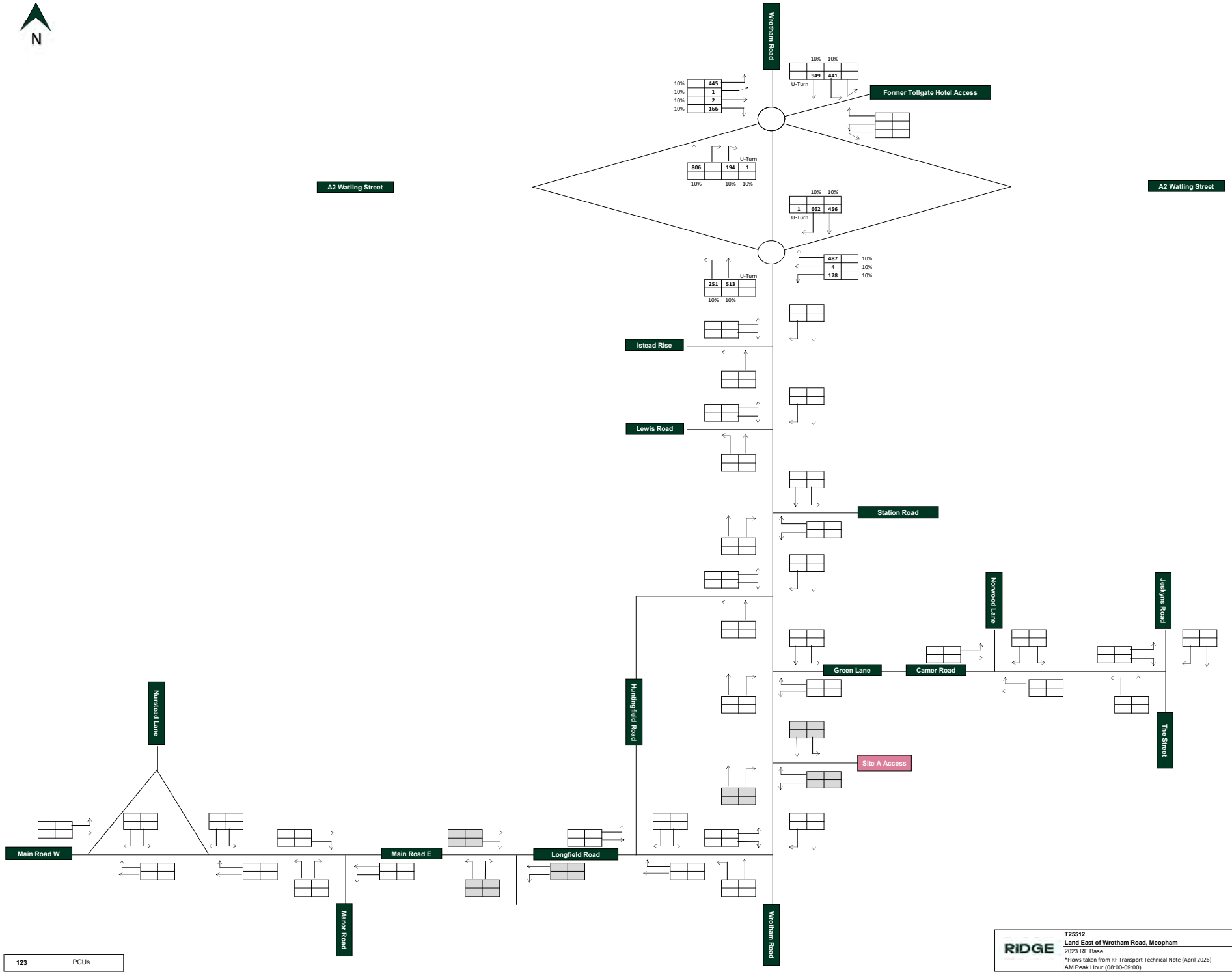
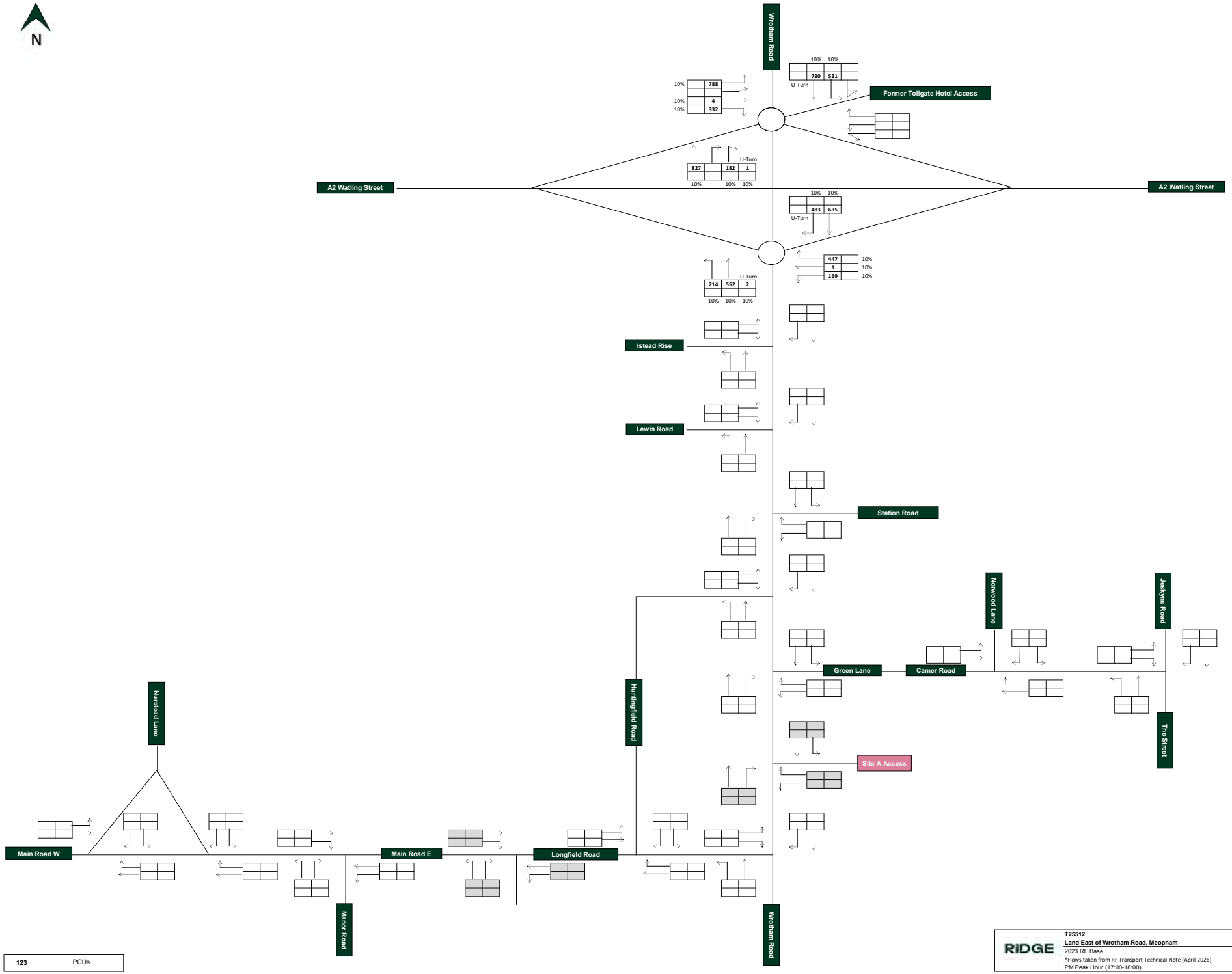
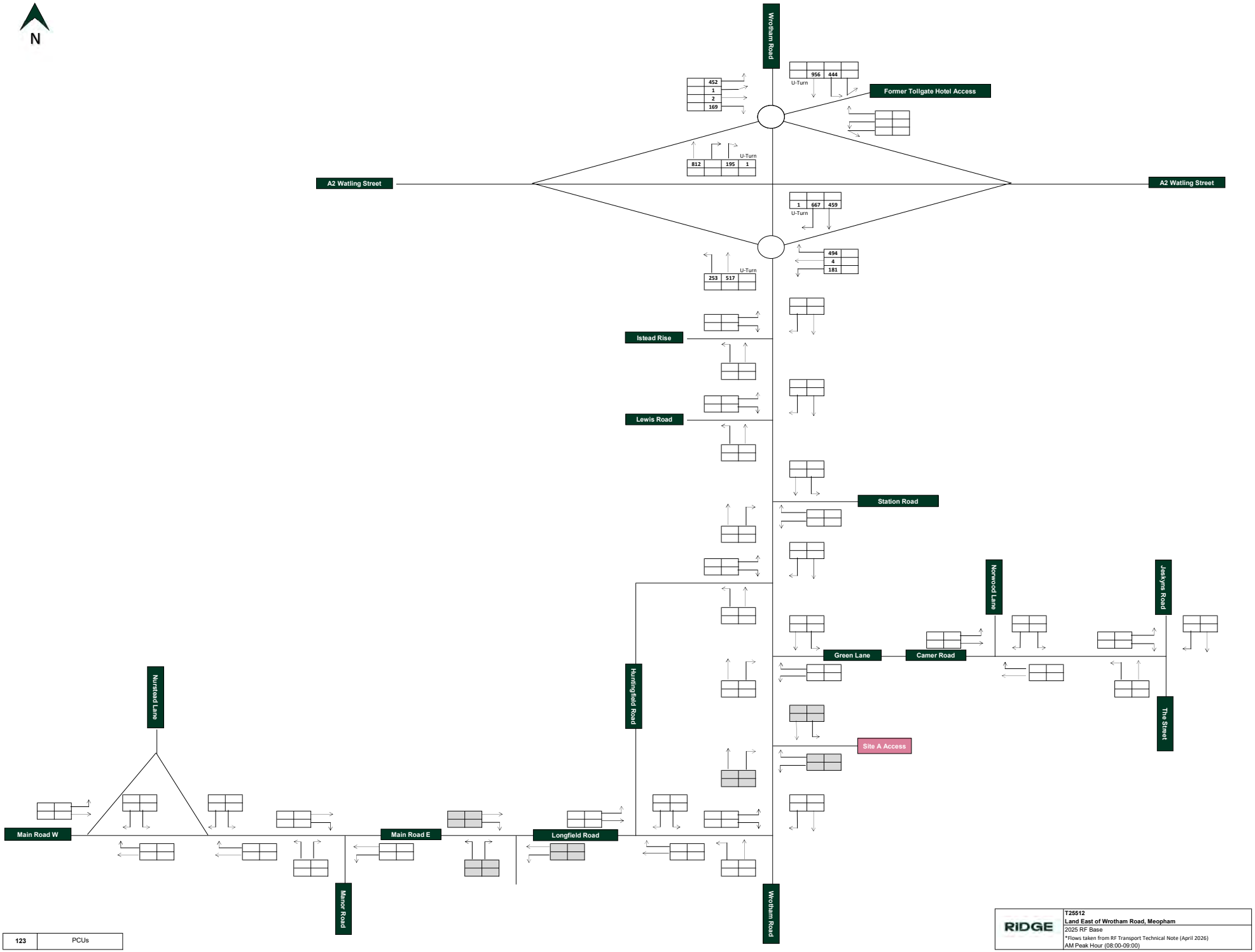
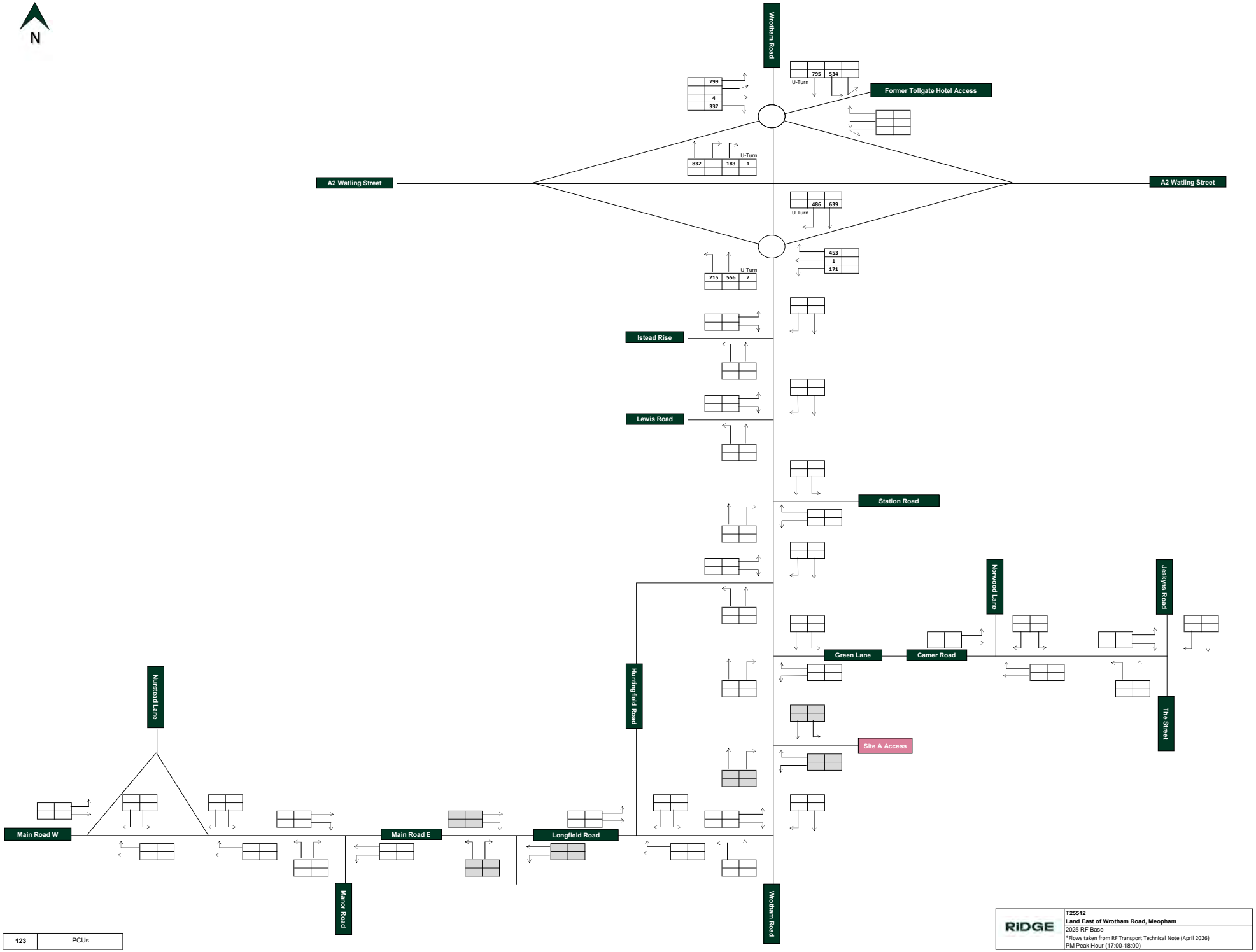
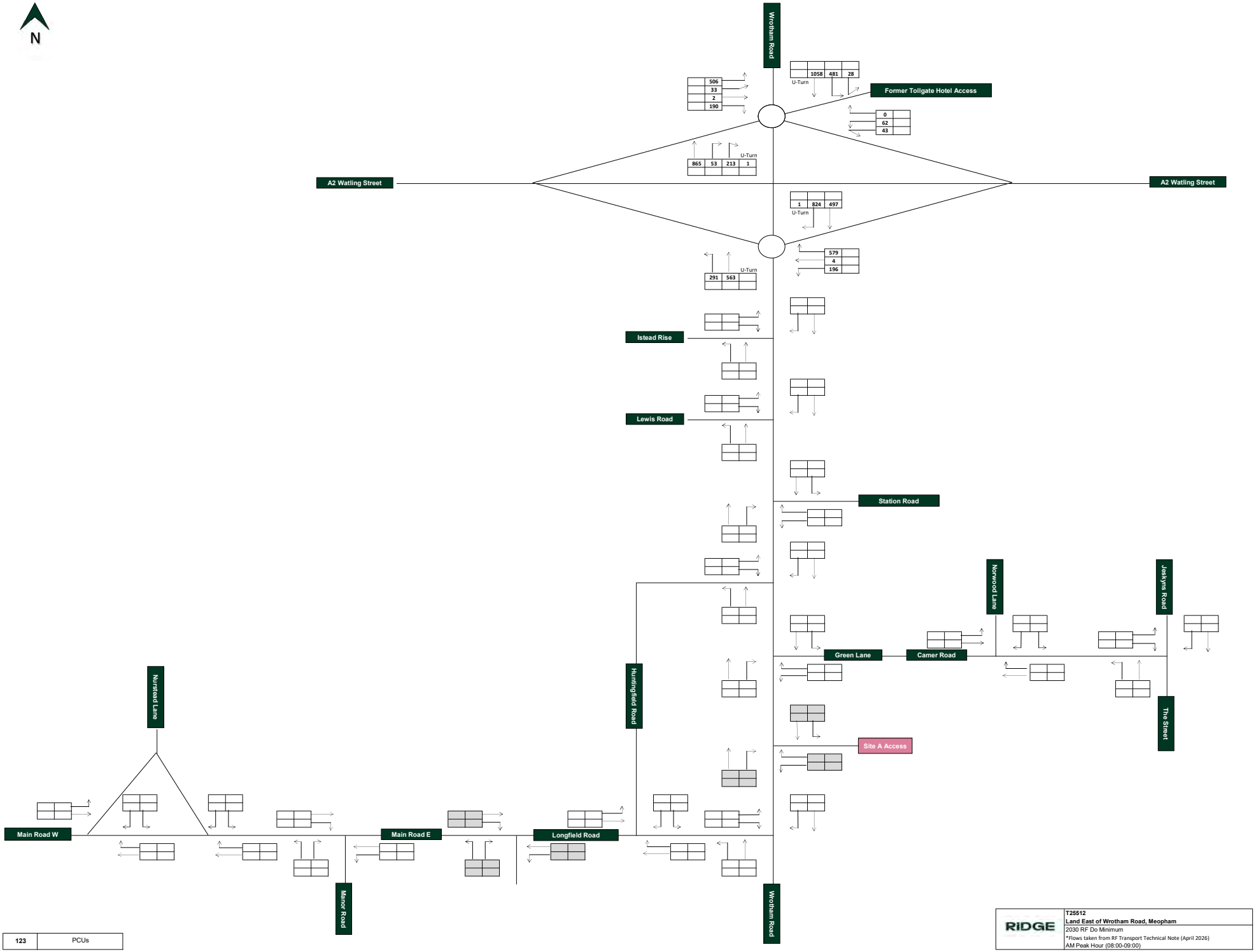
APPENDIX I NETWORK FLOW DIAGRAM – 2030 RF DO MINIMUM ASSESSMENT

