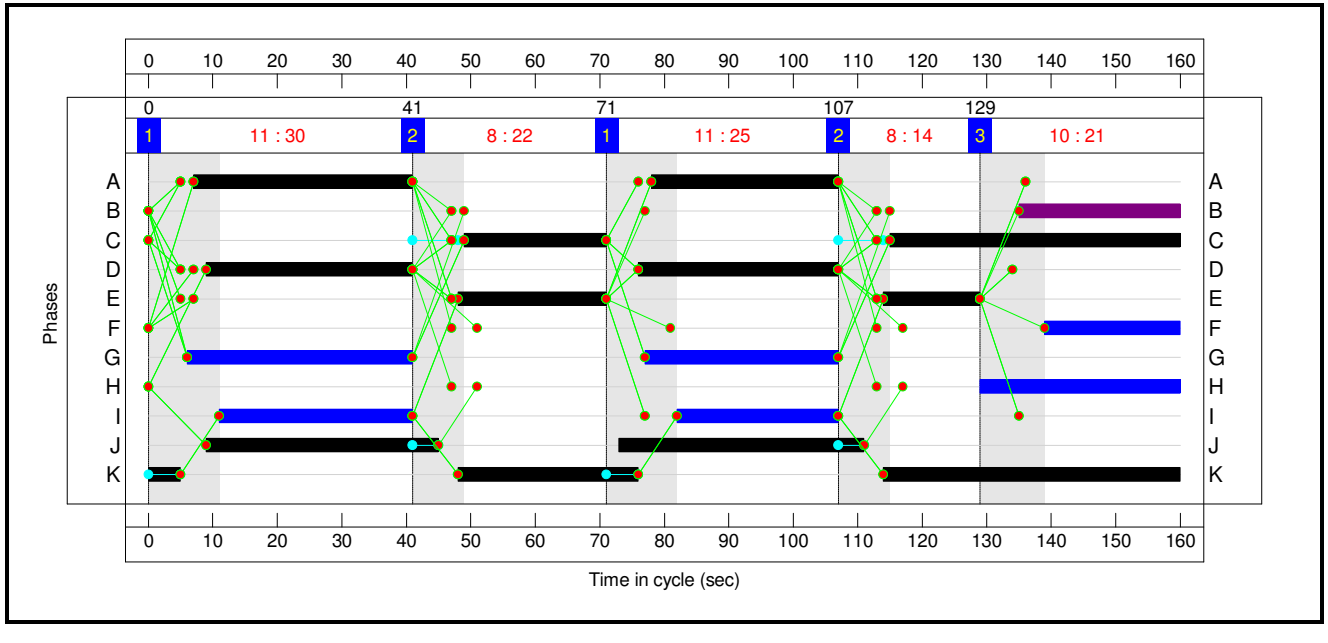
Stage Sequence Diagram



Stage Timings

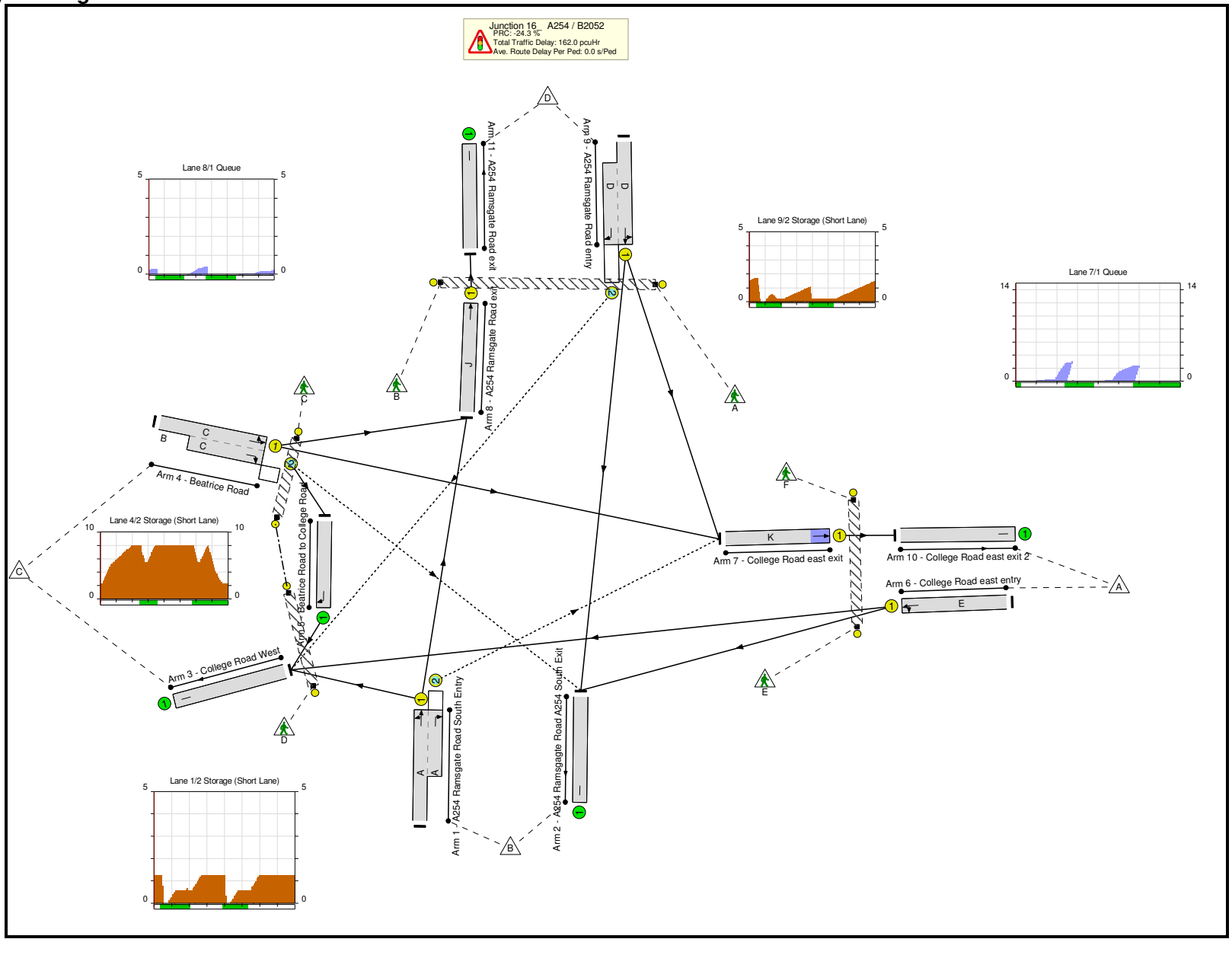
Stage	1	2	1	2	3
Duration	30	22	25	14	21
Change Point	0	41	71	107	129

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 16	-	-	**N/A**	-	-		-	-	-	-	-	-	**111.9%**
Junction 16_ A254 / B2052	-	-	**N/A**	-	-		-	-	-	-	-	-	**111.9%**
1/1+1/2	A254 Ramsgate Road South Entry Left Right Ahead	U+O	N/A	N/A	A		2	63	-	854	1740:1622	659+105	111.9 : 111.9%
2/1	A254 Ramsgagte Road A254 South Exit	U	N/A	N/A	-		-	-	-	958	Inf	Inf	0.0%
3/1	College Road West	U	N/A	N/A	-		-	-	-	839	Inf	Inf	0.0%
4/1+4/2	Beatrice Road Right Right2 Ahead Left	U+O	N/A	N/A	C	B	2	67	25	746	1906:1712	314+354	111.6 : 111.6%
5/1	Beatrice Road to College Road Right	U	N/A	N/A	-		-	-	-	84	2115	2115	3.6%
6/1	College Road east entry Left Ahead	U	N/A	N/A	E		2	38	-	543	1980	495	109.7%
7/1	College Road east exit Ahead	U	N/A	N/A	K		2	79	-	464	1965	995	41.9%
8/1	A254 Ramsgate Road exit Ahead	U	N/A	N/A	J		2	74	-	470	1965	933	45.0%
9/1+9/2	A254 Ramsgate Road entry Ahead Right Left	U+O	N/A	N/A	D		2	63	-	588	1906:1741	713+130	69.7 : 69.7%
10/1	College Road east exit 2	U	N/A	N/A	-		-	-	-	464	1965	1965	21.2%
11/1	A254 Ramsgate Road exit	U	N/A	N/A	-		-	-	-	470	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	65	-	0	-	29250	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	21	-	0	-	9450	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	I		2	55	-	0	-	24750	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	H		1	31	-	0	-	13950	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 16	**-**	**-**	**105**	**224**	**145**	**37.8**	**122.8**	**1.4**	**162.0**	**-**	**-**	**-**	**-**
Junction 16_ A254 / B2052	**-**	**-**	**105**	**224**	**145**	**37.8**	**122.8**	**1.4**	**162.0**	**-**	**-**	**-**	**-**
1/1+1/2	854	763	105	0	0	13.1	49.6	0.3	63.1	265.9	26.9	49.6	76.5
2/1	911	911	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	767	767	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1+4/2	746	668	0	224	54	12.4	43.2	0.5	56.1	270.7	26.7	43.2	69.9
5/1	75	75	-	-	-	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
6/1	543	495	-	-	-	8.4	28.7	-	37.1	245.9	17.5	28.7	46.2
7/1	417	417	-	-	-	0.5	0.0	-	0.5	4.2	3.1	0.0	3.1
8/1	420	420	-	-	-	0.1	0.0	-	0.1	0.7	0.4	0.0	0.4
9/1+9/2	588	588	0	0	91	3.3	1.1	0.6	5.0	30.9	11.9	1.1	13.1
10/1	417	417	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
11/1	420	420	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0

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PRC for Signalled Lanes (%): -24.3
PRC Over All Lanes (%): -24.3

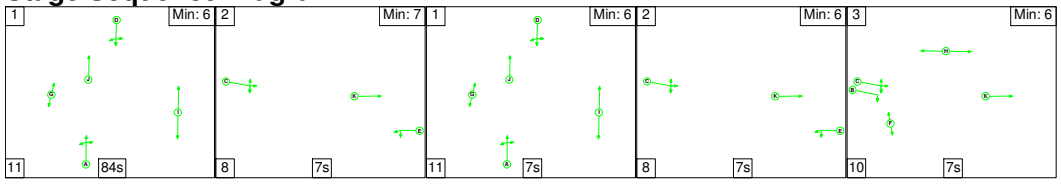
Total Delay for Signalled Lanes (pcuHr): 161.89
Total Delay Over All Lanes(pcuHr): 162.05

Cycle Time (s): 160

Full Input Data And Results

Scenario 7: '2039 B+Dev - Net Change - AM peak' (FG10: '2039 Base+Dev - Net Change - AM Peak', Plan 5: 'Copy of 2039 + Dev Traffic - AM Peak Mitigation Double Cycle')

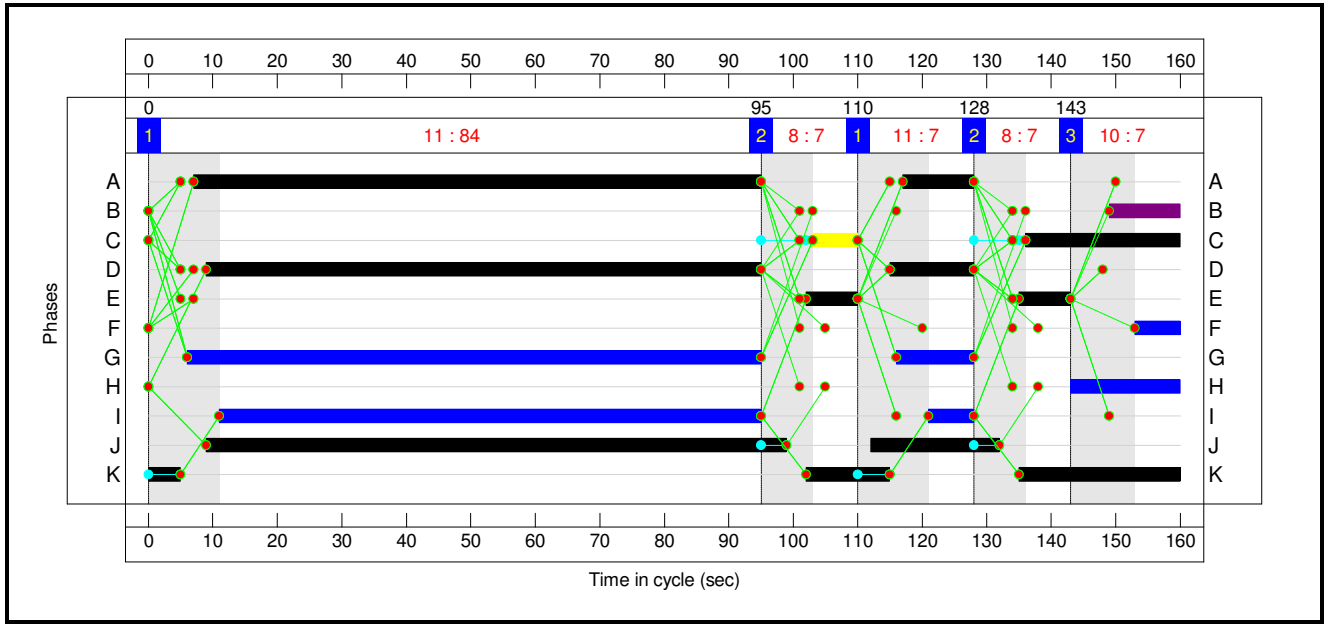
Stage Sequence Diagram



Stage Timings

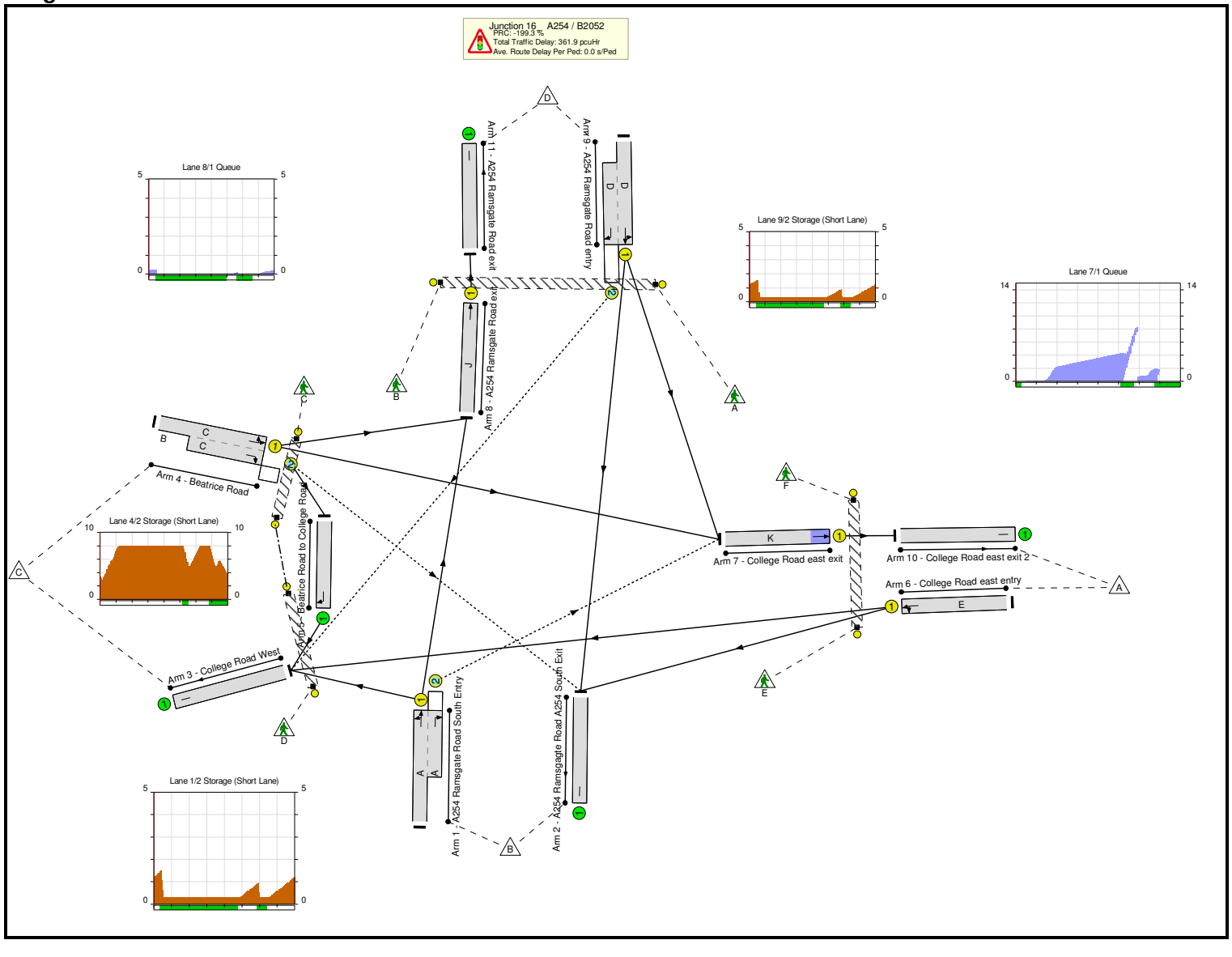
Stage	1	2	1	2	3
Duration	84	7	7	7	7
Change Point	0	95	110	128	143

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 16	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**269.4%**
Junction 16_ A254 / B2052	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**269.4%**
1/1+1/2	A254 Ramsgate Road South Entry Left Right Ahead	U+O	N/A	N/A	A		2	99	-	534	1811:1622	945+256	44.5 : 44.5%
2/1	A254 Ramsgagte Road A254 South Exit	U	N/A	N/A	-		-	-	-	941	Inf	Inf	0.0%
3/1	College Road West	U	N/A	N/A	-		-	-	-	711	Inf	Inf	0.0%
4/1+4/2	Beatrice Road Right Right2 Ahead Left	U+O	N/A	N/A	C	B	2	31	11	748	1910:1695	288+274	133.2 : 133.2%
5/1	Beatrice Road to College Road Right	U	N/A	N/A	-		-	-	-	124	2115	2115	4.4%
6/1	College Road east entry Left Ahead	U	N/A	N/A	E		2	16	-	600	1980	223	269.4%
7/1	College Road east exit Ahead	U	N/A	N/A	K		2	43	-	493	1965	553	72.4%
8/1	A254 Ramsgate Road exit Ahead	U	N/A	N/A	J		2	110	-	363	1965	1375	26.2%
9/1+9/2	A254 Ramsgate Road entry Ahead Right Left	U+O	N/A	N/A	D		2	99	-	626	1911:1741	1042+232	49.2 : 49.2%
10/1	College Road east exit 2	U	N/A	N/A	-		-	-	-	493	1965	1965	20.4%
11/1	A254 Ramsgate Road exit	U	N/A	N/A	-		-	-	-	363	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	101	-	0	-	45450	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	7	-	0	-	3150	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	I		2	91	-	0	-	40950	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	H		1	17	-	0	-	7650	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 16	**-**	**-**	**225**	**122**	**62**	**75.8**	**285.6**	**0.5**	**361.9**	**-**	**-**	**-**	**-**
Junction 16_ A254 / B2052	**-**	**-**	**225**	**122**	**62**	**75.8**	**285.6**	**0.5**	**361.9**	**-**	**-**	**-**	**-**
1/1+1/2	534	534	114	0	0	1.1	0.4	0.2	1.7	11.6	5.7	0.4	6.1
2/1	759	759	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	425	425	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1+4/2	748	562	0	122	59	26.7	95.2	0.2	122.1	587.7	33.8	95.2	129.0
5/1	93	93	-	-	-	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
6/1	600	223	-	-	-	44.8	189.4	-	234.2	1405.0	52.9	189.4	242.3
7/1	400	400	-	-	-	1.7	0.0	-	1.7	15.6	8.3	0.0	8.3
8/1	361	361	-	-	-	0.0	0.0	-	0.0	0.4	0.2	0.0	0.2
9/1+9/2	626	626	111	0	3	1.4	0.5	0.1	2.0	11.5	7.7	0.5	8.2
10/1	400	400	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
11/1	361	361	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0

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PRC for Signalled Lanes (%): -199.3
PRC Over All Lanes (%): -199.3

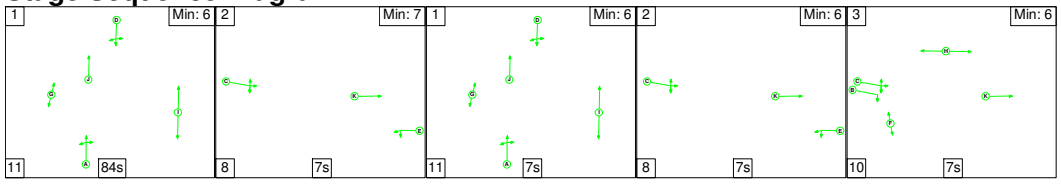
Total Delay for Signalled Lanes (pcuHr): 361.78
Total Delay Over All Lanes(pcuHr): 361.93

Cycle Time (s): 160

Full Input Data And Results

Scenario 8: '2039 B+Dev - Net Change - PM peak' (FG11: '2039 Base+Dev - Net Change - PM Peak', Plan 6: 'Copy of 2039 + Dev Traffic - PM Peak Mitigation Double Cycle')

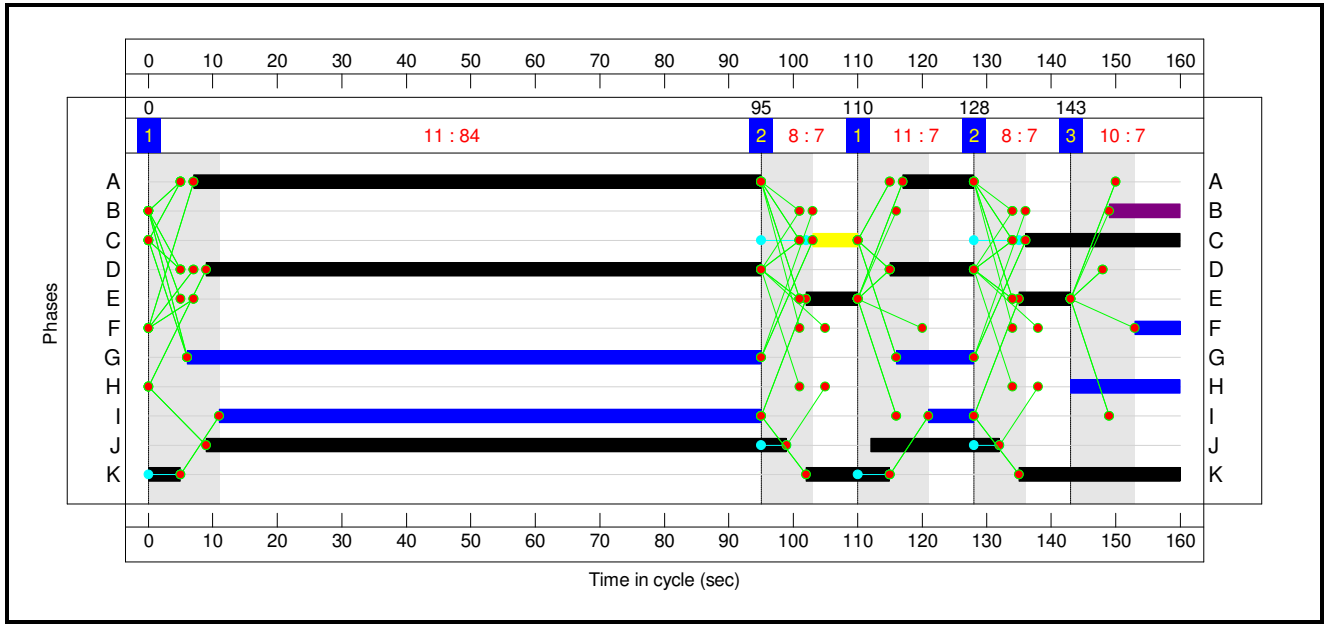
Stage Sequence Diagram



Stage Timings

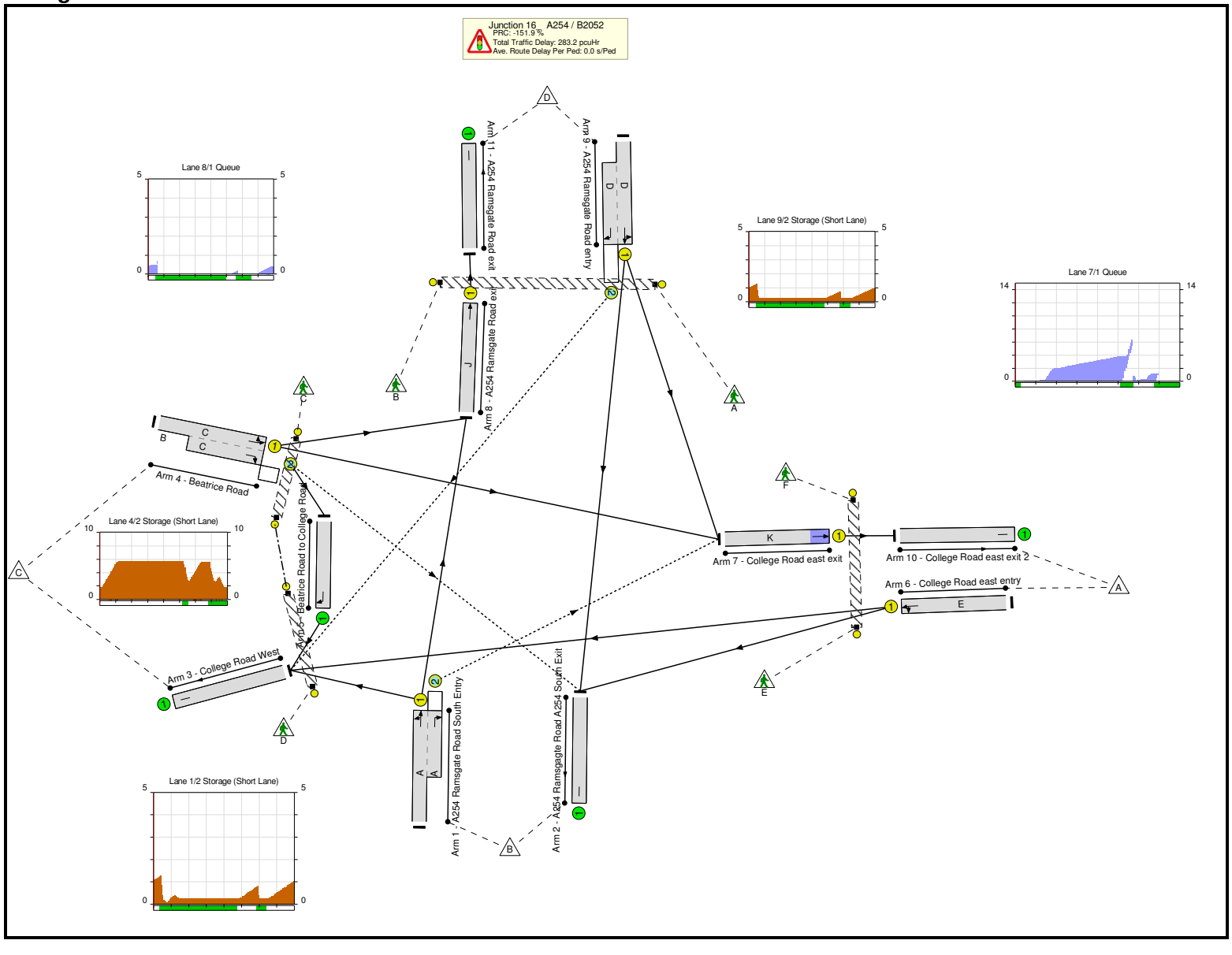
Stage	1	2	1	2	3
Duration	84	7	7	7	7
Change Point	0	95	110	128	143

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 16	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**226.7%**
Junction 16_ A254 / B2052	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**226.7%**
1/1+1/2	A254 Ramsgate Road South Entry Left Right Ahead	U+O	N/A	N/A	A		2	99	-	651	1780:1622	990+175	55.9 : 55.9%
2/1	A254 Ramsgagte Road A254 South Exit	U	N/A	N/A	-		-	-	-	825	Inf	Inf	0.0%
3/1	College Road West	U	N/A	N/A	-		-	-	-	674	Inf	Inf	0.0%
4/1+4/2	Beatrice Road Right Right2 Ahead Left	U+O	N/A	N/A	C	B	2	31	11	719	1907:1697	344+227	126.0 : 126.0%
5/1	Beatrice Road to College Road Right	U	N/A	N/A	-		-	-	-	92	2115	2115	3.5%
6/1	College Road east entry Left Ahead	U	N/A	N/A	E		2	16	-	505	1980	223	226.7%
7/1	College Road east exit Ahead	U	N/A	N/A	K		2	43	-	522	1965	553	79.0%
8/1	A254 Ramsgate Road exit Ahead	U	N/A	N/A	J		2	110	-	431	1965	1375	31.1%
9/1+9/2	A254 Ramsgate Road entry Ahead Right Left	U+O	N/A	N/A	D		2	99	-	577	1908:1741	1061+201	45.7 : 45.7%
10/1	College Road east exit 2	U	N/A	N/A	-		-	-	-	522	1965	1965	22.2%
11/1	A254 Ramsgate Road exit	U	N/A	N/A	-		-	-	-	431	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	101	-	0	-	45450	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	7	-	0	-	3150	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	I		2	91	-	0	-	40950	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	H		1	17	-	0	-	7650	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 16	**-**	**-**	**182**	**103**	**59**	**63.0**	**219.7**	**0.5**	**283.2**	**-**	**-**	**-**	**-**
Junction 16_ A254 / B2052	**-**	**-**	**182**	**103**	**59**	**63.0**	**219.7**	**0.5**	**283.2**	**-**	**-**	**-**	**-**
1/1+1/2	651	651	98	0	0	1.5	0.6	0.2	2.3	12.7	8.8	0.6	9.4
2/1	698	698	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	459	459	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1+4/2	719	571	0	103	51	24.5	76.4	0.2	101.1	506.2	31.4	76.4	107.9
5/1	73	73	-	-	-	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
6/1	505	223	-	-	-	34.2	142.0	-	176.2	1256.1	40.9	142.0	183.0
7/1	436	436	-	-	-	1.5	0.0	-	1.5	12.4	6.4	0.0	6.4
8/1	427	427	-	-	-	0.1	0.0	-	0.1	0.6	0.7	0.0	0.7
9/1+9/2	577	577	84	0	8	1.3	0.4	0.2	1.9	11.6	7.1	0.4	7.6
10/1	436	436	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
11/1	427	427	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0

C1 - 08-0694

PRC for Signalled Lanes (%): -151.9
PRC Over All Lanes (%): -151.9

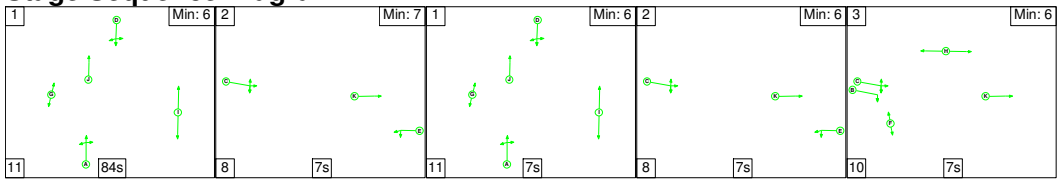
Total Delay for Signalled Lanes (pcuHr): 283.02
Total Delay Over All Lanes(pcuHr): 283.18

Cycle Time (s): 160

Full Input Data And Results

Scenario 9: '2039 B+Dev - Net Change - Airport peak' (FG12: '2039 Base+Dev - Net Change - Airport Peak', Plan 7: 'Copy of 2039 + Dev Traffic - Airport Peak Mitigation Double Cycle')

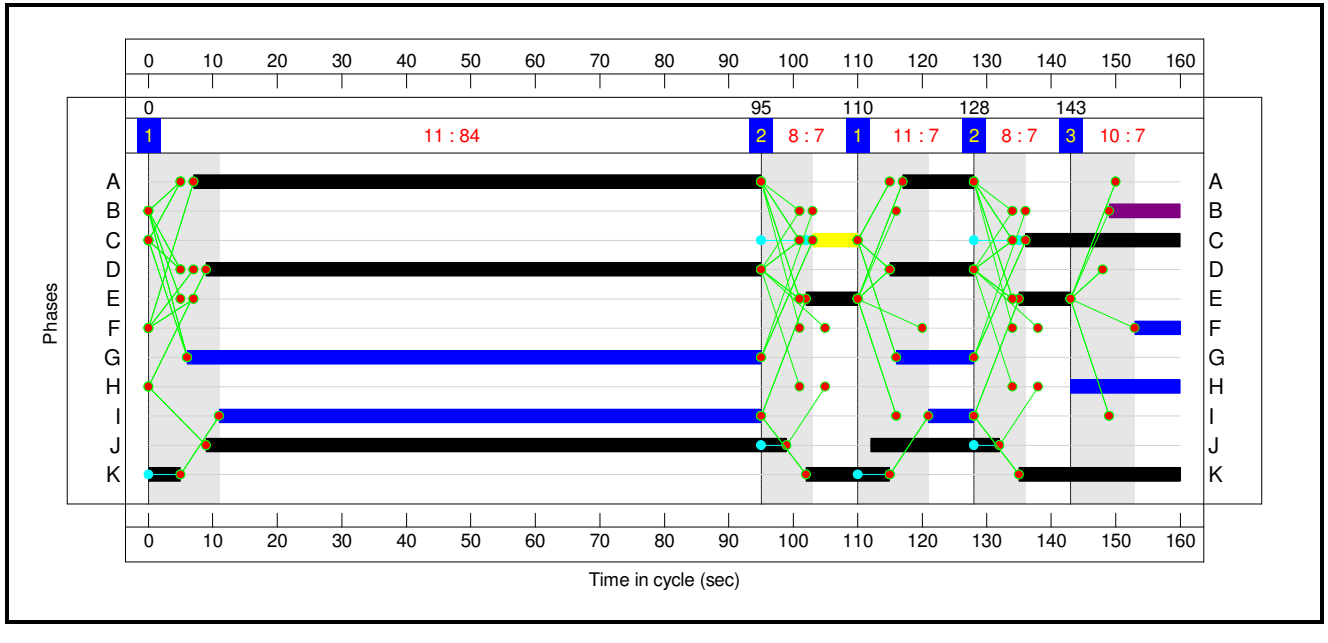
Stage Sequence Diagram



Stage Timings

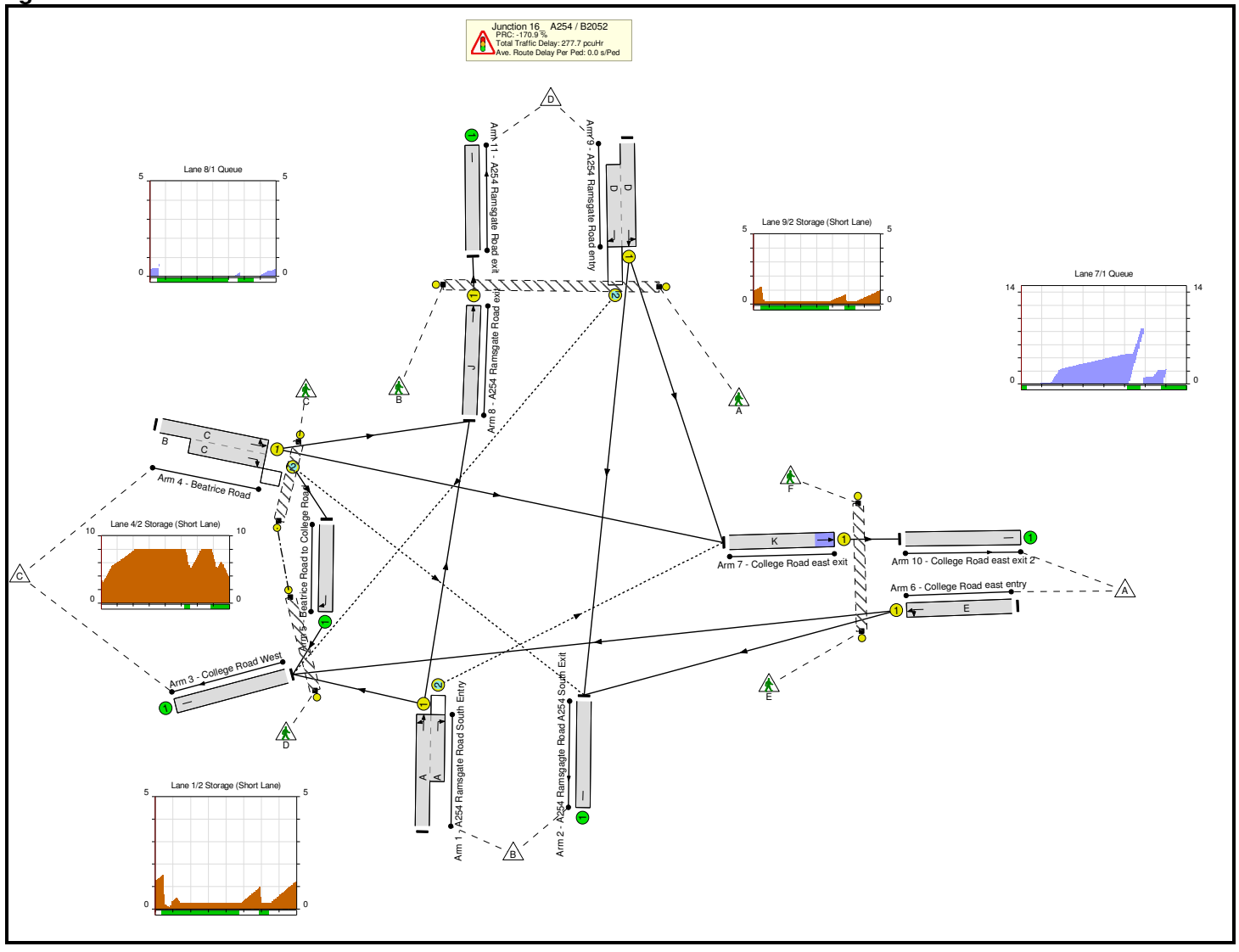
Stage	1	2	1	2	3
Duration	84	7	7	7	7
Change Point	0	95	110	128	143

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 16	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**243.8%**
Junction 16_ A254 / B2052	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**243.8%**
1/1+1/2	A254 Ramsgate Road South Entry Left Right Ahead	U+O	N/A	N/A	A		2	99	-	674	1803:1622	978+205	57.0 : 57.0%
2/1	A254 Ramsgagte Road A254 South Exit	U	N/A	N/A	-		-	-	-	873	Inf	Inf	0.0%
3/1	College Road West	U	N/A	N/A	-		-	-	-	659	Inf	Inf	0.0%
4/1+4/2	Beatrice Road Right Right2 Ahead Left	U+O	N/A	N/A	C	B	2	31	11	661	1906:1704	297+262	118.4 : 118.4%
5/1	Beatrice Road to College Road Right	U	N/A	N/A	-		-	-	-	84	2115	2115	3.4%
6/1	College Road east entry Left Ahead	U	N/A	N/A	E		2	16	-	543	1980	223	243.8%
7/1	College Road east exit Ahead	U	N/A	N/A	K		2	43	-	464	1965	553	74.6%
8/1	A254 Ramsgate Road exit Ahead	U	N/A	N/A	J		2	110	-	470	1965	1375	34.0%
9/1+9/2	A254 Ramsgate Road entry Ahead Right Left	U+O	N/A	N/A	D		2	99	-	588	1906:1741	1064+195	46.7 : 46.7%
10/1	College Road east exit 2	U	N/A	N/A	-		-	-	-	464	1965	1965	21.0%
11/1	A254 Ramsgate Road exit	U	N/A	N/A	-		-	-	-	470	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	G		2	101	-	0	-	45450	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	7	-	0	-	3150	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	I		2	91	-	0	-	40950	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	H		1	17	-	0	-	7650	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 16	**-**	**-**	**200**	**130**	**68**	**60.6**	**216.5**	**0.6**	**277.7**	**-**	**-**	**-**	**-**
Junction 16_ A254 / B2052	**-**	**-**	**200**	**130**	**68**	**60.6**	**216.5**	**0.6**	**277.7**	**-**	**-**	**-**	**-**
1/1+1/2	674	674	117	0	0	1.5	0.7	0.2	2.4	12.8	9.1	0.7	9.7
2/1	742	742	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	421	421	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1+4/2	661	558	0	130	61	17.3	54.3	0.2	71.8	391.3	22.3	54.3	76.6
5/1	71	71	-	-	-	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
6/1	543	223	-	-	-	38.4	161.0	-	199.4	1321.9	45.5	161.0	206.5
7/1	412	412	-	-	-	1.9	0.0	-	1.9	16.8	8.5	0.0	8.5
8/1	468	468	-	-	-	0.1	0.0	-	0.1	0.5	0.7	0.0	0.7
9/1+9/2	588	588	83	0	8	1.3	0.4	0.2	1.9	11.7	7.5	0.4	7.9
10/1	412	412	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
11/1	468	468	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P2	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P3	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0
Ped Link: P4	0	0	-	-	-	-	-	-	0.0	0.0	-	-	0.0

C1 - 08-0694

PRC for Signalled Lanes (%): -170.9
PRC Over All Lanes (%): -170.9

Total Delay for Signalled Lanes (pcuHr): 277.54
Total Delay Over All Lanes(pcuHr): 277.69

Cycle Time (s): 160

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: Jct 17_R1_val_mit_R1.j9
Path: R:\Projects\38199 Manston Airport DCO EIA\4 Design\Transport\Junction Modelling\Base Models\Validated\Jct 17_Ramsgate Rd_Poorhole Ln\Mitigation
Report generation date: 13/02/2018 17:56:04

Summary of junction performance

	AM							PM							Airport Peak						
	Queue (Veh)	Delay (min)	RFC	LOS	Junction Delay (min)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (min)	RFC	LOS	Junction Delay (min)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (min)	RFC	LOS	Junction Delay (min)	Junction LOS	Network Residual Capacity
	Arcady Module - 2039 + Dev Traffic																				
1 - Poorhole Ln	2.2	0.30	0.69	C	0.98	F	-10 % [3 - Star Ln]	2.4	0.33	0.72	C	2.40	F	-17 % [2 - Margate Rd]	2.6	0.36	0.73	C	1.97	F	-19 % [2 - Margate Rd]
2 - Margate Rd	16.5	1.30	0.99	F				67.5	4.18	1.15	F				79.8	4.90	1.18	F			
3 - Star Ln	15.6	1.62	1.00	F				17.4	1.75	1.00	F				4.6	0.62	0.84	E			
4 - Ramsgate Rd	14.1	0.72	0.96	E				55.7	2.15	1.07	F				17.2	0.83	0.97	E			
	Arcady Module - 2039 B+Dev_Net change																				
1 - Poorhole Ln	1.9	0.26	0.66	C	0.45	D	-2 % [3 - Star Ln]	2.3	0.31	0.70	C	0.97	F	-7 % [4 - Ramsgate Rd]	2.3	0.31	0.70	C	0.81	E	-10 % [2 - Margate Rd]
2 - Margate Rd	4.8	0.45	0.84	D				12.7	1.03	0.96	F				25.1	1.75	1.02	F			
3 - Star Ln	5.7	0.65	0.87	E				6.5	0.74	0.89	E				3.0	0.42	0.76	D			
4 - Ramsgate Rd	7.5	0.42	0.89	C				28.4	1.26	1.01	F				8.8	0.47	0.91	D			
	Lane Simulation-mit [Lane Simulation] - 2039 + Dev Traffic																				
1 - Poorhole Ln	7.9	1.02		F	1.16	F	% [ ]	10.5	1.33		F	2.61	F	% [ ]	10.6	1.30		F	2.17	F	% [ ]
2 - Margate Rd	20.0	1.36		F				63.8	4.11		F				75.3	4.91		F			
3 - Star Ln	18.0	1.68		F				21.6	1.92		F				5.9	0.73		E			
4 - Ramsgate Rd	19.2	0.86		F				63.0	2.32		F				22.6	0.96		F			
	Lane Simulation-mit [Lane Simulation] - 2039 B+Dev_Net change																				
1 - Poorhole Ln	8.6	1.05		F	0.65	E	% [ ]	14.9	1.86		F	1.28	F	% [ ]	13.1	1.57		F	1.05	F	% [ ]
2 - Margate Rd	5.8	0.49		D				14.0	0.99		F				28.2	1.70		F			
3 - Star Ln	7.4	0.77		E				7.4	0.76		E				3.2	0.43		D			
4 - Ramsgate Rd	10.8	0.54		D				35.3	1.47		F				12.6	0.63		E			

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.

