



RiverOak Strategic Partners

5.2- 18

**Environmental Statement
Volume 18: Transport
Assessment, Appendix D
(Junctions 21B to 28) and
Appendix E**

TR020002/ APP/ 5.2-18

Project Name:

Manston Airport Development Consent Order

Regulation:

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

Date:

July 2018



Volume 18 Contents

**Transport Assessment Appendix D - Base 2017 Models
(Junctions 21B to 28)**

Appendix E - Traffic Generation

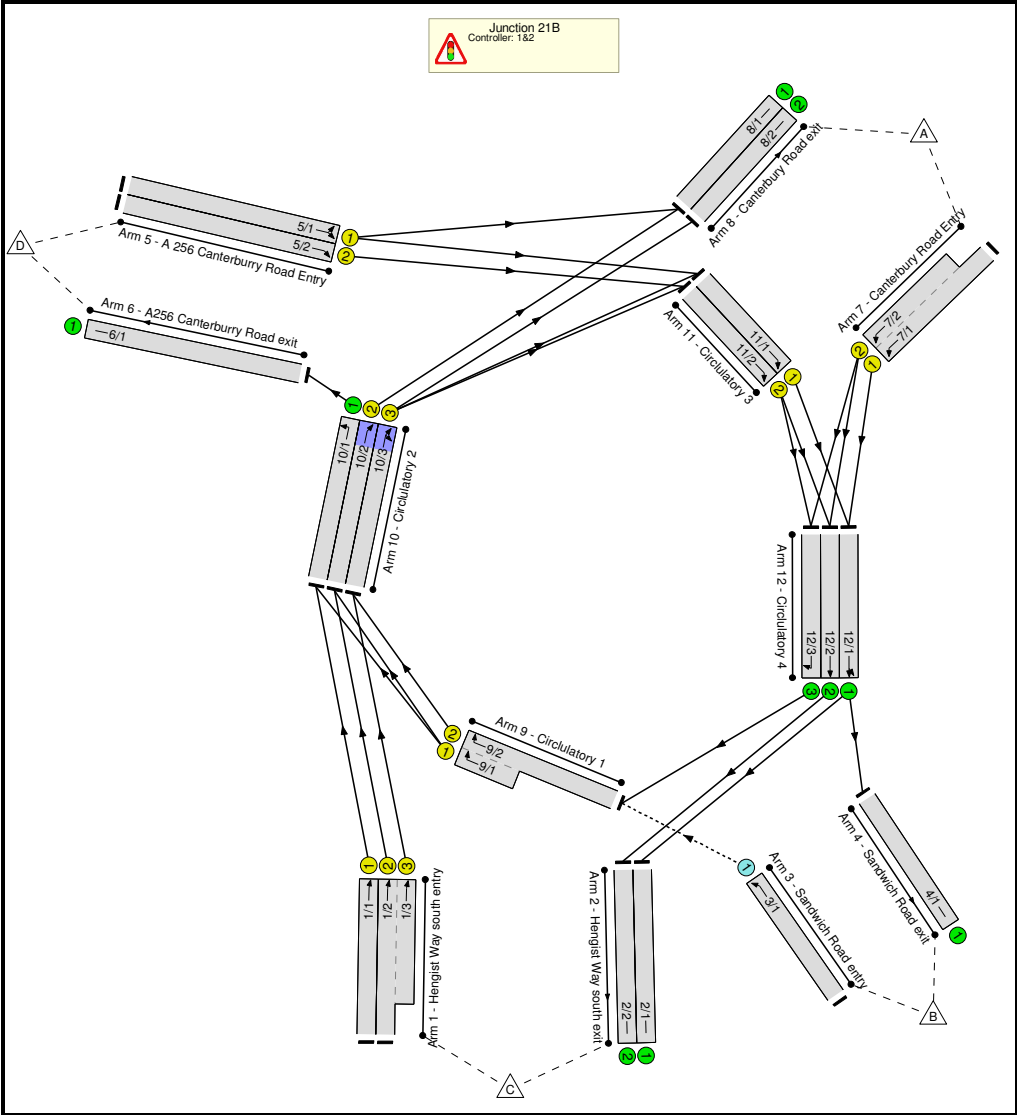
Full Input Data And Results

Full Input Data And Results

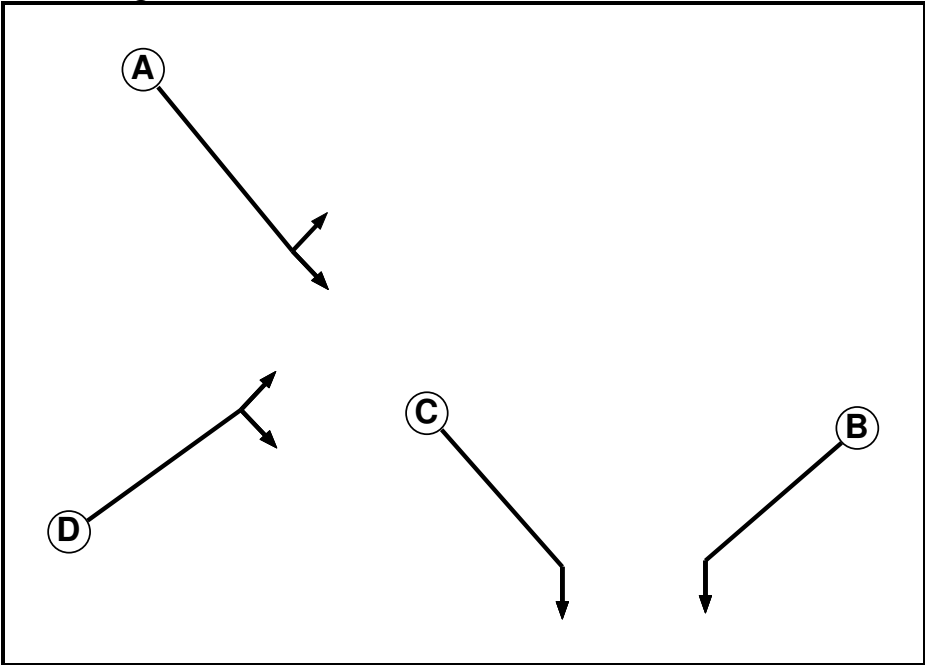
User and Project Details

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

Network Layout Diagram



C1 - 08-1078
Phase Diagram



Phase Input Data

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

Full Input Data And Results

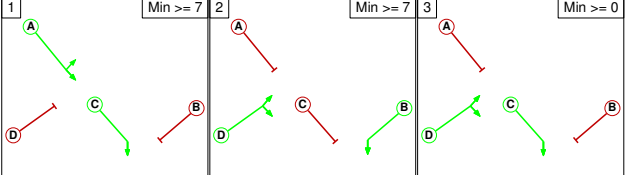
Phase Intergreens Matrix

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

Phases in Stage

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

Stage Diagram



Phase Delays

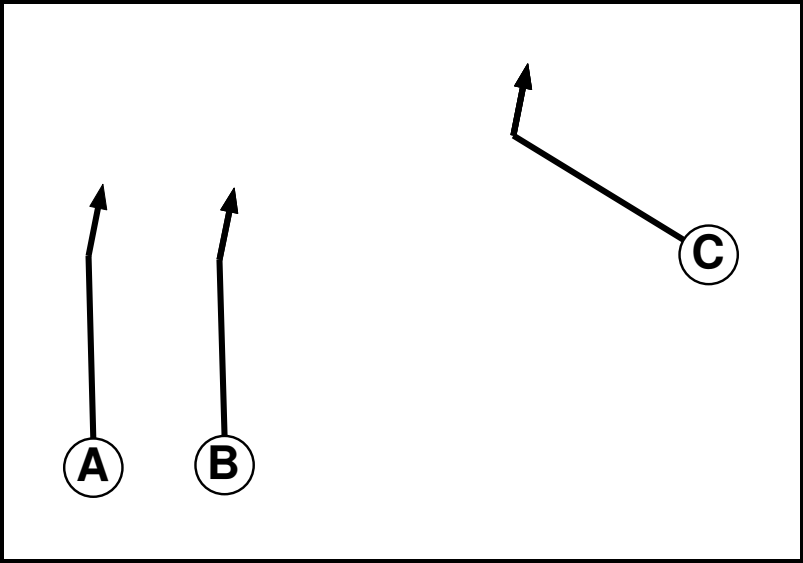
Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	C	Losing	6	6

Full Input Data And Results

Prohibited Stage Change

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

C2 - 08-1079
Phase Diagram



Phase Input Data

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

Full Input Data And Results

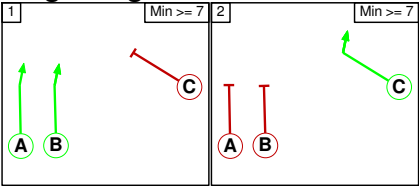
Phase Intergreens Matrix

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

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	C

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage		
		1	2
	1		5
	2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Junction 21B											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
3/1 (Sandwich Road entry)	9/2 (Ahead)	440	0	12/2	0.12	All	-	-	-	-	-
				12/1	0.12	To 2/1 (Ahead)					

Full Input Data And Results

Lane Input Data

Junction: Junction 21B												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Hengist Way south entry)	U	A	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 10 Ahead	Inf
1/2 (Hengist Way south entry)	U	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 10 Ahead	Inf
1/3 (Hengist Way south entry)	U	B	2	3	15.0	Geom	-	3.65	0.00	Y	Arm 10 Ahead	Inf
2/1 (Hengist Way south exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
2/2 (Hengist Way south exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (Sandwich Road entry)	O		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 9 Ahead	50.00
4/1 (Sandwich Road exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (A 256 Canterbury Road Entry)	U	A	2	3	14.0	Geom	-	4.00	0.00	Y	Arm 8 Left	153.00
5/2 (A 256 Canterbury Road Entry)	U	A	2	3	14.0	Geom	-	4.00	0.00	Y	Arm 11 Ahead	30.00
6/1 (A256 Canterbury Road exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Canterbury Road Entry)	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 12 Left	20.00
7/2 (Canterbury Road Entry)	U	B	2	3	18.0	Geom	-	3.50	0.00	Y	Arm 12 Left	20.00
8/1 (Canterbury Road exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/2 (Canterbury Road exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

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

Traffic Flow Groups

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

Full Input Data And Results

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

Traffic Flows, Desired

Desired Flow :

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

Traffic Lane Flows

Lane	Scenario 1: 2017 Baseline Traffic - AM Peak
Junction: Junction 21B	
1/1	654
1/2 (with short)	697(In) 338(Out)
1/3 (short)	359
2/1	753
2/2	956
3/1	140
4/1	225
5/1	538
5/2	518
6/1	896
7/1 (with short)	1205(In) 603(Out)
7/2 (short)	602

Full Input Data And Results

8/1	548
8/2	374
9/1 (short)	285
9/2 (with short)	318(In) 33(Out)
10/1	896
10/2	381
10/3	392
11/1	375
11/2	532
12/1	978
12/2	956
12/3	178

Lane Saturation Flows

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

Full Input Data And Results

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

Full Input Data And Results

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

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

Traffic Lane Flows

Lane	Scenario 2: 2017 Baseline Traffic - PM Peak
Junction: Junction 21B	
1/1	824
1/2 (with short)	842(In) 425(Out)
1/3 (short)	417
2/1	485
2/2	855
3/1	199
4/1	295
5/1	670
5/2	630
6/1	1095
7/1 (with short)	809(In) 405(Out)
7/2 (short)	404

Full Input Data And Results

8/1	780
8/2	464
9/1 (short)	322
9/2 (with short)	381(In) 59(Out)
10/1	1095
10/2	476
10/3	476
11/1	375
11/2	633
12/1	780
12/2	855
12/3	182

Lane Saturation Flows

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

Full Input Data And Results

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

Full Input Data And Results

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

Traffic Flows, Desired

Desired Flow :

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

Traffic Lane Flows

Lane	Scenario 3: 2017 Baseline Traffic - Airport Peak
Junction: Junction 21B	
1/1	409
1/2 (with short)	513(In) 250(Out)
1/3 (short)	263
2/1	408
2/2	628
3/1	161
4/1	236
5/1	471
5/2	444
6/1	670
7/1 (with short)	676(In) 338(Out)
7/2 (short)	338

Full Input Data And Results

8/1	459
8/2	273
9/1 (short)	293
9/2 (with short)	320(In) 27(Out)
10/1	670
10/2	282
10/3	290
11/1	306
11/2	449
12/1	644
12/2	628
12/3	159

Lane Saturation Flows

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

Full Input Data And Results

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

Full Input Data And Results

Scenario 4: '2039 Growthed Traffic - AM Peak' (FG4: '2039 Growthed Traffic - AM Peak', Plan 2: 'AM Peak')

Traffic Flows, Desired

Desired Flow :

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

Traffic Lane Flows

Lane	Scenario 4: 2039 Growthed Traffic - AM Peak
Junction: Junction 21B	
1/1	821
1/2 (with short)	876(In) 412(Out)
1/3 (short)	464
2/1	947
2/2	1195
3/1	176
4/1	282
5/1	677
5/2	646
6/1	1124
7/1 (with short)	1509(In) 755(Out)
7/2 (short)	754

Full Input Data And Results

8/1	698
8/2	459
9/1 (short)	381
9/2 (with short)	399(In) 18(Out)
10/1	1124
10/2	490
10/3	482
11/1	474
11/2	664
12/1	1229
12/2	1195
12/3	223

Lane Saturation Flows

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

Full Input Data And Results

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

Full Input Data And Results

Scenario 5: '2039 Growthed Traffic - PM Peak' (FG5: '2039 Growthed Traffic - PM Peak', Plan 3: 'PM Peak')

Traffic Flows, Desired

Desired Flow :

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

Traffic Lane Flows

Lane	Scenario 5: 2039 Growthed Traffic - PM Peak
Junction: Junction 21B	
1/1	1040
1/2 (with short)	1063(In) 507(Out)
1/3 (short)	556
2/1	609
2/2	1083
3/1	251
4/1	372
5/1	842
5/2	799
6/1	1382
7/1 (with short)	1021(In) 511(Out)
7/2 (short)	510

Full Input Data And Results

8/1	1024
8/2	546
9/1 (short)	476
9/2 (with short)	481(In) 5(Out)
10/1	1382
10/2	641
10/3	561
11/1	470
11/2	803
12/1	981
12/2	1083
12/3	230

Lane Saturation Flows

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

Full Input Data And Results

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

Full Input Data And Results

Scenario 6: '2039 Growthed Traffic - Airport Peak' (FG6: '2039 Growthed Traffic - Airport Peak', Plan 4: 'Airport Peak')

Traffic Flows, Desired

Desired Flow :

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

Traffic Lane Flows

Lane	Scenario 6: 2039 Growthed Traffic - Airport Peak
Junction: Junction 21B	
1/1	548
1/2 (with short)	687(In) 331(Out)
1/3 (short)	356
2/1	547
2/2	843
3/1	215
4/1	315
5/1	629
5/2	596
6/1	896
7/1 (with short)	905(In) 453(Out)
7/2 (short)	452

Full Input Data And Results

8/1	639
8/2	340
9/1 (short)	420
9/2 (with short)	427(In) 7(Out)
10/1	896
10/2	403
10/3	363
11/1	409
11/2	603
12/1	862
12/2	843
12/3	212

Lane Saturation Flows

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

Full Input Data And Results

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

Full Input Data And Results

Scenario 7: '2039 + Dev Traffic - AM Peak' (FG7: '2039 + Dev Traffic - AM Peak', Plan 2: 'AM Peak')

Traffic Flows, Desired

Desired Flow :

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

Traffic Lane Flows

Lane	Scenario 7: 2039 + Dev Traffic - AM Peak
Junction: Junction 21B	
1/1	938
1/2 (with short)	876(In) 410(Out)
1/3 (short)	466
2/1	973
2/2	1186
3/1	179
4/1	282
5/1	689
5/2	658
6/1	1286
7/1 (with short)	1551(In) 776(Out)
7/2 (short)	775
8/1	703

Full Input Data And Results

8/2	461
9/1 (short)	426
9/2 (with short)	444(In) 18(Out)
10/1	1286
10/2	488
10/3	484
11/1	479
11/2	676
12/1	1255
12/2	1186
12/3	265

Lane Saturation Flows

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

Full Input Data And Results

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

Full Input Data And Results

Scenario 8: '2039 + Dev Traffic - PM Peak' (FG8: '2039 + Dev Traffic - PM Peak', Plan 3: 'PM Peak')

Traffic Flows, Desired

Desired Flow :

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

Traffic Lane Flows

Lane	Scenario 8: 2039 + Dev Traffic - PM Peak
Junction: Junction 21B	
1/1	1059
1/2 (with short)	1063(In) 507(Out)
1/3 (short)	556
2/1	653
2/2	1169
3/1	251
4/1	376
5/1	933
5/2	891
6/1	1410
7/1 (with short)	1026(In) 513(Out)
7/2 (short)	513
8/1	1069

Full Input Data And Results

8/2	546
9/1 (short)	485
9/2 (with short)	490(In) 5(Out)
10/1	1410
10/2	641
10/3	561
11/1	516
11/2	895
12/1	1029
12/2	1169
12/3	239

Lane Saturation Flows

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

Full Input Data And Results

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

Full Input Data And Results

Scenario 9: '2039 + Dev Traffic - Airport Peak' (FG9: '2039 + Dev Traffic - Airport Peak', Plan 4: 'Airport Peak')

Traffic Flows, Desired

Desired Flow :

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

Traffic Lane Flows

Lane	Scenario 9: 2039 + Dev Traffic - Airport Peak
Junction: Junction 21B	
1/1	687
1/2 (with short)	687(In) 333(Out)
1/3 (short)	354
2/1	583
2/2	846
3/1	220
4/1	315
5/1	655
5/2	622
6/1	1087
7/1 (with short)	952(In) 476(Out)
7/2 (short)	476

Full Input Data And Results

8/1	654
8/2	338
9/1 (short)	472
9/2 (with short)	479(In) 7(Out)
10/1	1087
10/2	405
10/3	361
11/1	422
11/2	629
12/1	898
12/2	846
12/3	259

Lane Saturation Flows

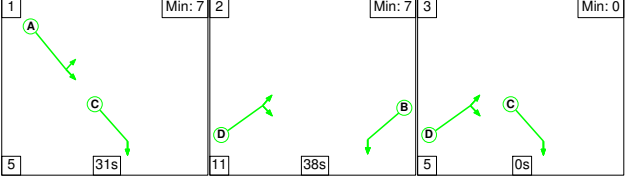
Junction: Junction 21B								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Hengist Way south entry)	3.70	0.00	Y	Arm 10 Ahead	Inf	100.0 %	1985	1985
1/2 (Hengist Way south entry)	3.65	0.00	Y	Arm 10 Ahead	Inf	100.0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

Full Input Data And Results

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

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

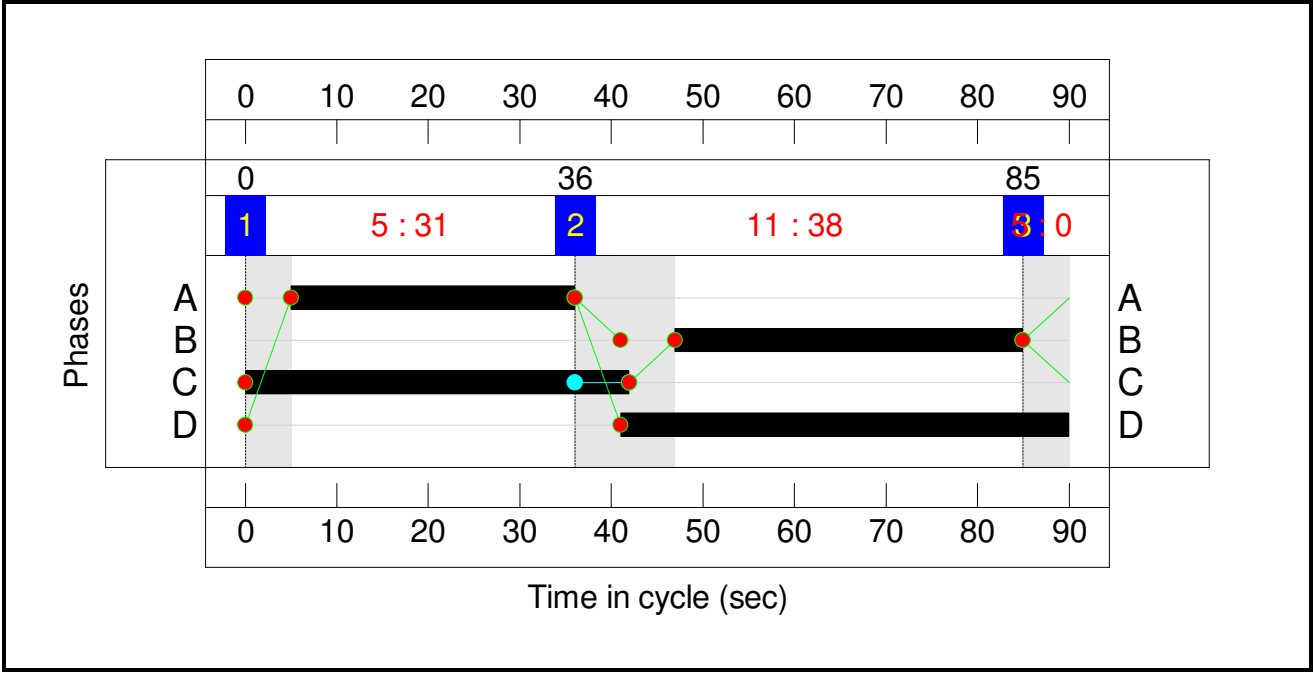
Stage Sequence Diagram



Stage Timings

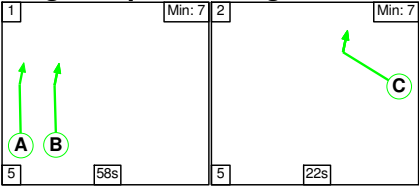
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Change Point	0	36	85

Signal Timings Diagram



Full Input Data And Results

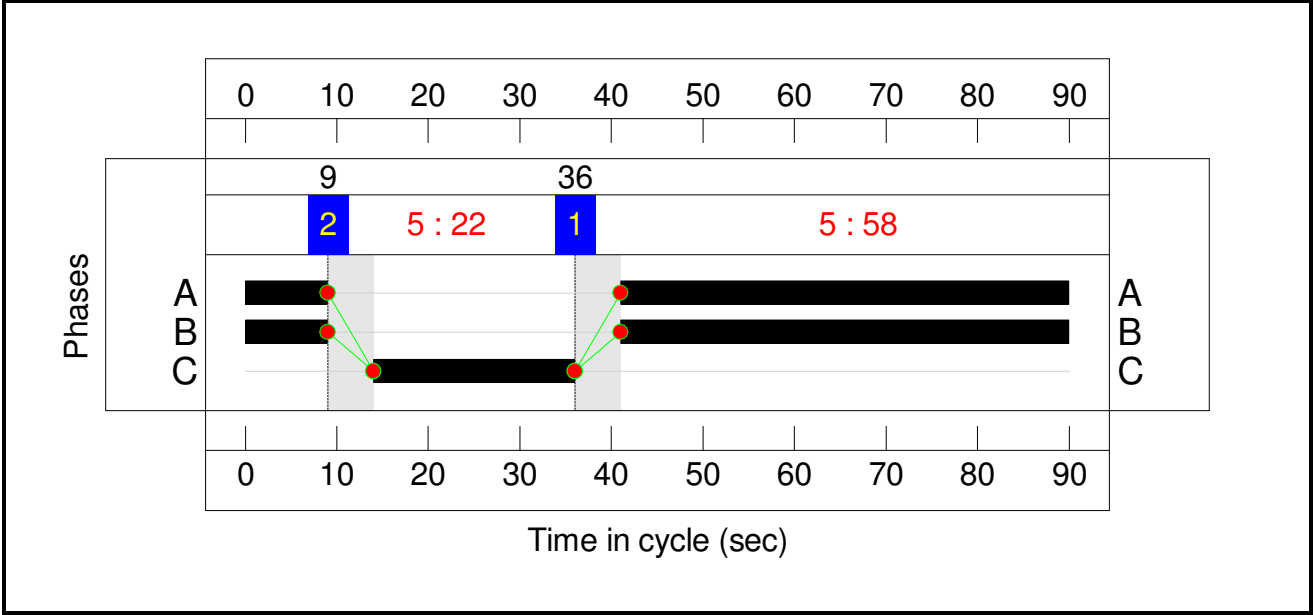
C2 - 08-1079
Stage Sequence Diagram



Stage Timings

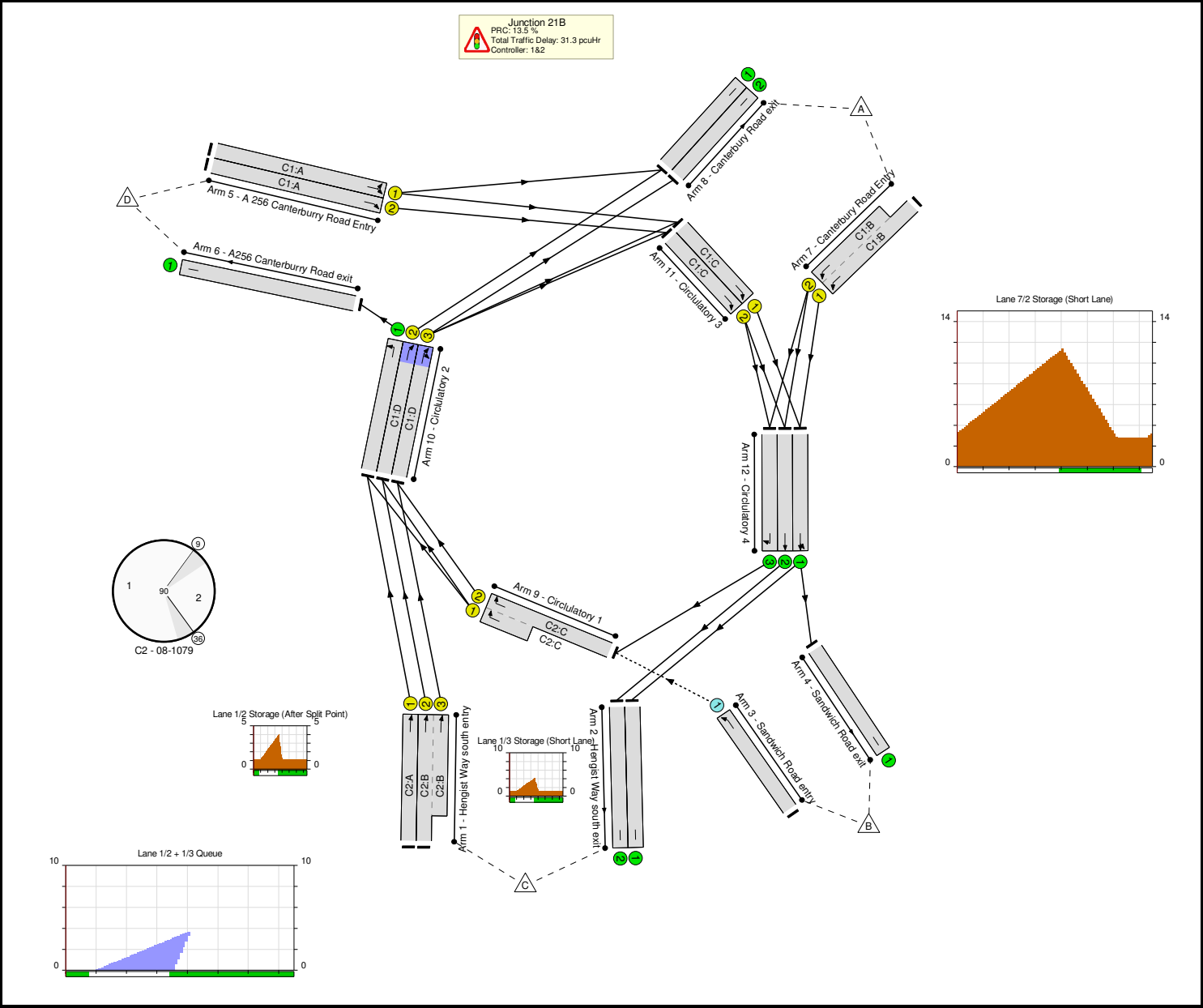
Stage	1	2
Duration	58	22
Change Point	36	9

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21b	-	-	N/A	-	-		-	-	-	-	-	-	79.3%
Junction 21B	-	-	N/A	-	-		-	-	-	-	-	-	79.3%
1/1	Hengist Way south entry Ahead	U	N/A	N/A	C2:A		1	58	-	654	1985	1301	50.3%
1/2+1/3	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	58	-	697	1980:1980	906+963	37.3 : 37.3%
2/1	Hengist Way south exit	U	N/A	N/A	-		-	-	-	753	Inf	Inf	0.0%
2/2	Hengist Way south exit	U	N/A	N/A	-		-	-	-	956	Inf	Inf	0.0%
3/1	Sandwich Road entry Ahead	O	N/A	N/A	-		-	-	-	140	1908	235	59.6%
4/1	Sandwich Road exit	U	N/A	N/A	-		-	-	-	225	Inf	Inf	0.0%
5/1	A 256 Canterbury Road Entry Left Ahead	U	N/A	N/A	C1:A		1	31	-	538	1942	690	77.9%
5/2	A 256 Canterbury Road Entry Ahead	U	N/A	N/A	C1:A		1	31	-	518	1919	682	75.9%
6/1	A256 Canterbury Road exit	U	N/A	N/A	-		-	-	-	896	Inf	Inf	0.0%
7/1+7/2	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	38	-	1205	1828:1828	761+759	79.3 : 79.3%
8/1	Canterbury Road exit	U	N/A	N/A	-		-	-	-	548	Inf	Inf	0.0%
8/2	Canterbury Road exit	U	N/A	N/A	-		-	-	-	374	Inf	Inf	0.0%
9/2+9/1	Circlulatory 1 Right	U	N/A	N/A	C2:C		1	22	-	318	1766:1796	50+432	66.0 : 66.0%
10/1	Circlulatory 2 Left	U	N/A	N/A	-		-	-	-	896	Inf	Inf	0.0%

Full Input Data And Results

10/2	Circlulatory 2 Ahead	U	N/A	N/A	C1:D		1	49	-	381	1922	1068	35.7%
10/3	Circlulatory 2 Ahead Right	U	N/A	N/A	C1:D		1	49	-	392	1914	1063	36.9%
11/1	Circlulatory 3 Ahead	U	N/A	N/A	C1:C		1	42	-	375	2040	975	38.5%
11/2	Circlulatory 3 Ahead	U	N/A	N/A	C1:C		1	42	-	532	2040	975	54.6%
12/1	Circlulatory 4 Ahead Ahead2	U	N/A	N/A	-		-	-	-	978	Inf	Inf	0.0%
12/2	Circlulatory 4 Ahead	U	N/A	N/A	-		-	-	-	956	Inf	Inf	0.0%
12/3	Circlulatory 4 Right	U	N/A	N/A	-		-	-	-	178	Inf	Inf	0.0%

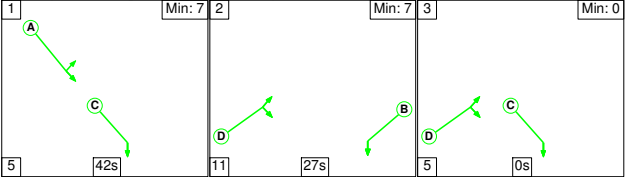
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	140	0	0	22.1	9.1	0.0	31.3	-	-	-	-
Junction 21B	-	-	140	0	0	22.1	9.1	0.0	31.3	-	-	-	-
1/1	654	654	-	-	-	1.4	0.5	-	2.0	10.7	8.4	0.5	8.9
1/2+1/3	697	697	-	-	-	1.3	0.3	-	1.6	8.0	3.7	0.3	4.0
2/1	753	753	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	956	956	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	140	140	140	0	0	0.1	0.7	-	0.8	20.1	1.1	0.7	1.8
4/1	225	225	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	538	538	-	-	-	3.9	1.7	-	5.6	37.4	12.0	1.7	13.7
5/2	518	518	-	-	-	3.7	1.5	-	5.2	36.4	11.4	1.5	12.9
6/1	896	896	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	1205	1205	-	-	-	7.2	1.9	-	9.1	27.2	12.7	1.9	14.6
8/1	548	548	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	374	374	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	318	318	-	-	-	3.0	1.0	-	4.0	44.7	7.0	1.0	8.0
10/1	896	896	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	381	381	-	-	-	0.7	0.3	-	1.0	9.4	2.4	0.3	2.7
10/3	392	392	-	-	-	0.7	0.3	-	1.0	9.3	2.3	0.3	2.6
11/1	375	375	-	-	-	0.0	0.3	-	0.3	3.3	0.1	0.3	0.4
11/2	532	532	-	-	-	0.2	0.6	-	0.8	5.2	0.4	0.6	1.0
12/1	978	978	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	956	956	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	178	178	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 - 08-1078 C2 - 08-1079													
PRC for Signalled Lanes (%):					13.5	Total Delay for Signalled Lanes (pcuHr):			23.04	Cycle Time (s): 90			
PRC for Signalled Lanes (%):					36.5	Total Delay for Signalled Lanes (pcuHr):			7.45	Cycle Time (s): 90			
PRC Over All Lanes (%):					13.5	Total Delay Over All Lanes(pcuHr):			31.28				

Full Input Data And Results

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

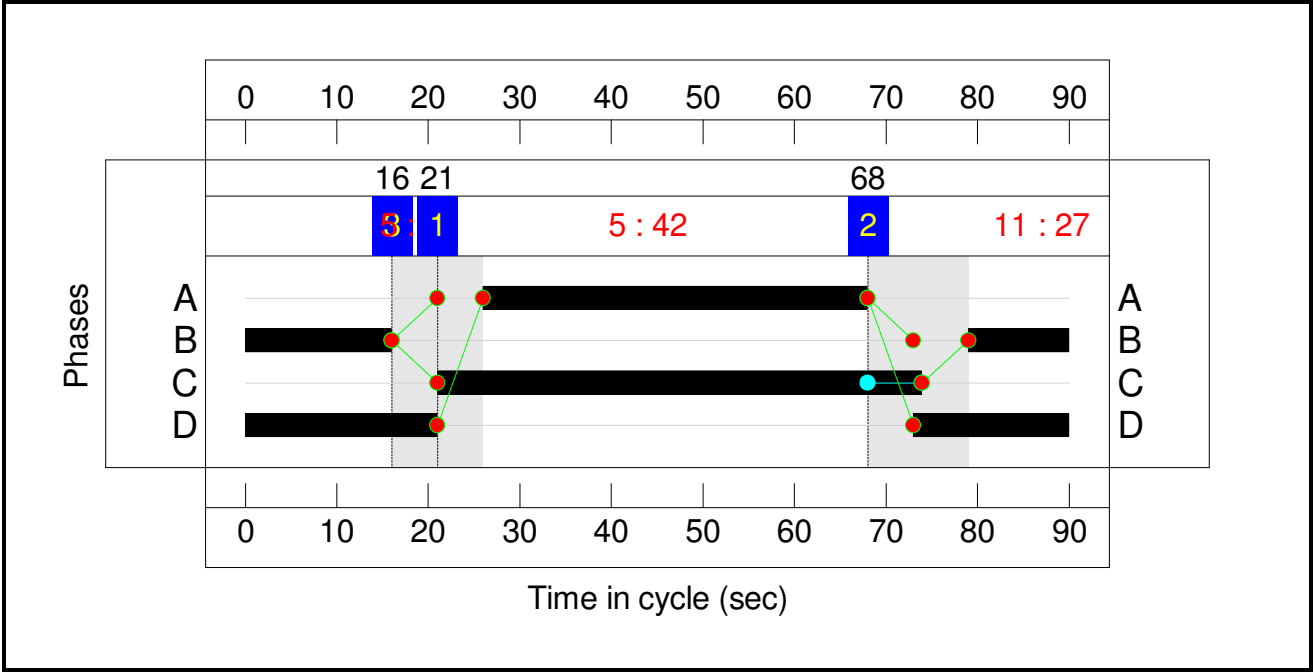
Stage Sequence Diagram



Stage Timings

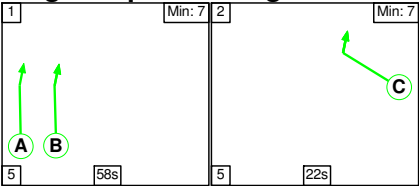
Stage	1	2	3
Duration	42	27	0
Change Point	21	68	16

Signal Timings Diagram



Full Input Data And Results

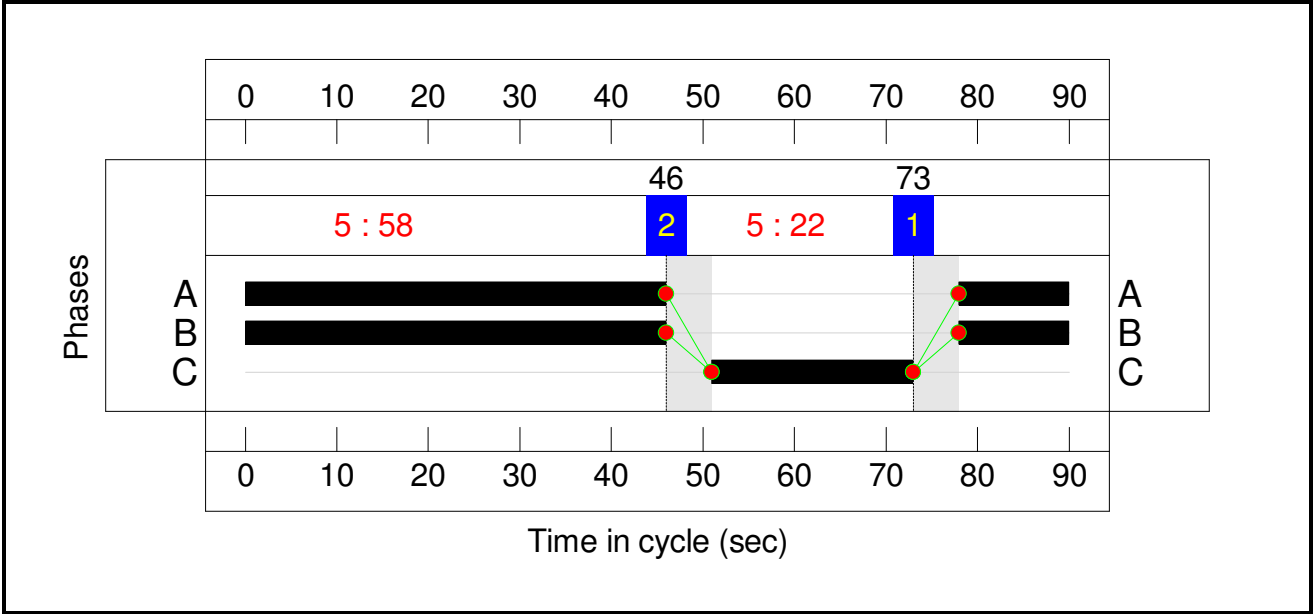
C2 - 08-1079
Stage Sequence Diagram



Stage Timings

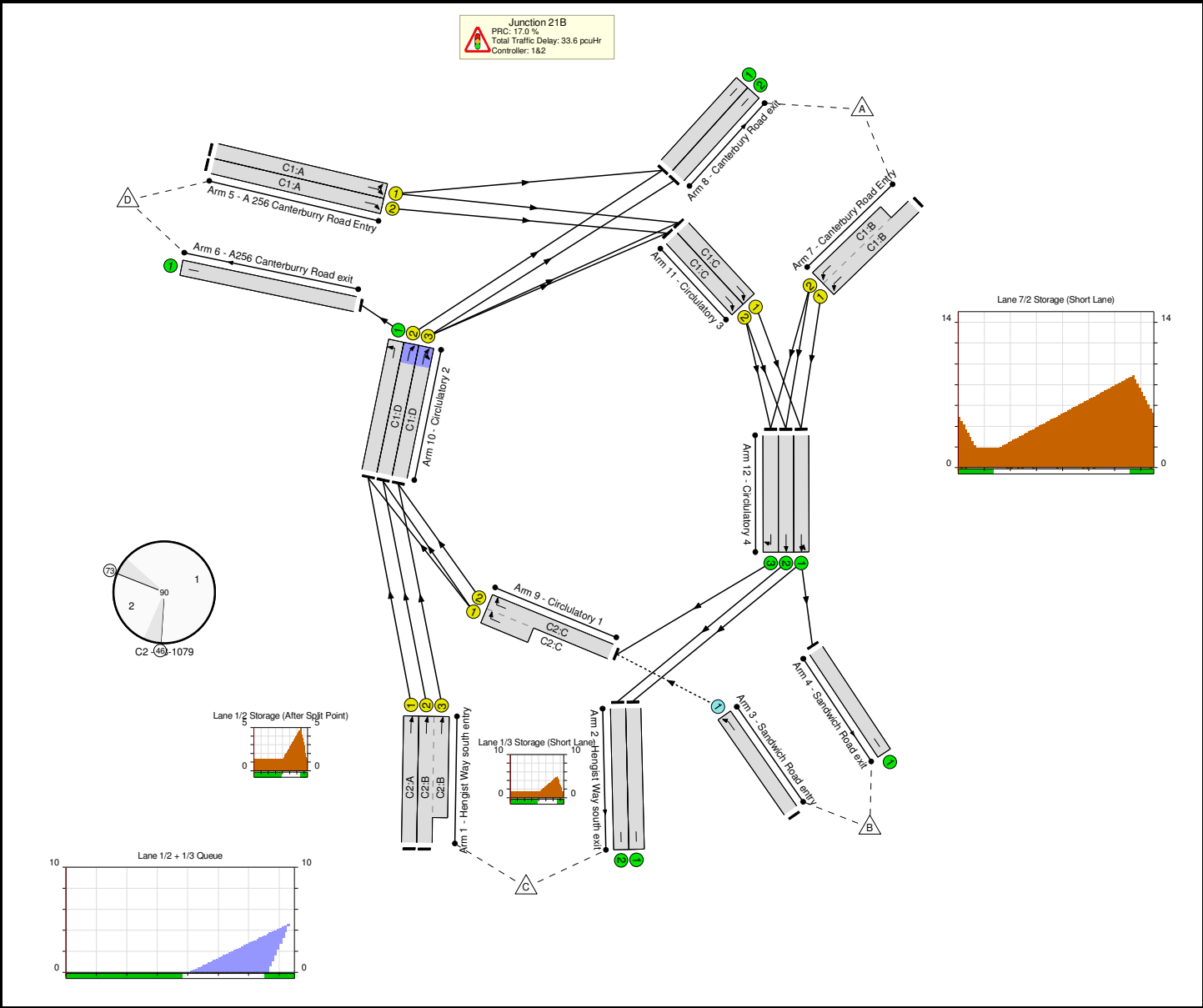
Stage	1	2
Duration	58	22
Change Point	73	46

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21b	-	-	N/A	-	-		-	-	-	-	-	-	76.9%
Junction 21B	-	-	N/A	-	-		-	-	-	-	-	-	76.9%
1/1	Hengist Way south entry Ahead	U	N/A	N/A	C2:A		1	58	-	824	1985	1301	63.3%
1/2+1/3	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	58	-	842	1980:1980	955+937	44.5 : 44.5%
2/1	Hengist Way south exit	U	N/A	N/A	-		-	-	-	485	Inf	Inf	0.0%
2/2	Hengist Way south exit	U	N/A	N/A	-		-	-	-	855	Inf	Inf	0.0%
3/1	Sandwich Road entry Ahead	O	N/A	N/A	-		-	-	-	199	1908	279	71.3%
4/1	Sandwich Road exit	U	N/A	N/A	-		-	-	-	295	Inf	Inf	0.0%
5/1	A 256 Canterbury Road Entry Left Ahead	U	N/A	N/A	C1:A		1	42	-	670	1953	933	71.8%
5/2	A 256 Canterbury Road Entry Ahead	U	N/A	N/A	C1:A		1	42	-	630	1919	917	68.7%
6/1	A256 Canterbury Road exit	U	N/A	N/A	-		-	-	-	1095	Inf	Inf	0.0%
7/1+7/2	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	27	-	809	1828:1828	569+569	71.2 : 71.0%
8/1	Canterbury Road exit	U	N/A	N/A	-		-	-	-	780	Inf	Inf	0.0%
8/2	Canterbury Road exit	U	N/A	N/A	-		-	-	-	464	Inf	Inf	0.0%
9/2+9/1	Circlulatory 1 Right	U	N/A	N/A	C2:C		1	22	-	381	1766:1796	77+419	76.9 : 76.9%
10/1	Circlulatory 2 Left	U	N/A	N/A	-		-	-	-	1095	Inf	Inf	0.0%

Full Input Data And Results

10/2	Circlulatory 2 Ahead	U	N/A	N/A	C1:D		1	38	-	476	1922	833	57.2%
10/3	Circlulatory 2 Ahead Right	U	N/A	N/A	C1:D		1	38	-	476	1918	831	57.3%
11/1	Circlulatory 3 Ahead	U	N/A	N/A	C1:C		1	53	-	375	2040	1224	30.6%
11/2	Circlulatory 3 Ahead	U	N/A	N/A	C1:C		1	53	-	633	2040	1224	51.7%
12/1	Circlulatory 4 Ahead Ahead2	U	N/A	N/A	-		-	-	-	780	Inf	Inf	0.0%
12/2	Circlulatory 4 Ahead	U	N/A	N/A	-		-	-	-	855	Inf	Inf	0.0%
12/3	Circlulatory 4 Right	U	N/A	N/A	-		-	-	-	182	Inf	Inf	0.0%

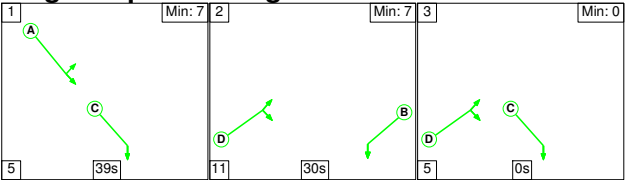
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	199	0	0	23.9	9.7	0.0	33.6	-	-	-	-
Junction 21B	-	-	199	0	0	23.9	9.7	0.0	33.6	-	-	-	-
1/1	824	824	-	-	-	2.1	0.9	-	2.9	12.9	12.1	0.9	13.0
1/2+1/3	842	842	-	-	-	1.6	0.4	-	2.0	8.5	4.6	0.4	5.0
2/1	485	485	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	855	855	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	199	199	199	0	0	0.1	1.2	-	1.3	22.9	1.5	1.2	2.8
4/1	295	295	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	670	670	-	-	-	3.5	1.3	-	4.7	25.5	13.2	1.3	14.5
5/2	630	630	-	-	-	3.2	1.1	-	4.3	24.5	12.1	1.1	13.2
6/1	1095	1095	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	809	809	-	-	-	6.2	1.2	-	7.4	32.9	8.9	1.2	10.1
8/1	780	780	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	464	464	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	381	381	-	-	-	3.7	1.6	-	5.3	50.0	8.3	1.6	9.9
10/1	1095	1095	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	476	476	-	-	-	1.8	0.7	-	2.4	18.4	4.9	0.7	5.5
10/3	476	476	-	-	-	1.8	0.7	-	2.5	18.7	5.0	0.7	5.7
11/1	375	375	-	-	-	0.1	0.2	-	0.3	2.7	0.2	0.2	0.4
11/2	633	633	-	-	-	0.0	0.5	-	0.6	3.2	0.1	0.5	0.6
12/1	780	780	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	855	855	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	182	182	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 - 08-1078 C2 - 08-1079													
PRC for Signalled Lanes (%):			25.3		Total Delay for Signalled Lanes (pcuHr):			22.15		Cycle Time (s):		90	
PRC for Signalled Lanes (%):			17.0		Total Delay for Signalled Lanes (pcuHr):			10.22		Cycle Time (s):		90	
PRC Over All Lanes (%):			17.0		Total Delay Over All Lanes(pcuHr):			33.64					

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	199	0	0	23.9	9.7	0.0	33.6	-	-	-	-
Junction 21B	-	-	199	0	0	23.9	9.7	0.0	33.6	-	-	-	-
1/1	824	824	-	-	-	2.1	0.9	-	2.9	12.9	12.1	0.9	13.0
1/2+1/3	842	842	-	-	-	1.6	0.4	-	2.0	8.5	4.6	0.4	5.0
2/1	485	485	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	855	855	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	199	199	199	0	0	0.1	1.2	-	1.3	22.9	1.5	1.2	2.8
4/1	295	295	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	670	670	-	-	-	3.5	1.3	-	4.7	25.5	13.2	1.3	14.5
5/2	630	630	-	-	-	3.2	1.1	-	4.3	24.5	12.1	1.1	13.2
6/1	1095	1095	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	809	809	-	-	-	6.2	1.2	-	7.4	32.9	8.9	1.2	10.1
8/1	780	780	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	464	464	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	381	381	-	-	-	3.7	1.6	-	5.3	50.0	8.3	1.6	9.9
10/1	1095	1095	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	476	476	-	-	-	1.8	0.7	-	2.4	18.4	4.9	0.7	5.5
10/3	476	476	-	-	-	1.8	0.7	-	2.5	18.7	5.0	0.7	5.7
11/1	375	375	-	-	-	0.1	0.2	-	0.3	2.7	0.2	0.2	0.4
11/2	633	633	-	-	-	0.0	0.5	-	0.6	3.2	0.1	0.5	0.6
12/1	780	780	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	855	855	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	182	182	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 - 08-1078 C2 - 08-1079													
PRC for Signalled Lanes (%):			25.3		Total Delay for Signalled Lanes (pcuHr):			22.15		Cycle Time (s):		90	
PRC for Signalled Lanes (%):			17.0		Total Delay for Signalled Lanes (pcuHr):			10.22		Cycle Time (s):		90	
PRC Over All Lanes (%):			17.0		Total Delay Over All Lanes(pcuHr):			33.64					