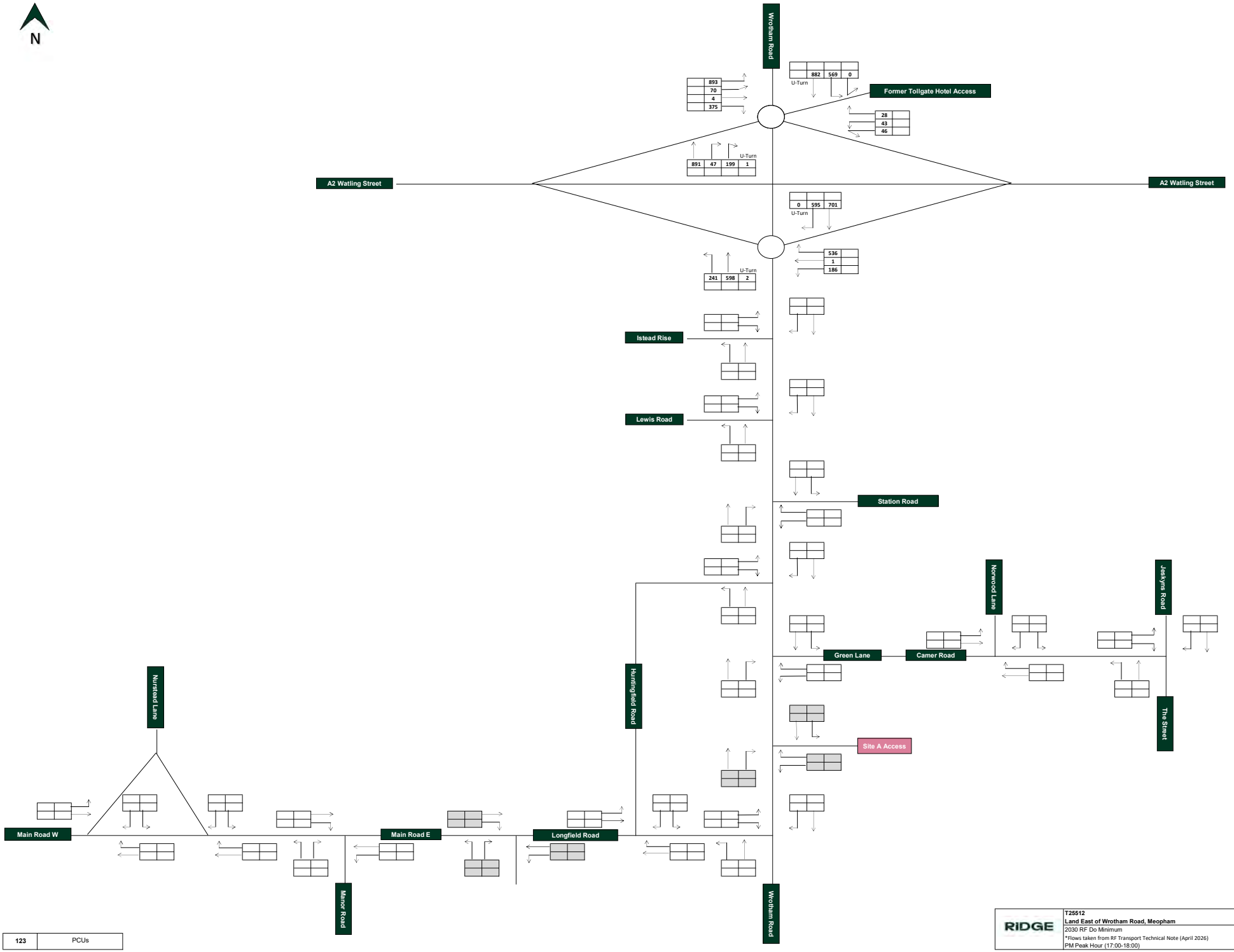

N
Wrotham Road
Former Tollgate Hotel Access
A2 Watling Street
A2 Watling Street
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Site A Access
Hurningfield Road
Nursstead Lane
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
U-Turn
10%
445
1
2
166
949
441
806
194
1
662
456
487
4
178
251
513
123
PCUs
RIDGE
T25512
Land East of Wrotham Road, Meopham
2023 RF Base
*Flows taken from RF Transport Technical Note (April 2026)
AM Peak Hour (08:00-09:00)

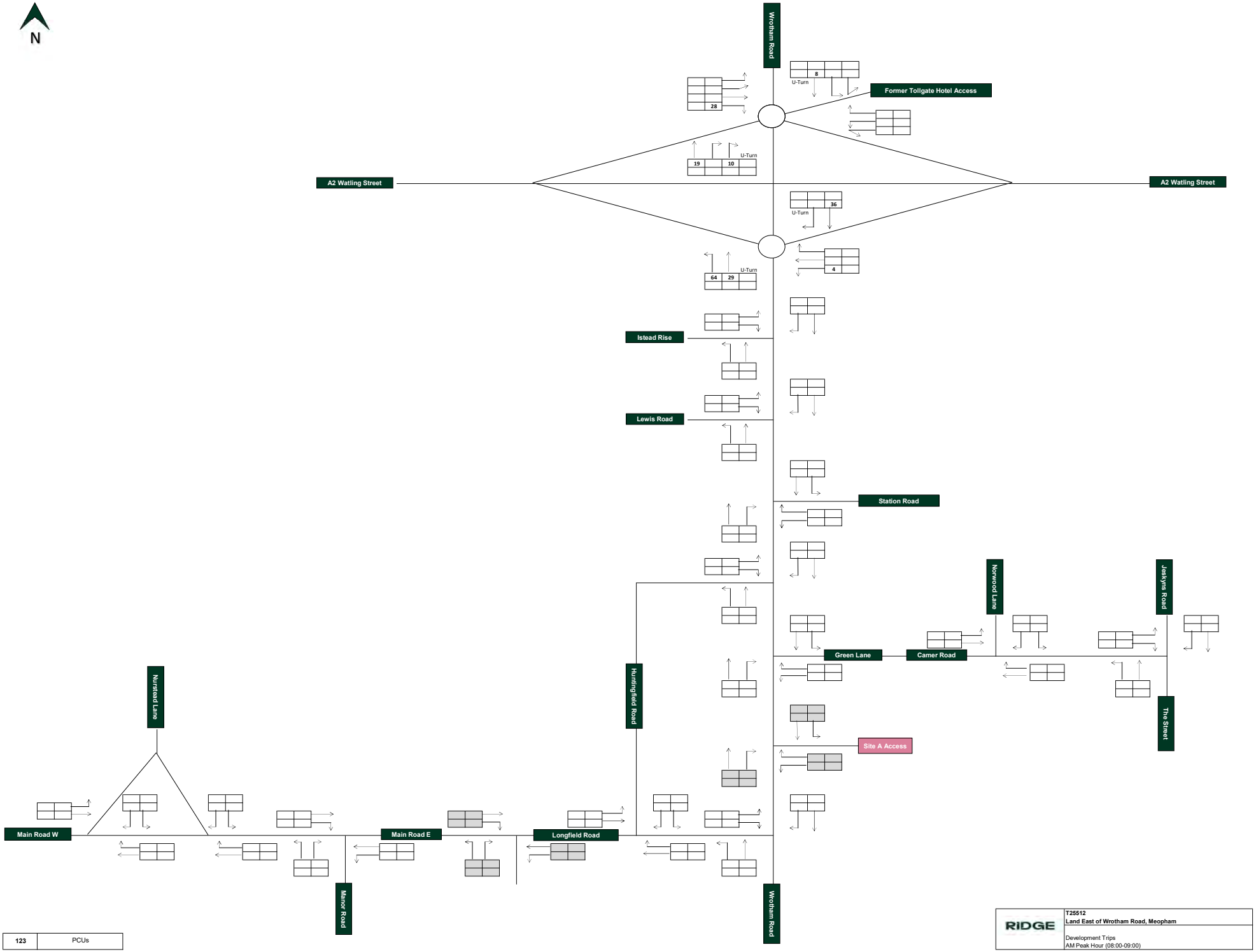

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Wrotham Road
Former Tollgate Hotel Access
A2 Watling Street
A2 Watling Street
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Site A Access
Hurningfield Road
Nursstead Lane
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
U-Turn
10%
123
PCUs
RIDGE
T25512
Land East of Wrotham Road, Meopham
2023 RF Base
*Flows taken from RF Transport Technical Note (April 2026)
PM Peak Hour (17:00-18:00)


N
Wrotham Road
452
1
2
169
U-Turn
956
444
U-Turn
Former Tollgate Hotel Access
812
195
1
U-Turn
A2 Watling Street
A2 Watling Street
1
667
459
U-Turn
494
4
181
U-Turn
253
517
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Site A Access
Nurstead Lane
Hurlingfield Road
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
123
PCUs
RIDGE
T25512
Land East of Wrotham Road, Meopham
2025 RF Base
*Flows taken from RF Transport Technical Note (April 2026)
AM Peak Hour (08:00-09:00)


N
Wrotham Road
Former Tollgate Hotel Access
A2 Watling Street
A2 Watling Street
U-Turn
U-Turn
U-Turn
799
4
337
795
534
832
183
1
486
639
453
1
171
215
556
2
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Site A Access
Hurlingfield Road
Nurstead Lane
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
123
PCUs
RIDGE
T25512
Land East of Wrotham Road, Meopham
2025 RF Base
*Flows taken from RF Transport Technical Note (April 2026)
PM Peak Hour (17:00-18:00)


N
Wrotham Road
Former Tollgate Hotel Access
A2 Watling Street
A2 Watling Street
U-Turn
U-Turn
U-Turn
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Site A Access
Nurstead Lane
Hurlingfield Road
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
123
PCUs
RIDGE
T25512
Land East of Wrotham Road, Meopham
2030 RF Do Minimum
*Flows taken from RF Transport Technical Note (April 2026)
AM Peak Hour (08:00-09:00)


N
Wrotham Road
893
70
4
375
882
569
0
U-Turn
Former Tollgate Hotel Access
28
43
46
U-Turn
891
47
199
1
A2 Watling Street
A2 Watling Street
0
595
701
U-Turn
536
1
186
U-Turn
241
598
2
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Nurstead Lane
Hurlingfield Road
Site A Access
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
123
PCUs
RIDGE
T25512
Land East of Wrotham Road, Meopham
2030 RF Do Minimum
*Flows taken from RF Transport Technical Note (April 2026)
PM Peak Hour (17:00-18:00)