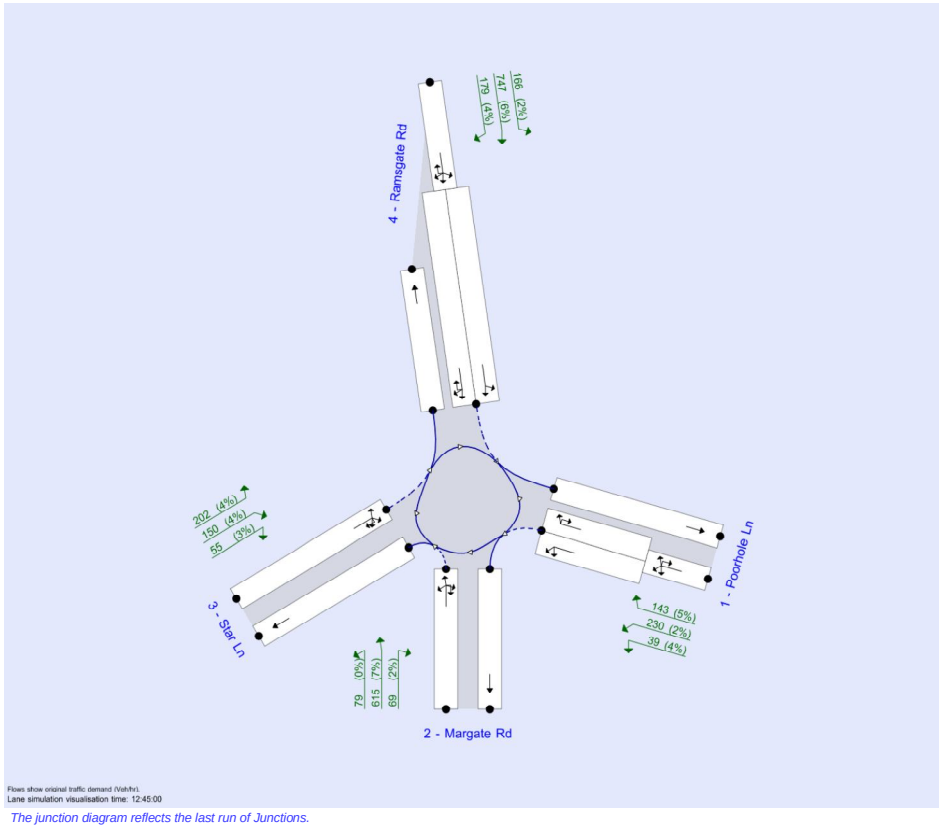
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	04/10/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	GLOBAL\fuad.huda
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



The junction diagram reflects the last run of Junctions.

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
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 - 2039 + Dev Traffic, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Description	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Arcady Module	Poorhole Ln - Margate Rd - Star Ln - Ramsgate Rd	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	0.98	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-10	3 - Star Ln

Arms

Arms

Arm	Name	Description
1	Poorhole Ln	
2	Margate Rd	
3	Star Ln	
4	Ramsgate Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Poorhole Ln	3.73	6.84	20.0	13.3	40.1	41.0	
2 - Margate Rd	3.65	4.39	3.0	6.9	40.1	50.0	
3 - Star Ln	3.91	4.50	2.7	12.0	40.1	22.0	
4 - Ramsgate Rd	3.22	7.79	9.9	18.7	40.1	64.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Poorhole Ln	0.613	1649
2 - Margate Rd	0.459	1031
3 - Star Ln	0.557	1284
4 - Ramsgate Rd	0.535	1349

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - Poorhole Ln	Percentage		70.00
2 - Margate Rd	Percentage		117.00
3 - Star Ln	Percentage		80.00
4 - Ramsgate Rd	Percentage		117.00

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 (%)
1 - Poorhole Ln		ONE HOUR	✓	407	100.000
2 - Margate Rd		ONE HOUR	✓	710	100.000
3 - Star Ln		ONE HOUR	✓	531	100.000
4 - Ramsgate Rd		ONE HOUR	✓	1130	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	14	222	171
	2 - Margate Rd	15	0	43	652
	3 - Star Ln	236	57	0	238
	4 - Ramsgate Rd	177	745	208	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	10	1	4
	2 - Margate Rd	17	0	9	6
	3 - Star Ln	2	0	0	3
	4 - Ramsgate Rd	9	5	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)
1 - Poorhole Ln	0.69	0.30	2.2	C	373	560
2 - Margate Rd	0.99	1.30	16.5	F	652	977
3 - Star Ln	1.00	1.62	15.6	F	487	731
4 - Ramsgate Rd	0.96	0.72	14.1	E	1037	1555

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
1 - Poorhole Ln	306	77	754	797	0.384	304	319	0.0	0.6	0.121	A
2 - Margate Rd	535	134	449	902	0.593	529	609	0.0	1.4	0.158	A
3 - Star Ln	400	100	625	717	0.558	395	353	0.0	1.2	0.184	B
4 - Ramsgate Rd	851	213	229	1362	0.625	844	790	0.0	1.6	0.115	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
1 - Poorhole Ln	366	91	903	733	0.499	364	382	0.6	1.0	0.162	A
2 - Margate Rd	638	160	538	856	0.746	633	729	1.4	2.7	0.263	C
3 - Star Ln	477	119	748	660	0.724	473	423	1.2	2.4	0.312	C
4 - Ramsgate Rd	1016	254	274	1335	0.761	1010	946	1.6	3.0	0.182	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 (min)	LOS
1 - Poorhole Ln	448	112	1080	655	0.684	444	451	1.0	2.0	0.278	C
2 - Margate Rd	782	195	651	798	0.980	745	873	2.7	12.0	0.820	E
3 - Star Ln	585	146	886	596	0.981	552	510	2.4	10.6	0.978	F
4 - Ramsgate Rd	1244	311	320	1306	0.952	1211	1118	3.0	11.4	0.507	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 (min)	LOS
1 - Poorhole Ln	448	112	1101	646	0.693	448	460	2.0	2.2	0.300	C
2 - Margate Rd	782	195	659	794	0.985	764	889	12.0	16.5	1.301	F
3 - Star Ln	585	146	905	587	0.996	565	517	10.6	15.6	1.620	F
4 - Ramsgate Rd	1244	311	328	1302	0.956	1233	1142	11.4	14.1	0.719	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 (min)	LOS
1 - Poorhole Ln	366	91	949	713	0.513	370	414	2.2	1.1	0.177	B
2 - Margate Rd	638	160	552	849	0.752	691	767	16.5	3.3	0.481	D
3 - Star Ln	477	119	805	633	0.754	526	439	15.6	3.4	0.716	E
4 - Ramsgate Rd	1016	254	305	1316	0.772	1058	1026	14.1	3.6	0.265	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 (min)	LOS
1 - Poorhole Ln	306	77	768	791	0.387	308	327	1.1	0.6	0.125	A
2 - Margate Rd	535	134	456	899	0.595	542	620	3.3	1.5	0.171	B
3 - Star Ln	400	100	638	710	0.563	408	359	3.4	1.3	0.204	B
4 - Ramsgate Rd	851	213	237	1357	0.627	858	810	3.6	1.7	0.122	A

Arcady Module - 2039 + Dev Traffic, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Description	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Arcady Module	Poorhole Ln - Margate Rd - Star Ln - Ramsgate Rd	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	2.40	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-17	2 - Margate Rd

Arms

Arms

Arm	Name	Description
1	Poorhole Ln	
2	Margate Rd	
3	Star Ln	
4	Ramsgate Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Poorhole Ln	3.73	6.84	20.0	13.3	40.1	41.0	
2 - Margate Rd	3.65	4.39	3.0	6.9	40.1	50.0	
3 - Star Ln	3.91	4.50	2.7	12.0	40.1	22.0	
4 - Ramsgate Rd	3.22	7.79	9.9	18.7	40.1	64.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Poorhole Ln	0.613	1649
2 - Margate Rd	0.459	1031
3 - Star Ln	0.557	1284
4 - Ramsgate Rd	0.535	1349

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - Poorhole Ln	Percentage		70.00
2 - Margate Rd	Percentage		117.00
3 - Star Ln	Percentage		80.00
4 - Ramsgate Rd	Percentage		117.00

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 (%)
1 - Poorhole Ln		ONE HOUR	✓	410	100.000
2 - Margate Rd		ONE HOUR	✓	840	100.000
3 - Star Ln		ONE HOUR	✓	549	100.000
4 - Ramsgate Rd		ONE HOUR	✓	1286	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	44	206	160
	2 - Margate Rd	34	0	63	743
	3 - Star Ln	235	62	0	252
	4 - Ramsgate Rd	205	799	282	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	0	1	2
	2 - Margate Rd	4	0	2	3
	3 - Star Ln	0	0	0	1
	4 - Ramsgate Rd	1	3	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)
1 - Poorhole Ln	0.72	0.33	2.4	C	376	564
2 - Margate Rd	1.15	4.18	67.5	F	771	1156
3 - Star Ln	1.00	1.75	17.4	F	504	756
4 - Ramsgate Rd	1.07	2.15	55.7	F	1180	1770

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
1 - Poorhole Ln	309	77	852	770	0.401	306	353	0.0	0.7	0.128	A
2 - Margate Rd	632	158	484	916	0.690	624	675	0.0	2.1	0.200	B
3 - Star Ln	413	103	696	704	0.587	408	411	0.0	1.4	0.199	B
4 - Ramsgate Rd	968	242	246	1392	0.695	959	858	0.0	2.2	0.136	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
1 - Poorhole Ln	369	92	1017	699	0.527	367	421	0.7	1.1	0.180	B
2 - Margate Rd	755	189	579	866	0.872	741	806	2.1	5.6	0.439	D
3 - Star Ln	494	123	829	644	0.766	487	491	1.4	3.0	0.368	C
4 - Ramsgate Rd	1156	289	294	1363	0.848	1145	1023	2.2	5.0	0.262	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 (min)	LOS
1 - Poorhole Ln	451	113	1162	636	0.710	447	484	1.1	2.3	0.309	C
2 - Margate Rd	925	231	685	810	1.142	798	924	5.6	37.3	1.854	F
3 - Star Ln	604	151	912	606	0.998	568	571	3.0	12.1	1.070	F
4 - Ramsgate Rd	1416	354	340	1335	1.061	1307	1141	5.0	32.4	1.050	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 (min)	LOS
1 - Poorhole Ln	451	113	1178	630	0.717	451	493	2.3	2.4	0.334	C
2 - Margate Rd	925	231	693	806	1.148	804	936	37.3	67.5	4.058	F
3 - Star Ln	604	151	920	603	1.003	583	577	12.1	17.4	1.751	F
4 - Ramsgate Rd	1416	354	348	1329	1.065	1323	1155	32.4	55.7	2.149	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 (min)	LOS
1 - Poorhole Ln	369	92	1170	633	0.582	373	476	2.4	1.4	0.234	B
2 - Margate Rd	755	189	622	843	0.895	831	921	67.5	48.5	4.184	F
3 - Star Ln	494	123	914	605	0.816	541	539	17.4	5.4	1.109	F
4 - Ramsgate Rd	1156	289	327	1342	0.861	1319	1129	55.7	15.0	1.689	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 (min)	LOS
1 - Poorhole Ln	309	77	904	748	0.413	312	378	1.4	0.7	0.138	A
2 - Margate Rd	632	158	501	907	0.697	816	714	48.5	2.6	1.370	F
3 - Star Ln	413	103	877	622	0.664	427	441	5.4	2.1	0.325	C
4 - Ramsgate Rd	968	242	264	1381	0.701	1018	1039	15.0	2.4	0.188	B

Arcady Module - 2039 + Dev Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Description	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Arcady Module	Poorhole Ln - Margate Rd - Star Ln - Ramsgate Rd	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	1.97	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-19	2 - Margate Rd

Arms

Arms

Arm	Name	Description
1	Poorhole Ln	
2	Margate Rd	
3	Star Ln	
4	Ramsgate Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Poorhole Ln	3.73	6.84	20.0	13.3	40.1	41.0	
2 - Margate Rd	3.65	4.39	3.0	6.9	40.1	50.0	
3 - Star Ln	3.91	4.50	2.7	12.0	40.1	22.0	
4 - Ramsgate Rd	3.22	7.79	9.9	18.7	40.1	64.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Poorhole Ln	0.613	1649
2 - Margate Rd	0.459	1031
3 - Star Ln	0.557	1284
4 - Ramsgate Rd	0.535	1349

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - Poorhole Ln	Percentage		70.00
2 - Margate Rd	Percentage		117.00
3 - Star Ln	Percentage		80.00
4 - Ramsgate Rd	Percentage		117.00

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 (%)
1 - Poorhole Ln		ONE HOUR	✓	412	100.000
2 - Margate Rd		ONE HOUR	✓	876	100.000
3 - Star Ln		ONE HOUR	✓	433	100.000
4 - Ramsgate Rd		ONE HOUR	✓	1174	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	39	204	169
	2 - Margate Rd	69	0	79	728
	3 - Star Ln	138	55	0	240
	4 - Ramsgate Rd	179	803	192	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	4	2	4
	2 - Margate Rd	2	0	0	6
	3 - Star Ln	4	3	0	4
	4 - Ramsgate Rd	2	6	4	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)
1 - Poorhole Ln	0.73	0.36	2.6	C	378	567
2 - Margate Rd	1.18	4.90	79.8	F	804	1206
3 - Star Ln	0.84	0.62	4.6	E	397	596
4 - Ramsgate Rd	0.97	0.83	17.2	E	1077	1616

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
1 - Poorhole Ln	310	78	784	776	0.400	308	288	0.0	0.7	0.127	A
2 - Margate Rd	659	165	422	925	0.713	650	670	0.0	2.4	0.212	B
3 - Star Ln	326	81	718	664	0.491	322	354	0.0	0.9	0.174	B
4 - Ramsgate Rd	884	221	195	1382	0.640	877	845	0.0	1.7	0.117	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
1 - Poorhole Ln	370	93	938	709	0.523	369	344	0.7	1.1	0.176	B
2 - Margate Rd	788	197	505	881	0.894	771	802	2.4	6.5	0.486	D
3 - Star Ln	389	97	853	603	0.645	386	424	0.9	1.7	0.272	C
4 - Ramsgate Rd	1055	264	233	1359	0.777	1049	1006	1.7	3.3	0.190	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 (min)	LOS
1 - Poorhole Ln	454	113	1121	629	0.722	448	404	1.1	2.4	0.323	C
2 - Margate Rd	964	241	611	825	1.169	816	958	6.5	43.6	2.075	F
3 - Star Ln	477	119	926	570	0.836	467	500	1.7	4.2	0.535	D
4 - Ramsgate Rd	1293	323	272	1334	0.969	1252	1121	3.3	13.4	0.561	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 (min)	LOS
1 - Poorhole Ln	454	113	1143	619	0.733	453	411	2.4	2.6	0.358	C
2 - Margate Rd	964	241	619	821	1.175	820	977	43.6	79.8	4.627	F
3 - Star Ln	477	119	931	568	0.840	475	507	4.2	4.6	0.622	E
4 - Ramsgate Rd	1293	323	276	1332	0.971	1278	1130	13.4	17.2	0.833	E

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
1 - Poorhole Ln	370	93	990	686	0.540	376	364	2.6	1.2	0.197	B
2 - Margate Rd	788	197	522	872	0.903	861	845	79.8	61.4	4.901	F
3 - Star Ln	389	97	938	565	0.689	398	445	4.6	2.4	0.378	C
4 - Ramsgate Rd	1055	264	245	1351	0.781	1109	1091	17.2	3.8	0.295	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 (min)	LOS
1 - Poorhole Ln	310	78	798	770	0.403	312	311	1.2	0.7	0.132	A
2 - Margate Rd	659	165	429	921	0.716	892	681	61.4	3.3	2.157	F
3 - Star Ln	326	81	939	564	0.578	330	381	2.4	1.4	0.260	C
4 - Ramsgate Rd	884	221	217	1368	0.646	892	1052	3.8	1.9	0.128	A

Arcady Module - 2039 B+Dev_Net change, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Description	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Arcady Module	Poorhole Ln - Margate Rd - Star Ln - Ramsgate Rd	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	0.45	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-2	3 - Star Ln

Arms

Arms

Arm	Name	Description
1	Poorhole Ln	
2	Margate Rd	
3	Star Ln	
4	Ramsgate Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Poorhole Ln	3.73	6.84	20.0	13.3	40.1	41.0	
2 - Margate Rd	3.65	4.39	3.0	6.9	40.1	50.0	
3 - Star Ln	3.91	4.50	2.7	12.0	40.1	22.0	
4 - Ramsgate Rd	3.22	7.79	9.9	18.7	40.1	64.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Poorhole Ln	0.613	1649
2 - Margate Rd	0.459	1031
3 - Star Ln	0.557	1284
4 - Ramsgate Rd	0.535	1349

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - Poorhole Ln	Percentage		70.00
2 - Margate Rd	Percentage		117.00
3 - Star Ln	Percentage		80.00
4 - Ramsgate Rd	Percentage		117.00

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)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Poorhole Ln		ONE HOUR	✓	407	100.000
2 - Margate Rd		ONE HOUR	✓	611	100.000
3 - Star Ln		ONE HOUR	✓	508	100.000
4 - Ramsgate Rd		ONE HOUR	✓	1046	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	14	248	145
	2 - Margate Rd	15	0	43	553
	3 - Star Ln	249	57	0	202
	4 - Ramsgate Rd	164	689	193	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	10	1	4
	2 - Margate Rd	17	0	9	6
	3 - Star Ln	2	0	0	3
	4 - Ramsgate Rd	9	5	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)
1 - Poorhole Ln	0.66	0.26	1.9	C	373	560
2 - Margate Rd	0.84	0.45	4.8	D	561	841
3 - Star Ln	0.87	0.65	5.7	E	466	699
4 - Ramsgate Rd	0.89	0.42	7.5	C	960	1440

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
1 - Poorhole Ln	306	77	702	822	0.373	304	319	0.0	0.6	0.115	A
2 - Margate Rd	460	115	438	907	0.507	456	568	0.0	1.0	0.132	A
3 - Star Ln	382	96	532	759	0.504	378	362	0.0	1.0	0.156	A
4 - Ramsgate Rd	787	197	239	1356	0.581	782	671	0.0	1.4	0.104	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
1 - Poorhole Ln	366	91	840	761	0.481	365	383	0.6	0.9	0.151	A
2 - Margate Rd	549	137	525	863	0.637	547	680	1.0	1.7	0.188	B
3 - Star Ln	457	114	638	711	0.643	454	433	1.0	1.7	0.231	B
4 - Ramsgate Rd	940	235	287	1327	0.709	936	805	1.4	2.4	0.152	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
1 - Poorhole Ln	448	112	1017	684	0.655	444	462	0.9	1.8	0.247	B
2 - Margate Rd	673	168	638	804	0.837	662	823	1.7	4.4	0.394	C
3 - Star Ln	559	140	774	648	0.863	546	527	1.7	5.0	0.532	D
4 - Ramsgate Rd	1152	288	345	1291	0.892	1134	975	2.4	6.8	0.348	C

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
1 - Poorhole Ln	448	112	1031	678	0.661	448	469	1.8	1.9	0.260	C
2 - Margate Rd	673	168	644	801	0.840	671	835	4.4	4.8	0.450	D
3 - Star Ln	559	140	784	643	0.869	557	532	5.0	5.7	0.652	E
4 - Ramsgate Rd	1152	288	352	1287	0.895	1149	988	6.8	7.5	0.415	C

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
1 - Poorhole Ln	366	91	863	752	0.487	370	396	1.9	1.0	0.159	A
2 - Margate Rd	549	137	534	858	0.640	561	698	4.8	1.8	0.210	B
3 - Star Ln	457	114	653	704	0.649	472	442	5.7	1.9	0.274	C
4 - Ramsgate Rd	940	235	298	1320	0.712	960	827	7.5	2.6	0.175	B

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
1 - Poorhole Ln	306	77	711	818	0.375	308	325	1.0	0.6	0.118	A
2 - Margate Rd	460	115	443	905	0.509	463	576	1.8	1.1	0.137	A
3 - Star Ln	382	96	540	756	0.506	386	366	1.9	1.0	0.164	A
4 - Ramsgate Rd	787	197	244	1353	0.582	792	682	2.6	1.4	0.108	A

Arcady Module - 2039 B+Dev_Net change, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Description	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Arcady Module	Poorhole Ln - Margate Rd - Star Ln - Ramsgate Rd	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	0.97	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-7	4 - Ramsgate Rd

Arms

Arms

Arm	Name	Description
1	Poorhole Ln	
2	Margate Rd	
3	Star Ln	
4	Ramsgate Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Poorhole Ln	3.73	6.84	20.0	13.3	40.1	41.0	
2 - Margate Rd	3.65	4.39	3.0	6.9	40.1	50.0	
3 - Star Ln	3.91	4.50	2.7	12.0	40.1	22.0	
4 - Ramsgate Rd	3.22	7.79	9.9	18.7	40.1	64.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Poorhole Ln	0.613	1649
2 - Margate Rd	0.459	1031
3 - Star Ln	0.557	1284
4 - Ramsgate Rd	0.535	1349

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - Poorhole Ln	Percentage		70.00
2 - Margate Rd	Percentage		117.00
3 - Star Ln	Percentage		80.00
4 - Ramsgate Rd	Percentage		117.00

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)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Poorhole Ln		ONE HOUR	✓	410	100.000
2 - Margate Rd		ONE HOUR	✓	706	100.000
3 - Star Ln		ONE HOUR	✓	516	100.000
4 - Ramsgate Rd		ONE HOUR	✓	1203	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	44	235	131
	2 - Margate Rd	34	0	63	609
	3 - Star Ln	248	62	0	206
	4 - Ramsgate Rd	192	748	263	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	0	1	2
	2 - Margate Rd	4	0	2	3
	3 - Star Ln	0	0	0	1
	4 - Ramsgate Rd	1	3	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)
1 - Poorhole Ln	0.70	0.31	2.3	C	376	564
2 - Margate Rd	0.96	1.03	12.7	F	648	972
3 - Star Ln	0.89	0.74	6.5	E	473	710
4 - Ramsgate Rd	1.01	1.26	28.4	F	1104	1656

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
1 - Poorhole Ln	309	77	801	793	0.389	306	353	0.0	0.6	0.123	A
2 - Margate Rd	532	133	470	924	0.575	526	638	0.0	1.3	0.149	A
3 - Star Ln	388	97	577	759	0.512	384	419	0.0	1.0	0.158	A
4 - Ramsgate Rd	906	226	256	1386	0.654	898	705	0.0	1.8	0.121	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
1 - Poorhole Ln	369	92	958	725	0.508	367	423	0.6	1.0	0.167	B
2 - Margate Rd	635	159	562	875	0.726	630	763	1.3	2.5	0.240	B
3 - Star Ln	464	116	691	707	0.656	461	501	1.0	1.8	0.240	B
4 - Ramsgate Rd	1081	270	307	1354	0.798	1074	845	1.8	3.7	0.208	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
1 - Poorhole Ln	451	113	1128	652	0.693	447	504	1.0	2.1	0.287	C
2 - Margate Rd	777	194	675	815	0.953	748	900	2.5	9.8	0.699	E
3 - Star Ln	568	142	824	647	0.879	553	599	1.8	5.5	0.571	D
4 - Ramsgate Rd	1325	331	369	1317	1.006	1263	1009	3.7	19.2	0.728	E

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
1 - Poorhole Ln	451	113	1150	642	0.703	451	514	2.1	2.3	0.312	C
2 - Margate Rd	777	194	684	811	0.959	766	917	9.8	12.7	1.030	F
3 - Star Ln	568	142	842	639	0.890	564	608	5.5	6.5	0.738	E
4 - Ramsgate Rd	1325	331	376	1312	1.009	1288	1030	19.2	28.4	1.263	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 (min)	LOS
1 - Poorhole Ln	369	92	1047	687	0.537	373	452	2.3	1.2	0.194	B
2 - Margate Rd	635	159	590	860	0.738	673	830	12.7	3.0	0.377	C
3 - Star Ln	464	116	732	688	0.674	481	531	6.5	2.2	0.311	C
4 - Ramsgate Rd	1081	270	322	1346	0.804	1177	892	28.4	4.5	0.503	D

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
1 - Poorhole Ln	309	77	817	786	0.393	311	361	1.2	0.7	0.127	A
2 - Margate Rd	532	133	478	919	0.578	538	650	3.0	1.4	0.160	A
3 - Star Ln	388	97	589	754	0.515	393	426	2.2	1.1	0.168	B
4 - Ramsgate Rd	906	226	262	1382	0.655	916	720	4.5	1.9	0.131	A

Arcady Module - 2039 B+Dev_Net change, Airport Peak

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Description	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Arcady Module	Poorhole Ln - Margate Rd - Star Ln - Ramsgate Rd	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	0.81	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-10	2 - Margate Rd

Arms

Arms

Arm	Name	Description
1	Poorhole Ln	
2	Margate Rd	
3	Star Ln	
4	Ramsgate Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Poorhole Ln	3.73	6.84	20.0	13.3	40.1	41.0	
2 - Margate Rd	3.65	4.39	3.0	6.9	40.1	50.0	
3 - Star Ln	3.91	4.50	2.7	12.0	40.1	22.0	
4 - Ramsgate Rd	3.22	7.79	9.9	18.7	40.1	64.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Poorhole Ln	0.613	1649
2 - Margate Rd	0.459	1031
3 - Star Ln	0.557	1284
4 - Ramsgate Rd	0.535	1349

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - Poorhole Ln	Percentage		70.00
2 - Margate Rd	Percentage		117.00
3 - Star Ln	Percentage		80.00
4 - Ramsgate Rd	Percentage		117.00

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 (%)
1 - Poorhole Ln		ONE HOUR	✓	412	100.000
2 - Margate Rd		ONE HOUR	✓	763	100.000
3 - Star Ln		ONE HOUR	✓	407	100.000
4 - Ramsgate Rd		ONE HOUR	✓	1092	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	39	230	143
	2 - Margate Rd	69	0	79	615
	3 - Star Ln	150	55	0	202
	4 - Ramsgate Rd	166	747	179	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	4	2	5
	2 - Margate Rd	2	0	0	7
	3 - Star Ln	4	3	0	4
	4 - Ramsgate Rd	2	6	4	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)
1 - Poorhole Ln	0.70	0.31	2.3	C	378	567
2 - Margate Rd	1.02	1.75	25.1	F	700	1050
3 - Star Ln	0.76	0.42	3.0	D	373	560
4 - Ramsgate Rd	0.91	0.47	8.8	D	1002	1503

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
1 - Poorhole Ln	310	78	733	797	0.389	308	287	0.0	0.6	0.122	A
2 - Margate Rd	574	144	412	923	0.622	568	629	0.0	1.6	0.166	A
3 - Star Ln	306	77	616	708	0.433	303	364	0.0	0.8	0.147	A
4 - Ramsgate Rd	822	206	204	1376	0.597	816	715	0.0	1.5	0.106	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
1 - Poorhole Ln	370	93	878	734	0.505	369	344	0.6	1.0	0.164	A
2 - Margate Rd	686	171	494	881	0.779	679	753	1.6	3.3	0.289	C
3 - Star Ln	366	91	737	653	0.561	364	436	0.8	1.2	0.206	B
4 - Ramsgate Rd	982	245	245	1351	0.727	977	856	1.5	2.6	0.159	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
1 - Poorhole Ln	454	113	1061	653	0.694	449	414	1.0	2.1	0.287	C
2 - Margate Rd	840	210	600	825	1.018	787	910	3.3	16.5	0.995	F
3 - Star Ln	448	112	861	596	0.752	442	526	1.2	2.8	0.375	C
4 - Ramsgate Rd	1202	301	294	1321	0.910	1181	1010	2.6	7.9	0.381	C

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
1 - Poorhole Ln	454	113	1077	647	0.702	453	420	2.1	2.3	0.309	C
2 - Margate Rd	840	210	607	821	1.023	806	923	16.5	25.1	1.753	F
3 - Star Ln	448	112	880	588	0.762	447	533	2.8	3.0	0.421	D
4 - Ramsgate Rd	1202	301	298	1318	0.912	1198	1029	7.9	8.8	0.470	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 (min)	LOS
1 - Poorhole Ln	370	93	903	723	0.513	375	360	2.3	1.1	0.175	B
2 - Margate Rd	686	171	504	875	0.784	770	774	25.1	4.1	0.807	E
3 - Star Ln	366	91	820	615	0.595	372	454	3.0	1.5	0.253	C
4 - Ramsgate Rd	982	245	257	1344	0.731	1006	935	8.8	2.8	0.189	B

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
1 - Poorhole Ln	310	78	743	793	0.391	312	293	1.1	0.7	0.125	A
2 - Margate Rd	574	144	418	921	0.624	584	637	4.1	1.7	0.183	B
3 - Star Ln	306	77	632	701	0.437	309	370	1.5	0.8	0.154	A
4 - Ramsgate Rd	822	206	209	1373	0.599	827	733	2.8	1.5	0.111	A

Lane Simulation-mit - 2039 + Dev Traffic, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A2 - Lane Simulation-mit [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	Description	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Lane Simulation-mit	✓	Poorhole Ln - Margate Rd - Star Ln - Ramsgate Rd	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	1.16	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Poorhole Ln	
2	Margate Rd	
3	Star Ln	
4	Ramsgate Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Poorhole Ln	3.73	6.84	20.0	13.3	40.1	41.0	
2 - Margate Rd	3.65	4.39	3.0	6.9	40.1	50.0	
3 - Star Ln	3.91	4.50	2.7	12.0	40.1	22.0	
4 - Ramsgate Rd	3.22	7.79	9.9	18.7	40.1	64.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Poorhole Ln	0.613	1649
2 - Margate Rd	0.459	1031
3 - Star Ln	0.557	1284
4 - Ramsgate Rd	0.535	1349

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - Poorhole Ln	Percentage		70.00
2 - Margate Rd	Percentage		117.00
3 - Star Ln	Percentage		80.00
4 - Ramsgate Rd	Percentage		117.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
1 - Poorhole Ln	Evenly split	10.00
2 - Margate Rd	Evenly split	10.00
3 - Star Ln	Evenly split	10.00
4 - Ramsgate Rd	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
1 - Poorhole Ln	1 [Give-way line]	1	2, 3	✓	4.00	0	99999
		2	1, 4	✓	4.00	0	99999
	2	1	(1, 2, 3, 4)		Infinity		
2 - Margate Rd	1 [Give-way line]	1	1, 2, 3, 4		Infinity	0	99999
3 - Star Ln	1 [Give-way line]	1	1, 2, 3, 4		Infinity	0	99999
4 - Ramsgate Rd	1 [Give-way line]	1	1, 2	✓	8.00	0	99999
		2	2, 3, 4	✓	8.00	0	99999
	2	1	(1, 2, 3, 4)		Infinity		

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - Poorhole Ln	1 [Give-way line]	1	0.306	825
		2	0.306	825
2 - Margate Rd	1 [Give-way line]	1	0.459	1031
3 - Star Ln	1 [Give-way line]	1	0.557	1284
4 - Ramsgate Rd	1 [Give-way line]	1	0.267	674
		2	0.267	674

Lane Movements

Arm	Lane Level	Lane	Destination arm			
			Poorhole Ln	Margate Rd	Star Ln	Ramsgate Rd
1 - Poorhole Ln	1 [Give-way line]	1		✓	✓	
		2	✓			✓
	2	1	✓	✓	✓	✓
2 - Margate Rd	1 [Give-way line]	1	✓	✓	✓	✓
3 - Star Ln	1 [Give-way line]	1	✓	✓	✓	✓
4 - Ramsgate Rd	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 (%)
1 - Poorhole Ln		ONE HOUR	✓	407	100.000
2 - Margate Rd		ONE HOUR	✓	710	100.000
3 - Star Ln		ONE HOUR	✓	531	100.000
4 - Ramsgate Rd		ONE HOUR	✓	1130	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	14	222	171
	2 - Margate Rd	15	0	43	652
	3 - Star Ln	236	57	0	238
	4 - Ramsgate Rd	177	745	208	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	10	1	4
	2 - Margate Rd	17	0	9	6
	3 - Star Ln	2	0	0	3
	4 - Ramsgate Rd	9	5	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)
1 - Poorhole Ln	1.02	7.9	F	372	557
2 - Margate Rd	1.36	20.0	F	652	978
3 - Star Ln	1.68	18.0	F	489	733
4 - Ramsgate Rd	0.86	19.2	F	1036	1554

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
1 - Poorhole Ln	306	77	761	309	323	0.0	1.3	0.234	B
2 - Margate Rd	539	135	455	537	614	0.0	1.6	0.154	A
3 - Star Ln	401	100	636	402	357	0.0	1.3	0.174	B
4 - Ramsgate Rd	850	213	233	851	804	0.0	2.3	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
1 - Poorhole Ln	365	91	906	366	382	1.3	2.3	0.356	C
2 - Margate Rd	640	160	544	638	728	1.6	3.1	0.268	C
3 - Star Ln	476	119	753	476	429	1.3	2.9	0.321	C
4 - Ramsgate Rd	1017	254	274	1015	955	2.3	4.4	0.240	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
1 - Poorhole Ln	446	112	1086	435	451	2.3	6.6	0.721	E
2 - Margate Rd	780	195	646	750	876	3.1	13.5	0.763	E
3 - Star Ln	589	147	891	555	505	2.9	12.5	0.925	F
4 - Ramsgate Rd	1242	311	318	1219	1128	4.4	15.2	0.586	E

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
1 - Poorhole Ln	447	112	1097	445	456	6.6	7.8	1.018	F
2 - Margate Rd	782	196	655	756	887	13.5	19.9	1.362	F
3 - Star Ln	588	147	897	571	514	12.5	18.0	1.678	F
4 - Ramsgate Rd	1241	310	328	1225	1139	15.2	19.1	0.856	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
1 - Poorhole Ln	365	91	923	371	405	7.8	2.7	0.628	E
2 - Margate Rd	636	159	547	675	748	19.9	4.6	0.847	F
3 - Star Ln	476	119	788	506	433	18.0	5.8	1.132	F
4 - Ramsgate Rd	1017	254	295	1033	999	19.1	5.3	0.487	D

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
1 - Poorhole Ln	300	75	761	300	325	2.7	1.3	0.288	C
2 - Margate Rd	536	134	447	535	614	4.6	1.6	0.207	B
3 - Star Ln	401	100	629	403	354	5.8	1.4	0.300	C
4 - Ramsgate Rd	850	212	235	851	796	5.3	2.4	0.185	B

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

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
1 - Poorhole Ln	Entry	1	1	2, 3	177	401	0.441	178	0.0	0.8	0.234	B
			2	1, 4	130	391	0.332	131	0.0	0.5	0.211	B
		2	1	(1, 2, 3, 4)	306			307	0.0	0.0	0.009	A
	Exit	1	1		323			323	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	539	898	0.600	537	0.0	1.6	0.154	A
	Exit	1	1		614			614	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	401	711	0.564	402	0.0	1.3	0.174	B
	Exit	1	1		357			357	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	416	673	0.618	416	0.0	1.1	0.160	A
			2	2, 3, 4	435	688	0.632	436	0.0	1.1	0.163	A
		2	1	(1, 2, 3, 4)	850			850	0.0	0.0	0.000	A
	Exit	1	1		804			804	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
1 - Poorhole Ln	Entry	1	1	2, 3	211	370	0.570	213	0.8	1.2	0.328	C
			2	1, 4	154	360	0.427	153	0.5	0.7	0.276	C
		2	1	(1, 2, 3, 4)	365			365	0.0	0.4	0.048	A
	Exit	1	1		382			382	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	640	854	0.749	638	1.6	3.1	0.268	C
	Exit	1	1		728			728	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	476	657	0.725	476	1.3	2.9	0.321	C
	Exit	1	1		429			429	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	497	660	0.754	496	1.1	2.0	0.231	B
			2	2, 3, 4	519	676	0.768	518	1.1	2.1	0.234	B
		2	1	(1, 2, 3, 4)	1017			1016	0.0	0.2	0.007	A
	Exit	1	1		955			955	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
1 - Poorhole Ln	Entry	1	1	2, 3	251	331	0.759	250	1.2	2.2	0.472	D
			2	1, 4	186	323	0.577	185	0.7	1.3	0.389	C
		2	1	(1, 2, 3, 4)	446			437	0.4	3.1	0.280	C
	Exit	1	1		451			451	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	780	800	0.975	750	3.1	13.5	0.763	E
	Exit	1	1		876			876	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	589	593	0.993	555	2.9	12.5	0.925	F
	Exit	1	1		505			505	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	602	647	0.931	600	2.0	4.7	0.413	C
			2	2, 3, 4	620	662	0.938	619	2.1	4.8	0.417	D
		2	1	(1, 2, 3, 4)	1242			1222	0.2	5.7	0.168	B
	Exit	1	1		1128			1128	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
1 - Poorhole Ln	Entry	1	1	2, 3	260	326	0.796	259	2.2	2.3	0.531	D
			2	1, 4	186	318	0.583	186	1.3	1.4	0.423	D
		2	1	(1, 2, 3, 4)	447			446	3.1	4.1	0.531	D
	Exit	1	1		456			456	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	782	794	0.985	756	13.5	19.9	1.362	F
	Exit	1	1		887			887	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	588	590	0.997	571	12.5	18.0	1.678	F
	Exit	1	1		514			514	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	603	643	0.937	601	4.7	5.0	0.474	D
			2	2, 3, 4	623	658	0.948	623	4.8	5.0	0.478	D
		2	1	(1, 2, 3, 4)	1241			1227	5.7	9.1	0.378	C
	Exit	1	1		1139			1139	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
			1	2, 3	216	366	0.592	218	2.3	1.3	0.426	D

1 - Poorhole Ln	Entry	1	2	1, 4	153	356	0.430	153	1.4	0.7	0.336	C
		2	1	(1, 2, 3, 4)	365			369	4.1	0.7	0.248	B
	Exit	1	1		405			405	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	636	851	0.747	675	19.9	4.6	0.847	F
	Exit	1	1		748			748	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	476	640	0.744	506	18.0	5.8	1.132	F
	Exit	1	1		433			433	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	506	653	0.774	508	5.0	2.3	0.333	C
			2	2, 3, 4	522	669	0.780	525	5.0	2.4	0.335	C
		2	1	(1, 2, 3, 4)	1017			1028	9.1	0.6	0.162	A
	Exit	1	1		999			999	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
1 - Poorhole Ln	Entry	1	1	2, 3	174	402	0.432	174	1.3	0.8	0.281	C
			2	1, 4	126	392	0.322	126	0.7	0.4	0.235	B
		2	1	(1, 2, 3, 4)	300			300	0.7	0.1	0.029	A
	Exit	1	1		325			325	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	536	904	0.593	535	4.6	1.6	0.207	B
	Exit	1	1		614			614	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	401	715	0.561	403	5.8	1.4	0.300	C
	Exit	1	1		354			354	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	418	671	0.622	419	2.3	1.2	0.179	B
			2	2, 3, 4	432	687	0.629	432	2.4	1.3	0.182	B
		2	1	(1, 2, 3, 4)	850			850	0.6	0.0	0.005	A
	Exit	1	1		796			796	0.0	0.0	0.000	A

Lane Simulation-mit - 2039 + Dev Traffic, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A2 - Lane Simulation-mit [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	2 - Margate Rd - Lane Simulation	Arm 2: 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	Description	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Lane Simulation-mit	✓	Poorhole Ln - Margate Rd - Star Ln - Ramsgate Rd	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	2.61	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Poorhole Ln	
2	Margate Rd	
3	Star Ln	
4	Ramsgate Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Poorhole Ln	3.73	6.84	20.0	13.3	40.1	41.0	
2 - Margate Rd	3.65	4.39	3.0	6.9	40.1	50.0	
3 - Star Ln	3.91	4.50	2.7	12.0	40.1	22.0	
4 - Ramsgate Rd	3.22	7.79	9.9	18.7	40.1	64.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Poorhole Ln	0.613	1649
2 - Margate Rd	0.459	1031
3 - Star Ln	0.557	1284
4 - Ramsgate Rd	0.535	1349

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - Poorhole Ln	Percentage		70.00
2 - Margate Rd	Percentage		117.00
3 - Star Ln	Percentage		80.00
4 - Ramsgate Rd	Percentage		117.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
1 - Poorhole Ln	Evenly split	10.00
2 - Margate Rd	Evenly split	10.00
3 - Star Ln	Evenly split	10.00
4 - Ramsgate Rd	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
1 - Poorhole Ln	1 [Give-way line]	1	2, 3	✓	4.00	0	99999
		2	1, 4	✓	4.00	0	99999
	2	1	(1, 2, 3, 4)		Infinity		
2 - Margate Rd	1 [Give-way line]	1	1, 2, 3, 4		Infinity	0	99999
3 - Star Ln	1 [Give-way line]	1	1, 2, 3, 4		Infinity	0	99999
4 - Ramsgate Rd	1 [Give-way line]	1	1, 2	✓	8.00	0	99999
		2	2, 3, 4	✓	8.00	0	99999
	2	1	(1, 2, 3, 4)		Infinity		

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - Poorhole Ln	1 [Give-way line]	1	0.306	825
		2	0.306	825
2 - Margate Rd	1 [Give-way line]	1	0.459	1031
3 - Star Ln	1 [Give-way line]	1	0.557	1284
4 - Ramsgate Rd	1 [Give-way line]	1	0.267	674
		2	0.267	674

Lane Movements

Arm	Lane Level	Lane	Destination arm			
			Poorhole Ln	Margate Rd	Star Ln	Ramsgate Rd
1 - Poorhole Ln	1 [Give-way line]	1		✓	✓	
		2	✓			✓
	2	1	✓	✓	✓	✓
2 - Margate Rd	1 [Give-way line]	1	✓	✓	✓	✓
3 - Star Ln	1 [Give-way line]	1	✓	✓	✓	✓
4 - Ramsgate Rd	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 (%)
1 - Poorhole Ln		ONE HOUR	✓	410	100.000
2 - Margate Rd		ONE HOUR	✓	840	100.000
3 - Star Ln		ONE HOUR	✓	549	100.000
4 - Ramsgate Rd		ONE HOUR	✓	1286	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	44	206	160
	2 - Margate Rd	34	0	63	743
	3 - Star Ln	235	62	0	252
	4 - Ramsgate Rd	205	799	282	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	0	1	2
	2 - Margate Rd	4	0	2	3
	3 - Star Ln	0	0	0	1
	4 - Ramsgate Rd	1	3	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)
1 - Poorhole Ln	1.33	10.5	F	377	565
2 - Margate Rd	4.11	63.8	F	772	1159
3 - Star Ln	1.92	21.6	F	505	758
4 - Ramsgate Rd	2.32	63.0	F	1182	1772

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
1 - Poorhole Ln	308	77	862	307	358	0.0	1.6	0.256	C
2 - Margate Rd	634	158	485	636	684	0.0	2.2	0.191	B
3 - Star Ln	411	103	708	412	414	0.0	1.4	0.183	B
4 - Ramsgate Rd	972	243	249	971	871	0.0	3.3	0.187	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
1 - Poorhole Ln	372	93	1033	368	423	1.6	3.0	0.415	C
2 - Margate Rd	757	189	583	748	818	2.2	6.9	0.435	D
3 - Star Ln	492	123	836	490	494	1.4	3.4	0.367	C
4 - Ramsgate Rd	1164	291	296	1160	1031	3.3	7.2	0.333	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
1 - Poorhole Ln	450	113	1166	441	487	3.0	8.3	0.914	F
2 - Margate Rd	925	231	679	802	928	6.9	35.4	1.602	F
3 - Star Ln	609	152	913	574	567	3.4	14.4	1.068	F