Full Input Data And Results

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

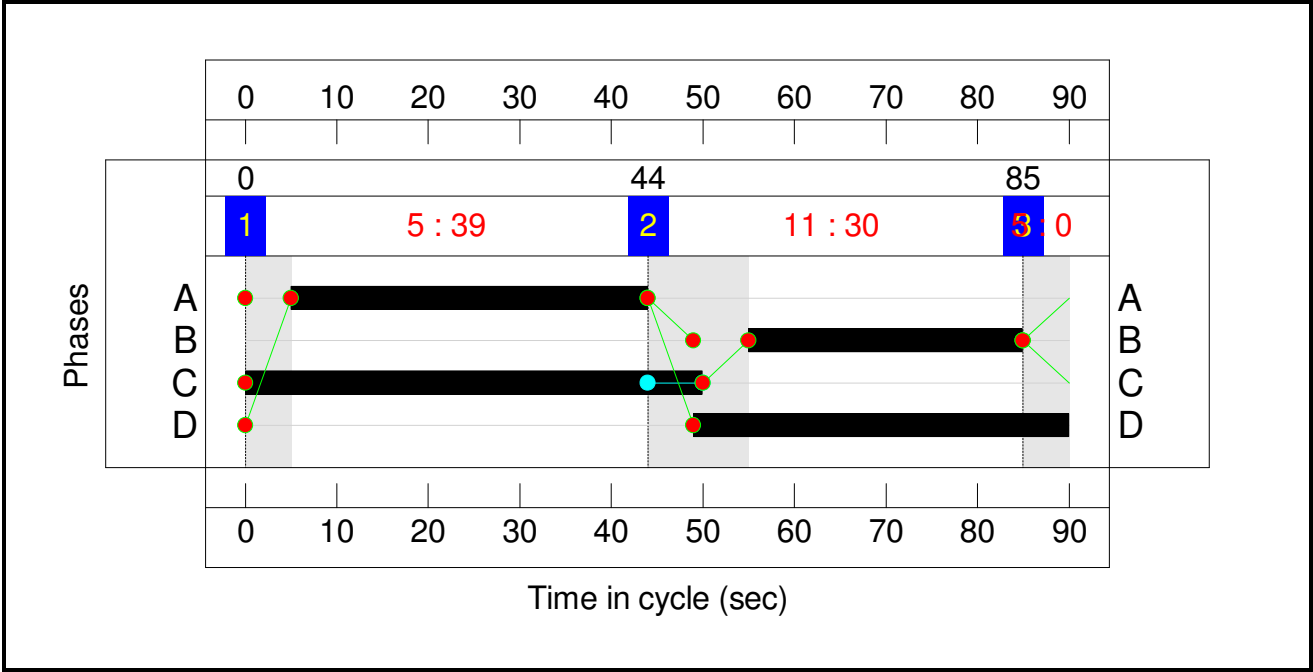
Stage Sequence Diagram



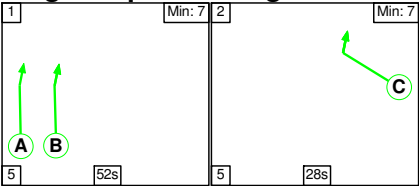
Stage Timings

Stage	1	2	3
Duration	39	30	0
Change Point	0	44	85

Signal Timings Diagram



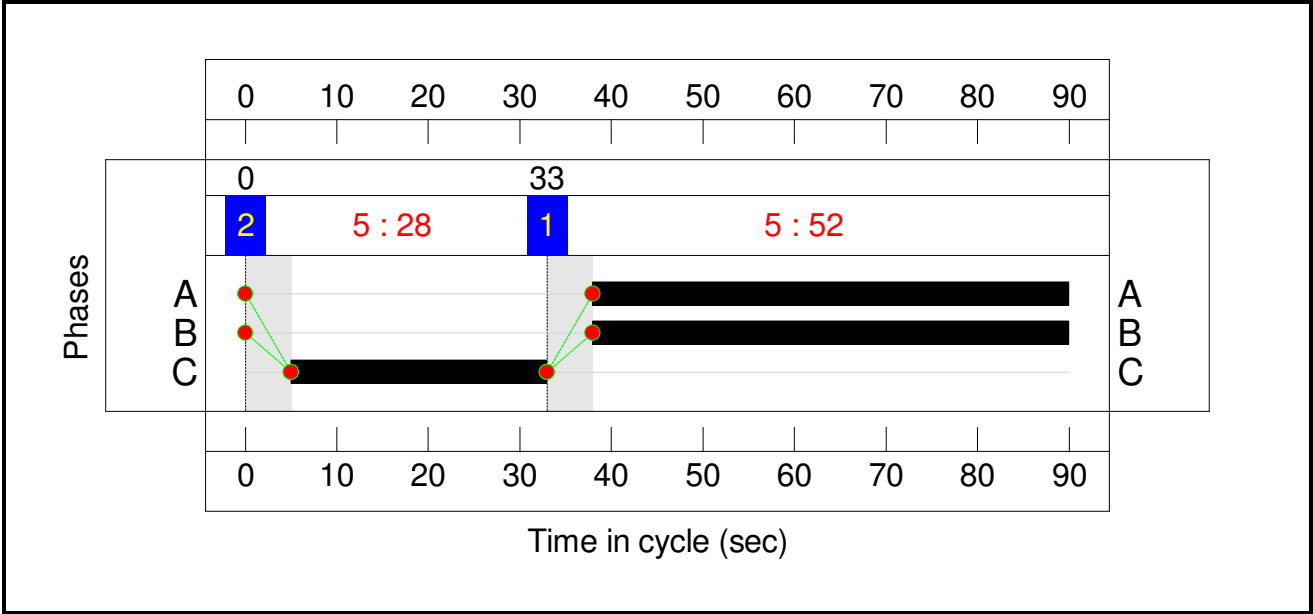
C2 - 08-1079
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	52	28
Change Point	33	0

Signal Timings Diagram



Junction 21B
 PRC: 65.4 %
 Total Traffic Delay: 19.4 pcu/hr
 Controller: 182

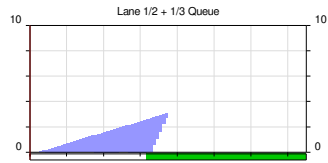
The diagram illustrates the traffic flow and lane configurations at Junction 21B. The junction is a roundabout with 12 arms, each with a specific lane configuration and traffic flow direction. The arms are labeled as follows:

- Arm 1 - Hengist Way south exit**: C2:A, C2:B, C2:C
- Arm 2 - Hengist Way south exit**: C2:A, C2:B, C2:C
- Arm 3 - Sandwich Road entry**: C1:A, C1:B
- Arm 4 - Sandwich Road exit**: C1:A, C1:B
- Arm 5 - A 256 Canterbury Road Entry**: C1:A, C1:B
- Arm 6 - A 256 Canterbury Road exit**: C1:A, C1:B
- Arm 7 - Canterbury Road Entry**: C1:A, C1:B
- Arm 8 - Canterbury Road exit**: C1:A, C1:B
- Arm 9 - Circulatory 1**: C2:C, C2:C
- Arm 10 - Circulatory 2**: C1:D, C1:D
- Arm 11 - Circulatory 3**: C1:C, C1:C
- Arm 12 - Circulatory 4**: C1:C, C1:C

The diagram also includes a circular diagram showing the junction layout with a 90-degree angle marked. The junction is identified as C2 - 08-1079.

Four queue storage analysis graphs are provided:

- Lane 1/2 Storage (After Split Point)**: A graph showing storage levels for Lane 1/2 after the split point, with a peak of approximately 5 pcu.
- Lane 1/3 Storage (Short Lane)**: A graph showing storage levels for Lane 1/3 (Short Lane), with a peak of approximately 10 pcu.
- Lane 7/2 Storage (Short Lane)**: A graph showing storage levels for Lane 7/2 (Short Lane), with a peak of approximately 14 pcu.
- Lane 1/2 + 1/3 Queue**: A graph showing the combined queue for Lane 1/2 and Lane 1/3, with a peak of approximately 10 pcu.



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21b	-	-	N/A	-	-		-	-	-	-	-	-	54.4%
Junction 21B	-	-	N/A	-	-		-	-	-	-	-	-	54.4%
1/1	Hengist Way south entry Ahead	U	N/A	N/A	C2:A		1	52	-	409	1985	1169	35.0%
1/2+1/3	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	52	-	513	1980:1980	849+893	29.4 : 29.4%
2/1	Hengist Way south exit	U	N/A	N/A	-		-	-	-	408	Inf	Inf	0.0%
2/2	Hengist Way south exit	U	N/A	N/A	-		-	-	-	628	Inf	Inf	0.0%
3/1	Sandwich Road entry Ahead	O	N/A	N/A	-		-	-	-	161	1908	316	51.0%
4/1	Sandwich Road exit	U	N/A	N/A	-		-	-	-	236	Inf	Inf	0.0%
5/1	A 256 Canterbury Road Entry Left Ahead	U	N/A	N/A	C1:A		1	39	-	471	1947	865	54.4%
5/2	A 256 Canterbury Road Entry Ahead	U	N/A	N/A	C1:A		1	39	-	444	1919	853	52.1%
6/1	A256 Canterbury Road exit	U	N/A	N/A	-		-	-	-	670	Inf	Inf	0.0%
7/1+7/2	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	30	-	676	1828:1828	630+630	53.7 : 53.7%
8/1	Canterbury Road exit	U	N/A	N/A	-		-	-	-	459	Inf	Inf	0.0%
8/2	Canterbury Road exit	U	N/A	N/A	-		-	-	-	273	Inf	Inf	0.0%
9/2+9/1	Circlulatory 1 Right	U	N/A	N/A	C2:C		1	28	-	320	1766:1796	50+547	53.6 : 53.6%
10/1	Circlulatory 2 Left	U	N/A	N/A	-		-	-	-	670	Inf	Inf	0.0%

Full Input Data And Results

10/2	Circlulatory 2 Ahead	U	N/A	N/A	C1:D		1	41	-	282	1922	897	31.4%
10/3	Circlulatory 2 Ahead Right	U	N/A	N/A	C1:D		1	41	-	290	1912	892	32.5%
11/1	Circlulatory 3 Ahead	U	N/A	N/A	C1:C		1	50	-	306	2040	1156	26.5%
11/2	Circlulatory 3 Ahead	U	N/A	N/A	C1:C		1	50	-	449	2040	1156	38.8%
12/1	Circlulatory 4 Ahead Ahead2	U	N/A	N/A	-		-	-	-	644	Inf	Inf	0.0%
12/2	Circlulatory 4 Ahead	U	N/A	N/A	-		-	-	-	628	Inf	Inf	0.0%
12/3	Circlulatory 4 Right	U	N/A	N/A	-		-	-	-	159	Inf	Inf	0.0%

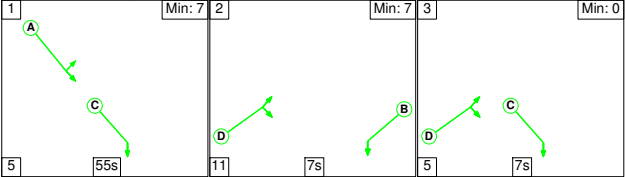
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	161	0	0	15.2	4.3	0.0	19.4	-	-	-	-
Junction 21B	-	-	161	0	0	15.2	4.3	0.0	19.4	-	-	-	-
1/1	409	409	-	-	-	1.1	0.3	-	1.4	12.0	5.2	0.3	5.5
1/2+1/3	513	513	-	-	-	1.2	0.2	-	1.5	10.2	3.1	0.2	3.3
2/1	408	408	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	628	628	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	161	161	161	0	0	0.0	0.5	-	0.5	11.7	0.5	0.5	1.0
4/1	236	236	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	471	471	-	-	-	2.4	0.6	-	3.0	22.9	8.5	0.6	9.1
5/2	444	444	-	-	-	2.2	0.5	-	2.8	22.5	8.0	0.5	8.6
6/1	670	670	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	676	676	-	-	-	4.5	0.6	-	5.0	26.8	6.8	0.6	7.3
8/1	459	459	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	273	273	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	320	320	-	-	-	2.1	0.6	-	2.7	30.3	6.0	0.6	6.6
10/1	670	670	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	282	282	-	-	-	0.8	0.2	-	1.0	12.6	4.7	0.2	4.9
10/3	290	290	-	-	-	0.7	0.2	-	1.0	12.3	4.8	0.2	5.1
11/1	306	306	-	-	-	0.1	0.2	-	0.3	3.2	0.3	0.2	0.5
11/2	449	449	-	-	-	0.1	0.3	-	0.4	3.0	0.1	0.3	0.4
12/1	644	644	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	628	628	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	159	159	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 - 08-1078 C2 - 08-1079													
PRC for Signalled Lanes (%):			65.4		Total Delay for Signalled Lanes (pcuHr):			13.41		Cycle Time (s):		90	
PRC for Signalled Lanes (%):			67.9		Total Delay for Signalled Lanes (pcuHr):			5.51		Cycle Time (s):		90	
PRC Over All Lanes (%):			65.4		Total Delay Over All Lanes(pcuHr):			19.43					

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	161	0	0	15.2	4.3	0.0	19.4	-	-	-	-
Junction 21B	-	-	161	0	0	15.2	4.3	0.0	19.4	-	-	-	-
1/1	409	409	-	-	-	1.1	0.3	-	1.4	12.0	5.2	0.3	5.5
1/2+1/3	513	513	-	-	-	1.2	0.2	-	1.5	10.2	3.1	0.2	3.3
2/1	408	408	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	628	628	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	161	161	161	0	0	0.0	0.5	-	0.5	11.7	0.5	0.5	1.0
4/1	236	236	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	471	471	-	-	-	2.4	0.6	-	3.0	22.9	8.5	0.6	9.1
5/2	444	444	-	-	-	2.2	0.5	-	2.8	22.5	8.0	0.5	8.6
6/1	670	670	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	676	676	-	-	-	4.5	0.6	-	5.0	26.8	6.8	0.6	7.3
8/1	459	459	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	273	273	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	320	320	-	-	-	2.1	0.6	-	2.7	30.3	6.0	0.6	6.6
10/1	670	670	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	282	282	-	-	-	0.8	0.2	-	1.0	12.6	4.7	0.2	4.9
10/3	290	290	-	-	-	0.7	0.2	-	1.0	12.3	4.8	0.2	5.1
11/1	306	306	-	-	-	0.1	0.2	-	0.3	3.2	0.3	0.2	0.5
11/2	449	449	-	-	-	0.1	0.3	-	0.4	3.0	0.1	0.3	0.4
12/1	644	644	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	628	628	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	159	159	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 - 08-1078 C2 - 08-1079PRC for Signalled Lanes (%): 65.4 PRC for Signalled Lanes (%): 67.9 PRC Over All Lanes (%): 65.4Total Delay for Signalled Lanes (pcuHr): 13.41 Total Delay for Signalled Lanes (pcuHr): 5.51 Total Delay Over All Lanes(pcuHr): 19.43Cycle Time (s): 90 Cycle Time (s): 90													

Full Input Data And Results

Scenario 4: '2039 Growthed Traffic - AM Peak' (FG4: '2039 Growthed Traffic - AM Peak', Plan 2: 'AM Peak')
C1 - 08-1078

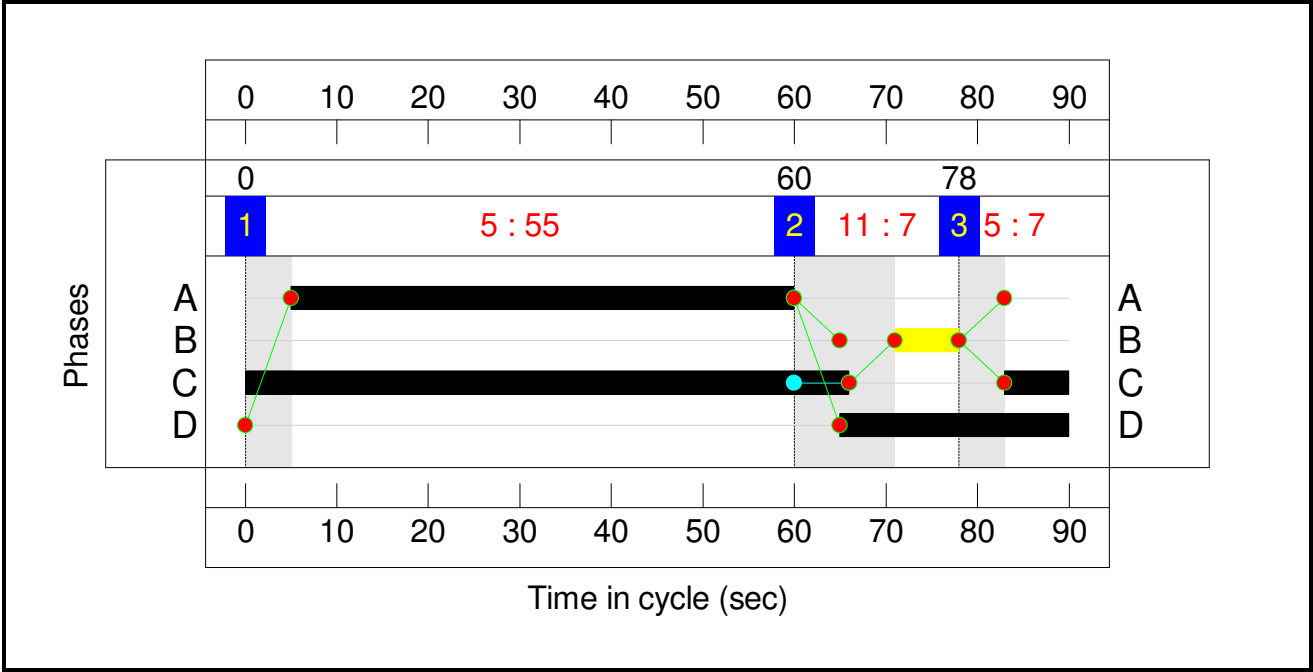
Stage Sequence Diagram



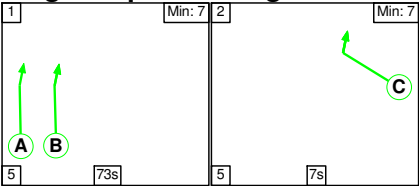
Stage Timings

Stage	1	2	3
Duration	55	7	7
Change Point	0	60	78

Signal Timings Diagram



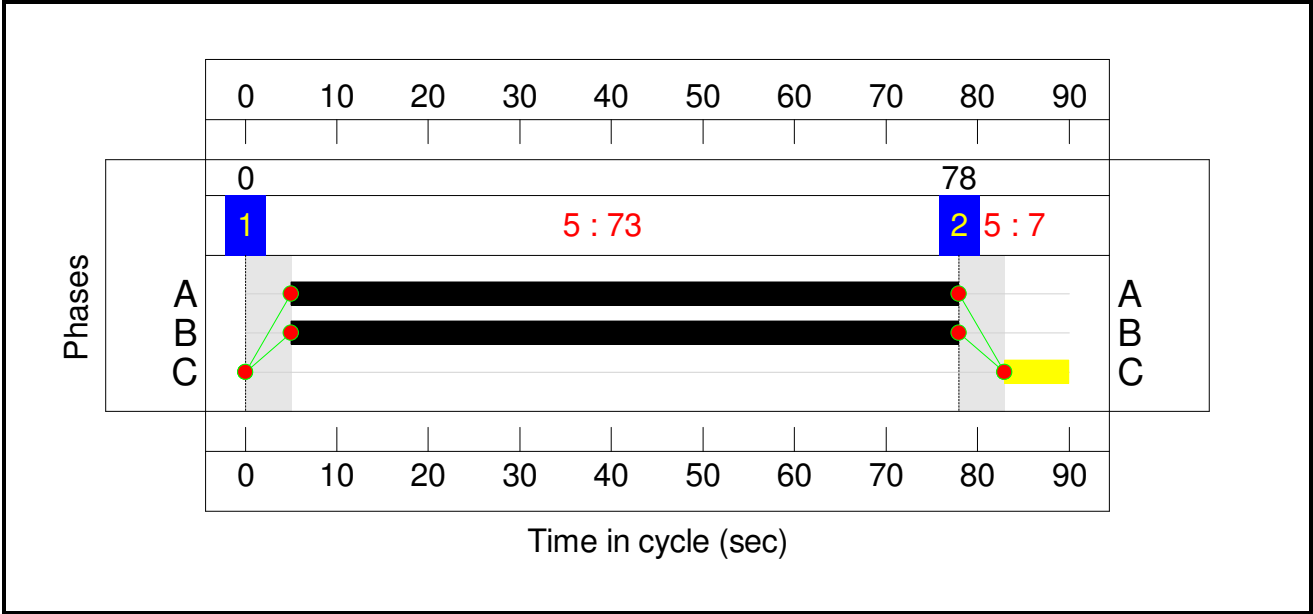
C2 - 08-1079
Stage Sequence Diagram



Stage Timings

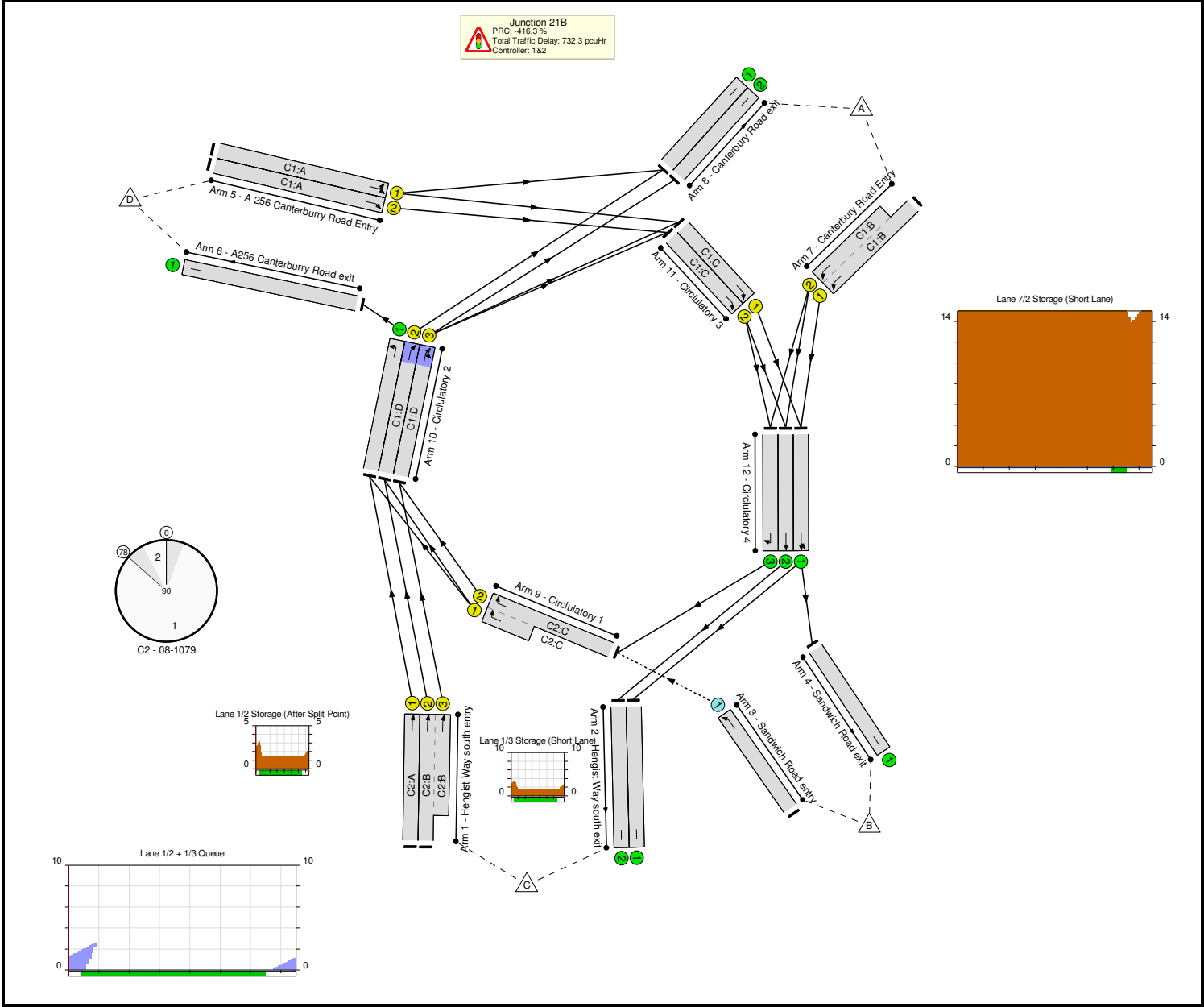
Stage	1	2
Duration	73	7
Change Point	0	78

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21b	-	-	N/A	-	-		-	-	-	-	-	-	464.6%
Junction 21B	-	-	N/A	-	-		-	-	-	-	-	-	464.6%
1/1	Hengist Way south entry Ahead	U	N/A	N/A	C2:A		1	73	-	821	1985	1632	50.3%
1/2+1/3	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	73	-	876	1980:1980	931+1049	44.2 : 44.2%
2/1	Hengist Way south exit	U	N/A	N/A	-		-	-	-	947	Inf	Inf	0.0%
2/2	Hengist Way south exit	U	N/A	N/A	-		-	-	-	1195	Inf	Inf	0.0%
3/1	Sandwich Road entry Ahead	O	N/A	N/A	-		-	-	-	176	1908	293	60.0%
4/1	Sandwich Road exit	U	N/A	N/A	-		-	-	-	282	Inf	Inf	0.0%
5/1	A 256 Canterbury Road Entry Left Ahead	U	N/A	N/A	C1:A		1	55	-	677	1942	1208	56.0%
5/2	A 256 Canterbury Road Entry Ahead	U	N/A	N/A	C1:A		1	55	-	646	1919	1194	54.1%
6/1	A256 Canterbury Road exit	U	N/A	N/A	-		-	-	-	1124	Inf	Inf	0.0%
7/1+7/2	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	7	-	1509	1828:1828	162+162	464.6 : 464.0%
8/1	Canterbury Road exit	U	N/A	N/A	-		-	-	-	698	Inf	Inf	0.0%
8/2	Canterbury Road exit	U	N/A	N/A	-		-	-	-	459	Inf	Inf	0.0%
9/2+9/1	Circlulatory 1 Right	U	N/A	N/A	C2:C		1	7	-	399	1766:1796	8+160	238.7 : 143.3%
10/1	Circlulatory 2 Left	U	N/A	N/A	-		-	-	-	1124	Inf	Inf	0.0%

Full Input Data And Results

10/2	Circlulatory 2 Ahead	U	N/A	N/A	C1:D		1	25	-	490	1922	555	84.3%
10/3	Circlulatory 2 Ahead Right	U	N/A	N/A	C1:D		1	25	-	482	1914	553	85.9%
11/1	Circlulatory 3 Ahead	U	N/A	N/A	C1:C		1	73	-	474	2040	1677	28.3%
11/2	Circlulatory 3 Ahead	U	N/A	N/A	C1:C		1	73	-	664	2040	1677	39.2%
12/1	Circlulatory 4 Ahead Ahead2	U	N/A	N/A	-		-	-	-	1229	Inf	Inf	0.0%
12/2	Circlulatory 4 Ahead	U	N/A	N/A	-		-	-	-	1195	Inf	Inf	0.0%
12/3	Circlulatory 4 Right	U	N/A	N/A	-		-	-	-	223	Inf	Inf	0.0%

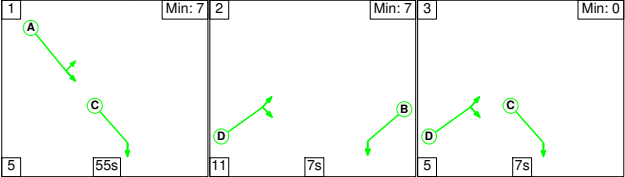
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	176	0	0	89.6	642.7	0.0	732.3	-	-	-	-
Junction 21B	-	-	176	0	0	89.6	642.7	0.0	732.3	-	-	-	-
1/1	821	821	-	-	-	0.6	0.5	-	1.1	4.6	6.2	0.5	6.7
1/2+1/3	876	876	-	-	-	0.4	0.4	-	0.8	3.5	2.6	0.4	3.0
2/1	471	471	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	749	749	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	176	176	176	0	0	0.0	0.7	-	0.8	16.0	1.1	0.7	1.9
4/1	165	165	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	677	677	-	-	-	1.9	0.6	-	2.5	13.2	9.8	0.6	10.4
5/2	646	646	-	-	-	1.7	0.6	-	2.3	13.0	9.2	0.6	9.7
6/1	925	925	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	1509	325	-	-	-	69.9	592.6	-	662.6	1580.7	71.8	592.6	664.5
8/1	676	676	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	459	459	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	247	171	-	-	-	5.9	41.3	-	47.2	689.0	9.1	41.3	50.4
10/1	925	925	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	468	468	-	-	-	4.6	2.5	-	7.1	54.7	11.1	2.5	13.6
10/3	475	475	-	-	-	4.5	2.8	-	7.3	55.7	11.6	2.8	14.4
11/1	474	474	-	-	-	0.0	0.2	-	0.2	1.6	0.1	0.2	0.3
11/2	657	657	-	-	-	0.0	0.3	-	0.3	1.8	0.0	0.3	0.4
12/1	636	636	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	749	749	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	71	71	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 - 08-1078 C2 - 08-1079 PRC for Signalled Lanes (%): -416.3 PRC for Signalled Lanes (%): -165.2 PRC Over All Lanes (%): -416.3 Total Delay for Signalled Lanes (pcuHr): 682.39 Total Delay for Signalled Lanes (pcuHr): 49.14 Total Delay Over All Lanes(pcuHr): 732.30 Cycle Time (s): 90 Cycle Time (s): 90													

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	176	0	0	89.6	642.7	0.0	732.3	-	-	-	-
Junction 21B	-	-	176	0	0	89.6	642.7	0.0	732.3	-	-	-	-
1/1	821	821	-	-	-	0.6	0.5	-	1.1	4.6	6.2	0.5	6.7
1/2+1/3	876	876	-	-	-	0.4	0.4	-	0.8	3.5	2.6	0.4	3.0
2/1	471	471	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	749	749	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	176	176	176	0	0	0.0	0.7	-	0.8	16.0	1.1	0.7	1.9
4/1	165	165	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	677	677	-	-	-	1.9	0.6	-	2.5	13.2	9.8	0.6	10.4
5/2	646	646	-	-	-	1.7	0.6	-	2.3	13.0	9.2	0.6	9.7
6/1	925	925	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	1509	325	-	-	-	69.9	592.6	-	662.6	1580.7	71.8	592.6	664.5
8/1	676	676	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	459	459	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	247	171	-	-	-	5.9	41.3	-	47.2	689.0	9.1	41.3	50.4
10/1	925	925	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	468	468	-	-	-	4.6	2.5	-	7.1	54.7	11.1	2.5	13.6
10/3	475	475	-	-	-	4.5	2.8	-	7.3	55.7	11.6	2.8	14.4
11/1	474	474	-	-	-	0.0	0.2	-	0.2	1.6	0.1	0.2	0.3
11/2	657	657	-	-	-	0.0	0.3	-	0.3	1.8	0.0	0.3	0.4
12/1	636	636	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	749	749	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	71	71	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 - 08-1078 C2 - 08-1079 PRC for Signalled Lanes (%): -416.3 PRC for Signalled Lanes (%): -165.2 PRC Over All Lanes (%): -416.3 Total Delay for Signalled Lanes (pcuHr): 682.39 Total Delay for Signalled Lanes (pcuHr): 49.14 Total Delay Over All Lanes(pcuHr): 732.30 Cycle Time (s): 90 Cycle Time (s): 90													

Full Input Data And Results

Scenario 5: '2039 Growthed Traffic - PM Peak' (FG5: '2039 Growthed Traffic - PM Peak', Plan 3: 'PM Peak')
C1 - 08-1078

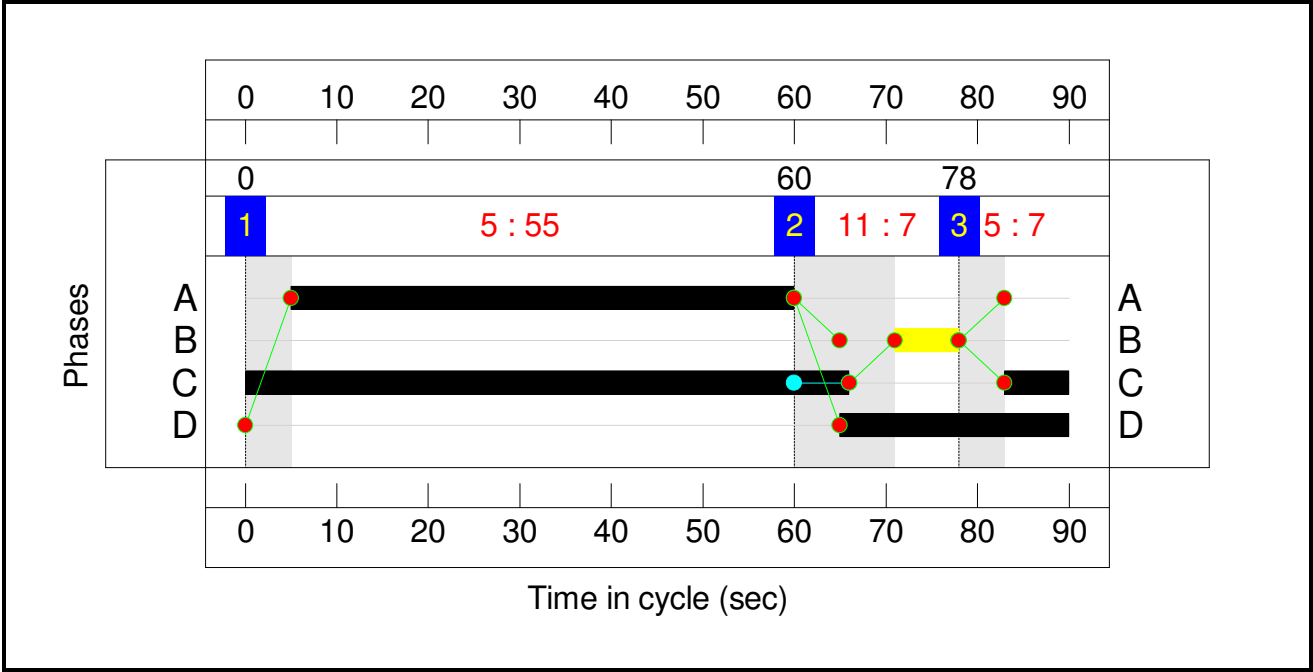
Stage Sequence Diagram



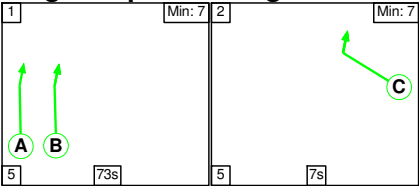
Stage Timings

Stage	1	2	3
Duration	55	7	7
Change Point	0	60	78

Signal Timings Diagram



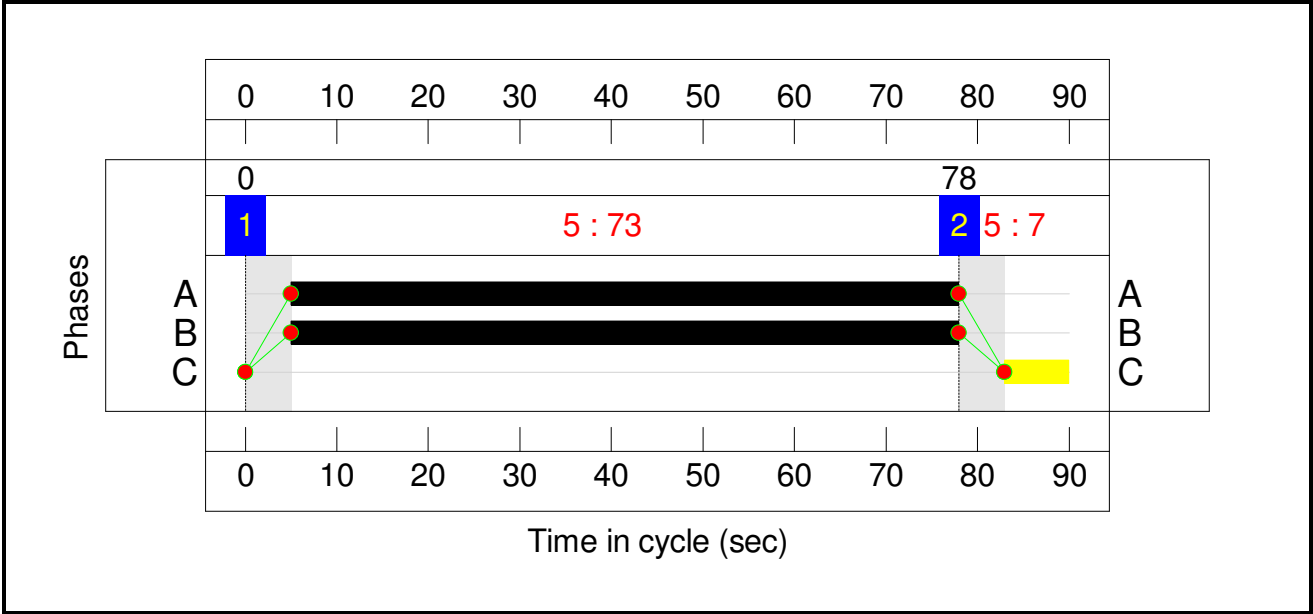
C2 - 08-1079
Stage Sequence Diagram



Stage Timings

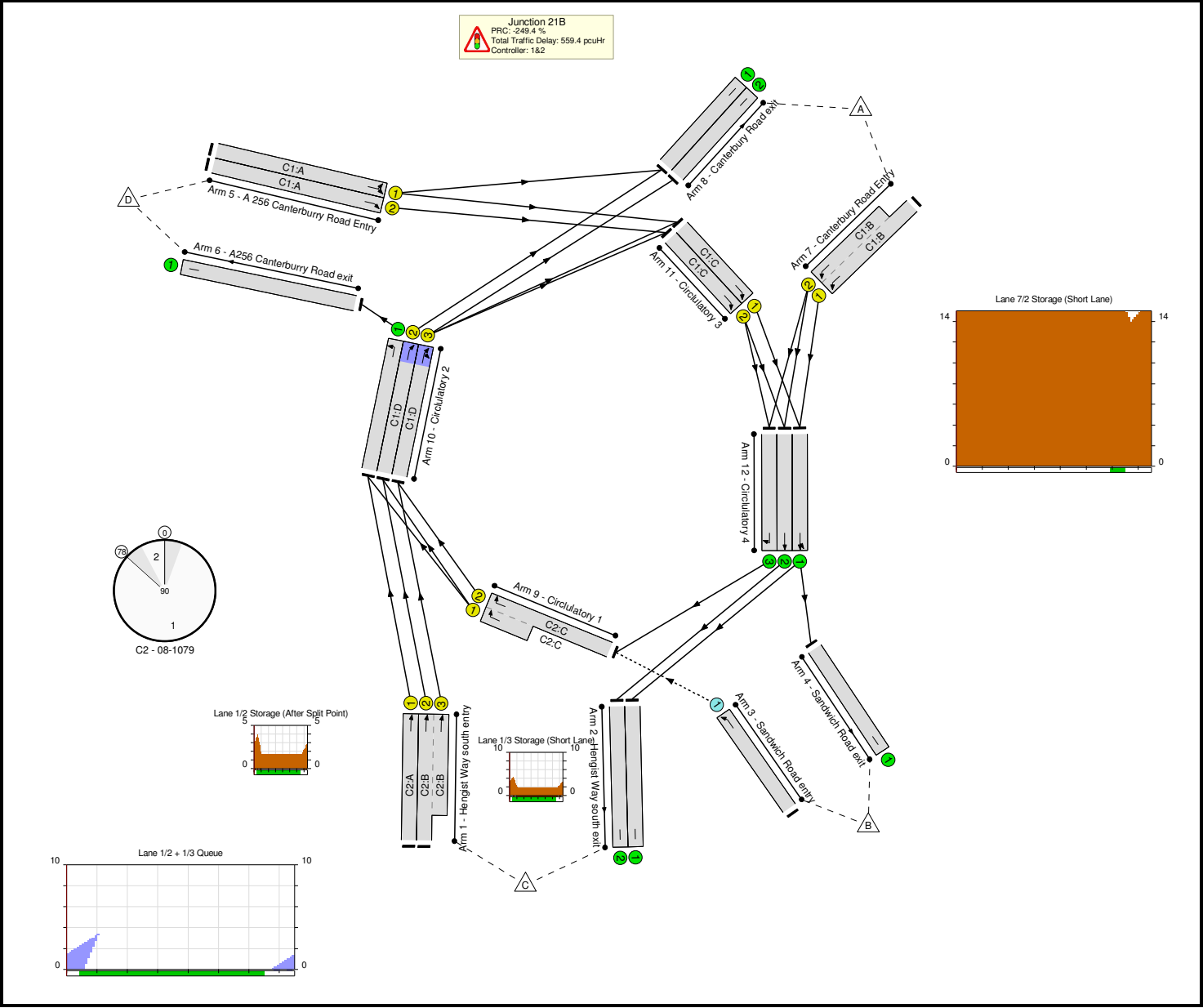
Stage	1	2
Duration	73	7
Change Point	0	78

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21b	-	-	N/A	-	-		-	-	-	-	-	-	314.5%
Junction 21B	-	-	N/A	-	-		-	-	-	-	-	-	314.5%
1/1	Hengist Way south entry Ahead	U	N/A	N/A	C2:A		1	73	-	1040	1985	1632	63.7%
1/2+1/3	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	73	-	1063	1980:1980	944+1036	53.7 : 53.7%
2/1	Hengist Way south exit	U	N/A	N/A	-		-	-	-	609	Inf	Inf	0.0%
2/2	Hengist Way south exit	U	N/A	N/A	-		-	-	-	1083	Inf	Inf	0.0%
3/1	Sandwich Road entry Ahead	O	N/A	N/A	-		-	-	-	251	1908	293	85.6%
4/1	Sandwich Road exit	U	N/A	N/A	-		-	-	-	372	Inf	Inf	0.0%
5/1	A 256 Canterbury Road Entry Left Ahead	U	N/A	N/A	C1:A		1	55	-	842	1953	1215	69.3%
5/2	A 256 Canterbury Road Entry Ahead	U	N/A	N/A	C1:A		1	55	-	799	1919	1194	66.9%
6/1	A256 Canterbury Road exit	U	N/A	N/A	-		-	-	-	1382	Inf	Inf	0.0%
7/1+7/2	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	7	-	1021	1828:1828	162+162	314.5 : 313.9%
8/1	Canterbury Road exit	U	N/A	N/A	-		-	-	-	1024	Inf	Inf	0.0%
8/2	Canterbury Road exit	U	N/A	N/A	-		-	-	-	546	Inf	Inf	0.0%
9/2+9/1	Circlulatory 1 Right	U	N/A	N/A	C2:C		1	7	-	481	1766:1796	2+160	298.2 : 226.5%
10/1	Circlulatory 2 Left	U	N/A	N/A	-		-	-	-	1382	Inf	Inf	0.0%

Full Input Data And Results

10/2	Circlulatory 2 Ahead	U	N/A	N/A	C1:D		1	25	-	641	1922	555	101.0%
10/3	Circlulatory 2 Ahead Right	U	N/A	N/A	C1:D		1	25	-	561	1918	554	100.8%
11/1	Circlulatory 3 Ahead	U	N/A	N/A	C1:C		1	73	-	470	2040	1677	28.0%
11/2	Circlulatory 3 Ahead	U	N/A	N/A	C1:C		1	73	-	803	2040	1677	47.7%
12/1	Circlulatory 4 Ahead Ahead2	U	N/A	N/A	-		-	-	-	981	Inf	Inf	0.0%
12/2	Circlulatory 4 Ahead	U	N/A	N/A	-		-	-	-	1083	Inf	Inf	0.0%
12/3	Circlulatory 4 Right	U	N/A	N/A	-		-	-	-	230	Inf	Inf	0.0%

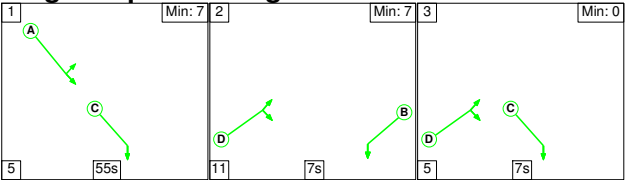
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	251	0	0	74.1	485.3	0.0	559.4	-	-	-	-
Junction 21B	-	-	251	0	0	74.1	485.3	0.0	559.4	-	-	-	-
1/1	1040	1040	-	-	-	0.9	0.9	-	1.7	6.0	9.5	0.9	10.4
1/2+1/3	1063	1063	-	-	-	0.6	0.6	-	1.2	3.9	3.4	0.6	4.0
2/1	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	848	848	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	251	251	251	0	0	0.2	2.6	-	2.8	40.7	3.8	2.6	6.5
4/1	257	257	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	842	842	-	-	-	2.6	1.1	-	3.8	16.1	13.8	1.1	14.9
5/2	799	799	-	-	-	2.4	1.0	-	3.4	15.5	12.9	1.0	13.9
6/1	1146	1146	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	1021	325	-	-	-	41.7	348.7	-	390.4	1376.6	37.6	348.7	386.3
8/1	938	938	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	541	541	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	367	162	-	-	-	13.7	103.5	-	117.2	1151.4	18.8	103.5	122.3
10/1	1146	1146	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	561	555	-	-	-	6.1	13.3	-	19.4	124.4	14.2	13.3	27.4
10/3	558	554	-	-	-	5.9	12.9	-	18.8	121.2	14.1	12.9	27.0
11/1	470	470	-	-	-	0.0	0.2	-	0.2	1.6	0.2	0.2	0.4
11/2	801	801	-	-	-	0.0	0.5	-	0.5	2.1	0.1	0.5	0.5
12/1	632	632	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	848	848	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	116	116	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 - 08-1078 C2 - 08-1079 PRC for Signalled Lanes (%): -249.4 PRC for Signalled Lanes (%): -231.3 PRC Over All Lanes (%): -249.4 Total Delay for Signalled Lanes (pcuHr): 436.46 Total Delay for Signalled Lanes (pcuHr): 120.12 Total Delay Over All Lanes(pcuHr): 559.41 Cycle Time (s): 90 Cycle Time (s): 90													

Full Input Data And Results

Scenario 6: '2039 Growthed Traffic - Airport Peak' (FG6: '2039 Growthed Traffic - Airport Peak', Plan 4: 'Airport Peak')
C1 - 08-1078