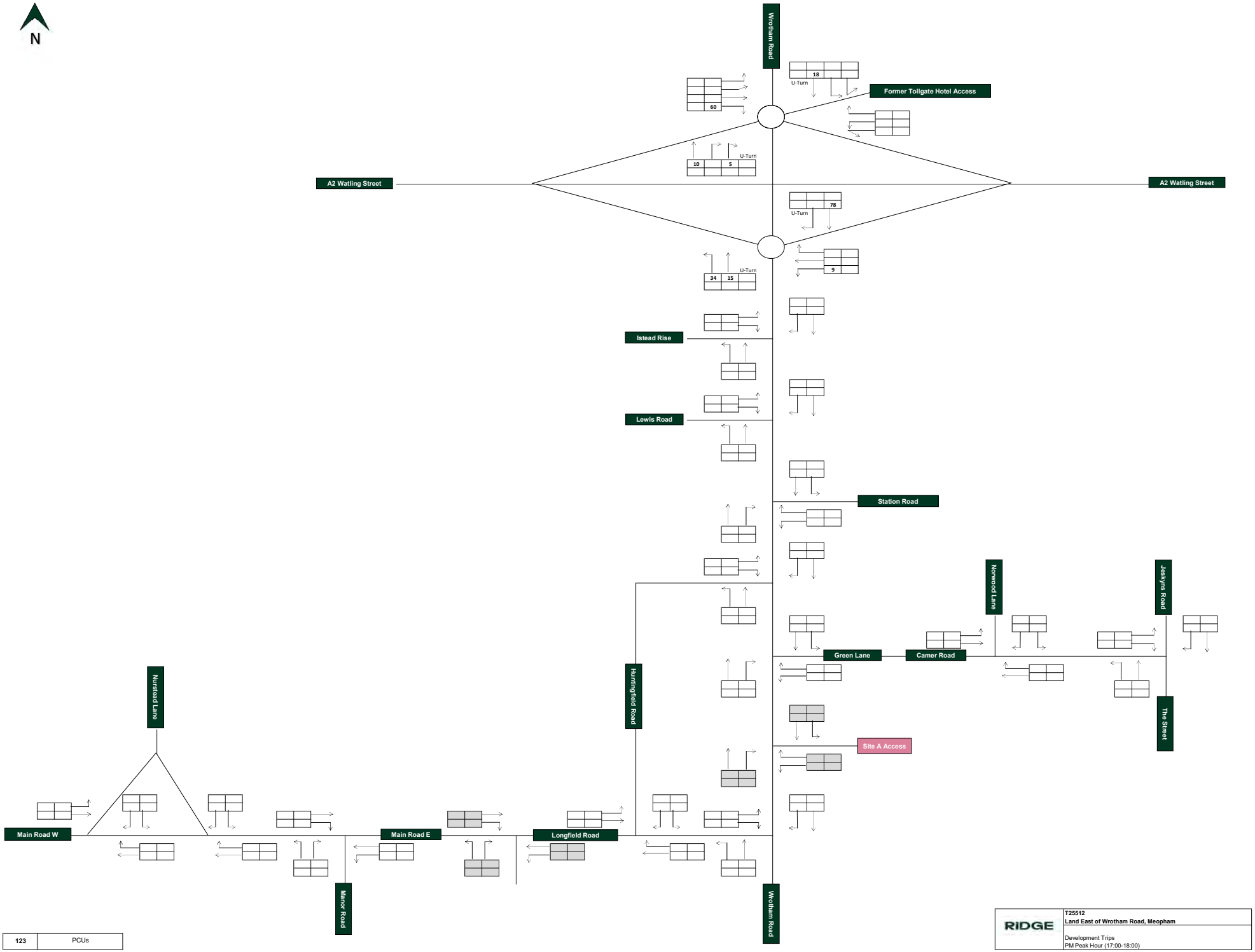


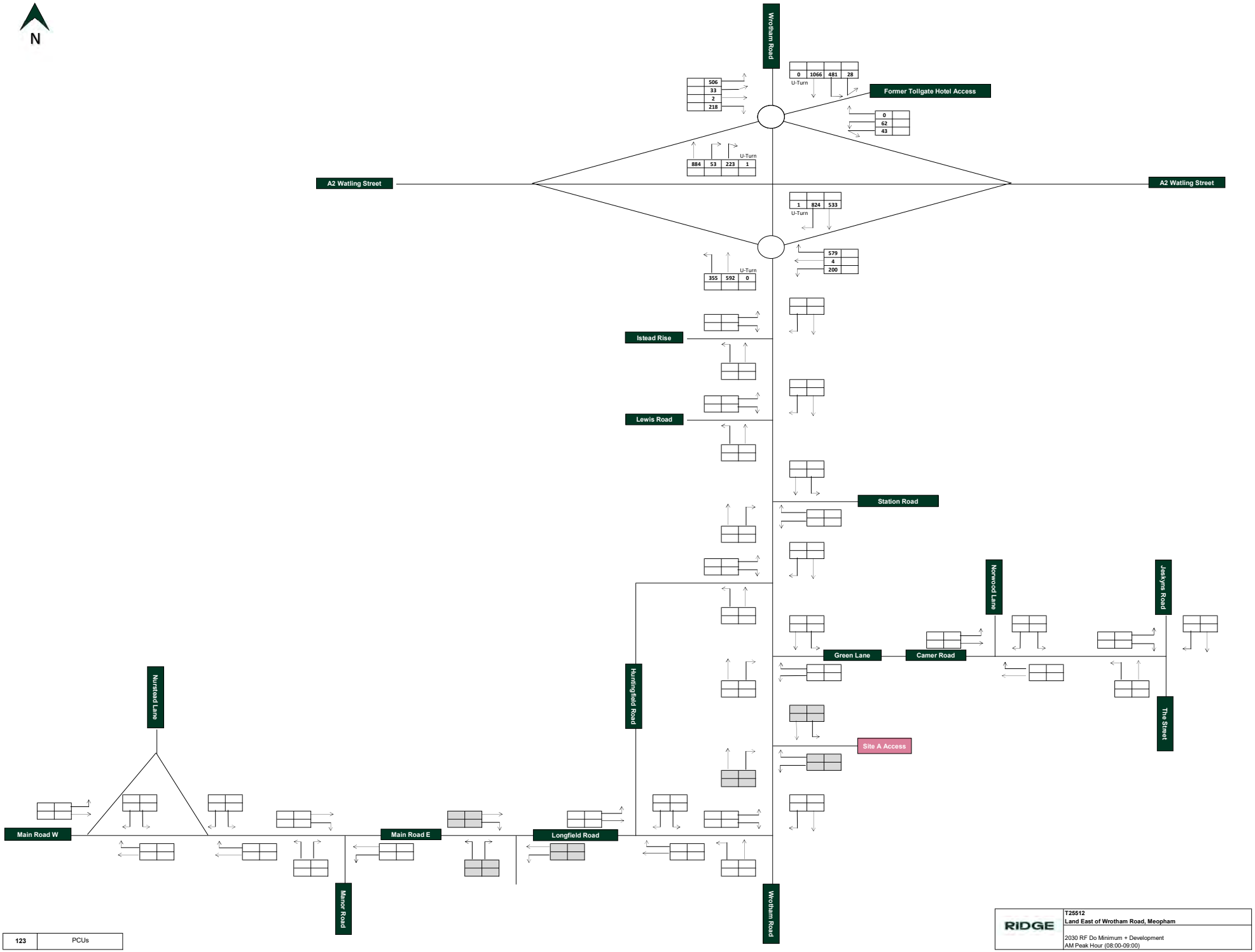
123	PCUs

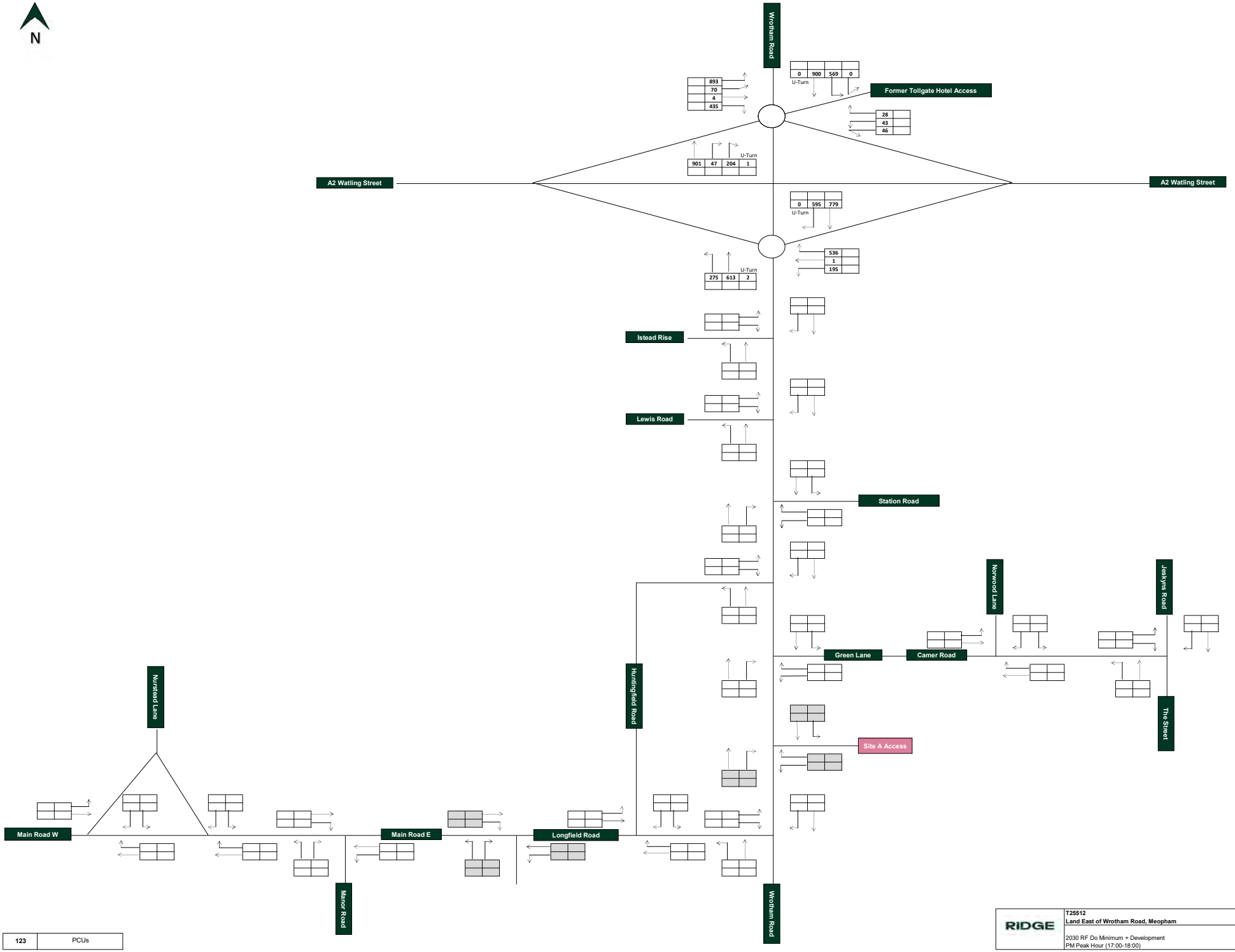
RIDGE

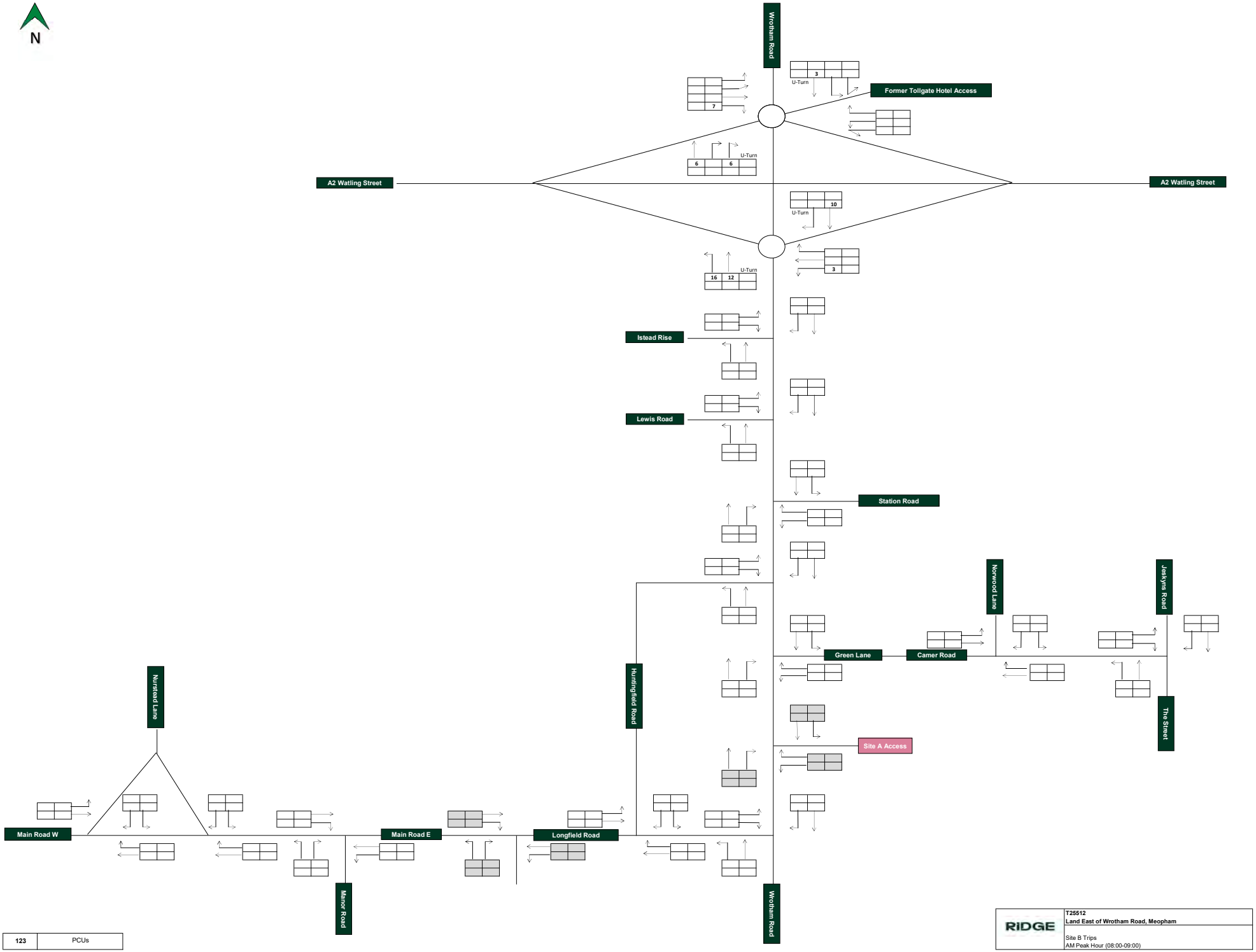
T25512
Land East of Wrotham Road, Meopham

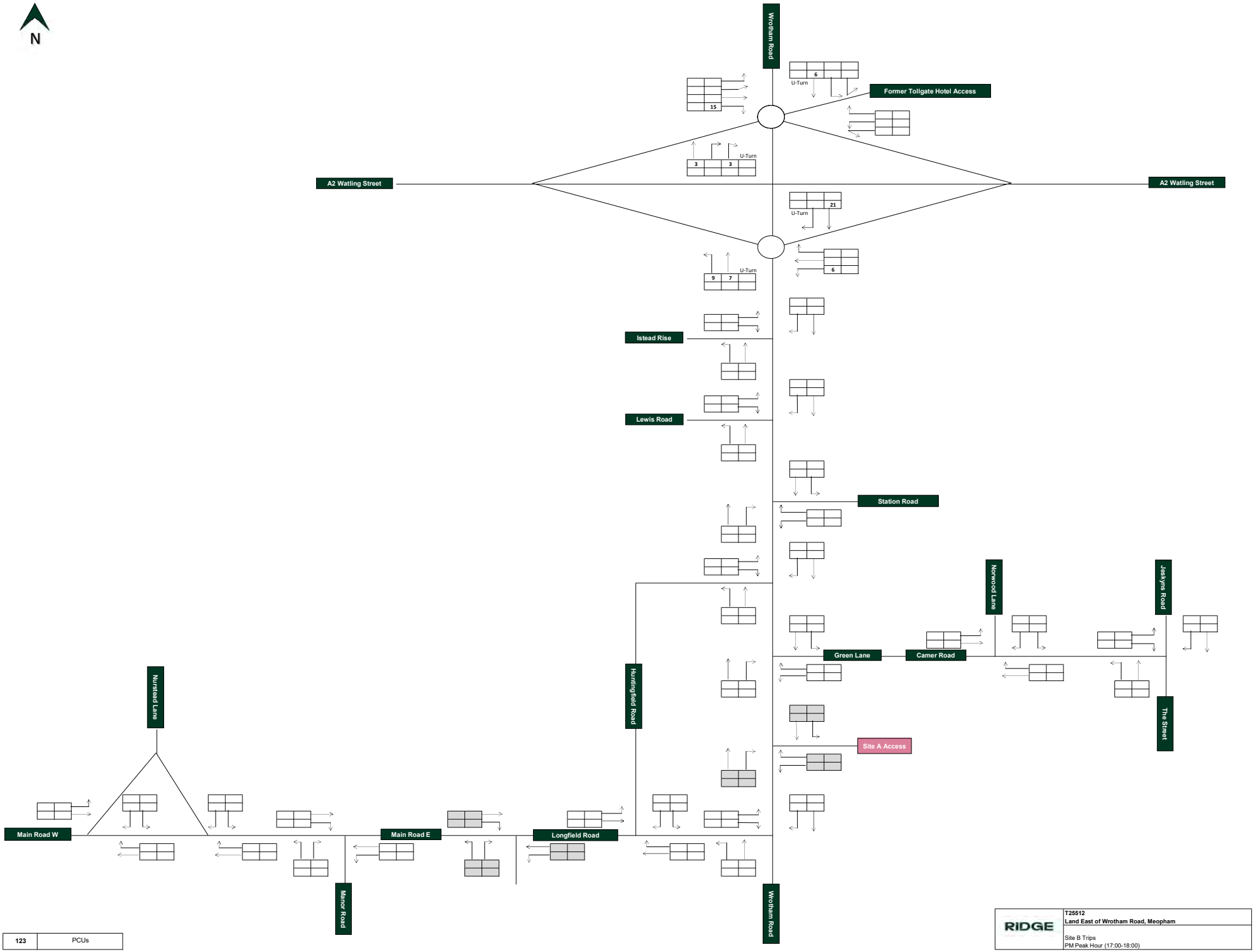
Development Trips
AM Peak Hour (08:00-09:00)

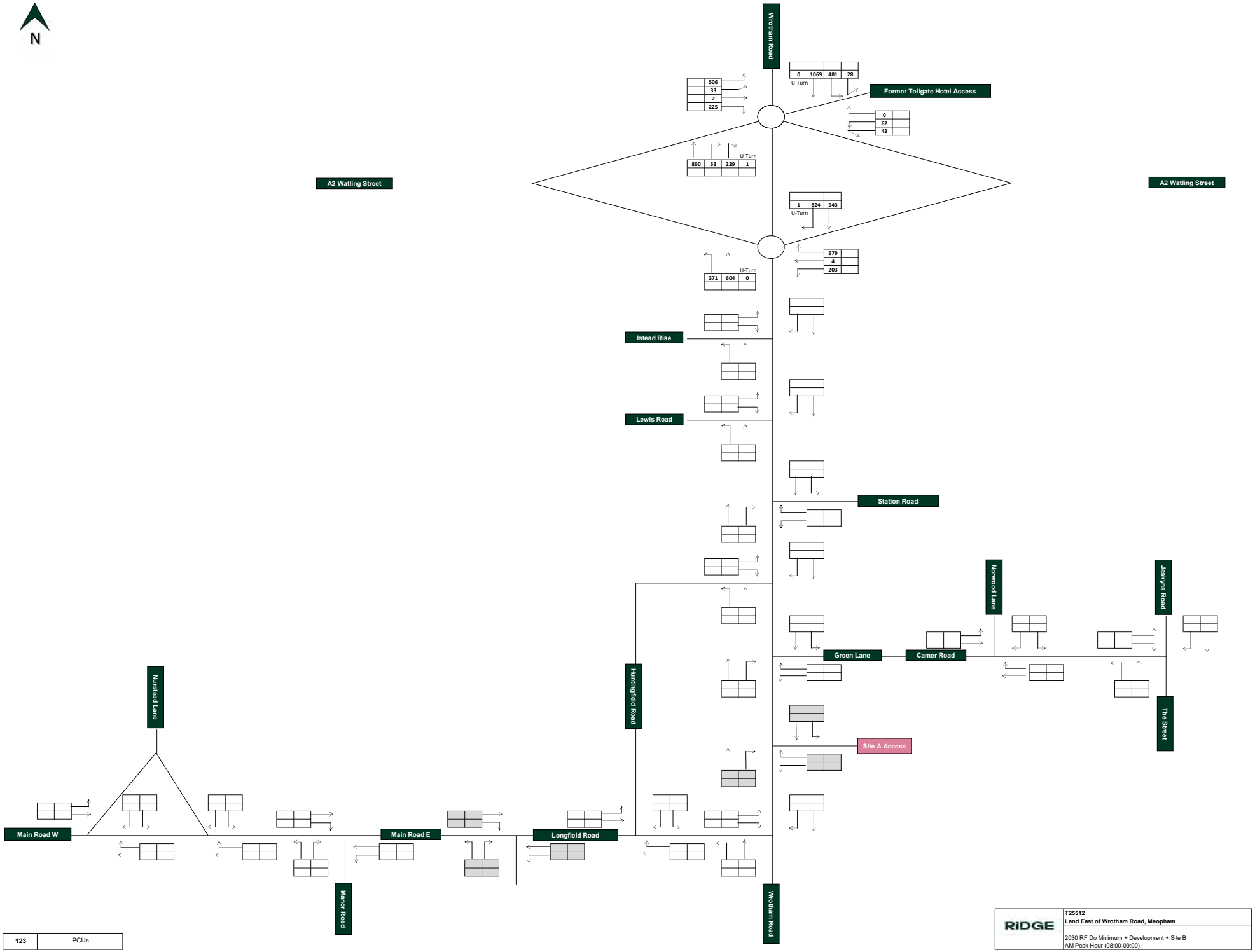

N
Wrotham Road
Former Tollgate Hotel Access
A2 Watling Street
A2 Watling Street
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Site A Access
Hurlingfield Road
Nurstead Lane
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
U-Turn
60
18
10
5
78
9
34
15
123
PCUs
RIDGE
T25512
Land East of Wrotham Road, Meopham
Development Trips
PM Peak Hour (17:00-18:00)

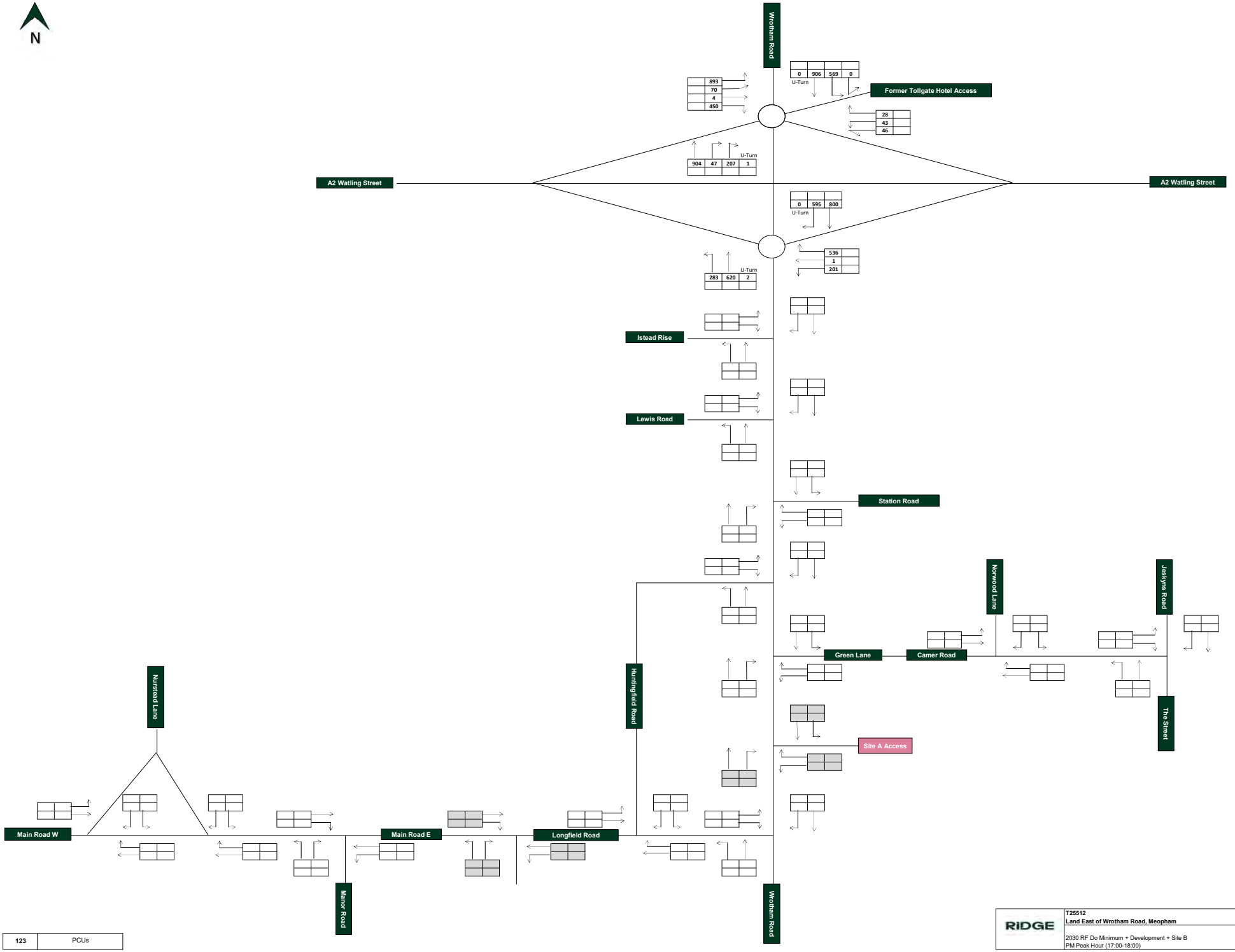

N
Wrotham Road
Former Tollgate Hotel Access
A2 Watling Street
A2 Watling Street
U-Turn
U-Turn
U-Turn
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Hurlingfield Road
Site A Access
Nurstead Lane
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
506
33
2
218
0 1066 481 28
0
62
43
884 53 223 1
1 824 533
579
4
200
355 592 0
123
PCUs
RIDGE
T25512
Land East of Wrotham Road, Meopham
2030 RF Do Minimum + Development
AM Peak Hour (08:00-09:00)


N
Wrotham Road
Former Tollgate Hotel Access
A2 Watling Street
A2 Watling Street
U-Turn
U-Turn
U-Turn
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Site A Access
Hurlingfield Road
Nurstead Lane
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
893
70
4
435
0
900
569
0
28
43
46
901
47
204
1
0
595
779
536
1
195
275
613
2
123
PCUs
RIDGE
T25512
Land East of Wrotham Road, Meopham
2030 RF Do Minimum + Development
PM Peak Hour (17:00-18:00)


N
Wrotham Road
Former Tollgate Hotel Access
A2 Watling Street
A2 Watling Street
U-Turn
U-Turn
U-Turn
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Site A Access
Nurstead Lane
Hurlingfield Road
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
123
PCUs
RIDGE
T25512
Land East of Wrotham Road, Meopham
Site B Trips
AM Peak Hour (08:00-09:00)


N
Wrotham Road
Former Tollgate Hotel Access
A2 Watling Street
A2 Watling Street
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Site A Access
Hurlingfield Road
Nurstead Lane
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
U-Turn
15
6
3
3
21
9
7
123
PCUs
RIDGE
T25512
Land East of Wrotham Road, Meopham
Site B Trips
PM Peak Hour (17:00-18:00)


N
Wrotham Road
Former Tollgate Hotel Access
A2 Watling Street
A2 Watling Street
U-Turn
U-Turn
U-Turn
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Site A Access
Hurlingfield Road
Nurstead Lane
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
506
33
2
225
0 1069 481 28
0
62
43
890 53 229 1
1 824 543
579
4
203
371 604 0
123 PCUs
RIDGE
T25512
Land East of Wrotham Road, Meopham
2030 RF Do Minimum + Development + Site B
AM Peak Hour (08:00-09:00)


N
Wrotham Road
Former Tollgate Hotel Access
A2 Watling Street
A2 Watling Street
U-Turn
U-Turn
U-Turn
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Site A Access
Hurlingfield Road
Nurstead Lane
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
893
70
4
450
0
906
569
0
28
43
46
904
47
207
1
0
595
800
536
1
201
283
620
2
123
PCUs
RIDGE
T25512
Land East of Wrotham Road, Meopham
2030 RF Do Minimum + Development + Site B
PM Peak Hour (17:00-18:00)

APPENDIX J A2/WROTHAM ROAD COMPLEX RESULTS

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.1.0.2307
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+44 (0)1344 379777 software@trl.co.uk trlsoftware.com