4 - Ramsgate Rd	1415	354	346	1307	1141	7.2	36.6	1.077	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
1 - Poorhole Ln	452	113	1171	446	492	8.3	10.5	1.331	F
2 - Margate Rd	926	232	690	808	927	35.4	63.8	3.719	F
3 - Star Ln	610	152	921	578	578	14.4	21.6	1.919	F
4 - Ramsgate Rd	1418	355	345	1318	1154	36.6	63.0	2.316	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
1 - Poorhole Ln	371	93	1127	378	461	10.5	4.7	0.962	F
2 - Margate Rd	758	189	616	828	889	63.8	47.3	4.108	F
3 - Star Ln	497	124	914	526	530	21.6	9.8	1.543	F
4 - Ramsgate Rd	1155	289	319	1269	1121	63.0	29.6	2.093	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
1 - Poorhole Ln	306	77	885	311	372	4.7	1.5	0.417	D
2 - Margate Rd	637	159	496	741	700	47.3	10.4	1.829	F
3 - Star Ln	413	103	808	422	429	9.8	2.3	0.532	D
4 - Ramsgate Rd	967	242	258	999	972	29.6	4.4	0.589	E

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
1 - Poorhole Ln	**Entry**	**1**	**1**	2, 3	188	385	0.489	187	0.0	1.0	0.262	C
			2	1, 4	120	381	0.314	119	0.0	0.5	0.207	B
		2	**1**	(1, 2, 3, 4)	308			308	0.0	0.1	0.015	A
	Exit	**1**	**1**		358			358	0.0	0.0	0.000	A
2 - Margate Rd	**Entry**	**1**	**1**	1, 2, 3, 4	634	915	0.693	636	0.0	2.2	0.191	B
	Exit	**1**	**1**		684			684	0.0	0.0	0.000	A
3 - Star Ln	**Entry**	**1**	**1**	1, 2, 3, 4	411	699	0.588	412	0.0	1.4	0.183	B
	Exit	**1**	**1**		414			414	0.0	0.0	0.000	A
4 - Ramsgate Rd	**Entry**	**1**	**1**	1, 2	478	694	0.689	477	0.0	1.6	0.181	B
			2	2, 3, 4	493	696	0.709	494	0.0	1.7	0.190	B
		2	**1**	(1, 2, 3, 4)	972			971	0.0	0.1	0.002	A
	Exit	**1**	**1**		871			871	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
1 - Poorhole Ln	**Entry**	**1**	**1**	2, 3	224	348	0.644	223	1.0	1.5	0.378	C
			2	1, 4	146	344	0.424	145	0.5	0.8	0.285	C
		2	**1**	(1, 2, 3, 4)	372			369	0.1	0.7	0.072	A
	Exit	**1**	**1**		423			423	0.0	0.0	0.000	A
2 - Margate Rd	**Entry**	**1**	**1**	1, 2, 3, 4	757	864	0.876	748	2.2	6.9	0.435	D
	Exit	**1**	**1**		818			818	0.0	0.0	0.000	A
3 - Star Ln	**Entry**	**1**	**1**	1, 2, 3, 4	492	641	0.767	490	1.4	3.4	0.367	C
	Exit	**1**	**1**		494			494	0.0	0.0	0.000	A
4 - Ramsgate Rd	**Entry**	**1**	**1**	1, 2	574	680	0.844	574	1.6	2.9	0.290	C
			2	2, 3, 4	587	682	0.862	587	1.7	3.2	0.306	C
		2	**1**	(1, 2, 3, 4)	1164			1161	0.1	1.0	0.033	A
	Exit	**1**	**1**		1031			1031	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
1 - Poorhole Ln	**Entry**	**1**	**1**	2, 3	269	319	0.843	269	1.5	2.5	0.543	D
			2	1, 4	171	315	0.545	172	0.8	1.1	0.387	C
		2	**1**	(1, 2, 3, 4)	450			440	0.7	4.6	0.427	D
	Exit	**1**	**1**		487			487	0.0	0.0	0.000	A
2 - Margate Rd	**Entry**	**1**	**1**	1, 2, 3, 4	925	812	1.138	802	6.9	35.4	1.602	F
	Exit	**1**	**1**		928			928	0.0	0.0	0.000	A
3 - Star Ln	**Entry**	**1**	**1**	1, 2, 3, 4	609	606	1.006	574	3.4	14.4	1.068	F
	Exit	**1**	**1**		567			567	0.0	0.0	0.000	A
4 - Ramsgate Rd	**Entry**	**1**	**1**	1, 2	658	665	0.990	654	2.9	6.2	0.502	D
			2	2, 3, 4	657	666	0.986	653	3.2	6.6	0.528	D
		2	**1**	(1, 2, 3, 4)	1415			1315	1.0	23.8	0.555	D
	Exit	**1**	**1**		1141			1141	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
1 - Poorhole Ln	**Entry**	**1**	**1**	2, 3	270	318	0.852	271	2.5	2.7	0.592	E
			2	1, 4	176	314	0.559	175	1.1	1.2	0.428	D
		2	**1**	(1, 2, 3, 4)	452			446	4.6	6.6	0.801	E
	Exit	**1**	**1**		492			492	0.0	0.0	0.000	A
2 - Margate Rd	**Entry**	**1**	**1**	1, 2, 3, 4	926	807	1.149	808	35.4	63.8	3.719	F
	Exit	**1**	**1**		927			927	0.0	0.0	0.000	A
3 - Star Ln	**Entry**	**1**	**1**	1, 2, 3, 4	610	602	1.013	578	14.4	21.6	1.919	F
	Exit	**1**	**1**		578			578	0.0	0.0	0.000	A
4 - Ramsgate Rd	**Entry**	**1**	**1**	1, 2	654	665	0.983	653	6.2	6.4	0.579	D
			2	2, 3, 4	664	667	0.996	664	6.6	6.7	0.606	E
		2	**1**	(1, 2, 3, 4)	1418			1319	23.8	49.9	1.723	F
	Exit	**1**	**1**		1154			1154	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
1 - Poorhole Ln	Entry	1	1	2, 3	230	327	0.705	231	2.7	1.9	0.529	D
			2	1, 4	147	323	0.455	147	1.2	0.8	0.383	C
		2	1	(1, 2, 3, 4)	371			377	6.6	2.0	0.498	D
	Exit	1	1		461			461	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	758	846	0.895	828	63.8	47.3	4.108	F
	Exit	1	1		889			889	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	497	605	0.821	526	21.6	9.8	1.543	F
	Exit	1	1		530			530	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	625	673	0.928	631	6.4	4.9	0.536	D
			2	2, 3, 4	633	674	0.938	638	6.7	5.3	0.563	D
		2	1	(1, 2, 3, 4)	1155			1257	49.9	19.4	1.551	F
	Exit	1	1		1121			1121	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
1 - Poorhole Ln	Entry	1	1	2, 3	188	379	0.495	189	1.9	0.9	0.360	C
			2	1, 4	121	376	0.322	122	0.8	0.5	0.275	C
		2	1	(1, 2, 3, 4)	306			309	2.0	0.1	0.096	A
	Exit	1	1		372			372	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	637	909	0.700	741	47.3	10.4	1.829	F
	Exit	1	1		700			700	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	413	653	0.632	422	9.8	2.3	0.532	D
	Exit	1	1		429			429	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	484	692	0.699	489	4.9	1.7	0.312	C
			2	2, 3, 4	504	693	0.727	509	5.3	1.9	0.325	C
		2	1	(1, 2, 3, 4)	967			988	19.4	0.7	0.290	C
	Exit	1	1		972			972	0.0	0.0	0.000	A

Lane Simulation-mit - 2039 + Dev Traffic, Airport Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A2 - Lane Simulation-mit [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	2 - Margate Rd - Lane Simulation	Arm 2: 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	Description	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Lane Simulation-mit	✓	Poorhole Ln - Margate Rd - Star Ln - Ramsgate Rd	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	2.17	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Poorhole Ln	
2	Margate Rd	
3	Star Ln	
4	Ramsgate Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Poorhole Ln	3.73	6.84	20.0	13.3	40.1	41.0	
2 - Margate Rd	3.65	4.39	3.0	6.9	40.1	50.0	
3 - Star Ln	3.91	4.50	2.7	12.0	40.1	22.0	
4 - Ramsgate Rd	3.22	7.79	9.9	18.7	40.1	64.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Poorhole Ln	0.613	1649
2 - Margate Rd	0.459	1031
3 - Star Ln	0.557	1284
4 - Ramsgate Rd	0.535	1349

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - Poorhole Ln	Percentage		70.00
2 - Margate Rd	Percentage		117.00
3 - Star Ln	Percentage		80.00
4 - Ramsgate Rd	Percentage		117.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
1 - Poorhole Ln	Evenly split	10.00
2 - Margate Rd	Evenly split	10.00
3 - Star Ln	Evenly split	10.00
4 - Ramsgate Rd	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
1 - Poorhole Ln	1 [Give-way line]	1	2, 3	✓	4.00	0	99999
		2	1, 4	✓	4.00	0	99999
	2	1	(1, 2, 3, 4)		Infinity		
2 - Margate Rd	1 [Give-way line]	1	1, 2, 3, 4		Infinity	0	99999
3 - Star Ln	1 [Give-way line]	1	1, 2, 3, 4		Infinity	0	99999
4 - Ramsgate Rd	1 [Give-way line]	1	1, 2	✓	8.00	0	99999
		2	2, 3, 4	✓	8.00	0	99999
	2	1	(1, 2, 3, 4)		Infinity		

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - Poorhole Ln	1 [Give-way line]	1	0.306	825
		2	0.306	825
2 - Margate Rd	1 [Give-way line]	1	0.459	1031
3 - Star Ln	1 [Give-way line]	1	0.557	1284
4 - Ramsgate Rd	1 [Give-way line]	1	0.267	674
		2	0.267	674

Lane Movements

Arm	Lane Level	Lane	Destination arm			
			Poorhole Ln	Margate Rd	Star Ln	Ramsgate Rd
1 - Poorhole Ln	1 [Give-way line]	1		✓	✓	
		2	✓			✓
	2	1	✓	✓	✓	✓
2 - Margate Rd	1 [Give-way line]	1	✓	✓	✓	✓
3 - Star Ln	1 [Give-way line]	1	✓	✓	✓	✓
4 - Ramsgate Rd	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 (%)
1 - Poorhole Ln		ONE HOUR	✓	412	100.000
2 - Margate Rd		ONE HOUR	✓	876	100.000
3 - Star Ln		ONE HOUR	✓	433	100.000
4 - Ramsgate Rd		ONE HOUR	✓	1174	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	39	204	169
	2 - Margate Rd	69	0	79	728
	3 - Star Ln	138	55	0	240
	4 - Ramsgate Rd	179	803	192	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	4	2	4
	2 - Margate Rd	2	0	0	6
	3 - Star Ln	4	3	0	4
	4 - Ramsgate Rd	2	6	4	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)
1 - Poorhole Ln	1.30	10.6	F	377	565
2 - Margate Rd	4.91	75.3	F	800	1200
3 - Star Ln	0.73	5.9	E	393	589
4 - Ramsgate Rd	0.96	22.6	F	1080	1620

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
1 - Poorhole Ln	309	77	794	312	289	0.0	1.4	0.243	B
2 - Margate Rd	660	165	430	663	677	0.0	2.4	0.207	B
3 - Star Ln	321	80	731	322	362	0.0	0.9	0.164	A
4 - Ramsgate Rd	889	222	195	888	858	0.0	2.5	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
1 - Poorhole Ln	372	93	952	368	345	1.4	2.6	0.390	C
2 - Margate Rd	778	194	509	774	810	2.4	7.7	0.501	D
3 - Star Ln	384	96	859	386	424	0.9	1.9	0.273	C
4 - Ramsgate Rd	1067	267	234	1063	1011	2.5	4.8	0.248	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
1 - Poorhole Ln	453	113	1125	436	408	2.6	7.9	0.830	E
2 - Margate Rd	968	242	600	830	962	7.7	41.6	1.855	F
3 - Star Ln	466	117	936	464	493	1.9	5.2	0.574	D

4 - Ramsgate Rd	1287	322	270	1263	1130	4.8	17.3	0.624	E

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
1 - Poorhole Ln	448	112	1144	435	412	7.9	10.5	1.295	F
2 - Margate Rd	960	240	606	826	973	41.6	75.4	4.281	F
3 - Star Ln	476	119	933	469	500	5.2	5.9	0.725	E
4 - Ramsgate Rd	1300	325	275	1281	1126	17.3	22.6	0.965	F

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
1 - Poorhole Ln	373	93	964	390	352	10.5	3.5	0.863	F
2 - Margate Rd	778	195	534	852	820	75.4	61.0	4.910	F
3 - Star Ln	388	97	933	390	453	5.9	2.4	0.428	D
4 - Ramsgate Rd	1060	265	235	1081	1088	22.6	5.6	0.542	D

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
1 - Poorhole Ln	303	76	785	303	301	3.5	1.4	0.315	C
2 - Margate Rd	660	165	420	794	668	61.0	17.5	2.470	F
3 - Star Ln	321	80	848	323	366	2.4	1.1	0.256	C
4 - Ramsgate Rd	878	220	206	880	965	5.6	2.4	0.187	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
1 - Poorhole Ln	**Entry**	**1**	**1**	2, 3	181	387	0.467	183	0.0	0.7	0.242	B
			2	1, 4	129	382	0.337	129	0.0	0.6	0.221	B
		2	**1**	(1, 2, 3, 4)	309			310	0.0	0.1	0.009	A
	Exit	**1**	**1**		289			289	0.0	0.0	0.000	A
2 - Margate Rd	**Entry**	**1**	**1**	1, 2, 3, 4	660	920	0.718	663	0.0	2.4	0.207	B
	Exit	**1**	**1**		677			677	0.0	0.0	0.000	A
3 - Star Ln	**Entry**	**1**	**1**	1, 2, 3, 4	321	658	0.487	322	0.0	0.9	0.164	A
	Exit	**1**	**1**		362			362	0.0	0.0	0.000	A
4 - Ramsgate Rd	**Entry**	**1**	**1**	1, 2	442	691	0.641	444	0.0	1.2	0.162	A
			2	2, 3, 4	446	686	0.651	444	0.0	1.3	0.163	A
		2	**1**	(1, 2, 3, 4)	889			889	0.0	0.0	0.000	A
	Exit	**1**	**1**		858			858	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
1 - Poorhole Ln	**Entry**	**1**	**1**	2, 3	216	353	0.613	215	0.7	1.4	0.358	C
			2	1, 4	153	347	0.441	153	0.6	0.7	0.290	C
		2	**1**	(1, 2, 3, 4)	372			369	0.1	0.5	0.059	A
	Exit	**1**	**1**		345			345	0.0	0.0	0.000	A
2 - Margate Rd	**Entry**	**1**	**1**	1, 2, 3, 4	778	876	0.888	774	2.4	7.7	0.501	D
	Exit	**1**	**1**		810			810	0.0	0.0	0.000	A
3 - Star Ln	**Entry**	**1**	**1**	1, 2, 3, 4	384	598	0.642	386	0.9	1.9	0.273	C
	Exit	**1**	**1**		424			424	0.0	0.0	0.000	A
4 - Ramsgate Rd	**Entry**	**1**	**1**	1, 2	532	679	0.785	532	1.2	2.2	0.238	B
			2	2, 3, 4	533	678	0.786	531	1.3	2.3	0.240	B
		2	**1**	(1, 2, 3, 4)	1067			1065	0.0	0.2	0.009	A
	Exit	**1**	**1**		1011			1011	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
1 - Poorhole Ln	**Entry**	**1**	**1**	2, 3	259	315	0.821	256	1.4	2.5	0.514	D
			2	1, 4	180	312	0.579	180	0.7	1.3	0.405	C
		2	**1**	(1, 2, 3, 4)	453			439	0.5	4.1	0.357	C
	Exit	**1**	**1**		408			408	0.0	0.0	0.000	A
2 - Margate Rd	**Entry**	**1**	**1**	1, 2, 3, 4	968	833	1.163	830	7.7	41.6	1.855	F
	Exit	**1**	**1**		962			962	0.0	0.0	0.000	A
3 - Star Ln	**Entry**	**1**	**1**	1, 2, 3, 4	466	566	0.824	464	1.9	5.2	0.574	D
	Exit	**1**	**1**		493			493	0.0	0.0	0.000	A
4 - Ramsgate Rd	**Entry**	**1**	**1**	1, 2	633	669	0.946	631	2.2	5.0	0.422	D
			2	2, 3, 4	634	666	0.953	632	2.3	5.0	0.425	D
		2	**1**	(1, 2, 3, 4)	1287			1267	0.2	7.2	0.197	B
	Exit	**1**	**1**		1130			1130	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
1 - Poorhole Ln	**Entry**	**1**	**1**	2, 3	254	311	0.818	254	2.5	2.5	0.589	E
			2	1, 4	180	307	0.586	181	1.3	1.3	0.446	D
		2	**1**	(1, 2, 3, 4)	448			434	4.1	6.7	0.762	E
	Exit	**1**	**1**		412			412	0.0	0.0	0.000	A
2 - Margate Rd	**Entry**	**1**	**1**	1, 2, 3, 4	960	829	1.156	826	41.6	75.4	4.281	F
	Exit	**1**	**1**		973			973	0.0	0.0	0.000	A
3 - Star Ln	**Entry**	**1**	**1**	1, 2, 3, 4	476	569	0.835	469	5.2	5.9	0.725	E
	Exit	**1**	**1**		500			500	0.0	0.0	0.000	A
4 - Ramsgate Rd	**Entry**	**1**	**1**	1, 2	643	669	0.962	645	5.0	5.1	0.484	D
			2	2, 3, 4	638	665	0.957	635	5.0	5.2	0.490	D
		2	**1**	(1, 2, 3, 4)	1300			1281	7.2	12.3	0.476	D
	Exit	**1**	**1**		1126			1126	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
1 - Poorhole Ln	Entry	1	1	2, 3	227	351	0.645	230	2.5	1.5	0.482	D
			2	1, 4	159	344	0.464	160	1.3	0.9	0.377	C
		2	1	(1, 2, 3, 4)	373			386	6.7	1.1	0.436	D
	Exit	1	1		352			352	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	778	865	0.898	852	75.4	61.0	4.910	F
	Exit	1	1		820			820	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	388	565	0.687	390	5.9	2.4	0.428	D
	Exit	1	1		453			453	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	531	682	0.778	537	5.1	2.3	0.340	C
			2	2, 3, 4	541	676	0.801	544	5.2	2.4	0.338	C
		2	1	(1, 2, 3, 4)	1060			1073	12.3	0.9	0.213	B
	Exit	1	1		1088			1088	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
1 - Poorhole Ln	Entry	1	1	2, 3	179	392	0.456	179	1.5	0.8	0.290	C
			2	1, 4	125	383	0.329	124	0.9	0.6	0.259	C
		2	1	(1, 2, 3, 4)	303			304	1.1	0.1	0.042	A
	Exit	1	1		301			301	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	660	924	0.713	794	61.0	17.5	2.470	F
	Exit	1	1		668			668	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	321	604	0.532	323	2.4	1.1	0.256	C
	Exit	1	1		366			366	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	437	688	0.635	439	2.3	1.1	0.181	B
			2	2, 3, 4	441	686	0.643	441	2.4	1.3	0.183	B
		2	1	(1, 2, 3, 4)	878			878	0.9	0.0	0.007	A
	Exit	1	1		965			965	0.0	0.0	0.000	A

Lane Simulation-mit - 2039 B+Dev_Net change, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A2 - Lane Simulation-mit [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	Description	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Lane Simulation-mit	✓	Poorhole Ln - Margate Rd - Star Ln - Ramsgate Rd	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	0.65	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Poorhole Ln	
2	Margate Rd	
3	Star Ln	
4	Ramsgate Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Poorhole Ln	3.73	6.84	20.0	13.3	40.1	41.0	
2 - Margate Rd	3.65	4.39	3.0	6.9	40.1	50.0	
3 - Star Ln	3.91	4.50	2.7	12.0	40.1	22.0	
4 - Ramsgate Rd	3.22	7.79	9.9	18.7	40.1	64.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Poorhole Ln	0.613	1649
2 - Margate Rd	0.459	1031
3 - Star Ln	0.557	1284
4 - Ramsgate Rd	0.535	1349

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - Poorhole Ln	Percentage		70.00
2 - Margate Rd	Percentage		117.00
3 - Star Ln	Percentage		80.00
4 - Ramsgate Rd	Percentage		117.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
1 - Poorhole Ln	Evenly split	10.00
2 - Margate Rd	Evenly split	10.00
3 - Star Ln	Evenly split	10.00
4 - Ramsgate Rd	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
1 - Poorhole Ln	1 [Give-way line]	1	2, 3	✓	4.00	0	99999
		2	1, 4	✓	4.00	0	99999
	2	1	(1, 2, 3, 4)		Infinity		
2 - Margate Rd	1 [Give-way line]	1	1, 2, 3, 4		Infinity	0	99999
3 - Star Ln	1 [Give-way line]	1	1, 2, 3, 4		Infinity	0	99999
4 - Ramsgate Rd	1 [Give-way line]	1	1, 2	✓	8.00	0	99999
		2	2, 3, 4	✓	8.00	0	99999
	2	1	(1, 2, 3, 4)		Infinity		

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - Poorhole Ln	1 [Give-way line]	1	0.306	825
		2	0.306	825
2 - Margate Rd	1 [Give-way line]	1	0.459	1031
3 - Star Ln	1 [Give-way line]	1	0.557	1284
4 - Ramsgate Rd	1 [Give-way line]	1	0.267	674
		2	0.267	674

Lane Movements

Arm	Lane Level	Lane	Destination arm			
			Poorhole Ln	Margate Rd	Star Ln	Ramsgate Rd
1 - Poorhole Ln	1 [Give-way line]	1		✓	✓	
		2	✓			✓
	2	1	✓	✓	✓	✓
2 - Margate Rd	1 [Give-way line]	1	✓	✓	✓	✓
3 - Star Ln	1 [Give-way line]	1	✓	✓	✓	✓
4 - Ramsgate Rd	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 (%)
1 - Poorhole Ln		ONE HOUR	✓	407	100.000
2 - Margate Rd		ONE HOUR	✓	611	100.000
3 - Star Ln		ONE HOUR	✓	508	100.000
4 - Ramsgate Rd		ONE HOUR	✓	1046	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	14	248	145
	2 - Margate Rd	15	0	43	553
	3 - Star Ln	249	57	0	202
	4 - Ramsgate Rd	164	689	193	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	10	1	4
	2 - Margate Rd	17	0	9	6
	3 - Star Ln	2	0	0	3
	4 - Ramsgate Rd	9	5	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)
1 - Poorhole Ln	1.05	8.6	F	374	561
2 - Margate Rd	0.49	5.8	D	562	843
3 - Star Ln	0.77	7.4	E	467	701
4 - Ramsgate Rd	0.54	10.8	D	959	1438

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
1 - Poorhole Ln	311	78	705	311	319	0.0	1.3	0.234	B
2 - Margate Rd	458	114	447	457	569	0.0	1.1	0.130	A
3 - Star Ln	377	94	537	378	366	0.0	1.1	0.152	A
4 - Ramsgate Rd	786	197	239	785	677	0.0	2.1	0.150	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
1 - Poorhole Ln	366	92	834	367	388	1.3	2.2	0.354	C
2 - Margate Rd	554	138	528	552	673	1.1	2.0	0.195	B
3 - Star Ln	451	113	642	452	438	1.1	1.7	0.225	B
4 - Ramsgate Rd	937	234	290	932	805	2.1	3.5	0.206	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
1 - Poorhole Ln	448	112	1037	439	474	2.2	6.8	0.712	E
2 - Margate Rd	669	167	634	669	841	2.0	4.8	0.365	C
3 - Star Ln	570	142	779	560	524	1.7	7.0	0.566	D
4 - Ramsgate Rd	1160	290	354	1156	985	3.5	9.8	0.427	D

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
1 - Poorhole Ln	448	112	1023	442	469	6.8	8.6	1.051	F
2 - Margate Rd	678	170	636	676	829	4.8	5.7	0.488	D
3 - Star Ln	557	139	787	557	525	7.0	7.4	0.772	E
4 - Ramsgate Rd	1147	287	352	1140	992	9.8	10.7	0.538	D

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
1 - Poorhole Ln	366	91	840	371	387	8.6	2.5	0.602	E
2 - Margate Rd	549	137	527	550	684	5.7	1.9	0.257	C
3 - Star Ln	462	115	644	469	433	7.4	1.9	0.398	C
4 - Ramsgate Rd	934	233	293	934	820	10.7	3.1	0.262	C

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
1 - Poorhole Ln	305	76	708	306	324	2.5	1.3	0.268	C
2 - Margate Rd	464	116	440	461	574	1.9	1.0	0.141	A
3 - Star Ln	387	97	536	387	365	1.9	1.0	0.177	B
4 - Ramsgate Rd	789	197	245	787	678	3.1	2.2	0.162	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

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
1 - Poorhole Ln	Entry	1	1	2, 3	199	414	0.480	198	0.0	0.9	0.241	B
			2	1, 4	112	405	0.277	113	0.0	0.3	0.192	B
		2	1	(1, 2, 3, 4)	311			311	0.0	0.0	0.011	A
	Exit	1	1		319			319	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	458	901	0.507	457	0.0	1.1	0.130	A
	Exit	1	1		569			569	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	377	755	0.500	378	0.0	1.1	0.152	A
	Exit	1	1		366			366	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	386	672	0.575	386	0.0	1.0	0.148	A
			2	2, 3, 4	400	685	0.584	399	0.0	1.1	0.151	A
		2	1	(1, 2, 3, 4)	786			786	0.0	0.0	0.000	A
	Exit	1	1		677			677	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
1 - Poorhole Ln	Entry	1	1	2, 3	237	385	0.615	238	0.9	1.3	0.335	C
			2	1, 4	131	375	0.347	129	0.3	0.6	0.237	B
		2	1	(1, 2, 3, 4)	366			367	0.0	0.2	0.053	A
	Exit	1	1		388			388	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	554	862	0.642	552	1.1	2.0	0.195	B
	Exit	1	1		673			673	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	451	710	0.635	452	1.1	1.7	0.225	B
	Exit	1	1		438			438	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	465	654	0.711	463	1.0	1.7	0.201	B
			2	2, 3, 4	473	670	0.705	469	1.1	1.7	0.207	B
		2	1	(1, 2, 3, 4)	937			938	0.0	0.0	0.002	A
	Exit	1	1		805			805	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
1 - Poorhole Ln	Entry	1	1	2, 3	281	341	0.825	280	1.3	2.5	0.479	D
			2	1, 4	160	332	0.482	159	0.6	1.0	0.315	C
		2	1	(1, 2, 3, 4)	448			441	0.2	3.3	0.288	C
	Exit	1	1		474			474	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	669	806	0.830	669	2.0	4.8	0.365	C
	Exit	1	1		841			841	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	570	645	0.883	560	1.7	7.0	0.566	D
	Exit	1	1		524			524	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	572	635	0.901	571	1.7	3.7	0.351	C
			2	2, 3, 4	586	652	0.899	585	1.7	3.8	0.356	C
		2	1	(1, 2, 3, 4)	1160			1158	0.0	2.3	0.072	A
	Exit	1	1		985			985	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
1 - Poorhole Ln	Entry	1	1	2, 3	284	343	0.828	283	2.5	2.7	0.542	D
			2	1, 4	159	336	0.472	159	1.0	0.9	0.357	C
		2	1	(1, 2, 3, 4)	448			443	3.3	4.9	0.574	D
	Exit	1	1		469			469	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	678	806	0.842	676	4.8	5.7	0.488	D
	Exit	1	1		829			829	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	557	642	0.867	557	7.0	7.4	0.772	E
	Exit	1	1		525			525	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	559	635	0.878	557	3.7	3.9	0.395	C
			2	2, 3, 4	583	648	0.899	583	3.8	3.9	0.398	C
		2	1	(1, 2, 3, 4)	1147			1142	2.3	3.0	0.141	A
	Exit	1	1		992			992	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
			1	2, 3	237	385	0.616	239	2.7	1.3	0.408	C

1 - Poorhole Ln	Entry	1	2	1, 4	132	376	0.353	132	0.9	0.6	0.281	C
		2	1	(1, 2, 3, 4)	366			369	4.9	0.6	0.249	B
	Exit	1	1		387			387	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	549	863	0.636	550	5.7	1.9	0.257	C
	Exit	1	1		684			684	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	462	708	0.652	469	7.4	1.9	0.398	C
	Exit	1	1		433			433	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	457	655	0.698	456	3.9	1.6	0.239	B
			2	2, 3, 4	477	671	0.711	478	3.9	1.5	0.238	B
		2	1	(1, 2, 3, 4)	934			935	3.0	0.1	0.028	A
	Exit	1	1		820			820	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
1 - Poorhole Ln	Entry	1	1	2, 3	196	413	0.474	198	1.3	0.8	0.272	C
			2	1, 4	109	403	0.269	108	0.6	0.4	0.207	B
		2	1	(1, 2, 3, 4)	305			305	0.6	0.1	0.020	A
	Exit	1	1		324			324	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	464	904	0.512	461	1.9	1.0	0.141	A
	Exit	1	1		574			574	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	387	757	0.511	387	1.9	1.0	0.177	B
	Exit	1	1		365			365	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	388	667	0.581	388	1.6	1.1	0.161	A
			2	2, 3, 4	401	682	0.588	400	1.5	1.1	0.162	A
		2	1	(1, 2, 3, 4)	789			789	0.1	0.0	0.001	A
	Exit	1	1		678			678	0.0	0.0	0.000	A

Lane Simulation-mit - 2039 B+Dev_Net change, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A2 - Lane Simulation-mit [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	Description	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Lane Simulation-mit	✓	Poorhole Ln - Margate Rd - Star Ln - Ramsgate Rd	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	1.28	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Poorhole Ln	
2	Margate Rd	
3	Star Ln	
4	Ramsgate Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Poorhole Ln	3.73	6.84	20.0	13.3	40.1	41.0	
2 - Margate Rd	3.65	4.39	3.0	6.9	40.1	50.0	
3 - Star Ln	3.91	4.50	2.7	12.0	40.1	22.0	
4 - Ramsgate Rd	3.22	7.79	9.9	18.7	40.1	64.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Poorhole Ln	0.613	1649
2 - Margate Rd	0.459	1031
3 - Star Ln	0.557	1284
4 - Ramsgate Rd	0.535	1349

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - Poorhole Ln	Percentage		70.00
2 - Margate Rd	Percentage		117.00
3 - Star Ln	Percentage		80.00
4 - Ramsgate Rd	Percentage		117.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
1 - Poorhole Ln	Evenly split	10.00
2 - Margate Rd	Evenly split	10.00
3 - Star Ln	Evenly split	10.00
4 - Ramsgate Rd	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
1 - Poorhole Ln	1 [Give-way line]	1	2, 3	✓	4.00	0	99999
		2	1, 4	✓	4.00	0	99999
	2	1	(1, 2, 3, 4)		Infinity		
2 - Margate Rd	1 [Give-way line]	1	1, 2, 3, 4		Infinity	0	99999
3 - Star Ln	1 [Give-way line]	1	1, 2, 3, 4		Infinity	0	99999
4 - Ramsgate Rd	1 [Give-way line]	1	1, 2	✓	8.00	0	99999
		2	2, 3, 4	✓	8.00	0	99999
	2	1	(1, 2, 3, 4)		Infinity		

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - Poorhole Ln	1 [Give-way line]	1	0.306	825
		2	0.306	825
2 - Margate Rd	1 [Give-way line]	1	0.459	1031
3 - Star Ln	1 [Give-way line]	1	0.557	1284
4 - Ramsgate Rd	1 [Give-way line]	1	0.267	674
		2	0.267	674

Lane Movements

Arm	Lane Level	Lane	Destination arm			
			Poorhole Ln	Margate Rd	Star Ln	Ramsgate Rd
1 - Poorhole Ln	1 [Give-way line]	1		✓	✓	
		2	✓			✓
	2	1	✓	✓	✓	✓
2 - Margate Rd	1 [Give-way line]	1	✓	✓	✓	✓
3 - Star Ln	1 [Give-way line]	1	✓	✓	✓	✓
4 - Ramsgate Rd	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 (%)
1 - Poorhole Ln		ONE HOUR	✓	410	100.000
2 - Margate Rd		ONE HOUR	✓	706	100.000
3 - Star Ln		ONE HOUR	✓	516	100.000
4 - Ramsgate Rd		ONE HOUR	✓	1203	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	44	235	131
	2 - Margate Rd	34	0	63	609
	3 - Star Ln	248	62	0	206
	4 - Ramsgate Rd	192	748	263	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	0	1	2
	2 - Margate Rd	4	0	2	3
	3 - Star Ln	0	0	0	1
	4 - Ramsgate Rd	1	3	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)
1 - Poorhole Ln	1.86	14.9	F	375	563
2 - Margate Rd	0.99	14.0	F	650	974
3 - Star Ln	0.76	7.4	E	474	711
4 - Ramsgate Rd	1.47	35.3	F	1099	1649

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
1 - Poorhole Ln	310	77	806	307	361	0.0	1.7	0.268	C
2 - Margate Rd	538	135	471	539	642	0.0	1.4	0.141	A
3 - Star Ln	387	97	586	387	424	0.0	1.0	0.145	A
4 - Ramsgate Rd	903	226	261	905	711	0.0	2.6	0.166	A

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
1 - Poorhole Ln	360	90	958	361	426	1.7	2.7	0.430	D
2 - Margate Rd	635	159	557	632	762	1.4	2.9	0.243	B
3 - Star Ln	465	116	694	463	494	1.0	2.0	0.241	B
4 - Ramsgate Rd	1077	269	308	1075	849	2.6	5.5	0.271	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
1 - Poorhole Ln	452	113	1130	423	501	2.7	11.2	1.113	F
2 - Margate Rd	774	194	657	758	896	2.9	11.0	0.671	E
3 - Star Ln	564	141	827	552	588	2.0	6.4	0.543	D
4 - Ramsgate Rd	1325	331	369	1261	1009	5.5	25.9	0.851	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
1 - Poorhole Ln	448	112	1156	439	507	11.2	14.9	1.862	F
2 - Margate Rd	779	195	673	771	922	11.0	14.0	0.993	F
3 - Star Ln	566	142	845	566	599	6.4	7.4	0.760	E
4 - Ramsgate Rd	1314	329	378	1286	1034	25.9	35.3	1.467	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
1 - Poorhole Ln	366	91	1012	390	437	14.9	6.0	1.361	F
2 - Margate Rd	637	159	597	646	805	14.0	4.6	0.594	E
3 - Star Ln	468	117	714	466	529	7.4	2.5	0.407	C
4 - Ramsgate Rd	1081	270	311	1137	869	35.3	8.5	0.915	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
1 - Poorhole Ln	316	79	804	319	355	6.0	1.6	0.435	D
2 - Margate Rd	533	133	479	532	644	4.6	1.5	0.192	B
3 - Star Ln	392	98	588	391	423	2.5	1.1	0.192	B
4 - Ramsgate Rd	895	224	262	897	718	8.5	2.6	0.210	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

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
1 - Poorhole Ln	Entry	1	1	2, 3	212	397	0.535	212	0.0	1.1	0.272	C
			2	1, 4	95	392	0.242	95	0.0	0.3	0.190	B
		2	1	(1, 2, 3, 4)	310			307	0.0	0.3	0.021	A
	Exit	1	1		361			361	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	538	923	0.583	539	0.0	1.4	0.141	A
	Exit	1	1		642			642	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	387	755	0.512	387	0.0	1.0	0.145	A
	Exit	1	1		424			424	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	442	689	0.642	444	0.0	1.2	0.161	A
			2	2, 3, 4	461	691	0.667	461	0.0	1.4	0.171	B
		2	1	(1, 2, 3, 4)	903			903	0.0	0.0	0.001	A
	Exit	1	1		711			711	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
1 - Poorhole Ln	Entry	1	1	2, 3	243	364	0.668	243	1.1	1.7	0.388	C
			2	1, 4	118	361	0.327	118	0.3	0.5	0.253	C
		2	1	(1, 2, 3, 4)	360			361	0.3	0.5	0.085	A
	Exit	1	1		426			426	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	635	876	0.725	632	1.4	2.9	0.243	B
	Exit	1	1		762			762	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	465	706	0.659	463	1.0	2.0	0.241	B
	Exit	1	1		494			494	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	531	676	0.787	531	1.2	2.5	0.251	C
			2	2, 3, 4	544	677	0.803	544	1.4	2.7	0.266	C
		2	1	(1, 2, 3, 4)	1077			1075	0.0	0.3	0.011	A
	Exit	1	1		849			849	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
1 - Poorhole Ln	Entry	1	1	2, 3	291	326	0.892	288	1.7	3.2	0.573	D
			2	1, 4	134	324	0.413	135	0.5	0.7	0.325	C
		2	1	(1, 2, 3, 4)	452			425	0.5	7.3	0.612	E
	Exit	1	1		501			501	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	774	825	0.938	758	2.9	11.0	0.671	E
	Exit	1	1		896			896	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	564	646	0.874	552	2.0	6.4	0.543	D
	Exit	1	1		588			588	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	631	657	0.960	626	2.5	5.6	0.477	D
			2	2, 3, 4	641	660	0.971	635	2.7	6.1	0.500	D
		2	1	(1, 2, 3, 4)	1325			1271	0.3	14.2	0.357	C
	Exit	1	1		1009			1009	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
1 - Poorhole Ln	Entry	1	1	2, 3	298	321	0.930	298	3.2	3.3	0.647	E
			2	1, 4	140	317	0.443	141	0.7	0.9	0.378	C
		2	1	(1, 2, 3, 4)	448			439	7.3	10.7	1.297	F
	Exit	1	1		507			507	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	779	815	0.955	771	11.0	14.0	0.993	F
	Exit	1	1		922			922	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	566	636	0.891	566	6.4	7.4	0.760	E
	Exit	1	1		599			599	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	639	655	0.975	639	5.6	5.9	0.550	D
			2	2, 3, 4	647	657	0.985	647	6.1	6.3	0.569	D
		2	1	(1, 2, 3, 4)	1314			1286	14.2	23.1	0.906	F
	Exit	1	1		1034			1034	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
			1	2, 3	261	352	0.740	263	3.3	2.0	0.556	D

1 - Poorhole Ln	Entry	1	2	1, 4	125	349	0.359	126	0.9	0.6	0.335	C
		2	1	(1, 2, 3, 4)	366			386	10.7	3.3	0.892	F
	Exit	1	1		437			437	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	637	857	0.744	646	14.0	4.6	0.594	E
	Exit	1	1		805			805	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	468	697	0.672	466	7.4	2.5	0.407	C
	Exit	1	1		529			529	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	551	674	0.816	557	5.9	2.9	0.425	D
			2	2, 3, 4	573	677	0.846	580	6.3	3.2	0.444	D
		2	1	(1, 2, 3, 4)	1081			1123	23.1	2.4	0.495	D
	Exit	1	1		869			869	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
1 - Poorhole Ln	Entry	1	1	2, 3	216	397	0.543	217	2.0	1.1	0.352	C
			2	1, 4	102	392	0.260	102	0.6	0.3	0.221	B
		2	1	(1, 2, 3, 4)	316			318	3.3	0.2	0.134	A
	Exit	1	1		355			355	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	533	919	0.580	532	4.6	1.5	0.192	B
	Exit	1	1		644			644	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	392	755	0.519	391	2.5	1.1	0.192	B
	Exit	1	1		423			423	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	437	691	0.633	438	2.9	1.2	0.195	B
			2	2, 3, 4	458	691	0.663	459	3.2	1.4	0.202	B
		2	1	(1, 2, 3, 4)	895			895	2.4	0.0	0.016	A
	Exit	1	1		718			718	0.0	0.0	0.000	A

Lane Simulation-mit - 2039 B+Dev_Net change, Airport Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A2 - Lane Simulation-mit [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	Description	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Lane Simulation-mit	✓	Poorhole Ln - Margate Rd - Star Ln - Ramsgate Rd	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	1.05	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Poorhole Ln	
2	Margate Rd	
3	Star Ln	
4	Ramsgate Rd	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Poorhole Ln	3.73	6.84	20.0	13.3	40.1	41.0	
2 - Margate Rd	3.65	4.39	3.0	6.9	40.1	50.0	
3 - Star Ln	3.91	4.50	2.7	12.0	40.1	22.0	
4 - Ramsgate Rd	3.22	7.79	9.9	18.7	40.1	64.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Poorhole Ln	0.613	1649
2 - Margate Rd	0.459	1031
3 - Star Ln	0.557	1284
4 - Ramsgate Rd	0.535	1349

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - Poorhole Ln	Percentage		70.00
2 - Margate Rd	Percentage		117.00
3 - Star Ln	Percentage		80.00
4 - Ramsgate Rd	Percentage		117.00

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
1 - Poorhole Ln	Evenly split	10.00
2 - Margate Rd	Evenly split	10.00
3 - Star Ln	Evenly split	10.00
4 - Ramsgate Rd	Evenly split	10.00

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
1 - Poorhole Ln	1 [Give-way line]	1	2, 3	✓	4.00	0	99999
		2	1, 4	✓	4.00	0	99999
	2	1	(1, 2, 3, 4)		Infinity		
2 - Margate Rd	1 [Give-way line]	1	1, 2, 3, 4		Infinity	0	99999
3 - Star Ln	1 [Give-way line]	1	1, 2, 3, 4		Infinity	0	99999
4 - Ramsgate Rd	1 [Give-way line]	1	1, 2	✓	8.00	0	99999
		2	2, 3, 4	✓	8.00	0	99999
	2	1	(1, 2, 3, 4)		Infinity		

Entry Lane slope and intercept

Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - Poorhole Ln	1 [Give-way line]	1	0.306	825
		2	0.306	825
2 - Margate Rd	1 [Give-way line]	1	0.459	1031
3 - Star Ln	1 [Give-way line]	1	0.557	1284
4 - Ramsgate Rd	1 [Give-way line]	1	0.267	674
		2	0.267	674

Lane Movements

Arm	Lane Level	Lane	Destination arm			
			Poorhole Ln	Margate Rd	Star Ln	Ramsgate Rd
1 - Poorhole Ln	1 [Give-way line]	1		✓	✓	
		2	✓			✓
	2	1	✓	✓	✓	✓
2 - Margate Rd	1 [Give-way line]	1	✓	✓	✓	✓
3 - Star Ln	1 [Give-way line]	1	✓	✓	✓	✓
4 - Ramsgate Rd	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 (%)
1 - Poorhole Ln		ONE HOUR	✓	412	100.000
2 - Margate Rd		ONE HOUR	✓	763	100.000
3 - Star Ln		ONE HOUR	✓	407	100.000
4 - Ramsgate Rd		ONE HOUR	✓	1092	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	39	230	143
	2 - Margate Rd	69	0	79	615
	3 - Star Ln	150	55	0	202
	4 - Ramsgate Rd	166	747	179	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Poorhole Ln	2 - Margate Rd	3 - Star Ln	4 - Ramsgate Rd
From	1 - Poorhole Ln	0	4	2	5
	2 - Margate Rd	2	0	0	7
	3 - Star Ln	4	3	0	4
	4 - Ramsgate Rd	2	6	4	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)
1 - Poorhole Ln	1.57	13.1	F	381	571
2 - Margate Rd	1.70	28.2	F	704	1057
3 - Star Ln	0.43	3.2	D	375	562
4 - Ramsgate Rd	0.63	12.6	E	998	1497