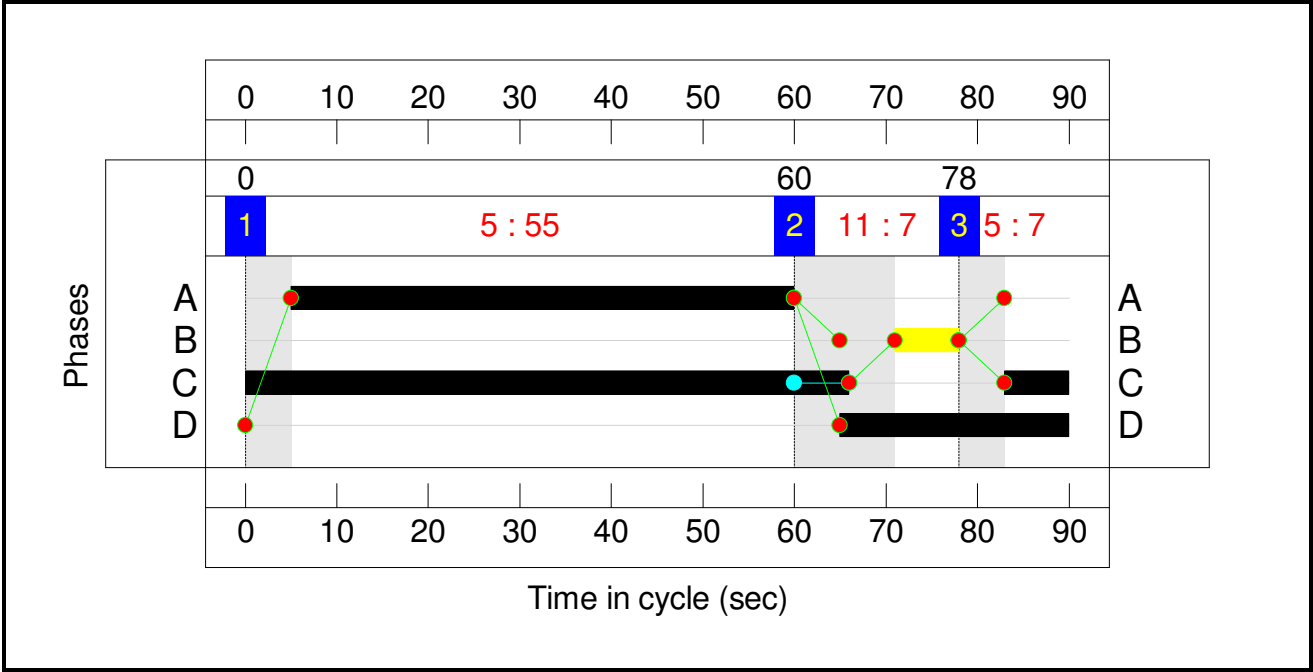
Stage Sequence Diagram



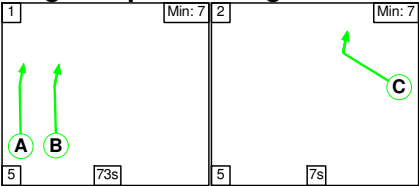
Stage Timings

Stage	1	2	3
Duration	55	7	7
Change Point	0	60	78

Signal Timings Diagram



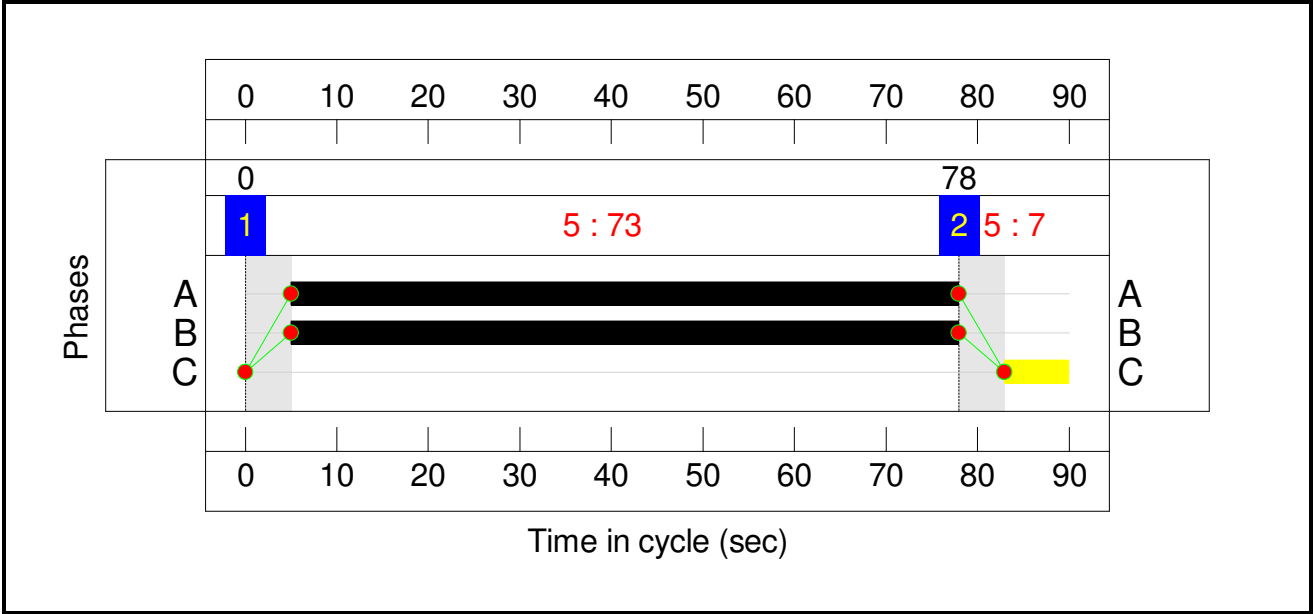
C2 - 08-1079
Stage Sequence Diagram



Stage Timings

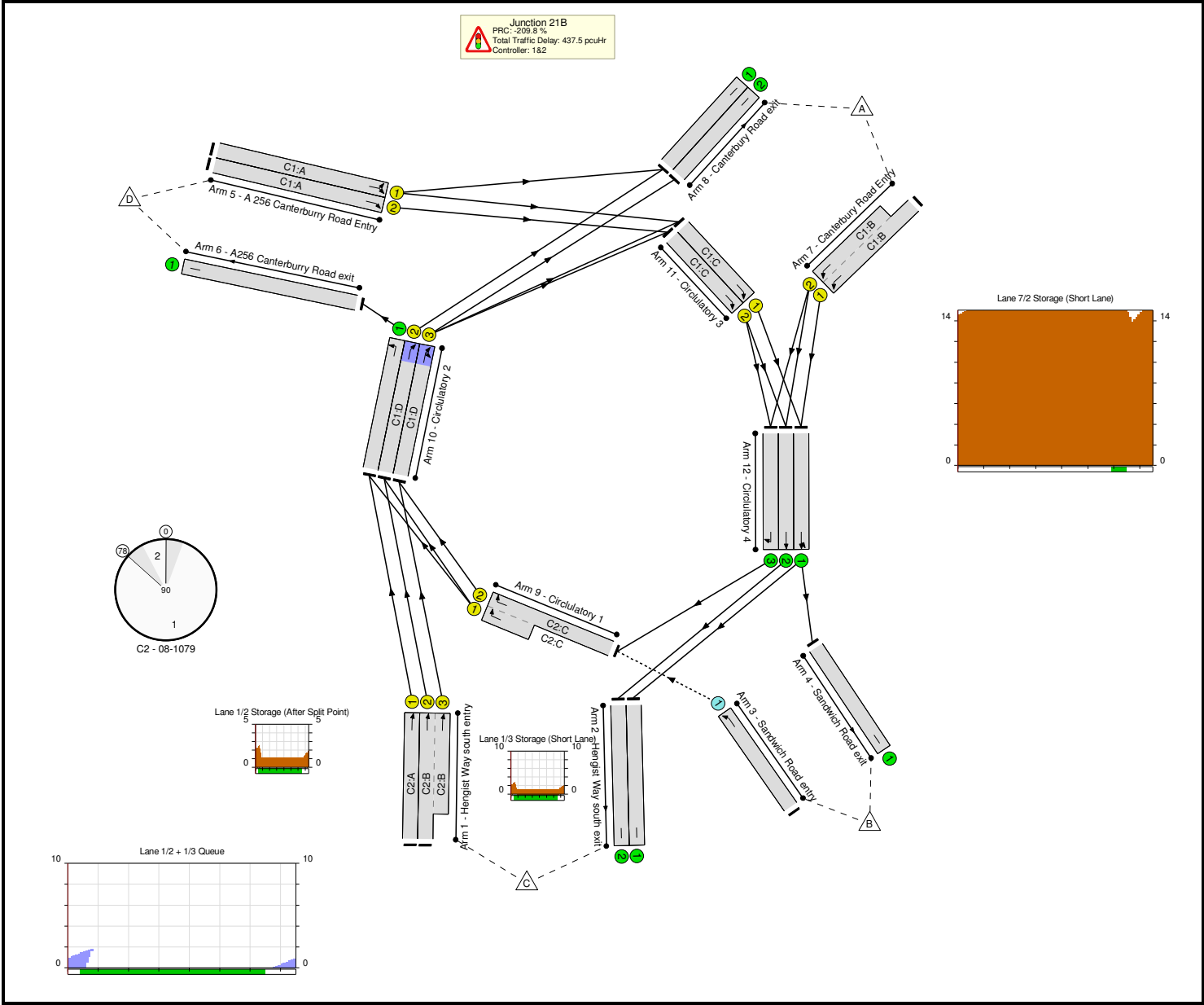
Stage	1	2
Duration	73	7
Change Point	0	78

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21b	-	-	N/A	-	-		-	-	-	-	-	-	278.8%
Junction 21B	-	-	N/A	-	-		-	-	-	-	-	-	278.8%
1/1	Hengist Way south entry Ahead	U	N/A	N/A	C2:A		1	73	-	548	1985	1632	33.6%
1/2+1/3	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	73	-	687	1980:1980	954+1026	34.7 : 34.7%
2/1	Hengist Way south exit	U	N/A	N/A	-		-	-	-	547	Inf	Inf	0.0%
2/2	Hengist Way south exit	U	N/A	N/A	-		-	-	-	843	Inf	Inf	0.0%
3/1	Sandwich Road entry Ahead	O	N/A	N/A	-		-	-	-	215	1908	321	67.0%
4/1	Sandwich Road exit	U	N/A	N/A	-		-	-	-	315	Inf	Inf	0.0%
5/1	A 256 Canterbury Road Entry Left Ahead	U	N/A	N/A	C1:A		1	55	-	629	1947	1211	51.9%
5/2	A 256 Canterbury Road Entry Ahead	U	N/A	N/A	C1:A		1	55	-	596	1919	1194	49.9%
6/1	A256 Canterbury Road exit	U	N/A	N/A	-		-	-	-	896	Inf	Inf	0.0%
7/1+7/2	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	7	-	905	1828:1828	162+162	278.8 : 278.2%
8/1	Canterbury Road exit	U	N/A	N/A	-		-	-	-	639	Inf	Inf	0.0%
8/2	Canterbury Road exit	U	N/A	N/A	-		-	-	-	340	Inf	Inf	0.0%
9/2+9/1	Circlulatory 1 Right	U	N/A	N/A	C2:C		1	7	-	427	1766:1796	3+160	263.1 : 202.5%
10/1	Circlulatory 2 Left	U	N/A	N/A	-		-	-	-	896	Inf	Inf	0.0%

Full Input Data And Results

10/2	Circlulatory 2 Ahead	U	N/A	N/A	C1:D		1	25	-	403	1922	555	65.0%
10/3	Circlulatory 2 Ahead Right	U	N/A	N/A	C1:D		1	25	-	363	1911	552	65.1%
11/1	Circlulatory 3 Ahead	U	N/A	N/A	C1:C		1	73	-	409	2040	1677	24.4%
11/2	Circlulatory 3 Ahead	U	N/A	N/A	C1:C		1	73	-	603	2040	1677	35.7%
12/1	Circlulatory 4 Ahead Ahead2	U	N/A	N/A	-		-	-	-	862	Inf	Inf	0.0%
12/2	Circlulatory 4 Ahead	U	N/A	N/A	-		-	-	-	843	Inf	Inf	0.0%
12/3	Circlulatory 4 Right	U	N/A	N/A	-		-	-	-	212	Inf	Inf	0.0%

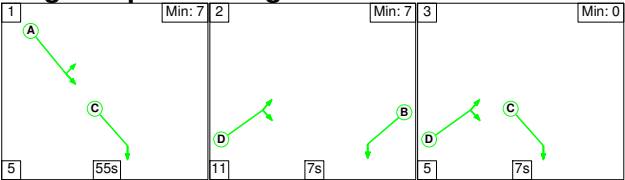
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	215	0	0	56.9	380.6	0.0	437.5	-	-	-	-
Junction 21B	-	-	215	0	0	56.9	380.6	0.0	437.5	-	-	-	-
1/1	548	548	-	-	-	0.3	0.3	-	0.6	3.6	3.3	0.3	3.6
1/2+1/3	687	687	-	-	-	0.3	0.3	-	0.6	3.1	1.9	0.3	2.1
2/1	343	343	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	647	647	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	215	215	215	0	0	0.0	1.0	-	1.0	17.1	1.2	1.0	2.2
4/1	228	228	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	629	629	-	-	-	1.7	0.5	-	2.2	12.6	8.7	0.5	9.3
5/2	596	596	-	-	-	1.5	0.5	-	2.0	12.3	8.1	0.5	8.6
6/1	678	678	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	905	325	-	-	-	34.9	290.8	-	325.7	1295.7	29.4	290.8	320.2
8/1	597	597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	340	340	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	330	163	-	-	-	11.6	85.0	-	96.5	1052.4	16.0	85.0	101.0
10/1	678	678	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	361	361	-	-	-	3.3	0.9	-	4.2	41.6	8.3	0.9	9.2
10/3	360	360	-	-	-	3.2	0.9	-	4.1	41.4	8.6	0.9	9.5
11/1	409	409	-	-	-	0.0	0.2	-	0.2	1.7	0.4	0.2	0.5
11/2	600	600	-	-	-	0.0	0.3	-	0.3	1.7	0.0	0.3	0.3
12/1	571	571	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	647	647	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	115	115	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 - 08-1078 C2 - 08-1079 PRC for Signalled Lanes (%): -209.8 PRC for Signalled Lanes (%): -192.3 PRC Over All Lanes (%): -209.8 Total Delay for Signalled Lanes (pcuHr): 338.76 Total Delay for Signalled Lanes (pcuHr): 97.70 Total Delay Over All Lanes(pcuHr): 437.47 Cycle Time (s): 90 Cycle Time (s): 90													

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: Junction 21b	-	-	215	0	0	56.9	380.6	0.0	437.5	-	-	-	-	
Junction 21B	-	-	215	0	0	56.9	380.6	0.0	437.5	-	-	-	-	
1/1	548	548	-	-	-	0.3	0.3	-	0.6	3.6	3.3	0.3	3.6	
1/2+1/3	687	687	-	-	-	0.3	0.3	-	0.6	3.1	1.9	0.3	2.1	
2/1	343	343	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
2/2	647	647	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	215	215	215	0	0	0.0	1.0	-	1.0	17.1	1.2	1.0	2.2	
4/1	228	228	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	629	629	-	-	-	1.7	0.5	-	2.2	12.6	8.7	0.5	9.3	
5/2	596	596	-	-	-	1.5	0.5	-	2.0	12.3	8.1	0.5	8.6	
6/1	678	678	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/1+7/2	905	325	-	-	-	34.9	290.8	-	325.7	1295.7	29.4	290.8	320.2	
8/1	597	597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/2	340	340	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	330	163	-	-	-	11.6	85.0	-	96.5	1052.4	16.0	85.0	101.0	
10/1	678	678	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	361	361	-	-	-	3.3	0.9	-	4.2	41.6	8.3	0.9	9.2	
10/3	360	360	-	-	-	3.2	0.9	-	4.1	41.4	8.6	0.9	9.5	
11/1	409	409	-	-	-	0.0	0.2	-	0.2	1.7	0.4	0.2	0.5	
11/2	600	600	-	-	-	0.0	0.3	-	0.3	1.7	0.0	0.3	0.3	
12/1	571	571	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/2	647	647	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/3	115	115	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
C1 - 08-1078 C2 - 08-1079														
PRC for Signalled Lanes (%):				-209.8	Total Delay for Signalled Lanes (pcuHr):				338.76	Cycle Time (s):		90		
PRC for Signalled Lanes (%):				-192.3	Total Delay for Signalled Lanes (pcuHr):				97.70	Cycle Time (s):		90		
PRC Over All Lanes (%):				-209.8	Total Delay Over All Lanes(pcuHr):				437.47					

Full Input Data And Results

Scenario 7: '2039 + Dev Traffic - AM Peak' (FG7: '2039 + Dev Traffic - AM Peak', Plan 2: 'AM Peak')
C1 - 08-1078

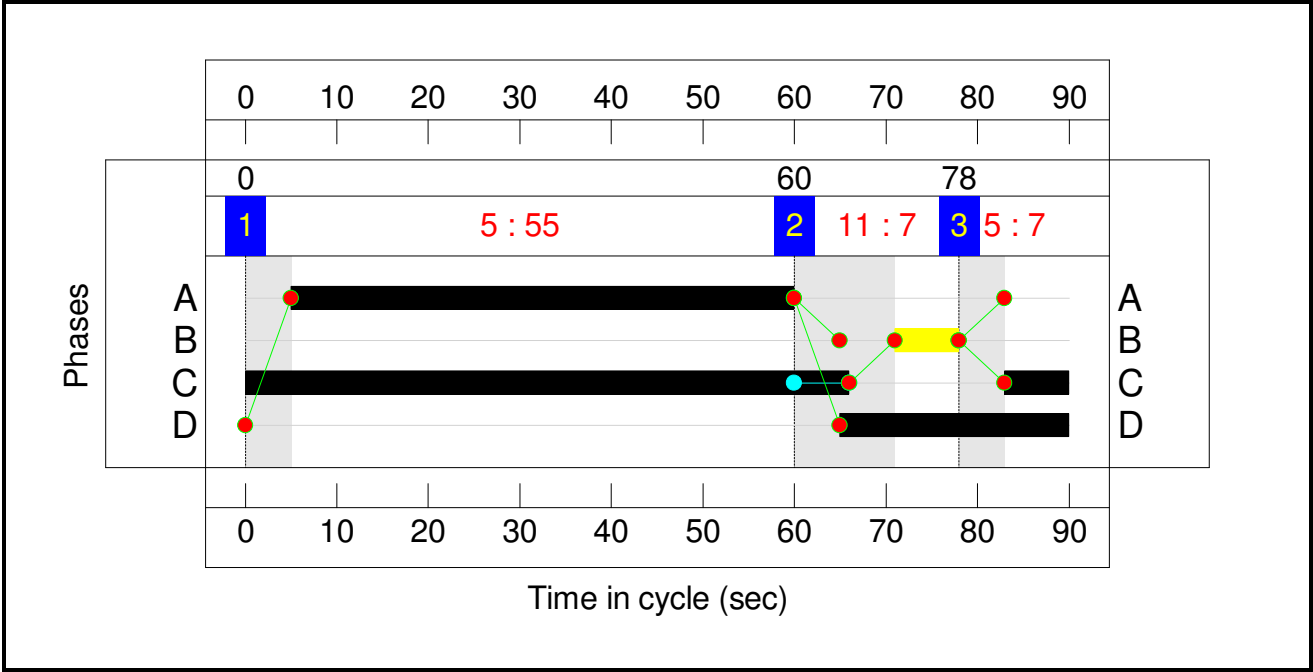
Stage Sequence Diagram



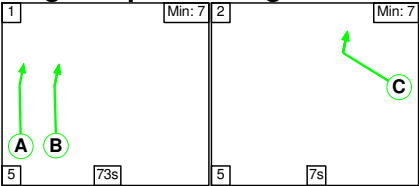
Stage Timings

Stage	1	2	3
Duration	55	7	7
Change Point	0	60	78

Signal Timings Diagram



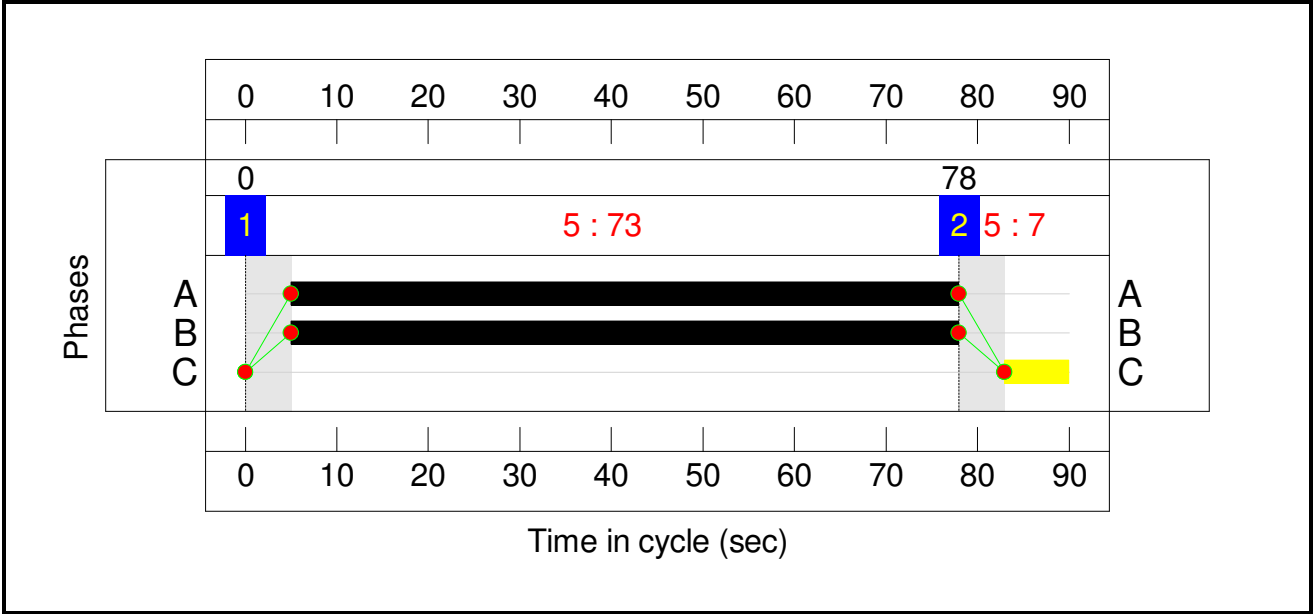
C2 - 08-1079
Stage Sequence Diagram



Stage Timings

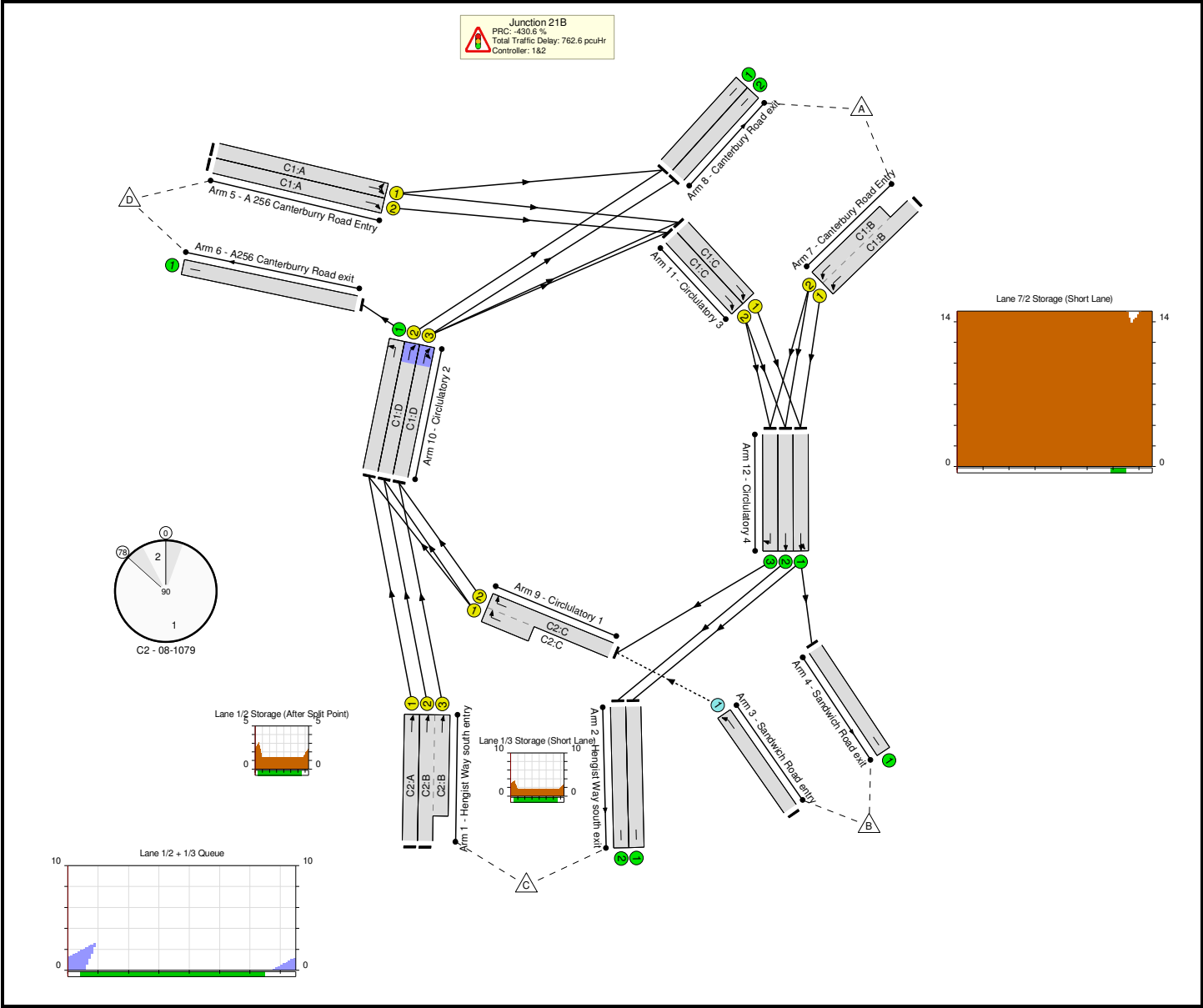
Stage	1	2
Duration	73	7
Change Point	0	78

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21b	-	-	N/A	-	-		-	-	-	-	-	-	477.6%
Junction 21B	-	-	N/A	-	-		-	-	-	-	-	-	477.6%
1/1	Hengist Way south entry Ahead	U	N/A	N/A	C2:A		1	73	-	938	1985	1632	57.5%
1/2+1/3	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	73	-	876	1980:1980	927+1053	44.2 : 44.2%
2/1	Hengist Way south exit	U	N/A	N/A	-		-	-	-	973	Inf	Inf	0.0%
2/2	Hengist Way south exit	U	N/A	N/A	-		-	-	-	1186	Inf	Inf	0.0%
3/1	Sandwich Road entry Ahead	O	N/A	N/A	-		-	-	-	179	1908	292	61.2%
4/1	Sandwich Road exit	U	N/A	N/A	-		-	-	-	282	Inf	Inf	0.0%
5/1	A 256 Canterbury Road Entry Left Ahead	U	N/A	N/A	C1:A		1	55	-	689	1942	1208	57.0%
5/2	A 256 Canterbury Road Entry Ahead	U	N/A	N/A	C1:A		1	55	-	658	1919	1194	55.1%
6/1	A256 Canterbury Road exit	U	N/A	N/A	-		-	-	-	1286	Inf	Inf	0.0%
7/1+7/2	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	7	-	1551	1828:1828	162+162	477.6 : 477.0%
8/1	Canterbury Road exit	U	N/A	N/A	-		-	-	-	703	Inf	Inf	0.0%
8/2	Canterbury Road exit	U	N/A	N/A	-		-	-	-	461	Inf	Inf	0.0%
9/2+9/1	Circlulatory 1 Right	U	N/A	N/A	C2:C		1	7	-	444	1766:1796	7+160	266.8 : 150.0%
10/1	Circlulatory 2 Left	U	N/A	N/A	-		-	-	-	1286	Inf	Inf	0.0%

Full Input Data And Results

10/2	Circlulatory 2 Ahead	U	N/A	N/A	C1:D		1	25	-	488	1922	555	84.4%
10/3	Circlulatory 2 Ahead Right	U	N/A	N/A	C1:D		1	25	-	484	1914	553	86.3%
11/1	Circlulatory 3 Ahead	U	N/A	N/A	C1:C		1	73	-	479	2040	1677	28.6%
11/2	Circlulatory 3 Ahead	U	N/A	N/A	C1:C		1	73	-	676	2040	1677	39.9%
12/1	Circlulatory 4 Ahead Ahead2	U	N/A	N/A	-		-	-	-	1255	Inf	Inf	0.0%
12/2	Circlulatory 4 Ahead	U	N/A	N/A	-		-	-	-	1186	Inf	Inf	0.0%
12/3	Circlulatory 4 Right	U	N/A	N/A	-		-	-	-	265	Inf	Inf	0.0%

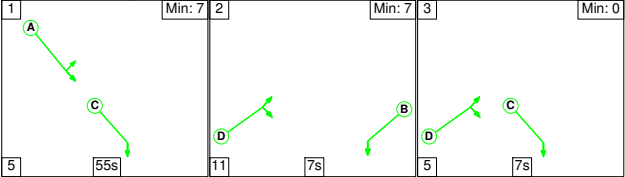
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	179	0	0	92.9	669.7	0.0	762.6	-	-	-	-
Junction 21B	-	-	179	0	0	92.9	669.7	0.0	762.6	-	-	-	-
1/1	938	938	-	-	-	0.7	0.7	-	1.4	5.3	7.8	0.7	8.5
1/2+1/3	876	876	-	-	-	0.4	0.4	-	0.8	3.5	2.6	0.4	3.0
2/1	477	477	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	753	753	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	179	179	179	0	0	0.0	0.8	-	0.8	16.6	1.2	0.8	2.0
4/1	164	164	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	689	689	-	-	-	1.9	0.7	-	2.6	13.4	10.0	0.7	10.6
5/2	658	658	-	-	-	1.8	0.6	-	2.4	13.1	9.3	0.6	9.9
6/1	1039	1039	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	1551	325	-	-	-	72.4	613.6	-	686.0	1592.3	74.8	613.6	688.4
8/1	683	683	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	461	461	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	257	171	-	-	-	6.5	46.9	-	53.5	747.3	9.9	46.9	56.9
10/1	1039	1039	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	468	468	-	-	-	4.6	2.5	-	7.1	54.9	11.1	2.5	13.6
10/3	477	477	-	-	-	4.5	2.9	-	7.4	56.2	11.6	2.9	14.6
11/1	479	479	-	-	-	0.0	0.2	-	0.2	1.6	0.1	0.2	0.3
11/2	669	669	-	-	-	0.0	0.3	-	0.3	1.8	0.0	0.3	0.4
12/1	641	641	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	753	753	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	78	78	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 - 08-1078 C2 - 08-1079 PRC for Signalled Lanes (%): -430.6 PRC for Signalled Lanes (%): -196.5 PRC Over All Lanes (%): -430.6 Total Delay for Signalled Lanes (pcuHr): 706.11 Total Delay for Signalled Lanes (pcuHr): 55.67 Total Delay Over All Lanes(pcuHr): 762.60 Cycle Time (s): 90 Cycle Time (s): 90													

Full Input Data And Results

Scenario 8: '2039 + Dev Traffic - PM Peak' (FG8: '2039 + Dev Traffic - PM Peak', Plan 3: 'PM Peak')
C1 - 08-1078

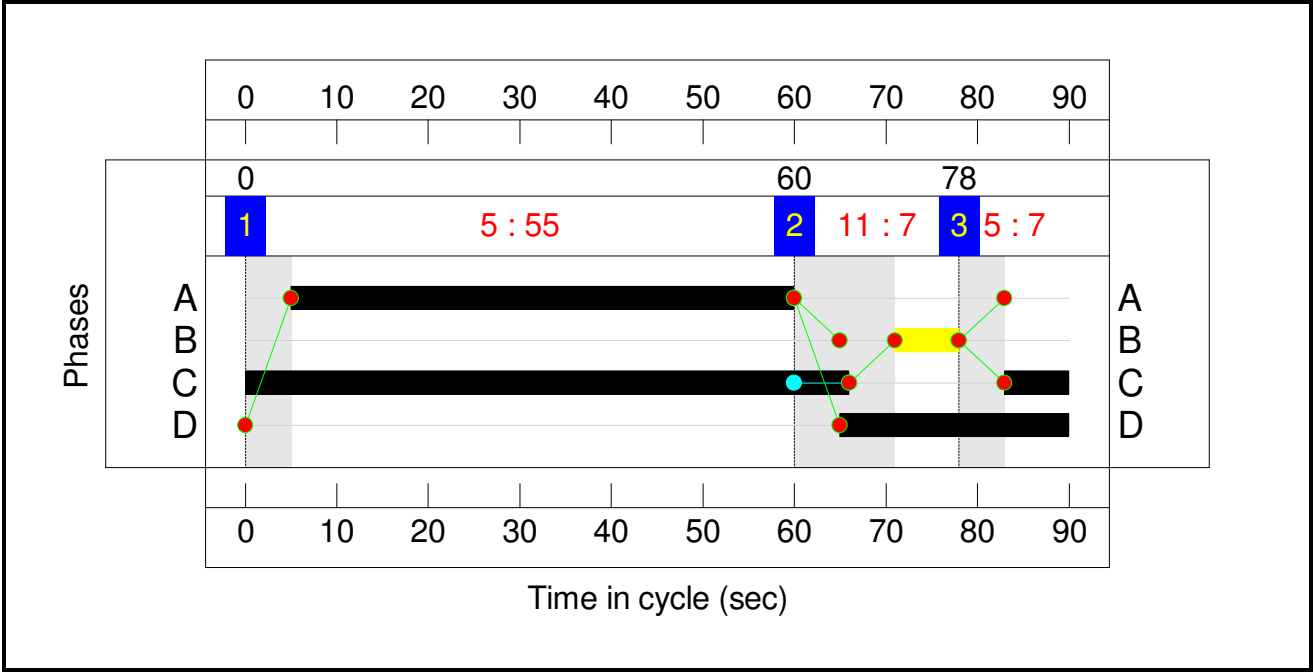
Stage Sequence Diagram



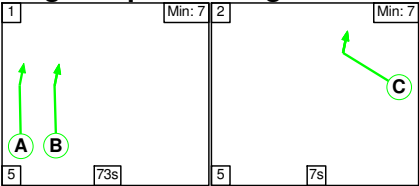
Stage Timings

Stage	1	2	3
Duration	55	7	7
Change Point	0	60	78

Signal Timings Diagram



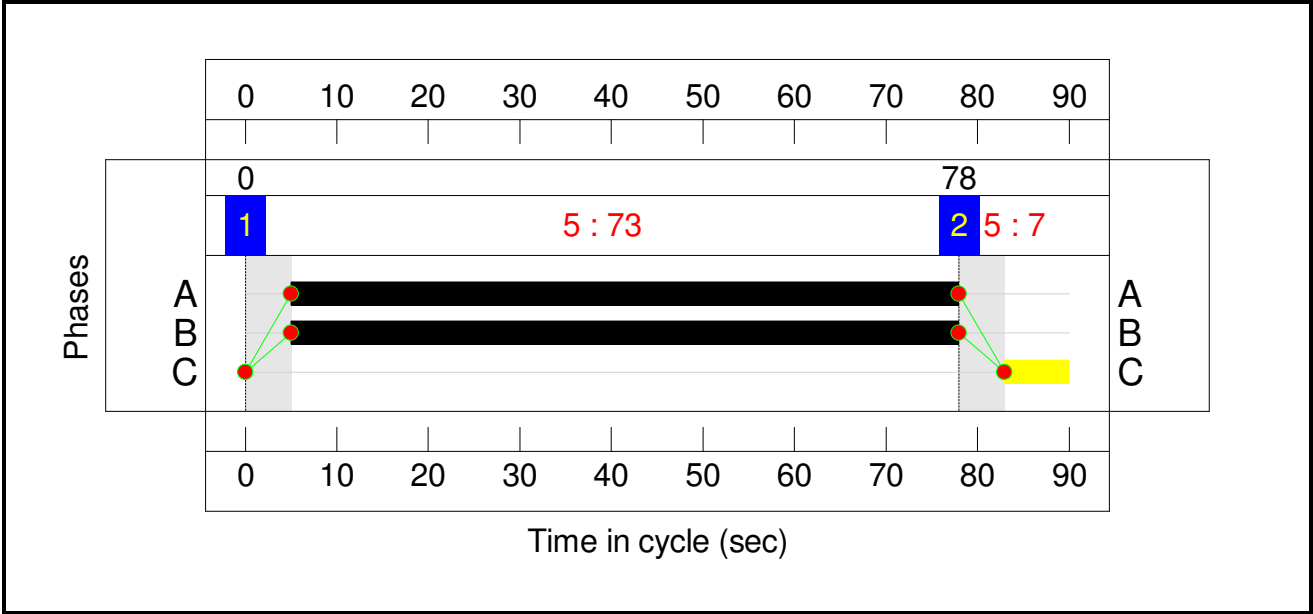
C2 - 08-1079
Stage Sequence Diagram



Stage Timings

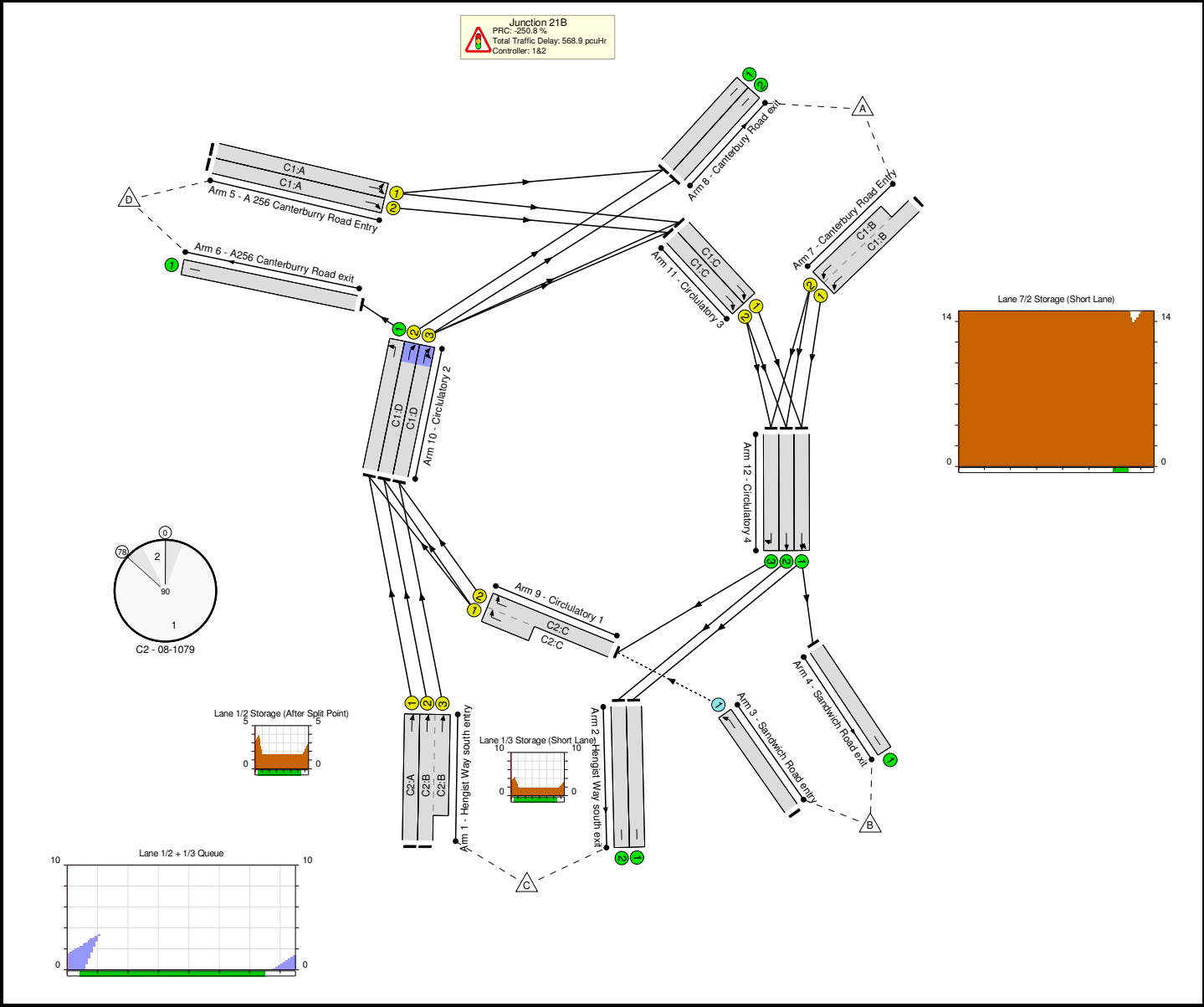
Stage	1	2
Duration	73	7
Change Point	0	78

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21b	-	-	N/A	-	-		-	-	-	-	-	-	315.7%
Junction 21B	-	-	N/A	-	-		-	-	-	-	-	-	315.7%
1/1	Hengist Way south entry Ahead	U	N/A	N/A	C2:A		1	73	-	1059	1985	1632	64.9%
1/2+1/3	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	73	-	1063	1980:1980	944+1036	53.7 : 53.7%
2/1	Hengist Way south exit	U	N/A	N/A	-		-	-	-	653	Inf	Inf	0.0%
2/2	Hengist Way south exit	U	N/A	N/A	-		-	-	-	1169	Inf	Inf	0.0%
3/1	Sandwich Road entry Ahead	O	N/A	N/A	-		-	-	-	251	1908	278	90.4%
4/1	Sandwich Road exit	U	N/A	N/A	-		-	-	-	376	Inf	Inf	0.0%
5/1	A 256 Canterbury Road Entry Left Ahead	U	N/A	N/A	C1:A		1	55	-	933	1953	1215	76.8%
5/2	A 256 Canterbury Road Entry Ahead	U	N/A	N/A	C1:A		1	55	-	891	1919	1194	74.6%
6/1	A256 Canterbury Road exit	U	N/A	N/A	-		-	-	-	1410	Inf	Inf	0.0%
7/1+7/2	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	7	-	1026	1828:1828	162+162	315.7 : 315.7%
8/1	Canterbury Road exit	U	N/A	N/A	-		-	-	-	1069	Inf	Inf	0.0%
8/2	Canterbury Road exit	U	N/A	N/A	-		-	-	-	546	Inf	Inf	0.0%
9/2+9/1	Circlulatory 1 Right	U	N/A	N/A	C2:C		1	7	-	490	1766:1796	2+160	303.8 : 229.8%
10/1	Circlulatory 2 Left	U	N/A	N/A	-		-	-	-	1410	Inf	Inf	0.0%

Full Input Data And Results

10/2	Circlulatory 2 Ahead	U	N/A	N/A	C1:D		1	25	-	641	1922	555	101.2%
10/3	Circlulatory 2 Ahead Right	U	N/A	N/A	C1:D		1	25	-	561	1918	554	100.7%
11/1	Circlulatory 3 Ahead	U	N/A	N/A	C1:C		1	73	-	516	2040	1677	30.8%
11/2	Circlulatory 3 Ahead	U	N/A	N/A	C1:C		1	73	-	895	2040	1677	53.2%
12/1	Circlulatory 4 Ahead Ahead2	U	N/A	N/A	-		-	-	-	1029	Inf	Inf	0.0%
12/2	Circlulatory 4 Ahead	U	N/A	N/A	-		-	-	-	1169	Inf	Inf	0.0%
12/3	Circlulatory 4 Right	U	N/A	N/A	-		-	-	-	239	Inf	Inf	0.0%

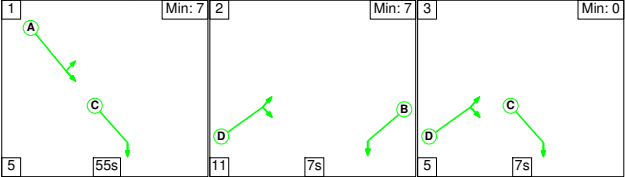
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	251	0	0	76.0	492.9	0.0	568.9	-	-	-	-
Junction 21B	-	-	251	0	0	76.0	492.9	0.0	568.9	-	-	-	-
1/1	1059	1059	-	-	-	0.9	0.9	-	1.8	6.2	10.0	0.9	10.9
1/2+1/3	1063	1063	-	-	-	0.6	0.6	-	1.2	3.9	3.4	0.6	4.0
2/1	417	417	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	934	934	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	251	251	251	0	0	0.3	3.7	-	4.0	57.6	5.2	3.7	8.9
4/1	261	261	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	933	933	-	-	-	3.2	1.6	-	4.8	18.6	16.8	1.6	18.5
5/2	891	891	-	-	-	3.0	1.5	-	4.4	17.9	15.6	1.5	17.0
6/1	1164	1164	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	1026	325	-	-	-	42.0	351.2	-	393.2	1379.6	37.9	351.2	389.1
8/1	983	983	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	541	541	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	372	162	-	-	-	14.0	106.1	-	120.1	1162.8	19.2	106.1	125.3
10/1	1164	1164	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	562	555	-	-	-	6.2	13.6	-	19.8	126.9	14.2	13.6	27.8
10/3	558	554	-	-	-	5.9	12.9	-	18.8	121.1	14.1	12.9	27.0
11/1	516	516	-	-	-	0.0	0.2	-	0.2	1.7	0.2	0.2	0.4
11/2	893	893	-	-	-	0.0	0.6	-	0.6	2.3	0.0	0.6	0.6
12/1	678	678	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	934	934	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	121	121	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 - 08-1078 C2 - 08-1079 PRC for Signalled Lanes (%): -250.8 PRC for Signalled Lanes (%): -237.6 PRC Over All Lanes (%): -250.8 Total Delay for Signalled Lanes (pcuHr): 441.84 Total Delay for Signalled Lanes (pcuHr): 123.07 Total Delay Over All Lanes(pcuHr): 568.92 Cycle Time (s): 90 Cycle Time (s): 90													

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	251	0	0	76.0	492.9	0.0	568.9	-	-	-	-
Junction 21B	-	-	251	0	0	76.0	492.9	0.0	568.9	-	-	-	-
1/1	1059	1059	-	-	-	0.9	0.9	-	1.8	6.2	10.0	0.9	10.9
1/2+1/3	1063	1063	-	-	-	0.6	0.6	-	1.2	3.9	3.4	0.6	4.0
2/1	417	417	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	934	934	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	251	251	251	0	0	0.3	3.7	-	4.0	57.6	5.2	3.7	8.9
4/1	261	261	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	933	933	-	-	-	3.2	1.6	-	4.8	18.6	16.8	1.6	18.5
5/2	891	891	-	-	-	3.0	1.5	-	4.4	17.9	15.6	1.5	17.0
6/1	1164	1164	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	1026	325	-	-	-	42.0	351.2	-	393.2	1379.6	37.9	351.2	389.1
8/1	983	983	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	541	541	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	372	162	-	-	-	14.0	106.1	-	120.1	1162.8	19.2	106.1	125.3
10/1	1164	1164	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	562	555	-	-	-	6.2	13.6	-	19.8	126.9	14.2	13.6	27.8
10/3	558	554	-	-	-	5.9	12.9	-	18.8	121.1	14.1	12.9	27.0
11/1	516	516	-	-	-	0.0	0.2	-	0.2	1.7	0.2	0.2	0.4
11/2	893	893	-	-	-	0.0	0.6	-	0.6	2.3	0.0	0.6	0.6
12/1	678	678	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	934	934	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	121	121	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 - 08-1078 C2 - 08-1079 PRC for Signalled Lanes (%): -250.8 PRC for Signalled Lanes (%): -237.6 PRC Over All Lanes (%): -250.8 Total Delay for Signalled Lanes (pcuHr): 441.84 Total Delay for Signalled Lanes (pcuHr): 123.07 Total Delay Over All Lanes(pcuHr): 568.92 Cycle Time (s): 90 Cycle Time (s): 90													

Full Input Data And Results

Scenario 9: '2039 + Dev Traffic - Airport Peak' (FG9: '2039 + Dev Traffic - Airport Peak', Plan 4: 'Airport Peak')
C1 - 08-1078