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Filename: Junction 7 - Wrotham Road_A2 Linked Rbt - Base Model AM.j11
Path: C:\Users\mattjohnson\Ridge and Partners LLP\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Modelling\Arcady\Tech Note 2\2028 FTH Do Minimum
Report generation date: 02/09/2026 15:50:37

»D1 - 2023 | Base | AM
»D2 - 2025 | Base | AM
»D3 - 2028 | FTH Do Minimum | AM
»D4 - 2028 | FTH Do Minimum + Dev | AM
»D5 - 2028 | FTH Do Minimum + Dev + Site B | AM
»D6 - 2028 | FTH Do Minimum + Dev + Site B + RF | AM

Summary of junction performance

	AM			
	Set ID	Queue (PCU)	Delay (s)	RFC
	2023 - Base			
Junction 1 - Arm 1	D1	59.9	271.01	1.17
Junction 1 - Arm 2		6.1	27.81	0.86
Junction 1 - Arm 4		1.2	3.45	0.52
Junction 2 - Arm 2		0.9	2.79	0.44
Junction 2 - Arm 3		2.0	10.68	0.65
Junction 2 - Arm 4		4.3	10.38	0.80
Junction 2 - Arm 5		0.0	0.00	0.00
	2025 - Base			
Junction 1 - Arm 1	D2	67.3	301.88	1.19
Junction 1 - Arm 2		6.5	29.32	0.87
Junction 1 - Arm 4		1.2	3.47	0.52
Junction 2 - Arm 2		0.9	2.80	0.44
Junction 2 - Arm 3		2.1	11.18	0.66
Junction 2 - Arm 4		4.5	10.75	0.81
Junction 2 - Arm 5		0.0	0.00	0.00
	2028 - FTH Do Minimum			
Junction 1 - Arm 1	D3	194.5	1036.76	1.64
Junction 1 - Arm 2		20.1	82.30	0.99
Junction 1 - Arm 4		1.7	4.30	0.61
Junction 2 - Arm 2		1.0	3.06	0.49
Junction 2 - Arm 3		5.7	26.57	0.85
Junction 2 - Arm 4		14.8	32.68	0.95
Junction 2 - Arm 5		1.1	34.87	0.51
	2028 - FTH Do Minimum + Dev			
Junction 1 - Arm 1	D4	215.2	1148.47	1.71
Junction 1 - Arm 2		53.4	178.05	1.09
Junction 1 - Arm 4		1.9	4.50	0.63
Junction 2 - Arm 2		1.1	3.14	0.50
Junction 2 - Arm 3		8.5	39.11	0.90
Junction 2 - Arm 4		18.6	40.32	0.96
Junction 2 - Arm 5		1.3	41.08	0.55
	2028 - FTH Do Minimum + Dev + Site B			
Junction 1 - Arm 1	D5	222.9	1188.57	1.74
Junction 1 - Arm 2		66.2	213.62	1.12
Junction 1 - Arm 4		1.9	4.55	0.63
Junction 2 - Arm 2		1.1	3.18	0.51
Junction 2 - Arm 3		9.9	45.27	0.92
Junction 2 - Arm 4		20.2	43.48	0.97
Junction 2 - Arm 5		1.4	43.57	0.57
	2028 - FTH Do Minimum + Dev + Site B + RF			
Junction 1 - Arm 1	D6	231.1	1230.76	1.76
Junction 1 - Arm 2		84.7	285.27	1.16
Junction 1 - Arm 4		1.9	4.61	0.64
Junction 2 - Arm 2		1.1	3.21	0.51
Junction 2 - Arm 3		12.0	53.87	0.94
Junction 2 - Arm 4		22.2	47.22	0.98
Junction 2 - Arm 5		1.4	46.84	0.59

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.

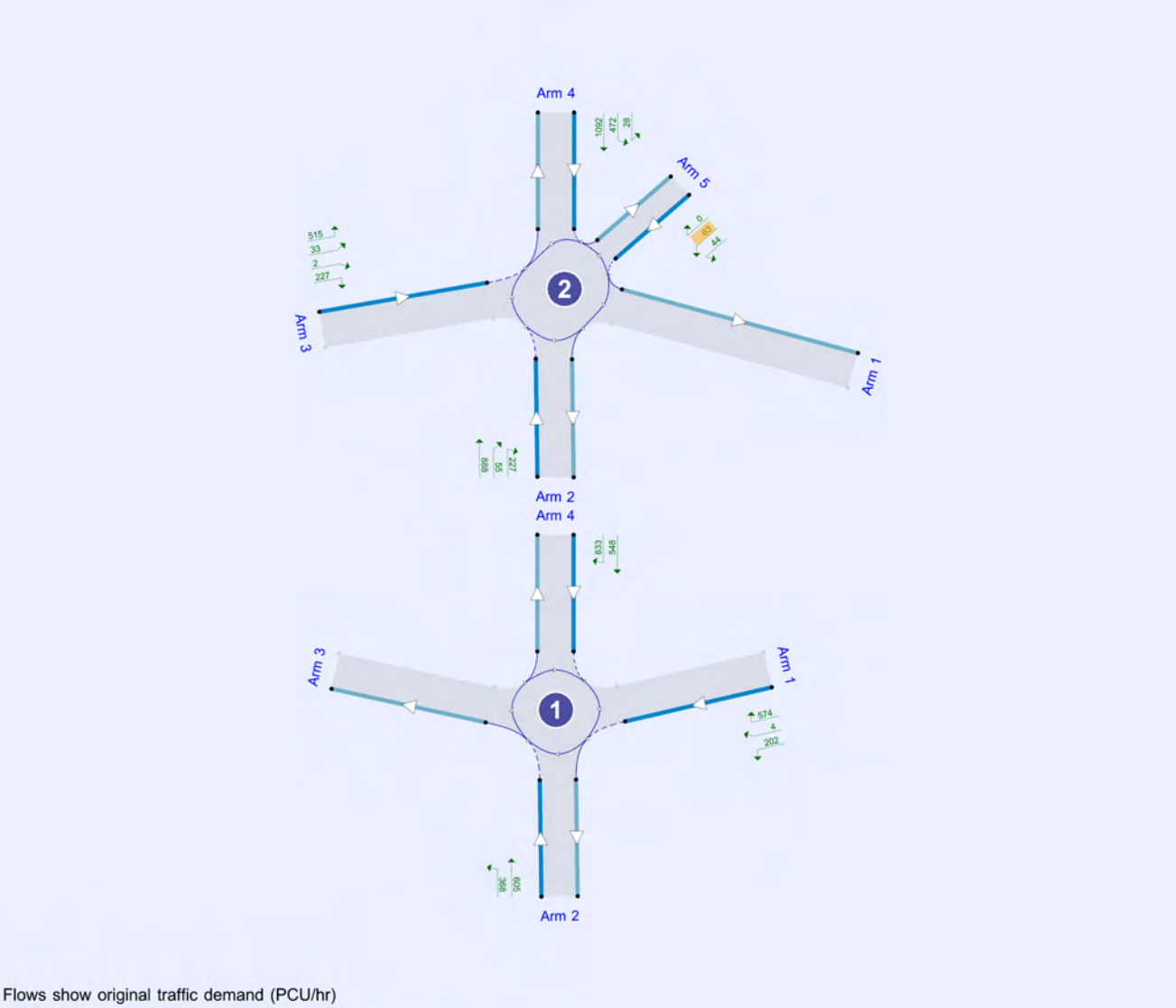
File summary

File Description

Title	
Location	Wrotham Road/A2 Southern Roundabout
Site number	7
Date	09/04/2026
Version	
Status	(new file)
Identifier	MJ
Client	Richborough
Jobnumber	T25512
Enumerator	AzureAD\MatthewJohnson
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	PCU	PCU	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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75	✓					0.85	36.00	20.00		

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2025	Base	AM	ONE HOUR	07:45	09:15	15	✓
D3	2028	FTH Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D4	2028	FTH Do Minimum + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D5	2028	FTH Do Minimum + Dev + Site B	AM	ONE HOUR	07:45	09:15	15	✓
D6	2028	FTH Do Minimum + Dev + Site B + RF	AM	ONE HOUR	07:45	09:15	15	✓

Analysis Set Details

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

D1 - 2023 | Base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	80.91	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	7.91	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	41.44	E

Arms

Arms

Junction	Arm	Name	Description	No give-way line
1	1	A2 (E) Off-Slip		
	2	Wrotham Road S		
	3	A2 (W) On-Slip		
	4	Wrotham Road N - Internal Link		
2	1	A2 (E) On-Slip		
	2	Wrotham Road S - Internal Link		
	3	A2 (W) Off-Slip		
	4	Wrotham Road N		
	5	Hotel access		

Roundabout Geometry

Junction	Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	1	3.70	8.50	10.2	19.1	59.9	60.0	✓	
	2	4.90	9.20	22.2	24.1	59.9	49.0		
	3								✓
	4	7.60	8.10	6.9	20.8	59.9	36.0		
2	1								✓
	2	7.10	9.30	17.9	31.1	63.9	47.0		
	3	7.00	10.20	17.9	40.0	63.9	24.0	✓	
	4	4.60	9.30	22.1	48.8	63.9	50.0		
	5	3.10	5.50	5.4	12.7	63.9	59.0		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Junction	Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1	1	Direct	Calbration	-275
	2	Direct	Calibration	-440
	3			
	4	None		
2	1			
	2	None		
	3	Direct	Calibration	-1000
	4	None		
	5	None		

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1	1	0.499	1245
	2	0.622	1717
	3		
	4	0.671	2380
2	1		
	2	0.662	2521
	3	0.741	1862
	4	0.600	2150
	5	0.400	1080

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

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	Base	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	669	100.000
	2		ONE HOUR	✓	764	100.000
	3					
	4		ONE HOUR	✓	1118	100.000
2	1					
	2		ONE HOUR	✓	1000	100.000
	3		ONE HOUR	✓	614	100.000
	4		ONE HOUR	✓	1390	100.000
	5		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	178	4	487
	2	0	0	251	513
	3	0	0	0	0
	4	0	456	662	0

Demand (PCU/hr)

Junction 2

From \ To	1	2	3	4	5
1	0	0	0	0	0
2	194	0	0	806	0
3	2	166	0	445	1
4	441	949	0	0	0
5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

From \ To	1	2	3	4
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10

Heavy Vehicle %

Junction 2

From \ To	1	2	3	4	5
1	10	10	10	10	10
2	10	10	10	10	10
3	10	10	10	10	10
4	10	10	10	10	10
5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.17	271.01	59.9	105.8	F	614	921
	2	0.86	27.81	6.1	32.5	D	701	1052
	3							
	4	0.52	3.45	1.2	1.6	A	1026	1539
2	1							
	2	0.44	2.79	0.9	2.1	A	918	1376
	3	0.65	10.68	2.0	4.3	B	563	845
	4	0.80	10.38	4.3	18.1	B	1275	1913
	5	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	504	126	839	827	0.609	497	0	0.0	1.7	11.778	B
	2	575	144	862	1181	0.487	571	475	0.0	1.0	6.447	A
	3			745				688				
	4	842	210	0	2380	0.354	839	745	0.0	0.6	2.567	A
2	1			835				478				
	2	753	188	0	2521	0.299	751	835	0.0	0.5	2.236	A
	3	462	116	751	1306	0.354	460	0	0.0	0.6	4.669	A
	4	1046	262	272	1987	0.527	1042	939	0.0	1.2	4.169	A
	5	0	0	1313	555	0.000	0	0.75	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	601	150	1004	745	0.807	592	0	1.7	4.1	24.467	C
	2	687	172	1029	1077	0.638	683	567	1.0	1.9	9.966	A
	3			890				823				
	4	1005	251	0	2380	0.422	1004	890	0.6	0.8	2.877	A
2	1			1000				572				
	2	899	225	0	2521	0.357	898	1000	0.5	0.6	2.441	A
	3	552	138	898	1196	0.461	551	0	0.6	0.9	6.120	A
	4	1250	312	326	1955	0.639	1247	1123	1.2	1.9	5.571	A
	5	0	0	1572	452	0.000	0	0.90	0.0	0.0	0.000	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	737	184	1229	633	1.164	620	0	4.1	33.2	125.772	F
	2	841	210	1183	982	0.857	826	666	1.9	5.6	23.574	C
	3			1006				1003				
	4	1231	308	0	2380	0.517	1229	1006	0.8	1.2	3.437	A
2	1			1220				698				
	2	1101	275	0	2521	0.437	1100	1220	0.6	0.8	2.786	A
	3	676	169	1100	1047	0.646	672	0	0.9	1.9	10.447	B
	4	1530	383	398	1911	0.801	1521	1374	1.9	4.2	9.930	A
	5	0	0	1919	313	0.000	0	1	0.0	0.0	0.000	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	737	184	1231	632	1.166	630	0	33.2	59.9	271.014	F
	2	841	210	1191	977	0.861	839	670	5.6	6.1	27.808	D
	3			1022				1008				
	4	1231	308	0	2380	0.517	1231	1022	1.2	1.2	3.445	A
2	1			1227				701				
	2	1101	275	0	2521	0.437	1101	1227	0.8	0.9	2.789	A
	3	676	169	1101	1046	0.646	676	0	1.9	2.0	10.680	B
	4	1530	383	400	1910	0.801	1530	1377	4.2	4.3	10.376	B
	5	0	0	1928	309	0.000	0	1	0.0	0.0	0.000	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	601	150	1007	744	0.809	730	0	59.9	27.7	218.653	F
	2	687	172	1132	1013	0.678	702	605	6.1	2.4	13.263	B
	3			1003				831				
	4	1005	251	0	2380	0.422	1007	1003	1.2	0.8	2.885	A
2	1			1010				576				
	2	899	225	0	2521	0.357	900	1010	0.9	0.6	2.444	A
	3	552	138	900	1195	0.462	556	0	2.0	1.0	6.233	A
	4	1250	312	328	1954	0.640	1259	1128	4.3	2.0	5.773	A
	5	0	0	1586	446	0.000	0	0.91	0.0	0.0	0.000	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	504	126	843	825	0.610	607	0	27.7	1.8	27.763	D
	2	575	144	944	1130	0.509	580	505	2.4	1.2	7.265	A
	3			831				693				
	4	842	210	0	2380	0.354	843	831	0.8	0.6	2.578	A
2	1			842				481				
	2	753	188	0	2521	0.299	753	842	0.6	0.5	2.243	A
	3	462	116	753	1304	0.355	464	0	1.0	0.6	4.720	A
	4	1046	262	274	1986	0.527	1049	943	2.0	1.2	4.243	A
	5	0	0	1322	551	0.000	0	0.76	0.0	0.0	0.000	A

Queue Variation Results for each time segment

07:45 - 08:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	1.66	0.11	1.29	3.18	4.23			N/A	N/A
	2	1.03	0.61	1.10	1.54	1.60			N/A	N/A
	3									
	4	0.60	0.60	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.47	0.00	0.00	0.47	0.47			N/A	N/A
	3	0.60	0.60	1.10	1.54	1.60			N/A	N/A
	4	1.21	0.61	1.10	1.54	1.60			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	4.05	0.08	1.46	10.91	16.37			N/A	N/A
	2	1.88	0.06	0.77	4.73	7.14			N/A	N/A
	3									
	4	0.80	0.09	0.88	1.54	1.63			N/A	N/A
2	1									
	2	0.61	0.08	0.80	1.48	1.57			N/A	N/A
	3	0.93	0.08	0.87	1.48	1.96			N/A	N/A
	4	1.92	0.05	0.52	5.07	8.13			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	33.19	10.80	29.94	54.91	63.84			N/A	N/A
	2	5.57	0.05	0.45	15.06	29.70			N/A	N/A
	3									
	4	1.17	0.03	0.28	1.17	1.17			N/A	N/A
2	1									
	2	0.85	0.03	0.28	0.85	0.85			N/A	N/A
	3	1.94	0.03	0.30	1.94	3.99			N/A	N/A
	4	4.19	0.03	0.33	4.19	18.07			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	59.88	24.79	55.86	92.95	105.77			N/A	N/A
	2	6.13	0.04	0.37	11.17	32.55			N/A	N/A
	3									
	4	1.17	0.03	0.29	1.17	1.17			N/A	N/A
2	1									
	2	0.85	0.03	0.30	0.85	2.15			N/A	N/A
	3	1.97	0.03	0.30	1.97	4.25			N/A	N/A
	4	4.31	0.03	0.30	4.31	7.14			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	27.66	7.78	24.45	47.32	55.65			N/A	N/A
	2	2.41	0.06	0.60	6.46	10.24			N/A	N/A
	3									
	4	0.81	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.61	0.61	1.10	1.54	1.60			N/A	N/A
	3	0.96	0.08	0.90	1.53	1.98			N/A	N/A
	4	1.99	0.06	0.86	5.00	7.46			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	1.81	0.03	0.30	1.81	3.79			N/A	N/A
	2	1.16	0.04	0.35	2.34	5.84			N/A	N/A
	3									
	4	0.60	0.60	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.47	0.00	0.00	0.47	0.47			N/A	N/A
	3	0.61	0.05	0.45	1.54	1.54			N/A	N/A
	4	1.24	0.04	0.42	3.13	5.49			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

D2 - 2025 | Base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	89.89	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	8.20	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	45.72	E

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025	Base	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	679	100.000
	2		ONE HOUR	✓	770	100.000
	3					
	4		ONE HOUR	✓	1126	100.000
2	1					
	2		ONE HOUR	✓	1007	100.000
	3		ONE HOUR	✓	624	100.000
	4		ONE HOUR	✓	1400	100.000
	5		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	181	4	494
	2	0	0	253	517
	3	0	0	0	0
	4	0	459	667	0

Demand (PCU/hr)

Junction 2

From \ To	1	2	3	4	5
1	0	0	0	0	0
2	195	0	0	812	0
3	2	169	0	452	1
4	444	956	0	0	0
5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