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
1 - Poorhole Ln	313	78	742	313	287	0.0	1.6	0.251	C
2 - Margate Rd	580	145	419	581	635	0.0	1.7	0.172	B
3 - Star Ln	306	77	630	304	371	0.0	0.8	0.142	A
4 - Ramsgate Rd	826	206	204	824	730	0.0	2.2	0.157	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
1 - Poorhole Ln	378	94	886	378	349	1.6	2.6	0.392	C
2 - Margate Rd	676	169	505	680	759	1.7	3.6	0.291	C
3 - Star Ln	371	93	740	367	444	0.8	1.6	0.211	B
4 - Ramsgate Rd	988	247	245	990	862	2.2	3.4	0.219	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
1 - Poorhole Ln	452	113	1071	425	420	2.6	9.8	0.959	F
2 - Margate Rd	843	211	575	802	921	3.6	17.0	0.872	F
3 - Star Ln	450	113	863	450	515	1.6	3.1	0.383	C
4 - Ramsgate Rd	1205	301	295	1196	1018	3.4	11.2	0.464	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
1 - Poorhole Ln	455	114	1075	442	425	9.8	13.0	1.566	F
2 - Margate Rd	851	213	598	803	918	17.0	28.1	1.696	F
3 - Star Ln	451	113	870	454	531	3.1	3.1	0.432	D
4 - Ramsgate Rd	1192	298	305	1194	1019	11.2	12.5	0.631	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
1 - Poorhole Ln	375	94	880	386	354	13.0	3.7	0.921	F
2 - Margate Rd	698	174	513	744	753	28.1	10.1	1.342	F
3 - Star Ln	365	91	802	368	455	3.1	1.2	0.266	C
4 - Ramsgate Rd	965	241	256	978	915	12.5	3.2	0.312	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
1 - Poorhole Ln	310	77	730	309	288	3.7	1.6	0.338	C
2 - Margate Rd	577	144	414	586	625	10.1	1.5	0.323	C
3 - Star Ln	307	77	629	305	371	1.2	0.8	0.176	B
4 - Ramsgate Rd	812	203	207	811	727	3.2	2.2	0.160	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
1 - Poorhole Ln	Entry	1	1	2, 3	203	401	0.507	203	0.0	1.0	0.256	C
			2	1, 4	109	390	0.280	110	0.0	0.4	0.193	B
		2	1	(1, 2, 3, 4)	313			313	0.0	0.2	0.016	A
	Exit	1	1		287			287	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	580	918	0.632	581	0.0	1.7	0.172	B
	Exit	1	1		635			635	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	306	698	0.439	304	0.0	0.8	0.142	A
	Exit	1	1		371			371	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	415	692	0.601	414	0.0	1.1	0.154	A
			2	2, 3, 4	411	691	0.595	410	0.0	1.1	0.158	A
		2	1	(1, 2, 3, 4)	826			826	0.0	0.0	0.000	A
	Exit	1	1		730			730	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
1 - Poorhole Ln	Entry	1	1	2, 3	245	369	0.665	246	1.0	1.5	0.354	C
			2	1, 4	132	360	0.367	132	0.4	0.6	0.259	C
		2	1	(1, 2, 3, 4)	378			377	0.2	0.6	0.071	A
	Exit	1	1		349			349	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	676	876	0.772	680	1.7	3.6	0.291	C
	Exit	1	1		759			759	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	371	652	0.570	367	0.8	1.6	0.211	B
	Exit	1	1		444			444	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	492	677	0.727	494	1.1	1.6	0.216	B
			2	2, 3, 4	497	673	0.738	496	1.1	1.7	0.213	B
		2	1	(1, 2, 3, 4)	988			989	0.0	0.1	0.004	A
	Exit	1	1		862			862	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
1 - Poorhole Ln	Entry	1	1	2, 3	282	329	0.859	280	1.5	2.9	0.535	D
			2	1, 4	146	320	0.454	145	0.6	0.9	0.340	C
		2	1	(1, 2, 3, 4)	452			428	0.6	5.9	0.484	D
	Exit	1	1		420			420	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	843	838	1.006	802	3.6	17.0	0.872	F
	Exit	1	1		921			921	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	450	594	0.758	450	1.6	3.1	0.383	C
	Exit	1	1		515			515	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	599	663	0.904	599	1.6	4.1	0.365	C
			2	2, 3, 4	595	659	0.904	597	1.7	3.9	0.368	C
		2	1	(1, 2, 3, 4)	1205			1195	0.1	3.2	0.095	A
	Exit	1	1		1018			1018	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
1 - Poorhole Ln	Entry	1	1	2, 3	291	327	0.891	290	2.9	3.1	0.610	E
			2	1, 4	152	318	0.478	151	0.9	1.1	0.394	C
		2	1	(1, 2, 3, 4)	455			443	5.9	8.9	1.033	F
	Exit	1	1		425			425	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	851	826	1.031	803	17.0	28.1	1.696	F
	Exit	1	1		918			918	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	451	592	0.762	454	3.1	3.1	0.432	D
	Exit	1	1		531			531	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	590	656	0.899	590	4.1	4.2	0.423	D
			2	2, 3, 4	602	654	0.921	604	3.9	4.2	0.422	D
		2	1	(1, 2, 3, 4)	1192			1192	3.2	4.1	0.208	B
	Exit	1	1		1019			1019	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
			1	2, 3	249	369	0.674	253	3.1	1.5	0.470	D

1 - Poorhole Ln	Entry	1	2	1, 4	135	360	0.374	133	1.1	0.6	0.315	C
		2	1	(1, 2, 3, 4)	375			384	8.9	1.6	0.518	D
	Exit	1	1		354			354	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	698	871	0.803	744	28.1	10.1	1.342	F
	Exit	1	1		753			753	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	365	624	0.584	368	3.1	1.2	0.266	C
	Exit	1	1		455			455	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	481	675	0.712	486	4.2	1.6	0.267	C
			2	2, 3, 4	487	670	0.728	492	4.2	1.6	0.272	C
		2	1	(1, 2, 3, 4)	965			968	4.1	0.1	0.048	A
	Exit	1	1		915			915	0.0	0.0	0.000	A

14:00 - 14:15

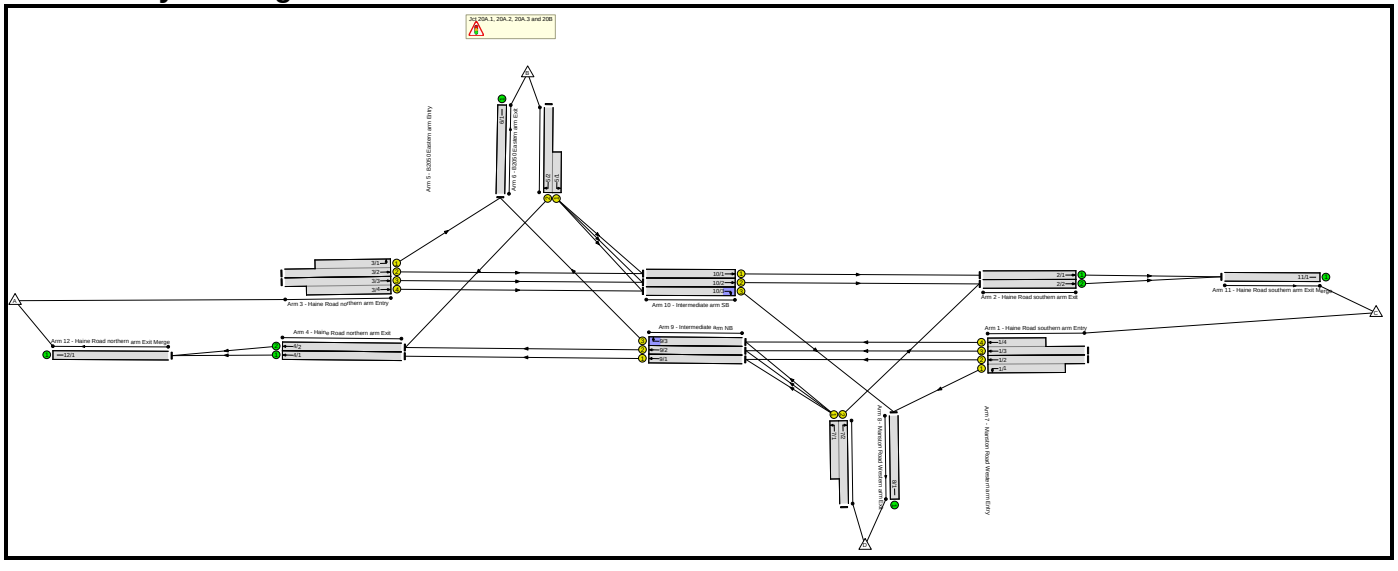
Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (min)	LOS
1 - Poorhole Ln	Entry	1	1	2, 3	204	403	0.507	204	1.5	1.0	0.306	C
			2	1, 4	105	393	0.268	105	0.6	0.4	0.224	B
		2	1	(1, 2, 3, 4)	310			309	1.6	0.2	0.064	A
	Exit	1	1		288			288	0.0	0.0	0.000	A
2 - Margate Rd	Entry	1	1	1, 2, 3, 4	577	923	0.624	586	10.1	1.5	0.323	C
	Exit	1	1		625			625	0.0	0.0	0.000	A
3 - Star Ln	Entry	1	1	1, 2, 3, 4	307	701	0.437	305	1.2	0.8	0.176	B
	Exit	1	1		371			371	0.0	0.0	0.000	A
4 - Ramsgate Rd	Entry	1	1	1, 2	407	687	0.591	406	1.6	1.1	0.158	A
			2	2, 3, 4	406	683	0.594	406	1.6	1.1	0.161	A
		2	1	(1, 2, 3, 4)	812			812	0.1	0.0	0.001	A
	Exit	1	1		727			727	0.0	0.0	0.000	A

Full Input Data And Results

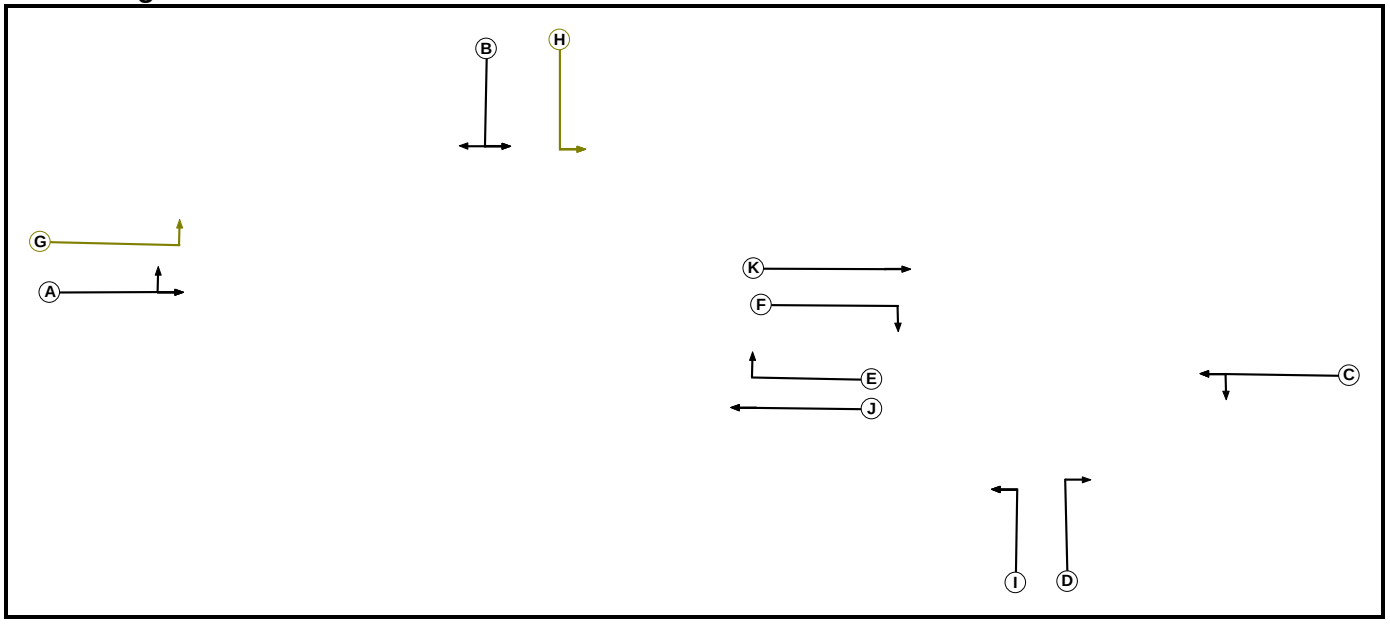
User and Project Details

Project:	**Manston Airport DCO EIA**
Title:	**Jct 20A.1, 20A.2, 20A.3 and 20B**
Location:	
File name:	Signal Option_R4.lsg3x
Author:	FOUDA
Company:	Wood
Address:	
Notes:	

Network Layout Diagram



Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Filter	A	4	0
H	Filter	B	4	0
I	Traffic		7	7
J	Traffic		7	7
K	Traffic		7	7

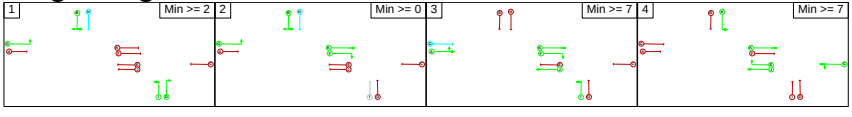
Phase Intergreens Matrix

		Starting Phase										
		A	B	C	D	E	F	G	H	I	J	K
Terminating Phase	A		5	-	-	5	-	-	5	-	-	-
	B	5		-	-	7	-	-	-	-	7	-
	C	-	-		5	-	5	-	-	5	-	-
	D	-	-	5		-	7	-	-	-	-	7
	E	5	5	-	-		-	6	-	-	-	-
	F	-	-	5	5	-		-	-	-	-	-
	G	-	-	-	-	6	-		-	-	-	-
	H	5	-	-	-	-	-	-		-	-	-
	I	-	-	5	-	-	-	-	-		-	-
	J	-	5	-	-	-	-	-	-	-		-
	K	-	-	-	5	-	-	-	-	-	-	

Phases in Stage

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

Stage Diagram



Full Input Data And Results

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
2	3	A	Gaining absolute	9	9
3	4	C	Gaining absolute	8	8
3	4	F	Losing	3	3
3	4	I	Losing	3	3
4	1	E	Losing	4	4
4	1	J	Losing	4	4

Prohibited Stage Change

		To Stage			
		1	2	3	4
From Stage	1		7	7	X
	2	5		9	X
	3	5	5		8
	4	10	6	X	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Jct 20A.1, 20A.2, 20A.3 and 20B
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: Jct 20A.1, 20A.2, 20A.3 and 20B												
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 (Haine Road southern arm Entry)	U	C	2	3	15.0	Geom	-	3.50	0.00	Y	Arm 8 Left	15.00
1/2 (Haine Road southern arm Entry)	U	C	2	3	33.0	Geom	-	3.00	0.00	Y	Arm 9 Ahead	Inf
1/3 (Haine Road southern arm Entry)	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 9 Ahead	Inf
1/4 (Haine Road southern arm Entry)	U	C	2	3	10.0	Geom	-	3.25	0.00	Y	Arm 9 Ahead	Inf
2/1 (Haine Road southern arm Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
2/2 (Haine Road southern arm Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (Haine Road northern arm Entry)	U	A G	2	3	13.0	Geom	-	3.25	0.00	Y	Arm 6 Left	Inf
3/2 (Haine Road northern arm Entry)	U	A	2	3	32.0	Geom	-	3.25	0.00	Y	Arm 10 Ahead	Inf
3/3 (Haine Road northern arm Entry)	U	A	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 10 Ahead	Inf
3/4 (Haine Road northern arm Entry)	U	A	2	3	19.0	Geom	-	3.25	0.00	Y	Arm 10 Ahead	Inf
4/1 (Haine Road northern arm Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2 (Haine Road northern arm Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (B2050 Eastern arm Entry)	U	B H	2	3	7.0	Geom	-	3.25	0.00	Y	Arm 10 Left	Inf
5/2 (B2050 Eastern arm Entry)	U	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 4 Right	Inf

Full Input Data And Results

6/1 (B2050 Eastern arm Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Manston Road Western arm Entry)	U	I	2	3	10.0	Geom	-	3.25	0.00	Y	Arm 9 Left	Inf
7/2 (Manston Road Western arm Entry)	U	D	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 2 Right	Inf
8/1 (Manston Road Western arm Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1 (Intermediate arm NB)	U	J	2	3	6.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
9/2 (Intermediate arm NB)	U	J	2	3	6.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
9/3 (Intermediate arm NB)	U	E	2	3	6.0	Geom	-	3.25	0.00	Y	Arm 6 Right	Inf
10/1 (Intermediate arm SB)	U	K	2	3	6.0	Geom	-	3.25	0.00	Y	Arm 2 Ahead	Inf
10/2 (Intermediate arm SB)	U	K	2	3	6.0	Geom	-	3.25	0.00	Y	Arm 2 Ahead	Inf
10/3 (Intermediate arm SB)	U	F	2	3	6.0	Geom	-	3.50	0.00	Y	Arm 8 Right	20.00
11/1 (Haine Road southern arm Exit Merge)	U		2	3	60.0	Inf	-	-	-	-	-	-
12/1 (Haine Road northern arm Exit Merge)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2039 + Dev Traffic AM peak'	07:45	08:45	01:00	
2: '2039 + Dev Traffic PM peak'	16:45	17:45	01:00	
3: '2039 + Dev Traffic Airport peak'	13:00	14:00	01:00	
4: '2039 B + Dev - Net change - AM peak'	07:45	08:45	01:00	
5: '2039 B + Dev - Net change - PM peak'	16:45	17:45	01:00	
6: '2039 B + Dev - Net change - Airport peak'	13:00	14:00	01:00	

Scenario 1: '2039 + Dev Traffic AM peak' (FG1: '2039 + Dev Traffic AM peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	167	770	537	1474
	B	185	0	373	218	776
	C	1020	380	0	252	1652
	D	289	65	118	0	472
	Tot.	1494	612	1261	1007	4374

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2039 + Dev Traffic AM peak
Junction: Jct 20A.1, 20A.2, 20A.3 and 20B	
1/1 (short)	252
1/2 (with short)	800(In) 548(Out)
1/3 (with short)	852(In) 472(Out)
1/4 (short)	380
2/1	875
2/2	386
3/1 (short)	167
3/2 (with short)	670(In) 503(Out)
3/3 (with short)	804(In) 267(Out)
3/4 (short)	537
4/1	741
4/2	753
5/1 (short)	591
5/2 (with short)	776(In) 185(Out)
6/1	612
7/1 (short)	354
7/2 (with short)	472(In) 118(Out)
8/1	1007
9/1	741
9/2	568
9/3	445
10/1	875
10/2	268
10/3	755
11/1	1261
12/1	1494

Full Input Data And Results

Lane Saturation Flows

Junction: Jct 20A.1, 20A.2, 20A.3 and 20B								
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 (Haine Road southern arm Entry)	3.50	0.00	Y	Arm 8 Left	15.00	100.0 %	1786	1786
1/2 (Haine Road southern arm Entry)	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/3 (Haine Road southern arm Entry)	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/4 (Haine Road southern arm Entry)	3.25	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1940	1940
2/1 (Haine Road southern arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Haine Road southern arm Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 6 Left	Inf	100.0 %	1940	1940
3/2 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1940	1940
3/3 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1940	1940
3/4 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1940	1940
4/1 (Haine Road northern arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Haine Road northern arm Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (B2050 Eastern arm Entry)	3.25	0.00	Y	Arm 10 Left	Inf	100.0 %	1940	1940
5/2 (B2050 Eastern arm Entry)	3.25	0.00	Y	Arm 4 Right	Inf	100.0 %	1940	1940
6/1 (B2050 Eastern arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Manston Road Western arm Entry)	3.25	0.00	Y	Arm 9 Left	Inf	100.0 %	1940	1940
7/2 (Manston Road Western arm Entry)	3.25	0.00	Y	Arm 2 Right	Inf	100.0 %	1940	1940
8/1 (Manston Road Western arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (Intermediate arm NB)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
9/2 (Intermediate arm NB)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
9/3 (Intermediate arm NB)	3.25	0.00	Y	Arm 6 Right	Inf	100.0 %	1940	1940
10/1 (Intermediate arm SB)	3.25	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1940	1940

10/2 (Intermediate arm SB)	3.25	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1940	1940
10/3 (Intermediate arm SB)	3.50	0.00	Y	Arm 8 Right	20.00	100.0 %	1828	1828
11/1 (Haine Road southern arm Exit Merge Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Haine Road northern arm Exit Merge Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2039 + Dev Traffic PM peak' (FG2: '2039 + Dev Traffic PM peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	248	1002	532	1782
	B	136	0	337	125	598
	C	937	377	0	90	1404
	D	276	70	283	0	629
	Tot.	1349	695	1622	747	4413

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2039 + Dev Traffic PM peak
Junction: Jct 20A.1, 20A.2, 20A.3 and 20B	
1/1 (short)	90
1/2 (with short)	603(In) 513(Out)
1/3 (with short)	801(In) 424(Out)
1/4 (short)	377
2/1	801
2/2	821
3/1 (short)	248
3/2 (with short)	716(In) 468(Out)
3/3 (with short)	1066(In) 534(Out)
3/4 (short)	532
4/1	688
4/2	661
5/1 (short)	462
5/2 (with short)	598(In) 136(Out)
6/1	695
7/1 (short)	346
7/2 (with short)	629(In) 283(Out)
8/1	747
9/1	688
9/2	525
9/3	447
10/1	801
10/2	538
10/3	657
11/1	1622
12/1	1349

Full Input Data And Results

Lane Saturation Flows

Junction: Jct 20A.1, 20A.2, 20A.3 and 20B								
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 (Haine Road southern arm Entry)	3.50	0.00	Y	Arm 8 Left	15.00	100.0 %	1786	1786
1/2 (Haine Road southern arm Entry)	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/3 (Haine Road southern arm Entry)	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/4 (Haine Road southern arm Entry)	3.25	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1940	1940
2/1 (Haine Road southern arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Haine Road southern arm Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 6 Left	Inf	100.0 %	1940	1940
3/2 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1940	1940
3/3 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1940	1940
3/4 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1940	1940
4/1 (Haine Road northern arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Haine Road northern arm Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (B2050 Eastern arm Entry)	3.25	0.00	Y	Arm 10 Left	Inf	100.0 %	1940	1940
5/2 (B2050 Eastern arm Entry)	3.25	0.00	Y	Arm 4 Right	Inf	100.0 %	1940	1940
6/1 (B2050 Eastern arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Manston Road Western arm Entry)	3.25	0.00	Y	Arm 9 Left	Inf	100.0 %	1940	1940
7/2 (Manston Road Western arm Entry)	3.25	0.00	Y	Arm 2 Right	Inf	100.0 %	1940	1940
8/1 (Manston Road Western arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (Intermediate arm NB)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
9/2 (Intermediate arm NB)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
9/3 (Intermediate arm NB)	3.25	0.00	Y	Arm 6 Right	Inf	100.0 %	1940	1940
10/1 (Intermediate arm SB)	3.25	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1940	1940

10/2 (Intermediate arm SB)	3.25	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1940	1940
10/3 (Intermediate arm SB)	3.50	0.00	Y	Arm 8 Right	20.00	100.0 %	1828	1828
11/1 (Haine Road southern arm Exit Merge Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Haine Road northern arm Exit Merge Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2039 + Dev Traffic Airport peak' (FG3: '2039 + Dev Traffic Airport peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	232	810	523	1565
	B	143	0	333	169	645
	C	695	330	0	278	1303
	D	263	88	138	0	489
	Tot.	1101	650	1281	970	4002

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2039 + Dev Traffic Airport peak
Junction: Jct 20A.1, 20A.2, 20A.3 and 20B	
1/1 (short)	278
1/2 (with short)	653(In) 375(Out)
1/3 (with short)	650(In) 320(Out)
1/4 (short)	330
2/1	756
2/2	525
3/1 (short)	232
3/2 (with short)	657(In) 425(Out)
3/3 (with short)	908(In) 385(Out)
3/4 (short)	523
4/1	557
4/2	544
5/1 (short)	502
5/2 (with short)	645(In) 143(Out)
6/1	650
7/1 (short)	351
7/2 (with short)	489(In) 138(Out)
8/1	970
9/1	557
9/2	401
9/3	418
10/1	756
10/2	387
10/3	692
11/1	1281
12/1	1101

Full Input Data And Results

Lane Saturation Flows

Junction: Jct 20A.1, 20A.2, 20A.3 and 20B								
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 (Haine Road southern arm Entry)	3.50	0.00	Y	Arm 8 Left	15.00	100.0 %	1786	1786
1/2 (Haine Road southern arm Entry)	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/3 (Haine Road southern arm Entry)	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/4 (Haine Road southern arm Entry)	3.25	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1940	1940
2/1 (Haine Road southern arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Haine Road southern arm Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 6 Left	Inf	100.0 %	1940	1940
3/2 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1940	1940
3/3 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1940	1940
3/4 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1940	1940
4/1 (Haine Road northern arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Haine Road northern arm Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (B2050 Eastern arm Entry)	3.25	0.00	Y	Arm 10 Left	Inf	100.0 %	1940	1940
5/2 (B2050 Eastern arm Entry)	3.25	0.00	Y	Arm 4 Right	Inf	100.0 %	1940	1940
6/1 (B2050 Eastern arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Manston Road Western arm Entry)	3.25	0.00	Y	Arm 9 Left	Inf	100.0 %	1940	1940
7/2 (Manston Road Western arm Entry)	3.25	0.00	Y	Arm 2 Right	Inf	100.0 %	1940	1940
8/1 (Manston Road Western arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (Intermediate arm NB)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
9/2 (Intermediate arm NB)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
9/3 (Intermediate arm NB)	3.25	0.00	Y	Arm 6 Right	Inf	100.0 %	1940	1940
10/1 (Intermediate arm SB)	3.25	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1940	1940

10/2 (Intermediate arm SB)	3.25	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1940	1940
10/3 (Intermediate arm SB)	3.50	0.00	Y	Arm 8 Right	20.00	100.0 %	1828	1828
11/1 (Haine Road southern arm Exit Merge Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Haine Road northern arm Exit Merge Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2039 B + Dev - Net change - AM peak' (FG4: '2039 B + Dev - Net change - AM peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	166	666	501	1333
	B	185	0	337	253	775
	C	958	351	0	253	1562
	D	259	95	118	0	472
	Tot.	1402	612	1121	1007	4142

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2039 B + Dev - Net change - AM peak
Junction: Jct 20A.1, 20A.2, 20A.3 and 20B	
1/1 (short)	253
1/2 (with short)	766(In) 513(Out)
1/3 (with short)	796(In) 445(Out)
1/4 (short)	351
2/1	767
2/2	354
3/1 (short)	166
3/2 (with short)	596(In) 430(Out)
3/3 (with short)	737(In) 236(Out)
3/4 (short)	501
4/1	695
4/2	707
5/1 (short)	590
5/2 (with short)	775(In) 185(Out)
6/1	612
7/1 (short)	354
7/2 (with short)	472(In) 118(Out)
8/1	1007
9/1	695
9/2	522
9/3	446
10/1	767
10/2	236
10/3	754
11/1	1121
12/1	1402

Full Input Data And Results

Lane Saturation Flows

Junction: Jct 20A.1, 20A.2, 20A.3 and 20B								
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 (Haine Road southern arm Entry)	3.50	0.00	Y	Arm 8 Left	15.00	100.0 %	1786	1786
1/2 (Haine Road southern arm Entry)	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/3 (Haine Road southern arm Entry)	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/4 (Haine Road southern arm Entry)	3.25	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1940	1940
2/1 (Haine Road southern arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Haine Road southern arm Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 6 Left	Inf	100.0 %	1940	1940
3/2 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1940	1940
3/3 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1940	1940
3/4 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1940	1940
4/1 (Haine Road northern arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Haine Road northern arm Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (B2050 Eastern arm Entry)	3.25	0.00	Y	Arm 10 Left	Inf	100.0 %	1940	1940
5/2 (B2050 Eastern arm Entry)	3.25	0.00	Y	Arm 4 Right	Inf	100.0 %	1940	1940
6/1 (B2050 Eastern arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Manston Road Western arm Entry)	3.25	0.00	Y	Arm 9 Left	Inf	100.0 %	1940	1940
7/2 (Manston Road Western arm Entry)	3.25	0.00	Y	Arm 2 Right	Inf	100.0 %	1940	1940
8/1 (Manston Road Western arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (Intermediate arm NB)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
9/2 (Intermediate arm NB)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
9/3 (Intermediate arm NB)	3.25	0.00	Y	Arm 6 Right	Inf	100.0 %	1940	1940
10/1 (Intermediate arm SB)	3.25	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1940	1940

10/2 (Intermediate arm SB)	3.25	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1940	1940
10/3 (Intermediate arm SB)	3.50	0.00	Y	Arm 8 Right	20.00	100.0 %	1828	1828
11/1 (Haine Road southern arm Exit Merge Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Haine Road northern arm Exit Merge Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2039 B + Dev - Net change - PM peak' (FG5: '2039 B + Dev - Net change - PM peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	248	922	495	1665
	B	136	0	301	162	599
	C	838	346	0	90	1274
	D	245	101	283	0	629
	Tot.	1219	695	1506	747	4167

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2039 B + Dev - Net change - PM peak
Junction: Jct 20A.1, 20A.2, 20A.3 and 20B	
1/1 (short)	90
1/2 (with short)	540(In) 450(Out)
1/3 (with short)	734(In) 388(Out)
1/4 (short)	346
2/1	719
2/2	787
3/1 (short)	248
3/2 (with short)	673(In) 425(Out)
3/3 (with short)	992(In) 497(Out)
3/4 (short)	495
4/1	608
4/2	611
5/1 (short)	463
5/2 (with short)	599(In) 136(Out)
6/1	695
7/1 (short)	346
7/2 (with short)	629(In) 283(Out)
8/1	747
9/1	608
9/2	475
9/3	447
10/1	719
10/2	504
10/3	657
11/1	1506
12/1	1219

Full Input Data And Results

Lane Saturation Flows

Junction: Jct 20A.1, 20A.2, 20A.3 and 20B								
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 (Haine Road southern arm Entry)	3.50	0.00	Y	Arm 8 Left	15.00	100.0 %	1786	1786
1/2 (Haine Road southern arm Entry)	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/3 (Haine Road southern arm Entry)	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/4 (Haine Road southern arm Entry)	3.25	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1940	1940
2/1 (Haine Road southern arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Haine Road southern arm Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 6 Left	Inf	100.0 %	1940	1940
3/2 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1940	1940
3/3 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1940	1940
3/4 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1940	1940
4/1 (Haine Road northern arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Haine Road northern arm Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (B2050 Eastern arm Entry)	3.25	0.00	Y	Arm 10 Left	Inf	100.0 %	1940	1940
5/2 (B2050 Eastern arm Entry)	3.25	0.00	Y	Arm 4 Right	Inf	100.0 %	1940	1940
6/1 (B2050 Eastern arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Manston Road Western arm Entry)	3.25	0.00	Y	Arm 9 Left	Inf	100.0 %	1940	1940
7/2 (Manston Road Western arm Entry)	3.25	0.00	Y	Arm 2 Right	Inf	100.0 %	1940	1940
8/1 (Manston Road Western arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (Intermediate arm NB)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
9/2 (Intermediate arm NB)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
9/3 (Intermediate arm NB)	3.25	0.00	Y	Arm 6 Right	Inf	100.0 %	1940	1940
10/1 (Intermediate arm SB)	3.25	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1940	1940

10/2 (Intermediate arm SB)	3.25	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1940	1940
10/3 (Intermediate arm SB)	3.50	0.00	Y	Arm 8 Right	20.00	100.0 %	1828	1828
11/1 (Haine Road southern arm Exit Merge Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Haine Road northern arm Exit Merge Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2039 B + Dev - Net change - Airport peak' (FG6: '2039 B + Dev - Net change - Airport peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	232	725	490	1447
	B	143	0	300	203	646
	C	675	309	0	279	1263
	D	241	110	138	0	489
	Tot.	1059	651	1163	972	3845

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2039 B + Dev - Net change - Airport peak
Junction: Jct 20A.1, 20A.2, 20A.3 and 20B	
1/1 (short)	279
1/2 (with short)	637(In) 358(Out)
1/3 (with short)	626(In) 317(Out)
1/4 (short)	309
2/1	673
2/2	490
3/1 (short)	232
3/2 (with short)	606(In) 374(Out)
3/3 (with short)	841(In) 351(Out)
3/4 (short)	490
4/1	537
4/2	522
5/1 (short)	503
5/2 (with short)	646(In) 143(Out)
6/1	651
7/1 (short)	351
7/2 (with short)	489(In) 138(Out)
8/1	972
9/1	537
9/2	379
9/3	419
10/1	673
10/2	352
10/3	693
11/1	1163
12/1	1059

Full Input Data And Results

Lane Saturation Flows

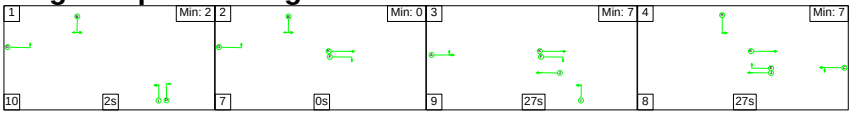
Junction: Jct 20A.1, 20A.2, 20A.3 and 20B								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Haine Road southern arm Entry)	3.50	0.00	Y	Arm 8 Left	15.00	100.0 %	1786	1786
1/2 (Haine Road southern arm Entry)	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/3 (Haine Road southern arm Entry)	3.00	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1915	1915
1/4 (Haine Road southern arm Entry)	3.25	0.00	Y	Arm 9 Ahead	Inf	100.0 %	1940	1940
2/1 (Haine Road southern arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Haine Road southern arm Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 6 Left	Inf	100.0 %	1940	1940
3/2 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1940	1940
3/3 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1940	1940
3/4 (Haine Road northern arm Entry)	3.25	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1940	1940
4/1 (Haine Road northern arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Haine Road northern arm Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (B2050 Eastern arm Entry)	3.25	0.00	Y	Arm 10 Left	Inf	100.0 %	1940	1940
5/2 (B2050 Eastern arm Entry)	3.25	0.00	Y	Arm 4 Right	Inf	100.0 %	1940	1940
6/1 (B2050 Eastern arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Manston Road Western arm Entry)	3.25	0.00	Y	Arm 9 Left	Inf	100.0 %	1940	1940
7/2 (Manston Road Western arm Entry)	3.25	0.00	Y	Arm 2 Right	Inf	100.0 %	1940	1940
8/1 (Manston Road Western arm Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (Intermediate arm NB)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
9/2 (Intermediate arm NB)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
9/3 (Intermediate arm NB)	3.25	0.00	Y	Arm 6 Right	Inf	100.0 %	1940	1940
10/1 (Intermediate arm SB)	3.25	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1940	1940

Full Input Data And Results

10/2 (Intermediate arm SB)	3.25	0.00	Y	Arm 2 Ahead	Inf	100.0 %	1940	1940
10/3 (Intermediate arm SB)	3.50	0.00	Y	Arm 8 Right	20.00	100.0 %	1828	1828
11/1 (Haine Road southern arm Exit Merge Lane 1)	Infinite Saturation Flow						Inf	Inf
12/1 (Haine Road northern arm Exit Merge Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2039 + Dev Traffic AM peak' (FG1: '2039 + Dev Traffic AM peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

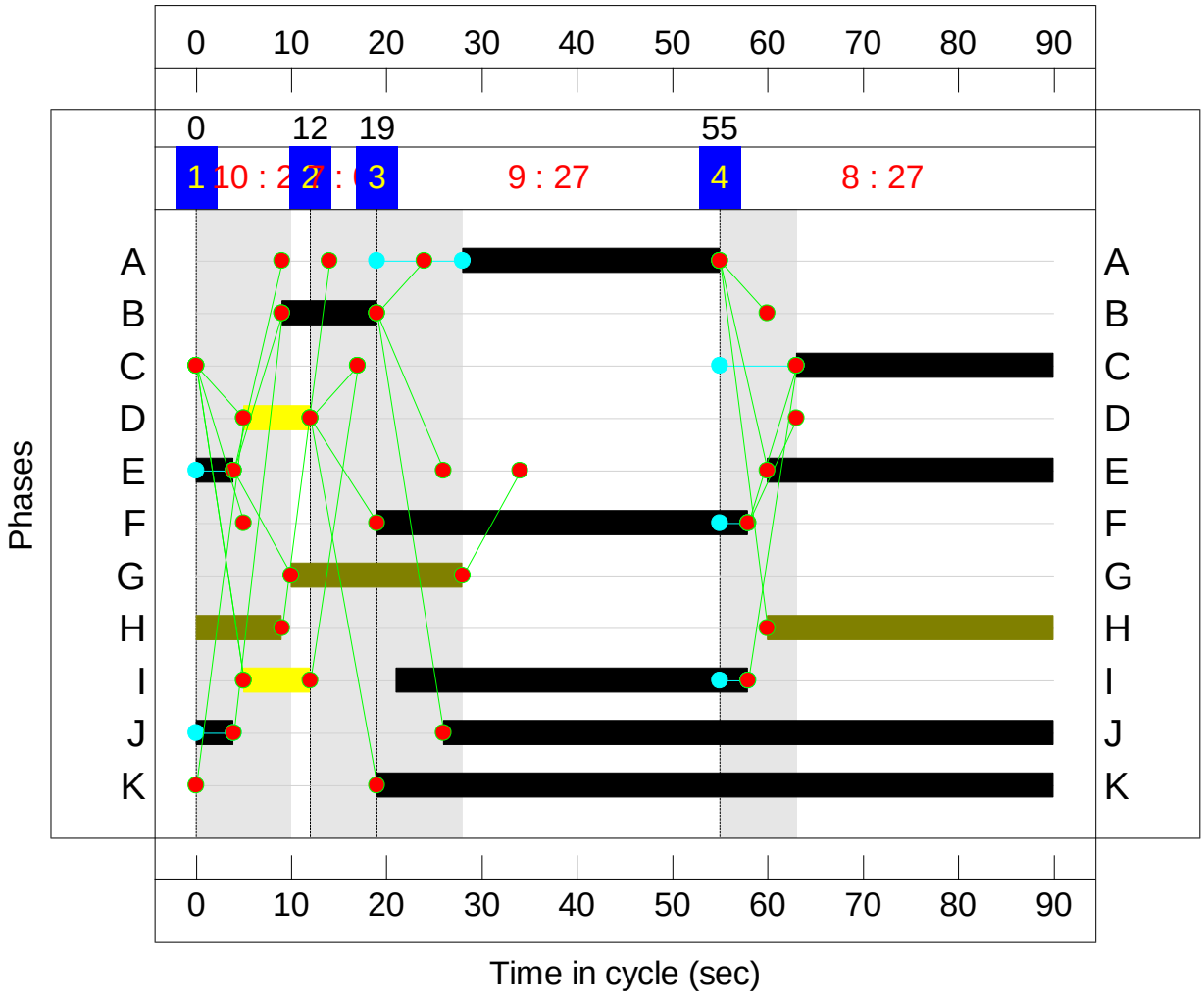


Stage Timings

Stage	1	2	3	4
Duration	2	0	27	27
Change Point	0	12	19	55

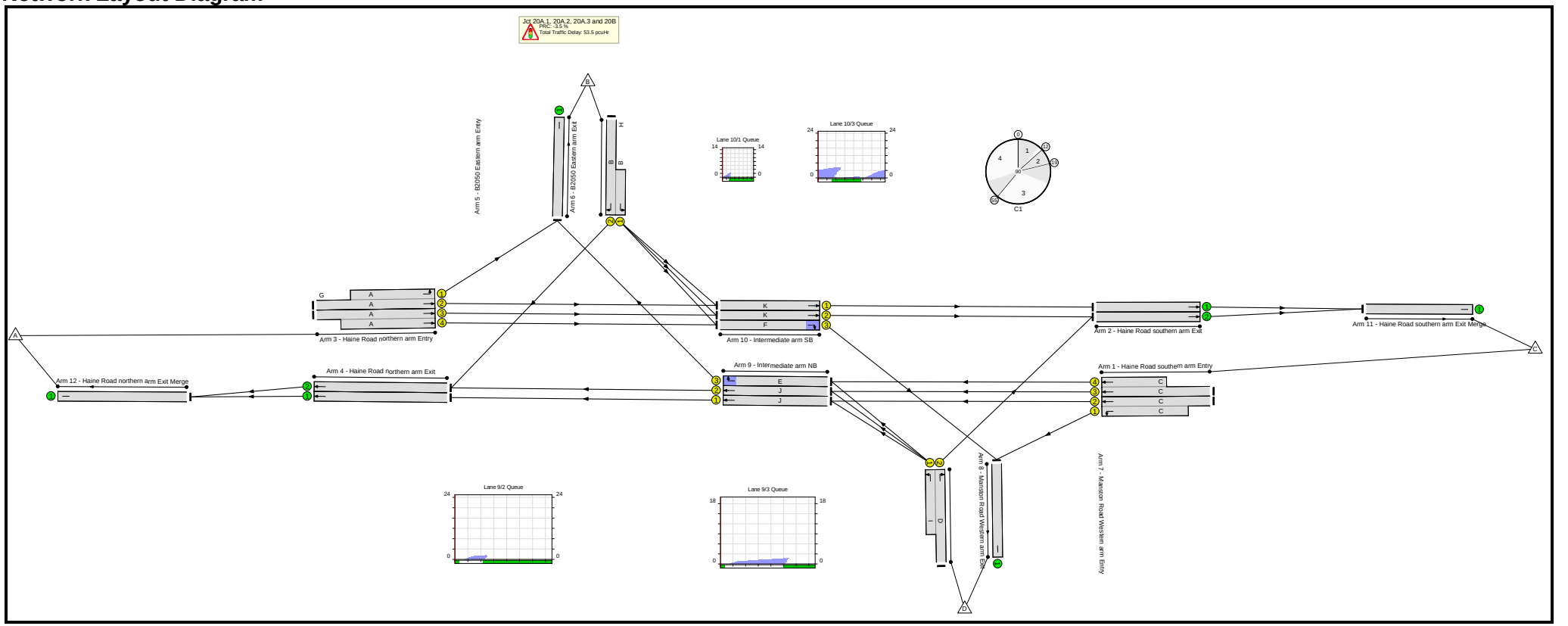
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Jct 20A.1, 20A.2, 20A.3 and 20B	-	-	**N/A**	-	-		-	-	-	-	-	-	**93.2%**
Jct 20A.1, 20A.2, 20A.3 and 20B	-	-	**N/A**	-	-		-	-	-	-	-	-	**93.2%**
1/2+1/1	Haine Road southern arm Entry Left Ahead	U	N/A	N/A	C		1	27	-	800	1915:1786	596+274	92.0 : 92.0%
1/3+1/4	Haine Road southern arm Entry Ahead	U	N/A	N/A	C		1	27	-	852	1915:1940	507+408	93.2 : 93.2%
2/1	Haine Road southern arm Exit Ahead	U	N/A	N/A	-		-	-	-	875	Inf	Inf	0.0%
2/2	Haine Road southern arm Exit Ahead	U	N/A	N/A	-		-	-	-	386	Inf	Inf	0.0%
3/2+3/1	Haine Road northern arm Entry Left Ahead	U	N/A	N/A	A	G	1	27:45	18	670	1940:1940	585+194	86.0 : 86.0%
3/3+3/4	Haine Road northern arm Entry Ahead	U	N/A	N/A	A		1	27	-	804	1940:1940	300+604	89.0 : 89.0%
4/1	Haine Road northern arm Exit Ahead	U	N/A	N/A	-		-	-	-	741	Inf	Inf	0.0%
4/2	Haine Road northern arm Exit Ahead	U	N/A	N/A	-		-	-	-	753	Inf	Inf	0.0%
5/2+5/1	B2050 Eastern arm Entry Right Left	U	N/A	N/A	B	H	1	10:49	39	776	1940:1940	237+772	78.0 : 76.5%
6/1	B2050 Eastern arm Exit	U	N/A	N/A	-		-	-	-	612	Inf	Inf	0.0%
7/2+7/1	Manston Road Western arm Entry Right Left	U	N/A	N/A	D I		1:2	7:44	-	472	1940:1940	172+648	68.4 : 54.6%