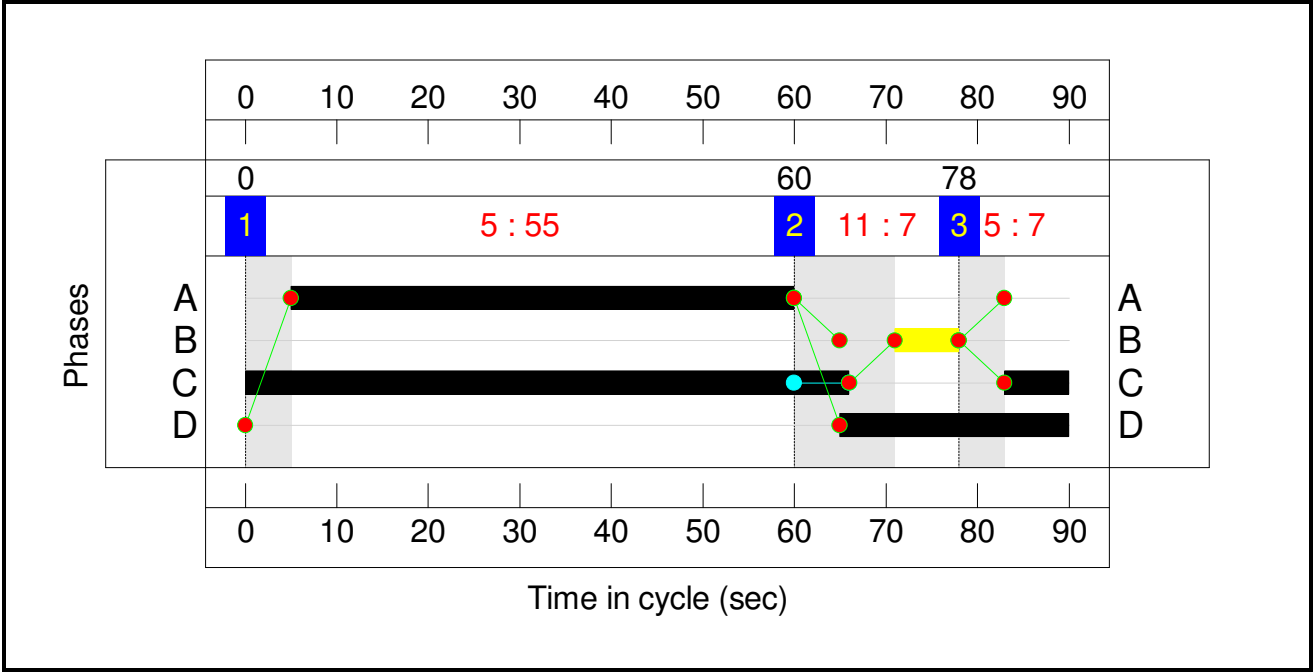
Stage Sequence Diagram



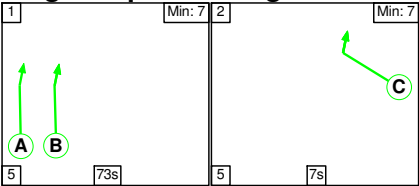
Stage Timings

Stage	1	2	3
Duration	55	7	7
Change Point	0	60	78

Signal Timings Diagram



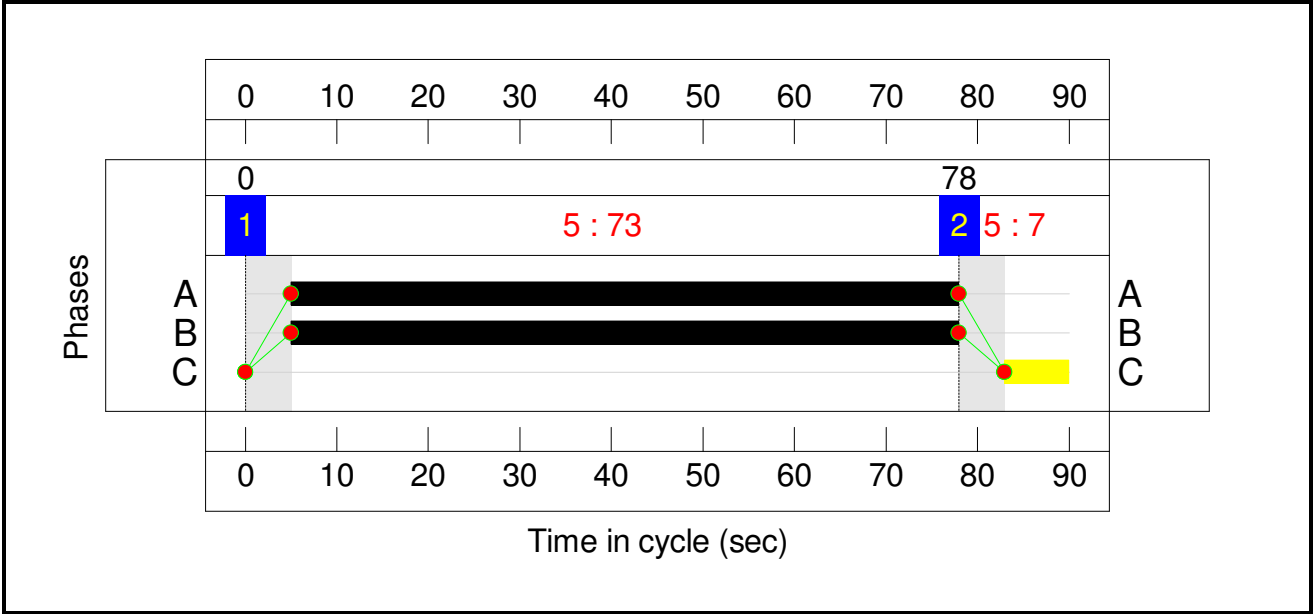
C2 - 08-1079
Stage Sequence Diagram



Stage Timings

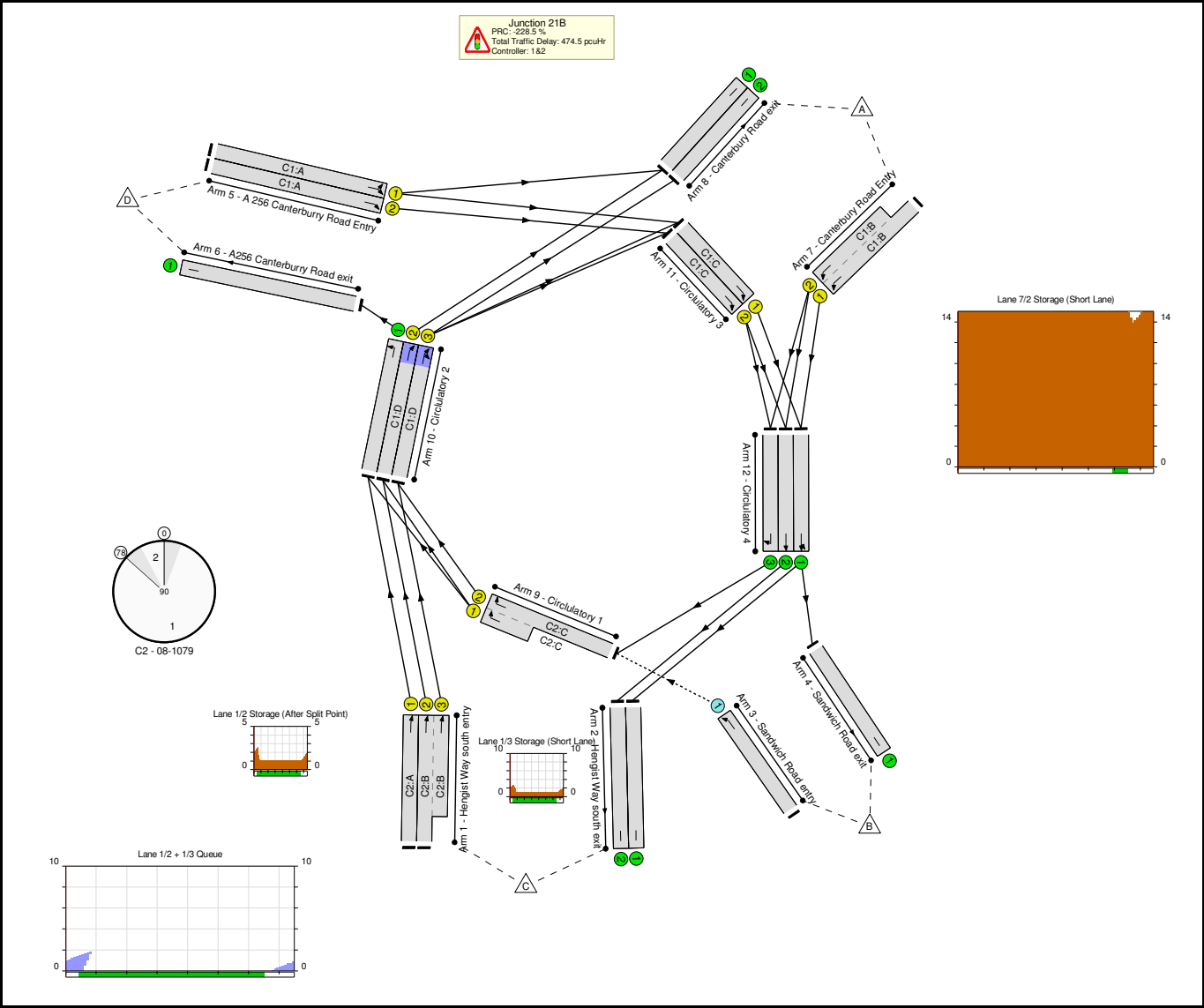
Stage	1	2
Duration	73	7
Change Point	0	78

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 21b	-	-	N/A	-	-		-	-	-	-	-	-	295.7%
Junction 21B	-	-	N/A	-	-		-	-	-	-	-	-	295.7%
1/1	Hengist Way south entry Ahead	U	N/A	N/A	C2:A		1	73	-	687	1985	1632	42.1%
1/2+1/3	Hengist Way south entry Ahead	U	N/A	N/A	C2:B		1	73	-	687	1980:1980	960+1020	34.7 : 34.7%
2/1	Hengist Way south exit	U	N/A	N/A	-		-	-	-	583	Inf	Inf	0.0%
2/2	Hengist Way south exit	U	N/A	N/A	-		-	-	-	846	Inf	Inf	0.0%
3/1	Sandwich Road entry Ahead	O	N/A	N/A	-		-	-	-	220	1908	318	69.2%
4/1	Sandwich Road exit	U	N/A	N/A	-		-	-	-	315	Inf	Inf	0.0%
5/1	A 256 Canterbury Road Entry Left Ahead	U	N/A	N/A	C1:A		1	55	-	655	1947	1211	54.1%
5/2	A 256 Canterbury Road Entry Ahead	U	N/A	N/A	C1:A		1	55	-	622	1919	1194	52.1%
6/1	A256 Canterbury Road exit	U	N/A	N/A	-		-	-	-	1087	Inf	Inf	0.0%
7/1+7/2	Canterbury Road Entry Left	U	N/A	N/A	C1:B		1	7	-	952	1828:1828	162+162	292.9 : 292.9%
8/1	Canterbury Road exit	U	N/A	N/A	-		-	-	-	654	Inf	Inf	0.0%
8/2	Canterbury Road exit	U	N/A	N/A	-		-	-	-	338	Inf	Inf	0.0%
9/2+9/1	Circlulatory 1 Right	U	N/A	N/A	C2:C		1	7	-	479	1766:1796	2+160	295.7 : 214.0%
10/1	Circlulatory 2 Left	U	N/A	N/A	-		-	-	-	1087	Inf	Inf	0.0%

Full Input Data And Results

10/2	Circlulatory 2 Ahead	U	N/A	N/A	C1:D		1	25	-	405	1922	555	64.9%
10/3	Circlulatory 2 Ahead Right	U	N/A	N/A	C1:D		1	25	-	361	1911	552	64.8%
11/1	Circlulatory 3 Ahead	U	N/A	N/A	C1:C		1	73	-	422	2040	1677	25.2%
11/2	Circlulatory 3 Ahead	U	N/A	N/A	C1:C		1	73	-	629	2040	1677	37.3%
12/1	Circlulatory 4 Ahead Ahead2	U	N/A	N/A	-		-	-	-	898	Inf	Inf	0.0%
12/2	Circlulatory 4 Ahead	U	N/A	N/A	-		-	-	-	846	Inf	Inf	0.0%
12/3	Circlulatory 4 Right	U	N/A	N/A	-		-	-	-	259	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Junction 21b	-	-	220	0	0	60.9	413.6	0.0	474.5	-	-	-	-
Junction 21B	-	-	220	0	0	60.9	413.6	0.0	474.5	-	-	-	-
1/1	687	687	-	-	-	0.4	0.4	-	0.8	4.1	4.6	0.4	4.9
1/2+1/3	687	687	-	-	-	0.3	0.3	-	0.6	3.1	1.9	0.3	2.1
2/1	358	358	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	659	659	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	220	220	220	0	0	0.0	1.1	-	1.1	18.6	1.4	1.1	2.5
4/1	226	226	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	655	655	-	-	-	1.8	0.6	-	2.3	12.9	9.3	0.6	9.9
5/2	622	622	-	-	-	1.6	0.5	-	2.2	12.6	8.6	0.5	9.2
6/1	819	819	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	952	325	-	-	-	37.7	314.3	-	351.9	1330.9	32.7	314.3	346.9
8/1	610	610	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	338	338	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	349	163	-	-	-	12.6	94.2	-	106.8	1102.9	17.4	94.2	111.6
10/1	819	819	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	361	361	-	-	-	3.2	0.9	-	4.1	41.3	8.2	0.9	9.2
10/3	358	358	-	-	-	3.2	0.9	-	4.1	41.2	8.5	0.9	9.4
11/1	422	422	-	-	-	0.0	0.2	-	0.2	1.7	0.4	0.2	0.5
11/2	626	626	-	-	-	0.0	0.3	-	0.3	1.7	0.0	0.3	0.3
12/1	584	584	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	659	659	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/3	129	129	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 - 08-1078 C2 - 08-1079 PRC for Signalled Lanes (%): -225.5 PRC for Signalled Lanes (%): -228.5 PRC Over All Lanes (%): -228.5 Total Delay for Signalled Lanes (pcuHr): 365.21 Total Delay for Signalled Lanes (pcuHr): 108.17 Total Delay Over All Lanes(pcuHr): 474.51 Cycle Time (s): 90 Cycle Time (s): 90													

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

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

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

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

Summary of junction performance

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

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

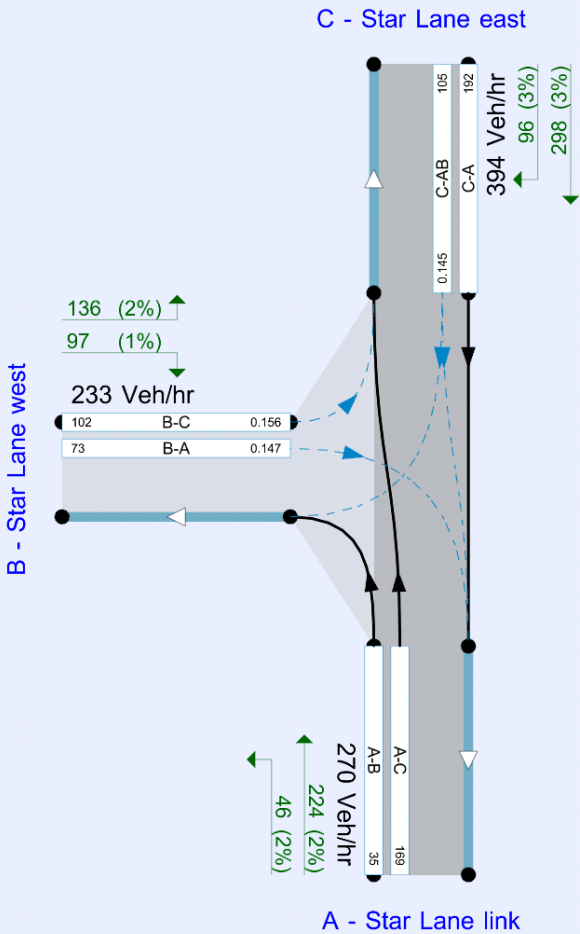
File summary

File Description

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

Units

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



Flows show original traffic demand (Veh/hr).
Streams (upstream end) show Total Demand (Veh/hr); Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

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

Analysis Set Details

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

2017 Baseline Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

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

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

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

Major Arm Geometry

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

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

Minor Arm Geometry

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

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

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

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

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

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

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

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

Origin-Destination Data

Demand (Veh/hr)

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

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

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

Main Results for each time segment

07:30 - 07:45

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

07:45 - 08:00

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

08:00 - 08:15

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

08:15 - 08:30

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

08:30 - 08:45

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

08:45 - 09:00

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

2017 Baseline Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

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

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

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

Origin-Destination Data

Demand (Veh/hr)

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

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

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

Main Results for each time segment

16:30 - 16:45

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

16:45 - 17:00

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

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	144	36	573	0.252	144	0.2	0.3	8.377	A
B-A	101	25	378	0.268	101	0.2	0.4	12.979	B
C-AB	340	85	783	0.435	339	0.7	1.1	8.125	A
C-A	207	52			207				
A-B	123	31			123				
A-C	367	92			367				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	144	36	573	0.252	144	0.3	0.3	8.401	A
B-A	101	25	377	0.268	101	0.4	0.4	13.039	B
C-AB	341	85	784	0.435	341	1.1	1.2	8.191	A
C-A	206	52			206				
A-B	123	31			123				
A-C	367	92			367				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	118	29	609	0.193	118	0.3	0.2	7.341	A
B-A	83	21	422	0.196	83	0.4	0.2	10.641	B
C-AB	246	62	752	0.327	248	1.2	0.7	7.189	A
C-A	201	50			201				
AB	101	25			101				
AC	299	75			299				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	99	25	632	0.156	99	0.2	0.2	6.757	A
B-A	69	17	454	0.153	70	0.2	0.2	9.377	A
C-AB	188	47	729	0.258	189	0.7	0.5	6.694	A
C-A	186	46			186				
AB	84	21			84				
AC	251	63			251				

2017 Baseline Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	2.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	350	100.000
B - Star Lane west		ONE HOUR	✓	139	100.000
C - Star Lane east		ONE HOUR	✓	346	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	66	284
	B - Star Lane west	65	0	74
	C - Star Lane east	245	101	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	3	4
	B - Star Lane west	0	0	3
	C - Star Lane east	4	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.14	6.93	0.2	A	68	102
B-A	0.16	9.68	0.2	A	60	89
C-AB	0.24	6.56	0.5	A	138	207
C-A					180	270
A-B					61	91
A-C					261	391

Main Results for each time segment

12:45 - 13:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	56	14	640	0.087	55	0.0	0.1	6.151	A
B-A	49	12	499	0.098	49	0.0	0.1	7.978	A
C-AB	104	26	693	0.150	103	0.0	0.2	6.093	A
C-A	157	39			157				
A-B	50	12			50				
A-C	214	53			214				

13:00 - 13:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	67	17	624	0.107	66	0.1	0.1	6.455	A
B-A	58	15	476	0.123	58	0.1	0.1	8.617	A
C-AB	132	33	707	0.187	132	0.2	0.3	6.258	A
C-A	179	45			179				
A-B	59	15			59				
A-C	255	64			255				

13:15 - 13:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	81	20	601	0.136	81	0.1	0.2	6.922	A
B-A	72	18	443	0.161	71	0.1	0.2	9.669	A
C-AB	177	44	728	0.244	177	0.3	0.5	6.533	A
C-A	204	51			204				
A-B	73	18			73				
A-C	313	78			313				

13:30 - 13:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	81	20	601	0.136	81	0.2	0.2	6.927	A
B-A	72	18	443	0.161	72	0.2	0.2	9.682	A
C-AB	177	44	728	0.244	177	0.5	0.5	6.555	A
C-A	203	51			203				
A-B	73	18			73				
A-C	313	78			313				

13:45 - 14:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	67	17	624	0.107	67	0.2	0.1	6.461	A
B-A	58	15	476	0.123	59	0.2	0.1	8.636	A
C-AB	132	33	707	0.187	133	0.5	0.3	6.287	A
C-A	179	45			179				
A-B	59	15			59				
A-C	255	64			255				

14:00 - 14:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	56	14	640	0.087	56	0.1	0.1	6.164	A
B-A	49	12	499	0.098	49	0.1	0.1	8.003	A
C-AB	104	26	693	0.150	104	0.3	0.2	6.129	A
C-A	157	39			157				
A-B	50	12			50				
A-C	214	53			214				

2039 Growthed Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	4.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Am	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	337	100.000
B - Star Lane west		ONE HOUR	✓	291	100.000
C - Star Lane east		ONE HOUR	✓	493	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	57	280
	B - Star Lane west	121	0	170
	C - Star Lane east	373	120	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.33	9.44	0.5	A	156	234
B-A	0.34	13.85	0.5	B	111	167
C-AB	0.32	6.50	0.8	A	200	300
C-A					252	378
A-B					52	78
A-C					257	385

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	128	32	635	0.202	127	0.0	0.2	7.076	A
B-A	91	23	467	0.195	90	0.0	0.2	9.532	A
C-AB	144	36	752	0.192	143	0.0	0.4	5.908	A
C-A	227	57			227				
A-B	43	11			43				
A-C	211	53			211				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	153	38	610	0.251	153	0.2	0.3	7.862	A
B-A	109	27	437	0.249	108	0.2	0.3	10.939	B
C-AB	190	47	781	0.243	189	0.4	0.5	6.095	A
C-A	253	63			253				
A-B	51	13			51				
A-C	252	63			252				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	187	47	569	0.329	187	0.3	0.5	9.397	A
B-A	133	33	394	0.339	133	0.3	0.5	13.755	B
C-AB	266	66	821	0.323	265	0.5	0.8	6.477	A
C-A	277	69			277				
A-B	63	16			63				
A-C	308	77			308				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	187	47	568	0.329	187	0.5	0.5	9.445	A
B-A	133	33	393	0.339	133	0.5	0.5	13.846	B
C-AB	266	67	822	0.324	266	0.8	0.8	6.502	A
C-A	277	69			277				
A-B	63	16			63				
A-C	308	77			308				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	153	38	609	0.251	153	0.5	0.3	7.910	A
B-A	109	27	437	0.249	109	0.5	0.3	11.025	B
C-AB	190	48	781	0.244	191	0.8	0.5	6.130	A
C-A	253	63			253				
AB	51	13			51				
AC	252	63			252				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	128	32	634	0.202	128	0.3	0.3	7.122	A
B-A	91	23	466	0.195	91	0.3	0.2	9.614	A
C-AB	145	36	752	0.193	146	0.5	0.4	5.949	A
C-A	226	57			226				
AB	43	11			43				
AC	211	53			211				

2039 Growthed Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	6.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	560	100.000
B - Star Lane west		ONE HOUR	✓	281	100.000
C - Star Lane east		ONE HOUR	✓	626	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	141	419
	B - Star Lane west	116	0	165
	C - Star Lane east	421	205	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.36	11.21	0.6	B	151	227
B-A	0.41	19.84	0.7	C	106	160
C-AB	0.62	11.65	2.6	B	380	571
C-A					194	291
A-B					129	194
A-C					384	577

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	124	31	602	0.206	123	0.0	0.3	7.508	A
B-A	87	22	413	0.212	86	0.0	0.3	10.997	B
C-AB	265	66	758	0.350	262	0.0	0.8	7.241	A
C-A	206	52			206				
A-B	106	27			106				
A-C	315	79			315				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	148	37	567	0.262	148	0.3	0.4	8.585	A
B-A	104	26	371	0.281	104	0.3	0.4	13.461	B
C-AB	357	89	788	0.453	355	0.8	1.2	8.335	A
C-A	206	52			206				
A-B	127	32			127				
A-C	377	94			377				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	182	45	505	0.360	181	0.3	0.6	11.090	B
B-A	128	32	310	0.412	127	0.4	0.7	19.461	C
C-AB	515	129	831	0.620	510	1.2	2.5	11.282	B
C-A	174	43			174				
A-B	155	39			155				
A-C	461	115			461				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	182	45	503	0.361	182	0.6	0.6	11.214	B
B-A	128	32	309	0.413	128	0.7	0.7	19.835	C
C-AB	518	130	834	0.622	518	2.5	2.6	11.647	B
C-A	171	43			171				
A-B	155	39			155				
A-C	461	115			461				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	148	37	565	0.263	149	0.6	0.4	8.672	A
B-A	104	26	369	0.283	105	0.7	0.4	13.717	B
C-AB	360	90	791	0.455	365	2.6	1.3	8.604	A
C-A	203	51			203				
A-B	127	32			127				
A-C	377	94			377				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	124	31	600	0.207	125	0.4	0.3	7.570	A
B-A	87	22	411	0.212	88	0.4	0.3	11.148	B
C-AB	267	67	760	0.352	269	1.3	0.8	7.398	A
C-A	204	51			204				
A-B	106	27			106				
A-C	315	79			315				

2039 Growthed Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	3.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	467	100.000
B - Star Lane west		ONE HOUR	✓	186	100.000
C - Star Lane east		ONE HOUR	✓	462	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	88	379
	B - Star Lane west	87	0	99
	C - Star Lane east	327	135	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	3	4
	B - Star Lane west	0	0	3
	C - Star Lane east	4	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.20	8.10	0.2	A	91	136
B-A	0.25	12.54	0.3	B	80	120
C-AB	0.37	7.44	0.9	A	213	320
C-A					211	316
A-B					81	121
A-C					348	522

Main Results for each time segment

12:45 - 13:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	75	19	613	0.122	74	0.0	0.1	6.677	A
B-A	65	16	459	0.143	65	0.0	0.2	9.113	A
C-AB	155	39	718	0.216	153	0.0	0.4	6.371	A
C-A	193	48			193				
A-B	66	17			66				
A-C	285	71			285				

13:00 - 13:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	89	22	589	0.151	89	0.1	0.2	7.192	A
B-A	78	20	427	0.183	78	0.2	0.2	10.296	B
C-AB	202	51	738	0.274	202	0.4	0.6	6.715	A
C-A	213	53			213				
A-B	79	20			79				
A-C	341	85			341				

13:15 - 13:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	109	27	554	0.197	109	0.2	0.2	8.082	A
B-A	96	24	383	0.250	95	0.2	0.3	12.492	B
C-AB	281	70	767	0.367	280	0.6	0.9	7.393	A
C-A	227	57			227				
A-B	97	24			97				
A-C	417	104			417				

13:30 - 13:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	109	27	553	0.197	109	0.2	0.2	8.099	A
B-A	96	24	383	0.250	96	0.3	0.3	12.542	B
C-AB	282	70	768	0.367	282	0.9	0.9	7.442	A
C-A	227	57			227				
A-B	97	24			97				
A-C	417	104			417				

13:45 - 14:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	89	22	589	0.151	89	0.2	0.2	7.212	A
B-A	78	20	427	0.183	79	0.3	0.2	10.346	B
C-AB	203	51	739	0.275	204	0.9	0.6	6.784	A
C-A	212	53			212				
A-B	79	20			79				
A-C	341	85			341				

14:00 - 14:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	75	19	612	0.122	75	0.2	0.1	6.704	A
B-A	65	16	459	0.143	66	0.2	0.2	9.168	A
C-AB	155	39	718	0.216	156	0.6	0.4	6.433	A
C-A	192	48			192				
A-B	66	17			66				
A-C	285	71			285				

2039 + Dev Traffic, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	5.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Am	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	337	100.000
B - Star Lane west		ONE HOUR	✓	301	100.000
C - Star Lane east		ONE HOUR	✓	566	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	57	280
	B - Star Lane west	121	0	180
	C - Star Lane east	373	193	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.35	9.96	0.5	A	165	248
B-A	0.37	15.79	0.6	C	111	167
C-AB	0.52	9.08	1.6	A	321	481
C-A					198	298
A-B					52	78
A-C					257	385

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	136	34	635	0.214	134	0.0	0.3	7.184	A
B-A	91	23	446	0.204	90	0.0	0.3	10.097	B
C-AB	231	58	756	0.306	229	0.0	0.6	6.809	A
C-A	195	49			195				
A-B	43	11			43				
A-C	211	53			211				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	162	40	608	0.266	161	0.3	0.4	8.064	A
B-A	109	27	412	0.264	108	0.3	0.4	11.859	B
C-AB	304	76	785	0.387	303	0.6	0.9	7.479	A
C-A	205	51			205				
A-B	51	13			51				
A-C	252	63			252				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	198	50	561	0.353	197	0.4	0.5	9.888	A
B-A	133	33	362	0.368	132	0.4	0.6	15.626	C
C-AB	425	106	826	0.515	423	0.9	1.6	8.958	A
C-A	198	49			198				
A-B	63	16			63				
A-C	308	77			308				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	198	50	560	0.354	198	0.5	0.5	9.957	A
B-A	133	33	361	0.369	133	0.6	0.6	15.793	C
C-AB	427	107	827	0.516	427	1.6	1.6	9.083	A
C-A	196	49			196				
A-B	63	16			63				
A-C	308	77			308				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	162	40	606	0.267	163	0.5	0.4	8.125	A
B-A	109	27	410	0.265	110	0.6	0.4	11.997	B
C-AB	306	76	787	0.388	308	1.6	0.9	7.603	A
C-A	203	51			203				
A-B	51	13			51				
A-C	252	63			252				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	136	34	633	0.214	136	0.4	0.3	7.239	A
B-A	91	23	445	0.205	92	0.4	0.3	10.208	B
C-AB	232	58	757	0.307	234	0.9	0.6	6.913	A
C-A	194	48			194				
A-B	43	11			43				
A-C	211	53			211				

2039 + Dev Traffic, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	7.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	560	100.000
B - Star Lane west		ONE HOUR	✓	343	100.000
C - Star Lane east		ONE HOUR	✓	635	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	141	419
	B - Star Lane west	116	0	227
	C - Star Lane east	421	214	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.50	14.11	1.0	B	208	312
B-A	0.45	23.18	0.8	C	106	160
C-AB	0.65	12.59	2.8	B	397	596
C-A					185	278
A-B					129	194
A-C					384	577

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	171	43	615	0.278	169	0.0	0.4	8.047	A
B-A	87	22	399	0.219	86	0.0	0.3	11.485	B
C-AB	277	69	758	0.365	274	0.0	0.8	7.411	A
C-A	201	50			201				
A-B	106	27			106				
A-C	315	79			315				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	204	51	577	0.353	203	0.4	0.5	9.610	A
B-A	104	26	353	0.295	104	0.3	0.4	14.401	B
C-AB	372	93	788	0.472	370	0.8	1.3	8.644	A
C-A	198	50			198				
A-B	127	32			127				
A-C	377	94			377				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	250	62	508	0.492	248	0.5	0.9	13.787	B
B-A	128	32	285	0.449	126	0.4	0.8	22.512	C
C-AB	538	135	831	0.647	532	1.3	2.7	12.108	B
C-A	161	40			161				
A-B	155	39			155				
A-C	461	115			461				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	250	62	505	0.495	250	0.9	1.0	14.105	B
B-A	128	32	283	0.452	128	0.8	0.8	23.183	C
C-AB	542	135	834	0.649	541	2.7	2.8	12.593	B
C-A	158	39			158				
A-B	155	39			155				
A-C	461	115			461				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	204	51	575	0.355	206	1.0	0.6	9.794	A
B-A	104	26	351	0.297	106	0.8	0.4	14.774	B
C-AB	376	94	792	0.475	382	2.8	1.4	8.979	A
C-A	195	49			195				
A-B	127	32			127				
A-C	377	94			377				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	171	43	614	0.278	172	0.6	0.4	8.153	A
B-A	87	22	397	0.220	88	0.4	0.3	11.671	B
C-AB	279	70	760	0.367	281	1.4	0.9	7.588	A
C-A	199	50			199				
A-B	106	27			106				
A-C	315	79			315				

2039 + Dev Traffic, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	4.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	467	100.000
B - Star Lane west		ONE HOUR	✓	203	100.000
C - Star Lane east		ONE HOUR	✓	528	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	88	379
	B - Star Lane west	87	0	116
	C - Star Lane east	327	201	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	3	4
	B - Star Lane west	0	0	2
	C - Star Lane east	4	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.23	8.38	0.3	A	106	160
B-A	0.27	14.08	0.4	B	80	120
C-AB	0.55	10.45	1.8	B	318	477
C-A					167	250
A-B					81	121
A-C					348	522

Main Results for each time segment

12:45 - 13:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	87	22	622	0.140	87	0.0	0.2	6.713	A
B-A	65	16	437	0.150	65	0.0	0.2	9.651	A
C-AB	230	58	718	0.321	228	0.0	0.6	7.332	A
C-A	167	42			167				
A-B	66	17			66				
A-C	285	71			285				

13:00 - 13:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	104	26	597	0.175	104	0.2	0.2	7.294	A
B-A	78	20	402	0.195	78	0.2	0.2	11.114	B
C-AB	302	75	738	0.408	300	0.6	1.0	8.226	A
C-A	173	43			173				
A-B	79	20			79				
A-C	341	85			341				

13:15 - 13:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	128	32	558	0.229	127	0.2	0.3	8.351	A
B-A	96	24	352	0.272	95	0.2	0.4	13.992	B
C-AB	419	105	768	0.546	416	1.0	1.7	10.255	B
C-A	162	40			162				
A-B	97	24			97				
A-C	417	104			417				

13:30 - 13:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	128	32	557	0.229	128	0.3	0.3	8.376	A
B-A	96	24	351	0.273	96	0.4	0.4	14.085	B
C-AB	421	105	769	0.547	421	1.7	1.8	10.452	B
C-A	161	40			161				
A-B	97	24			97				
A-C	417	104			417				

13:45 - 14:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	104	26	597	0.175	105	0.3	0.2	7.324	A
B-A	78	20	401	0.195	79	0.4	0.2	11.204	B
C-AB	303	76	740	0.410	306	1.8	1.0	8.415	A
C-A	172	43			172				
A-B	79	20			79				
A-C	341	85			341				

14:00 - 14:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	87	22	621	0.141	88	0.2	0.2	6.743	A
B-A	65	16	436	0.150	66	0.2	0.2	9.728	A
C-AB	232	58	719	0.322	233	1.0	0.7	7.468	A
C-A	166	41			166				
A-B	66	17			66				
A-C	285	71			285				

2039 B+Dev_Net Change, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	13.74	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	331	100.000
B - Star Lane west		ONE HOUR	✓	304	100.000
C - Star Lane east		ONE HOUR	✓	676	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	29	302
	B - Star Lane west	61	0	243
	C - Star Lane east	383	293	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	2	2
	B - Star Lane west	1	0	4
	C - Star Lane east	3	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.46	11.28	0.8	B	223	334
B-A	0.24	16.65	0.3	C	56	84
C-AB	0.82	25.59	6.0	D	506	759
C-A					114	171
A-B					27	40
A-C					277	416

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	183	46	640	0.286	181	0.0	0.4	7.826	A
B-A	46	11	388	0.118	45	0.0	0.1	10.479	B
C-AB	360	90	744	0.484	355	0.0	1.2	9.193	A
C-A	149	37			149				
A-B	22	5			22				
A-C	227	57			227				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	218	55	620	0.352	218	0.4	0.5	8.939	A
B-A	55	14	347	0.158	55	0.1	0.2	12.313	B
C-AB	477	119	776	0.614	473	1.2	2.1	11.936	B
C-A	131	33			131				
A-B	26	7			26				
A-C	271	68			271				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	268	67	588	0.455	266	0.5	0.8	11.171	B
B-A	67	17	287	0.234	67	0.2	0.3	16.335	C
C-AB	672	168	821	0.819	658	2.1	5.5	22.037	C
C-A	72	18			72				
A-B	32	8			32				
A-C	333	83			333				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	268	67	586	0.456	268	0.8	0.8	11.284	B
B-A	67	17	283	0.237	67	0.3	0.3	16.651	C
C-AB	680	170	826	0.823	678	5.5	6.0	25.586	D
C-A	64	16			64				
A-B	32	8			32				
A-C	333	83			333				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	218	55	619	0.353	220	0.8	0.6	9.035	A
B-A	55	14	342	0.160	55	0.3	0.2	12.572	B
C-AB	485	121	784	0.619	500	6.0	2.4	13.503	B
C-A	122	31			122				
A-B	26	7			26				
A-C	271	68			271				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	183	46	639	0.286	184	0.6	0.4	7.911	A
B-A	46	11	386	0.119	46	0.2	0.1	10.608	B
C-AB	364	91	747	0.487	368	2.4	1.3	9.634	A
C-A	145	36			145				
A-B	22	5			22				
A-C	227	57			227				

2039 B+Dev_Net Change, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	17.10	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	520	100.000
B - Star Lane west		ONE HOUR	✓	385	100.000
C - Star Lane east		ONE HOUR	✓	721	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	71	449
	B - Star Lane west	58	0	327
	C - Star Lane east	433	288	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.66	19.12	1.9	C	300	450
B-A	0.32	25.92	0.4	D	53	80
C-AB	0.87	33.78	8.6	D	545	817
C-A					117	175
A-B					65	98
A-C					412	618

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	246	62	624	0.394	244	0.0	0.6	9.395	A
B-A	44	11	348	0.125	43	0.0	0.1	11.777	B
C-AB	376	94	770	0.489	371	0.0	1.3	8.977	A
C-A	167	42			167				
A-B	53	13			53				
A-C	338	85			338				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	294	73	597	0.493	293	0.6	0.9	11.794	B
B-A	52	13	293	0.178	52	0.1	0.2	14.932	B
C-AB	507	127	803	0.632	503	1.3	2.4	12.055	B
C-A	141	35			141				
A-B	64	16			64				
A-C	404	101			404				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	360	90	550	0.655	357	0.9	1.8	18.311	C
B-A	64	16	208	0.307	63	0.2	0.4	24.673	C
C-AB	734	184	849	0.864	714	2.4	7.4	26.163	D
C-A	60	15			60				
A-B	78	20			78				
A-C	494	124			494				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	360	90	547	0.658	360	1.8	1.9	19.122	C
B-A	64	16	202	0.315	64	0.4	0.4	25.921	D
C-AB	749	187	858	0.872	744	7.4	8.6	33.777	D
C-A	45	11			45				
A-B	78	20			78				
A-C	494	124			494				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	294	73	595	0.494	297	1.9	1.0	12.239	B
B-A	52	13	285	0.183	53	0.4	0.2	15.574	C
C-AB	521	130	815	0.640	545	8.6	2.7	14.777	B
C-A	127	32			127				
A-B	64	16			64				
A-C	404	101			404				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	246	62	624	0.395	248	1.0	0.7	9.610	A
B-A	44	11	345	0.127	44	0.2	0.1	11.982	B
C-AB	381	95	774	0.492	386	2.7	1.4	9.490	A
C-A	162	41			162				
A-B	53	13			53				
A-C	338	85			338				

2039 B+Dev_Net Change, Airport Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
23	untitled	T-Junction	Two-way	9.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Star Lane link		ONE HOUR	✓	451	100.000
B - Star Lane west		ONE HOUR	✓	188	100.000
C - Star Lane east		ONE HOUR	✓	612	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	44	407
	B - Star Lane west	43	0	145
	C - Star Lane east	335	277	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Star Lane link	B - Star Lane west	C - Star Lane east
	A - Star Lane link	0	3	4
	B - Star Lane west	0	0	6
	C - Star Lane east	4	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.27	8.48	0.4	A	133	200
B-A	0.16	14.50	0.2	B	39	59
C-AB	0.77	20.92	4.5	C	448	672
C-A					114	171
A-B					40	61
A-C					373	560

Main Results for each time segment

12:45 - 13:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	109	27	637	0.171	108	0.0	0.2	6.801	A
B-A	32	8	391	0.083	32	0.0	0.1	10.006	B
C-AB	322	81	715	0.451	318	0.0	1.1	9.025	A
C-A	139	35			139				
A-B	33	8			33				
A-C	306	77			306				

13:00 - 13:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	130	33	616	0.212	130	0.2	0.3	7.407	A
B-A	39	10	352	0.110	39	0.1	0.1	11.473	B
C-AB	423	106	738	0.574	420	1.1	1.8	11.369	B
C-A	127	32			127				
A-B	40	10			40				
A-C	366	91			366				

13:15 - 13:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	160	40	584	0.273	159	0.3	0.4	8.456	A
B-A	47	12	298	0.159	47	0.1	0.2	14.337	B
C-AB	591	148	770	0.768	582	1.8	4.2	18.987	C
C-A	83	21			83				
A-B	48	12			48				
A-C	448	112			448				

13:30 - 13:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	160	40	584	0.273	160	0.4	0.4	8.483	A
B-A	47	12	296	0.160	47	0.2	0.2	14.499	B
C-AB	596	149	774	0.771	595	4.2	4.5	20.919	C
C-A	77	19			77				
A-B	48	12			48				
A-C	448	112			448				

13:45 - 14:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	130	33	615	0.212	131	0.4	0.3	7.434	A
B-A	39	10	349	0.111	39	0.2	0.1	11.622	B
C-AB	429	107	743	0.577	439	4.5	1.9	12.389	B
C-A	122	30			122				
A-B	40	10			40				
A-C	366	91			366				

14:00 - 14:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	109	27	636	0.172	109	0.3	0.2	6.832	A
B-A	32	8	389	0.083	33	0.1	0.1	10.093	B
C-AB	325	81	717	0.453	328	1.9	1.1	9.394	A
C-A	136	34			136				
A-B	33	8			33				
A-C	306	77			306				

Junctions 9							
ARCADY 9 - Roundabout Module							
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Filename: Jct 24_R1.j9

Path: R:\Projects\38199 Manston Airport DCO EIA\4 Design\Transport\Junction Modelling\Base Models\Validated\Jct 24_Star Ln Link_Nash Rd

Report generation date: 29/01/2018 14:01:18

»2017, AM

»2017, PM

Summary of junction performance

	AM					PM				
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)
2017										
1 - Star Lane east	0.5	5.15	0.34	A	4.21	1.0	6.27	0.49	A	4.89
2 - Nash Road south	0.2	3.52	0.14	A		0.3	4.33	0.24	A	
3 - Star Lane west	0.4	3.62	0.28	A		0.6	4.35	0.39	A	
4 - Nash Road north	0.5	4.24	0.33	A		0.3	3.73	0.24	A	

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

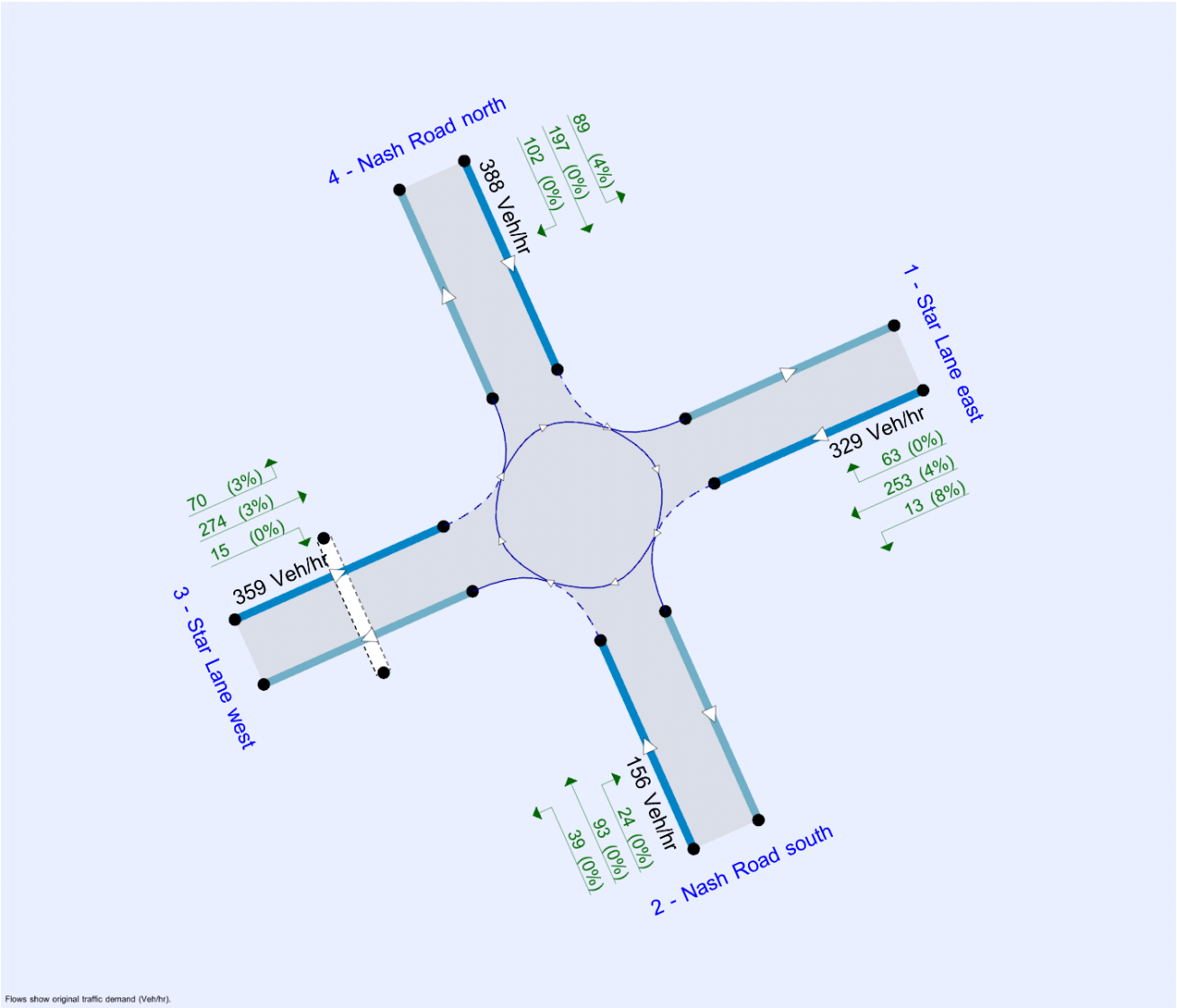
File summary

File Description

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

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2017	AM	ONE HOUR	07:30	09:00	15	✓
D2	2017	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

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

2017, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
24	untitled	Standard Roundabout	1, 2, 3, 4	4.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Star Lane east	
2	Nash Road south	
3	Star Lane west	
4	Nash Road north	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Star Lane east	3.50	7.00	7.0	7.7	38.0	45.0	
2 - Nash Road south	3.70	7.30	8.3	17.0	34.7	47.0	
3 - Star Lane west	3.70	8.00	10.1	40.2	38.0	40.0	
4 - Nash Road north	3.70	7.10	8.7	17.5	38.0	43.0	

Pelican/Puffin Crossings

Arm	Space between crossing and junction entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
3 - Star Lane west	6.00	3.00	2.90	1.00	6.00	6.00	7.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Star Lane east	0.522	1277
2 - Nash Road south	0.585	1471
3 - Star Lane west	0.634	1656
4 - Nash Road north	0.589	1496

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2017	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Am	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Star Lane east		ONE HOUR	✓	329	100.000
2 - Nash Road south		ONE HOUR	✓	156	100.000
3 - Star Lane west		ONE HOUR	✓	359	100.000
4 - Nash Road north		ONE HOUR	✓	388	100.000

Demand overview (Pedestrians)

Am	Profile type	Average pedestrian flow (Ped/hr)
1 - Star Lane east		
2 - Nash Road south		
3 - Star Lane west	[ONEHOUR]	40.00
4 - Nash Road north		

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	13	253	63
	2 - Nash Road south	24	0	39	93
	3 - Star Lane west	274	15	0	70
	4 - Nash Road north	89	197	102	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	8	4	0
	2 - Nash Road south	0	0	0	0
	3 - Star Lane west	3	0	0	3
	4 - Nash Road north	4	0	0	0

Results

Results Summary for whole modelled period

Am	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Star Lane east	0.34	5.15	0.5	A	302	453
2 - Nash Road south	0.14	3.52	0.2	A	143	215
3 - Star Lane west	0.28	3.62	0.4	A	329	494
4 - Nash Road north	0.33	4.24	0.5	A	356	534

Main Results for each time segment

07:30 - 07:45

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	248	62	236		1117	0.222	247	290	0.0	0.3	4.133	A
2 - Nash Road south	117	29	313		1284	0.092	117	169	0.0	0.1	3.086	A
3 - Star Lane west	270	68	135	30.11	1448	0.187	269	295	0.0	0.2	3.054	A
4 - Nash Road north	292	73	235		1342	0.218	291	170	0.0	0.3	3.422	A

07:45 - 08:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	296	74	282		1093	0.271	295	348	0.3	0.4	4.511	A
2 - Nash Road south	140	35	375		1246	0.113	140	202	0.1	0.1	3.253	A
3 - Star Lane west	323	81	162	35.96	1423	0.227	322	354	0.2	0.3	3.270	A
4 - Nash Road north	349	87	281		1314	0.265	348	203	0.3	0.4	3.727	A

08:00 - 08:15

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	362	91	345		1061	0.341	362	426	0.4	0.5	5.142	A
2 - Nash Road south	172	43	460		1196	0.144	172	247	0.1	0.2	3.514	A
3 - Star Lane west	395	99	198	44.04	1389	0.285	395	433	0.3	0.4	3.619	A
4 - Nash Road north	427	107	344		1277	0.335	427	249	0.4	0.5	4.233	A

08:15 - 08:30

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	362	91	346		1061	0.341	362	426	0.5	0.5	5.151	A
2 - Nash Road south	172	43	460		1196	0.144	172	248	0.2	0.2	3.515	A
3 - Star Lane west	395	99	198	44.04	1391	0.284	395	434	0.4	0.4	3.615	A
4 - Nash Road north	427	107	345		1276	0.335	427	249	0.5	0.5	4.239	A

08:30 - 08:45

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	296	74	283		1093	0.271	296	348	0.5	0.4	4.523	A
2 - Nash Road south	140	35	376		1246	0.113	140	203	0.2	0.1	3.259	A
3 - Star Lane west	323	81	162	35.96	1426	0.226	323	355	0.4	0.3	3.268	A
4 - Nash Road north	349	87	282		1314	0.265	349	203	0.5	0.4	3.733	A

08:45 - 09:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	248	62	237		1116	0.222	248	292	0.4	0.3	4.150	A
2 - Nash Road south	117	29	315		1282	0.092	118	170	0.1	0.1	3.089	A
3 - Star Lane west	270	68	136	30.11	1451	0.186	271	297	0.3	0.2	3.049	A
4 - Nash Road north	292	73	236		1342	0.218	292	170	0.4	0.3	3.434	A

2017, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
24	untitled	Standard Roundabout	1, 2, 3, 4	4.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2017	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Star Lane east		ONE HOUR	✓	506	100.000
2 - Nash Road south		ONE HOUR	✓	244	100.000
3 - Star Lane west		ONE HOUR	✓	472	100.000
4 - Nash Road north		ONE HOUR	✓	271	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Star Lane east		
2 - Nash Road south		
3 - Star Lane west	[ONE HOUR]	40.00
4 - Nash Road north		