From \ To	1	2	3	4
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10

Heavy Vehicle %

Junction 2

From \ To	1	2	3	4	5
1	10	10	10	10	10
2	10	10	10	10	10
3	10	10	10	10	10
4	10	10	10	10	10
5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.19	301.88	67.3	113.3	F	623	935
	2	0.87	29.32	6.5	35.1	D	707	1060
	3							
	4	0.52	3.47	1.2	1.6	A	1033	1550
2	1							
	2	0.44	2.80	0.9	2.1	A	924	1386
	3	0.66	11.18	2.1	5.1	B	573	859
	4	0.81	10.75	4.5	19.6	B	1285	1927
	5	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	511	128	845	824	0.620	504	0	0.0	1.7	12.136	B
	2	580	145	871	1176	0.493	575	479	0.0	1.1	6.550	A
	3			753				693				
	4	848	212	0	2380	0.356	845	753	0.0	0.6	2.576	A
2	1			843				481				
	2	758	190	0	2521	0.301	756	843	0.0	0.5	2.243	A
	3	470	117	756	1302	0.361	467	0	0.0	0.6	4.733	A
	4	1054	263	275	1985	0.531	1049	948	0.0	1.2	4.209	A
	5	0	0	1324	551	0.000	0	0.75	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	610	153	1011	741	0.824	600	0	1.7	4.4	26.179	D
	2	692	173	1039	1071	0.646	689	572	1.1	1.9	10.254	B
	3			899				829				
	4	1012	253	0	2380	0.425	1011	899	0.6	0.8	2.892	A
2	1			1009				575				
	2	905	226	0	2521	0.359	905	1009	0.5	0.6	2.451	A
	3	561	140	905	1192	0.471	560	0	0.6	1.0	6.250	A
	4	1259	315	329	1953	0.645	1256	1135	1.2	2.0	5.658	A
	5	0	0	1584	447	0.000	0	0.90	0.0	0.0	0.000	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	748	187	1238	628	1.190	618	0	4.4	36.9	137.793	F
	2	848	212	1187	979	0.866	832	669	1.9	5.9	24.620	C
	3			1008				1011				
	4	1240	310	0	2380	0.521	1238	1008	0.8	1.2	3.464	A
2	1			1231				703				
	2	1109	277	0	2521	0.440	1108	1231	0.6	0.9	2.802	A
	3	687	172	1108	1041	0.660	683	0	1.0	2.1	10.909	B
	4	1541	385	403	1909	0.808	1532	1388	2.0	4.4	10.259	B
	5	0	0	1933	307	0.000	0	1	0.0	0.0	0.000	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	748	187	1240	627	1.192	626	0	36.9	67.3	301.877	F
	2	848	212	1193	975	0.869	845	672	5.9	6.5	29.325	D
	3			1023				1016				
	4	1240	310	0	2380	0.521	1240	1023	1.2	1.2	3.472	A
2	1			1238				706				
	2	1109	277	0	2521	0.440	1109	1238	0.9	0.9	2.804	A
	3	687	172	1109	1041	0.660	687	0	2.1	2.1	11.181	B
	4	1541	385	404	1908	0.808	1541	1392	4.4	4.5	10.754	B
	5	0	0	1944	303	0.000	0	1	0.0	0.0	0.000	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	610	153	1014	740	0.825	728	0	67.3	37.9	260.628	F
	2	692	173	1135	1012	0.684	708	607	6.5	2.5	13.683	B
	3			1005				838				
	4	1012	253	0	2380	0.425	1014	1005	1.2	0.8	2.903	A
2	1			1019				580				
	2	905	226	0	2521	0.359	906	1019	0.9	0.6	2.456	A
	3	561	140	906	1191	0.471	565	0	2.1	1.0	6.379	A
	4	1259	315	331	1951	0.645	1268	1140	4.5	2.0	5.878	A
	5	0	0	1599	441	0.000	0	0.91	0.0	0.0	0.000	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	511	128	849	822	0.622	655	0	37.9	1.9	46.648	E
	2	580	145	983	1106	0.524	585	520	2.5	1.2	7.666	A
	3			869				699				
	4	848	212	0	2380	0.356	849	869	0.8	0.6	2.586	A
2	1			849				484				
	2	758	190	0	2521	0.301	759	849	0.6	0.5	2.248	A
	3	470	117	759	1300	0.361	471	0	1.0	0.6	4.788	A
	4	1054	263	277	1984	0.531	1057	953	2.0	1.3	4.285	A
	5	0	0	1333	547	0.000	0	0.76	0.0	0.0	0.000	A

Queue Variation Results for each time segment

07:45 - 08:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	1.73	0.10	1.27	3.53	4.79			N/A	N/A
	2	1.05	0.60	1.10	1.54	1.60			N/A	N/A
	3									
	4	0.61	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.47	0.00	0.00	0.47	0.47			N/A	N/A
	3	0.62	0.61	1.10	1.54	1.60			N/A	N/A
	4	1.23	0.61	1.10	1.54	1.60			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	4.42	0.08	1.62	11.85	17.60			N/A	N/A
	2	1.95	0.06	0.78	4.94	7.45			N/A	N/A
	3									
	4	0.81	0.09	0.88	1.55	1.64			N/A	N/A
2	1									
	2	0.61	0.08	0.81	1.48	1.57			N/A	N/A
	3	0.97	0.08	0.86	1.65	2.08			N/A	N/A
	4	1.96	0.05	0.52	5.21	8.41			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	36.89	13.51	33.78	59.05	67.92			N/A	N/A
	2	5.88	0.05	0.47	16.24	30.90			N/A	N/A
	3									
	4	1.19	0.03	0.28	1.19	1.19			N/A	N/A
2	1									
	2	0.86	0.03	0.28	0.86	0.86			N/A	N/A
	3	2.06	0.03	0.31	2.06	5.11			N/A	N/A
	4	4.36	0.03	0.33	4.36	19.55			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	67.30	31.02	63.57	100.72	113.32			N/A	N/A
	2	6.50	0.04	0.38	12.90	35.11			N/A	N/A
	3									
	4	1.19	0.03	0.29	1.19	1.19			N/A	N/A
2	1									
	2	0.86	0.03	0.30	0.86	2.09			N/A	N/A
	3	2.10	0.03	0.30	2.10	4.69			N/A	N/A
	4	4.49	0.03	0.30	4.49	8.36			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	37.85	15.05	35.01	59.10	67.47			N/A	N/A
	2	2.48	0.05	0.54	6.75	10.89			N/A	N/A
	3									
	4	0.82	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.62	0.61	1.10	1.54	1.60			N/A	N/A
	3	0.99	0.08	0.89	1.70	2.12			N/A	N/A
	4	2.03	0.06	0.82	5.18	7.79			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	1.92	0.03	0.30	1.92	3.90			N/A	N/A
	2	1.23	0.04	0.35	2.54	6.25			N/A	N/A
	3									
	4	0.61	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.47	0.00	0.00	0.47	0.47			N/A	N/A
	3	0.63	0.04	0.45	1.61	1.75			N/A	N/A
	4	1.26	0.04	0.41	3.17	5.71			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

D3 - 2028 | FTH Do Minimum | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	298.98	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	22.14	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	147.10	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028	FTH Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	769	100.000
	2		ONE HOUR	✓	815	100.000
	3					
	4		ONE HOUR	✓	1326	100.000
2	1					
	2		ONE HOUR	✓	1116	100.000
	3		ONE HOUR	✓	734	100.000
	4		ONE HOUR	✓	1580	100.000
	5		ONE HOUR	✓	107	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	191	4	574
	2	0	0	264	551
	3	0	0	0	0
	4	0	493	833	0

Junction 2

Demand (PCU/hr)

From \ To	1	2	3	4	5
1	0	0	0	0	0
2	201	0	0	860	55
3	2	184	0	515	33
4	472	1080	0	0	28
5	44	63	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction 1

Heavy Vehicle %

From \ To	1	2	3	4
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10

Junction 2

Heavy Vehicle %

From \ To	1	2	3	4	5
1	10	10	10	10	10
2	10	10	10	10	10
3	10	10	10	10	10
4	10	10	10	10	10
5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.64	1036.76	194.5	220.0	F	706	1058
	2	0.99	82.30	20.1	74.2	F	748	1122
	3							
	4	0.61	4.30	1.7	2.9	A	1217	1825
2	1							
	2	0.49	3.06	1.0	1.6	A	1024	1536
	3	0.85	26.57	5.7	29.6	D	674	1010
	4	0.95	32.68	14.8	78.8	D	1450	2175
	5	0.51	34.87	1.1	5.2	D	98	147

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	579	145	995	749	0.773	565	0	0.0	3.4	20.269	C
	2	614	153	1050	1064	0.577	608	510	0.0	1.5	8.568	A
	3			833				825				
	4	998	250	0	2380	0.419	995	833	0.0	0.8	2.854	A
2	1			993				538				
	2	840	210	0	2521	0.333	838	993	0.0	0.5	2.350	A
	3	553	138	838	1241	0.445	549	0	0.0	0.9	5.694	A
	4	1190	297	356	1937	0.614	1183	1031	0.0	1.7	5.207	A
	5	81	20	1452	500	0.161	80	87	0.0	0.2	9.414	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	691	173	1191	652	1.061	626	0	3.4	19.7	86.273	F
	2	733	183	1219	960	0.764	725	598	1.5	3.3	16.408	C
	3			958				986				
	4	1192	298	0	2380	0.501	1191	958	0.8	1.1	3.327	A
2	1			1188				644				
	2	1003	251	0	2521	0.398	1003	1188	0.5	0.7	2.607	A
	3	660	165	1003	1119	0.590	657	0	0.9	1.5	8.520	A
	4	1420	355	426	1895	0.750	1415	1234	1.7	3.2	8.150	A
	5	96	24	1737	386	0.249	96	104	0.2	0.4	13.624	B

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	847	212	1457	519	1.632	518	0	19.7	101.9	437.078	F
	2	897	224	1305	906	0.991	852	671	3.3	14.6	51.525	F
	3			963				1194				
	4	1460	365	0	2380	0.613	1457	963	1.1	1.7	4.280	A
2	1			1430				779				
	2	1229	307	0	2521	0.488	1227	1430	0.7	1.0	3.060	A
	3	808	202	1227	953	0.848	793	0	1.5	5.2	23.011	C
	4	1740	435	518	1839	0.946	1702	1503	3.2	12.6	24.148	C
	5	118	29	2094	243	0.485	115	126	0.4	1.0	30.530	D

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	847	212	1460	518	1.636	518	0	101.9	184.1	889.405	F
	2	897	224	1306	905	0.991	875	671	14.6	20.1	82.296	F
	3			978				1203				
	4	1460	365	0	2380	0.613	1460	978	1.7	1.7	4.304	A
2	1			1454				789				
	2	1229	307	0	2521	0.488	1229	1454	1.0	1.0	3.064	A
	3	808	202	1229	952	0.849	807	0	5.2	5.7	26.574	D
	4	1740	435	522	1837	0.947	1731	1513	12.6	14.8	32.682	D
	5	118	29	2126	230	0.512	117	127	1.0	1.1	34.872	D

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	691	173	1195	650	1.064	650	0	184.1	194.5	1036.756	F
	2	733	183	1239	947	0.774	796	605	20.1	4.2	34.039	D
	3			1023				1012				
	4	1192	298	0	2380	0.501	1195	1023	1.7	1.1	3.347	A
2	1			1230				661				
	2	1003	251	0	2521	0.398	1005	1230	1.0	0.7	2.613	A
	3	660	165	1005	1118	0.590	676	0	5.7	1.6	9.274	A
	4	1420	355	432	1891	0.751	1466	1248	14.8	3.4	10.252	B
	5	96	24	1792	363	0.265	99	106	1.1	0.4	15.121	C

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	579	145	1000	747	0.775	743	0	194.5	153.5	844.143	F
	2	614	153	1186	980	0.626	623	556	4.2	1.9	11.361	B
	3			976				833				
	4	998	250	0	2380	0.419	1000	976	1.1	0.8	2.873	A
2	1			1005				544				
	2	840	210	0	2521	0.333	841	1005	0.7	0.6	2.358	A
	3	553	138	841	1239	0.446	555	0	1.6	0.9	5.817	A
	4	1190	297	359	1935	0.615	1196	1038	3.4	1.8	5.406	A
	5	81	20	1467	493	0.163	81	88	0.4	0.2	9.629	A

Queue Variation Results for each time segment

07:45 - 08:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	3.38	0.03	0.32	3.38	12.32			N/A	N/A
	2	1.46	0.36	1.35	2.06	2.50			N/A	N/A
	3									
	4	0.79	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.55	0.00	0.00	0.55	0.55			N/A	N/A
	3	0.87	0.61	1.10	1.54	1.60			N/A	N/A
	4	1.73	0.60	1.60	2.31	2.91			N/A	N/A
	5	0.21	0.00	0.00	0.21	0.21			N/A	N/A

08:00 - 08:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	19.73	0.31	10.13	50.36	69.56			N/A	N/A
	2	3.30	0.07	1.29	8.72	13.04			N/A	N/A
	3									
	4	1.10	0.07	0.84	2.07	2.91			N/A	N/A
2	1									
	2	0.72	0.09	0.88	1.50	1.58			N/A	N/A
	3	1.55	0.05	0.55	3.85	5.89			N/A	N/A
	4	3.18	0.05	0.52	8.88	14.97			N/A	N/A
	5	0.36	0.00	0.00	0.36	0.36			N/A	N/A

08:15 - 08:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	101.85	56.36	98.21	142.38	156.92			N/A	N/A
	2	14.60	0.34	8.12	35.87	48.65			N/A	N/A
	3									
	4	1.72	0.03	0.29	1.72	1.72			N/A	N/A
2	1									
	2	1.04	0.03	0.28	1.04	1.04			N/A	N/A
	3	5.25	0.04	0.44	13.93	28.18			N/A	N/A
	4	12.56	0.08	1.88	36.62	58.51			N/A	N/A
	5	0.97	0.03	0.30	0.97	2.19			N/A	N/A

08:30 - 08:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	184.13	>199	>199	>199	>199			N/A	N/A
	2	20.10	0.24	9.31	52.78	74.18			N/A	N/A
	3									
	4	1.74	0.03	0.29	1.74	1.74			N/A	N/A
2	1									
	2	1.04	0.03	0.29	1.04	1.47			N/A	N/A
	3	5.65	0.04	0.36	9.79	29.64			N/A	N/A
	4	14.82	0.05	0.55	42.07	78.80			N/A	N/A
	5	1.09	0.04	0.38	2.60	5.24			N/A	N/A

08:45 - 09:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	194.54	>199	>199	>199	>199			N/A	N/A
	2	4.16	0.05	0.47	11.48	21.36			N/A	N/A
	3									
	4	1.11	0.46	1.13	1.16	1.69			N/A	N/A
2	1									
	2	0.73	0.61	1.10	1.54	1.60			N/A	N/A
	3	1.62	0.05	0.45	4.26	7.30			N/A	N/A
	4	3.45	0.05	0.46	9.49	17.48			N/A	N/A
	5	0.40	0.03	0.34	1.10	1.37			N/A	N/A

09:00 - 09:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	153.54	>199	>199	>199	>199			N/A	N/A
	2	1.90	0.03	0.33	2.34	9.07			N/A	N/A
	3									
	4	0.80	0.10	0.90	1.54	1.62			N/A	N/A
2	1									
	2	0.55	0.55	1.10	1.54	1.60			N/A	N/A
	3	0.90	0.03	0.34	1.65	4.38			N/A	N/A
	4	1.78	0.03	0.34	2.63	8.85			N/A	N/A
	5	0.22	0.03	0.29	0.52	0.61			N/A	N/A

D4 - 2028 | FTH Do Minimum + Dev | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	346.88	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	28.27	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	174.17	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028	FTH Do Minimum + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	773	100.000
	2		ONE HOUR	✓	908	100.000
	3					
	4		ONE HOUR	✓	1362	100.000
2	1					
	2		ONE HOUR	✓	1145	100.000
	3		ONE HOUR	✓	762	100.000
	4		ONE HOUR	✓	1588	100.000
	5		ONE HOUR	✓	107	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	195	4	574
	2	0	0	328	580
	3	0	0	0	0
	4	0	529	833	0

Demand (PCU/hr)

Junction 2

		To				
		1	2	3	4	5
From	1	0	0	0	0	0
	2	211	0	0	879	55
	3	2	212	0	515	33
	4	472	1088	0	0	28
	5	44	63	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

		To				
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.71	1148.47	215.2	220.0	F	709	1064
	2	1.09	178.05	53.4	109.0	F	833	1250
	3							
	4	0.63	4.50	1.9	3.2	A	1250	1875
2	1							
	2	0.50	3.14	1.1	1.6	A	1051	1576
	3	0.90	39.11	8.5	46.3	E	699	1049
	4	0.96	40.32	18.6	90.8	E	1457	2186
	5	0.55	41.08	1.3	6.2	E	98	147

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	582	145	1022	736	0.791	567	0	0.0	3.7	21.881	C
	2	684	171	1049	1065	0.642	676	540	0.0	1.9	9.997	A
	3			853				872				
	4	1025	256	0	2380	0.431	1022	853	0.0	0.8	2.909	A
2	1			1020				546				
	2	862	216	0	2521	0.342	860	1020	0.0	0.6	2.381	A
	3	574	143	860	1225	0.468	570	0	0.0	1.0	6.010	A
	4	1196	299	384	1920	0.623	1188	1045	0.0	1.8	5.366	A
	5	81	20	1486	486	0.166	80	87	0.0	0.2	9.729	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	695	174	1223	636	1.093	616	0	3.7	23.5	100.582	F
	2	816	204	1208	966	0.845	803	630	1.9	5.2	22.731	C
	3			970				1041				
	4	1224	306	0	2380	0.514	1223	970	0.8	1.2	3.421	A
2	1			1220				653				
	2	1029	257	0	2521	0.408	1029	1220	0.6	0.8	2.653	A
	3	685	171	1029	1100	0.623	682	0	1.0	1.8	9.395	A
	4	1428	357	460	1874	0.762	1421	1250	1.8	3.4	8.620	A
	5	96	24	1777	369	0.260	96	104	0.2	0.4	14.424	B

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	851	213	1497	499	1.705	499	0	23.5	111.6	502.100	F
	2	1000	250	1288	916	1.091	896	707	5.2	31.2	87.872	F
	3			943				1242				
	4	1500	375	0	2380	0.630	1497	943	1.2	1.8	4.470	A
2	1			1461				787				
	2	1261	315	0	2521	0.500	1259	1461	0.8	1.1	3.137	A
	3	839	210	1259	929	0.903	816	0	1.8	7.5	30.451	D
	4	1748	437	557	1816	0.963	1702	1518	3.4	14.9	27.659	D
	5	118	29	2134	227	0.519	115	126	0.4	1.1	34.538	D

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	851	213	1500	498	1.709	498	0	111.6	199.9	986.180	F
	2	1000	250	1289	915	1.092	911	708	31.2	53.4	178.046	F
	3			951				1249				
	4	1500	375	0	2380	0.630	1500	951	1.8	1.9	4.498	A
2	1			1489				798				
	2	1261	315	0	2521	0.500	1261	1489	1.1	1.1	3.142	A
	3	839	210	1261	928	0.904	835	0	7.5	8.5	39.114	E
	4	1748	437	563	1812	0.965	1734	1532	14.9	18.6	40.317	E
	5	118	29	2170	212	0.555	117	127	1.1	1.3	41.078	E

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	695	174	1227	634	1.097	634	0	199.9	215.2	1148.469	F
	2	816	204	1224	956	0.854	937	636	53.4	23.3	151.563	F
	3			1069				1092				
	4	1224	306	0	2380	0.514	1227	1069	1.9	1.2	3.445	A
2	1			1275				675				
	2	1029	257	0	2521	0.408	1031	1275	1.1	0.8	2.659	A
	3	685	171	1031	1098	0.624	712	0	8.5	1.9	10.907	B
	4	1428	357	470	1868	0.764	1487	1272	18.6	3.7	11.909	B
	5	96	24	1851	340	0.283	100	107	1.3	0.4	16.677	C

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	582	145	1027	734	0.793	730	0	215.2	178.2	971.025	F
	2	684	171	1174	987	0.692	766	583	23.3	2.6	24.412	C
	3			1031				909				
	4	1025	256	0	2380	0.431	1027	1031	1.2	0.8	2.928	A
2	1			1033				552				
	2	862	216	0	2521	0.342	863	1033	0.8	0.6	2.389	A
	3	574	143	863	1223	0.469	577	0	1.9	1.0	6.167	A
	4	1196	299	388	1918	0.623	1203	1052	3.7	1.8	5.599	A
	5	81	20	1503	479	0.168	81	88	0.4	0.2	9.981	A

Queue Variation Results for each time segment

07:45 - 08:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	3.70	0.03	0.31	3.70	9.77			N/A	N/A
	2	1.91	0.14	1.48	3.66	4.77			N/A	N/A
	3									
	4	0.83	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.57	0.57	1.10	1.54	1.60			N/A	N/A
	3	0.96	0.59	1.10	1.54	1.60			N/A	N/A
	4	1.79	0.56	1.63	2.64	3.13			N/A	N/A
	5	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:00 - 08:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	23.49	0.36	12.32	59.79	82.33			N/A	N/A
	2	5.17	0.10	1.77	13.53	19.52			N/A	N/A
	3									
	4	1.16	0.07	0.81	2.29	3.23			N/A	N/A
2	1									
	2	0.76	0.09	0.88	1.51	1.59			N/A	N/A
	3	1.77	0.05	0.52	4.59	7.30			N/A	N/A
	4	3.38	0.05	0.53	9.50	15.92			N/A	N/A
	5	0.38	0.00	0.00	0.38	0.38			N/A	N/A