Full Input Data And Results

8/1	Manston Road Western arm Exit	U	N/A	N/A	-		-	-	-	1007	Inf	Inf	0.0%
9/1	Intermediate arm NB Ahead	U	N/A	N/A	J		1	68	-	741	1940	1487	49.8%
9/2	Intermediate arm NB Ahead	U	N/A	N/A	J		1	68	-	568	1940	1487	38.2%
9/3	Intermediate arm NB Right	U	N/A	N/A	E		1	34	-	445	1940	754	59.0%
10/1	Intermediate arm SB Ahead	U	N/A	N/A	K		1	71	-	875	1940	1552	56.4%
10/2	Intermediate arm SB Ahead	U	N/A	N/A	K		1	71	-	268	1940	1552	17.3%
10/3	Intermediate arm SB Right	U	N/A	N/A	F		1	39	-	755	1828	812	92.9%
11/1	Haine Road southern arm Exit Merge	U	N/A	N/A	-		-	-	-	1261	Inf	Inf	0.0%
12/1	Haine Road northern arm Exit Merge	U	N/A	N/A	-		-	-	-	1494	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: Jct 20A.1, 20A.2, 20A.3 and 20B	**-**	**-**	**0**	**0**	**0**	**33.7**	**19.7**	**0.0**	**53.5**	**-**	**-**	**-**	**-**
Jct 20A.1, 20A.2, 20A.3 and 20B	**-**	**-**	**0**	**0**	**0**	**33.7**	**19.7**	**0.0**	**53.5**	**-**	**-**	**-**	**-**
1/2+1/1	800	800	-	-	-	6.3	5.0	-	11.3	50.9	13.1	5.0	18.1
1/3+1/4	852	852	-	-	-	6.6	5.7	-	12.3	52.0	11.9	5.7	17.6
2/1	875	875	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	386	386	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	670	670	-	-	-	4.6	2.9	-	7.5	40.3	11.6	2.9	14.5
3/3+3/4	804	804	-	-	-	6.2	3.8	-	10.0	44.7	12.7	3.8	16.4
4/1	741	741	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	753	753	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2+5/1	776	776	-	-	-	4.1	1.6	-	5.7	26.6	10.5	1.6	12.2
6/1	612	612	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	472	472	-	-	-	2.2	0.7	-	2.9	22.0	4.3	0.7	5.0
8/1	1007	1007	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	741	741	-	-	-	0.5	0.0	-	0.5	2.4	3.3	0.0	3.3
9/2	568	568	-	-	-	0.2	0.0	-	0.2	1.4	1.5	0.0	1.5
9/3	445	445	-	-	-	0.6	0.0	-	0.6	5.3	1.6	0.0	1.6
10/1	875	875	-	-	-	0.2	0.0	-	0.2	0.9	2.2	0.0	2.2
10/2	268	268	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	755	755	-	-	-	2.2	0.0	-	2.2	10.3	5.5	0.0	5.5
11/1	1261	1261	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	1494	1494	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

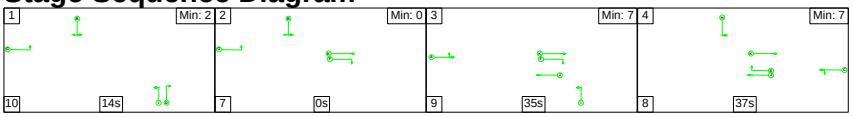
C1 PRC for Signalled Lanes (%): -3.5 Total Delay for Signalled Lanes (pcuHr): 53.45 Cycle Time (s): 90

PRC Over All Lanes (%): -3.5 Total Delay Over All Lanes(pcuHr): 53.45

Full Input Data And Results

Scenario 2: '2039 + Dev Traffic PM peak' (FG2: '2039 + Dev Traffic PM peak', Plan 1: 'Network Control Plan 1')

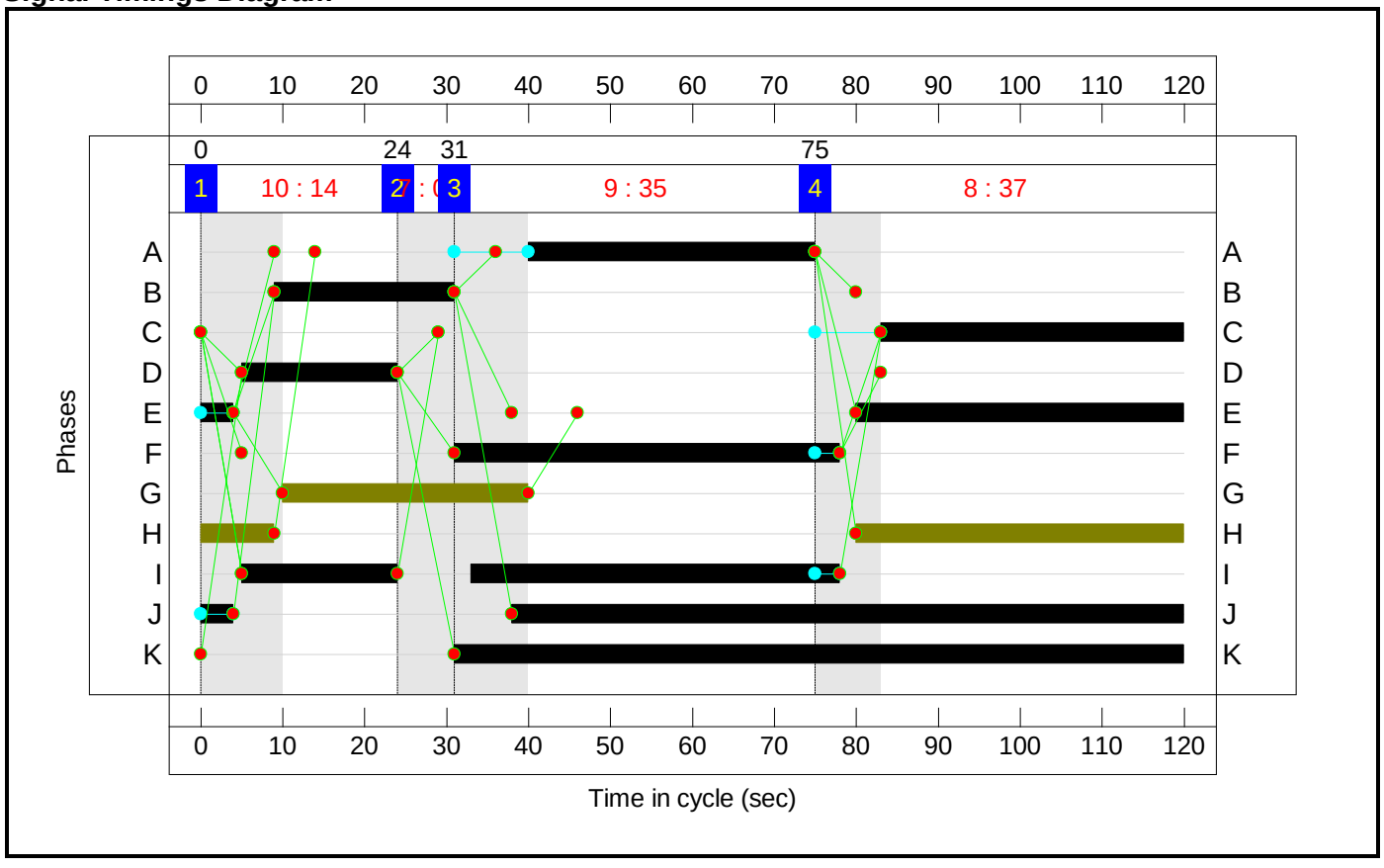
Stage Sequence Diagram



Stage Timings

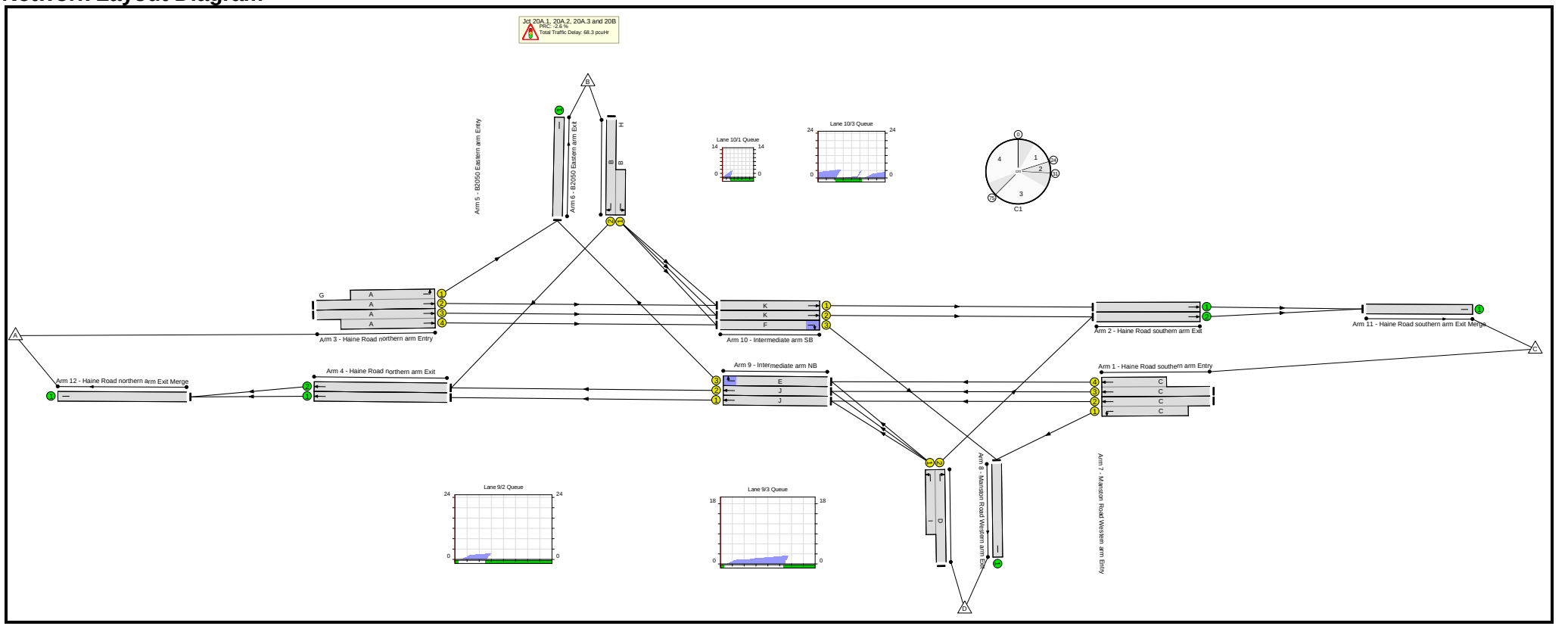
Stage	1	2	3	4
Duration	14	0	35	37
Change Point	0	24	31	75

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: Jct 20A.1, 20A.2, 20A.3 and 20B	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.4%**
Jct 20A.1, 20A.2, 20A.3 and 20B	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.4%**
1/2+1/1	Haine Road southern arm Entry Left Ahead	U	N/A	N/A	C		1	37	-	603	1915:1786	584+103	87.8 : 87.8%
1/3+1/4	Haine Road southern arm Entry Ahead	U	N/A	N/A	C		1	37	-	801	1915:1940	461+410	91.9 : 91.9%
2/1	Haine Road southern arm Exit Ahead	U	N/A	N/A	-		-	-	-	801	Inf	Inf	0.0%
2/2	Haine Road southern arm Exit Ahead	U	N/A	N/A	-		-	-	-	821	Inf	Inf	0.0%
3/2+3/1	Haine Road northern arm Entry Left Ahead	U	N/A	N/A	A	G	1	35:65	30	716	1940:1940	517+274	90.6 : 90.6%
3/3+3/4	Haine Road northern arm Entry Ahead	U	N/A	N/A	A		1	35	-	1066	1940:1940	578+576	92.4 : 92.4%
4/1	Haine Road northern arm Exit Ahead	U	N/A	N/A	-		-	-	-	688	Inf	Inf	0.0%
4/2	Haine Road northern arm Exit Ahead	U	N/A	N/A	-		-	-	-	661	Inf	Inf	0.0%
5/2+5/1	B2050 Eastern arm Entry Right Left	U	N/A	N/A	B	H	1	22:71	49	598	1940:1940	247+838	55.1 : 55.1%
6/1	B2050 Eastern arm Exit	U	N/A	N/A	-		-	-	-	695	Inf	Inf	0.0%
7/2+7/1	Manston Road Western arm Entry Right Left	U	N/A	N/A	D I		1:2	19:64	-	629	1940:1940	307+376	92.1 : 92.1%

Full Input Data And Results

8/1	Manston Road Western arm Exit	U	N/A	N/A	-		-	-	-	747	Inf	Inf	0.0%
9/1	Intermediate arm NB Ahead	U	N/A	N/A	J		1	86	-	688	1940	1407	48.9%
9/2	Intermediate arm NB Ahead	U	N/A	N/A	J		1	86	-	525	1940	1407	37.3%
9/3	Intermediate arm NB Right	U	N/A	N/A	E		1	44	-	447	1940	727	61.4%
10/1	Intermediate arm SB Ahead	U	N/A	N/A	K		1	89	-	801	1940	1455	55.1%
10/2	Intermediate arm SB Ahead	U	N/A	N/A	K		1	89	-	538	1940	1455	37.0%
10/3	Intermediate arm SB Right	U	N/A	N/A	F		1	47	-	657	1828	731	89.9%
11/1	Haine Road southern arm Exit Merge	U	N/A	N/A	-		-	-	-	1622	Inf	Inf	0.0%
12/1	Haine Road northern arm Exit Merge	U	N/A	N/A	-		-	-	-	1349	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: Jct 20A.1, 20A.2, 20A.3 and 20B	**-**	**-**	**0**	**0**	**0**	**44.7**	**23.5**	**0.0**	**68.3**	**-**	**-**	**-**	**-**
Jct 20A.1, 20A.2, 20A.3 and 20B	**-**	**-**	**0**	**0**	**0**	**44.7**	**23.5**	**0.0**	**68.3**	**-**	**-**	**-**	**-**
1/2+1/1	603	603	-	-	-	6.2	3.3	-	9.5	56.9	16.2	3.3	19.5
1/3+1/4	801	801	-	-	-	8.0	5.0	-	13.0	58.4	16.0	5.0	21.0
2/1	801	801	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	821	821	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	716	716	-	-	-	6.0	4.3	-	10.3	52.0	15.6	4.3	19.9
3/3+3/4	1066	1066	-	-	-	12.0	5.4	-	17.4	58.8	17.1	5.4	22.5
4/1	688	688	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	661	661	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2+5/1	598	598	-	-	-	3.2	0.6	-	3.8	23.0	8.5	0.6	9.1
6/1	695	695	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	629	629	-	-	-	4.9	4.9	-	9.8	56.2	9.2	4.9	14.1
8/1	747	747	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	688	688	-	-	-	0.8	0.0	-	0.8	4.0	4.1	0.0	4.1
9/2	525	525	-	-	-	0.4	0.0	-	0.4	2.8	2.3	0.0	2.3
9/3	447	447	-	-	-	1.0	0.0	-	1.0	7.8	2.3	0.0	2.3
10/1	801	801	-	-	-	0.4	0.0	-	0.4	1.9	3.1	0.0	3.1
10/2	538	538	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	657	657	-	-	-	1.8	0.0	-	1.8	9.9	4.2	0.0	4.2
11/1	1622	1622	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	1349	1349	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

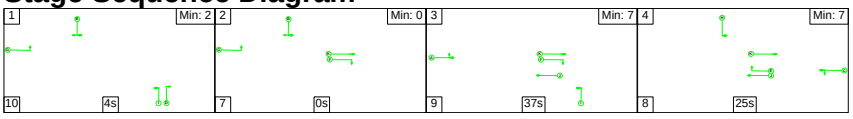
C1 PRC for Signalled Lanes (%): -2.6 Total Delay for Signalled Lanes (pcuHr): 68.28 Cycle Time (s): 120

PRC Over All Lanes (%): -2.6 Total Delay Over All Lanes(pcuHr): 68.28

Full Input Data And Results

Scenario 3: '2039 + Dev Traffic Airport peak' (FG3: '2039 + Dev Traffic Airport peak', Plan 1: 'Network Control Plan 1')

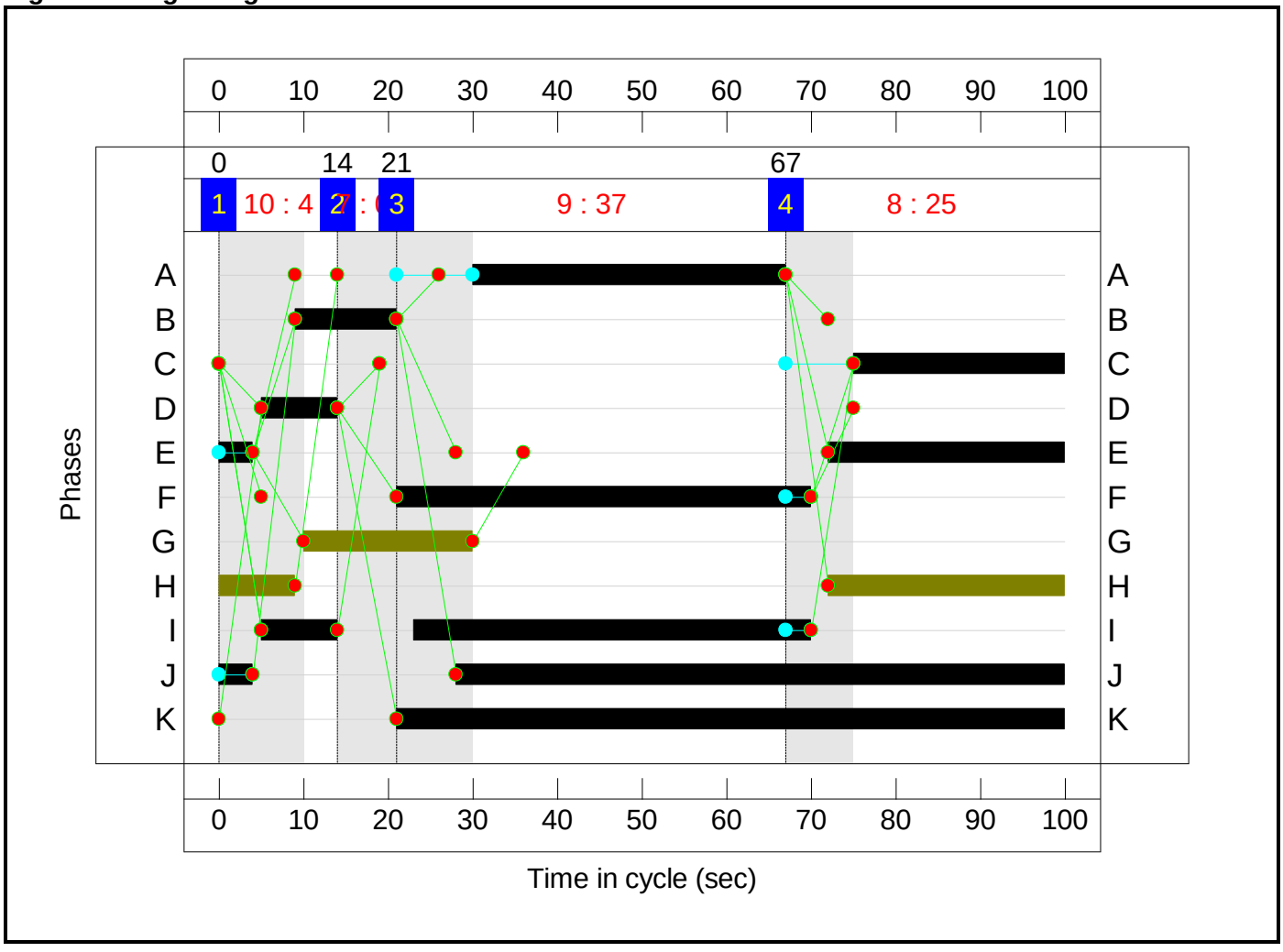
Stage Sequence Diagram



Stage Timings

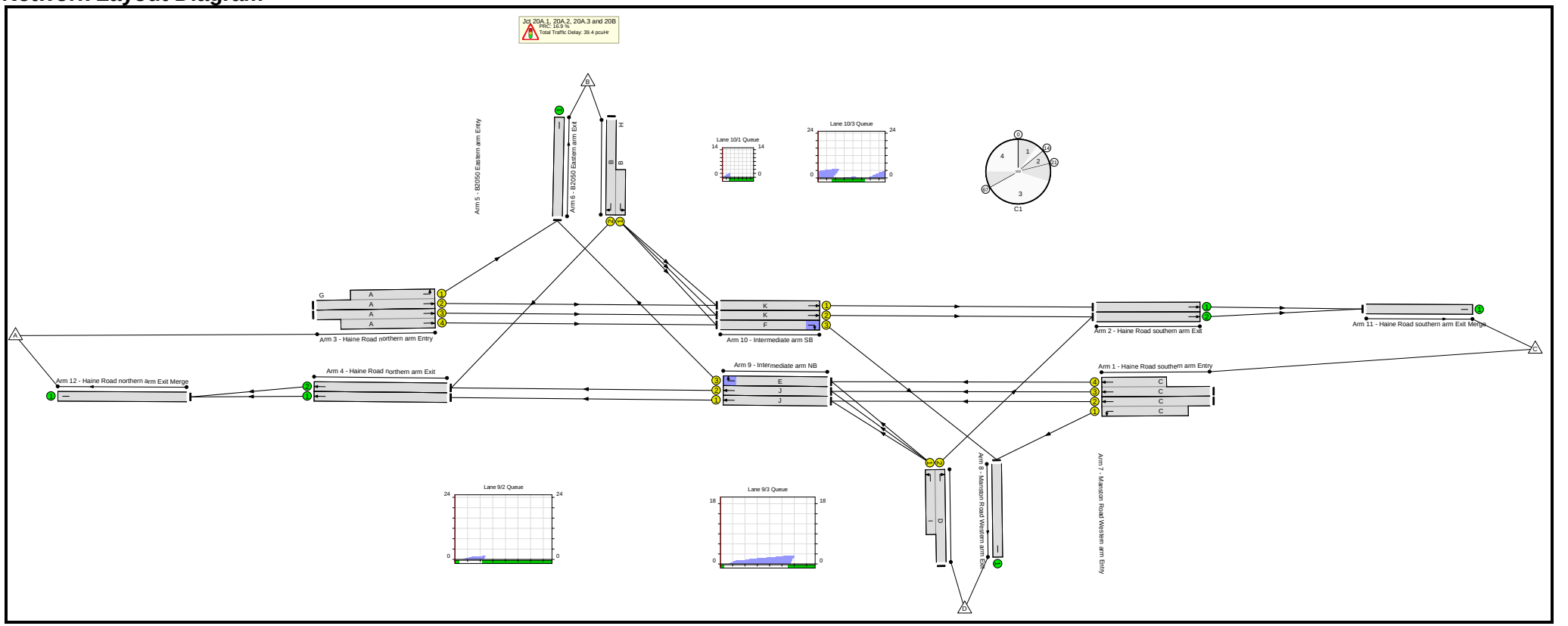
Stage	1	2	3	4
Duration	4	0	37	25
Change Point	0	14	21	67

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: Jct 20A.1, 20A.2, 20A.3 and 20B	-	-	**N/A**	-	-		-	-	-	-	-	-	**77.0%**
Jct 20A.1, 20A.2, 20A.3 and 20B	-	-	**N/A**	-	-		-	-	-	-	-	-	**77.0%**
1/2+1/1	Haine Road southern arm Entry Left Ahead	U	N/A	N/A	C		1	25	-	653	1915:1786	498+369	75.3 : 75.3%
1/3+1/4	Haine Road southern arm Entry Ahead	U	N/A	N/A	C		1	25	-	650	1915:1940	416+429	77.0 : 77.0%
2/1	Haine Road southern arm Exit Ahead	U	N/A	N/A	-		-	-	-	756	Inf	Inf	0.0%
2/2	Haine Road southern arm Exit Ahead	U	N/A	N/A	-		-	-	-	525	Inf	Inf	0.0%
3/2+3/1	Haine Road northern arm Entry Left Ahead	U	N/A	N/A	A	G	1	37:57	20	657	1940:1940	644+351	66.0 : 66.0%
3/3+3/4	Haine Road northern arm Entry Ahead	U	N/A	N/A	A		1	37	-	908	1940:1940	528+718	72.9 : 72.9%
4/1	Haine Road northern arm Exit Ahead	U	N/A	N/A	-		-	-	-	557	Inf	Inf	0.0%
4/2	Haine Road northern arm Exit Ahead	U	N/A	N/A	-		-	-	-	544	Inf	Inf	0.0%
5/2+5/1	B2050 Eastern arm Entry Right Left	U	N/A	N/A	B	H	1	12:49	37	645	1940:1940	231+811	61.9 : 61.9%
6/1	B2050 Eastern arm Exit	U	N/A	N/A	-		-	-	-	650	Inf	Inf	0.0%
7/2+7/1	Manston Road Western arm Entry Right Left	U	N/A	N/A	D I		1:2	9:56	-	489	1940:1940	194+493	71.1 : 71.1%

Full Input Data And Results

8/1	Manston Road Western arm Exit	U	N/A	N/A	-		-	-	-	970	Inf	Inf	0.0%
9/1	Intermediate arm NB Ahead	U	N/A	N/A	J		1	76	-	557	1940	1494	37.3%
9/2	Intermediate arm NB Ahead	U	N/A	N/A	J		1	76	-	401	1940	1494	26.8%
9/3	Intermediate arm NB Right	U	N/A	N/A	E		1	32	-	418	1940	640	65.3%
10/1	Intermediate arm SB Ahead	U	N/A	N/A	K		1	79	-	756	1940	1552	48.7%
10/2	Intermediate arm SB Ahead	U	N/A	N/A	K		1	79	-	387	1940	1552	24.9%
10/3	Intermediate arm SB Right	U	N/A	N/A	F		1	49	-	692	1828	914	75.7%
11/1	Haine Road southern arm Exit Merge	U	N/A	N/A	-		-	-	-	1281	Inf	Inf	0.0%
12/1	Haine Road northern arm Exit Merge	U	N/A	N/A	-		-	-	-	1101	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: Jct 20A.1, 20A.2, 20A.3 and 20B	**-**	**-**	**0**	**0**	**0**	**31.9**	**7.5**	**0.0**	**39.4**	**-**	**-**	**-**	**-**
Jct 20A.1, 20A.2, 20A.3 and 20B	**-**	**-**	**0**	**0**	**0**	**31.9**	**7.5**	**0.0**	**39.4**	**-**	**-**	**-**	**-**
1/2+1/1	653	653	-	-	-	6.1	1.5	-	7.6	41.7	9.6	1.5	11.1
1/3+1/4	650	650	-	-	-	5.9	1.6	-	7.6	42.1	8.2	1.6	9.8
2/1	756	756	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	525	525	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	657	657	-	-	-	3.6	1.0	-	4.5	24.8	9.3	1.0	10.3
3/3+3/4	908	908	-	-	-	6.4	1.3	-	7.7	30.6	12.2	1.3	13.5
4/1	557	557	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	544	544	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2+5/1	645	645	-	-	-	4.0	0.8	-	4.8	26.8	10.4	0.8	11.2
6/1	650	650	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	489	489	-	-	-	2.4	1.2	-	3.6	26.6	4.0	1.2	5.2
8/1	970	970	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	557	557	-	-	-	0.4	0.0	-	0.4	2.9	3.0	0.0	3.0
9/2	401	401	-	-	-	0.2	0.0	-	0.2	1.6	1.3	0.0	1.3
9/3	418	418	-	-	-	1.1	0.0	-	1.1	9.1	2.5	0.0	2.5
10/1	756	756	-	-	-	0.2	0.0	-	0.2	1.1	2.1	0.0	2.1
10/2	387	387	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	692	692	-	-	-	1.7	0.0	-	1.7	8.8	4.7	0.0	4.7
11/1	1281	1281	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	1101	1101	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

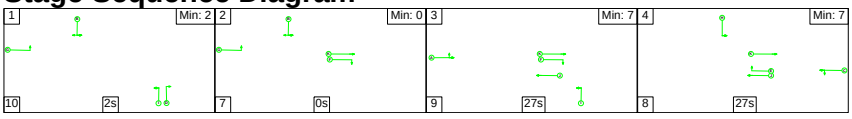
C1 PRC for Signalled Lanes (%): 16.9 Total Delay for Signalled Lanes (pcuHr): 39.41 Cycle Time (s): 100

PRC Over All Lanes (%): 16.9 Total Delay Over All Lanes(pcuHr): 39.41

Full Input Data And Results

Scenario 4: '2039 B + Dev - Net change - AM peak' (FG4: '2039 B + Dev - Net change - AM peak', Plan 1: 'Network Control Plan 1')

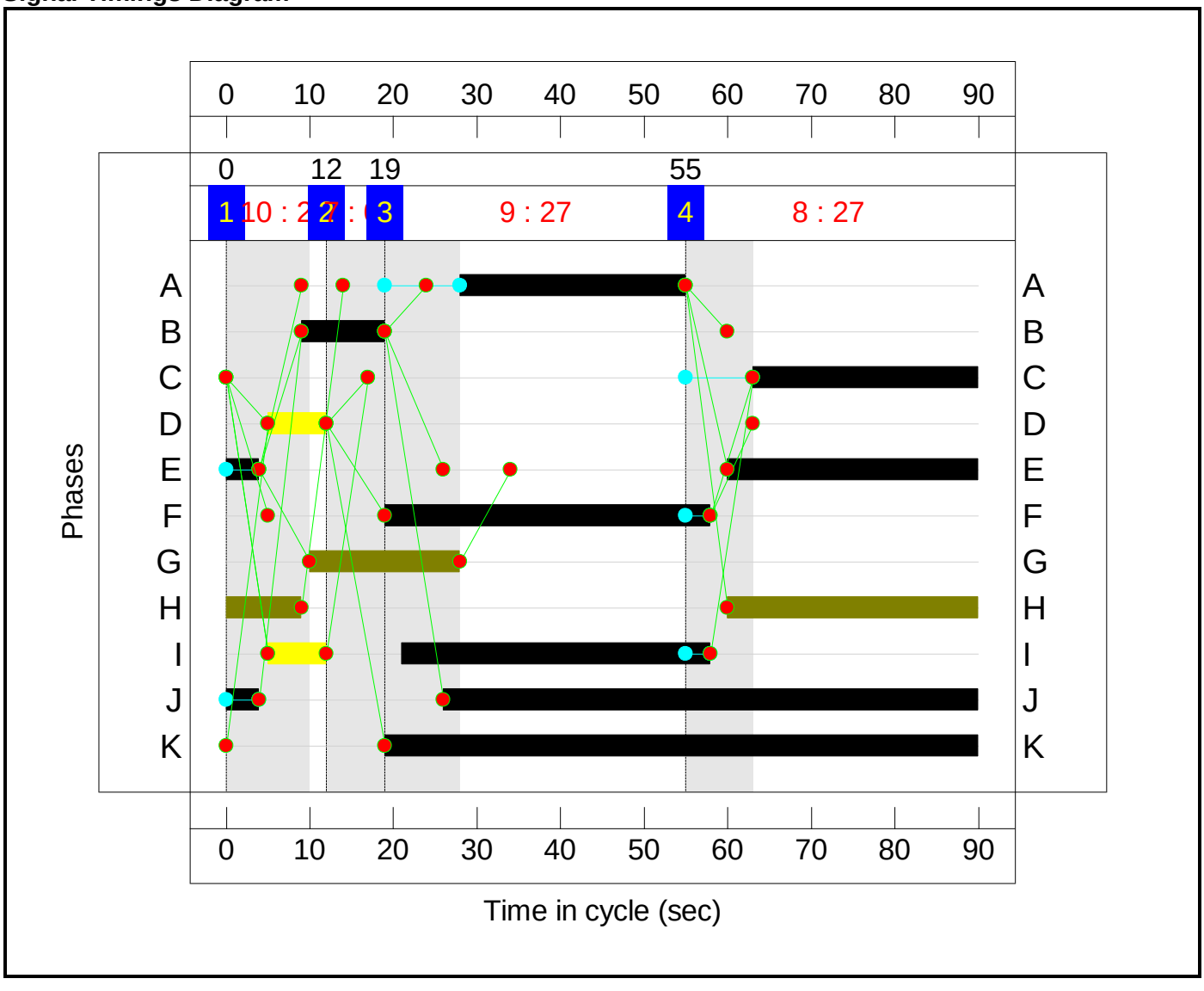
Stage Sequence Diagram



Stage Timings

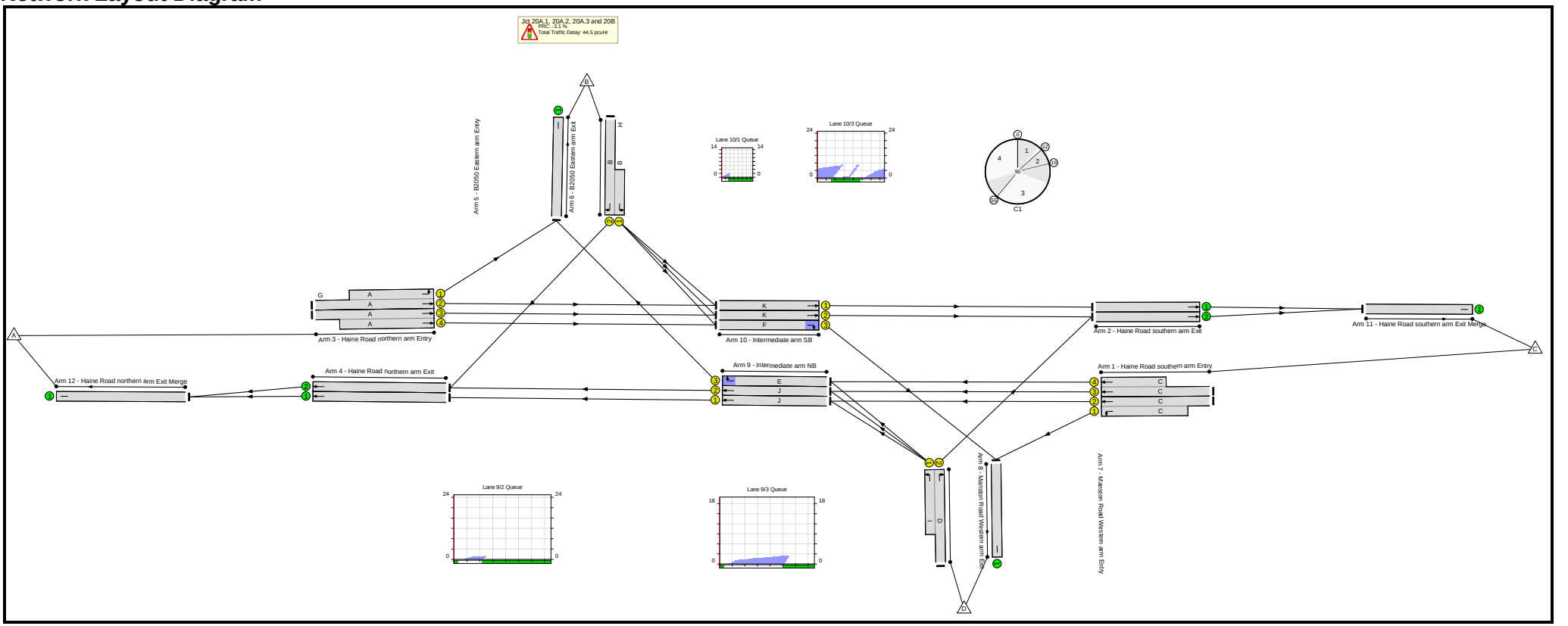
Stage	1	2	3	4
Duration	2	0	27	27
Change Point	0	12	19	55

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: Jct 20A.1, 20A.2, 20A.3 and 20B	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**92.8%**
Jct 20A.1, 20A.2, 20A.3 and 20B	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**92.8%**
1/2+1/1	Haine Road southern arm Entry Left Ahead	U	N/A	N/A	C		1	27	-	766	1915:1786	596+294	86.1 : 86.1%
1/3+1/4	Haine Road southern arm Entry Ahead	U	N/A	N/A	C		1	27	-	796	1915:1940	508+400	87.7 : 87.7%
2/1	Haine Road southern arm Exit Ahead	U	N/A	N/A	-		-	-	-	767	Inf	Inf	0.0%
2/2	Haine Road southern arm Exit Ahead	U	N/A	N/A	-		-	-	-	354	Inf	Inf	0.0%
3/2+3/1	Haine Road northern arm Entry Left Ahead	U	N/A	N/A	A	G	1	27:45	18	596	1940:1940	582+225	73.9 : 73.9%
3/3+3/4	Haine Road northern arm Entry Ahead	U	N/A	N/A	A		1	27	-	737	1940:1940	284+604	83.0 : 83.0%
4/1	Haine Road northern arm Exit Ahead	U	N/A	N/A	-		-	-	-	695	Inf	Inf	0.0%
4/2	Haine Road northern arm Exit Ahead	U	N/A	N/A	-		-	-	-	707	Inf	Inf	0.0%
5/2+5/1	B2050 Eastern arm Entry Right Left	U	N/A	N/A	B	H	1	10:49	39	775	1940:1940	237+770	78.0 : 76.6%
6/1	B2050 Eastern arm Exit	U	N/A	N/A	-		-	-	-	612	Inf	Inf	0.0%
7/2+7/1	Manston Road Western arm Entry Right Left	U	N/A	N/A	D I		1:2	7:44	-	472	1940:1940	172+648	68.4 : 54.6%

Full Input Data And Results

8/1	Manston Road Western arm Exit	U	N/A	N/A	-		-	-	-	1007	Inf	Inf	0.0%
9/1	Intermediate arm NB Ahead	U	N/A	N/A	J		1	68	-	695	1940	1487	46.7%
9/2	Intermediate arm NB Ahead	U	N/A	N/A	J		1	68	-	522	1940	1487	35.1%
9/3	Intermediate arm NB Right	U	N/A	N/A	E		1	34	-	446	1940	754	59.1%
10/1	Intermediate arm SB Ahead	U	N/A	N/A	K		1	71	-	767	1940	1552	49.4%
10/2	Intermediate arm SB Ahead	U	N/A	N/A	K		1	71	-	236	1940	1552	15.2%
10/3	Intermediate arm SB Right	U	N/A	N/A	F		1	39	-	754	1828	812	92.8%
11/1	Haine Road southern arm Exit Merge	U	N/A	N/A	-		-	-	-	1121	Inf	Inf	0.0%
12/1	Haine Road northern arm Exit Merge	U	N/A	N/A	-		-	-	-	1402	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: Jct 20A.1, 20A.2, 20A.3 and 20B	**-**	**-**	**0**	**0**	**0**	**32.1**	**12.4**	**0.0**	**44.5**	**-**	**-**	**-**	**-**
Jct 20A.1, 20A.2, 20A.3 and 20B	**-**	**-**	**0**	**0**	**0**	**32.1**	**12.4**	**0.0**	**44.5**	**-**	**-**	**-**	**-**
1/2+1/1	766	766	-	-	-	5.9	3.0	-	8.9	41.7	12.0	3.0	14.9
1/3+1/4	796	796	-	-	-	6.0	3.4	-	9.3	42.2	9.9	3.4	13.2
2/1	767	767	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	354	354	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	596	596	-	-	-	3.8	1.4	-	5.2	31.5	9.4	1.4	10.8
3/3+3/4	737	737	-	-	-	5.6	2.4	-	8.0	38.9	11.6	2.4	13.9
4/1	695	695	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	707	707	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2+5/1	775	775	-	-	-	4.1	1.6	-	5.7	26.6	10.5	1.6	12.2
6/1	612	612	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	472	472	-	-	-	2.2	0.7	-	2.9	22.0	4.3	0.7	5.0
8/1	1007	1007	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	695	695	-	-	-	0.5	0.0	-	0.5	2.3	3.0	0.0	3.0
9/2	522	522	-	-	-	0.2	0.0	-	0.2	1.2	1.2	0.0	1.2
9/3	446	446	-	-	-	1.0	0.0	-	1.0	7.8	2.4	0.0	2.4
10/1	767	767	-	-	-	0.2	0.0	-	0.2	1.0	2.0	0.0	2.0
10/2	236	236	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	754	754	-	-	-	2.7	0.0	-	2.7	12.7	7.1	0.0	7.1
11/1	1121	1121	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	1402	1402	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

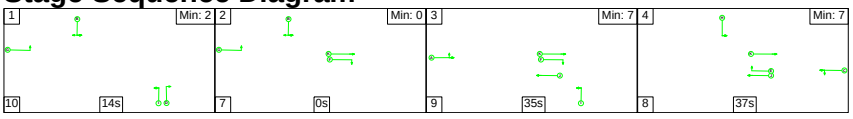
C1 PRC for Signalled Lanes (%): -3.1 Total Delay for Signalled Lanes (pcuHr): 44.45 Cycle Time (s): 90

PRC Over All Lanes (%): -3.1 Total Delay Over All Lanes(pcuHr): 44.45

Full Input Data And Results

Scenario 5: '2039 B + Dev - Net change - PM peak' (FG5: '2039 B + Dev - Net change - PM peak', Plan 1: 'Network Control Plan 1')