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	35	369	102
	2 - Nash Road south	19	0	42	183
	3 - Star Lane west	314	25	0	133
	4 - Nash Road north	56	125	90	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - Star Lane east	2 - Nash Road south	3 - Star Lane west	4 - Nash Road north
	1 - Star Lane east	0	0	1	0
	2 - Nash Road south	0	0	0	1
	3 - Star Lane west	1	0	0	0
	4 - Nash Road north	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Star Lane east	0.49	6.27	1.0	A	464	696
2 - Nash Road south	0.24	4.33	0.3	A	224	336
3 - Star Lane west	0.39	4.35	0.6	A	433	650
4 - Nash Road north	0.24	3.73	0.3	A	249	373

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	381	95	180		1175	0.324	379	292	0.0	0.5	4.513	A
2 - Nash Road south	184	46	420		1215	0.151	183	139	0.0	0.2	3.488	A
3 - Star Lane west	355	89	228	30.11	1425	0.249	354	375	0.0	0.3	3.358	A
4 - Nash Road north	204	51	269		1337	0.153	203	313	0.0	0.2	3.174	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	455	114	216		1156	0.393	454	349	0.5	0.6	5.123	A
2 - Nash Road south	219	55	504		1166	0.188	219	166	0.2	0.2	3.802	A
3 - Star Lane west	424	106	273	35.96	1392	0.305	424	450	0.3	0.4	3.718	A
4 - Nash Road north	244	61	322		1305	0.187	243	375	0.2	0.2	3.389	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	557	139	264		1131	0.492	556	428	0.6	1.0	6.241	A
2 - Nash Road south	269	67	616		1100	0.244	268	203	0.2	0.3	4.326	A
3 - Star Lane west	520	130	334	44.04	1346	0.386	519	551	0.4	0.6	4.351	A
4 - Nash Road north	298	75	394		1262	0.236	298	459	0.2	0.3	3.733	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	557	139	264		1131	0.493	557	428	1.0	1.0	6.270	A
2 - Nash Road south	269	67	618		1099	0.244	269	204	0.3	0.3	4.333	A
3 - Star Lane west	520	130	335	44.04	1349	0.385	520	552	0.6	0.6	4.341	A
4 - Nash Road north	298	75	394		1262	0.236	298	460	0.3	0.3	3.734	A

17:30 - 17:45

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	455	114	216		1156	0.393	456	350	1.0	0.7	5.153	A
2 - Nash Road south	219	55	506		1165	0.188	220	167	0.3	0.2	3.812	A
3 - Star Lane west	424	106	274	35.96	1396	0.304	425	451	0.6	0.4	3.713	A
4 - Nash Road north	244	61	322		1305	0.187	244	376	0.3	0.2	3.393	A

17:45 - 18:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Star Lane east	381	95	181		1174	0.324	382	293	0.7	0.5	4.544	A
2 - Nash Road south	184	46	423		1213	0.151	184	139	0.2	0.2	3.497	A
3 - Star Lane west	355	89	229	30.11	1430	0.249	356	378	0.4	0.3	3.355	A
4 - Nash Road north	204	51	270		1336	0.153	204	315	0.2	0.2	3.180	A

Junctions 9
ARCADY 9 - Roundabout Module
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Report generation date: 24/11/2017 17:18:18

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

Summary of junction performance

	AM					PM					Airport Peak				
	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
	2017														
1 - B2050 Manston Road (E)	0.6	4.50	0.38	A	54 %	0.5	4.20	0.31	A	16 %					
2 - Superstore Access	0.1	2.41	0.11	A	[3 - B2050 Manston Road (W)]	0.2	2.45	0.17	A	[3 - B2050 Manston Road (W)]					
3 - B2050 Manston Road (W)	1.3	9.74	0.56	A		2.9	17.64	0.75	C						
	2017 Baseline Traffic														
1 - B2050 Manston Road (E)	0.6	4.50	0.38	A	54 %	0.5	4.20	0.31	A	16 %	0.5	4.47	0.33	A	50 %
2 - Superstore Access	0.1	2.41	0.11	A	[3 - B2050 Manston Road (W)]	0.2	2.45	0.17	A	[3 - B2050 Manston Road (W)]	0.2	2.46	0.18	A	[3 - B2050 Manston Road (W)]
3 - B2050 Manston Road (W)	1.3	9.74	0.56	A		2.9	17.64	0.75	C		1.2	10.08	0.56	B	
	2039 Grownth Traffic														
1 - B2050 Manston Road (E)	0.9	5.27	0.48	A	22 %	0.7	4.82	0.40	A	-8 %	0.8	5.49	0.45	A	12 %
2 - Superstore Access	0.2	2.61	0.15	A	[3 - B2050 Manston Road (W)]	0.3	2.69	0.22	A	[3 - B2050 Manston Road (W)]	0.3	2.78	0.26	A	[3 - B2050 Manston Road (W)]
3 - B2050 Manston Road (W)	2.4	15.27	0.71	C		14.0	69.85	0.97	F		3.2	19.61	0.77	C	
	2039 + Dev Traffic														
1 - B2050 Manston Road (E)	1.0	5.52	0.50	A	21 %	0.7	4.83	0.40	A	-12 %	0.9	5.75	0.48	A	10 %
2 - Superstore Access	0.2	2.66	0.15	A	[3 - B2050 Manston Road (W)]	0.3	2.69	0.22	A	[3 - B2050 Manston Road (W)]	0.3	2.84	0.26	A	[3 - B2050 Manston Road (W)]
3 - B2050 Manston Road (W)	2.5	15.63	0.72	C		23.1	104.28	1.02	F		3.4	20.96	0.78	C	

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

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

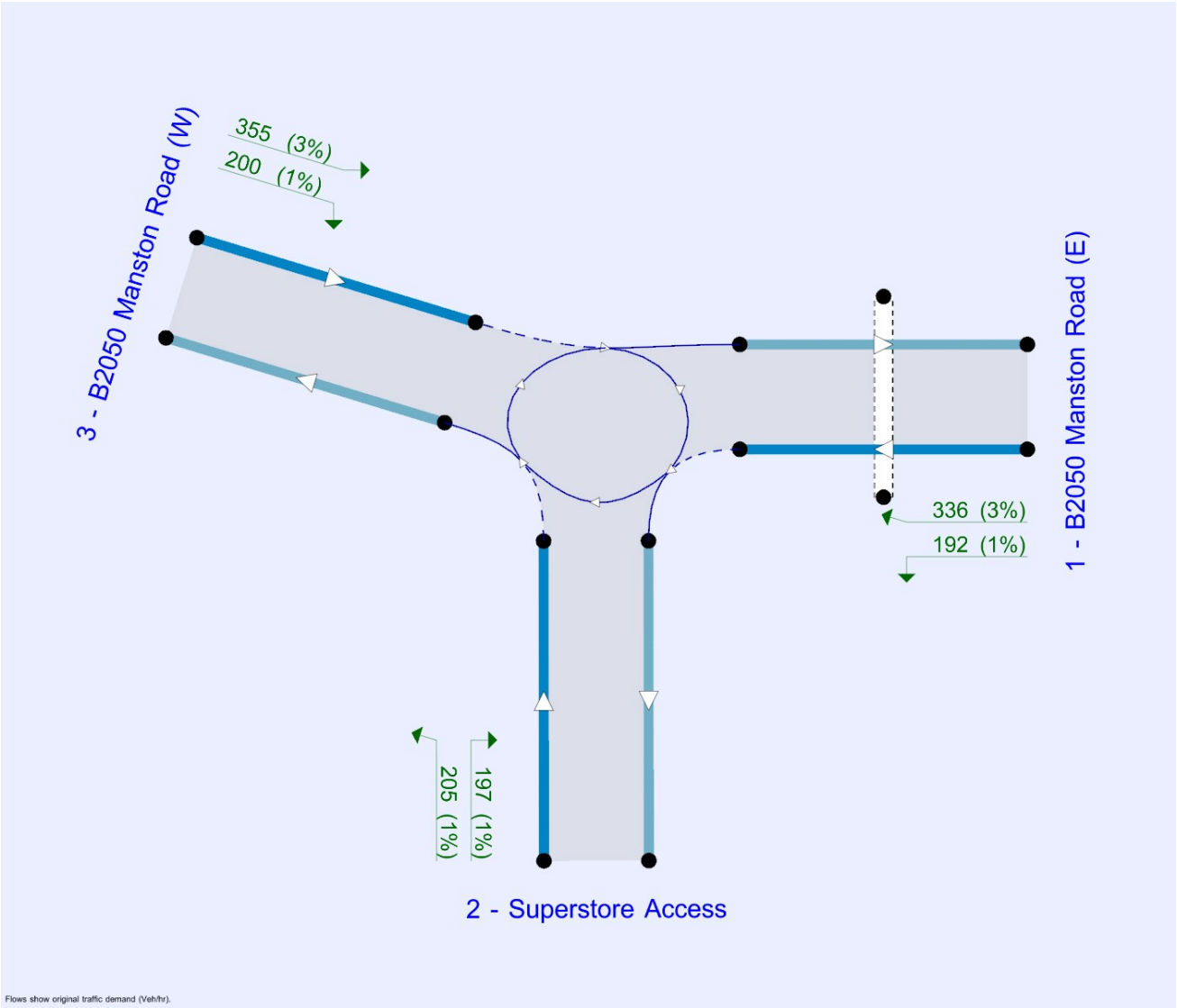
File summary

File Description

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

Units

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



Flows show original traffic demand (Veh/hr).
The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:30	09:00	15
D2	2017	PM	ONE HOUR	16:30	18:00	15
D3	2017 Baseline Traffic	AM	ONE HOUR	07:30	09:00	15
D4	2017 Baseline Traffic	PM	ONE HOUR	16:30	18:00	15
D5	2017 Baseline Traffic	Airport Peak	ONE HOUR	12:45	14:15	15
D6	2039 Growthed Traffic	AM	ONE HOUR	07:30	09:00	15
D7	2039 Growthed Traffic	PM	ONE HOUR	16:30	18:00	15
D8	2039 Growthed Traffic	Airport Peak	ONE HOUR	12:45	14:15	15
D9	2039 + Dev Traffic	AM	ONE HOUR	07:30	09:00	15
D10	2039 + Dev Traffic	PM	ONE HOUR	16:30	18:00	15
D11	2039 + Dev Traffic	Airport Peak	ONE HOUR	12:45	14:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2017, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	6.31	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	54	3 - B2050 Manston Road (W)

Arms

Arms

Arm	Name	Description
1	B2050 Manston Road (E)	
2	Superstore Access	
3	B2050 Manston Road (W)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - B2050 Manston Road (E)	3.26	7.15	6.4	35.0	32.0	17.0	
2 - Superstore Access	4.02	6.89	32.8	38.7	32.0	20.5	
3 - B2050 Manston Road (W)	2.20	5.67	4.4	13.5	32.0	42.0	

Pelican/Puffin Crossings

Arm	Space between crossing and junction entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
1 - B2050 Manston Road (E)	2.00	3.00	2.90	1.00	6.00	6.00	7.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B2050 Manston Road (E)	0.631	1480
2 - Superstore Access	0.735	2005
3 - B2050 Manston Road (W)	0.473	902

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	452	100.000
2 - Superstore Access		✓	170	100.000
3 - B2050 Manston Road (W)		✓	428	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	113	339
	2 - Superstore Access	76	0	94
	3 - B2050 Manston Road (W)	362	66	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	1	0
	2 - Superstore Access	3	0	3
	3 - B2050 Manston Road (W)	2	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.38	4.50	0.6	A
2 - Superstore Access	0.11	2.41	0.1	A
3 - B2050 Manston Road (W)	0.56	9.74	1.3	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	340	49	45.17	1334	0.255	339	0.3	3.614	A
2 - Superstore Access	128	254		1765	0.073	128	0.1	2.198	A
3 - B2050 Manston Road (W)	322	57		853	0.378	320	0.6	6.719	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	406	59	53.94	1319	0.308	406	0.4	3.940	A
2 - Superstore Access	153	304		1729	0.088	153	0.1	2.283	A
3 - B2050 Manston Road (W)	385	68		848	0.454	384	0.8	7.743	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	498	72	66.06	1296	0.384	497	0.6	4.499	A
2 - Superstore Access	187	373		1680	0.111	187	0.1	2.410	A
3 - B2050 Manston Road (W)	471	84		841	0.561	470	1.2	9.655	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	498	73	66.06	1301	0.383	498	0.6	4.480	A
2 - Superstore Access	187	373		1680	0.111	187	0.1	2.411	A
3 - B2050 Manston Road (W)	471	84		841	0.561	471	1.3	9.739	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	406	60	53.94	1325	0.307	407	0.4	3.923	A
2 - Superstore Access	153	305		1728	0.088	153	0.1	2.286	A
3 - B2050 Manston Road (W)	385	68		848	0.454	386	0.8	7.829	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	340	50	45.17	1342	0.254	341	0.3	3.597	A
2 - Superstore Access	128	256		1764	0.073	128	0.1	2.202	A
3 - B2050 Manston Road (W)	322	57		853	0.378	323	0.6	6.802	A

2017, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	10.01	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	16	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2017	PM	ONE HOUR	16:30	18:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	353	100.000
2 - Superstore Access		✓	278	100.000
3 - B2050 Manston Road (W)		✓	545	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
From	1 - B2050 Manston Road (E)	0	135	218
	2 - Superstore Access	166	0	112
	3 - B2050 Manston Road (W)	409	136	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	1	0
	2 - Superstore Access	1	0	6
	3 - B2050 Manston Road (W)	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.31	4.20	0.5	A
2 - Superstore Access	0.17	2.45	0.2	A
3 - B2050 Manston Road (W)	0.75	17.64	2.9	C

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	266	101	45.17	1300	0.204	265	0.3	3.475	A
2 - Superstore Access	209	163		1829	0.114	209	0.1	2.221	A
3 - B2050 Manston Road (W)	410	125		830	0.494	406	1.0	8.424	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	317	122	53.94	1277	0.249	317	0.3	3.750	A
2 - Superstore Access	250	196		1806	0.138	250	0.2	2.312	A
3 - B2050 Manston Road (W)	490	149		819	0.599	488	1.4	10.823	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	389	148	66.06	1244	0.312	388	0.5	4.204	A
2 - Superstore Access	306	240		1775	0.172	306	0.2	2.450	A
3 - B2050 Manston Road (W)	600	183		803	0.747	595	2.8	16.880	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	389	150	66.06	1247	0.312	389	0.5	4.194	A
2 - Superstore Access	306	240		1775	0.172	306	0.2	2.450	A
3 - B2050 Manston Road (W)	600	183		803	0.747	600	2.9	17.640	C

17:30 - 17:45

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	317	124	53.94	1280	0.248	318	0.3	3.740	A
2 - Superstore Access	250	196		1806	0.138	250	0.2	2.313	A
3 - B2050 Manston Road (W)	490	149		818	0.599	495	1.5	11.311	B

17:45 - 18:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	266	103	45.17	1306	0.204	266	0.3	3.463	A
2 - Superstore Access	209	164		1829	0.114	209	0.1	2.222	A
3 - B2050 Manston Road (W)	410	125		830	0.494	412	1.0	8.669	A

2017 Baseline Traffic , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	6.31	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	54	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	452	100.000
2 - Superstore Access		✓	170	100.000
3 - B2050 Manston Road (W)		✓	428	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
From	1 - B2050 Manston Road (E)	0	113	339
	2 - Superstore Access	76	0	94
	3 - B2050 Manston Road (W)	362	66	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	1	0
	2 - Superstore Access	3	0	3
	3 - B2050 Manston Road (W)	2	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.38	4.50	0.6	A
2 - Superstore Access	0.11	2.41	0.1	A
3 - B2050 Manston Road (W)	0.56	9.74	1.3	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	340	49	45.17	1334	0.255	339	0.3	3.614	A
2 - Superstore Access	128	254		1765	0.073	128	0.1	2.198	A
3 - B2050 Manston Road (W)	322	57		853	0.378	320	0.6	6.719	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	406	59	53.94	1319	0.308	406	0.4	3.940	A
2 - Superstore Access	153	304		1729	0.088	153	0.1	2.283	A
3 - B2050 Manston Road (W)	385	68		848	0.454	384	0.8	7.743	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	498	72	66.06	1296	0.384	497	0.6	4.499	A
2 - Superstore Access	187	373		1680	0.111	187	0.1	2.410	A
3 - B2050 Manston Road (W)	471	84		841	0.561	470	1.2	9.655	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	498	73	66.06	1301	0.383	498	0.6	4.480	A
2 - Superstore Access	187	373		1680	0.111	187	0.1	2.411	A
3 - B2050 Manston Road (W)	471	84		841	0.561	471	1.3	9.739	A

08:30 - 08:45

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	406	60	53.94	1325	0.307	407	0.4	3.923	A
2 - Superstore Access	153	305		1728	0.088	153	0.1	2.286	A
3 - B2050 Manston Road (W)	385	68		848	0.454	386	0.8	7.829	A

08:45 - 09:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	340	50	45.17	1342	0.254	341	0.3	3.597	A
2 - Superstore Access	128	256		1764	0.073	128	0.1	2.202	A
3 - B2050 Manston Road (W)	322	57		853	0.378	323	0.6	6.802	A

2017 Baseline Traffic, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	10.01	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	16	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	353	100.000
2 - Superstore Access		✓	278	100.000
3 - B2050 Manston Road (W)		✓	545	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
From	1 - B2050 Manston Road (E)	0	135	218
	2 - Superstore Access	166	0	112
	3 - B2050 Manston Road (W)	409	136	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	1	0
	2 - Superstore Access	1	0	6
	3 - B2050 Manston Road (W)	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.31	4.20	0.5	A
2 - Superstore Access	0.17	2.45	0.2	A
3 - B2050 Manston Road (W)	0.75	17.64	2.9	C

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	266	101	45.17	1300	0.204	265	0.3	3.475	A
2 - Superstore Access	209	163		1829	0.114	209	0.1	2.221	A
3 - B2050 Manston Road (W)	410	125		830	0.494	406	1.0	8.424	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	317	122	53.94	1277	0.249	317	0.3	3.750	A
2 - Superstore Access	250	196		1806	0.138	250	0.2	2.312	A
3 - B2050 Manston Road (W)	490	149		819	0.599	488	1.4	10.823	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	389	148	66.06	1244	0.312	388	0.5	4.204	A
2 - Superstore Access	306	240		1775	0.172	306	0.2	2.450	A
3 - B2050 Manston Road (W)	600	183		803	0.747	595	2.8	16.880	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	389	150	66.06	1247	0.312	389	0.5	4.194	A
2 - Superstore Access	306	240		1775	0.172	306	0.2	2.450	A
3 - B2050 Manston Road (W)	600	183		803	0.747	600	2.9	17.640	C

17:30 - 17:45

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	317	124	53.94	1280	0.248	318	0.3	3.740	A
2 - Superstore Access	250	196		1806	0.138	250	0.2	2.313	A
3 - B2050 Manston Road (W)	490	149		818	0.599	495	1.5	11.311	B

17:45 - 18:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	266	103	45.17	1306	0.204	266	0.3	3.463	A
2 - Superstore Access	209	164		1829	0.114	209	0.1	2.222	A
3 - B2050 Manston Road (W)	410	125		830	0.494	412	1.0	8.669	A

2017 Baseline Traffic, Airport Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	6.04	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	50	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	368	100.000
2 - Superstore Access		✓	302	100.000
3 - B2050 Manston Road (W)		✓	408	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
From	1 - B2050 Manston Road (E)	0	144	224
	2 - Superstore Access	148	0	154
	3 - B2050 Manston Road (W)	258	150	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	1	4
	2 - Superstore Access	1	0	1
	3 - B2050 Manston Road (W)	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.33	4.47	0.5	A
2 - Superstore Access	0.18	2.46	0.2	A
3 - B2050 Manston Road (W)	0.56	10.08	1.2	B

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	277	112	45.17	1265	0.219	276	0.3	3.638	A
2 - Superstore Access	227	168		1858	0.122	227	0.1	2.207	A
3 - B2050 Manston Road (W)	307	111		830	0.370	305	0.6	6.822	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	331	135	53.94	1242	0.266	330	0.4	3.947	A
2 - Superstore Access	271	201		1833	0.148	271	0.2	2.305	A
3 - B2050 Manston Road (W)	367	133		820	0.447	366	0.8	7.915	A

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	405	165	66.06	1210	0.335	405	0.5	4.466	A
2 - Superstore Access	333	246		1798	0.185	332	0.2	2.455	A
3 - B2050 Manston Road (W)	449	163		806	0.557	447	1.2	9.992	A

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	405	165	66.06	1214	0.334	405	0.5	4.452	A
2 - Superstore Access	333	247		1798	0.185	333	0.2	2.455	A
3 - B2050 Manston Road (W)	449	163		806	0.557	449	1.2	10.083	B

13:45 - 14:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	331	135	53.94	1247	0.265	331	0.4	3.933	A
2 - Superstore Access	271	202		1832	0.148	272	0.2	2.306	A
3 - B2050 Manston Road (W)	367	133		820	0.447	368	0.8	8.003	A

14:00 - 14:15

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	277	113	45.17	1271	0.218	277	0.3	3.623	A
2 - Superstore Access	227	169		1857	0.122	227	0.1	2.210	A
3 - B2050 Manston Road (W)	307	111		830	0.370	308	0.6	6.910	A

2039 Growthed Traffic , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	8.97	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	22	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	563	100.000
2 - Superstore Access		✓	213	100.000
3 - B2050 Manston Road (W)		✓	535	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
From	1 - B2050 Manston Road (E)	0	140	423
	2 - Superstore Access	95	0	118
	3 - B2050 Manston Road (W)	452	83	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	0	0
	2 - Superstore Access	3	0	3
	3 - B2050 Manston Road (W)	3	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.48	5.27	0.9	A
2 - Superstore Access	0.15	2.61	0.2	A
3 - B2050 Manston Road (W)	0.71	15.27	2.4	C

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	424	62	45.17	1332	0.318	422	0.5	3.949	A
2 - Superstore Access	160	317		1720	0.093	160	0.1	2.307	A
3 - B2050 Manston Road (W)	403	71		840	0.480	399	0.9	8.109	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	506	74	53.94	1320	0.383	506	0.6	4.416	A
2 - Superstore Access	191	380		1675	0.114	191	0.1	2.425	A
3 - B2050 Manston Road (W)	481	85		833	0.577	479	1.3	10.127	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	620	91	66.06	1301	0.476	619	0.9	5.266	A
2 - Superstore Access	235	465		1615	0.145	234	0.2	2.608	A
3 - B2050 Manston Road (W)	589	105		824	0.715	585	2.4	14.797	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	620	91	66.06	1309	0.474	620	0.9	5.226	A
2 - Superstore Access	235	466		1614	0.145	235	0.2	2.609	A
3 - B2050 Manston Road (W)	589	105		824	0.715	589	2.4	15.269	C

08:30 - 08:45

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	506	75	53.94	1330	0.381	507	0.6	4.382	A
2 - Superstore Access	191	381		1674	0.114	192	0.1	2.427	A
3 - B2050 Manston Road (W)	481	85		833	0.577	485	1.4	10.472	B

08:45 - 09:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	424	63	45.17	1344	0.315	424	0.5	3.919	A
2 - Superstore Access	160	319		1719	0.093	160	0.1	2.309	A
3 - B2050 Manston Road (W)	403	72		839	0.480	405	0.9	8.314	A

2039 Growthed Traffic, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	34.40	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-8	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	445	100.000
2 - Superstore Access		✓	350	100.000
3 - B2050 Manston Road (W)		✓	686	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	From			
	1 - B2050 Manston Road (E)	0	170	275
	2 - Superstore Access	209	0	141
	3 - B2050 Manston Road (W)	515	171	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	1	0
	2 - Superstore Access	1	0	7
	3 - B2050 Manston Road (W)	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.40	4.82	0.7	A
2 - Superstore Access	0.22	2.69	0.3	A
3 - B2050 Manston Road (W)	0.97	69.85	14.0	F

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	335	127	45.17	1286	0.260	334	0.4	3.774	A
2 - Superstore Access	263	206		1792	0.147	263	0.2	2.353	A
3 - B2050 Manston Road (W)	516	157		815	0.634	510	1.7	11.561	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	400	152	53.94	1264	0.316	400	0.5	4.162	A
2 - Superstore Access	315	247		1763	0.178	314	0.2	2.485	A
3 - B2050 Manston Road (W)	617	188		800	0.770	611	3.1	18.446	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	490	181	66.06	1235	0.397	489	0.7	4.823	A
2 - Superstore Access	385	302		1724	0.224	385	0.3	2.689	A
3 - B2050 Manston Road (W)	755	230		781	0.968	724	10.9	47.766	E

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	490	185	66.06	1237	0.396	490	0.7	4.815	A
2 - Superstore Access	385	303		1723	0.224	385	0.3	2.690	A
3 - B2050 Manston Road (W)	755	230		780	0.968	743	14.0	69.853	F

17:30 - 17:45

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	400	164	53.94	1265	0.316	401	0.5	4.171	A
2 - Superstore Access	315	248		1762	0.179	315	0.2	2.488	A
3 - B2050 Manston Road (W)	617	188		800	0.771	658	3.7	30.490	D

17:45 - 18:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	335	131	45.17	1294	0.259	335	0.4	3.758	A
2 - Superstore Access	263	207		1791	0.147	264	0.2	2.358	A
3 - B2050 Manston Road (W)	516	157		815	0.634	524	1.8	12.695	B

2039 Growthed Traffic, Airport Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	10.09	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	12	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	491	100.000
2 - Superstore Access		✓	402	100.000
3 - B2050 Manston Road (W)		✓	544	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
From	1 - B2050 Manston Road (E)	0	192	299
	2 - Superstore Access	197	0	205
	3 - B2050 Manston Road (W)	344	200	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	1	4
	2 - Superstore Access	1	0	1
	3 - B2050 Manston Road (W)	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.45	5.49	0.8	A
2 - Superstore Access	0.26	2.78	0.3	A
3 - B2050 Manston Road (W)	0.77	19.61	3.2	C

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	370	149	45.17	1246	0.297	368	0.4	4.092	A
2 - Superstore Access	303	224		1815	0.167	302	0.2	2.377	A
3 - B2050 Manston Road (W)	410	148		813	0.504	406	1.0	8.752	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	441	179	53.94	1225	0.360	441	0.6	4.587	A
2 - Superstore Access	361	268		1782	0.203	361	0.3	2.534	A
3 - B2050 Manston Road (W)	489	177		799	0.612	487	1.5	11.438	B

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	541	218	66.06	1195	0.452	540	0.8	5.485	A
2 - Superstore Access	443	329		1736	0.255	442	0.3	2.782	A
3 - B2050 Manston Road (W)	599	217		781	0.767	593	3.0	18.562	C

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	541	220	66.06	1201	0.450	541	0.8	5.453	A
2 - Superstore Access	443	329		1736	0.255	443	0.3	2.783	A
3 - B2050 Manston Road (W)	599	217		781	0.767	598	3.2	19.606	C

13:45 - 14:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	441	182	53.94	1233	0.358	442	0.6	4.562	A
2 - Superstore Access	361	269		1781	0.203	362	0.3	2.538	A
3 - B2050 Manston Road (W)	489	177		799	0.612	495	1.6	12.060	B

14:00 - 14:15

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	370	151	45.17	1256	0.294	370	0.4	4.067	A
2 - Superstore Access	303	225		1814	0.167	303	0.2	2.381	A
3 - B2050 Manston Road (W)	410	148		813	0.504	412	1.0	9.033	A

2039 + Dev Traffic, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	9.17	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	21	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	596	100.000
2 - Superstore Access		✓	213	100.000
3 - B2050 Manston Road (W)		✓	540	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
From	1 - B2050 Manston Road (E)	0	140	456
	2 - Superstore Access	95	0	118
	3 - B2050 Manston Road (W)	457	83	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	0	0
	2 - Superstore Access	3	0	3
	3 - B2050 Manston Road (W)	3	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.50	5.52	1.0	A
2 - Superstore Access	0.15	2.66	0.2	A
3 - B2050 Manston Road (W)	0.72	15.63	2.5	C

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	449	62	45.17	1333	0.337	447	0.5	4.055	A
2 - Superstore Access	160	342		1702	0.094	160	0.1	2.334	A
3 - B2050 Manston Road (W)	407	71		840	0.484	403	0.9	8.176	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	536	74	53.94	1323	0.405	535	0.7	4.568	A
2 - Superstore Access	191	409		1654	0.116	191	0.1	2.460	A
3 - B2050 Manston Road (W)	485	85		833	0.583	484	1.4	10.253	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	656	91	66.06	1306	0.503	655	1.0	5.521	A
2 - Superstore Access	235	501		1589	0.148	234	0.2	2.657	A
3 - B2050 Manston Road (W)	595	105		824	0.722	590	2.5	15.116	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	656	91	66.06	1314	0.499	656	1.0	5.474	A
2 - Superstore Access	235	502		1588	0.148	235	0.2	2.659	A
3 - B2050 Manston Road (W)	595	105		824	0.722	594	2.5	15.629	C

08:30 - 08:45

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	536	75	53.94	1333	0.402	537	0.7	4.529	A
2 - Superstore Access	191	411		1653	0.116	192	0.1	2.463	A
3 - B2050 Manston Road (W)	485	85		833	0.583	490	1.4	10.619	B

08:45 - 09:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	449	63	45.17	1345	0.333	449	0.5	4.020	A
2 - Superstore Access	160	344		1701	0.094	160	0.1	2.338	A
3 - B2050 Manston Road (W)	407	72		839	0.484	408	1.0	8.389	A

2039 + Dev Traffic, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	51.44	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-12	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	448	100.000
2 - Superstore Access		✓	350	100.000
3 - B2050 Manston Road (W)		✓	720	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
From	1 - B2050 Manston Road (E)	0	170	278
	2 - Superstore Access	209	0	141
	3 - B2050 Manston Road (W)	549	171	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	1	0
	2 - Superstore Access	1	0	7
	3 - B2050 Manston Road (W)	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.40	4.83	0.7	A
2 - Superstore Access	0.22	2.69	0.3	A
3 - B2050 Manston Road (W)	1.02	104.28	23.1	F

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	337	127	45.17	1287	0.262	336	0.4	3.782	A
2 - Superstore Access	263	208		1790	0.147	263	0.2	2.355	A
3 - B2050 Manston Road (W)	542	157		815	0.665	534	1.9	12.513	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	403	152	53.94	1265	0.318	402	0.5	4.173	A
2 - Superstore Access	315	250		1761	0.179	314	0.2	2.488	A
3 - B2050 Manston Road (W)	647	188		801	0.808	640	3.8	21.404	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	493	177	66.06	1237	0.399	492	0.7	4.828	A
2 - Superstore Access	385	306		1721	0.224	385	0.3	2.694	A
3 - B2050 Manston Road (W)	793	230		781	1.015	744	15.8	62.260	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	493	181	66.06	1240	0.398	493	0.7	4.820	A
2 - Superstore Access	385	306		1721	0.224	385	0.3	2.694	A
3 - B2050 Manston Road (W)	793	230		781	1.015	764	23.1	104.282	F

17:30 - 17:45

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	403	171	53.94	1261	0.319	403	0.5	4.204	A
2 - Superstore Access	315	250		1761	0.179	315	0.2	2.490	A
3 - B2050 Manston Road (W)	647	188		800	0.809	720	5.0	57.580	F

17:45 - 18:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	337	132	45.17	1293	0.261	338	0.4	3.771	A
2 - Superstore Access	263	210		1790	0.147	264	0.2	2.359	A
3 - B2050 Manston Road (W)	542	157		815	0.665	554	2.1	14.355	B

2039 + Dev Traffic, Airport Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Superstore Access - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	10.67	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	10	3 - B2050 Manston Road (W)

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2050 Manston Road (E)		✓	528	100.000
2 - Superstore Access		✓	402	100.000
3 - B2050 Manston Road (W)		✓	555	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
1 - B2050 Manston Road (E)	60.00
2 - Superstore Access	
3 - B2050 Manston Road (W)	

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
From	1 - B2050 Manston Road (E)	0	192	336
	2 - Superstore Access	197	0	205
	3 - B2050 Manston Road (W)	355	200	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2050 Manston Road (E)	2 - Superstore Access	3 - B2050 Manston Road (W)
	1 - B2050 Manston Road (E)	0	1	3
	2 - Superstore Access	1	0	1
	3 - B2050 Manston Road (W)	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - B2050 Manston Road (E)	0.48	5.75	0.9	A
2 - Superstore Access	0.26	2.84	0.3	A
3 - B2050 Manston Road (W)	0.78	20.96	3.4	C

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	398	149	45.17	1254	0.317	396	0.5	4.187	A
2 - Superstore Access	303	252		1796	0.169	302	0.2	2.408	A
3 - B2050 Manston Road (W)	418	148		813	0.514	414	1.0	8.928	A

13:00 - 13:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	475	179	53.94	1234	0.385	474	0.6	4.732	A
2 - Superstore Access	361	302		1759	0.205	361	0.3	2.575	A
3 - B2050 Manston Road (W)	499	177		799	0.624	497	1.6	11.800	B

13:15 - 13:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	581	218	66.06	1206	0.482	580	0.9	5.745	A
2 - Superstore Access	443	369		1708	0.259	442	0.3	2.844	A
3 - B2050 Manston Road (W)	611	217		781	0.783	604	3.3	19.673	C

13:30 - 13:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	581	220	66.06	1213	0.479	581	0.9	5.702	A
2 - Superstore Access	443	370		1708	0.259	443	0.3	2.845	A
3 - B2050 Manston Road (W)	611	217		781	0.783	610	3.4	20.963	C

13:45 - 14:00

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	475	182	53.94	1243	0.382	476	0.6	4.700	A
2 - Superstore Access	361	303		1758	0.206	362	0.3	2.580	A
3 - B2050 Manston Road (W)	499	177		799	0.624	506	1.7	12.539	B

14:00 - 14:15

Am	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2050 Manston Road (E)	398	151	45.17	1265	0.314	398	0.5	4.156	A
2 - Superstore Access	303	253		1795	0.169	303	0.2	2.412	A
3 - B2050 Manston Road (W)	418	148		813	0.514	420	1.1	9.237	A

Junctions 9							
ARCADY 9 - Roundabout Module							
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Filename: Jct 26_R1.j9

Path: R:\Projects\38199 Manston Airport DCO EIA\4 Design\Transport\Junction Modelling\Base Models\Validated\Jct 26_Manston Rd_B2014

Report generation date: 29/01/2018 14:11:26

»2017, AM

»2017, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2017								
1 - Newington Road north	1.1	7.85	0.52	A	0.8	6.95	0.43	A
2 - Newington Road south	4.8	22.74	0.84	C	2.6	13.40	0.73	B
3 - Manston Road	15.9	129.64	1.01	F	46.7	301.50	1.17	F

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

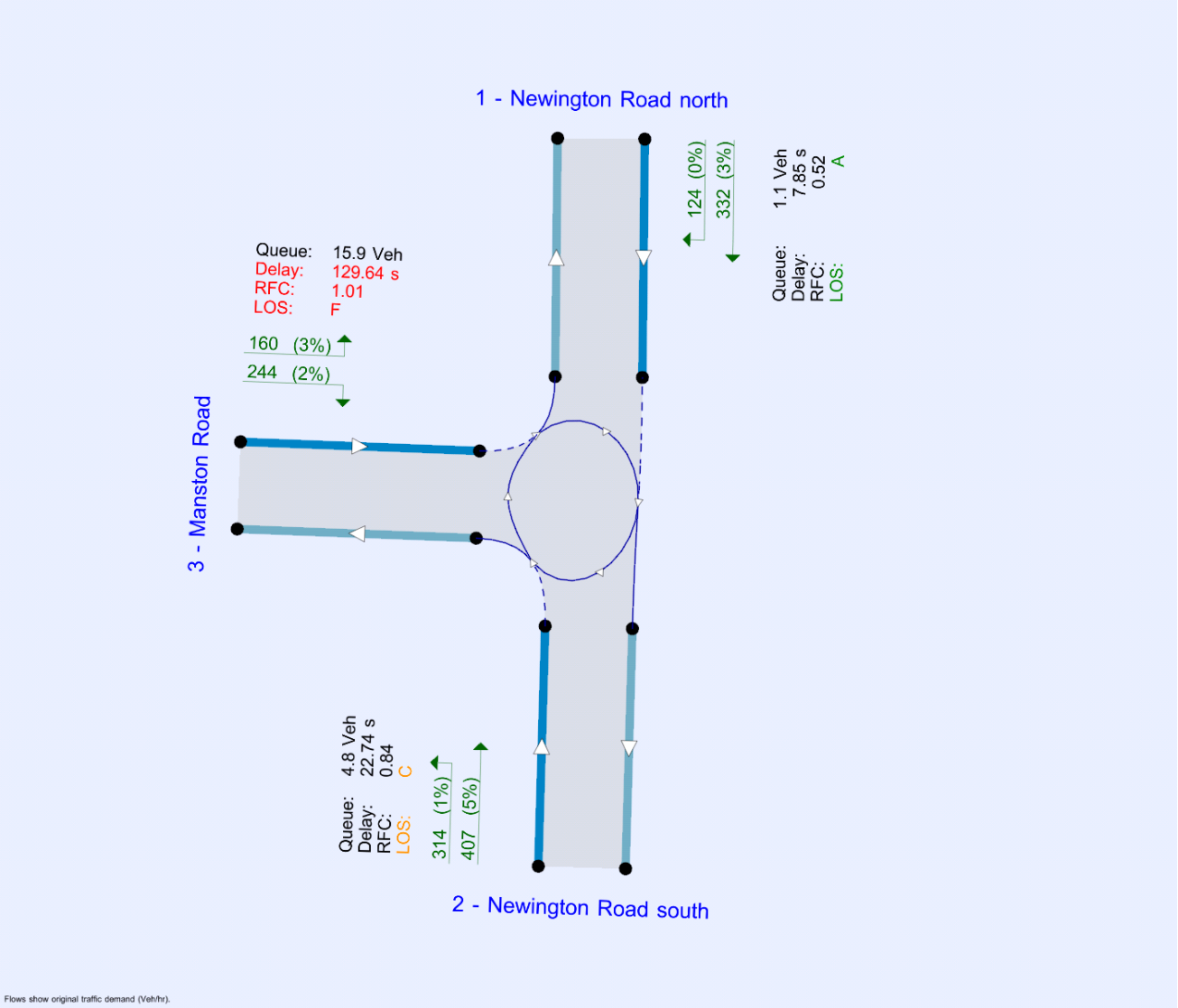
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	05/10/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	GLOBAL\chris.price2
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Mini-roundabout model	Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:30	09:00	15
D2	2017	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2017, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	45.70	E

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Newington Road north	
2	Newington Road south	
3	Manston Road	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1 - Newington Road north	3.65	3.65	3.65	0.0	19.30	19.30	0.0	
2 - Newington Road south	3.50	2.95	5.62	14.6	15.49	12.00	0.0	
3 - Manston Road	2.34	2.00	5.40	5.5	14.19	9.14	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Newington Road north	0.829	1198
2 - Newington Road south	0.658	1069
3 - Manston Road	0.597	730

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		✓	456	100.000
2 - Newington Road south		✓	721	100.000
3 - Manston Road		✓	404	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	332	124
	2 - Newington Road south	407	0	314
	3 - Manston Road	160	244	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
	1 - Newington Road north	0	3	0
	2 - Newington Road south	5	0	1
	3 - Manston Road	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Newington Road north	0.52	7.85	1.1	A
2 - Newington Road south	0.84	22.74	4.8	C
3 - Manston Road	1.01	129.64	15.9	F

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	343	181	1023	0.335	341	0.5	5.264	A
2 - Newington Road south	543	93	976	0.556	538	1.2	8.125	A
3 - Manston Road	304	304	527	0.577	299	1.3	15.439	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	410	216	994	0.413	409	0.7	6.151	A
2 - Newington Road south	648	111	964	0.672	645	2.0	11.165	B
3 - Manston Road	363	364	490	0.741	358	2.6	26.255	D

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	502	249	967	0.519	501	1.1	7.696	A
2 - Newington Road south	794	136	949	0.837	784	4.5	20.636	C
3 - Manston Road	445	442	442	1.006	412	10.8	78.450	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	502	256	961	0.523	502	1.1	7.848	A
2 - Newington Road south	794	137	948	0.837	793	4.8	22.736	C
3 - Manston Road	445	448	439	1.013	424	15.9	129.645	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	410	249	966	0.424	411	0.7	6.502	A
2 - Newington Road south	648	112	964	0.672	659	2.1	12.175	B
3 - Manston Road	363	372	485	0.748	413	3.5	64.016	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	343	189	1017	0.338	344	0.5	5.360	A
2 - Newington Road south	543	94	976	0.556	546	1.3	8.448	A
3 - Manston Road	304	308	524	0.580	312	1.4	17.562	C

2017, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1		Mini-roundabout	1, 2, 3	104.06	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2017	PM	ONE HOUR	16:30	18:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		✓	356	100.000
2 - Newington Road south		✓	661	100.000
3 - Manston Road		✓	484	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
From	1 - Newington Road north	0	279	77
	2 - Newington Road south	408	0	253
	3 - Manston Road	141	343	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Newington Road north	2 - Newington Road south	3 - Manston Road
From	1 - Newington Road north	0	2	3
	2 - Newington Road south	2	0	1
	3 - Manston Road	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Newington Road north	0.43	6.95	0.8	A
2 - Newington Road south	0.73	13.40	2.6	B
3 - Manston Road	1.17	301.50	46.7	F

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	268	253	965	0.278	266	0.4	5.139	A
2 - Newington Road south	498	58	1014	0.491	494	1.0	6.878	A
3 - Manston Road	364	305	541	0.674	357	1.9	18.847	C

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	320	300	926	0.345	319	0.5	5.926	A
2 - Newington Road south	594	69	1006	0.591	592	1.4	8.664	A
3 - Manston Road	435	366	504	0.863	424	4.8	39.948	E

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	392	316	913	0.429	391	0.7	6.882	A
2 - Newington Road south	728	85	996	0.731	723	2.6	12.981	B
3 - Manston Road	533	446	455	1.171	446	26.5	147.022	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	392	320	910	0.431	392	0.8	6.947	A
2 - Newington Road south	728	85	996	0.731	728	2.6	13.397	B
3 - Manston Road	533	449	454	1.175	452	46.7	301.496	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	320	348	887	0.361	321	0.6	6.364	A
2 - Newington Road south	594	69	1006	0.591	599	1.5	8.948	A
3 - Manston Road	435	370	502	0.868	491	32.8	291.522	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	268	344	891	0.301	269	0.4	5.792	A
2 - Newington Road south	498	58	1013	0.491	500	1.0	7.037	A
3 - Manston Road	364	308	539	0.677	485	2.5	107.925	F

Junctions 9							
ARCADY 9 - Roundabout Module							
Version: 9.0.2.5947 © Copyright TRL Limited, 2017							
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Filename: Jct 27_R1.j9

Path: R:\Projects\38199 Manston Airport DCO EIA\4 Design\Transport\Junction Modelling\Base Models\Validated\Jct 27_B2014_A255

Report generation date: 29/01/2018 14:33:34

»2017, AM

»2017, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2017								
1 - Newington Road north	86.8	602.45	1.30	F	212.8	1802.14	1.60	F
2 - High Street east	29.6	117.28	1.03	F	13.5	62.20	0.96	F
3 - High Street south	23.7	106.31	1.02	F	71.7	274.66	1.16	F

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

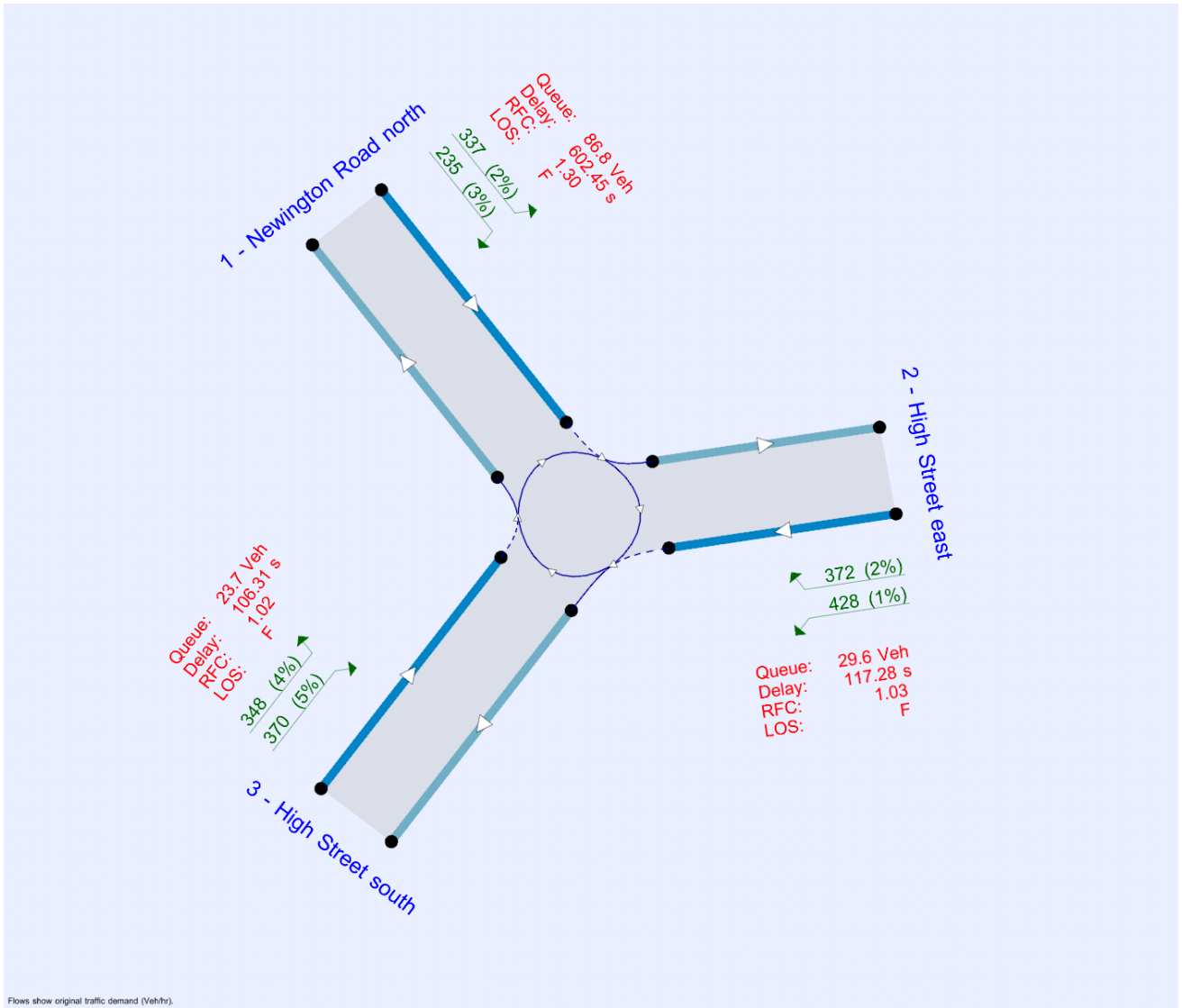
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	05/10/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	GLOBAL\chris.price2
Description	

Units

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



Analysis Options

Mini-roundabout model	Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:30	09:00	15
D2	2017	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2017, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	245.76	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Newington Road north	
2	High Street east	
3	High Street south	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1 - Newington Road north	3.50	3.29	5.18	1.7	13.95	8.20	0.0	
2 - High Street east	3.69	3.20	3.45	17.9	20.00	18.00	0.0	
3 - High Street south	3.28	3.28	5.47	10.0	14.07	9.72	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Newington Road north	0.617	749
2 - High Street east	0.719	1013
3 - High Street south	0.651	1069

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2017	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		✓	572	100.000
2 - High Street east		✓	800	100.000
3 - High Street south		✓	718	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Newington Road north	2 - High Street east	3 - High Street south
	1 - Newington Road north	0	337	235
	2 - High Street east	372	0	428
	3 - High Street south	348	370	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Newington Road north	2 - High Street east	3 - High Street south
	1 - Newington Road north	0	2	3
	2 - High Street east	2	0	1
	3 - High Street south	4	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Newington Road north	1.30	602.45	86.8	F
2 - High Street east	1.03	117.28	29.6	F
3 - High Street south	1.02	106.31	23.7	F

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	431	275	558	0.772	419	3.0	24.155	C
2 - High Street east	602	172	872	0.690	594	2.1	12.563	B
3 - High Street south	541	276	847	0.638	534	1.7	11.264	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	514	329	524	0.982	485	10.2	66.435	F
2 - High Street east	719	199	852	0.844	709	4.7	23.549	C
3 - High Street south	645	330	813	0.794	638	3.5	19.829	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	630	382	490	1.286	487	46.0	226.448	F
2 - High Street east	881	200	852	1.034	822	19.4	67.307	F
3 - High Street south	791	382	780	1.014	742	15.6	61.134	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	630	391	485	1.300	484	82.4	486.367	F
2 - High Street east	881	199	853	1.033	840	29.6	117.276	F
3 - High Street south	791	391	774	1.021	758	23.7	106.306	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	514	370	498	1.033	497	86.8	602.448	F
2 - High Street east	719	204	849	0.847	808	7.4	83.523	F
3 - High Street south	645	376	784	0.824	718	5.7	65.719	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	431	286	550	0.782	544	58.4	482.549	F
2 - High Street east	602	224	835	0.721	621	2.7	18.111	C
3 - High Street south	541	289	839	0.644	556	1.9	13.361	B