08:15 - 08:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	111.57	60.71	107.45	157.13	173.52			N/A	N/A
	2	31.15	6.84	26.71	56.58	67.76			N/A	N/A
	3									
	4	1.85	0.03	0.29	1.85	1.85			N/A	N/A
2	1									
	2	1.09	0.03	0.28	1.09	1.09			N/A	N/A
	3	7.47	0.06	1.17	21.67	35.87			N/A	N/A
	4	14.89	0.12	4.19	42.07	63.18			N/A	N/A
	5	1.10	0.03	0.31	1.10	3.69			N/A	N/A

08:30 - 08:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	199.88	>199	>199	>199	>199			N/A	N/A
	2	53.40	15.02	47.48	92.57	108.99			N/A	N/A
	3									
	4	1.86	0.03	0.29	1.86	1.86			N/A	N/A
2	1									
	2	1.10	0.03	0.29	1.10	1.26			N/A	N/A
	3	8.51	0.05	0.46	22.81	46.25			N/A	N/A
	4	18.59	0.08	2.01	54.90	90.79			N/A	N/A
	5	1.28	0.04	0.39	3.12	6.17			N/A	N/A

08:45 - 09:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	215.22	>199	>199	>199	>199			N/A	N/A
	2	23.29	3.16	18.70	45.66	56.19			N/A	N/A
	3									
	4	1.17	0.34	1.16	1.56	1.91			N/A	N/A
2	1									
	2	0.76	0.61	1.10	1.54	1.60			N/A	N/A
	3	1.88	0.04	0.42	4.92	9.23			N/A	N/A
	4	3.73	0.05	0.46	10.20	19.05			N/A	N/A
	5	0.44	0.04	0.38	1.27	1.46			N/A	N/A

09:00 - 09:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	178.24	>199	>199	>199	>199			N/A	N/A
	2	2.62	0.03	0.33	2.62	11.64			N/A	N/A
	3									
	4	0.84	0.09	0.89	1.31	1.31			N/A	N/A
2	1									
	2	0.57	0.57	1.10	1.54	1.60			N/A	N/A
	3	0.98	0.03	0.32	1.63	4.55			N/A	N/A
	4	1.85	0.03	0.33	2.31	8.85			N/A	N/A
	5	0.23	0.03	0.30	0.54	1.05			N/A	N/A

D5 - 2028 | FTH Do Minimum + Dev + Site B | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	365.93	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	30.99	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	184.98	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2028	FTH Do Minimum + Dev + Site B	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	776	100.000
	2		ONE HOUR	✓	936	100.000
	3					
	4		ONE HOUR	✓	1372	100.000
2	1					
	2		ONE HOUR	✓	1157	100.000
	3		ONE HOUR	✓	769	100.000
	4		ONE HOUR	✓	1591	100.000
	5		ONE HOUR	✓	107	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	198	4	574
	2	0	0	344	592
	3	0	0	0	0
	4	0	539	833	0

Demand (PCU/hr)

Junction 2

		To				
		1	2	3	4	5
From	1	0	0	0	0	0
	2	217	0	0	885	55
	3	2	219	0	515	33
	4	472	1091	0	0	28
	5	44	63	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

		To				
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.74	1188.57	222.9	222.9	F	712	1068
	2	1.12	213.62	66.2	122.2	F	859	1288
	3							
	4	0.63	4.55	1.9	3.3	A	1259	1888
2	1							
	2	0.51	3.18	1.1	1.6	A	1062	1593
	3	0.92	45.27	9.9	51.9	E	706	1058
	4	0.97	43.48	20.2	94.6	E	1460	2190
	5	0.57	43.57	1.4	6.5	E	98	147

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	584	146	1030	732	0.798	569	0	0.0	3.8	22.521	C
	2	705	176	1049	1065	0.662	696	550	0.0	2.1	10.520	B
	3			861				884				
	4	1033	258	0	2380	0.434	1030	861	0.0	0.8	2.925	A
2	1			1027				550				
	2	871	218	0	2521	0.346	869	1027	0.0	0.6	2.394	A
	3	579	145	869	1218	0.475	575	0	0.0	1.0	6.119	A
	4	1198	299	394	1914	0.626	1191	1050	0.0	1.8	5.421	A
	5	81	20	1498	481	0.167	80	87	0.0	0.2	9.845	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	698	174	1232	631	1.105	613	0	3.8	25.0	106.134	F
	2	841	210	1205	968	0.869	826	640	2.1	6.0	25.397	D
	3			976				1055				
	4	1233	308	0	2380	0.518	1232	976	0.8	1.2	3.445	A
2	1			1228				658				
	2	1040	260	0	2521	0.413	1039	1228	0.6	0.8	2.672	A
	3	691	173	1039	1092	0.633	688	0	1.0	1.8	9.716	A
	4	1430	358	472	1867	0.766	1424	1256	1.8	3.5	8.796	A
	5	96	24	1791	364	0.264	96	104	0.2	0.4	14.725	B

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	854	214	1508	494	1.730	493	0	25.0	115.2	526.142	F
	2	1031	258	1283	919	1.121	904	718	6.0	37.6	101.321	F
	3			937				1250				
	4	1511	378	0	2380	0.635	1508	937	1.2	1.9	4.526	A
2	1			1468				793				
	2	1274	318	0	2521	0.505	1272	1468	0.8	1.1	3.170	A
	3	847	212	1272	919	0.921	820	0	1.8	8.5	33.620	D
	4	1752	438	570	1808	0.969	1702	1523	3.5	15.8	29.016	D
	5	118	29	2147	222	0.531	115	126	0.4	1.2	36.078	E

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	854	214	1511	492	1.735	492	0	115.2	205.7	1020.168	F
	2	1031	258	1284	919	1.122	916	719	37.6	66.2	213.619	F
	3			944				1256				
	4	1511	378	0	2380	0.635	1511	944	1.9	1.9	4.555	A
2	1			1498				804				
	2	1274	318	0	2521	0.505	1274	1498	1.1	1.1	3.175	A
	3	847	212	1274	918	0.922	841	0	8.5	9.9	45.274	E
	4	1752	438	577	1804	0.971	1734	1537	15.8	20.2	43.477	E
	5	118	29	2184	207	0.570	117	127	1.2	1.4	43.575	E

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	698	174	1236	629	1.109	629	0	205.7	222.9	1188.565	F
	2	841	210	1219	959	0.877	944	646	66.2	40.7	205.856	F
	3			1062				1101				
	4	1233	308	0	2380	0.518	1236	1062	1.9	1.2	3.470	A
2	1			1290				682				
	2	1040	260	0	2521	0.413	1041	1290	1.1	0.8	2.679	A
	3	691	173	1041	1090	0.634	723	0	9.9	2.0	11.679	B
	4	1430	358	484	1860	0.769	1496	1281	20.2	3.8	12.709	B
	5	96	24	1873	331	0.290	100	107	1.4	0.5	17.351	C

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	584	146	1034	730	0.800	726	0	222.9	187.4	1017.365	F
	2	705	176	1169	990	0.712	855	592	40.7	3.0	54.851	F
	3			1078				946				
	4	1033	258	0	2380	0.434	1034	1078	1.2	0.8	2.945	A
2	1			1041				556				
	2	871	218	0	2521	0.346	872	1041	0.8	0.6	2.402	A
	3	579	145	872	1216	0.476	583	0	2.0	1.0	6.291	A
	4	1198	299	397	1912	0.627	1206	1057	3.8	1.9	5.668	A
	5	81	20	1515	474	0.170	81	88	0.5	0.2	10.111	B

Queue Variation Results for each time segment

07:45 - 08:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	3.83	0.03	0.31	3.83	8.86			N/A	N/A
	2	2.08	0.12	1.49	4.26	5.68			N/A	N/A
	3									
	4	0.84	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.58	0.58	1.10	1.54	1.60			N/A	N/A
	3	0.98	0.58	1.09	1.55	1.60			N/A	N/A
	4	1.81	0.55	1.64	2.73	3.20			N/A	N/A
	5	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:00 - 08:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	24.97	0.37	13.14	63.57	87.51			N/A	N/A
	2	6.01	0.13	2.38	15.43	21.87			N/A	N/A
	3									
	4	1.17	0.06	0.80	2.39	3.34			N/A	N/A
2	1									
	2	0.77	0.09	0.88	1.52	1.60			N/A	N/A
	3	1.84	0.05	0.52	4.85	7.72			N/A	N/A
	4	3.46	0.05	0.53	9.71	16.26			N/A	N/A
	5	0.39	0.00	0.00	0.39	0.39			N/A	N/A

08:15 - 08:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	115.22	62.16	110.90	163.00	180.26			N/A	N/A
	2	37.56	11.09	33.51	63.93	74.93			N/A	N/A
	3									
	4	1.89	0.03	0.29	1.89	1.89			N/A	N/A
2	1									
	2	1.12	0.03	0.28	1.12	1.12			N/A	N/A
	3	8.47	0.08	1.37	24.34	38.29			N/A	N/A
	4	15.83	0.14	5.25	43.94	64.69			N/A	N/A
	5	1.15	0.03	0.31	1.15	4.24			N/A	N/A

08:30 - 08:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	205.73	>199	>199	>199	>199			N/A	N/A
	2	66.19	24.78	61.08	106.31	122.19			N/A	N/A
	3									
	4	1.90	0.03	0.29	1.90	1.90			N/A	N/A
2	1									
	2	1.12	0.03	0.29	1.12	1.17			N/A	N/A
	3	9.94	0.05	0.54	28.34	51.90			N/A	N/A
	4	20.22	0.09	3.35	59.35	94.56			N/A	N/A
	5	1.35	0.04	0.39	3.32	6.52			N/A	N/A

08:45 - 09:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	222.87	>199	>199	>199	>199			N/A	N/A
	2	40.68	14.14	37.06	66.29	76.64			N/A	N/A
	3									
	4	1.19	0.31	1.17	1.63	1.95			N/A	N/A
2	1									
	2	0.78	0.61	1.10	1.54	1.60			N/A	N/A
	3	1.96	0.04	0.41	5.08	9.84			N/A	N/A
	4	3.84	0.05	0.46	10.51	19.66			N/A	N/A
	5	0.46	0.04	0.40	1.30	1.48			N/A	N/A

09:00 - 09:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	187.36	>199	>199	>199	>199			N/A	N/A
	2	2.98	0.03	0.33	2.99	13.53			N/A	N/A
	3									
	4	0.85	0.09	0.89	1.44	1.44			N/A	N/A
2	1									
	2	0.58	0.58	1.10	1.54	1.60			N/A	N/A
	3	1.01	0.03	0.32	1.49	4.44			N/A	N/A
	4	1.88	0.03	0.33	2.19	8.84			N/A	N/A
	5	0.23	0.03	0.31	0.58	1.12			N/A	N/A

D6 - 2028 | FTH Do Minimum + Dev + Site B + RF | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	396.91	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	34.50	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	202.02	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2028	FTH Do Minimum + Dev + Site B + RF	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	780	100.000
	2		ONE HOUR	✓	973	100.000
	3					
	4		ONE HOUR	✓	1381	100.000
2	1					
	2		ONE HOUR	✓	1170	100.000
	3		ONE HOUR	✓	777	100.000
	4		ONE HOUR	✓	1592	100.000
	5		ONE HOUR	✓	107	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	202	4	574
	2	0	0	368	605
	3	0	0	0	0
	4	0	548	833	0

Demand (PCU/hr)

Junction 2

From \ To	1	2	3	4	5
1	0	0	0	0	0
2	227	0	0	888	55
3	2	227	0	515	33
4	472	1092	0	0	28
5	44	63	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

From \ To	1	2	3	4
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10

Heavy Vehicle %

Junction 2

From \ To	1	2	3	4	5
1	10	10	10	10	10
2	10	10	10	10	10
3	10	10	10	10	10
4	10	10	10	10	10
5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.76	1230.76	231.1	231.1	F	716	1074
	2	1.16	285.27	84.7	141.5	F	893	1339
	3							
	4	0.64	4.61	1.9	3.5	A	1267	1901
2	1							
	2	0.51	3.21	1.1	1.6	A	1074	1610
	3	0.94	53.87	12.0	58.6	F	713	1069
	4	0.98	47.22	22.2	98.5	E	1461	2191
	5	0.59	46.84	1.4	7.0	E	98	147

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	587	147	1036	729	0.806	571	0	0.0	4.0	23.234	C
	2	733	183	1048	1065	0.688	723	559	0.0	2.3	11.292	B
	3			870				902				
	4	1040	260	0	2380	0.437	1036	870	0.0	0.8	2.940	A
2	1			1034				558				
	2	881	220	0	2521	0.349	878	1034	0.0	0.6	2.409	A
	3	585	146	878	1211	0.483	581	0	0.0	1.0	6.244	A
	4	1199	300	408	1906	0.629	1191	1052	0.0	1.8	5.488	A
	5	81	20	1512	475	0.169	80	87	0.0	0.2	9.983	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	701	175	1240	627	1.118	611	0	4.0	26.6	112.218	F
	2	875	219	1201	971	0.901	854	650	2.3	7.5	29.807	D
	3			981				1074				
	4	1241	310	0	2380	0.522	1240	981	0.8	1.2	3.469	A
2	1			1236				667				
	2	1052	263	0	2521	0.417	1051	1236	0.6	0.8	2.693	A
	3	699	175	1051	1083	0.645	695	0	1.0	1.9	10.096	B
	4	1431	358	488	1858	0.770	1424	1258	1.8	3.5	8.998	A
	5	96	24	1808	357	0.269	95	104	0.2	0.4	15.096	C

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	859	215	1518	489	1.757	489	0	26.6	119.2	551.758	F
	2	1071	268	1277	923	1.161	913	729	7.5	47.1	121.649	F
	3			927				1263				
	4	1521	380	0	2380	0.639	1518	927	1.2	1.9	4.577	A
2	1			1474				803				
	2	1288	322	0	2521	0.511	1287	1474	0.8	1.1	3.207	A
	3	855	214	1287	909	0.941	824	0	1.9	9.8	37.681	E
	4	1753	438	588	1797	0.975	1699	1523	3.5	16.9	30.578	D
	5	118	29	2162	216	0.546	115	125	0.4	1.2	38.064	E

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	859	215	1520	487	1.762	487	0	119.2	212.0	1055.471	F
	2	1071	268	1278	922	1.161	921	730	47.1	84.7	265.680	F
	3			931				1268				
	4	1521	380	0	2380	0.639	1520	931	1.9	1.9	4.607	A
2	1			1504				814				
	2	1288	322	0	2521	0.511	1288	1504	1.1	1.1	3.212	A
	3	855	214	1288	908	0.942	847	0	9.8	12.0	53.868	F
	4	1753	438	596	1793	0.978	1732	1539	16.9	22.2	47.216	E
	5	118	29	2201	200	0.589	117	127	1.2	1.4	46.840	E

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	701	175	1244	625	1.122	625	0	212.0	231.1	1230.763	F
	2	875	219	1214	963	0.909	950	656	84.7	65.9	285.271	F
	3			1051				1113				
	4	1241	310	0	2380	0.522	1244	1051	1.9	1.2	3.495	A
2	1			1306				693				
	2	1052	263	0	2521	0.417	1053	1306	1.1	0.8	2.700	A
	3	699	175	1053	1082	0.646	738	0	12.0	2.1	12.806	B
	4	1431	358	503	1848	0.774	1504	1289	22.2	4.0	13.765	B
	5	96	24	1899	321	0.300	100	107	1.4	0.5	18.251	C

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	587	147	1041	726	0.808	723	0	231.1	197.1	1066.569	F
	2	733	183	1164	994	0.737	976	600	65.9	4.9	137.434	F
	3			1139				1001				
	4	1040	260	0	2380	0.437	1041	1139	1.2	0.9	2.960	A
2	1			1048				564				
	2	881	220	0	2521	0.349	882	1048	0.8	0.6	2.417	A
	3	585	146	882	1209	0.484	589	0	2.1	1.0	6.430	A
	4	1199	300	411	1904	0.630	1207	1060	4.0	1.9	5.748	A
	5	81	20	1530	468	0.172	82	88	0.5	0.2	10.269	B

Queue Variation Results for each time segment

07:45 - 08:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	3.99	0.03	0.31	3.99	7.94			N/A	N/A
	2	2.33	0.10	1.46	5.23	7.21			N/A	N/A
	3									
	4	0.85	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.59	0.59	1.10	1.54	1.60			N/A	N/A
	3	1.01	0.56	1.10	1.57	1.63			N/A	N/A
	4	1.83	0.49	1.65	2.82	3.27			N/A	N/A
	5	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:00 - 08:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	26.60	0.39	14.01	67.80	93.35			N/A	N/A
	2	7.47	0.18	3.61	18.53	25.57			N/A	N/A
	3									
	4	1.19	0.06	0.79	2.48	3.49			N/A	N/A
2	1									
	2	0.78	0.09	0.88	1.53	1.62			N/A	N/A
	3	1.94	0.05	0.51	5.15	8.33			N/A	N/A
	4	3.54	0.05	0.54	9.95	16.62			N/A	N/A
	5	0.40	0.00	0.00	0.40	0.40			N/A	N/A

08:15 - 08:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	119.17	63.58	114.59	169.38	187.55			N/A	N/A
	2	47.10	18.02	43.47	74.78	85.75			N/A	N/A
	3									
	4	1.92	0.03	0.29	1.92	1.92			N/A	N/A
2	1									
	2	1.14	0.03	0.28	1.14	1.14			N/A	N/A
	3	9.82	0.10	2.75	27.42	41.02			N/A	N/A
	4	16.92	0.17	6.53	45.97	66.35			N/A	N/A
	5	1.21	0.03	0.32	1.35	4.94			N/A	N/A

08:30 - 08:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	212.01	>199	>199	>199	>199			N/A	N/A
	2	84.73	40.04	80.37	126.03	141.52			N/A	N/A
	3									
	4	1.93	0.03	0.29	1.93	1.93			N/A	N/A
2	1									
	2	1.15	0.03	0.29	1.15	1.15			N/A	N/A
	3	12.00	0.07	1.59	35.21	58.59			N/A	N/A
	4	22.18	0.11	5.31	64.10	98.49			N/A	N/A
	5	1.45	0.04	0.40	3.65	7.01			N/A	N/A

08:45 - 09:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	231.07	>199	>199	>199	>199			N/A	N/A
	2	65.86	31.94	62.54	96.71	108.23			N/A	N/A
	3									
	4	1.21	0.29	1.18	1.69	1.99			N/A	N/A
2	1									
	2	0.79	0.61	1.10	1.54	1.60			N/A	N/A
	3	2.07	0.04	0.40	5.28	10.64			N/A	N/A
	4	3.97	0.05	0.46	10.86	20.37			N/A	N/A
	5	0.48	0.04	0.42	1.34	1.50			N/A	N/A

09:00 - 09:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	197.12	>199	>199	>199	>199			N/A	N/A
	2	4.92	0.04	0.40	11.44	26.79			N/A	N/A
	3									
	4	0.86	0.09	0.88	1.55	1.55			N/A	N/A
2	1									
	2	0.59	0.59	1.10	1.54	1.60			N/A	N/A
	3	1.05	0.03	0.32	1.31	4.32			N/A	N/A
	4	1.90	0.03	0.33	2.11	8.83			N/A	N/A
	5	0.23	0.03	0.31	0.69	1.18			N/A	N/A