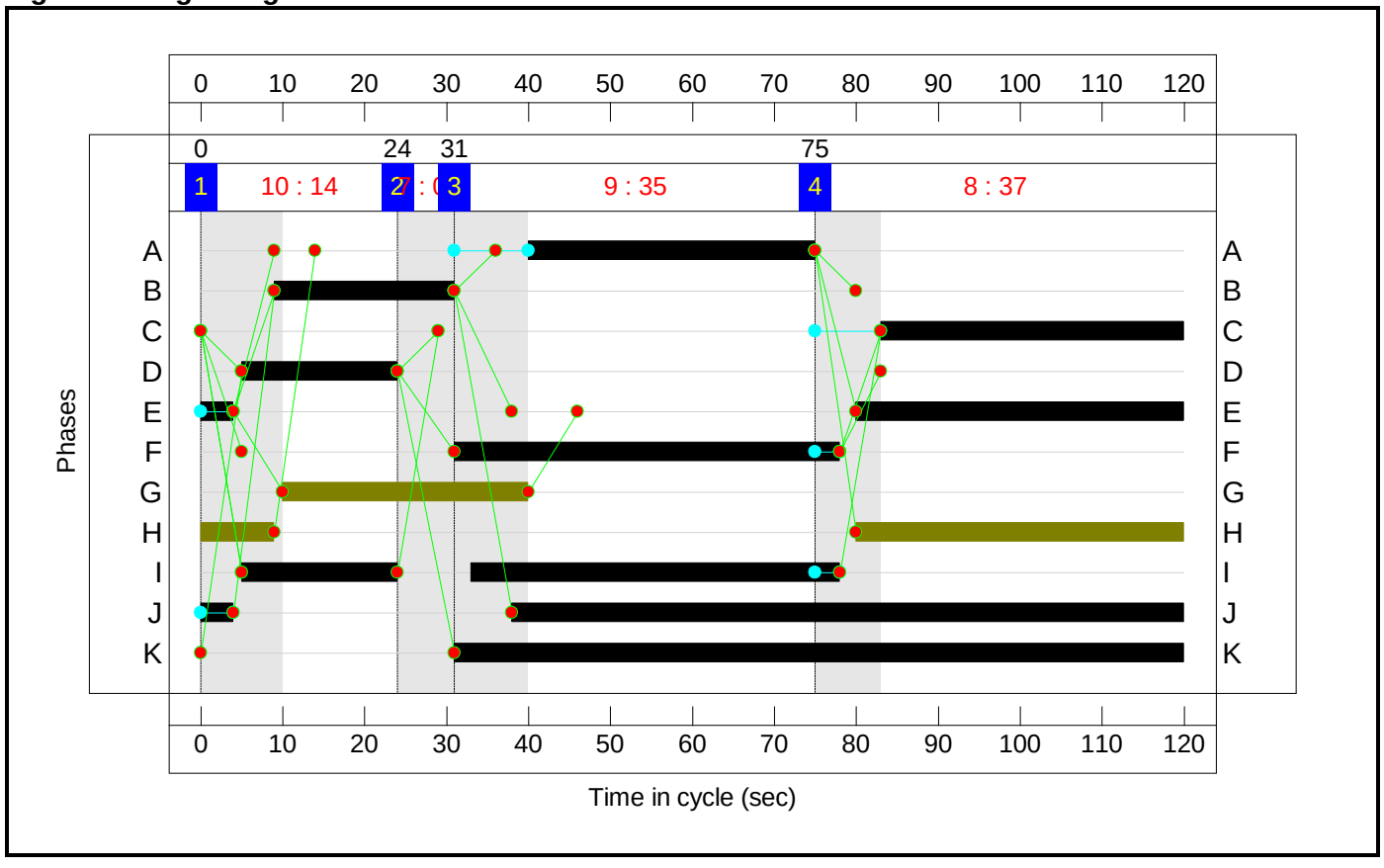
Stage Sequence Diagram



Stage Timings

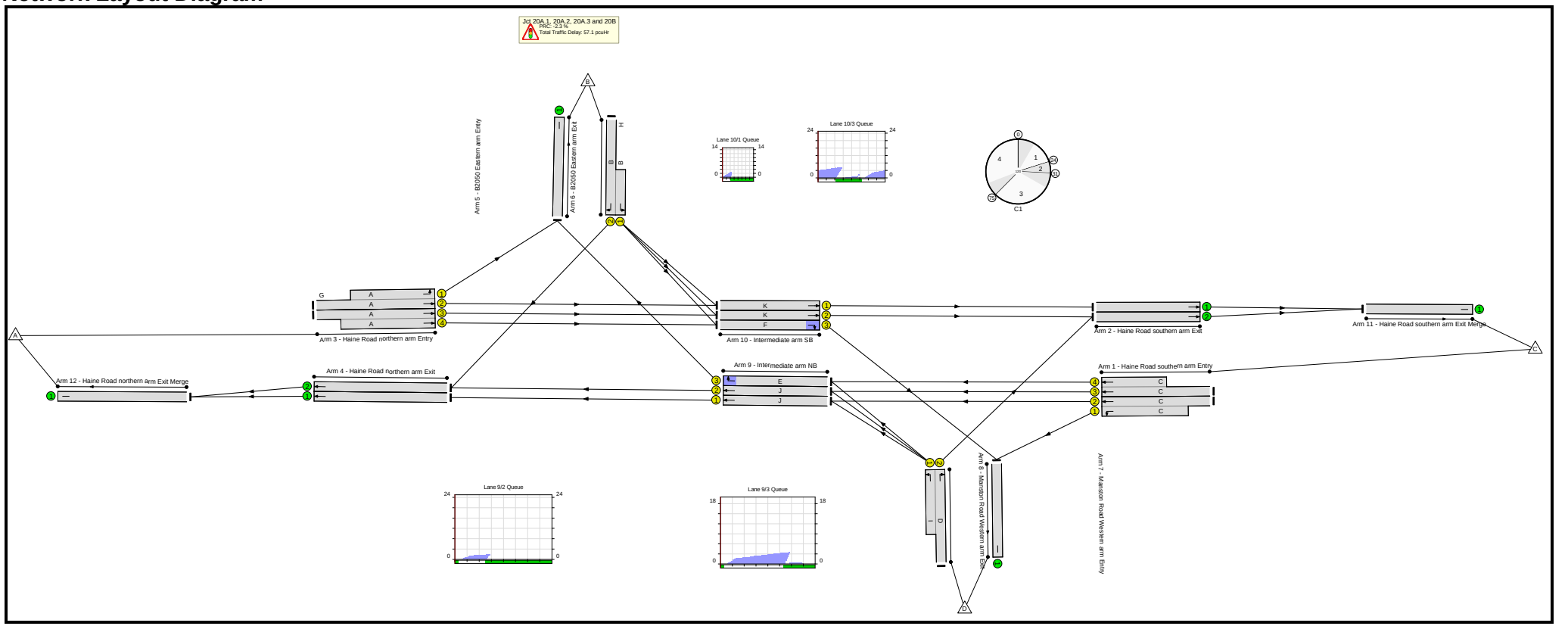
Stage	1	2	3	4
Duration	14	0	35	37
Change Point	0	24	31	75

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: Jct 20A.1, 20A.2, 20A.3 and 20B	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**92.1%**
Jct 20A.1, 20A.2, 20A.3 and 20B	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**92.1%**
1/2+1/1	Haine Road southern arm Entry Left Ahead	U	N/A	N/A	C		1	37	-	540	1915:1786	581+116	77.4 : 77.4%
1/3+1/4	Haine Road southern arm Entry Ahead	U	N/A	N/A	C		1	37	-	734	1915:1940	461+411	84.1 : 84.1%
2/1	Haine Road southern arm Exit Ahead	U	N/A	N/A	-		-	-	-	719	Inf	Inf	0.0%
2/2	Haine Road southern arm Exit Ahead	U	N/A	N/A	-		-	-	-	787	Inf	Inf	0.0%
3/2+3/1	Haine Road northern arm Entry Left Ahead	U	N/A	N/A	A	G	1	35:65	30	673	1940:1940	513+299	82.9 : 82.9%
3/3+3/4	Haine Road northern arm Entry Ahead	U	N/A	N/A	A		1	35	-	992	1940:1940	578+576	86.0 : 86.0%
4/1	Haine Road northern arm Exit Ahead	U	N/A	N/A	-		-	-	-	608	Inf	Inf	0.0%
4/2	Haine Road northern arm Exit Ahead	U	N/A	N/A	-		-	-	-	611	Inf	Inf	0.0%
5/2+5/1	B2050 Eastern arm Entry Right Left	U	N/A	N/A	B	H	1	22:71	49	599	1940:1940	247+840	55.1 : 55.1%
6/1	B2050 Eastern arm Exit	U	N/A	N/A	-		-	-	-	695	Inf	Inf	0.0%
7/2+7/1	Manston Road Western arm Entry Right Left	U	N/A	N/A	D I		1:2	19:64	-	629	1940:1940	307+376	92.1 : 92.1%

Full Input Data And Results

8/1	Manston Road Western arm Exit	U	N/A	N/A	-		-	-	-	747	Inf	Inf	0.0%
9/1	Intermediate arm NB Ahead	U	N/A	N/A	J		1	86	-	608	1940	1407	43.2%
9/2	Intermediate arm NB Ahead	U	N/A	N/A	J		1	86	-	475	1940	1407	33.8%
9/3	Intermediate arm NB Right	U	N/A	N/A	E		1	44	-	447	1940	727	61.4%
10/1	Intermediate arm SB Ahead	U	N/A	N/A	K		1	89	-	719	1940	1455	49.4%
10/2	Intermediate arm SB Ahead	U	N/A	N/A	K		1	89	-	504	1940	1455	34.6%
10/3	Intermediate arm SB Right	U	N/A	N/A	F		1	47	-	657	1828	731	89.9%
11/1	Haine Road southern arm Exit Merge	U	N/A	N/A	-		-	-	-	1506	Inf	Inf	0.0%
12/1	Haine Road northern arm Exit Merge	U	N/A	N/A	-		-	-	-	1219	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: Jct 20A.1, 20A.2, 20A.3 and 20B	**-**	**-**	**0**	**0**	**0**	**42.0**	**15.1**	**0.0**	**57.1**	**-**	**-**	**-**	**-**
Jct 20A.1, 20A.2, 20A.3 and 20B	**-**	**-**	**0**	**0**	**0**	**42.0**	**15.1**	**0.0**	**57.1**	**-**	**-**	**-**	**-**
1/2+1/1	540	540	-	-	-	5.3	1.7	-	7.0	46.6	13.4	1.7	15.1
1/3+1/4	734	734	-	-	-	7.1	2.6	-	9.7	47.4	12.9	2.6	15.4
2/1	719	719	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	787	787	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	673	673	-	-	-	5.4	2.3	-	7.8	41.5	12.6	2.3	15.0
3/3+3/4	992	992	-	-	-	10.9	3.0	-	13.8	50.2	15.5	3.0	18.4
4/1	608	608	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	611	611	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2+5/1	599	599	-	-	-	3.2	0.6	-	3.8	23.0	8.5	0.6	9.1
6/1	695	695	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	629	629	-	-	-	4.9	4.9	-	9.8	56.2	9.2	4.9	14.1
8/1	747	747	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	608	608	-	-	-	0.7	0.0	-	0.7	4.0	3.6	0.0	3.6
9/2	475	475	-	-	-	0.4	0.0	-	0.4	2.7	1.9	0.0	1.9
9/3	447	447	-	-	-	1.5	0.0	-	1.5	11.8	3.7	0.0	3.7
10/1	719	719	-	-	-	0.4	0.0	-	0.4	1.8	2.7	0.0	2.7
10/2	504	504	-	-	-	0.0	0.0	-	0.0	0.1	0.1	0.0	0.1
10/3	657	657	-	-	-	2.3	0.0	-	2.3	12.7	5.4	0.0	5.4
11/1	1506	1506	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	1219	1219	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

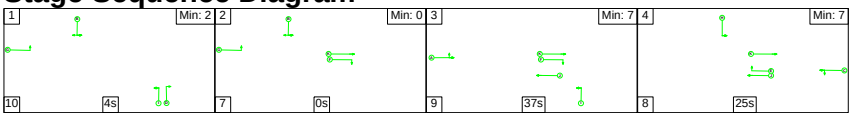
C1 PRC for Signalled Lanes (%): -2.3 Total Delay for Signalled Lanes (pcuHr): 57.09 Cycle Time (s): 120

PRC Over All Lanes (%): -2.3 Total Delay Over All Lanes(pcuHr): 57.09

Full Input Data And Results

Scenario 6: '2039 B + Dev - Net change - Airport peak' (FG6: '2039 B + Dev - Net change - Airport peak', Plan 1: 'Network Control Plan 1')

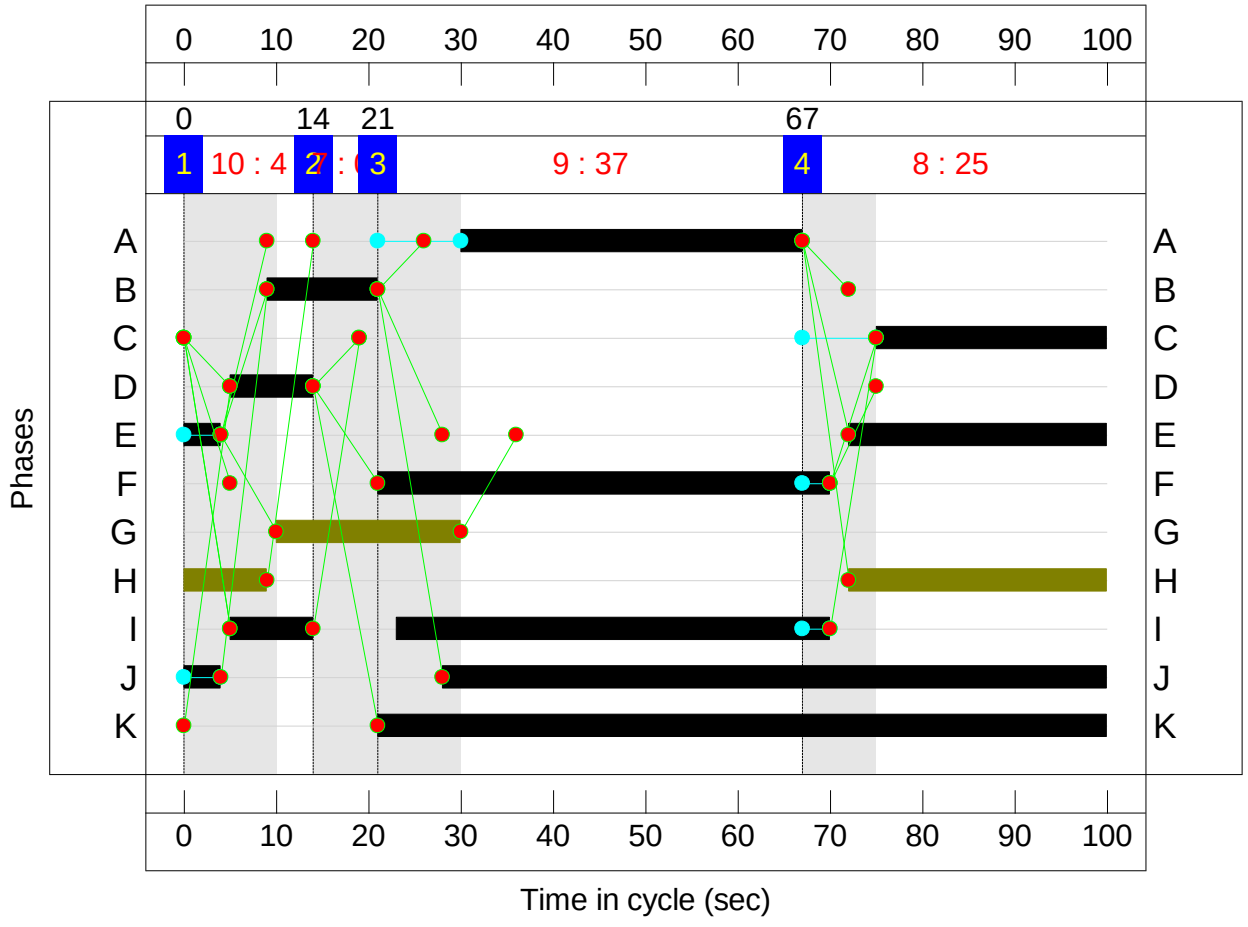
Stage Sequence Diagram



Stage Timings

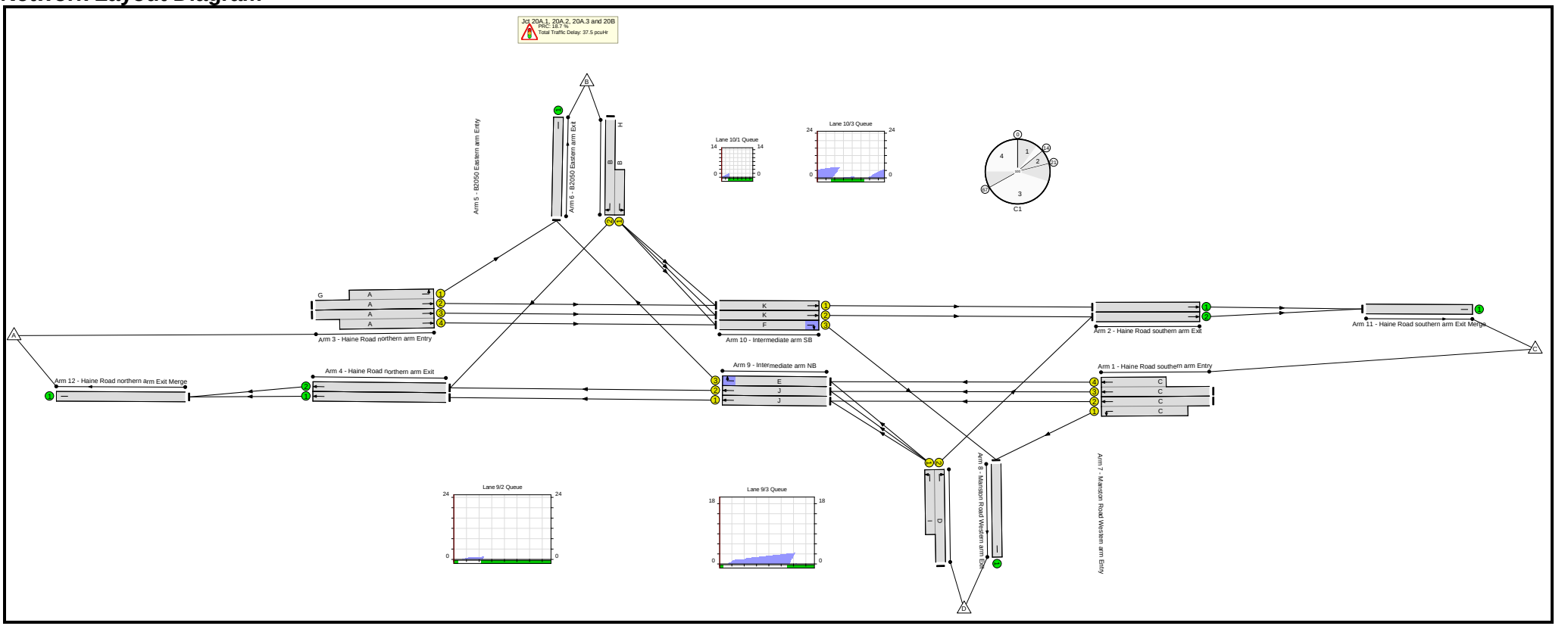
Stage	1	2	3	4
Duration	4	0	37	25
Change Point	0	14	21	67

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: Jct 20A.1, 20A.2, 20A.3 and 20B	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**75.8%**
Jct 20A.1, 20A.2, 20A.3 and 20B	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**75.8%**
1/2+1/1	Haine Road southern arm Entry Left Ahead	U	N/A	N/A	C		1	25	-	637	1915:1786	498+388	71.9 : 71.9%
1/3+1/4	Haine Road southern arm Entry Ahead	U	N/A	N/A	C		1	25	-	626	1915:1940	428+418	74.0 : 74.0%
2/1	Haine Road southern arm Exit Ahead	U	N/A	N/A	-		-	-	-	673	Inf	Inf	0.0%
2/2	Haine Road southern arm Exit Ahead	U	N/A	N/A	-		-	-	-	490	Inf	Inf	0.0%
3/2+3/1	Haine Road northern arm Entry Left Ahead	U	N/A	N/A	A	G	1	37:57	20	606	1940:1940	636+394	58.8 : 58.8%
3/3+3/4	Haine Road northern arm Entry Ahead	U	N/A	N/A	A		1	37	-	841	1940:1940	514+718	68.3 : 68.3%
4/1	Haine Road northern arm Exit Ahead	U	N/A	N/A	-		-	-	-	537	Inf	Inf	0.0%
4/2	Haine Road northern arm Exit Ahead	U	N/A	N/A	-		-	-	-	522	Inf	Inf	0.0%
5/2+5/1	B2050 Eastern arm Entry Right Left	U	N/A	N/A	B	H	1	12:49	37	646	1940:1940	231+811	62.0 : 62.0%
6/1	B2050 Eastern arm Exit	U	N/A	N/A	-		-	-	-	651	Inf	Inf	0.0%
7/2+7/1	Manston Road Western arm Entry Right Left	U	N/A	N/A	D I		1:2	9:56	-	489	1940:1940	194+493	71.1 : 71.1%

Full Input Data And Results

8/1	Manston Road Western arm Exit	U	N/A	N/A	-		-	-	-	972	Inf	Inf	0.0%
9/1	Intermediate arm NB Ahead	U	N/A	N/A	J		1	76	-	537	1940	1494	35.9%
9/2	Intermediate arm NB Ahead	U	N/A	N/A	J		1	76	-	379	1940	1494	25.4%
9/3	Intermediate arm NB Right	U	N/A	N/A	E		1	32	-	419	1940	640	65.4%
10/1	Intermediate arm SB Ahead	U	N/A	N/A	K		1	79	-	673	1940	1552	43.4%
10/2	Intermediate arm SB Ahead	U	N/A	N/A	K		1	79	-	352	1940	1552	22.7%
10/3	Intermediate arm SB Right	U	N/A	N/A	F		1	49	-	693	1828	914	75.8%
11/1	Haine Road southern arm Exit Merge	U	N/A	N/A	-		-	-	-	1163	Inf	Inf	0.0%
12/1	Haine Road northern arm Exit Merge	U	N/A	N/A	-		-	-	-	1059	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: Jct 20A.1, 20A.2, 20A.3 and 20B	**-**	**-**	**0**	**0**	**0**	**31.0**	**6.5**	**0.0**	**37.5**	**-**	**-**	**-**	**-**
Jct 20A.1, 20A.2, 20A.3 and 20B	**-**	**-**	**0**	**0**	**0**	**31.0**	**6.5**	**0.0**	**37.5**	**-**	**-**	**-**	**-**
1/2+1/1	637	637	-	-	-	5.9	1.3	-	7.1	40.3	9.0	1.3	10.3
1/3+1/4	626	626	-	-	-	5.7	1.4	-	7.1	40.8	7.7	1.4	9.2
2/1	673	673	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	490	490	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	606	606	-	-	-	3.1	0.7	-	3.8	22.8	7.9	0.7	8.6
3/3+3/4	841	841	-	-	-	5.8	1.1	-	6.9	29.4	11.2	1.1	12.2
4/1	537	537	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	522	522	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2+5/1	646	646	-	-	-	4.0	0.8	-	4.8	26.8	10.4	0.8	11.2
6/1	651	651	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	489	489	-	-	-	2.4	1.2	-	3.6	26.6	4.0	1.2	5.2
8/1	972	972	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	537	537	-	-	-	0.4	0.0	-	0.4	3.0	3.0	0.0	3.0
9/2	379	379	-	-	-	0.1	0.0	-	0.1	1.3	1.0	0.0	1.0
9/3	419	419	-	-	-	1.3	0.0	-	1.3	11.6	3.4	0.0	3.4
10/1	673	673	-	-	-	0.2	0.0	-	0.2	1.1	1.9	0.0	1.9
10/2	352	352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/3	693	693	-	-	-	2.0	0.0	-	2.0	10.6	5.7	0.0	5.7
11/1	1163	1163	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	1059	1059	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 18.7 Total Delay for Signalled Lanes (pcuHr): 37.50 Cycle Time (s): 100

PRC Over All Lanes (%): 18.7 Total Delay Over All Lanes(pcuHr): 37.50

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947
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Filename: Jct 21A_R2_Mit.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: 09/02/2018 17:07:51

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	1.4	0.08	0.59	A	61 %	2.7	0.12	0.73	A	29 %	1.0	0.06	0.50	A	86 %
B - A256 Cantebury 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	0.5	0.08	0.31	A		0.8	0.10	0.44	A		0.3	0.06	0.22	A	
	Arcady Module - 2039 Growthed Traffic														
A - A256 Haine Road	2.9	0.13	0.75	A	27 %	12.2	0.44	0.94	D	2 %	2.1	0.10	0.68	A	38 %
B - A256 Cantebury 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	0.8	0.11	0.45	A		1.9	0.21	0.66	B		0.5	0.08	0.33	A	
	Arcady Module - 2039 + Dev Traffic														
A - A256 Haine Road	3.1	0.13	0.76	A	25 %	57.6	1.61	1.04	F	-8 %	2.4	0.11	0.71	A	34 %
B - A256 Cantebury 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	1.0	0.14	0.50	A		2.0	0.22	0.68	B		0.6	0.10	0.38	A	
	Arcady Module - 2039 B+Dev Net Change														
A - A256 Haine Road	2.1	0.10	0.68	A	33 %	21.2	0.72	0.98	E	-2 %	1.8	0.09	0.64	A	47 %
B - A256 Cantebury 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	0.9	0.12	0.47	A		1.6	0.17	0.61	B		0.6	0.09	0.37	A	

	Lane Analysis [Lane Simulation] - 2017 Baseline Traffic														
A - A256 Haine Road	1.9	0.10		A	%	3.9	0.15		A	%	1.7	0.09		A	%
B - A256 Cantebury Road	1.2	0.06		A	[ ]	1.6	0.07		A	[ ]	0.7	0.06		A	[ ]
C - Canterbury Road West	1.4	0.21		B		3.0	0.41		C		0.7	0.15		A	
	Lane Analysis [Lane Simulation] - 2039 Growthed Traffic														
A - A256 Haine Road	4.0	0.16		A	%	13.9	0.46		D	%	2.9	0.13		A	%
B - A256 Cantebury Road	1.5	0.07		A	[ ]	2.2	0.09		A	[ ]	1.1	0.06		A	[ ]
C - Canterbury Road West	3.2	0.47		D		33.6	3.28		F		1.5	0.22		B	
	Lane Analysis [Lane Simulation] - 2039 + Dev Traffic														
A - A256 Haine Road	3.9	0.17		B	%	57.1	1.54		F	%	3.6	0.14		A	%
B - A256 Cantebury Road	2.0	0.08		A	[ ]	2.2	0.09		A	[ ]	1.4	0.07		A	[ ]
C - Canterbury Road West	6.2	0.82		E		40.6	3.96		F		2.0	0.32		C	
	Lane Analysis [Lane Simulation] - 2039 B+Dev Net Change														
A - A256 Haine Road	2.7	0.13		A	%	24.9	0.77		E	%	2.4	0.12		A	%
B - A256 Cantebury Road	1.6	0.07		A	[ ]	2.0	0.08		A	[ ]	1.3	0.07		A	[ ]
C - Canterbury Road West	4.5	0.57		D		21.1	2.06		F		2.0	0.30		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. 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.

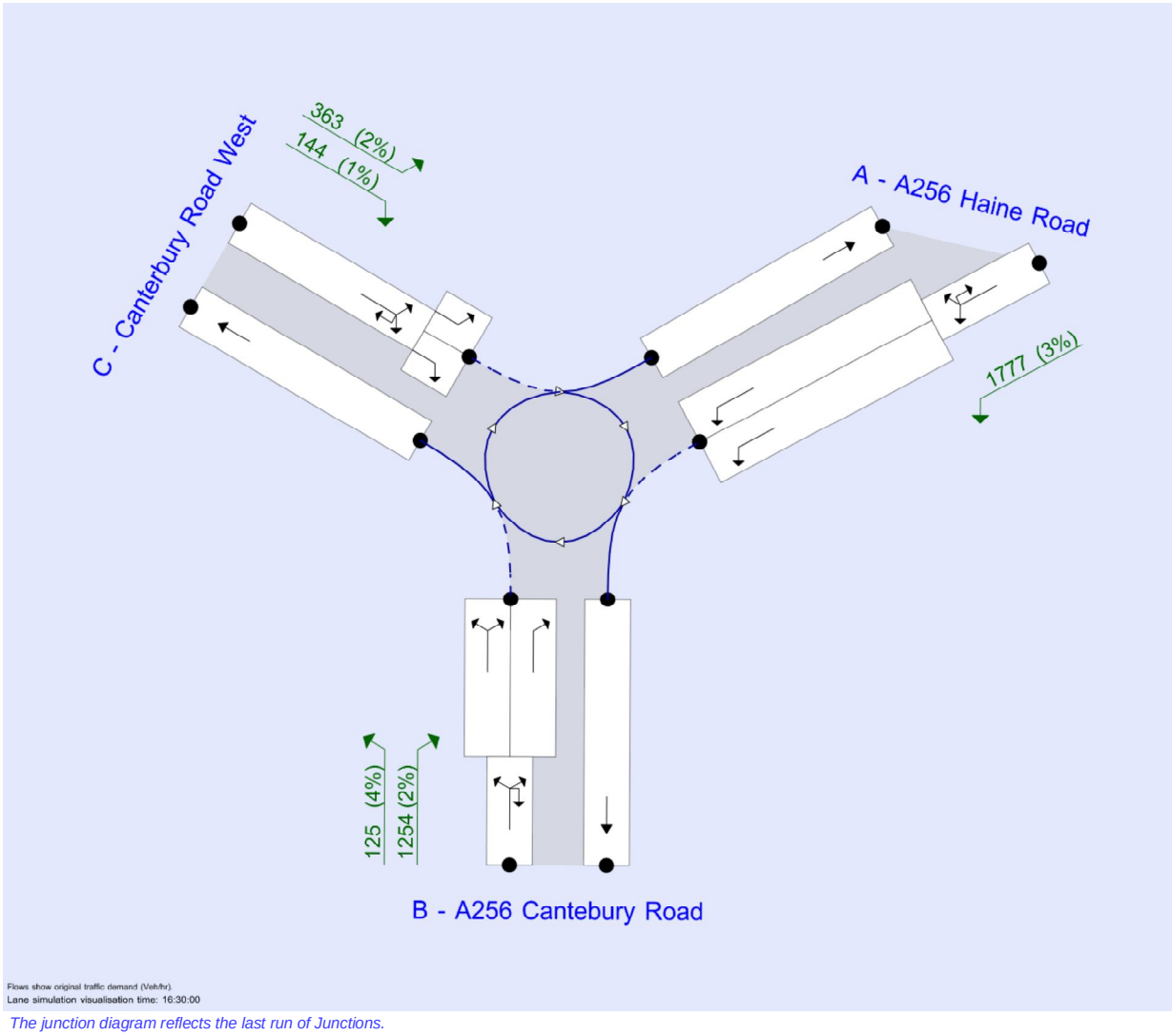
File summary

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



The junction diagram reflects the last run of Junctions.

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	0.06	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	61	A - A256 Haine Road

Arms

Arms

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

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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)

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

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	4	0
	B - A256 Cantebury 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	0.59	0.08	1.4	A	928	1392
B - A256 Cantebury Road	0.38	0.04	0.6	A	781	1171
C - Canterbury Road West	0.31	0.08	0.5	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	1922	0.396	759	764	0.0	0.7	0.051	A
B - A256 Cantebury Road	641	160	0	2448	0.262	639	822	0.0	0.4	0.033	A
C - Canterbury Road West	237	59	591	1291	0.184	236	48	0.0	0.2	0.057	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	1914	0.475	908	915	0.7	0.9	0.060	A
B - A256 Cantebury Road	765	191	0	2448	0.313	765	983	0.4	0.5	0.036	A
C - Canterbury Road West	283	71	707	1217	0.233	283	58	0.2	0.3	0.064	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	1902	0.585	1111	1120	0.9	1.4	0.076	A
B - A256 Cantebury Road	937	234	0	2448	0.383	936	1203	0.5	0.6	0.040	A
C - Canterbury Road West	347	87	866	1114	0.311	346	70	0.3	0.4	0.078	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	1902	0.585	1113	1121	1.4	1.4	0.076	A
B - A256 Cantebury Road	937	234	0	2448	0.383	937	1206	0.6	0.6	0.040	A
C - Canterbury Road West	347	87	866	1114	0.311	347	70	0.4	0.5	0.078	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	1914	0.475	911	916	1.4	0.9	0.060	A
B - A256 Cantebury Road	765	191	0	2448	0.313	766	986	0.6	0.5	0.036	A
C - Canterbury Road West	283	71	708	1216	0.233	284	58	0.5	0.3	0.064	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	1922	0.396	762	767	0.9	0.7	0.052	A
B - A256 Cantebury Road	641	160	0	2448	0.262	641	825	0.5	0.4	0.033	A
C - Canterbury Road West	237	59	593	1290	0.184	237	48	0.3	0.2	0.057	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	0.09	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	29	A - A256 Haine Road

Arms

Arms

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

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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)

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

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	3	0
	B - A256 Cantebury 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	0.73	0.12	2.7	A	1162	1743
B - A256 Cantebury Road	0.47	0.04	0.9	A	984	1476
C - Canterbury Road West	0.44	0.10	0.8	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	1926	0.495	949	949	0.0	1.0	0.061	A
B - A256 Cantebury Road	807	202	0	2532	0.319	805	1035	0.0	0.5	0.035	A
C - Canterbury Road West	303	76	733	1230	0.246	301	72	0.0	0.3	0.065	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	1914	0.595	1136	1135	1.0	1.4	0.077	A
B - A256 Cantebury Road	964	241	0	2532	0.381	963	1239	0.5	0.6	0.038	A
C - Canterbury Road West	361	90	877	1140	0.317	361	86	0.3	0.5	0.077	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	1899	0.734	1389	1390	1.4	2.7	0.117	A
B - A256 Cantebury Road	1180	295	0	2532	0.466	1179	1514	0.6	0.9	0.044	A
C - Canterbury Road West	443	111	1074	1017	0.435	441	106	0.5	0.8	0.104	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	1898	0.734	1394	1392	2.7	2.7	0.119	A
B - A256 Cantebury Road	1180	295	0	2532	0.466	1180	1519	0.9	0.9	0.044	A
C - Canterbury Road West	443	111	1075	1016	0.436	443	106	0.8	0.8	0.105	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	1914	0.595	1143	1138	2.7	1.5	0.078	A
B - A256 Cantebury Road	964	241	0	2532	0.381	965	1246	0.9	0.6	0.038	A
C - Canterbury Road West	361	90	878	1139	0.317	363	86	0.8	0.5	0.077	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	1926	0.495	955	953	1.5	1.0	0.062	A
B - A256 Cantebury Road	807	202	0	2532	0.319	808	1041	0.6	0.5	0.035	A
C - Canterbury Road West	303	76	735	1228	0.246	303	72	0.5	0.3	0.065	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	0.05	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	86	A - A256 Haine Road

Arms

Arms

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

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	5	0
	B - A256 Cantebury 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	0.50	0.06	1.0	A	797	1196
B - A256 Cantebury Road	0.28	0.03	0.4	A	585	877
C - Canterbury Road West	0.22	0.06	0.3	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	47	1915	0.342	652	573	0.0	0.5	0.047	A
B - A256 Cantebury Road	480	120	0	2466	0.194	479	699	0.0	0.2	0.030	A
C - Canterbury Road West	192	48	428	1395	0.138	191	50	0.0	0.2	0.050	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	1909	0.409	781	686	0.5	0.7	0.053	A
B - A256 Cantebury Road	573	143	0	2466	0.232	572	836	0.2	0.3	0.032	A
C - Canterbury Road West	229	57	512	1342	0.171	229	60	0.2	0.2	0.054	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	1900	0.504	956	840	0.7	1.0	0.063	A
B - A256 Cantebury Road	701	175	0	2466	0.284	701	1024	0.3	0.4	0.034	A
C - Canterbury Road West	281	70	627	1268	0.221	280	74	0.2	0.3	0.061	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	1900	0.504	957	840	1.0	1.0	0.064	A
B - A256 Cantebury Road	701	175	0	2466	0.284	701	1025	0.4	0.4	0.034	A

C - Canterbury Road West	281	70	628	1268	0.221	281	74	0.3	0.3	0.061	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	781	195	56	1909	0.409	782	686	1.0	0.7	0.053	A
B - A256 Cantebury Road	573	143	0	2466	0.232	573	838	0.4	0.3	0.032	A
C - Canterbury Road West	229	57	513	1341	0.171	230	60	0.3	0.2	0.054	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	1915	0.342	655	575	0.7	0.5	0.048	A
B - A256 Cantebury Road	480	120	0	2466	0.194	480	702	0.3	0.2	0.030	A
C - Canterbury Road West	192	48	429	1394	0.138	192	50	0.2	0.2	0.050	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	0.09	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	27	A - A256 Haine Road

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Cantebury 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	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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)

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

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	5	0
	B - A256 Cantebury 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	0.75	0.13	2.9	A	1161	1741
B - A256 Cantebury Road	0.48	0.05	0.9	A	977	1466
C - Canterbury Road West	0.45	0.11	0.8	A	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	1893	0.503	948	956	0.0	1.0	0.063	A
B - A256 Cantebury Road	802	200	0	2448	0.328	800	1027	0.0	0.5	0.036	A
C - Canterbury Road West	297	74	740	1196	0.248	295	60	0.0	0.3	0.067	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	1883	0.604	1135	1144	1.0	1.5	0.080	A
B - A256 Cantebury Road	957	239	0	2448	0.391	957	1229	0.5	0.6	0.040	A
C - Canterbury Road West	354	89	885	1102	0.321	354	72	0.3	0.5	0.080	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	1868	0.745	1387	1401	1.5	2.8	0.123	A
B - A256 Cantebury Road	1173	293	0	2448	0.479	1171	1503	0.6	0.9	0.047	A
C - Canterbury Road West	434	108	1083	974	0.445	433	88	0.5	0.8	0.110	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	1393	348	116	1868	0.746	1393	1403	2.8	2.9	0.126	A
B - A256 Cantebury Road	1173	293	0	2448	0.479	1173	1508	0.9	0.9	0.047	A
C - Canterbury Road West	434	108	1084	974	0.446	434	88	0.8	0.8	0.111	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	1137	284	95	1882	0.604	1143	1147	2.9	1.5	0.082	A
B - A256 Cantebury Road	957	239	0	2448	0.391	958	1237	0.9	0.6	0.040	A
C - Canterbury Road West	354	89	886	1101	0.322	355	72	0.8	0.5	0.081	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	1893	0.503	954	960	1.5	1.0	0.064	A
B - A256 Cantebury Road	802	200	0	2448	0.328	802	1034	0.6	0.5	0.037	A
C - Canterbury Road West	297	74	742	1194	0.248	297	60	0.5	0.3	0.067	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	0.26	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	2	A - A256 Haine Road

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Cantebury 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	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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)

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

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	3	0
	B - A256 Cantebury 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	0.94	0.44	12.2	D	1465	2197
B - A256 Cantebury Road	0.59	0.06	1.4	A	1240	1860
C - Canterbury Road West	0.66	0.21	1.9	B	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	1911	0.629	1195	1195	0.0	1.7	0.083	A
B - A256 Cantebury Road	1017	254	0	2532	0.402	1014	1303	0.0	0.7	0.039	A
C - Canterbury Road West	382	95	924	1111	0.344	380	91	0.0	0.5	0.082	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	1896	0.757	1429	1430	1.7	3.0	0.127	A
B - A256 Cantebury Road	1215	304	0	2532	0.480	1214	1559	0.7	0.9	0.045	A
C - Canterbury Road West	456	114	1105	997	0.457	455	109	0.5	0.8	0.110	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	1757	439	157	1876	0.936	1727	1749	3.0	10.7	0.346	C
B - A256 Cantebury Road	1487	372	0	2532	0.587	1486	1884	0.9	1.4	0.057	A
C - Canterbury Road West	558	140	1352	842	0.663	554	133	0.8	1.9	0.205	B

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	1876	0.937	1751	1754	10.7	12.2	0.442	D
B - A256 Cantebury Road	1487	372	0	2532	0.587	1487	1910	1.4	1.4	0.057	A
C - Canterbury Road West	558	140	1354	841	0.664	558	133	1.9	1.9	0.211	B

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	131	1895	0.757	1470	1437	12.2	3.2	0.153	A
B - A256 Cantebury Road	1215	304	0	2532	0.480	1216	1601	1.4	0.9	0.046	A
C - Canterbury Road West	456	114	1108	996	0.458	460	109	1.9	0.9	0.113	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	1202	300	109	1910	0.629	1208	1201	3.2	1.7	0.086	A
B - A256 Cantebury Road	1017	254	0	2532	0.402	1018	1316	0.9	0.7	0.040	A
C - Canterbury Road West	382	95	927	1109	0.344	383	91	0.9	0.5	0.083	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	0.08	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	38	A - A256 Haine Road

Arms

Arms

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

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	6	0
	B - A256 Cantebury 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	0.68	0.10	2.1	A	1064	1597
B - A256 Cantebury Road	0.38	0.04	0.6	A	780	1170
C - Canterbury Road West	0.33	0.08	0.5	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	1886	0.463	870	764	0.0	0.9	0.059	A
B - A256 Cantebury Road	640	160	0	2443	0.262	639	932	0.0	0.4	0.033	A
C - Canterbury Road West	256	64	572	1300	0.197	255	67	0.0	0.2	0.057	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	75	1878	0.555	1041	915	0.9	1.2	0.072	A
B - A256 Cantebury Road	764	191	0	2443	0.313	764	1116	0.4	0.5	0.036	A
C - Canterbury Road West	306	76	684	1228	0.249	305	80	0.2	0.3	0.065	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	1866	0.684	1274	1120	1.2	2.1	0.101	A
B - A256 Cantebury Road	936	234	0	2443	0.383	935	1365	0.5	0.6	0.040	A
C - Canterbury Road West	374	94	837	1130	0.331	374	98	0.3	0.5	0.079	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	1866	0.684	1277	1121	2.1	2.1	0.102	A
B - A256 Cantebury Road	936	234	0	2443	0.383	936	1368	0.6	0.6	0.040	A

C - Canterbury Road West	374	94	838	1129	0.331	374	98	0.5	0.5	0.079	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	1043	261	75	1878	0.555	1046	916	2.1	1.3	0.072	A
B - A256 Cantebury Road	764	191	0	2443	0.313	765	1121	0.6	0.5	0.036	A
C - Canterbury Road West	306	76	685	1228	0.249	306	80	0.5	0.3	0.065	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	1886	0.463	875	767	1.3	0.9	0.059	A
B - A256 Cantebury Road	640	160	0	2443	0.262	640	937	0.5	0.4	0.033	A
C - Canterbury Road West	256	64	573	1299	0.197	256	67	0.3	0.2	0.058	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	0.10	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	25	A - A256 Haine Road

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Cantebury 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	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	**B - A256 Cantebury Road**	**C - Canterbury Road West**
From	**A - A256 Haine Road**	0	5	0
	B - A256 Cantebury 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	0.76	0.13	3.1	A	1181	1771
B - A256 Cantebury Road	0.55	0.05	1.2	A	1126	1689
C - Canterbury Road West	0.50	0.14	1.0	A	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	1893	0.512	965	1080	0.0	1.0	0.064	A
B - A256 Cantebury Road	924	231	0	2469	0.374	921	1043	0.0	0.6	0.039	A
C - Canterbury Road West	299	75	861	1123	0.266	297	60	0.0	0.4	0.073	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	1883	0.615	1155	1292	1.0	1.6	0.082	A
B - A256 Cantebury Road	1103	276	0	2469	0.447	1102	1249	0.6	0.8	0.044	A
C - Canterbury Road West	357	89	1030	1015	0.352	356	72	0.4	0.5	0.091	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	1868	0.758	1411	1582	1.6	3.0	0.130	A
B - A256 Cantebury Road	1351	338	0	2469	0.547	1349	1526	0.8	1.2	0.054	A
C - Canterbury Road West	437	109	1261	867	0.504	435	88	0.5	1.0	0.138	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	1417	354	116	1868	0.759	1417	1584	3.0	3.1	0.133	A
B - A256 Cantebury Road	1351	338	0	2469	0.547	1351	1532	1.2	1.2	0.054	A
C - Canterbury Road West	437	109	1263	867	0.504	437	88	1.0	1.0	0.140	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	1157	289	95	1882	0.615	1163	1296	3.1	1.6	0.084	A
B - A256 Cantebury Road	1103	276	0	2469	0.447	1105	1258	1.2	0.8	0.044	A
C - Canterbury Road West	357	89	1033	1013	0.352	359	72	1.0	0.5	0.092	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	1893	0.512	971	1085	1.6	1.1	0.065	A
B - A256 Cantebury Road	924	231	0	2469	0.374	925	1050	0.8	0.6	0.039	A
C - Canterbury Road West	299	75	864	1121	0.267	300	60	0.5	0.4	0.073	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	0.84	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-8	A - A256 Haine Road

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Cantebury 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	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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 (%)

A - A256 Haine Road		ONE HOUR	✓	1777	100.000
B - A256 Cantebury 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 Cantebury Road**	**C - Canterbury Road West**
From	**A - A256 Haine Road**	0	1777	0
	B - A256 Cantebury Road	1254	0	125
	C - Canterbury Road West	363	144	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	**B - A256 Cantebury Road**	**C - Canterbury Road West**
From	**A - A256 Haine Road**	0	3	0
	B - A256 Cantebury 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	1.04	1.61	57.6	F	1631	2446
B - A256 Cantebury Road	0.60	0.06	1.5	A	1265	1898
C - Canterbury Road West	0.68	0.22	2.0	B	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	1911	0.700	1329	1213	0.0	2.3	0.102	A
B - A256 Cantebury Road	1038	260	0	2532	0.410	1035	1436	0.0	0.7	0.040	A
C - Canterbury Road West	382	95	942	1099	0.347	380	94	0.0	0.5	0.083	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	1896	0.843	1587	1452	2.3	5.0	0.188	B
B - A256 Cantebury Road	1240	310	0	2532	0.490	1239	1716	0.7	1.0	0.046	A
C - Canterbury Road West	456	114	1126	984	0.463	454	112	0.5	0.9	0.113	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	1957	489	157	1877	1.043	1837	1775	5.0	34.8	0.808	E
B - A256 Cantebury Road	1518	380	0	2532	0.600	1516	1995	1.0	1.5	0.059	A
C - Canterbury Road West	558	140	1379	826	0.676	554	137	0.9	2.0	0.217	B