2017, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	631.72	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2017	PM	ONE HOUR	16:30	18:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Newington Road north		✓	623	100.000
2 - High Street east		✓	749	100.000
3 - High Street south		✓	855	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - Newington Road north	2 - High Street east	3 - High Street south
	1 - Newington Road north	0	331	292
	2 - High Street east	340	0	409
	3 - High Street south	325	530	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - Newington Road north	2 - High Street east	3 - High Street south
	1 - Newington Road north	0	2	1
	2 - High Street east	1	0	1
	3 - High Street south	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Newington Road north	1.60	1802.14	212.8	F
2 - High Street east	0.96	62.20	13.5	F
3 - High Street south	1.16	274.66	71.7	F

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	469	393	497	0.944	439	7.6	48.814	E
2 - High Street east	564	206	855	0.660	556	1.9	11.794	B
3 - High Street south	644	253	890	0.723	634	2.5	13.569	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	560	466	452	1.240	447	35.8	196.573	F
2 - High Street east	673	210	852	0.790	667	3.4	18.818	C
3 - High Street south	769	303	858	0.896	752	6.5	30.280	D

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	686	502	430	1.595	430	99.9	583.219	F
2 - High Street east	825	201	858	0.961	795	10.8	44.099	E
3 - High Street south	941	361	820	1.148	810	39.5	116.916	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	686	504	429	1.600	429	164.2	1134.020	F
2 - High Street east	825	201	858	0.961	814	13.5	62.202	F
3 - High Street south	941	369	814	1.156	813	71.7	255.102	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	560	516	421	1.330	421	198.9	1574.946	F
2 - High Street east	673	197	861	0.782	711	4.0	28.554	D
3 - High Street south	769	323	844	0.910	833	55.6	274.664	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Newington Road north	469	528	414	1.134	414	212.8	1802.142	F
2 - High Street east	564	194	863	0.653	572	2.0	12.678	B
3 - High Street south	644	260	886	0.727	852	3.5	122.134	F

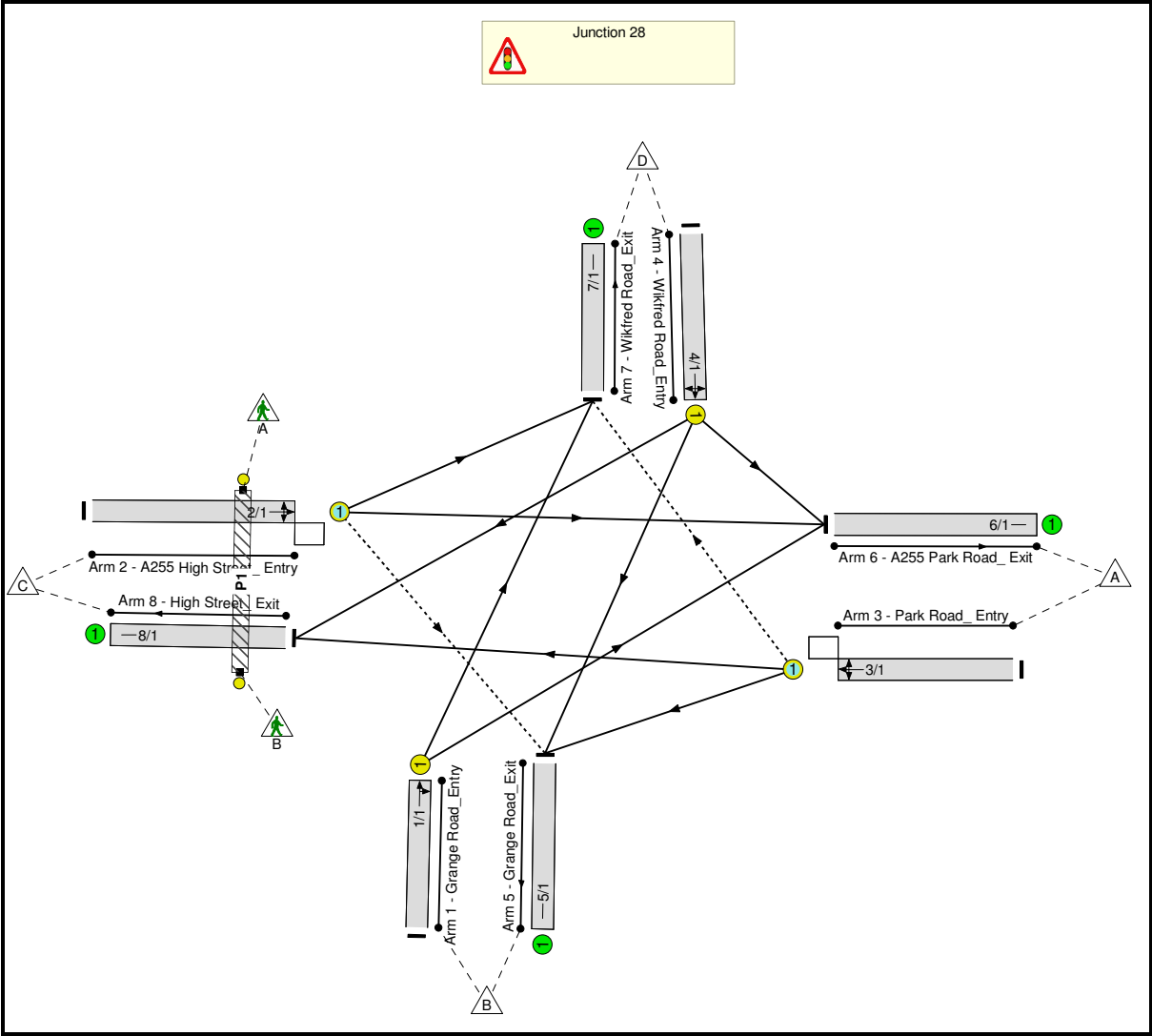
Full Input Data And Results

Full Input Data And Results

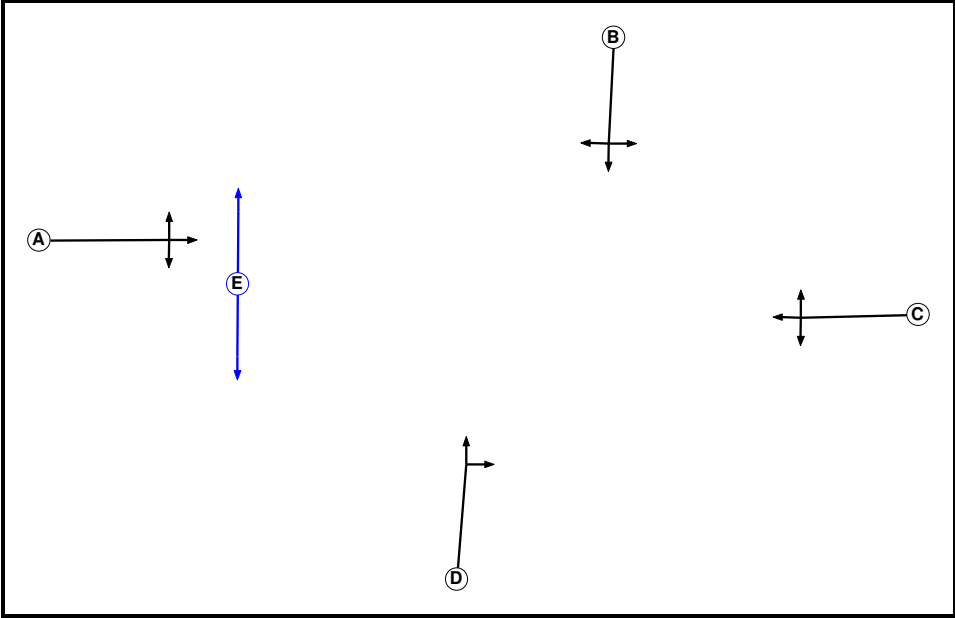
User and Project Details

Project:	Manston Airport
Title:	Junction 28
Location:	Base Model_R3.lsg3x
File name:	
Author:	
Company:	Fouda Amr
Address:	
Notes:	

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		6	6

Full Input Data And Results

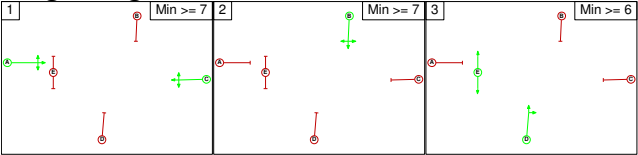
Phase Intergreens Matrix

Terminating Phase	Starting Phase					
		A	B	C	D	E
	A		7	-	6	5
	B	6		6	7	10
	C	-	6		7	9
	D	5	8	5		-
	E	12	10	10	-	

Phases in Stage

Stage No.	Phases in Stage
1	A C
2	B
3	D 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
	1		7
	2	6	10
3	12	10	

Give-Way Lane Input Data

Junction: Junction 28											
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)
2/1 (A255 High Street_ Entry)	5/1 (Right)	1439	0	3/1	1.09	To 5/1 (Left) To 8/1 (Ahead)	2.00	2.00	0.50	2	2.00
3/1 (Park Road_ Entry)	7/1 (Right)	1439	0	2/1	1.09	To 6/1 (Ahead) To 7/1 (Left)	2.00	2.00	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: Junction 28												
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 (Grange Road_Entry)	U	D	2	3	60.0	Geom	-	2.70	0.00	Y	Arm 6 Right Arm 7 Ahead	20.00 Inf
2/1 (A255 High Street_Entry)	O	A	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 5 Right Arm 6 Ahead	6.00 Inf
3/1 (Park Road_Entry)	O	C	2	3	60.0	Geom	-	2.50	0.00	Y	Arm 7 Left Arm 5 Left	16.00 11.50
4/1 (Wikfred Road_Entry)	U	B	2	3	60.0	Geom	-	4.50	0.00	Y	Arm 7 Right Arm 8 Ahead	8.00 Inf
5/1 (Grange Road_Exit)	U		2	3	60.0	Inf	-	-	-	-	Arm 5 Ahead Arm 6 Left Arm 8 Right	10.00 14.00 10.00
6/1 (A255 Park Road_Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Wikfred Road_Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (High Street_Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

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

Full Input Data And Results

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

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	18	408	6	432
	B	12	0	0	125	137
	C	405	5	0	150	560
	D	9	66	185	0	260
	Tot.	426	89	593	281	1389

Traffic Lane Flows

Lane	Scenario 1: 2017 Baseline Traffic - AM
Junction: Junction 28	
1/1	137
2/1	560
3/1	432
4/1	260
5/1	89
6/1	426
7/1	281
8/1	593

Lane Saturation Flows

Junction: Junction 28								
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 (Grange Road_Entry)	2.70	0.00	Y	Arm 6 Right Arm 7 Ahead	20.00 Inf	8.8 % 91.2 %	1873	1873
2/1 (A255 High Street_Entry)	3.70	0.00	Y	Arm 5 Right Arm 6 Ahead Arm 7 Left	6.00 Inf 16.00	0.9 % 72.3 % 26.8 %	1932	1932
3/1 (Park Road_Entry)	2.50	0.00	Y	Arm 5 Left Arm 7 Right Arm 8 Ahead	11.50 8.00 Inf	4.2 % 1.4 % 94.4 %	1850	1850
4/1 (Wikfred Road_Entry)	4.50	0.00	Y	Arm 5 Ahead Arm 6 Left Arm 8 Right	10.00 14.00 10.00	25.4 % 3.5 % 71.2 %	1798	1798
5/1 (Grange Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A255 Park Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Wikfred Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (High Street_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

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

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	19	363	9	391
	B	18	0	0	99	117
	C	451	2	0	233	686
	D	10	108	185	0	303
	Tot.	479	129	548	341	1497

Traffic Lane Flows

Lane	Scenario 2: 2017 Baseline Traffic - PM
Junction: Junction 28	
1/1	117
2/1	686
3/1	391
4/1	303
5/1	129
6/1	479
7/1	341
8/1	548

Lane Saturation Flows

Junction: Junction 28								
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 (Grange Road_Entry)	2.70	0.00	Y	Arm 6 Right Arm 7 Ahead	20.00 Inf	15.4 % 84.6 %	1863	1863
2/1 (A255 High Street_Entry)	3.70	0.00	Y	Arm 5 Right Arm 6 Ahead Arm 7 Left	6.00 Inf 16.00	0.3 % 65.7 % 34.0 %	1922	1922
3/1 (Park Road_Entry)	2.50	0.00	Y	Arm 5 Left Arm 7 Right Arm 8 Ahead	11.50 8.00 Inf	4.9 % 2.3 % 92.8 %	1845	1845
4/1 (Wikfred Road_Entry)	4.50	0.00	Y	Arm 5 Ahead Arm 6 Left Arm 8 Right	10.00 14.00 10.00	35.6 % 3.3 % 61.1 %	1798	1798
5/1 (Grange Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A255 Park Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Wikfred Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (High Street_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

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

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	20	354	7	381
	B	21	0	0	74	95
	C	323	8	0	111	442
	D	12	59	105	0	176
	Tot.	356	87	459	192	1094

Traffic Lane Flows

Lane	Scenario 3: 2017 Baseline Traffic - Airport Peak
Junction: Junction 28	
1/1	95
2/1	442
3/1	381
4/1	176
5/1	87
6/1	356
7/1	192
8/1	459

Lane Saturation Flows

Junction: Junction 28								
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 (Grange Road_Entry)	2.70	0.00	Y	Arm 6 Right Arm 7 Ahead	20.00 Inf	22.1 % 77.9 %	1854	1854
2/1 (A255 High Street_Entry)	3.70	0.00	Y	Arm 5 Right Arm 6 Ahead Arm 7 Left	6.00 Inf 16.00	1.8 % 73.1 % 25.1 %	1931	1931
3/1 (Park Road_Entry)	2.50	0.00	Y	Arm 5 Left Arm 7 Right Arm 8 Ahead	11.50 8.00 Inf	5.2 % 1.8 % 92.9 %	1846	1846
4/1 (Wikfred Road_Entry)	4.50	0.00	Y	Arm 5 Ahead Arm 6 Left Arm 8 Right	10.00 14.00 10.00	33.5 % 6.8 % 59.7 %	1800	1800
5/1 (Grange Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A255 Park Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Wikfred Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (High Street_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '2039 Growthed Traffic - AM' (FG4: '2039 Growthed Traffic - AM', Plan 2: 'AM Peak')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	23	510	7	540
	B	15	0	0	157	172
	C	533	6	0	190	729
	D	11	84	231	0	326
	Tot.	559	113	741	354	1767

Traffic Lane Flows

Lane	Scenario 4: 2039 Growthed Traffic - AM
Junction: Junction 28	
1/1	172
2/1	729
3/1	540
4/1	326
5/1	113
6/1	559
7/1	354
8/1	741

Lane Saturation Flows

Junction: Junction 28								
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 (Grange Road_Entry)	2.70	0.00	Y	Arm 6 Right Arm 7 Ahead	20.00 Inf	8.7 % 91.3 %	1873	1873
2/1 (A255 High Street_Entry)	3.70	0.00	Y	Arm 5 Right Arm 6 Ahead Arm 7 Left	6.00 Inf 16.00	0.8 % 73.1 % 26.1 %	1934	1934
3/1 (Park Road_Entry)	2.50	0.00	Y	Arm 5 Left Arm 7 Right Arm 8 Ahead	11.50 8.00 Inf	4.3 % 1.3 % 94.4 %	1850	1850
4/1 (Wikfred Road_Entry)	4.50	0.00	Y	Arm 5 Ahead Arm 6 Left Arm 8 Right	10.00 14.00 10.00	25.8 % 3.4 % 70.9 %	1798	1798
5/1 (Grange Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A255 Park Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Wikfred Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (High Street_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: '2039 Growthed Traffic - PM' (FG5: '2039 Growthed Traffic - PM', Plan 3: 'PM Peak')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	24	458	11	493
	B	23	0	0	126	149
	C	568	3	0	294	865
	D	13	137	234	0	384
	Tot.	604	164	692	431	1891

Traffic Lane Flows

Lane	Scenario 5: 2039 Growthed Traffic - PM
Junction: Junction 28	
1/1	149
2/1	865
3/1	493
4/1	384
5/1	164
6/1	604
7/1	431
8/1	692

Lane Saturation Flows

Junction: Junction 28								
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 (Grange Road_Entry)	2.70	0.00	Y	Arm 6 Right Arm 7 Ahead	20.00 Inf	15.4 % 84.6 %	1863	1863
2/1 (A255 High Street_Entry)	3.70	0.00	Y	Arm 5 Right Arm 6 Ahead Arm 7 Left	6.00 Inf 16.00	0.3 % 65.7 % 34.0 %	1922	1922
3/1 (Park Road_Entry)	2.50	0.00	Y	Arm 5 Left Arm 7 Right Arm 8 Ahead	11.50 8.00 Inf	4.9 % 2.2 % 92.9 %	1846	1846
4/1 (Wikfred Road_Entry)	4.50	0.00	Y	Arm 5 Ahead Arm 6 Left Arm 8 Right	10.00 14.00 10.00	35.7 % 3.4 % 60.9 %	1798	1798
5/1 (Grange Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A255 Park Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Wikfred Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (High Street_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 6: '2039 Growthed Traffic - Airport Peak' (FG6: '2039 Growthed Traffic - Airport Peak', Plan 4: 'Airport Peak')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	27	473	9	509
	B	28	0	0	100	128
	C	431	11	0	148	590
	D	16	80	140	0	236
	Tot.	475	118	613	257	1463

Traffic Lane Flows

Lane	Scenario 6: 2039 Growthed Traffic - Airport Peak
Junction: Junction 28	
1/1	128
2/1	590
3/1	509
4/1	236
5/1	118
6/1	475
7/1	257
8/1	613

Lane Saturation Flows

Junction: Junction 28								
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 (Grange Road_Entry)	2.70	0.00	Y	Arm 6 Right Arm 7 Ahead	20.00 Inf	21.9 % 78.1 %	1855	1855
2/1 (A255 High Street_Entry)	3.70	0.00	Y	Arm 5 Right Arm 6 Ahead Arm 7 Left Arm 5 Left	6.00 Inf 16.00 11.50	1.9 % 73.1 % 25.1 % 5.3 %	1931	1931
3/1 (Park Road_Entry)	2.50	0.00	Y	Arm 7 Right Arm 8 Ahead	8.00 Inf	1.8 % 92.9 %	1846	1846
4/1 (Wikfred Road_Entry)	4.50	0.00	Y	Arm 5 Ahead Arm 6 Left Arm 8 Right	10.00 14.00 10.00	33.9 % 6.8 % 59.3 %	1800	1800
5/1 (Grange Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A255 Park Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Wikfred Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (High Street_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 7: '2039 + Dev Traffic - AM' (FG7: '2039 + Dev Traffic - AM', Plan 2: 'AM Peak')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	23	536	7	566
	B	15	0	0	157	172
	C	537	6	0	191	734
	D	11	84	238	0	333
	Tot.	563	113	774	355	1805

Traffic Lane Flows

Lane	Scenario 7: 2039 + Dev Traffic - AM
Junction: Junction 28	
1/1	172
2/1	734
3/1	566
4/1	333
5/1	113
6/1	563
7/1	355
8/1	774

Lane Saturation Flows

Junction: Junction 28								
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 (Grange Road_Entry)	2.70	0.00	Y	Arm 6 Right Arm 7 Ahead	20.00 Inf	8.7 % 91.3 %	1873	1873
2/1 (A255 High Street_Entry)	3.70	0.00	Y	Arm 5 Right Arm 6 Ahead Arm 7 Left	6.00 Inf 16.00	0.8 % 73.2 % 26.0 %	1934	1934
3/1 (Park Road_Entry)	2.50	0.00	Y	Arm 5 Left Arm 7 Right Arm 8 Ahead	11.50 8.00 Inf	4.1 % 1.2 % 94.7 %	1851	1851
4/1 (Wikfred Road_Entry)	4.50	0.00	Y	Arm 5 Ahead Arm 6 Left Arm 8 Right	10.00 14.00 10.00	25.2 % 3.3 % 71.5 %	1798	1798
5/1 (Grange Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A255 Park Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Wikfred Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (High Street_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 8: '2039 + Dev Traffic - PM' (FG8: '2039 + Dev Traffic - PM', Plan 3: 'PM Peak')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	24	461	11	496
	B	23	0	0	126	149
	C	595	3	0	301	899
	D	13	137	234	0	384
	Tot.	631	164	695	438	1928

Traffic Lane Flows

Lane	Scenario 8: 2039 + Dev Traffic - PM
Junction: Junction 28	
1/1	149
2/1	899
3/1	496
4/1	384
5/1	164
6/1	631
7/1	438
8/1	695

Lane Saturation Flows

Junction: Junction 28								
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 (Grange Road_Entry)	2.70	0.00	Y	Arm 6 Right Arm 7 Ahead	20.00 Inf	15.4 % 84.6 %	1863	1863
2/1 (A255 High Street_Entry)	3.70	0.00	Y	Arm 5 Right Arm 6 Ahead Arm 7 Left	6.00 Inf 16.00	0.3 % 66.2 % 33.5 %	1923	1923
3/1 (Park Road_Entry)	2.50	0.00	Y	Arm 5 Left Arm 7 Right Arm 8 Ahead	11.50 8.00 Inf	4.8 % 2.2 % 92.9 %	1846	1846
4/1 (Wikfred Road_Entry)	4.50	0.00	Y	Arm 5 Ahead Arm 6 Left Arm 8 Right	10.00 14.00 10.00	35.7 % 3.4 % 60.9 %	1798	1798
5/1 (Grange Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A255 Park Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Wikfred Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (High Street_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 9: '2039 + Dev Traffic - Airport Peak' (FG9: '2039 + Dev Traffic - Airport Peak', Plan 4: 'Airport Peak')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	27	501	9	537
	B	28	0	0	100	128
	C	440	11	0	150	601
	D	16	80	149	0	245
	Tot.	484	118	650	259	1511

Traffic Lane Flows

Lane	Scenario 9: 2039 + Dev Traffic - Airport Peak
Junction: Junction 28	
1/1	128
2/1	601
3/1	537
4/1	245
5/1	118
6/1	484
7/1	259
8/1	650

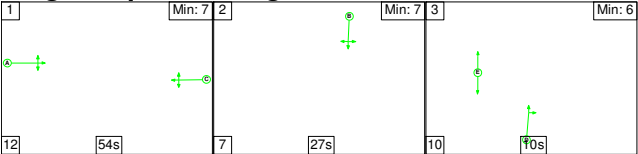
Lane Saturation Flows

Junction: Junction 28								
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 (Grange Road_Entry)	2.70	0.00	Y	Arm 6 Right Arm 7 Ahead	20.00 Inf	21.9 % 78.1 %	1855	1855
2/1 (A255 High Street_Entry)	3.70	0.00	Y	Arm 5 Right Arm 6 Ahead Arm 7 Left	6.00 Inf 16.00	1.8 % 73.2 % 25.0 %	1931	1931
3/1 (Park Road_Entry)	2.50	0.00	Y	Arm 5 Left Arm 7 Right Arm 8 Ahead	11.50 8.00 Inf	5.0 % 1.7 % 93.3 %	1847	1847
4/1 (Wikfred Road_Entry)	4.50	0.00	Y	Arm 5 Ahead Arm 6 Left Arm 8 Right	10.00 14.00 10.00	32.7 % 6.5 % 60.8 %	1800	1800
5/1 (Grange Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A255 Park Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Wikfred Road_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (High Street_Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

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

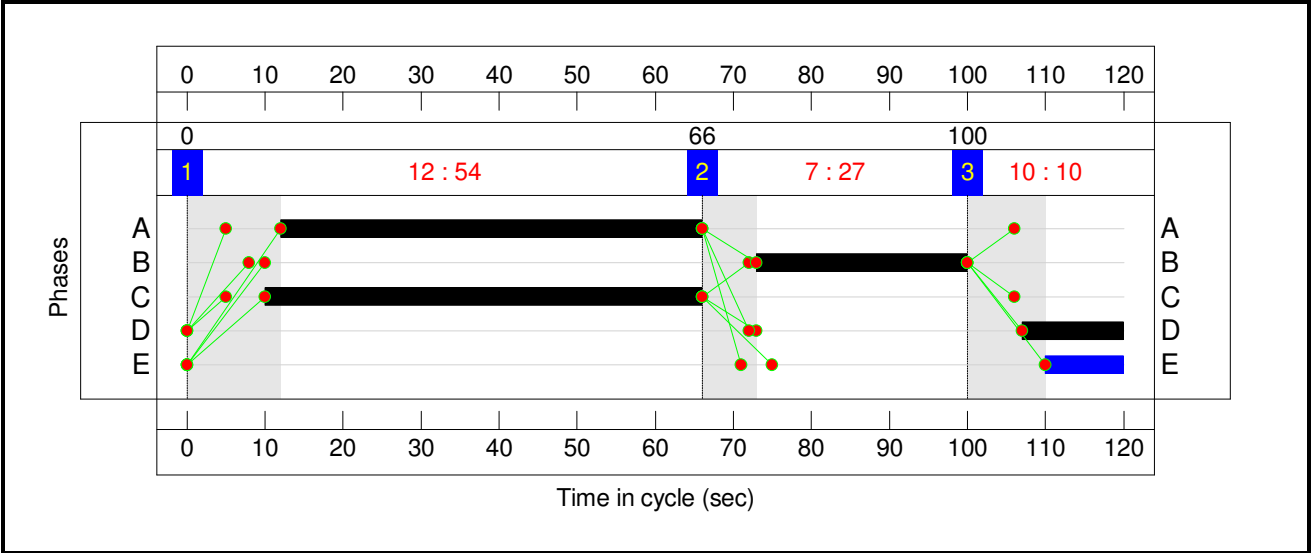
Stage Sequence Diagram



Stage Timings

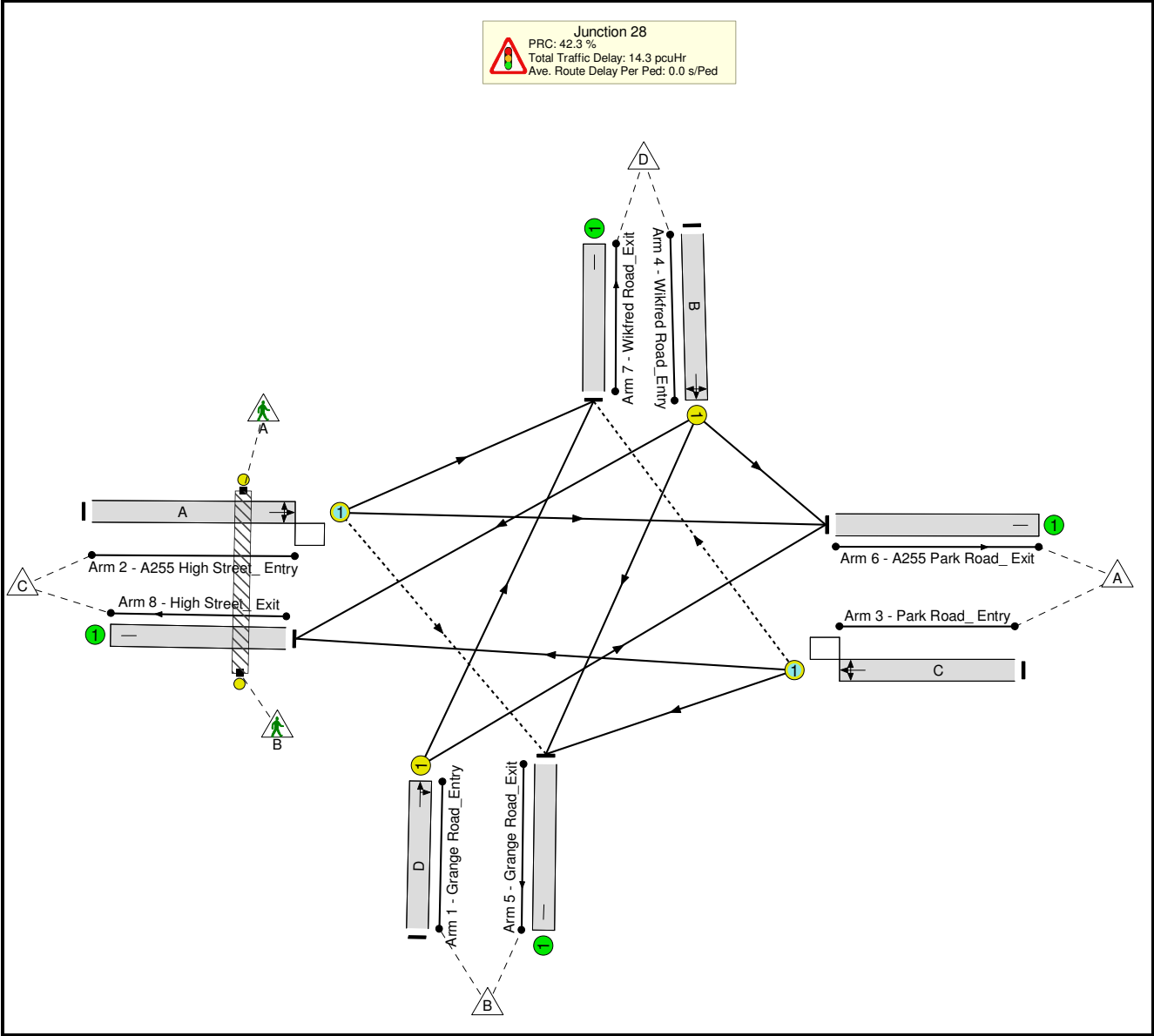
Stage	1	2	3
Duration	54	27	10
Change Point	0	66	100

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 28	-	-	N/A	-	-		-	-	-	-	-	-	63.2%
Junction 28	-	-	N/A	-	-		-	-	-	-	-	-	63.2%
1/1	Grange Road_Entry Right Ahead	U	N/A	N/A	D		1	13	-	137	1873	219	62.7%
2/1	A255 High Street_Entry Right Ahead Left	O	N/A	N/A	A		1	54	-	560	1932	885	63.2%
3/1	Park Road_Entry Left Right Ahead	O	N/A	N/A	C		1	56	-	432	1850	879	49.2%
4/1	Wikfred Road_Entry Ahead Left Right	U	N/A	N/A	B		1	27	-	260	1798	420	62.0%
5/1	Grange Road_Exit	U	N/A	N/A	-		-	-	-	89	Inf	Inf	0.0%
6/1	A255 Park Road_Exit	U	N/A	N/A	-		-	-	-	426	Inf	Inf	0.0%
7/1	Wikfred Road_Exit	U	N/A	N/A	-		-	-	-	281	Inf	Inf	0.0%
8/1	High Street_Exit	U	N/A	N/A	-		-	-	-	593	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	10	-	0	-	6000	0.0%

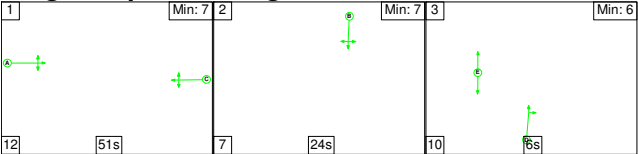
Full Input Data And Results

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 28	-	-	11	0	0	11.3	3.0	0.0	14.3	-	-	-	-
Junction 28	-	-	11	0	0	11.3	3.0	0.0	14.3	-	-	-	-
1/1	137	137	-	-	-	1.9	0.8	-	2.7	72.2	4.3	0.8	5.2
2/1	560	560	5	0	0	3.9	0.9	0.0	4.7	30.3	14.2	0.9	15.0
3/1	432	432	6	0	0	2.6	0.5	0.0	3.1	25.8	9.8	0.5	10.3
4/1	260	260	-	-	-	3.0	0.8	-	3.8	52.4	7.7	0.8	8.5
5/1	89	89	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	426	426	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	281	281	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	593	593	-	-	-	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
C1 - 08-0932 PRC for Signalled Lanes (%): 42.3 Total Delay for Signalled Lanes (pcuHr): 14.34 Cycle Time (s): 120 PRC Over All Lanes (%): 42.3 Total Delay Over All Lanes(pcuHr): 14.34													

Full Input Data And Results

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

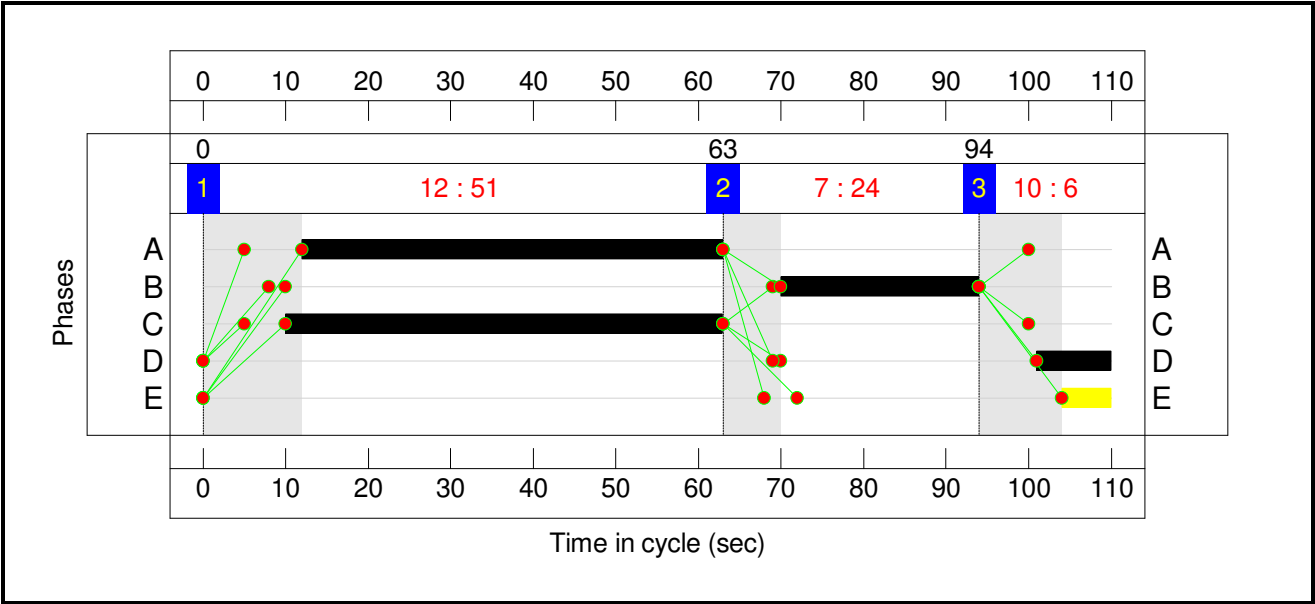
Stage Sequence Diagram



Stage Timings

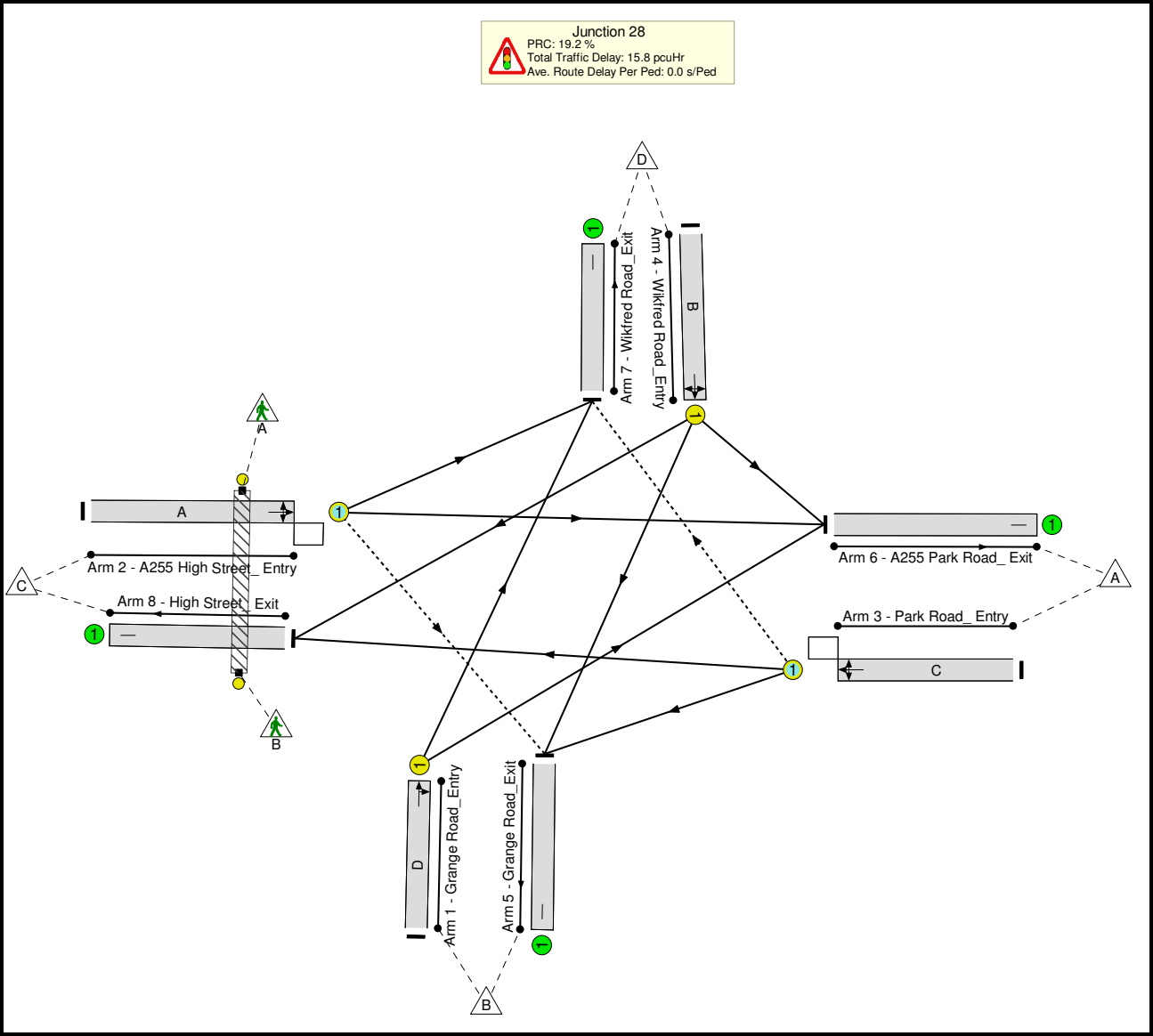
Stage	1	2	3
Duration	51	24	6
Change Point	0	63	94

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

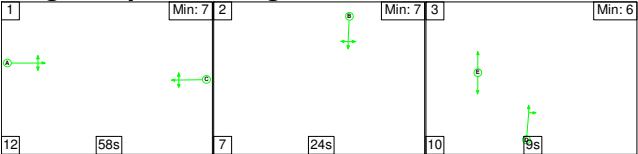
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 28	-	-	N/A	-	-		-	-	-	-	-	-	75.5%
Junction 28	-	-	N/A	-	-		-	-	-	-	-	-	75.5%
1/1	Grange Road_Entry Right Ahead	U	N/A	N/A	D		1	9	-	117	1863	169	69.1%
2/1	A255 High Street_Entry Right Ahead Left	O	N/A	N/A	A		1	51	-	686	1922	909	75.5%
3/1	Park Road_Entry Left Right Ahead	O	N/A	N/A	C		1	53	-	391	1845	906	43.2%
4/1	Wikfred Road_Entry Ahead Left Right	U	N/A	N/A	B		1	24	-	303	1798	409	74.1%
5/1	Grange Road_Exit	U	N/A	N/A	-		-	-	-	129	Inf	Inf	0.0%
6/1	A255 Park Road_Exit	U	N/A	N/A	-		-	-	-	479	Inf	Inf	0.0%
7/1	Wikfred Road_Exit	U	N/A	N/A	-		-	-	-	341	Inf	Inf	0.0%
8/1	High Street_Exit	U	N/A	N/A	-		-	-	-	548	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	6	-	0	-	3927	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 28	-	-	11	0	0	11.4	4.4	0.1	15.8	-	-	-	-
Junction 28	-	-	11	0	0	11.4	4.4	0.1	15.8	-	-	-	-
1/1	117	117	-	-	-	1.6	1.1	-	2.6	81.5	3.4	1.1	4.5
2/1	686	686	2	0	0	4.5	1.5	0.0	6.1	31.8	17.2	1.5	18.7
3/1	391	391	9	0	0	2.0	0.4	0.0	2.4	22.0	7.7	0.4	8.1
4/1	303	303	-	-	-	3.3	1.4	-	4.7	56.1	8.6	1.4	10.0
5/1	129	129	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	479	479	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	341	341	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	548	548	-	-	-	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
C1 - 08-0932 PRC for Signalled Lanes (%): 19.2 Total Delay for Signalled Lanes (pcuHr): 15.82 Cycle Time (s): 110 PRC Over All Lanes (%): 19.2 Total Delay Over All Lanes(pcuHr): 15.82													

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

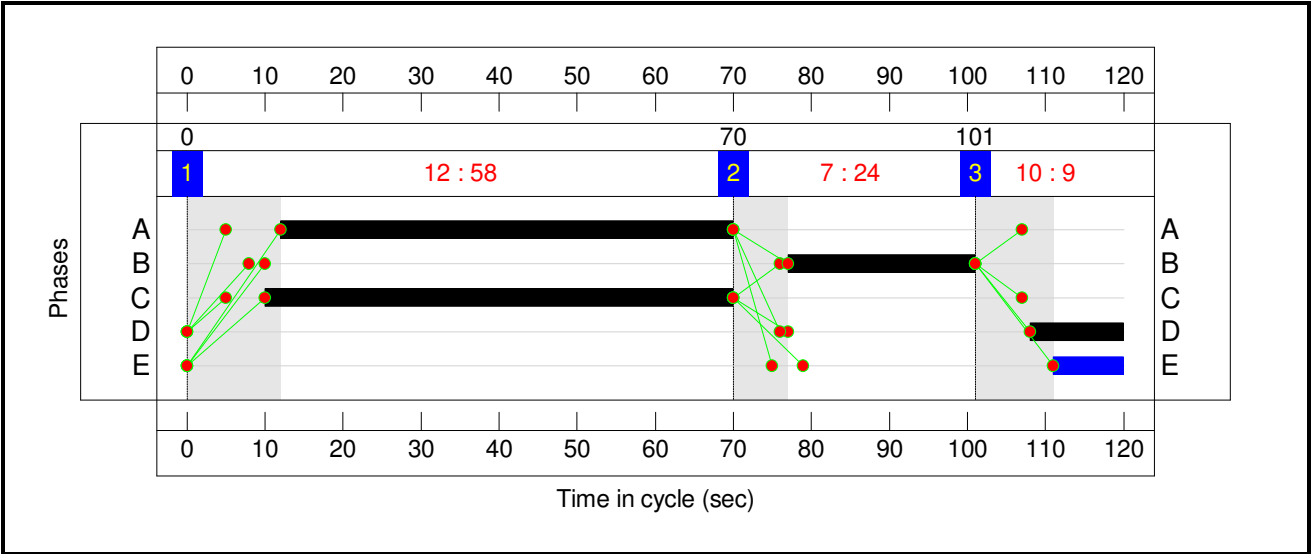
Stage Sequence Diagram



Stage Timings

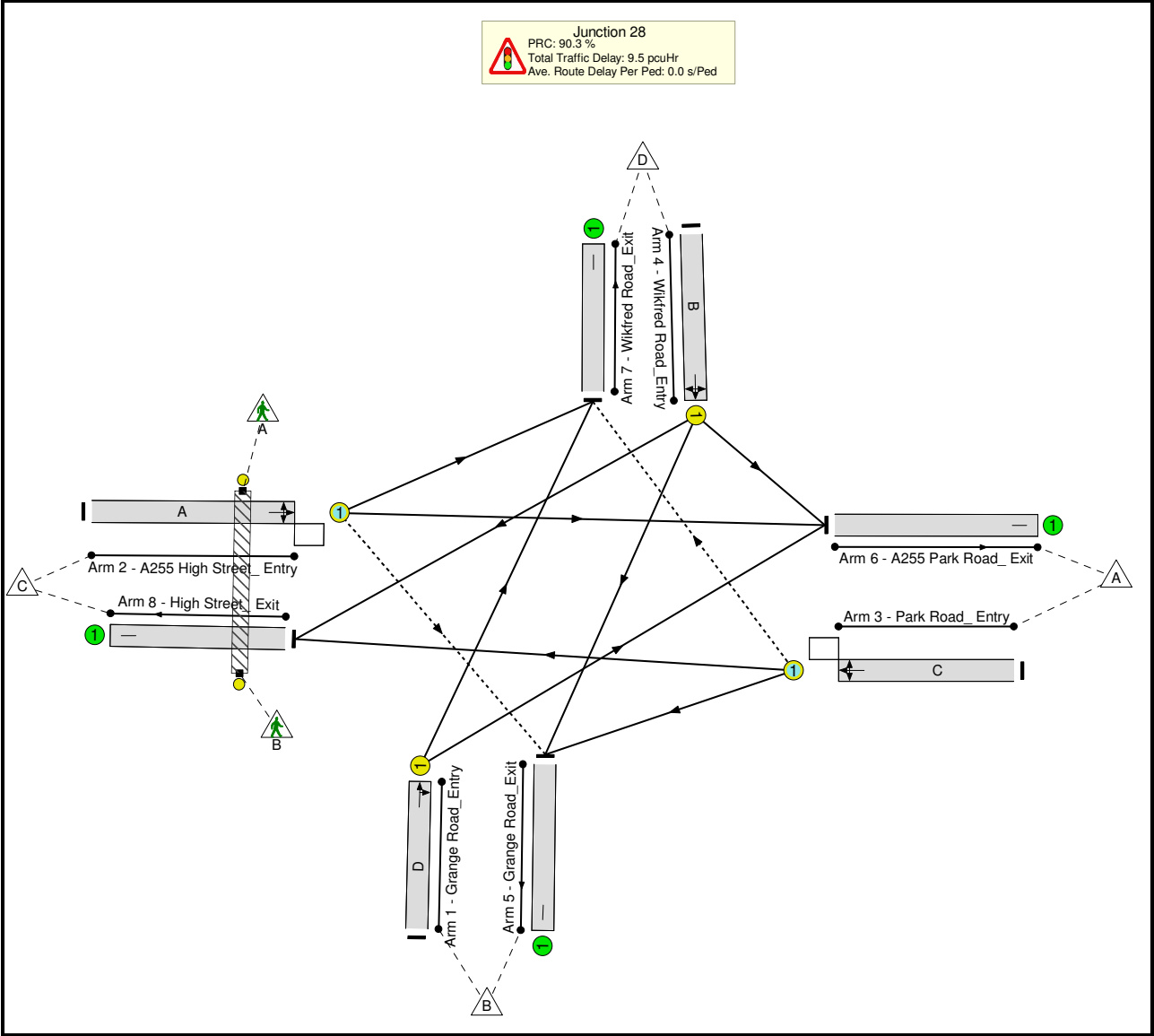
Stage	1	2	3
Duration	58	24	9
Change Point	0	70	101

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 28	-	-	N/A	-	-		-	-	-	-	-	-	47.3%
Junction 28	-	-	N/A	-	-		-	-	-	-	-	-	47.3%
1/1	Grange Road_Entry Right Ahead	U	N/A	N/A	D		1	12	-	95	1854	201	47.3%
2/1	A255 High Street_Entry Right Ahead Left	O	N/A	N/A	A		1	58	-	442	1931	949	46.6%
3/1	Park Road_Entry Left Right Ahead	O	N/A	N/A	C		1	60	-	381	1846	938	40.6%
4/1	Wikfred Road_Entry Ahead Left Right	U	N/A	N/A	B		1	24	-	176	1800	375	46.9%
5/1	Grange Road_Exit	U	N/A	N/A	-		-	-	-	87	Inf	Inf	0.0%
6/1	A255 Park Road_Exit	U	N/A	N/A	-		-	-	-	356	Inf	Inf	0.0%
7/1	Wikfred Road_Exit	U	N/A	N/A	-		-	-	-	192	Inf	Inf	0.0%
8/1	High Street_Exit	U	N/A	N/A	-		-	-	-	459	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	9	-	0	-	5400	0.0%

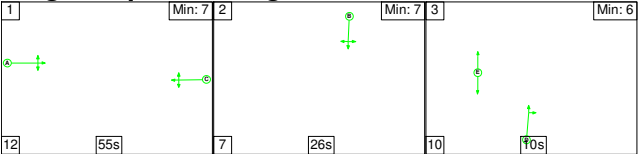
Full Input Data And Results

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 28	-	-	15	0	0	7.8	1.7	0.0	9.5	-	-	-	-
Junction 28	-	-	15	0	0	7.8	1.7	0.0	9.5	-	-	-	-
1/1	95	95	-	-	-	1.3	0.4	-	1.8	67.2	3.0	0.4	3.4
2/1	442	442	8	0	0	2.5	0.4	0.0	2.9	23.7	9.7	0.4	10.1
3/1	381	381	7	0	0	1.9	0.3	0.0	2.3	21.7	7.8	0.3	8.2
4/1	176	176	-	-	-	2.0	0.4	-	2.5	50.7	5.1	0.4	5.6
5/1	87	87	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	356	356	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	192	192	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	459	459	-	-	-	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
C1 - 08-0932 PRC for Signalled Lanes (%): 90.3 Total Delay for Signalled Lanes (pcuHr): 9.45 Cycle Time (s): 120 PRC Over All Lanes (%): 90.3 Total Delay Over All Lanes(pcuHr): 9.45													