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.1.0.2307
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Filename: Junction 7 - Wrotham Road_A2 Linked Rbt - Base Model PM.j11
Path: C:\Users\mattjohnson\Ridge and Partners LLP\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Modelling\Arcady\Tech Note 2\2028 FTH Do Minimum
Report generation date: 02/09/2026 15:55:28

»D1 - 2023 | Base | PM
»D2 - 2025 | Base | PM
»D3 - 2028 | FTH Do Minimum | PM
»D4 - 2028 | FTH Do Minimum + Dev | PM
»D5 - 2028 | FTH Do Minimum + Dev + Site B | PM
»D6 - 2028 | FTH Do Minimum + Dev + Site B + RF | PM

Summary of junction performance

	PM			
	Set ID	Queue (PCU)	Delay (s)	RFC
	2023 - Base			
Junction 1 - Arm 1	D1	60.8	300.18	1.19
Junction 1 - Arm 2		5.8	26.09	0.85
Junction 1 - Arm 4		1.2	3.45	0.52
Junction 2 - Arm 2		0.9	2.81	0.44
Junction 2 - Arm 3		5.2	15.55	0.83
Junction 2 - Arm 4		4.4	11.14	0.80
Junction 2 - Arm 5		0.0	0.00	0.00
	2025 - Base			
Junction 1 - Arm 1	D2	66.9	328.51	1.21
Junction 1 - Arm 2		6.0	27.10	0.86
Junction 1 - Arm 4		1.2	3.47	0.52
Junction 2 - Arm 2		0.9	2.82	0.44
Junction 2 - Arm 3		5.7	17.00	0.85
Junction 2 - Arm 4		4.6	11.54	0.81
Junction 2 - Arm 5		0.0	0.00	0.00
	2028 - FTH Do Minimum			
Junction 1 - Arm 1	D3	158.8	916.21	1.57
Junction 1 - Arm 2		12.4	53.22	0.94
Junction 1 - Arm 4		1.5	3.97	0.58
Junction 2 - Arm 2		1.1	3.12	0.49
Junction 2 - Arm 3		45.0	105.02	1.04
Junction 2 - Arm 4		10.4	25.25	0.92
Junction 2 - Arm 5		1.5	44.10	0.60
	2028 - FTH Do Minimum + Dev			
Junction 1 - Arm 1	D4	203.1	1167.85	1.74
Junction 1 - Arm 2		17.9	70.52	0.98
Junction 1 - Arm 4		1.8	4.35	0.62
Junction 2 - Arm 2		1.1	3.16	0.50
Junction 2 - Arm 3		77.9	166.43	1.10
Junction 2 - Arm 4		14.0	33.36	0.94
Junction 2 - Arm 5		2.0	60.39	0.68
	2028 - FTH Do Minimum + Dev + Site B			
Junction 1 - Arm 1	D5	218.9	1291.43	1.80
Junction 1 - Arm 2		20.0	76.81	0.99
Junction 1 - Arm 4		1.8	4.46	0.63
Junction 2 - Arm 2		1.1	3.17	0.50
Junction 2 - Arm 3		87.7	185.17	1.11
Junction 2 - Arm 4		15.3	36.42	0.95
Junction 2 - Arm 5		2.2	66.75	0.70
	2028 - FTH Do Minimum + Dev + Site B + RF			
Junction 1 - Arm 1	D6	237.8	1428.96	1.87
Junction 1 - Arm 2		22.5	83.69	1.00
Junction 1 - Arm 4		1.9	4.59	0.64
Junction 2 - Arm 2		1.1	3.19	0.50
Junction 2 - Arm 3		100.9	210.39	1.14
Junction 2 - Arm 4		16.9	39.92	0.96
Junction 2 - Arm 5		2.5	75.45	0.73

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.

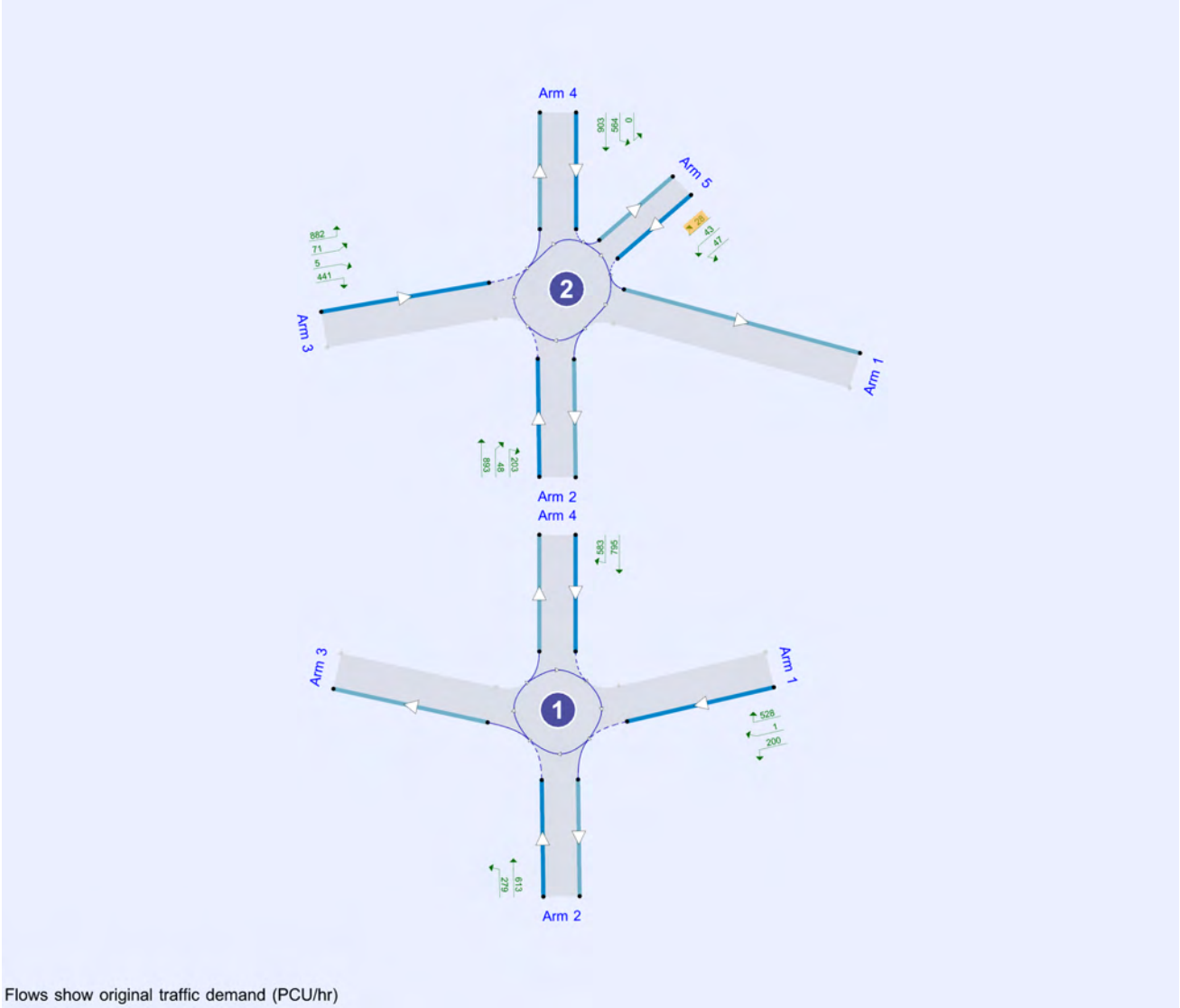
File summary

File Description

Title	
Location	Wrotham Road/A2 Southern Roundabout
Site number	7
Date	09/04/2026
Version	
Status	(new file)
Identifier	MJ
Client	Richborough
Jobnumber	T25512
Enumerator	AzureAD\MatthewJohnson
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	PCU	PCU	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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75	✓					0.85	36.00	20.00		

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	Base	PM	ONE HOUR	16:45	18:15	15	✓
D2	2025	Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2028	FTH Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D4	2028	FTH Do Minimum + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D5	2028	FTH Do Minimum + Dev + Site B	PM	ONE HOUR	16:45	18:15	15	✓
D6	2028	FTH Do Minimum + Dev + Site B + RF	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

D1 - 2023 | Base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	83.59	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	10.14	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	40.99	E

Arms

Arms

Junction	Arm	Name	Description	No give-way line
1	1	A2 (E) Off-Slip		
	2	Wrotham Road S		
	3	A2 (W) On-Slip		
	4	Wrotham Road N - Internal Link		
2	1	A2 (E) On-Slip		
	2	Wrotham Road S - Internal Link		
	3	A2 (W) Off-Slip		
	4	Wrotham Road N		
	5	Hotel access		

Roundabout Geometry

Junction	Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	1	3.70	8.50	10.2	19.1	59.9	60.0	✓	
	2	4.90	9.20	22.2	24.1	59.9	49.0		
	3								✓
	4	7.60	8.10	6.9	20.8	59.9	36.0		
2	1								✓
	2	7.10	9.30	17.9	31.1	63.9	47.0		
	3	7.00	10.20	17.9	40.0	63.9	24.0	✓	
	4	4.60	9.30	22.1	48.8	63.9	50.0		
	5	3.10	5.50	5.4	12.7	63.9	59.0		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Junction	Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1	1	Direct	Calbration	-335
	2	Direct	Calibration	-580
	3			
	4	None		
2	1			
	2	None		
	3	Direct	Calibration	-550
	4	None		
	5	None		

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1	1	0.499	1185
	2	0.622	1577
	3		
	4	0.671	2380
2	1		
	2	0.662	2521
	3	0.741	2312
	4	0.600	2150
	5	0.400	1080

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

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	Base	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	617	100.000
	2		ONE HOUR	✓	766	100.000
	3					
	4		ONE HOUR	✓	1118	100.000
2	1					
	2		ONE HOUR	✓	1009	100.000
	3		ONE HOUR	✓	1124	100.000
	4		ONE HOUR	✓	1321	100.000
	5		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	169	1	447
	2	0	0	214	552
	3	0	0	0	0
	4	0	635	483	0

Demand (PCU/hr)

Junction 2

		To				
		1	2	3	4	5
From	1	0	0	0	0	0
	2	182	0	0	827	0
	3	4	332	0	788	0
	4	531	790	0	0	0
	5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

		To				
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.19	300.18	60.8	104.6	F	566	849
	2	0.85	26.09	5.8	29.7	D	703	1054
	3							
	4	0.52	3.45	1.2	1.6	A	1026	1539
2	1							
	2	0.44	2.81	0.9	2.1	A	926	1389
	3	0.83	15.55	5.2	26.3	C	1031	1547
	4	0.80	11.14	4.4	19.2	B	1212	1818
	5	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	465	116	839	767	0.606	458	0	0.0	1.6	12.566	B
	2	577	144	695	1145	0.504	572	602	0.0	1.1	6.864	A
	3			744				523				
	4	842	210	0	2380	0.354	839	744	0.0	0.6	2.567	A
2	1			841				538				
	2	760	190	0	2521	0.301	758	841	0.0	0.5	2.244	A
	3	846	212	758	1751	0.483	842	0	0.0	1.0	4.340	A
	4	995	249	388	1917	0.519	990	1211	0.0	1.2	4.249	A
	5	0	0	1378	529	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	555	139	1004	685	0.810	545	0	1.6	4.1	26.618	D
	2	689	172	830	1061	0.649	685	720	1.1	2.0	10.427	B
	3			889				626				
	4	1005	251	0	2380	0.422	1004	889	0.6	0.8	2.877	A
2	1			1006				643				
	2	907	227	0	2521	0.360	906	1006	0.5	0.6	2.453	A
	3	1010	253	906	1640	0.616	1008	0	1.0	1.7	6.229	A
	4	1188	297	465	1871	0.635	1185	1449	1.2	1.9	5.743	A
	5	0	0	1649	420	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	679	170	1229	573	1.187	562	0	4.1	33.5	138.874	F
	2	843	211	939	993	0.849	830	852	2.0	5.3	22.594	C
	3			1005				764				
	4	1231	308	0	2380	0.517	1229	1005	0.8	1.2	3.437	A
2	1			1226				785				
	2	1111	278	0	2521	0.441	1110	1226	0.6	0.9	2.806	A
	3	1238	309	1110	1490	0.831	1225	0	1.7	4.9	14.304	B
	4	1454	364	566	1810	0.803	1445	1768	1.9	4.2	10.572	B
	5	0	0	2011	276	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	679	170	1231	572	1.188	570	0	33.5	60.8	300.182	F
	2	843	211	946	989	0.853	841	855	5.3	5.8	26.091	D
	3			1019				768				
	4	1231	308	0	2380	0.517	1231	1019	1.2	1.2	3.445	A
2	1			1235				789				
	2	1111	278	0	2521	0.441	1111	1235	0.9	0.9	2.808	A
	3	1238	309	1111	1489	0.831	1237	0	4.9	5.2	15.552	C
	4	1454	364	570	1808	0.804	1454	1778	4.2	4.4	11.136	B
	5	0	0	2024	271	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	555	139	1007	684	0.811	672	0	60.8	31.5	249.036	F
	2	689	172	922	1004	0.686	702	756	5.8	2.5	13.640	B
	3			992				632				
	4	1005	251	0	2380	0.422	1007	992	1.2	0.8	2.885	A
2	1			1018				649				
	2	907	227	0	2521	0.360	908	1018	0.9	0.6	2.456	A
	3	1010	253	908	1639	0.616	1024	0	5.2	1.8	6.569	A
	4	1188	297	470	1868	0.636	1197	1462	4.4	2.0	5.984	A
	5	0	0	1667	413	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	465	116	843	765	0.607	583	0	31.5	1.8	37.948	E
	2	577	144	788	1087	0.530	582	638	2.5	1.3	7.903	A
	3			842				527				
	4	842	210	0	2380	0.354	843	842	0.8	0.6	2.578	A
2	1			847				541				
	2	760	190	0	2521	0.301	760	847	0.6	0.5	2.249	A
	3	846	212	760	1749	0.484	849	0	1.8	1.0	4.418	A
	4	995	249	391	1916	0.519	998	1218	2.0	1.2	4.328	A
	5	0	0	1389	525	0.000	0	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

16:45 - 17:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	1.63	0.10	1.24	3.20	4.29			N/A	N/A
	2	1.10	0.61	1.10	1.54	1.60			N/A	N/A
	3									
	4	0.60	0.60	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.47	0.00	0.00	0.47	0.47			N/A	N/A
	3	1.02	0.61	1.10	1.54	1.60			N/A	N/A
	4	1.17	0.61	1.10	1.54	1.60			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	4.07	0.08	1.51	10.89	16.25			N/A	N/A
	2	1.97	0.06	0.89	4.92	7.31			N/A	N/A
	3									
	4	0.80	0.09	0.88	1.54	1.63			N/A	N/A
2	1									
	2	0.62	0.08	0.82	1.48	1.57			N/A	N/A
	3	1.73	0.05	0.50	4.51	7.30			N/A	N/A
	4	1.88	0.05	0.52	4.94	7.86			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	33.47	11.60	30.43	54.36	62.83			N/A	N/A
	2	5.31	0.04	0.44	13.95	28.60			N/A	N/A
	3									
	4	1.17	0.03	0.28	1.17	1.17			N/A	N/A
2	1									
	2	0.86	0.03	0.28	0.86	0.86			N/A	N/A
	3	4.94	0.04	0.37	9.29	26.30			N/A	N/A
	4	4.25	0.03	0.33	4.25	19.16			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	60.76	26.70	57.07	92.43	104.55			N/A	N/A
	2	5.79	0.04	0.36	9.18	29.67			N/A	N/A
	3									
	4	1.17	0.03	0.29	1.17	1.17			N/A	N/A
2	1									
	2	0.86	0.03	0.30	0.86	2.07			N/A	N/A
	3	5.16	0.03	0.32	5.16	19.47			N/A	N/A
	4	4.38	0.03	0.31	4.38	8.74			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	31.54	10.71	28.58	51.47	59.61			N/A	N/A
	2	2.51	0.06	0.65	6.74	10.67			N/A	N/A
	3									
	4	0.81	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.62	0.61	1.10	1.54	1.60			N/A	N/A
	3	1.80	0.05	0.52	4.69	7.46			N/A	N/A
	4	1.95	0.06	0.81	4.94	7.43			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	1.80	0.03	0.30	1.80	3.47			N/A	N/A
	2	1.26	0.04	0.36	2.83	6.38			N/A	N/A
	3									
	4	0.60	0.60	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.48	0.00	0.00	0.48	0.48			N/A	N/A
	3	1.04	0.04	0.37	2.36	5.09			N/A	N/A
	4	1.20	0.04	0.41	3.02	5.40			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

D2 - 2025 | Base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	91.28	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	10.79	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	44.58	E

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025	Base	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	625	100.000
	2		ONE HOUR	✓	771	100.000
	3					
	4		ONE HOUR	✓	1125	100.000
2	1					
	2		ONE HOUR	✓	1015	100.000
	3		ONE HOUR	✓	1140	100.000
	4		ONE HOUR	✓	1329	100.000
	5		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	171	1	453
	2	0	0	215	556
	3	0	0	0	0
	4	0	639	486	0

Demand (PCU/hr)

Junction 2

From \ To	1	2	3	4	5
1	0	0	0	0	0
2	183	0	0	832	0
3	4	337	0	799	0
4	534	795	0	0	0
5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