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	1876	1.043	1865	1780	34.8	57.6	1.615	F
B - A256 Cantebury Road	1518	380	0	2532	0.600	1518	2024	1.5	1.5	0.059	A
C - Canterbury Road West	558	140	1381	825	0.677	558	138	2.0	2.0	0.224	B

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	131	1895	0.843	1802	1459	57.6	6.4	0.935	F
B - A256 Cantebury Road	1240	310	0	2532	0.490	1242	1933	1.5	1.0	0.047	A
C - Canterbury Road West	456	114	1129	982	0.464	460	113	2.0	0.9	0.116	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	1338	334	109	1910	0.700	1354	1219	6.4	2.4	0.111	A
B - A256 Cantebury Road	1038	260	0	2532	0.410	1039	1463	1.0	0.7	0.040	A
C - Canterbury Road West	382	95	945	1097	0.348	383	94	0.9	0.5	0.084	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	0.08	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	34	A - A256 Haine Road

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Cantebury 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	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	**B - A256 Cantebury Road**	**C - Canterbury Road West**
From	**A - A256 Haine Road**	0	5	0
	B - A256 Cantebury 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	0.71	0.11	2.4	A	1113	1670
B - A256 Cantebury Road	0.46	0.04	0.9	A	954	1431
C - Canterbury Road West	0.38	0.10	0.6	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	1904	0.480	910	911	0.0	0.9	0.060	A
B - A256 Cantebury Road	783	196	0	2486	0.315	781	972	0.0	0.5	0.035	A
C - Canterbury Road West	260	65	714	1217	0.213	259	67	0.0	0.3	0.063	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	75	1896	0.575	1089	1090	0.9	1.3	0.074	A
B - A256 Cantebury Road	935	234	0	2486	0.376	934	1163	0.5	0.6	0.039	A
C - Canterbury Road West	310	78	854	1129	0.275	310	80	0.3	0.4	0.073	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	1884	0.709	1331	1334	1.3	2.4	0.108	A
B - A256 Cantebury Road	1145	286	0	2486	0.461	1144	1423	0.6	0.8	0.045	A
C - Canterbury Road West	380	95	1046	1008	0.377	379	98	0.4	0.6	0.095	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	1884	0.709	1335	1336	2.4	2.4	0.109	A
B - A256 Cantebury Road	1145	286	0	2486	0.461	1145	1427	0.8	0.9	0.045	A
C - Canterbury Road West	380	95	1047	1008	0.377	380	98	0.6	0.6	0.096	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	1895	0.575	1095	1092	2.4	1.4	0.075	A
B - A256 Cantebury Road	935	234	0	2486	0.376	936	1169	0.9	0.6	0.039	A
C - Canterbury Road West	310	78	856	1128	0.275	311	80	0.6	0.4	0.074	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	1904	0.480	915	914	1.4	0.9	0.061	A
B - A256 Cantebury Road	783	196	0	2486	0.315	784	978	0.6	0.5	0.035	A
C - Canterbury Road West	260	65	716	1216	0.214	260	67	0.4	0.3	0.063	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	0.08	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	33	C - Canterbury Road West

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Cantebury 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	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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)

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

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	4	0
	B - A256 Cantebury 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	0.68	0.10	2.1	A	1068	1602
B - A256 Cantebury Road	0.51	0.05	1.0	A	1051	1576
C - Canterbury Road West	0.47	0.12	0.9	A	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	1912	0.458	873	1019	0.0	0.8	0.058	A
B - A256 Cantebury Road	862	216	0	2469	0.349	860	952	0.0	0.5	0.037	A
C - Canterbury Road West	299	75	800	1162	0.257	298	60	0.0	0.3	0.069	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	1901	0.551	1045	1219	0.8	1.2	0.070	A
B - A256 Cantebury Road	1029	257	0	2469	0.417	1029	1139	0.5	0.7	0.042	A
C - Canterbury Road West	357	89	957	1062	0.336	356	72	0.3	0.5	0.085	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	1886	0.679	1278	1492	1.2	2.1	0.098	A
B - A256 Cantebury Road	1261	315	0	2469	0.511	1259	1393	0.7	1.0	0.050	A
C - Canterbury Road West	437	109	1171	925	0.473	436	88	0.5	0.9	0.122	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	1282	320	116	1886	0.679	1282	1494	2.1	2.1	0.099	A
B - A256 Cantebury Road	1261	315	0	2469	0.511	1261	1397	1.0	1.0	0.050	A
C - Canterbury Road West	437	109	1173	924	0.473	437	88	0.9	0.9	0.123	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	1046	262	95	1900	0.551	1050	1222	2.1	1.2	0.071	A
B - A256 Cantebury Road	1029	257	0	2469	0.417	1031	1145	1.0	0.7	0.042	A
C - Canterbury Road West	357	89	959	1060	0.337	358	72	0.9	0.5	0.086	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	1911	0.459	878	1023	1.2	0.9	0.058	A
B - A256 Cantebury Road	862	216	0	2469	0.349	863	957	0.7	0.5	0.037	A
C - Canterbury Road West	299	75	802	1160	0.258	300	60	0.5	0.3	0.070	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	0.40	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-2	A - A256 Haine Road

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Cantebury 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	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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)

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

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	3	0
	B - A256 Cantebury 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	0.98	0.72	21.2	E	1528	2292
B - A256 Cantebury Road	0.54	0.05	1.2	A	1149	1723
C - Canterbury Road West	0.61	0.17	1.6	B	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	1911	0.656	1246	1118	0.0	1.9	0.089	A
B - A256 Cantebury Road	943	236	0	2532	0.372	940	1354	0.0	0.6	0.038	A
C - Canterbury Road West	382	95	846	1159	0.329	380	94	0.0	0.5	0.077	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	1896	0.790	1490	1338	1.9	3.6	0.145	A
B - A256 Cantebury Road	1126	281	0	2532	0.445	1125	1619	0.6	0.8	0.043	A
C - Canterbury Road West	456	114	1012	1055	0.432	455	112	0.5	0.8	0.100	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	158	1876	0.977	1781	1637	3.6	16.6	0.477	D
B - A256 Cantebury Road	1378	345	0	2532	0.545	1377	1939	0.8	1.2	0.052	A
C - Canterbury Road West	558	140	1239	913	0.611	555	137	0.8	1.5	0.166	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	1833	458	159	1876	0.977	1814	1640	16.6	21.2	0.724	E
B - A256 Cantebury Road	1378	345	0	2532	0.545	1378	1973	1.2	1.2	0.052	A
C - Canterbury Road West	558	140	1241	912	0.612	558	138	1.5	1.6	0.169	B

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	130	1895	0.790	1566	1343	21.2	4.0	0.218	B
B - A256 Cantebury Road	1126	281	0	2532	0.445	1127	1696	1.2	0.8	0.043	A
C - Canterbury Road West	456	114	1015	1054	0.433	459	113	1.6	0.8	0.101	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	1910	0.656	1262	1123	4.0	1.9	0.094	A
B - A256 Cantebury Road	943	236	0	2532	0.372	943	1370	0.8	0.6	0.038	A
C - Canterbury Road West	382	95	849	1157	0.330	383	94	0.8	0.5	0.078	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	0.07	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	47	A - A256 Haine Road

Arms

Arms

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

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	4	0
	B - A256 Cantebury 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	0.64	0.09	1.8	A	1019	1528
B - A256 Cantebury Road	0.44	0.04	0.8	A	921	1382
C - Canterbury Road West	0.37	0.09	0.6	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	1922	0.435	833	884	0.0	0.8	0.055	A
B - A256 Cantebury Road	756	189	0	2486	0.304	754	895	0.0	0.4	0.035	A
C - Canterbury Road West	260	65	687	1234	0.210	259	67	0.0	0.3	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	998	249	75	1914	0.521	997	1057	0.8	1.1	0.065	A
B - A256 Cantebury Road	903	226	0	2486	0.363	902	1071	0.4	0.6	0.038	A
C - Canterbury Road West	310	78	822	1150	0.270	310	80	0.3	0.4	0.071	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	1902	0.642	1219	1294	1.1	1.8	0.088	A
B - A256 Cantebury Road	1105	276	0	2486	0.445	1105	1311	0.6	0.8	0.043	A
C - Canterbury Road West	380	95	1007	1033	0.368	379	98	0.4	0.6	0.092	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	1902	0.642	1222	1296	1.8	1.8	0.088	A
B - A256 Cantebury Road	1105	276	0	2486	0.445	1105	1313	0.8	0.8	0.043	A

C - Canterbury Road West	380	95	1007	1033	0.368	380	98	0.6	0.6	0.092	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	998	249	75	1914	0.521	1001	1060	1.8	1.1	0.066	A
B - A256 Cantebury Road	903	226	0	2486	0.363	903	1075	0.8	0.6	0.038	A
C - Canterbury Road West	310	78	823	1149	0.270	311	80	0.6	0.4	0.072	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	1922	0.435	837	887	1.1	0.8	0.055	A
B - A256 Cantebury Road	756	189	0	2486	0.304	756	900	0.6	0.4	0.035	A
C - Canterbury Road West	260	65	689	1233	0.211	260	67	0.4	0.3	0.062	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	0.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Cantebury 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	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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 Cantebury 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 Cantebury 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	0.319	929
		2	0.319	929
B - A256 Cantebury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.297	818
		2	0.297	818

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Cantebury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Cantebury 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 Cantebury 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 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1011	0
	B - A256 Cantebury Road	787	0	64
	C - Canterbury Road West	231	84	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	4	0
	B - A256 Cantebury 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	0.10	1.9	A	932	1398
B - A256 Cantebury Road	0.06	1.2	A	782	1173
C - Canterbury Road West	0.21	1.4	B	288	432

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	775	194	66	773	776	0.0	1.0	0.077	A
B - A256 Cantebury Road	651	163	0	653	839	0.0	0.5	0.055	A
C - Canterbury Road West	238	60	603	239	50	0.0	0.6	0.122	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	912	228	75	915	905	1.0	1.1	0.089	A
B - A256 Cantebury Road	756	189	0	754	991	0.5	0.8	0.058	A
C - Canterbury Road West	284	71	696	285	59	0.6	0.7	0.150	A

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	1121	280	98	1120	1107	1.1	1.9	0.100	A
B - A256 Cantebury Road	930	232	0	930	1218	0.8	1.0	0.061	A
C - Canterbury Road West	343	86	857	348	73	0.7	0.9	0.212	B

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	1122	280	93	1126	1127	1.9	1.8	0.105	A
B - A256 Cantebury Road	948	237	0	946	1219	1.0	1.1	0.062	A
C - Canterbury Road West	343	86	878	342	68	0.9	1.4	0.197	B

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	907	227	77	908	912	1.8	1.3	0.088	A
B - A256 Cantebury Road	759	190	0	761	985	1.1	0.6	0.057	A
C - Canterbury Road West	282	71	705	283	56	1.4	0.7	0.163	A

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	758	189	64	759	784	1.3	0.9	0.079	A
B - A256 Cantebury Road	650	163	0	652	823	0.6	0.5	0.055	A
C - Canterbury Road West	240	60	608	240	44	0.7	0.6	0.128	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		

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	387	960	0.403	385	0.0	0.6	0.076	A
			2	B	388	962	0.403	388	0.0	0.4	0.078	A
		2	1	(A, B, C)	775			775	0.0	0.0	0.000	A
	Exit	1	1		776			776	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	344	1225	0.281	346	0.0	0.2	0.055	A
			2	A	307	1221	0.251	307	0.0	0.3	0.055	A
		2	1	(A, B, C)	651			651	0.0	0.0	0.000	A
	Exit	1	1		839			839	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	173	643	0.269	172	0.0	0.3	0.091	A
			2	B	66	653	0.102	66	0.0	0.1	0.091	A
		2	1	(A, B, C)	238			239	0.0	0.1	0.031	A
	Exit	1	1		50			50	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	452	958	0.472	454	0.6	0.6	0.090	A
			2	B	460	959	0.480	462	0.4	0.5	0.087	A
		2	1	(A, B, C)	912			912	0.0	0.0	0.000	A
	Exit	1	1		905			905	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	394	1229	0.320	393	0.2	0.4	0.059	A
			2	A	362	1226	0.295	361	0.3	0.4	0.057	A
		2	1	(A, B, C)	756			756	0.0	0.0	0.000	A
	Exit	1	1		991			991	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	209	610	0.342	209	0.3	0.3	0.098	A
			2	B	74	619	0.120	75	0.1	0.1	0.097	A
		2	1	(A, B, C)	284			283	0.1	0.3	0.052	A
	Exit	1	1		59			59	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	567	948	0.598	566	0.6	1.0	0.098	A
			2	B	554	955	0.580	554	0.5	0.9	0.101	A
		2	1	(A, B, C)	1121			1121	0.0	0.0	0.001	A
	Exit	1	1		1107			1107	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	484	1232	0.393	486	0.4	0.5	0.060	A
			2	A	445	1218	0.366	444	0.4	0.5	0.060	A
		2	1	(A, B, C)	930			930	0.0	0.0	0.001	A
	Exit	1	1		1218			1218	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	250	561	0.445	250	0.3	0.4	0.110	A
			2	B	97	564	0.172	98	0.1	0.1	0.111	A
		2	1	(A, B, C)	343			347	0.3	0.4	0.102	A
	Exit	1	1		73			73	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	556	954	0.582	558	1.0	0.8	0.104	A
			2	B	566	954	0.592	567	0.9	1.0	0.104	A
		2	1	(A, B, C)	1122			1122	0.0	0.0	0.001	A
	Exit	1	1		1127			1127	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	491	1233	0.399	491	0.5	0.5	0.063	A
			2	A	456	1213	0.376	455	0.5	0.6	0.059	A
		2	1	(A, B, C)	948			948	0.0	0.0	0.001	A
	Exit	1	1		1219			1219	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	250	553	0.451	249	0.4	0.5	0.107	A
			2	B	93	561	0.165	93	0.1	0.2	0.105	A
		2	1	(A, B, C)	343			343	0.4	0.7	0.091	A
	Exit	1	1		68			68	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	453	959	0.473	454	0.8	0.7	0.087	A
			2	B	453	958	0.472	454	1.0	0.7	0.088	A
		2	1	(A, B, C)	907			907	0.0	0.0	0.000	A

	Exit	**1**	**1**		912			912	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	394	1229	0.321	396	0.5	0.4	0.058	A
			2	A	365	1228	0.297	366	0.6	0.3	0.056	A
		2	**1**	(A, B, C)	759			759	0.0	0.0	0.000	A
	Exit	**1**	**1**		985			985	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	206	609	0.338	206	0.5	0.3	0.102	A
			2	B	76	614	0.124	77	0.2	0.1	0.101	A
		2	**1**	(A, B, C)	282			282	0.7	0.3	0.061	A
	Exit	**1**	**1**		56			56	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	379	958	0.395	380	0.7	0.4	0.078	A
			2	B	379	957	0.396	379	0.7	0.5	0.079	A
		2	**1**	(A, B, C)	758			758	0.0	0.0	0.000	A
	Exit	**1**	**1**		784			784	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	340	1232	0.276	341	0.4	0.2	0.056	A
			2	A	310	1227	0.253	311	0.3	0.2	0.053	A
		2	**1**	(A, B, C)	650			650	0.0	0.0	0.000	A
	Exit	**1**	**1**		823			823	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	175	641	0.272	176	0.3	0.2	0.094	A
			2	B	65	642	0.102	64	0.1	0.2	0.095	A
		2	**1**	(A, B, C)	240			240	0.3	0.2	0.033	A
	Exit	**1**	**1**		44			44	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	0.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Cantebury 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	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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 Cantebury 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 Cantebury 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	0.319	929
		2	0.319	929
B - A256 Cantebury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.297	818
		2	0.297	818

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Cantebury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Cantebury 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 Cantebury 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 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1266	0
	B - A256 Cantebury Road	976	0	96
	C - Canterbury Road West	288	114	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	3	0
	B - A256 Cantebury 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	0.15	3.9	A	1163	1744
B - A256 Cantebury Road	0.07	1.6	A	985	1477
C - Canterbury Road West	0.41	3.0	C	367	551

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	943	236	87	941	952	0.0	1.4	0.087	A
B - A256 Cantebury Road	803	201	0	804	1028	0.0	0.7	0.056	A
C - Canterbury Road West	307	77	730	308	73	0.0	0.8	0.143	A

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	1144	286	103	1143	1136	1.4	2.0	0.108	A
B - A256 Cantebury Road	963	241	0	964	1246	0.7	0.9	0.059	A
C - Canterbury Road West	362	91	877	362	87	0.8	1.2	0.211	B

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	1405	351	126	1400	1384	2.0	3.9	0.152	A
B - A256 Cantebury Road	1182	295	0	1179	1526	0.9	1.6	0.068	A
C - Canterbury Road West	433	108	1073	437	106	1.2	2.6	0.355	C

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	1386	346	123	1389	1398	3.9	3.3	0.149	A
B - A256 Cantebury Road	1184	296	0	1186	1512	1.6	1.3	0.067	A
C - Canterbury Road West	443	111	1079	442	107	2.6	3.0	0.410	C

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	1144	286	103	1145	1136	3.3	1.9	0.107	A
B - A256 Cantebury Road	967	242	0	967	1248	1.3	1.0	0.060	A
C - Canterbury Road West	356	89	880	359	87	3.0	1.3	0.241	B

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	956	239	87	955	955	1.9	1.5	0.089	A
B - A256 Cantebury Road	809	202	0	809	1042	1.0	0.7	0.056	A
C - Canterbury Road West	303	76	737	305	72	1.3	0.7	0.162	A

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		

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	470	963	0.488	469	0.0	0.8	0.086	A
			2	B	473	964	0.491	472	0.0	0.7	0.087	A
		2	1	(A, B, C)	943			943	0.0	0.0	0.000	A
	Exit	1	1		952			952	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	424	1265	0.335	425	0.0	0.4	0.057	A
			2	A	379	1270	0.298	379	0.0	0.3	0.054	A
		2	1	(A, B, C)	803			803	0.0	0.0	0.000	A
	Exit	1	1		1028			1028	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	221	614	0.360	221	0.0	0.4	0.094	A
			2	B	87	619	0.140	87	0.0	0.1	0.091	A
		2	1	(A, B, C)	307			308	0.0	0.3	0.050	A
	Exit	1	1		73			73	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	572	957	0.597	571	0.8	1.0	0.106	A
			2	B	572	958	0.597	571	0.7	1.0	0.107	A
		2	1	(A, B, C)	1144			1144	0.0	0.0	0.001	A
	Exit	1	1		1136			1136	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	503	1264	0.398	504	0.4	0.5	0.060	A
			2	A	460	1273	0.362	460	0.3	0.4	0.057	A
		2	1	(A, B, C)	963			963	0.0	0.0	0.001	A
	Exit	1	1		1246			1246	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	260	570	0.455	259	0.4	0.5	0.106	A
			2	B	103	576	0.178	103	0.1	0.2	0.104	A
		2	1	(A, B, C)	362			362	0.3	0.6	0.105	A
	Exit	1	1		87			87	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	701	948	0.739	697	1.0	1.8	0.143	A
			2	B	704	950	0.741	703	1.0	1.7	0.142	A
		2	1	(A, B, C)	1405			1404	0.0	0.3	0.010	A
	Exit	1	1		1384			1384	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	617	1264	0.488	617	0.5	0.7	0.066	A
			2	A	564	1269	0.444	562	0.4	0.7	0.064	A
		2	1	(A, B, C)	1182			1181	0.0	0.1	0.003	A
	Exit	1	1		1526			1526	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	309	508	0.609	311	0.5	0.5	0.117	A
			2	B	127	512	0.247	126	0.2	0.3	0.114	A
		2	1	(A, B, C)	433			436	0.6	1.8	0.239	B
	Exit	1	1		106			106	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	696	951	0.731	697	1.8	1.6	0.140	A
			2	B	691	949	0.728	692	1.7	1.6	0.140	A
		2	1	(A, B, C)	1386			1386	0.3	0.1	0.009	A
	Exit	1	1		1398			1398	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	614	1266	0.485	614	0.7	0.6	0.066	A
			2	A	570	1268	0.450	571	0.7	0.6	0.064	A
		2	1	(A, B, C)	1184			1184	0.1	0.0	0.002	A
	Exit	1	1		1512			1512	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	320	505	0.634	319	0.5	0.7	0.120	A
			2	B	123	510	0.241	123	0.3	0.2	0.116	A
		2	1	(A, B, C)	443			443	1.8	2.1	0.291	C
	Exit	1	1		107			107	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	565	957	0.591	566	1.6	1.0	0.106	A
			2	B	579	956	0.605	579	1.6	1.0	0.106	A
		2	1	(A, B, C)	1144			1144	0.1	0.0	0.001	A

	Exit	**1**	**1**		1136			1136	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	505	1265	0.399	504	0.6	0.5	0.061	A
			2	A	462	1269	0.364	462	0.6	0.4	0.058	A
		2	**1**	(A, B, C)	967			967	0.0	0.0	0.001	A
	Exit	**1**	**1**		1248			1248	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	255	567	0.450	256	0.7	0.4	0.109	A
			2	B	103	572	0.181	103	0.2	0.2	0.108	A
		2	**1**	(A, B, C)	356			359	2.1	0.6	0.132	A
	Exit	**1**	**1**		87			87	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	475	961	0.494	475	1.0	0.7	0.090	A
			2	B	481	963	0.499	480	1.0	0.7	0.088	A
		2	**1**	(A, B, C)	956			956	0.0	0.0	0.000	A
	Exit	**1**	**1**		955			955	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	427	1264	0.338	427	0.5	0.4	0.056	A
			2	A	382	1269	0.301	383	0.4	0.3	0.055	A
		2	**1**	(A, B, C)	809			809	0.0	0.0	0.000	A
	Exit	**1**	**1**		1042			1042	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	217	612	0.355	218	0.4	0.3	0.100	A
			2	B	87	620	0.141	87	0.2	0.1	0.098	A
		2	**1**	(A, B, C)	303			305	0.6	0.2	0.063	A
	Exit	**1**	**1**		72			72	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	0.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

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

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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 Cantebury 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 Cantebury 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	0.319	929
		2	0.319	929
B - A256 Cantebury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.297	818
		2	0.297	818

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Cantebury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Cantebury 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
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 Cantebury 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 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	869	0
	B - A256 Cantebury Road	570	0	67
	C - Canterbury Road West	193	62	0

Vehicle Mix

Heavy Vehicle Percentages

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

	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	0.09	1.7	A	803	1204
B - A256 Cantebury Road	0.06	0.7	A	585	878
C - Canterbury Road West	0.15	0.7	A	231	347

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	659	165	49	658	579	0.0	0.8	0.076	A
B - A256 Cantebury Road	485	121	0	487	707	0.0	0.4	0.052	A
C - Canterbury Road West	191	48	436	192	51	0.0	0.3	0.102	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	798	200	53	798	684	0.8	1.0	0.079	A
B - A256 Cantebury Road	566	142	0	568	850	0.4	0.5	0.053	A
C - Canterbury Road West	226	57	509	227	59	0.3	0.5	0.123	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	961	240	67	960	846	1.0	1.7	0.091	A
B - A256 Cantebury Road	706	176	0	707	1027	0.5	0.7	0.056	A
C - Canterbury Road West	281	70	632	281	75	0.5	0.7	0.146	A

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	963	241	68	959	834	1.7	1.5	0.091	A
B - A256 Cantebury Road	702	175	0	704	1027	0.7	0.6	0.055	A
C - Canterbury Road West	272	68	628	274	76	0.7	0.6	0.140	A

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	769	192	55	767	682	1.5	1.2	0.082	A
B - A256 Cantebury Road	578	145	0	577	822	0.6	0.6	0.055	A
C - Canterbury Road West	227	57	512	225	65	0.6	0.5	0.120	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	664	166	50	665	567	1.2	0.8	0.075	A
B - A256 Cantebury Road	473	118	0	471	714	0.6	0.5	0.054	A
C - Canterbury Road West	191	48	426	191	46	0.5	0.4	0.107	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	332	954	0.349	331	0.0	0.4	0.075	A
			2	B	327	961	0.340	328	0.0	0.4	0.078	A
		2	1	(A, B, C)	659			659	0.0	0.0	0.000	A
	Exit	1	1		579			579	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	261	1238	0.211	262	0.0	0.2	0.053	A
			2	A	224	1242	0.180	224	0.0	0.2	0.051	A
		2	1	(A, B, C)	485			485	0.0	0.0	0.000	A
	Exit	1	1		707			707	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	143	695	0.205	143	0.0	0.2	0.084	A
			2	B	49	698	0.070	49	0.0	0.1	0.081	A
		2	1	(A, B, C)	191			192	0.0	0.0	0.019	A
	Exit	1	1		51			51	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	402	963	0.418	402	0.4	0.5	0.079	A
			2	B	397	958	0.414	396	0.4	0.5	0.079	A
		2	1	(A, B, C)	798			798	0.0	0.0	0.000	A
	Exit	1	1		684			684	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	297	1228	0.242	298	0.2	0.2	0.055	A
			2	A	269	1239	0.217	270	0.2	0.2	0.052	A
		2	1	(A, B, C)	566			566	0.0	0.0	0.000	A
	Exit	1	1		850			850	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	174	670	0.259	175	0.2	0.2	0.091	A
			2	B	53	678	0.078	53	0.1	0.1	0.092	A
		2	1	(A, B, C)	226			227	0.0	0.2	0.032	A
	Exit	1	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	487	954	0.510	488	0.5	0.8	0.090	A
			2	B	474	950	0.499	472	0.5	0.9	0.091	A
		2	1	(A, B, C)	961			961	0.0	0.0	0.000	A
	Exit	1	1		846			846	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	374	1239	0.302	375	0.2	0.3	0.056	A
			2	A	332	1237	0.268	333	0.2	0.3	0.054	A
		2	1	(A, B, C)	706			706	0.0	0.0	0.000	A
	Exit	1	1		1027			1027	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	213	635	0.336	213	0.2	0.3	0.095	A
			2	B	67	640	0.105	67	0.1	0.1	0.095	A
		2	1	(A, B, C)	281			281	0.2	0.2	0.051	A
	Exit	1	1		75			75	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	483	952	0.508	479	0.8	0.8	0.092	A
			2	B	480	956	0.503	480	0.9	0.7	0.091	A
		2	1	(A, B, C)	963			963	0.0	0.0	0.000	A
	Exit	1	1		834			834	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	375	1236	0.304	375	0.3	0.3	0.057	A
			2	A	328	1235	0.265	329	0.3	0.2	0.053	A
		2	1	(A, B, C)	702			702	0.0	0.0	0.000	A
	Exit	1	1		1027			1027	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	205	635	0.322	206	0.3	0.3	0.091	A
			2	B	67	640	0.106	68	0.1	0.1	0.097	A
		2	1	(A, B, C)	272			273	0.2	0.2	0.048	A
	Exit	1	1		76			76	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	378	954	0.396	377	0.8	0.6	0.083	A
			2	B	391	955	0.409	390	0.7	0.6	0.081	A

A - A256 Haine Road		**2**	**1**	(A, B, C)	769			769	0.0	0.0	0.000	A
	Exit	**1**	**1**		682			682	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	314	1242	0.253	314	0.3	0.3	0.055	A
			2	A	263	1239	0.212	263	0.2	0.2	0.054	A
		2	**1**	(A, B, C)	578			578	0.0	0.0	0.000	A
	Exit	**1**	**1**		822			822	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	171	670	0.254	170	0.3	0.3	0.090	A
			2	B	56	673	0.083	55	0.1	0.1	0.091	A
		2	**1**	(A, B, C)	227			226	0.2	0.1	0.030	A
	Exit	**1**	**1**		65			65	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	330	964	0.343	331	0.6	0.3	0.075	A
			2	B	334	957	0.349	334	0.6	0.5	0.075	A
		2	**1**	(A, B, C)	664			664	0.0	0.0	0.000	A
	Exit	**1**	**1**		567			567	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	250	1235	0.202	249	0.3	0.3	0.055	A
			2	A	223	1226	0.182	222	0.2	0.2	0.053	A
		2	**1**	(A, B, C)	473			473	0.0	0.0	0.000	A
	Exit	**1**	**1**		714			714	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	140	706	0.199	141	0.3	0.2	0.083	A
			2	B	50	683	0.074	50	0.1	0.1	0.086	A
		2	**1**	(A, B, C)	191			191	0.1	0.1	0.023	A
	Exit	**1**	**1**		46			46	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	0.17	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Cantebury 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	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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 Cantebury 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 Cantebury 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	0.319	929
		2	0.319	929
B - A256 Cantebury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.297	818
		2	0.297	818

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Cantebury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Cantebury 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 Cantebury 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 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1265	0
	B - A256 Cantebury Road	985	0	80
	C - Canterbury Road West	289	105	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	5	0
	B - A256 Cantebury 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	0.16	4.0	A	1159	1739
B - A256 Cantebury Road	0.07	1.5	A	975	1463
C - Canterbury Road West	0.47	3.2	D	361	542

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	949	237	80	949	954	0.0	1.4	0.090	A
B - A256 Cantebury Road	797	199	0	796	1029	0.0	0.9	0.059	A
C - Canterbury Road West	296	74	739	294	57	0.0	0.8	0.150	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	1117	279	96	1116	1135	1.4	2.2	0.107	A
B - A256 Cantebury Road	949	237	0	949	1212	0.9	1.0	0.062	A
C - Canterbury Road West	354	89	877	354	73	0.8	1.2	0.210	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	1398	349	119	1397	1400	2.2	3.8	0.152	A
B - A256 Cantebury Road	1181	295	0	1183	1516	1.0	1.2	0.071	A
C - Canterbury Road West	430	107	1092	427	91	1.2	3.1	0.383	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	1403	351	115	1397	1405	3.8	3.9	0.157	A
B - A256 Cantebury Road	1172	293	0	1173	1512	1.2	1.4	0.071	A
C - Canterbury Road West	431	108	1082	438	91	3.1	3.2	0.473	D

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	1142	285	93	1147	1144	3.9	2.1	0.113	A
B - A256 Cantebury Road	955	239	0	954	1240	1.4	1.0	0.061	A
C - Canterbury Road West	354	89	882	355	72	3.2	1.2	0.241	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	948	237	79	948	963	2.1	1.6	0.092	A
B - A256 Cantebury Road	799	200	0	799	1027	1.0	0.8	0.058	A
C - Canterbury Road West	302	76	741	301	58	1.2	0.8	0.169	B

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		

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	475	947	0.502	475	0.0	0.7	0.090	A
			2	B	475	948	0.501	474	0.0	0.7	0.090	A
		2	1	(A, B, C)	949			950	0.0	0.0	0.000	A
	Exit	1	1		954			954	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	418	1226	0.341	417	0.0	0.5	0.059	A
			2	A	379	1224	0.310	379	0.0	0.4	0.058	A
		2	1	(A, B, C)	797			797	0.0	0.0	0.001	A
	Exit	1	1		1029			1029	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	216	597	0.361	215	0.0	0.4	0.095	A
			2	B	80	599	0.133	80	0.0	0.1	0.095	A
		2	1	(A, B, C)	296			296	0.0	0.3	0.055	A
	Exit	1	1		57			57	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	562	943	0.595	561	0.7	1.1	0.106	A
			2	B	556	942	0.590	554	0.7	1.1	0.107	A
		2	1	(A, B, C)	1117			1117	0.0	0.0	0.001	A
	Exit	1	1		1135			1135	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	492	1227	0.400	492	0.5	0.5	0.062	A
			2	A	457	1217	0.376	457	0.4	0.5	0.060	A
		2	1	(A, B, C)	949			949	0.0	0.0	0.001	A
	Exit	1	1		1212			1212	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	260	554	0.469	259	0.4	0.5	0.108	A
			2	B	95	556	0.172	96	0.1	0.2	0.106	A
		2	1	(A, B, C)	354			355	0.3	0.5	0.102	A
	Exit	1	1		73			73	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	701	931	0.753	701	1.1	1.8	0.142	A
			2	B	696	932	0.746	696	1.1	1.7	0.142	A
		2	1	(A, B, C)	1398			1397	0.0	0.3	0.010	A
	Exit	1	1		1400			1400	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	614	1229	0.500	616	0.5	0.6	0.068	A
			2	A	566	1222	0.463	567	0.5	0.5	0.066	A
		2	1	(A, B, C)	1181			1181	0.0	0.1	0.004	A
	Exit	1	1		1516			1516	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	308	484	0.636	308	0.5	0.6	0.121	A
			2	B	119	489	0.243	119	0.2	0.2	0.117	A
		2	1	(A, B, C)	430			427	0.5	2.2	0.263	C
	Exit	1	1		91			91	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	701	934	0.750	697	1.8	1.8	0.146	A
			2	B	702	934	0.751	700	1.7	1.8	0.146	A
		2	1	(A, B, C)	1403			1402	0.3	0.4	0.011	A
	Exit	1	1		1405			1405	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	614	1227	0.500	615	0.6	0.7	0.068	A
			2	A	558	1218	0.458	558	0.5	0.6	0.067	A
		2	1	(A, B, C)	1172			1172	0.1	0.1	0.004	A
	Exit	1	1		1512			1512	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	323	487	0.663	323	0.6	0.6	0.125	A
			2	B	115	490	0.235	115	0.2	0.2	0.123	A
		2	1	(A, B, C)	431			438	2.2	2.3	0.349	C
	Exit	1	1		91			91	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	565	942	0.600	569	1.8	0.9	0.111	A
			2	B	576	941	0.612	578	1.8	1.1	0.111	A
		2	1	(A, B, C)	1142			1141	0.4	0.1	0.002	A

	Exit	**1**	**1**		1144			1144	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	496	1229	0.404	495	0.7	0.5	0.061	A
			2	A	459	1220	0.376	459	0.6	0.4	0.060	A
		2	**1**	(A, B, C)	955			955	0.1	0.0	0.001	A
	Exit	**1**	**1**		1240			1240	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	262	551	0.475	262	0.6	0.5	0.110	A
			2	B	93	553	0.167	93	0.2	0.2	0.109	A
		2	**1**	(A, B, C)	354			355	2.3	0.6	0.132	A
	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	473	942	0.502	473	0.9	0.8	0.091	A
			2	B	475	946	0.503	475	1.1	0.8	0.092	A
		2	**1**	(A, B, C)	948			949	0.1	0.0	0.000	A
	Exit	**1**	**1**		963			963	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	415	1227	0.338	415	0.5	0.4	0.058	A
			2	A	384	1221	0.315	384	0.4	0.4	0.057	A
		2	**1**	(A, B, C)	799			799	0.0	0.0	0.000	A
	Exit	**1**	**1**		1027			1027	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	222	595	0.373	222	0.5	0.4	0.103	A
			2	B	79	598	0.132	79	0.2	0.1	0.101	A
		2	**1**	(A, B, C)	302			301	0.6	0.3	0.067	A
	Exit	**1**	**1**		58			58	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.

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	0.72	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Cantebury 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	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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 Cantebury 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 Cantebury 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	0.319	929
		2	0.319	929
B - A256 Cantebury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.297	818
		2	0.297	818

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Cantebury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Cantebury 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
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 Cantebury 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 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1596	0
	B - A256 Cantebury Road	1230	0	121
	C - Canterbury Road West	363	144	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	3	0
	B - A256 Cantebury 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	0.46	13.9	D	1466	2199
B - A256 Cantebury Road	0.09	2.2	A	1241	1861
C - Canterbury Road West	3.28	33.6	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	108	1200	1200	0.0	2.2	0.110	A
B - A256 Cantebury Road	1017	254	0	1018	1308	0.0	1.0	0.061	A
C - Canterbury Road West	380	95	927	381	91	0.0	1.5	0.206	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	1450	362	131	1447	1433	2.2	4.1	0.159	A
B - A256 Cantebury Road	1217	304	0	1217	1578	1.0	1.4	0.068	A
C - Canterbury Road West	459	115	1106	458	111	1.5	3.4	0.411	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	1759	440	140	1746	1709	4.1	12.6	0.361	C
B - A256 Cantebury Road	1487	372	0	1487	1886	1.4	2.1	0.085	A
C - Canterbury Road West	559	140	1353	496	135	3.4	20.1	1.531	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	1759	440	141	1755	1719	12.6	13.8	0.458	D
B - A256 Cantebury Road	1490	372	0	1492	1896	2.1	2.2	0.088	A
C - Canterbury Road West	556	139	1356	504	136	20.1	33.6	3.281	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	144	1440	1474	13.8	3.9	0.215	B
B - A256 Cantebury Road	1210	303	0	1211	1584	2.2	1.4	0.068	A
C - Canterbury Road West	453	113	1103	516	108	33.6	13.0	2.443	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	1194	299	111	1193	1207	3.9	2.2	0.116	A
B - A256 Cantebury Road	1023	256	0	1023	1304	1.4	1.0	0.061	A
C - Canterbury Road West	379	95	929	389	95	13.0	1.7	0.562	D

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		

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	600	955	0.628	600	0.0	1.1	0.108	A
			2	B	600	955	0.628	600	0.0	1.1	0.109	A
		2	1	(A, B, C)	1200			1200	0.0	0.0	0.001	A
	Exit	1	1		1200			1200	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	532	1264	0.421	532	0.0	0.5	0.062	A
			2	A	486	1268	0.383	486	0.0	0.4	0.059	A
		2	1	(A, B, C)	1017			1017	0.0	0.0	0.001	A
	Exit	1	1		1308			1308	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	273	554	0.493	273	0.0	0.5	0.102	A
			2	B	108	558	0.193	108	0.0	0.2	0.102	A
		2	1	(A, B, C)	380			381	0.0	0.8	0.104	A
	Exit	1	1		91			91	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	730	949	0.769	728	1.1	1.8	0.147	A
			2	B	719	947	0.760	719	1.1	1.8	0.147	A
		2	1	(A, B, C)	1450			1449	0.0	0.4	0.012	A
	Exit	1	1		1433			1433	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	634	1264	0.502	634	0.5	0.7	0.067	A
			2	A	582	1268	0.459	583	0.4	0.6	0.064	A
		2	1	(A, B, C)	1217			1217	0.0	0.1	0.003	A
	Exit	1	1		1578			1578	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	327	496	0.660	327	0.5	0.7	0.119	A
			2	B	131	501	0.261	131	0.2	0.3	0.118	A
		2	1	(A, B, C)	459			459	0.8	2.5	0.291	C
	Exit	1	1		111			111	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	875	945	0.926	873	1.8	3.5	0.225	B
			2	B	874	944	0.927	873	1.8	3.5	0.225	B
		2	1	(A, B, C)	1759			1749	0.4	5.5	0.135	A
	Exit	1	1		1709			1709	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	768	1263	0.608	768	0.7	1.0	0.076	A
			2	A	719	1269	0.567	720	0.6	0.8	0.072	A
		2	1	(A, B, C)	1487			1487	0.1	0.3	0.012	A
	Exit	1	1		1886			1886	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	357	420	0.848	356	0.7	0.9	0.139	A
			2	B	140	423	0.331	140	0.3	0.4	0.138	A
		2	1	(A, B, C)	559			497	2.5	18.9	1.391	F
	Exit	1	1		135			135	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	874	945	0.925	874	3.5	3.6	0.244	B
			2	B	882	943	0.936	882	3.5	3.6	0.243	B
		2	1	(A, B, C)	1759			1756	5.5	6.7	0.214	B
	Exit	1	1		1719			1719	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	773	1264	0.612	774	1.0	1.0	0.076	A
			2	A	717	1267	0.565	717	0.8	0.8	0.072	A
		2	1	(A, B, C)	1490			1490	0.3	0.4	0.014	A
	Exit	1	1		1896			1896	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	363	418	0.869	363	0.9	0.9	0.143	A
			2	B	141	422	0.334	141	0.4	0.3	0.142	A
		2	1	(A, B, C)	556			504	18.9	32.4	3.142	F
	Exit	1	1		136			136	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	719	942	0.763	720	3.6	1.8	0.169	B
			2	B	717	941	0.762	719	3.6	1.8	0.170	B
		2	1	(A, B, C)	1435			1436	6.7	0.3	0.048	A

	Exit	**1**	**1**		1474			1474	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	629	1264	0.497	629	1.0	0.7	0.067	A
			2	A	582	1269	0.458	581	0.8	0.6	0.064	A
		2	**1**	(A, B, C)	1210			1211	0.4	0.0	0.003	A
	Exit	**1**	**1**		1584			1584	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	371	497	0.746	371	0.9	0.7	0.124	A
			2	B	145	503	0.288	144	0.3	0.3	0.125	A
		2	**1**	(A, B, C)	453			516	32.4	12.0	2.321	F
	Exit	**1**	**1**		108			108	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	598	954	0.627	598	1.8	1.1	0.114	A
			2	B	596	954	0.625	596	1.8	1.1	0.114	A
		2	**1**	(A, B, C)	1194			1194	0.3	0.0	0.002	A
	Exit	**1**	**1**		1207			1207	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	536	1266	0.424	537	0.7	0.5	0.061	A
			2	A	487	1269	0.384	486	0.6	0.5	0.059	A
		2	**1**	(A, B, C)	1023			1023	0.0	0.0	0.001	A
	Exit	**1**	**1**		1304			1304	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	278	553	0.503	278	0.7	0.5	0.110	A
			2	B	111	558	0.198	111	0.3	0.2	0.109	A
		2	**1**	(A, B, C)	379			388	12.0	1.0	0.452	D
	Exit	**1**	**1**		95			95	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	0.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

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

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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 Cantebury 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 Cantebury 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	0.319	929
		2	0.319	929
B - A256 Cantebury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.297	818
		2	0.297	818

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Cantebury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Cantebury 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
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 Cantebury 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 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1160	0
	B - A256 Cantebury Road	761	0	89
	C - Canterbury Road West	257	83	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	6	0
	B - A256 Cantebury Road	6	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	0.13	2.9	A	1062	1593
B - A256 Cantebury Road	0.06	1.1	A	782	1173
C - Canterbury Road West	0.22	1.5	B	308	461