Full Input Data And Results

Scenario 4: '2039 Growthed Traffic - AM' (FG4: '2039 Growthed Traffic - AM', Plan 2: 'AM Peak')

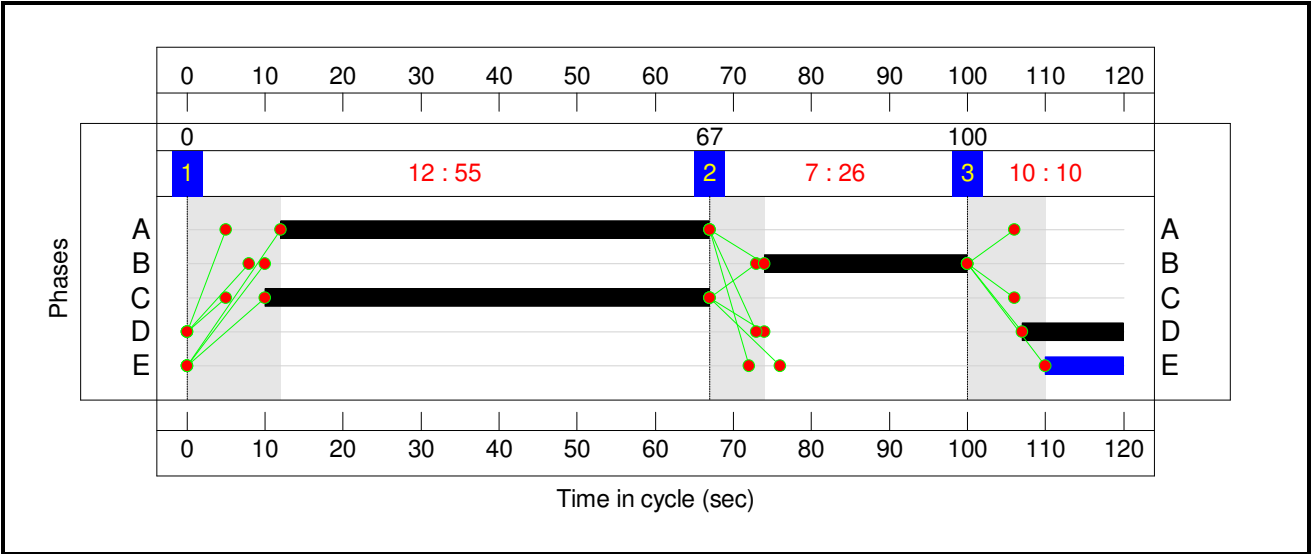
Stage Sequence Diagram



Stage Timings

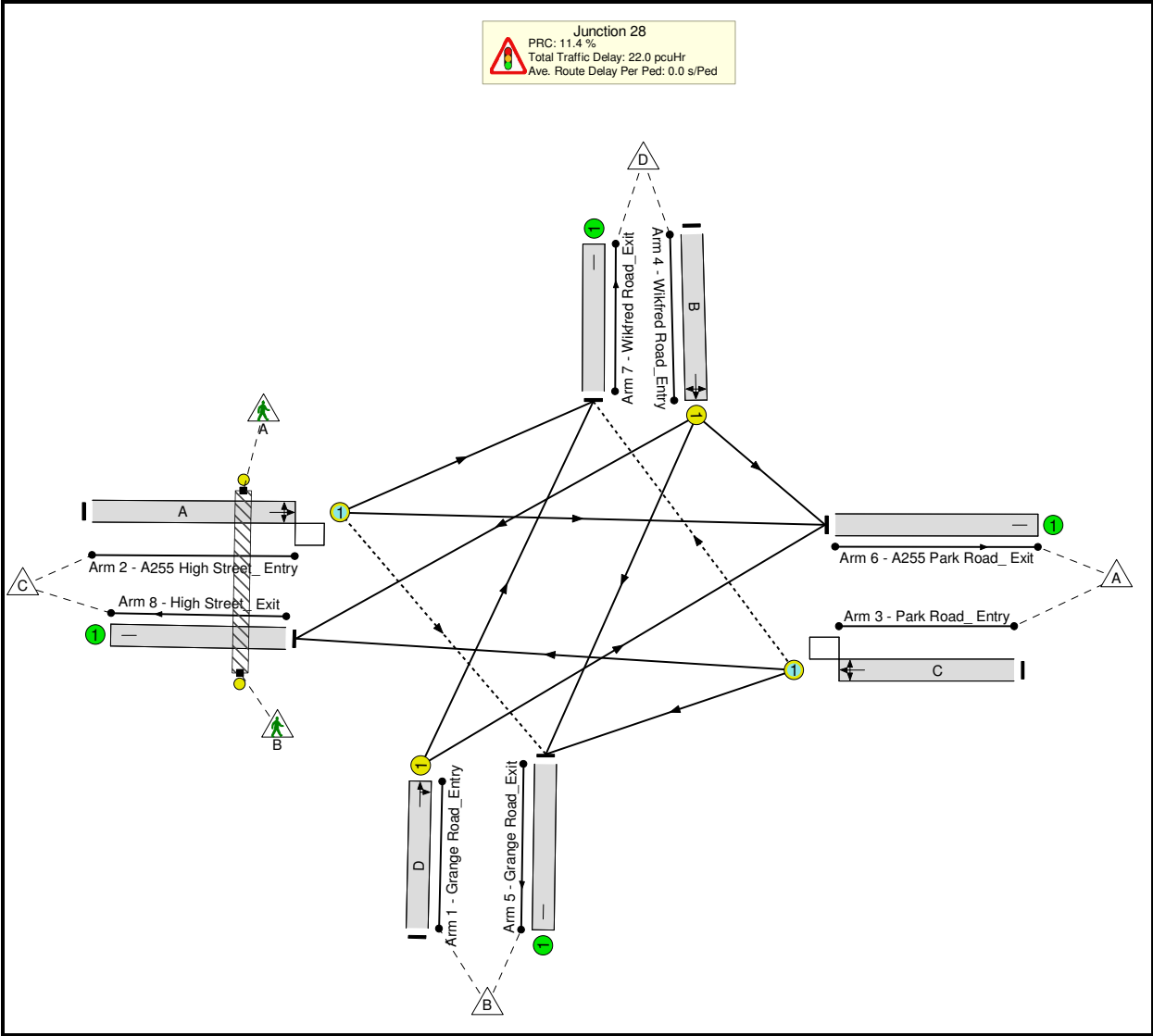
Stage	1	2	3
Duration	55	26	10
Change Point	0	67	100

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 28	-	-	N/A	-	-		-	-	-	-	-	-	80.8%
Junction 28	-	-	N/A	-	-		-	-	-	-	-	-	80.8%
1/1	Grange Road_Entry Right Ahead	U	N/A	N/A	D		1	13	-	172	1873	219	78.7%
2/1	A255 High Street_Entry Right Ahead Left	O	N/A	N/A	A		1	55	-	729	1934	903	80.8%
3/1	Park Road_Entry Left Right Ahead	O	N/A	N/A	C		1	57	-	540	1850	894	60.4%
4/1	Wikfred Road_Entry Ahead Left Right	U	N/A	N/A	B		1	26	-	326	1798	405	80.6%
5/1	Grange Road_Exit	U	N/A	N/A	-		-	-	-	113	Inf	Inf	0.0%
6/1	A255 Park Road_Exit	U	N/A	N/A	-		-	-	-	559	Inf	Inf	0.0%
7/1	Wikfred Road_Exit	U	N/A	N/A	-		-	-	-	354	Inf	Inf	0.0%
8/1	High Street_Exit	U	N/A	N/A	-		-	-	-	741	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	10	-	0	-	6000	0.0%

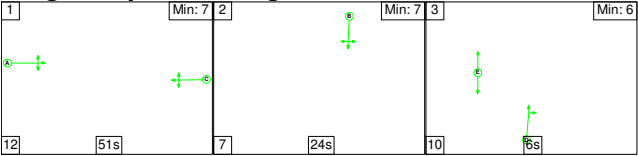
Full Input Data And Results

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 28	-	-	13	0	0	15.4	6.5	0.1	22.0	-	-	-	-
Junction 28	-	-	13	0	0	15.4	6.5	0.1	22.0	-	-	-	-
1/1	172	172	-	-	-	2.5	1.7	-	4.2	87.6	5.5	1.7	7.3
2/1	729	729	6	0	0	5.5	2.1	0.0	7.6	37.6	20.7	2.1	22.7
3/1	540	540	7	0	0	3.4	0.8	0.0	4.2	28.0	13.1	0.8	13.8
4/1	326	326	-	-	-	4.0	2.0	-	6.0	65.8	10.2	2.0	12.2
5/1	113	113	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	559	559	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	354	354	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	741	741	-	-	-	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
C1 - 08-0932 PRC for Signalled Lanes (%): 11.4 Total Delay for Signalled Lanes (pcuHr): 21.95 Cycle Time (s): 120 PRC Over All Lanes (%): 11.4 Total Delay Over All Lanes(pcuHr): 21.95													

Full Input Data And Results

Scenario 5: '2039 Growthed Traffic - PM' (FG5: '2039 Growthed Traffic - PM', Plan 3: 'PM Peak')

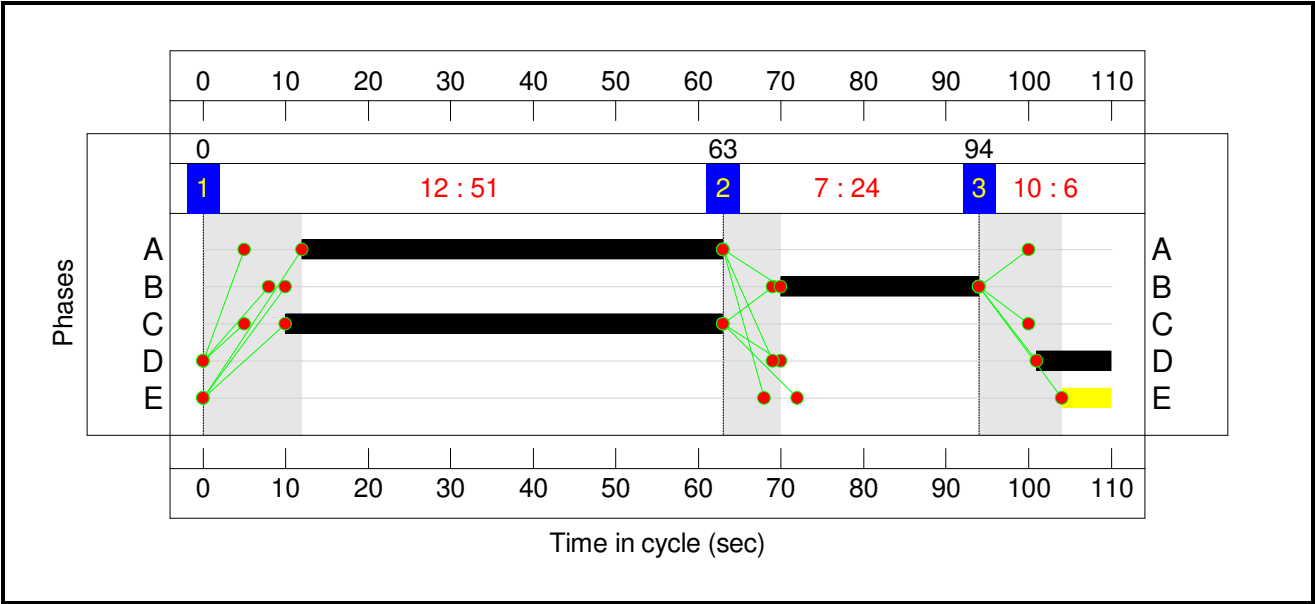
Stage Sequence Diagram



Stage Timings

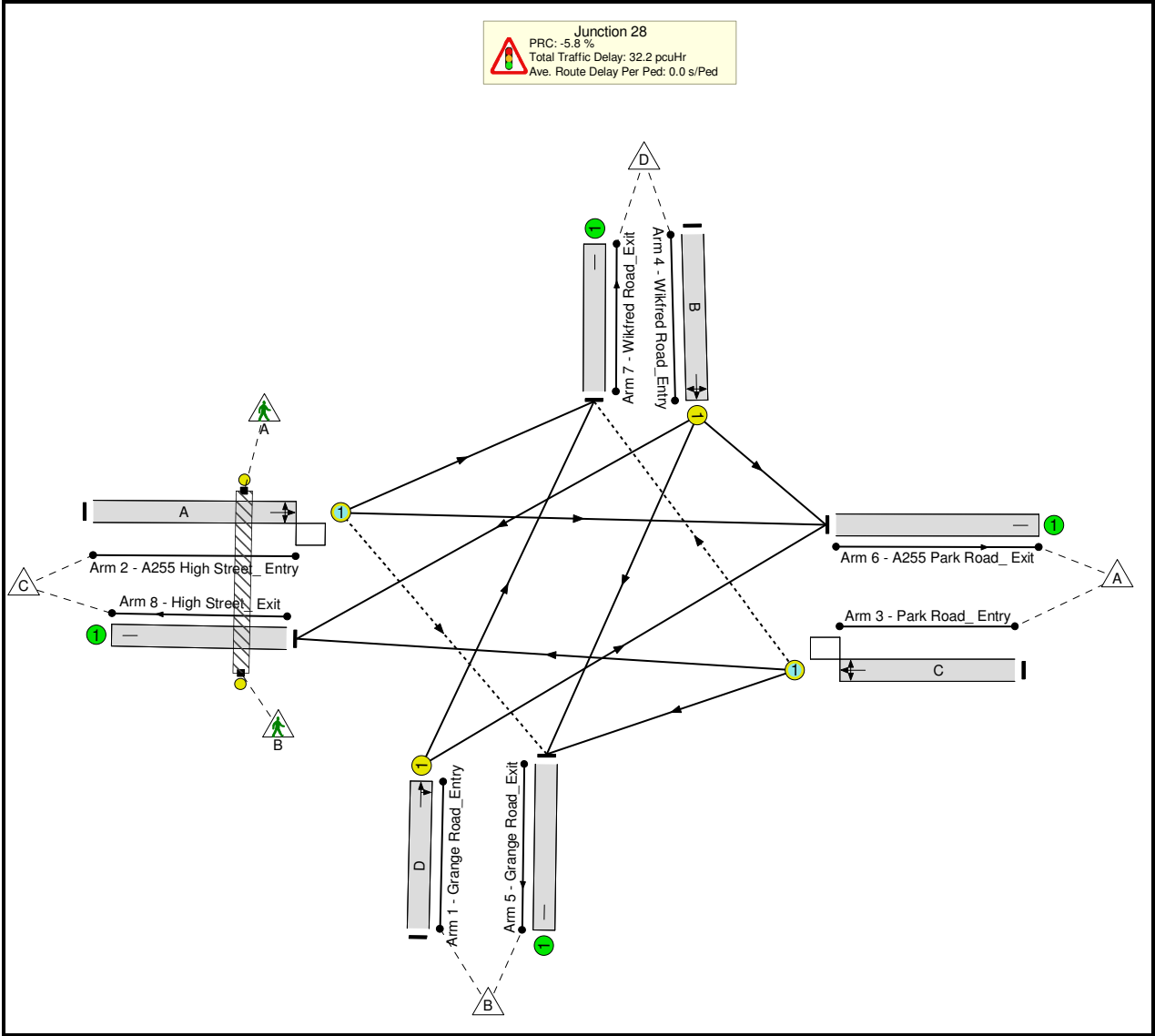
Stage	1	2	3
Duration	51	24	6
Change Point	0	63	94

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 28	-	-	N/A	-	-		-	-	-	-	-	-	95.2%
Junction 28	-	-	N/A	-	-		-	-	-	-	-	-	95.2%
1/1	Grange Road_Entry Right Ahead	U	N/A	N/A	D		1	9	-	149	1863	169	88.0%
2/1	A255 High Street_Entry Right Ahead Left	O	N/A	N/A	A		1	51	-	865	1922	909	95.2%
3/1	Park Road_Entry Left Right Ahead	O	N/A	N/A	C		1	53	-	493	1846	906	54.4%
4/1	Wikfred Road_Entry Ahead Left Right	U	N/A	N/A	B		1	24	-	384	1798	409	94.0%
5/1	Grange Road_Exit	U	N/A	N/A	-		-	-	-	164	Inf	Inf	0.0%
6/1	A255 Park Road_Exit	U	N/A	N/A	-		-	-	-	604	Inf	Inf	0.0%
7/1	Wikfred Road_Exit	U	N/A	N/A	-		-	-	-	431	Inf	Inf	0.0%
8/1	High Street_Exit	U	N/A	N/A	-		-	-	-	692	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	6	-	0	-	3927	0.0%

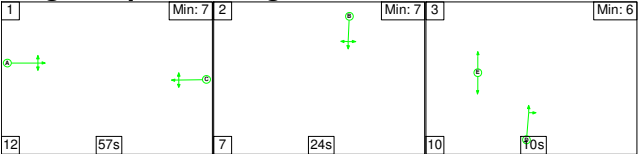
Full Input Data And Results

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 28	-	-	14	0	0	15.8	16.3	0.1	32.2	-	-	-	-
Junction 28	-	-	14	0	0	15.8	16.3	0.1	32.2	-	-	-	-
1/1	149	149	-	-	-	2.0	2.9	-	4.9	118.4	4.5	2.9	7.3
2/1	865	865	3	0	0	6.7	7.4	0.0	14.1	58.6	25.2	7.4	32.6
3/1	493	493	11	0	0	2.7	0.6	0.1	3.4	24.5	10.4	0.6	11.0
4/1	384	384	-	-	-	4.5	5.4	-	9.9	92.5	11.5	5.4	16.9
5/1	164	164	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	604	604	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	431	431	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	692	692	-	-	-	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
C1 - 08-0932 PRC for Signalled Lanes (%): -5.8 Total Delay for Signalled Lanes (pcuHr): 32.22 Cycle Time (s): 110 PRC Over All Lanes (%): -5.8 Total Delay Over All Lanes(pcuHr): 32.22													

Full Input Data And Results

Scenario 6: '2039 Growthed Traffic - Airport Peak' (FG6: '2039 Growthed Traffic - Airport Peak', Plan 4: 'Airport Peak')

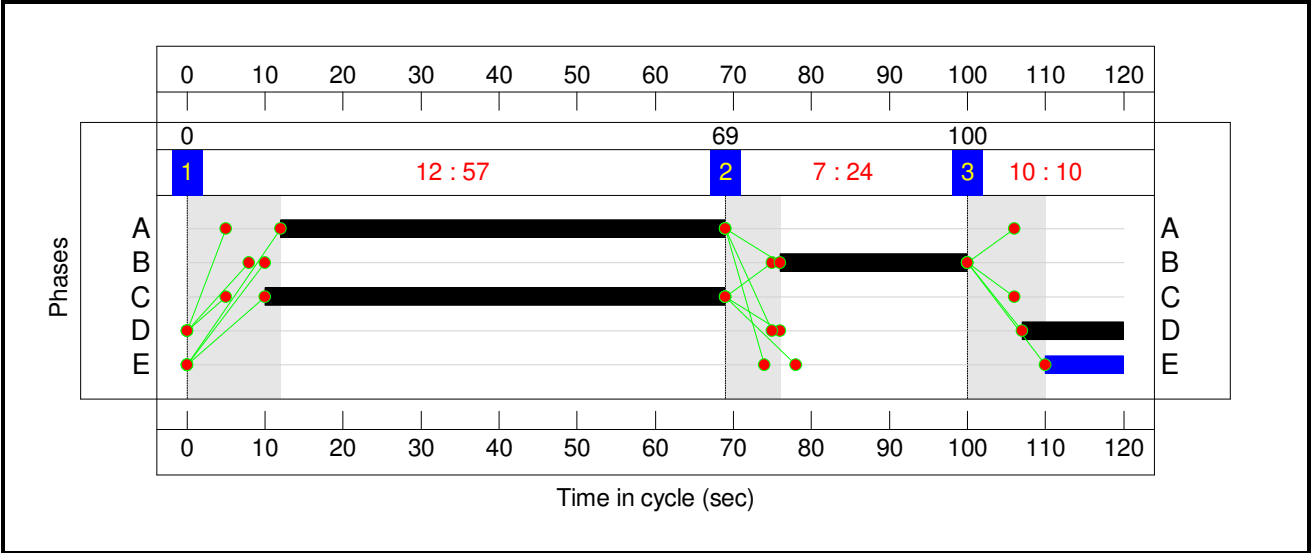
Stage Sequence Diagram



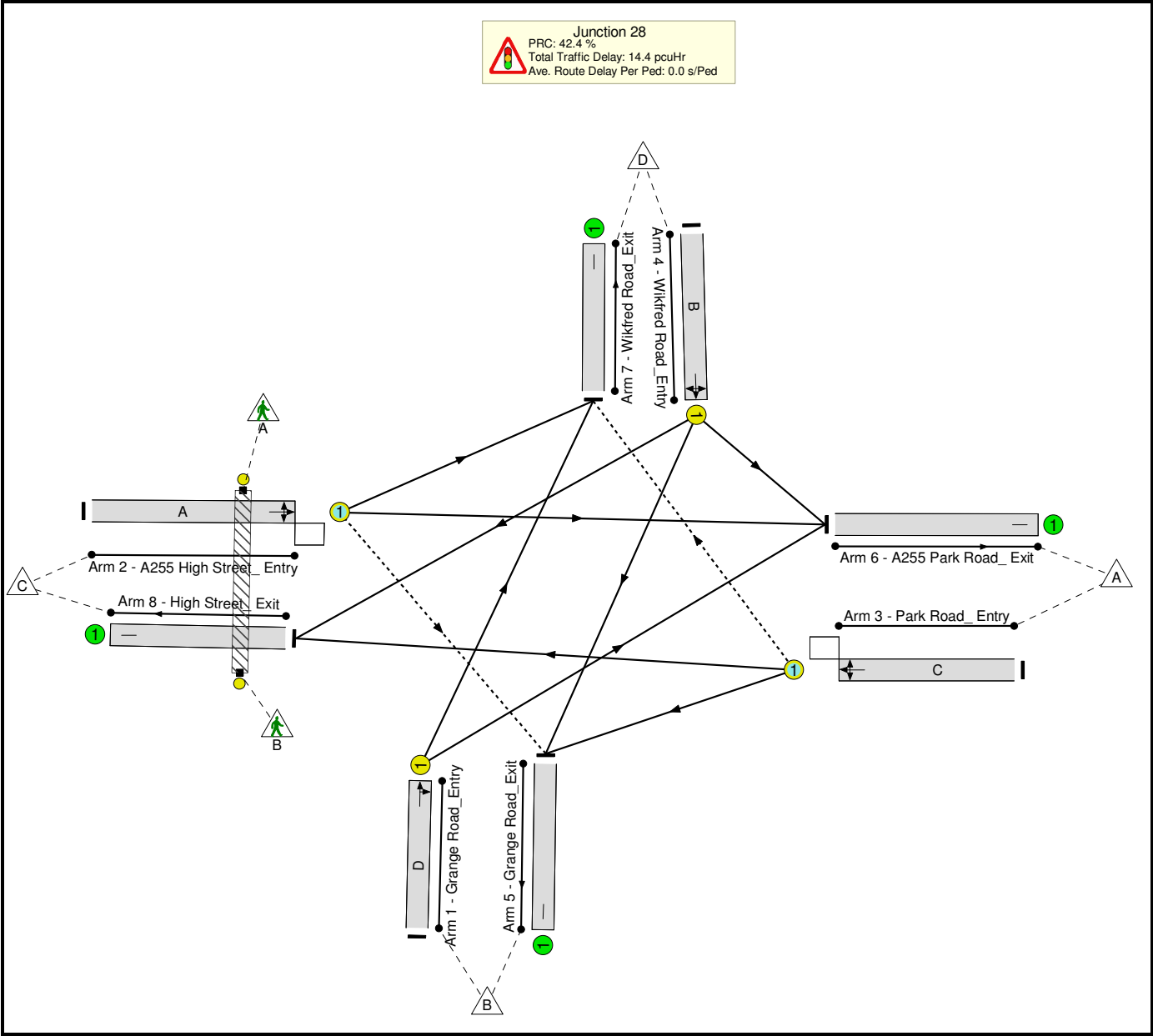
Stage Timings

Stage	1	2	3
Duration	57	24	10
Change Point	0	69	100

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 28	-	-	N/A	-	-		-	-	-	-	-	-	63.2%
Junction 28	-	-	N/A	-	-		-	-	-	-	-	-	63.2%
1/1	Grange Road_Entry Right Ahead	U	N/A	N/A	D		1	13	-	128	1855	216	59.1%
2/1	A255 High Street_Entry Right Ahead Left	O	N/A	N/A	A		1	57	-	590	1931	933	63.2%
3/1	Park Road_Entry Left Right Ahead	O	N/A	N/A	C		1	59	-	509	1846	923	55.1%
4/1	Wikfred Road_Entry Ahead Left Right	U	N/A	N/A	B		1	24	-	236	1800	375	62.9%
5/1	Grange Road_Exit	U	N/A	N/A	-		-	-	-	118	Inf	Inf	0.0%
6/1	A255 Park Road_Exit	U	N/A	N/A	-		-	-	-	475	Inf	Inf	0.0%
7/1	Wikfred Road_Exit	U	N/A	N/A	-		-	-	-	257	Inf	Inf	0.0%
8/1	High Street_Exit	U	N/A	N/A	-		-	-	-	613	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	10	-	0	-	6000	0.0%

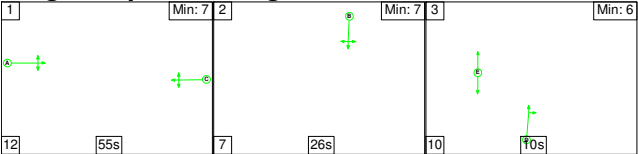
Full Input Data And Results

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 28	-	-	20	0	0	11.3	3.0	0.1	14.4	-	-	-	-
Junction 28	-	-	20	0	0	11.3	3.0	0.1	14.4	-	-	-	-
1/1	128	128	-	-	-	1.8	0.7	-	2.5	70.3	4.0	0.7	4.7
2/1	590	590	11	0	0	3.8	0.9	0.0	4.7	28.4	14.6	0.9	15.4
3/1	509	509	9	0	0	2.9	0.6	0.0	3.6	25.3	11.6	0.6	12.2
4/1	236	236	-	-	-	2.8	0.8	-	3.7	56.1	7.1	0.8	8.0
5/1	118	118	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	475	475	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	257	257	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	613	613	-	-	-	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
C1 - 08-0932 PRC for Signalled Lanes (%): 42.4 Total Delay for Signalled Lanes (pcuHr): 14.41 Cycle Time (s): 120 PRC Over All Lanes (%): 42.4 Total Delay Over All Lanes(pcuHr): 14.41													

Full Input Data And Results

Scenario 7: '2039 + Dev Traffic - AM' (FG7: '2039 + Dev Traffic - AM', Plan 2: 'AM Peak')

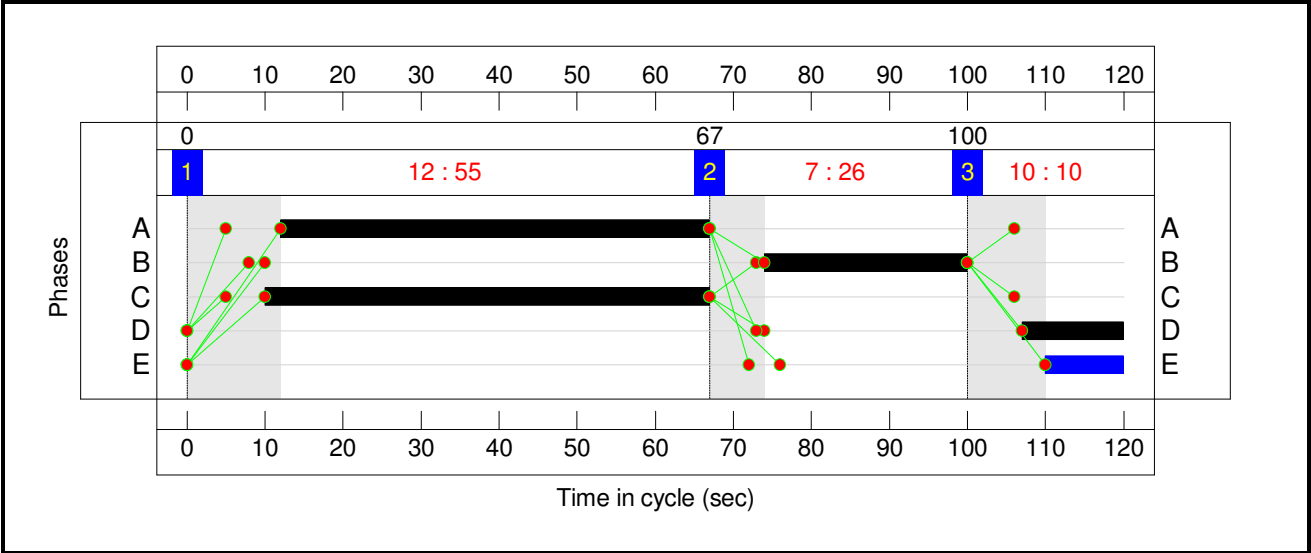
Stage Sequence Diagram



Stage Timings

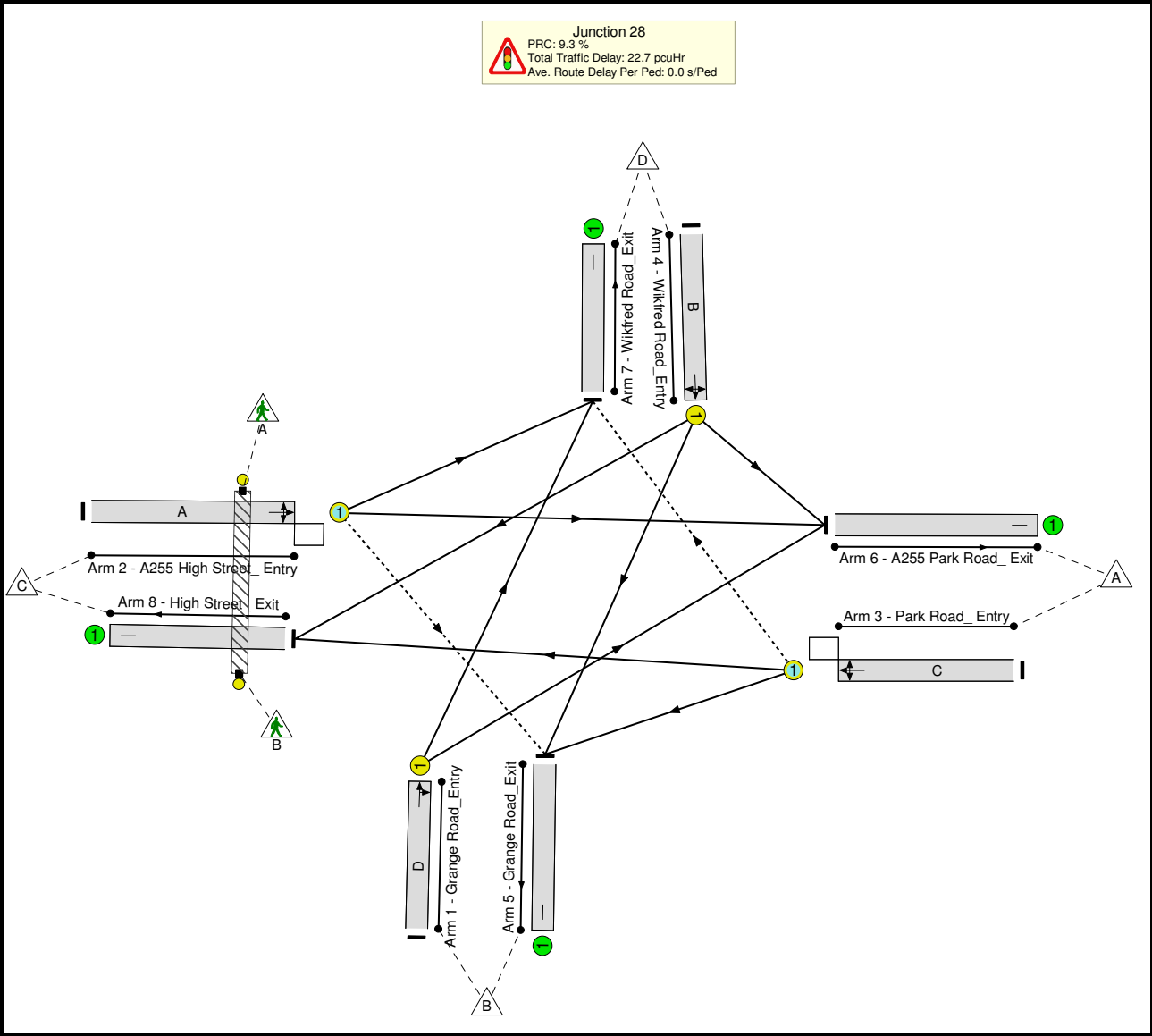
Stage	1	2	3
Duration	55	26	10
Change Point	0	67	100

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

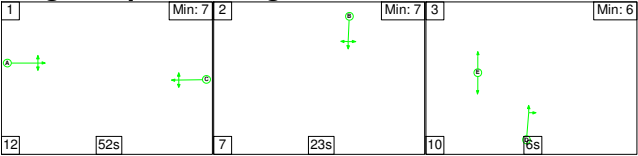
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 28	-	-	N/A	-	-		-	-	-	-	-	-	82.3%
Junction 28	-	-	N/A	-	-		-	-	-	-	-	-	82.3%
1/1	Grange Road_Entry Right Ahead	U	N/A	N/A	D		1	13	-	172	1873	219	78.7%
2/1	A255 High Street_Entry Right Ahead Left	O	N/A	N/A	A		1	55	-	734	1934	903	81.3%
3/1	Park Road_Entry Left Right Ahead	O	N/A	N/A	C		1	57	-	566	1851	895	63.3%
4/1	Wikfred Road_Entry Ahead Left Right	U	N/A	N/A	B		1	26	-	333	1798	405	82.3%
5/1	Grange Road_Exit	U	N/A	N/A	-		-	-	-	113	Inf	Inf	0.0%
6/1	A255 Park Road_Exit	U	N/A	N/A	-		-	-	-	563	Inf	Inf	0.0%
7/1	Wikfred Road_Exit	U	N/A	N/A	-		-	-	-	355	Inf	Inf	0.0%
8/1	High Street_Exit	U	N/A	N/A	-		-	-	-	774	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	10	-	0	-	6000	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 28	-	-	13	0	0	15.8	6.9	0.1	22.7	-	-	-	-
Junction 28	-	-	13	0	0	15.8	6.9	0.1	22.7	-	-	-	-
1/1	172	172	-	-	-	2.5	1.7	-	4.2	87.6	5.5	1.7	7.3
2/1	734	734	6	0	0	5.6	2.1	0.0	7.7	38.0	21.0	2.1	23.1
3/1	566	566	7	0	0	3.6	0.9	0.0	4.5	28.8	14.0	0.9	14.8
4/1	333	333	-	-	-	4.1	2.2	-	6.3	67.9	10.5	2.2	12.7
5/1	113	113	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	563	563	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	355	355	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	774	774	-	-	-	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
C1 - 08-0932 PRC for Signalled Lanes (%): 9.3 Total Delay for Signalled Lanes (pcuHr): 22.74 Cycle Time (s): 120 PRC Over All Lanes (%): 9.3 Total Delay Over All Lanes(pcuHr): 22.74													

Full Input Data And Results
Scenario 8: '2039 + Dev Traffic - PM' (FG8: '2039 + Dev Traffic - PM', Plan 3: 'PM Peak')

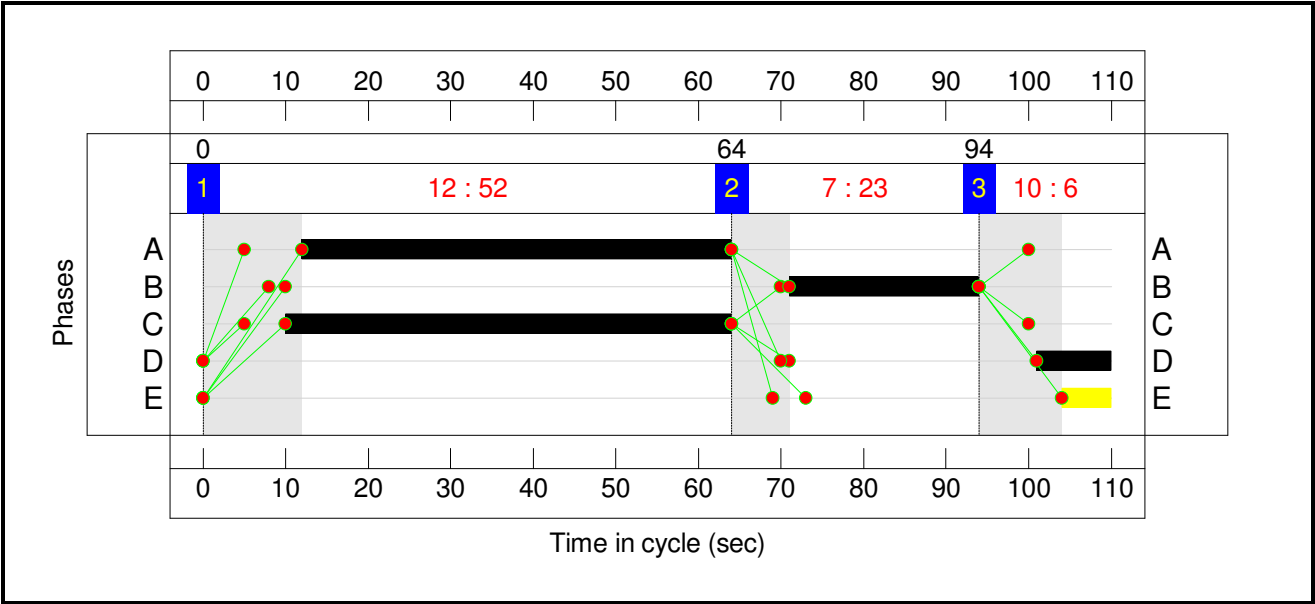
Stage Sequence Diagram



Stage Timings

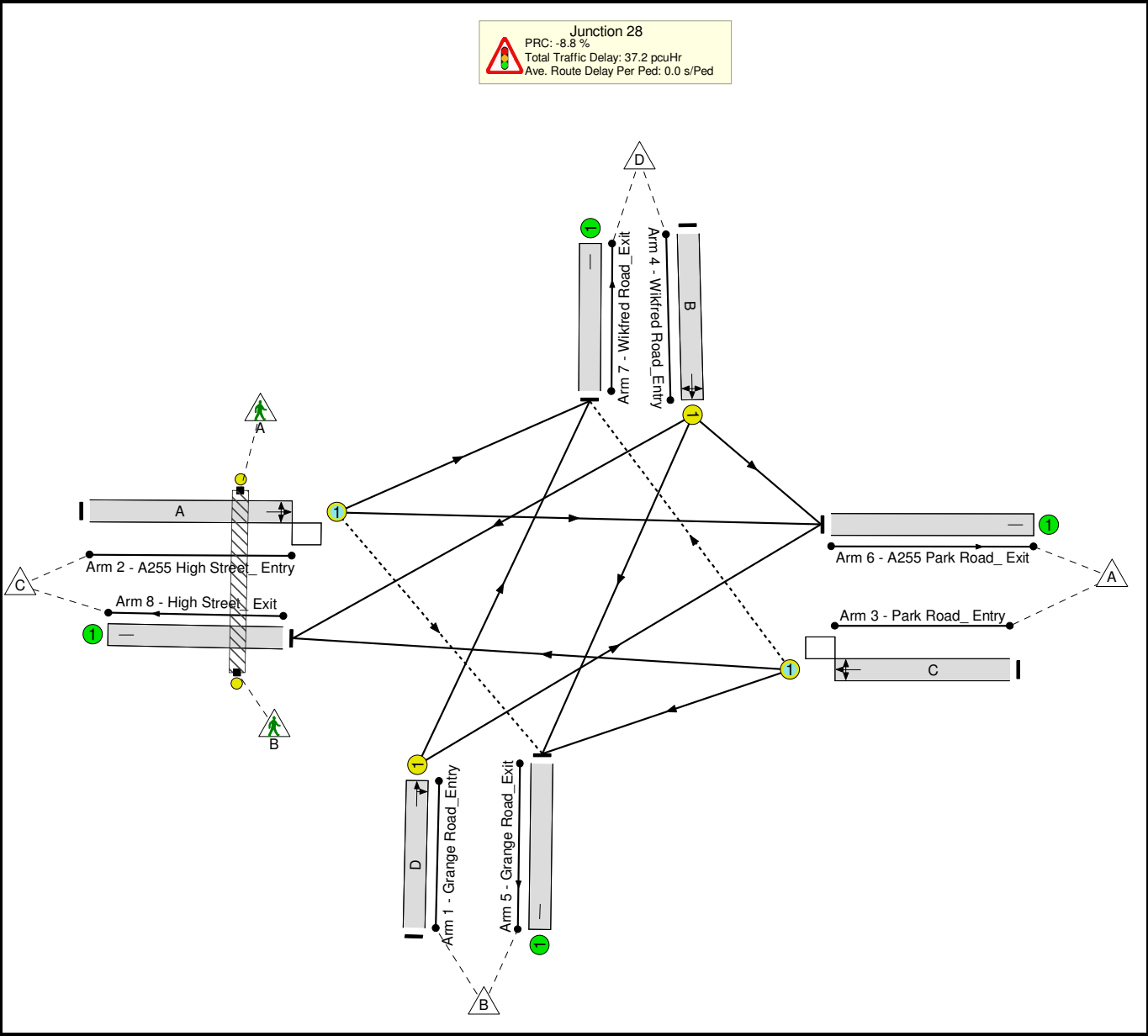
Stage	1	2	3
Duration	52	23	6
Change Point	0	64	94

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

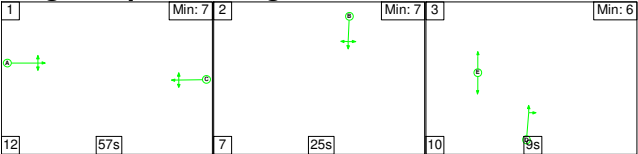
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 28	-	-	N/A	-	-		-	-	-	-	-	-	97.9%
Junction 28	-	-	N/A	-	-		-	-	-	-	-	-	97.9%
1/1	Grange Road_Entry Right Ahead	U	N/A	N/A	D		1	9	-	149	1863	169	88.0%
2/1	A255 High Street_Entry Right Ahead Left	O	N/A	N/A	A		1	52	-	899	1923	927	97.0%
3/1	Park Road_Entry Left Right Ahead	O	N/A	N/A	C		1	54	-	496	1846	923	53.7%
4/1	Wikfred Road_Entry Ahead Left Right	U	N/A	N/A	B		1	23	-	384	1798	392	97.9%
5/1	Grange Road_Exit	U	N/A	N/A	-		-	-	-	164	Inf	Inf	0.0%
6/1	A255 Park Road_Exit	U	N/A	N/A	-		-	-	-	631	Inf	Inf	0.0%
7/1	Wikfred Road_Exit	U	N/A	N/A	-		-	-	-	438	Inf	Inf	0.0%
8/1	High Street_Exit	U	N/A	N/A	-		-	-	-	695	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	6	-	0	-	3927	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 28	-	-	14	0	0	16.1	21.0	0.1	37.2	-	-	-	-
Junction 28	-	-	14	0	0	16.1	21.0	0.1	37.2	-	-	-	-
1/1	149	149	-	-	-	2.0	2.9	-	4.9	118.4	4.5	2.9	7.3
2/1	899	899	3	0	0	6.9	9.6	0.0	16.5	66.2	26.7	9.6	36.3
3/1	496	496	11	0	0	2.6	0.6	0.1	3.3	23.8	10.3	0.6	10.9
4/1	384	384	-	-	-	4.6	7.9	-	12.5	117.2	11.6	7.9	19.6
5/1	164	164	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	631	631	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	438	438	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	695	695	-	-	-	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
C1 - 08-0932 PRC for Signalled Lanes (%): -8.8 Total Delay for Signalled Lanes (pcuHr): 37.22 Cycle Time (s): 110 PRC Over All Lanes (%): -8.8 Total Delay Over All Lanes(pcuHr): 37.22													

Full Input Data And Results
Scenario 9: '2039 + Dev Traffic - Airport Peak' (FG9: '2039 + Dev Traffic - Airport Peak', Plan 4: 'Airport Peak')

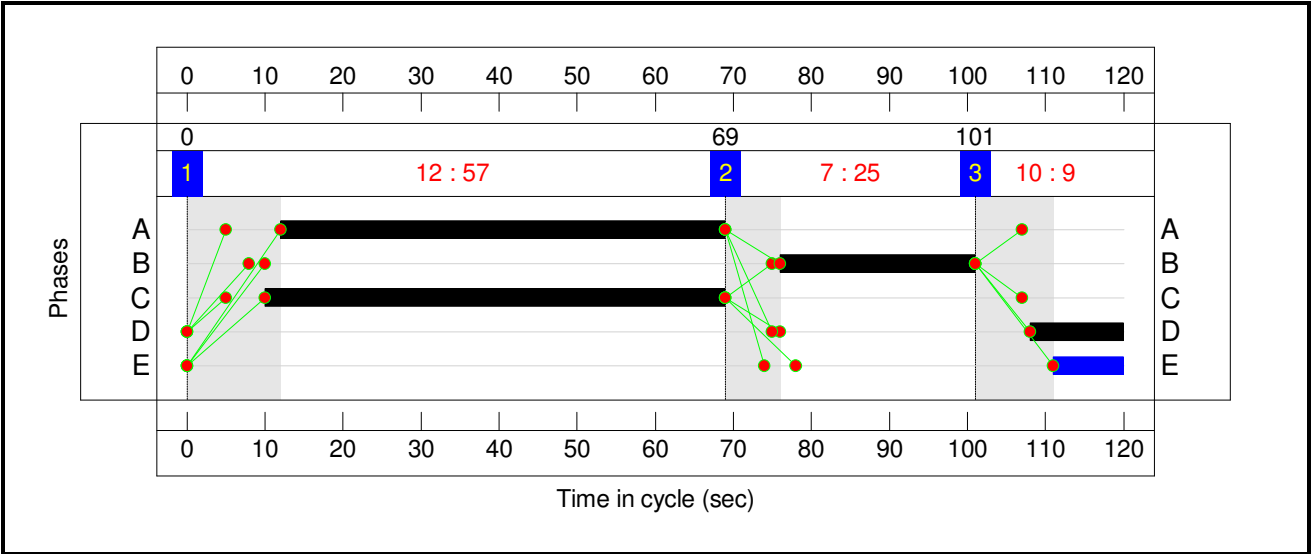
Stage Sequence Diagram



Stage Timings

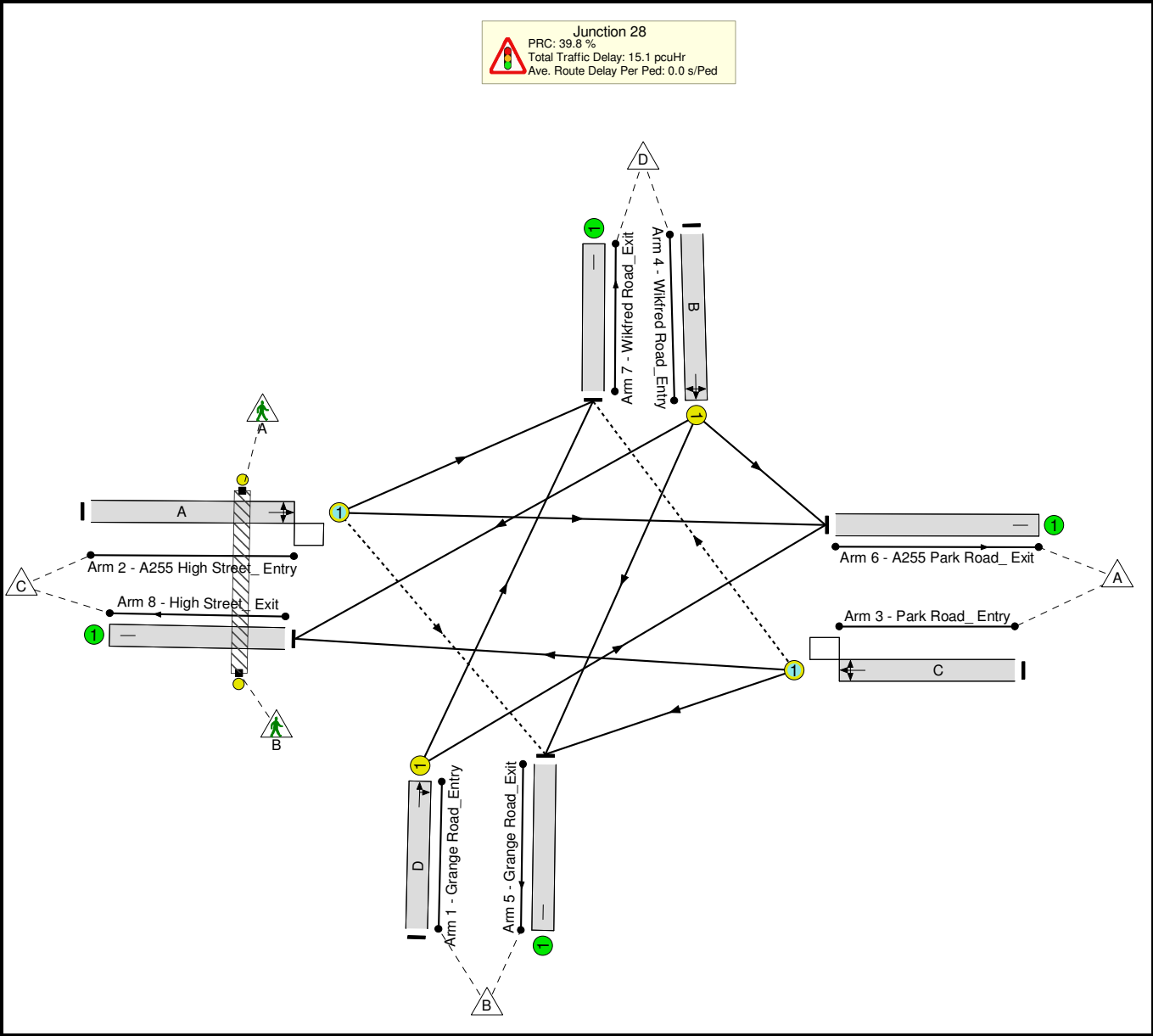
Stage	1	2	3
Duration	57	25	9
Change Point	0	69	101

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Junction 28	-	-	N/A	-	-		-	-	-	-	-	-	64.4%
Junction 28	-	-	N/A	-	-		-	-	-	-	-	-	64.4%
1/1	Grange Road_Entry Right Ahead	U	N/A	N/A	D		1	12	-	128	1855	201	63.7%
2/1	A255 High Street_Entry Right Ahead Left	O	N/A	N/A	A		1	57	-	601	1931	933	64.4%
3/1	Park Road_Entry Left Right Ahead	O	N/A	N/A	C		1	59	-	537	1847	924	58.1%
4/1	Wikfred Road_Entry Ahead Left Right	U	N/A	N/A	B		1	25	-	245	1800	390	62.8%
5/1	Grange Road_Exit	U	N/A	N/A	-		-	-	-	118	Inf	Inf	0.0%
6/1	A255 Park Road_Exit	U	N/A	N/A	-		-	-	-	484	Inf	Inf	0.0%
7/1	Wikfred Road_Exit	U	N/A	N/A	-		-	-	-	259	Inf	Inf	0.0%
8/1	High Street_Exit	U	N/A	N/A	-		-	-	-	650	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	9	-	0	-	5400	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 28	-	-	20	0	0	11.8	3.3	0.1	15.1	-	-	-	-
Junction 28	-	-	20	0	0	11.8	3.3	0.1	15.1	-	-	-	-
1/1	128	128	-	-	-	1.8	0.9	-	2.7	75.3	4.1	0.9	4.9
2/1	601	601	11	0	0	3.9	0.9	0.0	4.8	28.8	15.0	0.9	15.9
3/1	537	537	9	0	0	3.2	0.7	0.0	3.9	26.0	12.5	0.7	13.2
4/1	245	245	-	-	-	2.9	0.8	-	3.7	54.9	7.4	0.8	8.2
5/1	118	118	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	484	484	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	259	259	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	650	650	-	-	-	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
C1 - 08-0932 PRC for Signalled Lanes (%): 39.8 Total Delay for Signalled Lanes (pcuHr): 15.10 Cycle Time (s): 120 PRC Over All Lanes (%): 39.8 Total Delay Over All Lanes(pcuHr): 15.10													

Appendix E:

Traffic Generation Tables

Table 1.1 Cargo Freight Facility – 24 Hour Flows – Across 20 Year Programme

Total HGVs	Year 1			Year 2			Year 3			Year 4			Year 5			Year 6			Year 7			Year 8			Year 9			Year 10		
Time	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total
Total	0	0	0	34	34	68	38	38	76	58	58	116	62	62	124	64	64	128	68	68	136	70	70	140	76	76	152	74	74	148
00:00-01:00	0	0	0	1	1	2	1	1	2	2	2	4	3	2	5	3	2	5	3	2	5	3	2	5	3	3	6	3	3	6
01:00-02:00	0	0	0	2	1	3	2	1	3	2	2	4	3	3	6	3	3	6	3	3	6	3	3	6	3	3	6	3	3	6
02:00-03:00	0	0	0	1	2	3	1	2	3	3	2	5	3	3	6	3	3	6	3	3	6	3	3	6	3	3	6	3	3	6
03:00-04:00	0	0	0	1	1	2	1	1	2	2	2	4	3	2	5	3	2	5	3	2	5	3	2	5	4	3	7	3	3	6
04:00-05:00	0	0	0	2	1	3	2	1	3	2	2	4	3	3	6	3	3	6	3	3	6	3	3	6	3	4	7	3	3	6
05:00-06:00	0	0	0	1	2	3	1	2	3	2	2	4	2	3	5	3	3	6	3	4	7	3	3	6	3	3	6	3	3	6
06:00-07:00	0	0	0	2	1	3	2	1	3	3	2	5	3	2	5	3	3	6	3	3	6	3	3	6	3	3	6	3	3	6
07:00-08:00	0	0	0	1	2	3	2	2	4	3	3	6	3	3	6	3	3	6	2	3	5	3	3	6	4	3	7	3	3	6
08:00-09:00	0	0	0	2	1	3	2	2	4	2	3	5	2	3	5	2	3	5	3	3	6	3	3	6	3	4	7	3	3	6
09:00-10:00	0	0	0	1	2	3	2	2	4	3	2	5	3	2	5	3	2	5	3	3	6	3	3	6	3	3	6	3	3	6
10:00-11:00	0	0	0	1	1	2	1	2	3	2	3	5	2	3	5	2	3	5	3	3	6	3	3	6	3	3	6	3	3	6
11:00-12:00	0	0	0	1	1	2	2	1	3	2	2	4	2	2	4	3	2	5	3	3	6	3	3	6	3	3	6	3	3	6
12:00-13:00	0	0	0	2	1	3	2	2	4	3	2	5	3	2	5	3	3	6	3	3	6	3	3	6	3	3	6	3	3	6
13:00-14:00	0	0	0	1	2	3	1	2	3	2	3	5	2	3	5	2	3	5	3	3	6	3	3	6	3	3	6	3	3	6
14:00-15:00	0	0	0	2	1	3	2	1	3	2	2	4	2	2	4	2	2	4	3	3	6	3	3	6	3	3	6	3	3	6
15:00-16:00	0	0	0	1	2	3	2	2	4	2	2	4	2	2	4	2	2	4	3	3	6	3	3	6	3	3	6	3	3	6
16:00-17:00	0	0	0	2	1	3	2	2	4	3	3	6	3	3	6	3	3	6	3	2	5	3	3	6	4	3	7	4	3	7

Total HGVs	Year 1			Year 2			Year 3			Year 4			Year 5			Year 6			Year 7			Year 8			Year 9			Year 10		
17:00-18:00	0	0	0	2	2	4	2	2	4	3	3	6	3	3	6	3	3	6	3	3	6	3	3	6	3	4	7	3	4	7
18:00-19:00	0	0	0	1	2	3	1	2	3	3	3	6	3	3	6	3	3	6	3	3	6	3	3	6	3	3	6	3	3	6
19:00-20:00	0	0	0	2	1	3	2	1	3	3	3	6	3	3	6	3	3	6	3	3	6	3	3	6	3	3	6	3	3	6
20:00-21:00	0	0	0	1	2	3	1	2	3	2	3	5	2	3	5	2	3	5	2	3	5	3	3	6	3	3	6	3	3	6
21:00-22:00	0	0	0	2	1	3	2	1	3	3	2	5	3	2	5	3	2	5	3	2	5	3	3	6	4	3	7	4	3	7
22:00-23:00	0	0	0	1	2	3	1	2	3	2	3	5	2	3	5	2	3	5	2	3	5	2	3	5	3	4	7	3	4	7
23:00-00:00	0	0	0	1	1	2	1	1	2	2	2	4	2	2	4	2	2	4	2	2	4	2	3	5	3	3	6	3	3	6

Total HGVs	Year 11			Year 12			Year 13			Year 14			Year 15			Year 16			Year 17			Year 18			Year 19			Year 20		
Time	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total
Total	78	78	156	82	82	164	84	84	168	90	90	180	94	94	188	98	98	196	104	104	208	108	108	216	112	112	224	118	118	236
00:00-01:00	3	3	6	4	3	7	4	3	7	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	5	4	9
01:00-02:00	3	3	6	3	4	7	3	4	7	4	4	8	4	4	8	4	4	8	5	4	9	5	4	9	5	4	9	5	5	10
02:00-03:00	3	3	6	3	3	6	3	3	6	3	4	7	4	4	8	4	4	8	4	5	9	4	5	9	4	5	9	5	5	10
03:00-04:00	4	3	7	4	3	7	4	3	7	4	3	7	4	4	8	4	4	8	5	4	9	5	4	9	5	4	9	5	5	10
04:00-05:00	3	4	7	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	5	9	4	5	9	5	5	10	5	5	10
05:00-06:00	3	3	6	3	4	7	3	4	7	3	4	7	4	4	8	4	4	8	5	4	9	5	4	9	5	5	10	5	5	10
06:00-07:00	3	3	6	3	3	6	3	3	6	3	3	6	4	4	8	4	4	8	4	5	9	5	5	10	5	5	10	5	5	10
07:00-08:00	4	3	7	4	3	7	4	3	7	4	3	7	4	4	8	4	4	8	4	4	8	4	5	9	5	5	10	5	5	10
08:00-09:00	3	4	7	4	4	8	4	4	8	4	4	8	4	4	8	5	4	9	5	4	9	5	4	9	5	5	10	5	5	10
09:00-10:00	3	3	6	3	4	7	3	4	7	3	4	7	3	4	7	4	5	9	4	5	9	4	5	9	4	5	9	5	5	10
10:00-11:00	3	3	6	3	3	6	3	3	6	3	3	6	4	3	7	4	4	8	5	4	9	5	4	9	5	4	9	5	5	10
11:00-12:00	3	3	6	3	3	6	4	3	7	4	3	7	4	4	8	4	4	8	4	5	9	4	5	9	4	5	9	5	5	10
12:00-13:00	4	3	7	4	3	7	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	5	4	9	5	4	9	5	5	10
13:00-14:00	3	4	7	3	4	7	3	4	7	3	4	7	3	4	7	4	4	8	4	4	8	4	5	9	4	5	9	5	5	10
14:00-15:00	4	3	7	4	3	7	4	3	7	4	3	7	4	3	7	4	4	8	4	4	8	4	4	8	4	4	8	5	5	10
15:00-16:00	3	4	7	3	4	7	4	4	8	4	4	8	4	4	8	5	4	9	5	4	9	5	4	9	5	4	9	5	5	10

Total HGVs	Year 11			Year 12			Year 13			Year 14			Year 15			Year 16			Year 17			Year 18			Year 19			Year 20		
16:00-17:00	4	3	7	4	3	7	4	4	8	4	4	8	4	4	8	4	5	9	4	5	9	4	5	9	5	5	10	5	5	10
17:00-18:00	3	4	7	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	5	4	9	5	4	9	5	5	10	5	5	10
18:00-19:00	3	3	6	3	4	7	3	4	7	4	4	8	4	4	8	4	4	8	4	5	9	4	5	9	5	5	10	5	5	10
19:00-20:00	3	3	6	3	3	6	3	3	6	4	4	8	4	4	8	4	4	8	4	4	8	5	4	9	5	5	10	5	5	10
20:00-21:00	3	3	6	3	3	6	3	3	6	4	4	8	4	4	8	4	4	8	5	4	9	5	5	10	5	5	10	5	5	10
21:00-22:00	4	3	7	4	3	7	4	3	7	4	4	8	4	4	8	4	4	8	4	5	9	4	5	9	4	5	9	4	5	9
22:00-23:00	3	4	7	3	4	7	3	4	7	4	4	8	4	4	8	4	4	8	4	4	8	5	4	9	5	4	9	5	4	9
23:00-00:00	3	3	6	3	3	6	3	3	6	4	4	8	4	4	8	4	4	8	4	4	8	4	5	9	4	5	9	4	5	9

Table 1.2 Anticipated Arrivals

Total flights split by time of day	Arrivals																			
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
06:00 - 07:00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
07:00 - 08:00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00
08:00 - 09:00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
09:00 - 10:00																				
10:00 - 11:00																				
11:00 - 12:00																				
12:00 - 13:00																				
13:00 - 14:00						1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
14:00 - 15:00												1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
15:00 - 16:00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00
16:00 - 17:00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
17:00 - 18:00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
18:00 - 19:00						1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00
19:00 - 20:00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
20:00 - 21:00																				
21:00 - 22:00																				
22:00 - 23:00																				

Table 1.3 Anticipated Departures

Total flights split by time of day	Departures																			
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
06:00 - 07:00																				
07:00 - 08:00																				
08:00 - 09:00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
09:00 - 10:00						1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
10:00 - 11:00																				
11:00 - 12:00																	1.00	1.00	1.00	1.00
12:00 - 13:00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
13:00 - 14:00														1.00	1.00	1.00	1.00	1.00	1.00	1.00
14:00 - 15:00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
15:00 - 16:00																				1.00
16:00 - 17:00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
17:00 - 18:00																				
18:00 - 19:00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
19:00 - 20:00						1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
20:00 - 21:00														1.00	1.00	1.00	1.00	1.00	1.00	1.00
21:00 - 22:00									1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
22:00 - 23:00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table 1.4 Passenger Numbers Per Departures

Total flights split by time of day	Departures																			
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
06:00 - 07:00			170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10
07:00 - 08:00			170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	340.20	340.20	340.20	340.20	340.20
08:00 - 09:00			52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00
09:00 - 10:00																				
10:00 - 11:00																				
11:00 - 12:00																				
12:00 - 13:00																				
13:00 - 14:00						170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10
14:00 - 15:00												170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10
15:00 - 16:00			170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	340.20	340.20
16:00 - 17:00			170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10
17:00 - 18:00			52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00
18:00 - 19:00						170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	340.20
19:00 - 20:00			170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10
20:00 - 21:00																				
21:00 - 22:00																				
22:00 - 23:00																				

Table 1.5 Passenger Numbers Per Arrivals

Total flights split by time of day	Arrivals																			
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
06:00 - 07:00																				
07:00 - 08:00																				
08:00 - 09:00				170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10
09:00 - 10:00							170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10
10:00 - 11:00																				
11:00 - 12:00																		170.10	170.10	170.10
12:00 - 13:00				52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00
13:00 - 14:00															170.10	170.10	170.10	170.10	170.10	170.10
14:00 - 15:00				170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10
15:00 - 16:00																				
16:00 - 17:00				170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10
17:00 - 18:00																				
18:00 - 19:00				52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00	52.00
19:00 - 20:00							170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10
20:00 - 21:00															170.10	170.10	170.10	170.10	170.10	170.10
21:00 - 22:00										170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10
22:00 - 23:00				170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10	170.10

Table 1.6 Passenger Movements for Flight Arrivals (Requiring Departure from Airport Site)

Time	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
09:00 - 10:00			170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170
10:00 - 11:00			0	0	0	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170
11:00 - 12:00			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 - 13:00			0	0	0	0	0	0	0	0	0	0	0	0	0	0	170	170	170	170
13:00 - 14:00			52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
14:00 - 15:00			0	0	0	0	0	0	0	0	0	0	0	170	170	170	170	170	170	170
15:00 - 16:00			170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170
16:00 - 17:00			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	170
17:00 - 18:00			170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170
18:00 - 19:00			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00 - 20:00			52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
20:00 - 21:00			0	0	0	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170
21:00 - 22:00			0	0	0	0	0	0	0	0	0	0	0	170	170	170	170	170	170	170
22:00 - 23:00			0	0	0	0	0	170	170	170	170	170	170	170	170	170	170	170	170	170
23:00 - 00:00			170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170

Table 1.7 Passenger Movements for Flight Departures (Requiring Arrival to the Airport Site)

Time	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
03:00 - 04:00			136	136	136	136	136	136	136	136	136	136	136	136	136	136	136	136	136	136
04:00 - 05:00			170	170	170	170	170	170	170	170	170	170	170	170	170	306	306	306	306	306
05:00 - 06:00			76	76	76	76	76	76	76	76	76	76	76	76	76	110	110	110	110	110
06:00 - 07:00			10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
07:00 - 08:00			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 - 09:00			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 - 10:00			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 - 11:00			0	0	0	136	136	136	136	136	136	136	136	136	136	136	136	136	136	136
11:00 - 12:00			0	0	0	34	34	34	34	34	34	170	170	170	170	170	170	170	170	170
12:00 - 13:00			136	136	136	136	136	136	136	136	136	170	170	170	170	170	170	170	306	306
13:00 - 14:00			170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	204	204
14:00 - 15:00			76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76	76
15:00 - 16:00			10	10	10	146	146	146	146	146	146	146	146	146	146	146	146	146	146	283
16:00 - 17:00			136	136	136	170	170	170	170	170	170	170	170	170	170	170	170	170	170	204
17:00 - 18:00			34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34

Table 1.8 Total Light Vehicle Traffic – Passenger Terminal

LGVs	Year 1			Year 2			Year 3			Year 4			Year 5			Year 6			Year 7			Year 8			Year 9			Year 10		
Time	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total
Total	0	0	0	0	0	0	1211	1171	2382	1211	1171	2382	1211	1171	2382	1644	1604	3249	1644	1604	3249	1644	1604	3249	1733	1732	3465	1733	1732	3465
00:00 - 01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 04:00	0	0	0	0	0	0	107	75	182	107	75	182	107	75	182	107	75	182	107	75	182	107	75	182	107	75	182	107	75	182
04:00 - 05:00	0	0	0	0	0	0	133	93	227	133	93	227	133	93	227	133	93	227	133	93	227	133	93	227	133	93	227	133	93	227
05:00 - 06:00	0	0	0	0	0	0	61	43	104	61	43	104	61	43	104	61	43	104	61	43	104	61	43	104	61	43	104	61	43	104
06:00 - 07:00	0	0	0	0	0	0	12	9	21	12	9	21	12	9	21	12	9	21	12	9	21	12	9	21	12	9	21	12	9	21
07:00 - 08:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
08:00 - 09:00	0	0	0	0	0	0	92	132	225	92	132	225	92	132	225	92	132	225	92	132	225	92	132	225	92	132	225	92	132	225
09:00 - 10:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	92	132	225	92	132	225	92	132	225	92	132	225	92	132	225
10:00 - 11:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	107	75	181	107	75	181	107	75	181	107	75	181	107	75	181
11:00 - 12:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	30	22	51	30	22	51	30	22	51	30	22	51	30	22	51
12:00 - 13:00	0	0	0	0	0	0	134	114	247	134	114	247	134	114	247	134	114	247	134	114	247	134	114	247	134	114	247	134	114	247
13:00 - 14:00	0	0	0	0	0	0	132	92	225	132	92	225	132	92	225	132	92	225	132	92	225	132	92	225	132	92	225	132	92	225
14:00 - 15:00	0	0	0	0	0	0	149	171	321	149	171	321	149	171	321	149	171	321	149	171	321	149	171	321	149	171	321	149	171	321
15:00 - 16:00	0	0	0	0	0	0	12	9	21	12	9	21	12	9	21	114	80	194	114	80	194	114	80	194	114	80	194	114	80	194
16:00 - 17:00	0	0	0	0	0	0	195	203	398	195	203	398	195	203	398	221	221	441	221	221	441	221	221	441	221	221	441	221	221	441
17:00 - 18:00	0	0	0	0	0	0	30	22	51	30	22	51	30	22	51	30	22	51	30	22	51	30	22	51	30	22	51	30	22	51
18:00 - 19:00	0	0	0	0	0	0	31	43	74	31	43	74	31	43	74	31	43	74	31	43	74	31	43	74	31	43	74	31	43	74
19:00 - 20:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	92	132	225	92	132	225	92	132	225	92	132	225	92	132	225
20:00 - 21:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
21:00 - 22:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	92	132	225	92	132	225

LGVs	Year 1			Year 2			Year 3			Year 4			Year 5			Year 6			Year 7			Year 8			Year 9			Year 10		
22:00 - 23:00	0	0	0	0	0	0	95	135	231	95	135	231	95	135	231	95	135	231	95	135	231	95	135	231	95	135	231	95	135	231
23:00 - 00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LGVs	Year 11			Year 12			Year 13			Year 14			Year 15			Year 16			Year 17			Year 18			Year 19			Year 20		
Time	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total
Total	1592	1590	3181	1707	1669	3376	1707	1669	3376	1866	1899	3765	1866	1899	3765	1990	1986	3977	2070	2101	4171	2070	2101	4171	2187	2183	4370	2163	2156	4319
00:00 - 01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 04:00	104	73	177	104	73	177	104	73	177	104	73	177	104	73	177	104	73	177	104	73	177	104	73	177	104	73	177	102	74	176
04:00 - 05:00	131	93	224	131	93	224	131	93	224	131	93	224	131	93	224	233	165	397	233	165	397	233	165	397	233	165	397	225	162	386
05:00 - 06:00	55	39	94	55	39	94	55	39	94	55	39	94	55	39	94	78	55	133	78	55	133	78	55	133	78	55	133	70	50	119
06:00 - 07:00	11	9	20	11	9	20	11	9	20	11	9	20	11	9	20	11	9	20	11	9	20	11	9	20	11	9	20	10	8	19
07:00 - 08:00	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
08:00 - 09:00	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	75	106	180
09:00 - 10:00	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	75	106	180
10:00 - 11:00	96	68	164	96	68	164	96	68	164	96	68	164	96	68	164	96	68	164	96	68	164	96	68	164	96	68	164	85	61	146
11:00 - 12:00	27	20	47	119	84	202	119	84	202	119	84	202	119	84	202	119	84	202	198	198	397	198	198	397	198	198	397	176	176	353
12:00 - 13:00	120	103	223	143	119	262	143	119	262	143	119	262	143	119	262	143	119	262	143	119	262	143	119	262	237	184	421	211	164	375
13:00 - 14:00	119	84	202	119	84	202	119	84	202	198	198	397	198	198	397	198	198	397	198	198	397	198	198	397	221	214	436	199	192	391
14:00 - 15:00	135	154	289	135	154	289	135	154	289	135	154	289	135	154	289	135	154	289	135	154	289	135	154	289	135	154	289	120	137	257
15:00 - 16:00	103	73	175	103	73	175	103	73	175	103	73	175	103	73	175	103	73	175	103	73	175	103	73	175	103	73	175	246	225	471
16:00 - 17:00	198	198	397	198	198	397	198	198	397	198	198	397	198	198	397	198	198	397	198	198	397	198	198	397	198	198	397	199	192	391
17:00 - 18:00	27	20	47	27	20	47	27	20	47	27	20	47	27	20	47	27	20	47	27	20	47	27	20	47	27	20	47	24	18	42
18:00 - 19:00	28	39	67	28	39	67	28	39	67	28	39	67	28	39	67	28	39	67	28	39	67	28	39	67	28	39	67	26	35	61
19:00 - 20:00	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	75	106	180

LGVs	Year 11			Year 12			Year 13			Year 14			Year 15			Year 16			Year 17			Year 18			Year 19			Year 20		
20:00 - 21:00	4	4	8	4	4	8	4	4	8	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	75	106	180
21:00 - 22:00	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	84	119	202	75	106	180
22:00 - 23:00	95	133	228	95	133	228	95	133	228	95	133	228	95	133	228	95	133	228	95	133	228	95	133	228	95	133	228	94	129	222
23:00 - 00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Table 1.9 Total HGV Traffic – Passenger Terminal

HGVs BUS)	Year 1			Year 2			Year 3			Year 4			Year 5			Year 6			Year 7			Year 8			Year 9			Year 10		
Time	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total
Total	0	0	0	0	0	0	68	68	136	68	68	136	68	68	136	68	68	136	68	68	136	68	68	136	68	68	136	68	68	136
00:00 - 01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 - 06:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
06:00 - 07:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
07:00 - 08:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
08:00 - 09:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
09:00 - 10:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
10:00 - 11:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
11:00 - 12:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
12:00 - 13:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
13:00 - 14:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
14:00 - 15:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
15:00 - 16:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
16:00 - 17:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
17:00 - 18:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
18:00 - 19:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
19:00 - 20:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
20:00 - 21:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
21:00 - 22:00	0	0	0	0	0	0	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8

HGVs BUS)	Year 1			Year 2			Year 3			Year 4			Year 5			Year 6			Year 7			Year 8			Year 9			Year 10		
22:00 - 23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
23:00 - 00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

HGVs BUS)	Year 11			Year 12			Year 13			Year 14			Year 15			Year 16			Year 17			Year 18			Year 19			Year 20		
Time	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total	Arr	Dep	Total
Total	68	68	136	68	68	136	68	68	136	68	68	136	68	68	136	68	68	136	68	68	136	68	68	136	74	74	148	94	94	188
00:00 - 01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00 - 02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 - 06:00	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
06:00 - 07:00	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
07:00 - 08:00	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
08:00 - 09:00	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
09:00 - 10:00	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
10:00 - 11:00	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	6	6	12
11:00 - 12:00	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	8	8	16
12:00 - 13:00	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	6	6	12	8	8	16
13:00 - 14:00	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	8	8	16	8	8	16
14:00 - 15:00	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	8	8	16
15:00 - 16:00	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	6	6	12
16:00 - 17:00	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	8	8	16
17:00 - 18:00	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	6	6	12
18:00 - 19:00	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8

HGVs BUS)	Year 11			Year 12			Year 13			Year 14			Year 15			Year 16			Year 17			Year 18			Year 19			Year 20		
19:00 - 20:00	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
20:00 - 21:00	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
21:00 - 22:00	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8	4	4	8
22:00 - 23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00 - 00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 1.10 Total Light Vehicle Trips – Northern Grass Area

LGVs	Year 1			Year 2			Year 3			Year 4			Year 5			Year 6			Year 7			Year 8			Year 9			Year 10		
	0%			13%			30%			43%			45%			55%			57%			59%			58%			61%		
Time	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total
TOTAL	0	0	0	216	211	427	489	477	966	705	687	1391	725	707	1432	891	869	1760	929	906	1835	954	930	1884	939	915	1854	992	967	1959
07:00 - 08:00	0	0	0	28	6	35	64	15	79	93	21	114	95	22	117	117	27	144	122	28	150	125	29	154	123	28	151	130	30	160
08:00 - 09:00	0	0	0	57	9	66	128	20	148	185	29	214	190	30	220	234	37	271	244	38	282	250	39	290	246	39	285	260	41	301
09:00 - 10:00	0	0	0	28	9	38	64	21	85	92	31	123	95	32	127	116	39	156	121	41	162	125	42	167	123	41	164	130	44	173
10:00 - 11:00	0	0	0	9	8	17	20	17	38	29	25	54	30	25	56	37	31	68	39	32	71	40	33	73	39	33	72	42	35	76
11:00 - 12:00	0	0	0	13	11	24	29	26	55	41	37	79	43	38	81	52	47	99	55	49	104	56	50	106	55	50	105	58	52	111
12:00 - 13:00	0	0	0	13	16	29	30	36	66	44	52	95	45	53	98	55	65	120	57	68	125	59	70	129	58	69	127	61	73	134
13:00 - 14:00	0	0	0	23	16	38	52	35	87	74	51	125	77	52	129	94	64	158	98	67	165	101	69	170	99	68	167	105	71	176
14:00 - 15:00	0	0	0	11	18	29	24	41	65	35	59	94	36	61	96	44	75	118	46	78	123	47	80	127	46	79	125	49	83	132
15:00 - 16:00	0	0	0	11	18	29	25	41	66	36	60	95	37	61	98	45	76	121	47	79	126	48	81	129	47	80	127	50	84	134
16:00 - 17:00	0	0	0	13	35	48	28	80	108	41	115	156	42	118	160	52	146	197	54	152	206	55	156	211	54	153	208	58	162	220
17:00 - 18:00	0	0	0	7	47	55	17	107	124	24	154	178	25	158	184	31	195	226	32	203	235	33	209	242	32	205	238	34	217	251
18:00 - 19:00	0	0	0	3	16	20	8	37	45	11	53	65	11	55	66	14	68	82	15	71	85	15	72	87	15	71	86	16	75	91

LGVs	Year 11			Year 12			Year 13			Year 14			Year 15			Year 16			Year 17			Year 18			Year 19			Year 20		
	64%			68%			71%			75%			79%			83%			87%			91%			95%			100%		
Time	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total
TOTAL	1042	1015	2057	1101	1073	2174	1151	1122	2273	1212	1181	2393	1275	1243	2518	1341	1307	2648	1405	1369	2774	1479	1441	2920	1543	1503	3046	1621	1579	3200
07:00 - 08:00	137	31	168	145	33	178	151	35	186	159	36	195	167	38	206	176	40	216	185	42	227	194	44	239	203	46	249	213	49	261
08:00 - 09:00	273	43	316	289	46	334	302	48	349	318	50	368	334	53	387	352	55	407	368	58	426	388	61	449	404	64	468	425	67	492
09:00 - 10:00	136	46	182	144	48	192	150	51	201	158	53	212	167	56	223	175	59	234	184	62	245	193	65	258	202	68	269	212	71	283

LGVs	Year 11			Year 12			Year 13			Year 14			Year 15			Year 16			Year 17			Year 18			Year 19			Year 20		
10:00 - 11:00	44	36	80	46	38	84	48	40	88	51	42	93	53	44	98	56	47	103	59	49	108	62	52	113	65	54	118	68	56	124
11:00 - 12:00	61	55	116	65	58	123	68	61	128	71	64	135	75	67	142	79	71	150	82	74	157	87	78	165	91	82	172	95	86	181
12:00 - 13:00	64	76	141	68	81	149	71	84	155	75	89	163	79	93	172	83	98	181	87	103	190	91	108	199	95	113	208	100	119	219
13:00 - 14:00	110	75	185	116	79	196	122	83	205	128	87	215	135	92	227	142	97	238	149	101	250	156	106	263	163	111	274	171	117	288
14:00 - 15:00	51	87	138	54	92	146	56	97	153	59	102	161	62	107	169	66	112	178	69	118	187	72	124	196	76	129	205	79	136	215
15:00 - 16:00	53	88	141	56	93	149	58	98	156	61	103	164	65	108	173	68	114	182	71	119	190	75	125	200	78	131	209	82	137	219
16:00 - 17:00	60	170	231	64	180	244	67	188	255	70	198	268	74	208	282	78	219	297	82	229	311	86	241	327	90	252	341	94	265	359
17:00 - 18:00	36	228	264	38	241	279	40	252	291	42	265	307	44	279	323	46	293	339	49	307	356	51	323	374	53	337	390	56	354	410
18:00 - 19:00	16	79	95	17	84	101	18	87	105	19	92	111	20	97	117	21	102	123	22	107	129	23	112	135	24	117	141	25	123	148

Table 1.11 Total HGV Trips – Northern Grass Area

TOTAL HGVS	Year 1			Year 2			Year 3			Year 4			Year 5			Year 6			Year 7			Year 8			Year 9			Year 10		
	0%			13%			30%			43%			45%			55%			57%			59%			58%			61%		
Time	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total
TOTAL	0	0	0	32	33	65	51	50	101	69	69	138	69	70	139	83	87	170	89	87	176	89	87	176	89	87	176	93	91	184
07:00 - 08:00	0	0	0	3	3	6	4	5	9	5	6	11	5	6	11	7	8	15	7	8	15	7	8	15	7	8	15	8	9	17
08:00 - 09:00	0	0	0	2	2	4	3	4	7	5	5	10	5	5	10	5	7	12	6	7	13	6	7	13	6	7	13	6	7	13
09:00 - 10:00	0	0	0	2	3	5	4	4	8	6	6	12	6	6	12	6	8	14	7	8	15	7	8	15	7	8	15	7	8	15
10:00 - 11:00	0	0	0	3	3	6	5	4	9	7	6	13	7	6	13	9	7	16	9	7	16	9	7	16	9	7	16	10	7	17
11:00 - 12:00	0	0	0	3	3	6	4	5	9	5	7	12	5	7	12	6	8	14	7	8	15	7	8	15	7	8	15	7	9	16
12:00 - 13:00	0	0	0	3	2	5	4	3	7	5	4	9	5	4	9	6	5	11	7	5	12	7	5	12	7	5	12	7	5	12
13:00 - 14:00	0	0	0	3	2	5	5	3	8	6	4	10	6	4	10	7	5	12	8	5	13	8	5	13	8	5	13	8	6	14
14:00 - 15:00	0	0	0	3	3	6	6	5	11	8	7	15	8	7	15	10	8	18	10	8	18	10	8	18	10	8	18	11	9	20
15:00 - 16:00	0	0	0	3	3	6	6	5	11	8	6	14	8	7	15	9	8	17	10	8	18	10	8	18	10	8	18	10	8	18
16:00 - 17:00	0	0	0	3	3	6	5	4	9	7	5	12	7	5	12	9	7	16	9	7	16	9	7	16	9	7	16	10	7	17
17:00 - 18:00	0	0	0	2	3	5	3	4	7	5	7	12	5	7	12	6	8	14	6	8	14	6	8	14	6	8	14	6	8	14
18:00 - 19:00	0	0	0	2	3	5	2	4	6	2	6	8	2	6	8	3	8	11	3	8	11	3	8	11	3	8	11	3	8	11

TOTAL HGVS	Year 11			Year 12			Year 13			Year 14			Year 15			Year 16			Year 17			Year 18			Year 19			Year 20		
	64%			68%			71%			75%			79%			83%			87%			91%			95%			100%		
Time	Arrivals	Deps	Total	Arrivals	Deps	Total	Arrivals	Deps	Total	Arrivals	Deps	Total	Arrivals	Deps	Total	Arrivals	Deps	Total	Arrivals	Deps	Total	Arrivals	Deps	Total	Arrivals	Deps	Total	Arrivals	Deps	Total
TOTAL	96	96	192	99	97	196	104	102	206	107	107	214	114	110	224	116	117	233	124	121	245	128	124	252	135	136	271	128	126	254
07:00 - 08:00	8	9	17	8	9	17	8	10	18	9	10	19	9	10	19	9	11	20	10	11	21	10	12	22	11	12	23	10	12	22
08:00 - 09:00	6	7	13	6	7	13	6	8	14	6	8	14	7	8	15	7	9	16	8	9	17	8	9	17	9	11	20	8	9	17
09:00 - 10:00	7	9	16	7	9	16	8	9	17	8	10	18	9	10	19	9	10	19	10	11	21	10	11	21	10	13	23	10	12	21

TOTAL HGVS	Year 11			Year 12			Year 13			Year 14			Year 15			Year 16			Year 17			Year 18			Year 19			Year 20		
10:00 - 11:00	10	8	18	10	8	18	11	8	19	11	9	20	12	9	21	12	10	22	13	10	23	13	10	23	14	11	25	14	10	24
11:00 - 12:00	7	9	16	8	9	17	8	10	18	8	10	18	9	11	20	9	11	20	9	12	21	10	12	22	10	13	23	10	12	22
12:00 - 13:00	7	5	12	8	5	13	8	5	13	8	6	14	9	6	15	9	6	15	9	6	15	10	7	17	10	7	17	9	6	16
13:00 - 14:00	8	6	14	9	6	15	9	6	15	10	6	16	10	7	17	10	7	17	11	7	18	11	7	18	12	8	20	12	7	19
14:00 - 15:00	11	9	20	11	9	20	12	10	22	13	10	23	13	11	24	14	11	25	14	12	26	15	12	27	16	13	29	15	12	27
15:00 - 16:00	11	9	20	11	9	20	12	10	22	12	10	22	13	10	23	13	11	24	14	11	25	15	12	27	15	12	27	15	12	27
16:00 - 17:00	10	7	17	10	8	18	11	8	19	11	8	19	12	8	20	12	9	21	13	9	22	13	9	22	14	11	25	13	10	23
17:00 - 18:00	7	9	16	7	9	16	7	9	16	7	10	17	7	10	17	8	11	19	9	12	21	9	12	21	10	13	23	9	12	21
18:00 - 19:00	4	9	13	4	9	13	4	9	13	4	10	14	4	10	14	4	11	15	4	11	15	4	11	15	4	12	16	3	12	15

Table 1.12 Total Trip Generation for Fuel Farm Traffic

	Year 1			Year 2			Year 3			Year 4			Year 5			Year 6			Year 7			Year 8			Year 9			Year 10		
Time	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total
Total	0	0	0	7	7	14	9	9	18	13	13	26	14	14	28	15	15	30	14	14	28	14	14	28	14	14	28	15	15	30
00:00 - 01:00	0	0	0	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1
01:00 - 02:00	0	0	0		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1
02:00 - 03:00	0	0	0	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1
03:00 - 04:00	0	0	0		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1
04:00 - 05:00	0	0	0			0			0			0	1		1	1		1	1		1	1		1	1		1	1		1
05:00 - 06:00	0	0	0	1		1	1		1	1		1	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
06:00 - 07:00	0	0	0		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1
07:00 - 08:00	0	0	0			0			0			0			0	1		1	1		1	1		1	1		1	1		1
08:00 - 09:00	0	0	0	1		1	1		1	1		1	1		1	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
09:00 - 10:00	0	0	0		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1
10:00 - 11:00	0	0	0			0			0	1		1	1		1	1		1	1		1	1		1	1		1	1		1
11:00 - 12:00	0	0	0			0			0		1	1		1	1		1	1		1	1		1	1		1	1	1	1	2
12:00 - 13:00	0	0	0			0			0	1		1	1		1	1		1	1		1	1		1	1		1	1	1	2
13:00 - 14:00	0	0	0	1		1	1		1	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
14:00 - 15:00	0	0	0		1	1		1	1	1	1	2	1	1	2	1	1	2		1	1		1	1		1	1		1	1
15:00 - 16:00	0	0	0			0	1		1	1	1	2	1	1	2	1	1	2	1		1	1		1	1		1	1		1
16:00 - 17:00	0	0	0			0		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1
17:00 - 18:00	0	0	0	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1
18:00 - 19:00	0	0	0		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1
19:00 - 20:00	0	0	0			0			0			0			0			0			0			0			0			0
20:00 - 21:00	0	0	0	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1

			Year 1			Year 2			Year 3			Year 4			Year 5			Year 6			Year 7			Year 8			Year 9			Year 10		
21:00 - 22:00	0	0	0		1	1		1	1	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2		
22:00 - 23:00	0	0	0			0	1		1	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2		
23:00 - 00:00	0	0	0			0		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		
Year 11				Year 12			Year 13			Year 14			Year 15			Year 16			Year 17			Year 18			Year 19			Year 20				
Time	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total	Arr	Deps	Total		
Total	15	15	30	16	16	32	16	16	32	17	17	34	18	18	36	18	18	36	19	19	38	20	20	40	20	20	40	21	21	42		
00:00 - 01:00	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1	1	2		
01:00 - 02:00		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		
02:00 - 03:00	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1		
03:00 - 04:00		1	1		1	1		1	1		1	1		1	1		1	1		1	1	1	1	1	2	1	1	2	1	1	2	
04:00 - 05:00	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1	1	1	2	1	1	2	1	1	2	
05:00 - 06:00	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	2
06:00 - 07:00		1	1	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	2
07:00 - 08:00	1		1	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	2
08:00 - 09:00	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	2
09:00 - 10:00		1	1		1	1		1	1		1	1	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	2
10:00 - 11:00	1		1	1		1	1		1	1		1	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	2
11:00 - 12:00	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	2
12:00 - 13:00	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	2
13:00 - 14:00	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	2
14:00 - 15:00		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		
15:00 - 16:00	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1	

	Year 11		Year 12		Year 13		Year 14		Year 15		Year 16		Year 17		Year 18		Year 19		Year 20								
16:00 - 17:00	1	1		1	1		1	1	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	
17:00 - 18:00	1		1	1		1	1		1	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
18:00 - 19:00	1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1	
19:00 - 20:00			0			0			0			0			0	1		1	1		1	1		1	1		1
20:00 - 21:00	1		1	1		1	1		1	1		1	1		1	1	1	2	1	1	2	1	1	2	1	1	2
21:00 - 22:00	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
22:00 - 23:00	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
23:00 - 00:00	1	1		1	1		1	1		1	1		1	1		1	1		1	1		1	1	1	1	2	

Table 1.13 Staff Trip Generation by Job Type

Year	Direct Jobs	PAX	Freight	ATS	RFFS	Ops	Maintenance	Motor Transport	Security	Administration	Airport Total	Non RO	Northern Grass	Non AS freight
1	116	0	49	6	14	6	8	8	11	14	116	0	0	0
2	856	0	196	25	57	24	31	31	45	14	423	433	288	145
3	1551	99	215	25	57	29	38	38	55	15	571	980	652	328
4	2085	102	302	25	57	31	41	41	59	15	673	1412	939	473
5	2150	103	322	25	57	32	41	41	60	16	697	1453	966	487
6	2466	145	256	25	57	33	43	43	62	16	680	1786	1188	598
7	2576	146	288	25	57	33	43	43	63	16	714	1862	1238	624
8	2645	146	307	25	57	33	43	43	63	16	733	1912	1271	641
9	2668	146	357	25	57	34	44	44	64	16	787	1881	1251	630
10	2749	146	331	25	57	34	44	44	64	16	761	1988	1322	666
11	2870	152	347	25	57	34	44	44	64	16	783	2087	1388	699
12	3011	157	361	25	57	34	45	45	65	16	805	2206	1467	739
13	3135	163	376	25	57	35	45	45	66	16	828	2307	1534	773
14	3280	169	391	25	57	35	46	46	67	16	852	2428	1615	813
15	3438	176	413	25	57	36	46	46	68	16	883	2555	1699	856
16	3595	182	430	25	57	36	47	47	68	16	908	2687	1787	900
17	3748	189	447	25	57	36	47	47	69	16	933	2815	1872	943
18	3930	196	469	25	57	37	48	48	70	17	967	2963	1970	993
19	4085	203	488	25	57	37	48	48	71	17	994	3091	2056	1035
20	4271	211	507	25	57	38	49	49	71	17	1024	3247	2159	1088

Table 1.14 Total Trip Generation for all Airport Staff

	Year 1			Year 2			Year 3			Year 4			Year 5			Year 6			Year 7			Year 8			Year 9			Year 10		
Time	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total
Total	70	70	140	296	296	593	524	524	1049	641	641	1282	645	645	1289	766	766	1532	779	779	1559	792	792	1584	779	779	1558	804	804	1607
00:00 - 01:00	0	2	2	0	9	9	0	36	36	0	38	38	0	38	38	0	51	51	0	51	51	0	51	51	0	51	51	0	51	51
01:00 - 02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:00 - 03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:00 - 04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:00 - 05:00	19	0	19	29	0	29	56	0	56	58	0	58	58	0	58	70	0	70	71	0	71	71	0	71	71	0	71	71	0	71
05:00 - 06:00	8	0	8	60	0	60	103	0	103	137	0	137	138	0	138	164	0	164	168	0	168	172	0	172	169	0	169	176	0	176
06:00 - 07:00	0	9	9	0	67	67	0	117	117	0	155	155	0	157	157	0	186	186	0	191	191	0	196	196	0	191	191	0	200	200
07:00 - 08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
08:00 - 09:00	13	0	13	52	0	52	61	0	61	67	0	67	65	0	65	69	0	69	68	0	68	68	0	68	68	0	68	68	0	68
09:00 - 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10:00 - 11:00	2	0	2	9	0	9	35	0	35	36	0	36	36	0	36	48	0	48	47	0	47	47	0	47	47	0	47	47	0	47
11:00 - 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:00 - 13:00	0	2	2	0	9	9	0	36	36	0	38	38	0	38	38	0	51	51	0	51	51	0	51	51	0	51	51	0	51	51
13:00 - 14:00	8	0	8	60	0	60	104	0	104	139	0	139	141	0	141	166	0	166	171	0	171	175	0	175	172	0	172	179	0	179
14:00 - 15:00	11	8	19	20	60	80	48	103	151	50	137	186	50	138	188	62	164	226	62	168	231	62	172	234	62	169	231	62	176	238
15:00 - 16:00	0	17	17	0	20	20	0	20	20	0	20	20	0	20	20	0	20	20	0	20	20	0	20	20	0	20	20	0	20	20
16:00 - 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17:00 - 18:00	0	13	13	0	52	52	0	61	61	0	67	67	0	65	65	0	69	69	0	68	68	0	68	68	0	68	68	0	68	68
18:00 - 19:00	0	2	2	0	9	9	0	35	35	0	36	36	0	36	36	0	48	48	0	47	47	0	47	47	0	47	47	0	47	47
19:00 - 20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20:00 - 21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21:00 - 22:00	9	0	9	67	0	67	117	0	117	155	0	155	157	0	157	186	0	186	191	0	191	196	0	196	191	0	191	200	0	200

	Year 1			Year 2			Year 3			Year 4			Year 5			Year 6			Year 7			Year 8			Year 9			Year 10		
22:00 - 23:00	0	8	8	0	60	60	0	104	104	0	139	139	0	141	141	0	166	166	0	171	171	0	175	175	0	172	172	0	179	179
23:00 - 00:00	0	9	9	0	11	11	0	11	11	0	11	11	0	11	11	0	11	11	0	11	11	0	11	11	0	11	11	0	11	11

	Year 11			Year 12			Year 13			Year 14			Year 15			Year 16			Year 17			Year 18			Year 19			Year 20		
Time	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total	Arrivals	Departures	Total
Total	833	833	1666	864	864	1728	892	892	1783	921	921	1841	955	955	1910	987	987	1975	1013	1013	2026	1044	1044	2087	1078	1078	2155	1113	1113	2226
00:00 - 01:00	0	53	53	0	54	54	0	55	55	0	58	58	0	60	60	0	62	62	0	63	63	0	65	65	0	67	67	0	69	69
01:00 - 02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 - 03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 - 04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 - 05:00	72	0	72	74	0	74	75	0	75	78	0	78	80	0	80	81	0	81	83	0	83	85	0	85	87	0	87	89	0	89
05:00 - 06:00	184	0	184	192	0	192	199	0	199	205	0	205	214	0	214	222	0	222	229	0	229	237	0	237	247	0	247	255	0	255
06:00 - 07:00	0	209	209	0	219	219	0	227	227	0	235	235	0	246	246	0	254	254	0	262	262	0	271	271	0	280	280	0	290	290
07:00 - 08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 - 09:00	68	0	68	69	0	69	69	0	69	69	0	69	69	0	69	72	0	72	70	0	70	70	0	70	70	0	70	73	0	73
09:00 - 10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 - 11:00	48	0	48	50	0	50	51	0	51	53	0	53	55	0	55	56	0	56	56	0	56	57	0	57	59	0	59	60	0	60
11:00 - 12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00 -	0	53	53	0	54	54	0	55	55	0	58	58	0	60	60	0	62	62	0	63	63	0	65	65	0	67	67	0	69	69

	Year 11		Year 12		Year 13		Year 14		Year 15		Year 16		Year 17		Year 18		Year 19		Year 20											
13:00																														
13:00 - 14:00	188	0	188	196	0	196	203	0	203	211	0	211	220	0	220	230	0	230	238	0	238	247	0	247	257	0	257	266	0	266
14:00 - 15:00	64	184	248	65	192	257	67	199	266	69	205	275	71	214	286	73	222	295	75	229	304	77	237	313	78	247	325	81	255	335
15:00 - 16:00	0	20	20	0	20	20	0	20	20	0	20	20	0	20	20	0	20	20	0	20	20	0	20	20	0	20	20	0	20	20
16:00 - 17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00 - 18:00	0	68	68	0	69	69	0	69	69	0	69	69	0	69	69	0	72	72	0	70	70	0	70	70	0	70	70	0	73	73
18:00 - 19:00	0	48	48	0	50	50	0	51	51	0	53	53	0	55	55	0	56	56	0	56	56	0	57	57	0	59	59	0	60	60
19:00 - 20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00 - 21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00 - 22:00	209	0	209	219	0	219	227	0	227	235	0	235	246	0	246	254	0	254	262	0	262	271	0	271	280	0	280	290	0	290
22:00 - 23:00	0	188	188	0	196	196	0	203	203	0	211	211	0	220	220	0	230	230	0	238	238	0	247	247	0	257	257	0	266	266
23:00 - 00:00	0	11	11	0	11	11	0	11	11	0	11	11	0	11	11	0	11	11	0	11	11	0	11	11	0	11	11	0	11	11