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	871	218	62	874	761	0.0	1.1	0.085	A
B - A256 Cantebury Road	638	160	0	639	936	0.0	0.6	0.056	A
C - Canterbury Road West	251	63	572	251	67	0.0	0.6	0.122	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	1026	256	73	1026	914	1.1	1.8	0.099	A
B - A256 Cantebury Road	761	190	0	760	1099	0.6	0.9	0.059	A
C - Canterbury Road West	303	76	683	304	77	0.6	0.7	0.154	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	1277	319	92	1277	1116	1.8	2.8	0.128	A
B - A256 Cantebury Road	937	234	0	936	1369	0.9	1.0	0.064	A
C - Canterbury Road West	366	91	839	369	97	0.7	1.4	0.221	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	1280	320	89	1279	1113	2.8	2.7	0.127	A
B - A256 Cantebury Road	939	235	0	937	1367	1.0	1.0	0.062	A
C - Canterbury Road West	365	91	837	364	100	1.4	1.4	0.217	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	1038	259	72	1040	933	2.7	1.7	0.101	A
B - A256 Cantebury Road	775	194	0	774	1112	1.0	0.8	0.058	A
C - Canterbury Road West	307	77	698	306	76	1.4	0.8	0.162	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	881	220	60	882	769	1.7	1.4	0.087	A
B - A256 Cantebury Road	641	160	0	640	942	0.8	0.7	0.055	A
C - Canterbury Road West	254	64	576	253	64	0.8	0.6	0.138	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	434	940	0.462	437	0.0	0.5	0.085	A
			2	B	436	947	0.460	438	0.0	0.5	0.085	A
		2	1	(A, B, C)	871			871	0.0	0.0	0.000	A
	Exit	1	1		761			761	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	348	1224	0.284	348	0.0	0.3	0.056	A
			2	A	290	1221	0.238	291	0.0	0.3	0.055	A
		2	1	(A, B, C)	638			638	0.0	0.0	0.000	A
	Exit	1	1		936			936	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	189	648	0.292	189	0.0	0.3	0.088	A
			2	B	61	654	0.094	62	0.0	0.1	0.091	A
		2	1	(A, B, C)	251			251	0.0	0.2	0.033	A
	Exit	1	1		67			67	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	514	940	0.547	513	0.5	1.0	0.098	A
			2	B	511	937	0.545	512	0.5	0.8	0.098	A
		2	1	(A, B, C)	1026			1026	0.0	0.0	0.001	A
	Exit	1	1		914			914	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	406	1219	0.333	404	0.3	0.5	0.060	A
			2	A	355	1224	0.290	356	0.3	0.4	0.057	A
		2	1	(A, B, C)	761			761	0.0	0.0	0.000	A
	Exit	1	1		1099			1099	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	231	615	0.375	230	0.3	0.4	0.096	A
			2	B	74	618	0.119	73	0.1	0.2	0.102	A
		2	1	(A, B, C)	303			304	0.2	0.2	0.057	A
	Exit	1	1		77			77	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	639	932	0.685	638	1.0	1.4	0.124	A
			2	B	638	936	0.683	639	0.8	1.3	0.124	A
		2	1	(A, B, C)	1277			1277	0.0	0.1	0.004	A
	Exit	1	1		1116			1116	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	498	1223	0.407	497	0.5	0.5	0.063	A
			2	A	440	1217	0.362	439	0.4	0.5	0.061	A
		2	1	(A, B, C)	937			938	0.0	0.0	0.002	A
	Exit	1	1		1369			1369	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	276	565	0.488	277	0.4	0.5	0.106	A
			2	B	92	562	0.164	92	0.2	0.2	0.107	A
		2	1	(A, B, C)	366			368	0.2	0.8	0.115	A
	Exit	1	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	645	935	0.690	643	1.4	1.4	0.123	A
			2	B	634	936	0.678	635	1.3	1.2	0.124	A
		2	1	(A, B, C)	1280			1279	0.1	0.1	0.004	A
	Exit	1	1		1113			1113	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	499	1225	0.408	498	0.5	0.6	0.062	A
			2	A	439	1212	0.363	440	0.5	0.4	0.060	A
		2	1	(A, B, C)	939			938	0.0	0.0	0.001	A
	Exit	1	1		1367			1367	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	276	565	0.489	276	0.5	0.5	0.106	A
			2	B	89	566	0.158	89	0.2	0.2	0.106	A
		2	1	(A, B, C)	365			365	0.8	0.7	0.111	A
	Exit	1	1		100			100	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	519	942	0.551	520	1.4	0.9	0.102	A
			2	B	518	941	0.551	520	1.2	0.8	0.100	A

A - A256 Haine Road		**2**	**1**	(A, B, C)	1038			1038	0.1	0.0	0.001	A
	Exit	**1**	**1**		933			933	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	410	1223	0.335	410	0.6	0.4	0.059	A
			2	A	365	1218	0.300	365	0.4	0.3	0.056	A
		2	**1**	(A, B, C)	775			775	0.0	0.0	0.000	A
	Exit	**1**	**1**		1112			1112	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	234	609	0.384	234	0.5	0.4	0.099	A
			2	B	73	607	0.119	72	0.2	0.1	0.100	A
		2	**1**	(A, B, C)	307			307	0.7	0.3	0.062	A
	Exit	**1**	**1**		76			76	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	443	946	0.468	442	0.9	0.7	0.086	A
			2	B	439	945	0.464	440	0.8	0.7	0.087	A
		2	**1**	(A, B, C)	881			881	0.0	0.0	0.000	A
	Exit	**1**	**1**		769			769	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	342	1230	0.278	341	0.4	0.4	0.055	A
			2	A	299	1216	0.246	300	0.3	0.3	0.054	A
		2	**1**	(A, B, C)	641			641	0.0	0.0	0.000	A
	Exit	**1**	**1**		942			942	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	193	648	0.298	193	0.4	0.3	0.095	A
			2	B	60	645	0.093	60	0.1	0.1	0.093	A
		2	**1**	(A, B, C)	254			253	0.3	0.2	0.044	A
	Exit	**1**	**1**		64			64	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	0.22	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Cantebury 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	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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 Cantebury 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 Cantebury 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	0.319	929
		2	0.319	929
B - A256 Cantebury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.297	818
		2	0.297	818

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Cantebury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Cantebury 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 Cantebury 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 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1287	0
	B - A256 Cantebury Road	1147	0	80
	C - Canterbury Road West	292	105	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	5	0
	B - A256 Cantebury 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	0.17	3.9	B	1182	1773
B - A256 Cantebury Road	0.08	2.0	A	1127	1691
C - Canterbury Road West	0.82	6.2	E	365	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	967	242	80	969	1088	0.0	1.6	0.092	A
B - A256 Cantebury Road	931	233	0	932	1049	0.0	0.9	0.061	A
C - Canterbury Road West	299	75	868	300	64	0.0	0.8	0.161	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	1161	290	92	1161	1303	1.6	2.2	0.111	A
B - A256 Cantebury Road	1109	277	0	1110	1253	0.9	1.1	0.066	A
C - Canterbury Road West	357	89	1038	357	73	0.8	1.7	0.265	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	1412	353	116	1411	1579	2.2	3.8	0.164	A
B - A256 Cantebury Road	1353	338	0	1351	1527	1.1	2.0	0.078	A
C - Canterbury Road West	439	110	1261	434	90	1.7	5.5	0.616	E

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	1428	357	115	1426	1583	3.8	3.9	0.167	B
B - A256 Cantebury Road	1346	336	0	1347	1541	2.0	1.9	0.079	A
C - Canterbury Road West	443	111	1258	440	89	5.5	6.1	0.815	E

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	1153	288	93	1152	1299	3.9	2.2	0.115	A
B - A256 Cantebury Road	1110	278	0	1110	1245	1.9	1.3	0.068	A
C - Canterbury Road West	354	88	1038	354	72	6.1	1.8	0.417	C

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	971	243	80	970	1076	2.2	1.5	0.092	A
B - A256 Cantebury Road	913	228	0	912	1050	1.3	0.9	0.061	A
C - Canterbury Road West	301	75	855	301	57	1.8	0.9	0.187	B

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		

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	484	945	0.512	485	0.0	0.7	0.092	A
			2	B	483	944	0.512	483	0.0	0.8	0.091	A
		2	1	(A, B, C)	967			968	0.0	0.0	0.000	A
	Exit	1	1		1088			1088	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	484	1236	0.392	484	0.0	0.5	0.061	A
			2	A	446	1233	0.362	447	0.0	0.4	0.059	A
		2	1	(A, B, C)	931			930	0.0	0.0	0.001	A
	Exit	1	1		1049			1049	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	220	559	0.393	220	0.0	0.4	0.100	A
			2	B	80	564	0.142	80	0.0	0.1	0.099	A
		2	1	(A, B, C)	299			300	0.0	0.3	0.061	A
	Exit	1	1		64			64	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	583	940	0.620	583	0.7	1.1	0.109	A
			2	B	578	942	0.613	578	0.8	1.1	0.110	A
		2	1	(A, B, C)	1161			1161	0.0	0.0	0.001	A
	Exit	1	1		1303			1303	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	573	1235	0.464	573	0.5	0.6	0.065	A
			2	A	536	1231	0.436	537	0.4	0.5	0.063	A
		2	1	(A, B, C)	1109			1110	0.0	0.0	0.002	A
	Exit	1	1		1253			1253	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	265	504	0.526	265	0.4	0.5	0.117	A
			2	B	92	511	0.180	92	0.1	0.2	0.118	A
		2	1	(A, B, C)	357			357	0.3	1.0	0.147	A
	Exit	1	1		73			73	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	710	934	0.761	709	1.1	1.8	0.150	A
			2	B	703	935	0.752	702	1.1	1.8	0.151	A
		2	1	(A, B, C)	1412			1413	0.0	0.2	0.013	A
	Exit	1	1		1579			1579	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	696	1238	0.562	694	0.6	0.9	0.073	A
			2	A	658	1229	0.535	657	0.5	0.9	0.070	A
		2	1	(A, B, C)	1353			1354	0.0	0.1	0.007	A
	Exit	1	1		1527			1527	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	318	432	0.736	318	0.5	0.7	0.136	A
			2	B	116	437	0.266	116	0.2	0.3	0.135	A
		2	1	(A, B, C)	439			434	1.0	4.5	0.480	D
	Exit	1	1		90			90	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	715	933	0.766	714	1.8	1.7	0.152	A
			2	B	713	935	0.763	713	1.8	1.7	0.153	A
		2	1	(A, B, C)	1428			1428	0.2	0.4	0.014	A
	Exit	1	1		1583			1583	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	696	1239	0.562	696	0.9	0.9	0.073	A
			2	A	650	1229	0.529	651	0.9	0.8	0.070	A
		2	1	(A, B, C)	1346			1346	0.1	0.2	0.007	A
	Exit	1	1		1541			1541	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	325	433	0.751	325	0.7	0.7	0.139	A
			2	B	115	438	0.263	115	0.3	0.3	0.138	A
		2	1	(A, B, C)	443			440	4.5	5.1	0.676	E
	Exit	1	1		89			89	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	577	941	0.613	576	1.7	1.1	0.113	A
			2	B	576	943	0.611	576	1.7	1.1	0.113	A
		2	1	(A, B, C)	1153			1153	0.4	0.0	0.002	A

	Exit	**1**	**1**		1299			1299	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	575	1237	0.465	574	0.9	0.6	0.066	A
			2	A	536	1232	0.435	536	0.8	0.6	0.064	A
		2	**1**	(A, B, C)	1110			1110	0.2	0.1	0.003	A
	Exit	**1**	**1**		1245			1245	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	261	504	0.517	261	0.7	0.5	0.125	A
			2	B	93	509	0.182	93	0.3	0.2	0.122	A
		2	**1**	(A, B, C)	354			354	5.1	1.1	0.293	C
	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	485	947	0.512	484	1.1	0.8	0.092	A
			2	B	486	946	0.514	486	1.1	0.8	0.091	A
		2	**1**	(A, B, C)	971			971	0.0	0.0	0.000	A
	Exit	**1**	**1**		1076			1076	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	473	1236	0.383	472	0.6	0.5	0.061	A
			2	A	440	1236	0.356	440	0.6	0.4	0.059	A
		2	**1**	(A, B, C)	913			913	0.1	0.0	0.001	A
	Exit	**1**	**1**		1050			1050	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	220	562	0.392	221	0.5	0.4	0.108	A
			2	B	80	566	0.142	80	0.2	0.2	0.107	A
		2	**1**	(A, B, C)	301			301	1.1	0.4	0.079	A
	Exit	**1**	**1**		57			57	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.

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	1.33	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Cantebury 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	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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 Cantebury 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 Cantebury 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	0.319	929
		2	0.319	929
B - A256 Cantebury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.297	818
		2	0.297	818

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Cantebury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Cantebury 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 Cantebury 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 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1777	0
	B - A256 Cantebury Road	1254	0	125
	C - Canterbury Road West	363	144	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	3	0
	B - A256 Cantebury 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	1.54	57.1	F	1629	2443
B - A256 Cantebury Road	0.09	2.2	A	1263	1894
C - Canterbury Road West	3.96	40.6	F	468	702

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	1326	331	112	1325	1221	0.0	3.1	0.132	A
B - A256 Cantebury Road	1046	262	0	1046	1437	0.0	1.1	0.062	A
C - Canterbury Road West	379	95	950	383	96	0.0	1.3	0.205	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	1603	401	127	1603	1451	3.1	6.3	0.221	B
B - A256 Cantebury Road	1234	308	0	1233	1730	1.1	1.4	0.068	A
C - Canterbury Road West	465	116	1123	454	110	1.3	4.0	0.433	D

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	1967	492	134	1882	1729	6.3	35.6	0.768	E
B - A256 Cantebury Road	1525	381	0	1526	2016	1.4	2.1	0.090	A
C - Canterbury Road West	560	140	1384	479	142	4.0	23.4	1.744	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	1933	483	136	1875	1732	35.6	56.9	1.539	F
B - A256 Cantebury Road	1512	378	0	1516	2011	2.1	2.2	0.089	A
C - Canterbury Road West	561	140	1378	489	138	23.4	40.7	3.964	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	1605	401	153	1690	1494	56.9	16.1	1.037	F
B - A256 Cantebury Road	1227	307	0	1227	1842	2.2	1.4	0.069	A
C - Canterbury Road West	453	113	1115	532	112	40.7	18.5	3.168	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	1339	335	118	1351	1231	16.1	2.9	0.222	B
B - A256 Cantebury Road	1033	258	0	1030	1468	1.4	1.1	0.062	A
C - Canterbury Road West	390	97	935	414	95	18.5	2.5	0.826	E

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		

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	664	955	0.695	664	0.0	1.4	0.127	A
			2	B	661	952	0.694	661	0.0	1.5	0.127	A
		2	1	(A, B, C)	1326			1325	0.0	0.1	0.005	A
	Exit	1	1		1221			1221	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	548	1267	0.433	549	0.0	0.5	0.062	A
			2	A	498	1267	0.393	497	0.0	0.6	0.060	A
		2	1	(A, B, C)	1046			1046	0.0	0.0	0.001	A
	Exit	1	1		1437			1437	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	270	546	0.494	271	0.0	0.5	0.102	A
			2	B	112	550	0.204	112	0.0	0.2	0.100	A
		2	1	(A, B, C)	379			382	0.0	0.6	0.103	A
	Exit	1	1		96			96	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	804	949	0.848	804	1.4	2.6	0.179	B
			2	B	800	949	0.843	799	1.5	2.7	0.181	B
		2	1	(A, B, C)	1603			1605	0.1	1.1	0.041	A
	Exit	1	1		1451			1451	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	641	1262	0.508	641	0.5	0.8	0.067	A
			2	A	593	1269	0.468	593	0.6	0.6	0.064	A
		2	1	(A, B, C)	1234			1235	0.0	0.0	0.003	A
	Exit	1	1		1730			1730	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	328	490	0.669	327	0.5	0.7	0.119	A
			2	B	128	497	0.257	127	0.2	0.3	0.119	A
		2	1	(A, B, C)	465			456	0.6	3.0	0.314	C
	Exit	1	1		110			110	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	941	947	0.994	940	2.6	4.7	0.277	C
			2	B	942	947	0.995	942	2.7	4.6	0.279	C
		2	1	(A, B, C)	1967			1883	1.1	26.3	0.489	D
	Exit	1	1		1729			1729	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	794	1265	0.628	795	0.8	1.0	0.077	A
			2	A	731	1269	0.576	731	0.6	0.9	0.073	A
		2	1	(A, B, C)	1525			1525	0.0	0.2	0.015	A
	Exit	1	1		2016			2016	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	345	411	0.840	345	0.7	0.9	0.144	A
			2	B	134	414	0.324	134	0.3	0.3	0.142	A
		2	1	(A, B, C)	560			479	3.0	22.2	1.600	F
	Exit	1	1		142			142	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	939	945	0.994	940	4.7	4.8	0.299	C
			2	B	935	945	0.990	936	4.6	4.7	0.302	C
		2	1	(A, B, C)	1933			1875	26.3	47.4	1.238	F
	Exit	1	1		1732			1732	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	783	1264	0.620	786	1.0	0.9	0.077	A
			2	A	729	1265	0.576	731	0.9	0.9	0.072	A
		2	1	(A, B, C)	1512			1513	0.2	0.4	0.015	A
	Exit	1	1		2011			2011	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	353	412	0.858	353	0.9	0.9	0.147	A
			2	B	136	416	0.327	136	0.3	0.3	0.148	A
		2	1	(A, B, C)	561			489	22.2	39.5	3.821	F
	Exit	1	1		138			138	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	838	942	0.889	842	4.8	3.2	0.262	C
			2	B	843	938	0.898	848	4.7	3.1	0.262	C
		2	1	(A, B, C)	1605			1681	47.4	9.7	0.780	E

	Exit	**1**	**1**		1494			1494	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	637	1266	0.504	638	0.9	0.7	0.067	A
			2	A	590	1269	0.465	589	0.9	0.7	0.064	A
		2	**1**	(A, B, C)	1227			1227	0.4	0.0	0.003	A
	Exit	**1**	**1**		1842			1842	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	379	495	0.764	379	0.9	0.8	0.126	A
			2	B	152	501	0.304	153	0.3	0.3	0.127	A
		2	**1**	(A, B, C)	453			531	39.5	17.4	3.046	F
	Exit	**1**	**1**		112			112	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	680	951	0.715	682	3.2	1.4	0.153	A
			2	B	665	951	0.700	669	3.1	1.4	0.154	A
		2	**1**	(A, B, C)	1339			1345	9.7	0.1	0.073	A
	Exit	**1**	**1**		1231			1231	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	543	1262	0.430	542	0.7	0.6	0.062	A
			2	A	489	1270	0.385	488	0.7	0.5	0.059	A
		2	**1**	(A, B, C)	1033			1032	0.0	0.0	0.001	A
	Exit	**1**	**1**		1468			1468	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	296	550	0.538	296	0.8	0.5	0.112	A
			2	B	118	554	0.212	118	0.3	0.2	0.111	A
		2	**1**	(A, B, C)	390			414	17.4	1.7	0.712	E
	Exit	**1**	**1**		95			95	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	0.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Cantebury 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	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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 Cantebury 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 Cantebury 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	0.319	929
		2	0.319	929
B - A256 Cantebury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.297	818
		2	0.297	818

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Cantebury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Cantebury 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 Cantebury 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 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1213	0
	B - A256 Cantebury Road	951	0	89
	C - Canterbury Road West	262	83	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	5	0
	B - A256 Cantebury 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	0.14	3.6	A	1116	1675
B - A256 Cantebury Road	0.07	1.4	A	955	1432
C - Canterbury Road West	0.32	2.0	C	315	473

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	918	230	60	917	911	0.0	1.3	0.087	A
B - A256 Cantebury Road	785	196	0	786	977	0.0	0.7	0.057	A
C - Canterbury Road West	251	63	719	252	67	0.0	0.6	0.134	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	1088	272	78	1089	1092	1.3	1.7	0.100	A
B - A256 Cantebury Road	933	233	0	932	1167	0.7	1.1	0.060	A
C - Canterbury Road West	318	80	854	317	79	0.6	0.9	0.181	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	1348	337	88	1345	1335	1.7	3.3	0.136	A
B - A256 Cantebury Road	1154	288	0	1153	1433	1.1	1.3	0.068	A
C - Canterbury Road West	370	92	1050	374	103	0.9	1.5	0.270	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	1352	338	95	1348	1341	3.3	3.5	0.141	A
B - A256 Cantebury Road	1147	287	0	1147	1443	1.3	1.2	0.069	A
C - Canterbury Road West	383	96	1050	387	98	1.5	2.0	0.322	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	1079	270	73	1083	1079	3.5	1.6	0.105	A
B - A256 Cantebury Road	928	232	0	927	1156	1.2	0.9	0.060	A
C - Canterbury Road West	306	76	848	303	79	2.0	1.1	0.199	B

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	912	228	61	908	917	1.6	1.4	0.089	A
B - A256 Cantebury Road	781	195	0	782	969	0.9	0.8	0.057	A
C - Canterbury Road West	261	65	716	261	66	1.1	0.7	0.147	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

					Total				Start	End		

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	460	952	0.483	458	0.0	0.7	0.086	A
			2	B	459	955	0.480	459	0.0	0.6	0.088	A
		2	1	(A, B, C)	918			918	0.0	0.0	0.000	A
	Exit	1	1		911			911	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	410	1242	0.330	410	0.0	0.4	0.058	A
			2	A	376	1241	0.303	376	0.0	0.3	0.056	A
		2	1	(A, B, C)	785			786	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	191	606	0.316	192	0.0	0.3	0.094	A
			2	B	60	609	0.098	60	0.0	0.1	0.093	A
		2	1	(A, B, C)	251			251	0.0	0.2	0.040	A
	Exit	1	1		67			67	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	545	948	0.574	545	0.7	0.9	0.098	A
			2	B	544	950	0.573	544	0.6	0.8	0.100	A
		2	1	(A, B, C)	1088			1088	0.0	0.0	0.001	A
	Exit	1	1		1092			1092	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	488	1243	0.393	487	0.4	0.6	0.060	A
			2	A	445	1249	0.356	445	0.3	0.5	0.058	A
		2	1	(A, B, C)	933			933	0.0	0.0	0.001	A
	Exit	1	1		1167			1167	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	239	566	0.423	239	0.3	0.4	0.103	A
			2	B	79	563	0.140	78	0.1	0.2	0.106	A
		2	1	(A, B, C)	318			318	0.2	0.4	0.077	A
	Exit	1	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	671	944	0.711	670	0.9	1.6	0.131	A
			2	B	676	942	0.718	675	0.8	1.5	0.131	A
		2	1	(A, B, C)	1348			1347	0.0	0.3	0.005	A
	Exit	1	1		1335			1335	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	599	1243	0.482	599	0.6	0.7	0.067	A
			2	A	555	1243	0.447	555	0.5	0.6	0.064	A
		2	1	(A, B, C)	1154			1154	0.0	0.1	0.003	A
	Exit	1	1		1433			1433	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	285	503	0.566	285	0.4	0.5	0.117	A
			2	B	89	504	0.177	88	0.2	0.2	0.116	A
		2	1	(A, B, C)	370			374	0.4	0.8	0.153	A
	Exit	1	1		103			103	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	673	941	0.715	672	1.6	1.7	0.133	A
			2	B	677	946	0.716	676	1.5	1.6	0.134	A
		2	1	(A, B, C)	1352			1350	0.3	0.3	0.008	A
	Exit	1	1		1341			1341	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	601	1243	0.484	603	0.7	0.6	0.067	A
			2	A	546	1241	0.440	544	0.6	0.6	0.064	A
		2	1	(A, B, C)	1147			1147	0.1	0.0	0.003	A
	Exit	1	1		1443			1443	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	291	504	0.578	291	0.5	0.6	0.120	A
			2	B	95	499	0.190	95	0.2	0.1	0.117	A
		2	1	(A, B, C)	383			386	0.8	1.3	0.203	B
	Exit	1	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	539	949	0.568	540	1.7	0.8	0.104	A
			2	B	541	948	0.570	542	1.6	0.8	0.104	A
		2	1	(A, B, C)	1079			1079	0.3	0.0	0.001	A

	Exit	**1**	**1**		1079			1079	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	486	1243	0.391	485	0.6	0.5	0.060	A
			2	A	442	1247	0.354	442	0.6	0.4	0.059	A
		2	**1**	(A, B, C)	928			928	0.0	0.0	0.001	A
	Exit	**1**	**1**		1156			1156	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	231	567	0.409	230	0.6	0.5	0.110	A
			2	B	73	566	0.129	73	0.1	0.2	0.109	A
		2	**1**	(A, B, C)	306			304	1.3	0.4	0.090	A
	Exit	**1**	**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	458	948	0.484	457	0.8	0.7	0.089	A
			2	B	454	954	0.476	451	0.8	0.7	0.089	A
		2	**1**	(A, B, C)	912			912	0.0	0.0	0.000	A
	Exit	**1**	**1**		917			917	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	409	1237	0.331	409	0.5	0.5	0.058	A
			2	A	372	1240	0.300	373	0.4	0.3	0.056	A
		2	**1**	(A, B, C)	781			781	0.0	0.0	0.000	A
	Exit	**1**	**1**		969			969	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	200	604	0.332	200	0.5	0.3	0.099	A
			2	B	60	610	0.099	61	0.2	0.1	0.098	A
		2	**1**	(A, B, C)	261			261	0.4	0.3	0.049	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	0.17	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Cantebury 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	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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 Cantebury 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 Cantebury 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	0.319	929
		2	0.319	929
B - A256 Cantebury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.297	818
		2	0.297	818

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Cantebury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Cantebury 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 Cantebury 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 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1164	0
	B - A256 Cantebury Road	1065	0	80
	C - Canterbury Road West	292	105	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	4	0
	B - A256 Cantebury 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	0.13	2.7	A	1066	1599
B - A256 Cantebury Road	0.07	1.6	A	1050	1575
C - Canterbury Road West	0.57	4.5	D	365	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	871	218	82	872	1018	0.0	1.2	0.084	A
B - A256 Cantebury Road	858	215	0	858	954	0.0	0.9	0.059	A
C - Canterbury Road West	302	76	797	303	61	0.0	0.8	0.156	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	1055	264	93	1055	1223	1.2	1.8	0.098	A
B - A256 Cantebury Road	1028	257	0	1027	1148	0.9	1.1	0.064	A
C - Canterbury Road West	363	91	956	360	72	0.8	1.5	0.232	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	1271	318	116	1274	1489	1.8	2.7	0.126	A
B - A256 Cantebury Road	1258	315	0	1259	1390	1.1	1.6	0.074	A
C - Canterbury Road West	435	109	1170	434	89	1.5	4.0	0.500	D

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	1279	320	115	1283	1501	2.7	2.6	0.129	A
B - A256 Cantebury Road	1267	317	0	1267	1398	1.6	1.5	0.074	A
C - Canterbury Road West	440	110	1178	438	89	4.0	4.5	0.570	D

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	1048	262	95	1050	1219	2.6	1.7	0.099	A
B - A256 Cantebury Road	1031	258	0	1032	1145	1.5	1.0	0.064	A
C - Canterbury Road West	352	88	960	354	72	4.5	1.3	0.306	C

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	871	218	79	872	1017	1.7	1.2	0.085	A
B - A256 Cantebury Road	860	215	0	859	951	1.0	0.9	0.059	A
C - Canterbury Road West	298	75	797	299	62	1.3	0.8	0.177	B

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		

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	434	956	0.454	434	0.0	0.6	0.084	A
			2	B	438	954	0.459	438	0.0	0.6	0.084	A
		2	1	(A, B, C)	871			871	0.0	0.0	0.000	A
	Exit	1	1		1018			1018	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	447	1237	0.362	447	0.0	0.4	0.059	A
			2	A	411	1233	0.333	411	0.0	0.4	0.058	A
		2	1	(A, B, C)	858			858	0.0	0.0	0.001	A
	Exit	1	1		954			954	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	220	580	0.380	220	0.0	0.4	0.099	A
			2	B	82	586	0.139	82	0.0	0.1	0.098	A
		2	1	(A, B, C)	302			302	0.0	0.3	0.058	A
	Exit	1	1		61			61	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	529	953	0.555	529	0.6	0.9	0.097	A
			2	B	526	953	0.552	526	0.6	0.9	0.098	A
		2	1	(A, B, C)	1055			1055	0.0	0.0	0.000	A
	Exit	1	1		1223			1223	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	532	1236	0.430	532	0.4	0.5	0.064	A
			2	A	496	1232	0.402	496	0.4	0.5	0.061	A
		2	1	(A, B, C)	1028			1028	0.0	0.0	0.001	A
	Exit	1	1		1148			1148	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	268	531	0.505	268	0.4	0.5	0.112	A
			2	B	93	535	0.173	93	0.1	0.2	0.113	A
		2	1	(A, B, C)	363			361	0.3	0.8	0.120	A
	Exit	1	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	638	944	0.676	640	0.9	1.3	0.122	A
			2	B	634	944	0.672	635	0.9	1.3	0.123	A
		2	1	(A, B, C)	1271			1272	0.0	0.1	0.004	A
	Exit	1	1		1489			1489	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	651	1239	0.525	651	0.5	0.8	0.070	A
			2	A	608	1231	0.494	608	0.5	0.7	0.068	A
		2	1	(A, B, C)	1258			1259	0.0	0.1	0.005	A
	Exit	1	1		1390			1390	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	319	462	0.689	319	0.5	0.7	0.129	A
			2	B	116	467	0.248	116	0.2	0.3	0.125	A
		2	1	(A, B, C)	435			435	0.8	3.1	0.371	C
	Exit	1	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	643	944	0.681	644	1.3	1.3	0.125	A
			2	B	637	944	0.676	639	1.3	1.3	0.126	A
		2	1	(A, B, C)	1279			1280	0.1	0.0	0.004	A
	Exit	1	1		1501			1501	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	657	1236	0.531	656	0.8	0.8	0.070	A
			2	A	610	1233	0.495	611	0.7	0.6	0.068	A
		2	1	(A, B, C)	1267			1267	0.1	0.1	0.005	A
	Exit	1	1		1398			1398	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	323	457	0.706	323	0.7	0.7	0.131	A
			2	B	115	463	0.248	115	0.3	0.2	0.130	A
		2	1	(A, B, C)	440			438	3.1	3.5	0.439	D
	Exit	1	1		89			89	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	524	948	0.552	525	1.3	0.8	0.099	A
			2	B	524	950	0.552	525	1.3	0.9	0.099	A
		2	1	(A, B, C)	1048			1048	0.0	0.0	0.001	A

	Exit	**1**	**1**		1219			1219	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	535	1239	0.432	536	0.8	0.6	0.063	A
			2	A	496	1231	0.403	496	0.6	0.5	0.062	A
		2	**1**	(A, B, C)	1031			1031	0.1	0.0	0.001	A
	Exit	**1**	**1**		1145			1145	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	259	530	0.489	259	0.7	0.5	0.116	A
			2	B	95	534	0.177	95	0.2	0.2	0.117	A
		2	**1**	(A, B, C)	352			354	3.5	0.7	0.190	B
	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	435	956	0.455	435	0.8	0.6	0.084	A
			2	B	436	957	0.456	436	0.9	0.6	0.085	A
		2	**1**	(A, B, C)	871			871	0.0	0.0	0.000	A
	Exit	**1**	**1**		1017			1017	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	449	1236	0.364	449	0.6	0.5	0.059	A
			2	A	410	1232	0.333	410	0.5	0.4	0.058	A
		2	**1**	(A, B, C)	860			860	0.0	0.0	0.001	A
	Exit	**1**	**1**		951			951	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	220	581	0.378	220	0.5	0.4	0.105	A
			2	B	79	586	0.135	79	0.2	0.1	0.103	A
		2	**1**	(A, B, C)	298			299	0.7	0.3	0.072	A
	Exit	**1**	**1**		62			62	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.

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	0.71	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A256 Haine Road	
B	A256 Cantebury 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	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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 Cantebury 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 Cantebury 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	0.319	929
		2	0.319	929
B - A256 Cantebury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.297	818
		2	0.297	818

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Cantebury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Cantebury 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 Cantebury 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 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1665	0
	B - A256 Cantebury Road	1127	0	125
	C - Canterbury Road West	363	144	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	3	0
	B - A256 Cantebury 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	0.77	24.9	E	1524	2286
B - A256 Cantebury Road	0.08	2.0	A	1149	1724
C - Canterbury Road West	2.06	21.1	F	467	701

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	1258	314	111	1257	1126	0.0	2.4	0.117	A
B - A256 Cantebury Road	946	236	0	944	1368	0.0	0.9	0.060	A
C - Canterbury Road West	387	97	849	389	95	0.0	1.3	0.190	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	1490	373	131	1499	1329	2.4	4.2	0.185	B
B - A256 Cantebury Road	1113	278	0	1112	1630	0.9	1.2	0.065	A
C - Canterbury Road West	462	115	1001	459	111	1.3	2.9	0.353	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	1832	458	152	1794	1616	4.2	19.5	0.487	D
B - A256 Cantebury Road	1376	344	0	1373	1946	1.2	1.9	0.077	A
C - Canterbury Road West	559	140	1240	528	133	2.9	13.4	1.032	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	1824	456	152	1825	1628	19.5	24.9	0.773	E
B - A256 Cantebury Road	1383	346	0	1383	1977	1.9	2.0	0.078	A
C - Canterbury Road West	557	139	1247	533	136	13.4	21.2	2.064	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	1491	373	138	1509	1360	24.9	4.1	0.334	C
B - A256 Cantebury Road	1126	282	0	1127	1647	2.0	1.1	0.066	A
C - Canterbury Road West	454	114	1013	485	115	21.2	4.8	1.187	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	1253	313	113	1254	1132	4.1	2.3	0.122	A
B - A256 Cantebury Road	950	238	0	948	1367	1.1	1.1	0.059	A
C - Canterbury Road West	386	96	855	390	92	4.8	1.3	0.281	C

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		

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	627	955	0.657	628	0.0	1.1	0.114	A
			2	B	630	954	0.661	630	0.0	1.2	0.115	A
		2	1	(A, B, C)	1258			1258	0.0	0.0	0.002	A
	Exit	1	1		1126			1126	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	501	1265	0.396	501	0.0	0.5	0.060	A
			2	A	444	1269	0.350	443	0.0	0.5	0.058	A
		2	1	(A, B, C)	946			946	0.0	0.0	0.001	A
	Exit	1	1		1368			1368	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	277	577	0.480	277	0.0	0.4	0.098	A
			2	B	111	585	0.189	111	0.0	0.2	0.097	A
		2	1	(A, B, C)	387			387	0.0	0.7	0.092	A
	Exit	1	1		95			95	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	951	0.787	752	1.1	1.9	0.162	A
			2	B	745	948	0.786	748	1.2	1.9	0.162	A
		2	1	(A, B, C)	1490			1494	0.0	0.4	0.023	A
	Exit	1	1		1329			1329	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	580	1264	0.459	580	0.5	0.6	0.065	A
			2	A	533	1269	0.420	532	0.5	0.5	0.061	A
		2	1	(A, B, C)	1113			1113	0.0	0.0	0.002	A
	Exit	1	1		1630			1630	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	328	530	0.619	328	0.4	0.6	0.113	A
			2	B	131	536	0.244	131	0.2	0.2	0.113	A
		2	1	(A, B, C)	462			459	0.7	2.0	0.240	B
	Exit	1	1		111			111	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	896	939	0.954	894	1.9	4.2	0.252	C
			2	B	902	940	0.960	900	1.9	4.2	0.252	C
		2	1	(A, B, C)	1832			1798	0.4	11.2	0.234	B
	Exit	1	1		1616			1616	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	719	1264	0.569	717	0.6	0.9	0.073	A
			2	A	656	1266	0.518	656	0.5	0.8	0.068	A
		2	1	(A, B, C)	1376			1375	0.0	0.2	0.006	A
	Exit	1	1		1946			1946	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	376	455	0.827	376	0.6	0.8	0.126	A
			2	B	152	458	0.331	152	0.2	0.4	0.127	A
		2	1	(A, B, C)	559			528	2.0	12.2	0.905	F
	Exit	1	1		133			133	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	909	939	0.968	910	4.2	4.1	0.274	C
			2	B	914	941	0.972	915	4.2	4.1	0.273	C
		2	1	(A, B, C)	1824			1823	11.2	16.6	0.499	D
	Exit	1	1		1628			1628	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	714	1266	0.564	714	0.9	1.0	0.073	A
			2	A	669	1267	0.528	669	0.8	0.8	0.069	A
		2	1	(A, B, C)	1383			1383	0.2	0.2	0.007	A
	Exit	1	1		1977			1977	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	381	453	0.841	381	0.8	0.8	0.132	A
			2	B	153	458	0.333	152	0.4	0.4	0.133	A
		2	1	(A, B, C)	557			534	12.2	20.0	1.933	F
	Exit	1	1		136			136	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	753	946	0.796	757	4.1	1.8	0.198	B
			2	B	746	944	0.790	752	4.1	1.8	0.200	B
		2	1	(A, B, C)	1491			1499	16.6	0.5	0.140	A

	Exit	**1**	**1**		1360			1360	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	592	1265	0.468	592	1.0	0.6	0.065	A
			2	A	534	1268	0.421	535	0.8	0.5	0.062	A
		2	**1**	(A, B, C)	1126			1126	0.2	0.0	0.002	A
	Exit	**1**	**1**		1647			1647	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	347	525	0.661	347	0.8	0.7	0.117	A
			2	B	138	531	0.259	138	0.4	0.3	0.117	A
		2	**1**	(A, B, C)	454			485	20.0	3.9	1.072	F
	Exit	**1**	**1**		115			115	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	625	953	0.656	627	1.8	1.1	0.119	A
			2	B	628	954	0.659	627	1.8	1.2	0.119	A
		2	**1**	(A, B, C)	1253			1253	0.5	0.0	0.003	A
	Exit	**1**	**1**		1132			1132	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	503	1262	0.399	502	0.6	0.6	0.060	A
			2	A	447	1270	0.352	446	0.5	0.5	0.058	A
		2	**1**	(A, B, C)	950			950	0.0	0.0	0.001	A
	Exit	**1**	**1**		1367			1367	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	276	574	0.480	277	0.7	0.4	0.106	A
			2	B	113	579	0.196	113	0.3	0.2	0.106	A
		2	**1**	(A, B, C)	386			389	3.9	0.7	0.175	B
	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	0.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

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

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A256 Haine Road	3.70	8.22	24.0	35.0	45.8	53.0	
B - A256 Cantebury Road	7.37	8.21	1.9	20.8	45.8	0.0	
C - Canterbury Road West	3.43	7.35	18.3	23.3	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	0.638	1859
B - A256 Cantebury Road	0.829	2587
C - Canterbury Road West	0.594	1635

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 Cantebury 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 Cantebury 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	0.319	929
		2	0.319	929
B - A256 Cantebury Road	1 [Give-way line]	1	0.414	1294
		2	0.414	1294
C - Canterbury Road West	1 [Give-way line]	1	0.297	818
		2	0.297	818

Lane Movements

Arm	Lane Level	Lane	Destination arm		
			A256 Haine Road	A256 Cantebury Road	Canterbury Road West
A - A256 Haine Road	1 [Give-way line]	1		✓	
		2		✓	
	2	1	✓	✓	✓
B - A256 Cantebury 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 Cantebury 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 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	1110	0
	B - A256 Cantebury Road	915	0	89
	C - Canterbury Road West	262	83	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A256 Haine Road	B - A256 Cantebury Road	C - Canterbury Road West
From	A - A256 Haine Road	0	4	0
	B - A256 Cantebury 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	0.12	2.4	A	1019	1528
B - A256 Cantebury Road	0.07	1.3	A	921	1382
C - Canterbury Road West	0.30	2.0	C	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	828	207	61	827	881	0.0	1.1	0.082	A
B - A256 Cantebury Road	750	188	0	752	888	0.0	0.6	0.056	A
C - Canterbury Road West	260	65	682	260	70	0.0	0.5	0.134	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	992	248	71	993	1059	1.1	1.4	0.091	A
B - A256 Cantebury Road	904	226	0	906	1065	0.6	0.8	0.059	A
C - Canterbury Road West	303	76	827	303	79	0.5	0.8	0.174	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	1227	307	92	1228	1286	1.4	2.4	0.116	A
B - A256 Cantebury Road	1100	275	0	1099	1320	0.8	1.2	0.066	A
C - Canterbury Road West	383	96	1000	378	99	0.8	2.0	0.269	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	1219	305	94	1218	1308	2.4	2.4	0.117	A
B - A256 Cantebury Road	1110	277	0	1108	1312	1.2	1.3	0.066	A
C - Canterbury Road West	385	96	1014	388	94	2.0	1.7	0.296	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	1001	250	76	1002	1062	2.4	1.5	0.093	A
B - A256 Cantebury Road	906	227	0	904	1078	1.3	1.0	0.060	A
C - Canterbury Road West	310	78	828	309	76	1.7	1.0	0.187	B

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	847	212	61	846	887	1.5	1.2	0.084	A
B - A256 Cantebury Road	759	190	0	760	907	1.0	0.7	0.057	A
C - Canterbury Road West	263	66	687	261	73	1.0	0.8	0.142	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	416	965	0.431	414	0.0	0.6	0.082	A
			2	B	412	960	0.430	412	0.0	0.5	0.082	A
		2	1	(A, B, C)	828			828	0.0	0.0	0.000	A
	Exit	1	1		881			881	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	393	1247	0.315	394	0.0	0.3	0.056	A
			2	A	357	1239	0.288	358	0.0	0.3	0.056	A
		2	1	(A, B, C)	750			750	0.0	0.0	0.000	A
	Exit	1	1		888			888	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	199	621	0.320	199	0.0	0.3	0.091	A
			2	B	61	614	0.099	61	0.0	0.1	0.094	A
		2	1	(A, B, C)	260			259	0.0	0.2	0.042	A
	Exit	1	1		70			70	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	500	960	0.521	501	0.6	0.7	0.090	A
			2	B	493	956	0.515	493	0.5	0.7	0.091	A
		2	1	(A, B, C)	992			992	0.0	0.0	0.000	A
	Exit	1	1		1059			1059	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	472	1242	0.380	473	0.3	0.4	0.060	A
			2	A	432	1244	0.347	433	0.3	0.3	0.058	A
		2	1	(A, B, C)	904			904	0.0	0.0	0.001	A
	Exit	1	1		1065			1065	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	231	573	0.404	232	0.3	0.3	0.102	A
			2	B	72	580	0.125	71	0.1	0.2	0.101	A
		2	1	(A, B, C)	303			303	0.2	0.3	0.071	A
	Exit	1	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	614	952	0.645	613	0.7	1.2	0.114	A
			2	B	614	950	0.645	615	0.7	1.2	0.114	A
		2	1	(A, B, C)	1227			1228	0.0	0.0	0.002	A
	Exit	1	1		1286			1286	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	579	1245	0.465	579	0.4	0.7	0.064	A
			2	A	520	1245	0.418	520	0.3	0.5	0.063	A
		2	1	(A, B, C)	1100			1100	0.0	0.1	0.002	A
	Exit	1	1		1320			1320	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	287	519	0.554	286	0.3	0.6	0.115	A
			2	B	91	521	0.175	92	0.2	0.2	0.113	A
		2	1	(A, B, C)	383			379	0.3	1.2	0.154	A
	Exit	1	1		99			99	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	612	951	0.644	612	1.2	1.2	0.115	A
			2	B	607	953	0.637	606	1.2	1.2	0.115	A
		2	1	(A, B, C)	1219			1219	0.0	0.0	0.001	A
	Exit	1	1		1308			1308	0.0	0.0	0.000	A
B - A256 Cantebury Road	Entry	1	1	A, C	577	1244	0.464	577	0.7	0.6	0.065	A
			2	A	533	1240	0.430	532	0.5	0.6	0.063	A
		2	1	(A, B, C)	1110			1110	0.1	0.0	0.002	A
	Exit	1	1		1312			1312	0.0	0.0	0.000	A
C - Canterbury Road West	Entry	1	1	A	293	515	0.570	294	0.6	0.5	0.116	A
			2	B	94	517	0.182	94	0.2	0.2	0.115	A
		2	1	(A, B, C)	385			387	1.2	1.0	0.181	B
	Exit	1	1		94			94	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	501	957	0.524	501	1.2	0.8	0.094	A
			2	B	500	955	0.523	501	1.2	0.7	0.092	A

A - A256 Haine Road		**2**	**1**	(A, B, C)	1001			1001	0.0	0.0	0.000	A
	Exit	**1**	**1**		1062			1062	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	476	1244	0.383	476	0.6	0.5	0.060	A
			2	A	430	1242	0.346	428	0.6	0.5	0.058	A
		2	**1**	(A, B, C)	906			906	0.0	0.0	0.001	A
	Exit	**1**	**1**		1078			1078	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	233	576	0.405	233	0.5	0.4	0.107	A
			2	B	76	565	0.135	76	0.2	0.2	0.107	A
		2	**1**	(A, B, C)	310			309	1.0	0.4	0.080	A
	Exit	**1**	**1**		76			76	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	419	955	0.438	419	0.8	0.6	0.083	A
			2	B	428	964	0.444	427	0.7	0.6	0.084	A
		2	**1**	(A, B, C)	847			847	0.0	0.0	0.000	A
	Exit	**1**	**1**		887			887	0.0	0.0	0.000	A
B - A256 Cantebury Road	**Entry**	**1**	**1**	A, C	403	1240	0.325	404	0.5	0.3	0.057	A
			2	A	356	1236	0.288	356	0.5	0.3	0.055	A
		2	**1**	(A, B, C)	759			759	0.0	0.0	0.000	A
	Exit	**1**	**1**		907			907	0.0	0.0	0.000	A
C - Canterbury Road West	**Entry**	**1**	**1**	A	200	617	0.324	199	0.4	0.4	0.097	A
			2	B	62	614	0.101	61	0.2	0.1	0.101	A
		2	**1**	(A, B, C)	263			262	0.4	0.3	0.044	A
	Exit	**1**	**1**		73			73	0.0	0.0	0.000	A