From \ To	1	2	3	4
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10

Heavy Vehicle %

Junction 2

From \ To	1	2	3	4	5
1	10	10	10	10	10
2	10	10	10	10	10
3	10	10	10	10	10
4	10	10	10	10	10
5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.21	328.51	66.9	110.8	F	574	860
	2	0.86	27.10	6.0	31.6	D	707	1061
	3							
	4	0.52	3.47	1.2	1.6	A	1032	1548
2	1							
	2	0.44	2.82	0.9	2.0	A	931	1397
	3	0.85	17.00	5.7	29.4	C	1046	1569
	4	0.81	11.54	4.6	20.5	B	1220	1829
	5	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	471	118	845	764	0.616	464	0	0.0	1.7	12.899	B
	2	580	145	702	1141	0.509	576	607	0.0	1.1	6.957	A
	3			751				526				
	4	847	212	0	2380	0.356	845	751	0.0	0.6	2.571	A
2	1			848				541				
	2	764	191	0	2521	0.303	762	848	0.0	0.5	2.250	A
	3	858	215	762	1747	0.491	854	0	0.0	1.1	4.414	A
	4	1001	250	393	1914	0.523	996	1223	0.0	1.2	4.288	A
	5	0	0	1389	525	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	562	140	1011	682	0.824	551	0	1.7	4.4	28.239	D
	2	693	173	837	1057	0.656	689	725	1.1	2.0	10.674	B
	3			897				630				
	4	1011	253	0	2380	0.425	1011	897	0.6	0.8	2.890	A
2	1			1015				647				
	2	912	228	0	2521	0.362	912	1015	0.5	0.6	2.462	A
	3	1025	256	912	1636	0.626	1022	0	1.1	1.8	6.411	A
	4	1195	299	470	1868	0.640	1192	1464	1.2	1.9	5.829	A
	5	0	0	1662	416	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	688	172	1237	569	1.210	559	0	4.4	36.6	150.145	F
	2	849	212	941	992	0.856	835	856	2.0	5.5	23.332	C
	3			1008				768				
	4	1239	310	0	2380	0.520	1237	1008	0.8	1.2	3.461	A
2	1			1236				790				
	2	1118	279	0	2521	0.443	1117	1236	0.6	0.9	2.819	A
	3	1255	314	1117	1485	0.845	1241	0	1.8	5.4	15.397	C
	4	1463	366	572	1807	0.810	1453	1785	1.9	4.4	10.907	B
	5	0	0	2026	270	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	688	172	1239	568	1.212	567	0	36.6	66.9	328.506	F
	2	849	212	947	989	0.859	847	859	5.5	6.0	27.102	D
	3			1021				772				
	4	1239	310	0	2380	0.520	1239	1021	1.2	1.2	3.469	A
2	1			1246				794				
	2	1118	279	0	2521	0.443	1118	1246	0.9	0.9	2.821	A
	3	1255	314	1118	1484	0.846	1254	0	5.4	5.7	17.000	C
	4	1463	366	577	1804	0.811	1463	1795	4.4	4.6	11.542	B
	5	0	0	2039	265	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	562	140	1013	681	0.826	670	0	66.9	40.0	287.014	F
	2	693	173	924	1003	0.691	707	758	6.0	2.6	13.962	B
	3			995				636				
	4	1011	253	0	2380	0.425	1013	995	1.2	0.8	2.901	A
2	1			1028				653				
	2	912	228	0	2521	0.362	913	1028	0.9	0.6	2.465	A
	3	1025	256	913	1635	0.627	1040	0	5.7	1.9	6.819	A
	4	1195	299	476	1865	0.641	1205	1478	4.6	2.0	6.095	A
	5	0	0	1681	408	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	471	118	848	763	0.617	623	0	40.0	1.9	60.300	F
	2	580	145	819	1068	0.543	585	652	2.6	1.3	8.286	A
	3			874				530				
	4	847	212	0	2380	0.356	848	874	0.8	0.6	2.585	A
2	1			855				544				
	2	764	191	0	2521	0.303	765	855	0.6	0.5	2.255	A
	3	858	215	765	1745	0.492	861	0	1.9	1.1	4.496	A
	4	1001	250	396	1913	0.523	1004	1231	2.0	1.2	4.371	A
	5	0	0	1399	521	0.000	0	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

16:45 - 17:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	1.70	0.09	1.21	3.51	4.82			N/A	N/A
	2	1.12	0.61	1.10	1.54	1.60			N/A	N/A
	3									
	4	0.61	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.48	0.00	0.00	0.48	0.48			N/A	N/A
	3	1.05	0.61	1.10	1.54	1.60			N/A	N/A
	4	1.19	0.61	1.10	1.54	1.60			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	4.39	0.08	1.64	11.74	17.38			N/A	N/A
	2	2.03	0.06	0.90	5.10	7.57			N/A	N/A
	3									
	4	0.81	0.09	0.88	1.55	1.64			N/A	N/A
2	1									
	2	0.62	0.08	0.83	1.49	1.57			N/A	N/A
	3	1.81	0.05	0.50	4.79	7.77			N/A	N/A
	4	1.92	0.05	0.52	5.07	8.13			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	36.56	13.90	33.64	57.89	66.39			N/A	N/A
	2	5.53	0.04	0.45	14.86	29.61			N/A	N/A
	3									
	4	1.18	0.03	0.28	1.18	1.18			N/A	N/A
2	1									
	2	0.87	0.03	0.28	0.87	0.87			N/A	N/A
	3	5.41	0.04	0.38	11.63	29.45			N/A	N/A
	4	4.41	0.03	0.34	4.87	20.54			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	66.92	31.93	63.44	98.88	110.84			N/A	N/A
	2	6.04	0.04	0.36	10.32	31.58			N/A	N/A
	3									
	4	1.19	0.03	0.29	1.19	1.19			N/A	N/A
2	1									
	2	0.87	0.03	0.30	0.87	2.01			N/A	N/A
	3	5.69	0.03	0.33	5.69	24.05			N/A	N/A
	4	4.56	0.03	0.31	4.56	10.06			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	40.00	16.89	37.28	61.31	69.61			N/A	N/A
	2	2.57	0.06	0.55	7.01	11.23			N/A	N/A
	3									
	4	0.82	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.63	0.61	1.10	1.54	1.60			N/A	N/A
	3	1.88	0.05	0.50	5.01	8.14			N/A	N/A
	4	2.00	0.06	0.76	5.11	7.73			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	1.90	0.03	0.30	1.90	3.64			N/A	N/A
	2	1.33	0.04	0.37	3.02	6.76			N/A	N/A
	3									
	4	0.61	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.48	0.00	0.00	0.48	0.48			N/A	N/A
	3	1.07	0.04	0.36	2.32	5.33			N/A	N/A
	4	1.22	0.04	0.40	3.06	5.62			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

D3 - 2028 | FTH Do Minimum | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	250.56	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	45.72	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	129.88	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028	FTH Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	706	100.000
	2		ONE HOUR	✓	812	100.000
	3					
	4		ONE HOUR	✓	1256	100.000
2	1					
	2		ONE HOUR	✓	1117	100.000
	3		ONE HOUR	✓	1303	100.000
	4		ONE HOUR	✓	1440	100.000
	5		ONE HOUR	✓	118	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	177	1	528
	2	0	0	227	585
	3	0	0	0	0
	4	0	673	583	0

Demand (PCU/hr)

Junction 2

		To				
		1	2	3	4	5
From	1	0	0	0	0	0
	2	190	0	0	879	48
	3	5	345	0	882	71
	4	564	876	0	0	0
	5	47	43	0	28	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

		To				
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.57	916.21	158.8	220.0	F	648	972
	2	0.94	53.22	12.4	60.9	F	745	1118
	3							
	4	0.58	3.97	1.5	2.1	A	1153	1729
2	1							
	2	0.49	3.12	1.1	1.6	A	1025	1537
	3	1.04	105.02	45.0	114.3	F	1196	1793
	4	0.92	25.25	10.4	57.6	D	1321	1982
	5	0.60	44.10	1.5	7.5	E	108	162

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	532	133	943	716	0.743	520	0	0.0	2.9	19.243	C
	2	611	153	827	1063	0.575	605	635	0.0	1.5	8.552	A
	3			825				608				
	4	946	236	0	2380	0.397	943	825	0.0	0.7	2.749	A
2	1			967				604				
	2	841	210	21	2507	0.335	839	946	0.0	0.6	2.371	A
	3	981	245	860	1675	0.586	975	0	0.0	1.5	5.608	A
	4	1084	271	494	1854	0.585	1078	1341	0.0	1.5	5.065	A
	5	89	22	1483	487	0.182	88	89	0.0	0.2	9.893	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	635	159	1128	623	1.019	588	0	2.9	14.7	72.720	F
	2	730	182	964	978	0.747	724	752	1.5	3.0	15.207	C
	3			961				727				
	4	1129	282	0	2380	0.474	1128	961	0.7	1.0	3.160	A
2	1			1156				722				
	2	1004	251	25	2504	0.401	1003	1131	0.6	0.7	2.637	A
	3	1171	293	1028	1550	0.756	1164	0	1.5	3.3	10.092	B
	4	1295	324	590	1796	0.721	1290	1603	1.5	2.8	7.744	A
	5	106	27	1773	371	0.286	105	107	0.2	0.4	14.859	B

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	777	194	1381	497	1.564	496	0	14.7	85.0	377.543	F
	2	894	224	1013	948	0.944	865	864	3.0	10.2	38.792	E
	3			994				884				
	4	1383	346	0	2380	0.581	1381	994	1.0	1.5	3.956	A
2	1			1379				875				
	2	1230	307	30	2501	0.492	1229	1349	0.7	1.1	3.110	A
	3	1435	359	1259	1380	1.040	1337	0	3.3	27.8	53.454	F
	4	1585	396	694	1734	0.914	1559	1902	2.8	9.2	20.246	C
	5	130	32	2128	229	0.566	126	126	0.4	1.3	37.299	E

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	777	194	1383	496	1.567	496	0	85.0	155.3	791.232	F
	2	894	224	1014	947	0.944	885	865	10.2	12.4	53.225	F
	3			1009				890				
	4	1383	346	0	2380	0.581	1383	1009	1.5	1.5	3.971	A
2	1			1401				885				
	2	1230	307	31	2500	0.492	1230	1370	1.1	1.1	3.116	A
	3	1435	359	1260	1378	1.041	1365	0	27.8	45.0	105.017	F
	4	1585	396	703	1728	0.917	1581	1923	9.2	10.4	25.251	D
	5	130	32	2157	218	0.597	129	127	1.3	1.5	44.096	E

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	635	159	1131	622	1.021	621	0	155.3	158.8	916.213	F
	2	730	182	990	962	0.759	765	762	12.4	3.7	22.938	C
	3			1015				740				
	4	1129	282	0	2380	0.474	1131	1015	1.5	1.0	3.175	A
2	1			1225				738				
	2	1004	251	26	2503	0.401	1005	1199	1.1	0.7	2.647	A
	3	1171	293	1032	1548	0.757	1337	0	45.0	3.7	32.894	D
	4	1295	324	646	1762	0.735	1324	1722	10.4	3.2	9.586	A
	5	106	27	1854	339	0.313	110	116	1.5	0.5	17.592	C

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	532	133	947	714	0.745	709	0	158.8	114.5	695.654	F
	2	611	153	970	974	0.628	619	685	3.7	1.9	11.369	B
	3			976				613				
	4	946	236	0	2380	0.397	947	976	1.0	0.7	2.764	A
2	1			979				610				
	2	841	210	21	2506	0.336	842	958	0.7	0.6	2.381	A
	3	981	245	863	1673	0.586	989	0	3.7	1.6	5.866	A
	4	1084	271	499	1851	0.586	1090	1353	3.2	1.6	5.249	A
	5	89	22	1499	481	0.185	90	90	0.5	0.3	10.165	B

Queue Variation Results for each time segment

16:45 - 17:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	2.92	0.03	0.33	3.40	13.79			N/A	N/A
	2	1.46	0.60	1.35	1.93	2.11			N/A	N/A
	3									
	4	0.72	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.55	0.55	1.10	1.54	1.60			N/A	N/A
	3	1.53	0.15	1.32	2.61	3.23			N/A	N/A
	4	1.53	0.62	1.42	1.97	2.13			N/A	N/A
	5	0.24	0.00	0.00	0.24	0.24			N/A	N/A

17:00 - 17:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	14.66	0.22	6.90	38.00	53.16			N/A	N/A
	2	3.04	0.07	1.28	7.92	11.74			N/A	N/A
	3									
	4	0.99	0.08	0.88	1.70	2.12			N/A	N/A
2	1									
	2	0.73	0.09	0.88	1.50	1.58			N/A	N/A
	3	3.26	0.05	0.50	9.08	15.62			N/A	N/A
	4	2.76	0.05	0.52	7.61	12.70			N/A	N/A
	5	0.43	0.00	0.00	0.43	0.43			N/A	N/A

17:15 - 17:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	84.98	46.82	81.83	118.80	130.98			N/A	N/A
	2	10.22	0.10	2.85	28.58	42.79			N/A	N/A
	3									
	4	1.51	0.03	0.28	1.51	1.51			N/A	N/A
2	1									
	2	1.06	0.03	0.28	1.06	1.06			N/A	N/A
	3	27.75	2.64	21.30	57.46	72.06			N/A	N/A
	4	9.25	0.05	0.54	26.52	47.97			N/A	N/A
	5	1.31	0.03	0.32	1.61	5.70			N/A	N/A

17:30 - 17:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	155.32	>199	>199	>199	>199			N/A	N/A
	2	12.39	0.07	1.54	36.36	60.95			N/A	N/A
	3									
	4	1.52	0.03	0.29	1.52	1.52			N/A	N/A
2	1									
	2	1.06	0.03	0.29	1.06	1.42			N/A	N/A
	3	45.04	5.31	35.55	91.85	114.29			N/A	N/A
	4	10.45	0.04	0.41	23.72	57.65			N/A	N/A
	5	1.51	0.04	0.39	3.70	7.55			N/A	N/A

17:45 - 18:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	158.82	>199	>199	>199	>199			N/A	N/A
	2	3.74	0.05	0.47	10.40	18.94			N/A	N/A
	3									
	4	1.00	0.57	1.09	1.56	1.61			N/A	N/A
2	1									
	2	0.74	0.61	1.10	1.54	1.60			N/A	N/A
	3	3.68	0.04	0.41	9.20	19.71			N/A	N/A
	4	3.15	0.05	0.50	8.77	15.04			N/A	N/A
	5	0.52	0.04	0.44	1.38	1.54			N/A	N/A

18:00 - 18:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	114.54	59.84	109.90	164.15	182.19			N/A	N/A
	2	1.91	0.04	0.35	3.54	9.94			N/A	N/A
	3									
	4	0.73	0.11	0.91	1.51	1.58			N/A	N/A
2	1									
	2	0.56	0.56	1.10	1.54	1.60			N/A	N/A
	3	1.58	0.03	0.31	1.58	4.54			N/A	N/A
	4	1.58	0.03	0.34	2.76	8.07			N/A	N/A
	5	0.25	0.03	0.32	0.86	1.29			N/A	N/A

D4 - 2028 | FTH Do Minimum + Dev | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	309.80	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	70.29	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	170.13	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028	FTH Do Minimum + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	715	100.000
	2		ONE HOUR	✓	861	100.000
	3					
	4		ONE HOUR	✓	1334	100.000
2	1					
	2		ONE HOUR	✓	1132	100.000
	3		ONE HOUR	✓	1363	100.000
	4		ONE HOUR	✓	1458	100.000
	5		ONE HOUR	✓	118	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	186	1	528
	2	0	0	261	600
	3	0	0	0	0
	4	0	751	583	0

Demand (PCU/hr)

Junction 2

		To				
		1	2	3	4	5
From	1	0	0	0	0	0
	2	195	0	0	889	48
	3	5	405	0	882	71
	4	564	894	0	0	0
	5	47	43	0	28	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

		To				
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.74	1167.85	203.1	220.0	F	656	984
	2	0.98	70.52	17.9	73.0	F	790	1185
	3							
	4	0.62	4.35	1.8	3.0	A	1224	1836
2	1							
	2	0.50	3.16	1.1	1.6	A	1039	1558
	3	1.10	166.43	77.9	146.6	F	1251	1876
	4	0.94	33.36	14.0	74.5	D	1338	2007
	5	0.68	60.39	2.0	10.0	F	108	162

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	538	135	1001	686	0.784	524	0	0.0	3.6	22.759	C
	2	648	162	825	1064	0.609	642	700	0.0	1.7	9.234	A
	3			834				633				
	4	1004	251	0	2380	0.422	1001	834	0.0	0.8	2.867	A
2	1			1025				607				
	2	852	213	21	2507	0.340	850	1004	0.0	0.6	2.387	A
	3	1026	257	871	1667	0.616	1019	0	0.0	1.7	6.052	A
	4	1098	274	542	1825	0.602	1091	1348	0.0	1.6	5.351	A
	5	89	22	1544	463	0.192	88	89	0.0	0.3	10.538	B

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	643	161	1198	588	1.093	569	0	3.6	22.1	103.546	F
	2	774	194	944	990	0.782	766	822	1.7	3.6	17.098	C
	3			954				757				
	4	1199	300	0	2380	0.504	1198	954	0.8	1.1	3.348	A
2	1			1225				726				
	2	1018	254	25	2504	0.406	1017	1200	0.6	0.7	2.661	A
	3	1225	306	1042	1540	0.796	1216	0	1.7	4.0	11.896	B
	4	1311	328	647	1762	0.744	1305	1611	1.6	3.1	8.562	A
	5	106	27	1846	342	0.310	105	106	0.3	0.5	16.663	C

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	787	197	1466	455	1.732	454	0	22.1	105.4	521.398	F
	2	948	237	977	970	0.977	908	944	3.6	13.6	46.728	E
	3			968				917				
	4	1469	367	0	2380	0.617	1466	968	1.1	1.8	4.322	A
2	1			1438				877				
	2	1246	312	30	2501	0.498	1245	1408	0.7	1.1	3.150	A
	3	1501	375	1275	1368	1.097	1344	0	4.0	43.3	74.698	F
	4	1605	401	741	1705	0.941	1570	1877	3.1	11.8	24.729	C
	5	130	32	2189	205	0.635	125	123	0.5	1.7	47.325	E

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	787	197	1469	453	1.737	453	0	105.4	188.9	1010.781	F
	2	948	237	977	970	0.978	931	945	13.6	17.9	70.521	F
	3			983				925				
	4	1469	367	0	2380	0.617	1469	983	1.8	1.8	4.346	A
2	1			1461				889				
	2	1246	312	30	2500	0.498	1246	1431	1.1	1.1	3.157	A
	3	1501	375	1277	1366	1.098	1362	0	43.3	77.9	166.426	F
	4	1605	401	748	1701	0.944	1597	1891	11.8	14.0	33.356	D
	5	130	32	2221	192	0.677	128	124	1.7	2.0	60.385	F

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	643	161	1202	586	1.096	586	0	188.9	203.1	1167.849	F
	2	774	194	959	981	0.789	827	829	17.9	4.6	31.807	D
	3			1009				777				
	4	1199	300	0	2380	0.504	1202	1009	1.8	1.1	3.370	A
2	1			1345				748				
	2	1018	254	26	2503	0.407	1019	1318	1.1	0.8	2.672	A
	3	1225	306	1045	1537	0.797	1511	0	77.9	6.4	104.601	F
	4	1311	328	752	1699	0.772	1351	1805	14.0	3.9	12.566	B
	5	106	27	1981	288	0.368	112	122	2.0	0.7	23.082	C

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	538	135	1006	684	0.787	680	0	203.1	167.5	981.020	F
	2	648	162	943	991	0.654	658	743	4.6	2.2	12.212	B
	3			961				640				
	4	1004	251	0	2380	0.422	1006	961	1.1	0.8	2.885	A
2	1			1043				615				
	2	852	213	21	2506	0.340	853	1022	0.8	0.6	2.395	A
	3	1026	257	874	1664	0.617	1044	0	6.4	1.8	6.571	A
	4	1098	274	552	1819	0.603	1106	1367	3.9	1.7	5.622	A
	5	89	22	1568	453	0.196	90	91	0.7	0.3	10.962	B

Queue Variation Results for each time segment

16:45 - 17:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	3.55	0.03	0.31	3.55	9.35			N/A	N/A
	2	1.67	0.57	1.53	2.24	2.88			N/A	N/A
	3									
	4	0.80	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.56	0.56	1.10	1.54	1.60			N/A	N/A
	3	1.73	0.10	1.30	3.42	4.60			N/A	N/A
	4	1.64	0.59	1.51	2.14	2.66			N/A	N/A
	5	0.26	0.00	0.00	0.26	0.26			N/A	N/A

17:00 - 17:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	22.11	0.32	11.23	56.77	78.58			N/A	N/A
	2	3.63	0.08	1.52	9.50	13.93			N/A	N/A
	3									
	4	1.11	0.07	0.83	2.11	2.99			N/A	N/A
2	1									
	2	0.75	0.09	0.88	1.51	1.59			N/A	N/A
	3	4.03	0.05	0.54	11.40	19.20			N/A	N/A
	4	3.09	0.05	0.53	8.59	14.22			N/A	N/A
	5	0.48	0.04	0.38	1.24	1.45			N/A	N/A

17:15 - 17:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	105.41	56.71	101.40	149.23	165.09			N/A	N/A
	2	13.59	0.22	6.50	34.95	48.70			N/A	N/A
	3									
	4	1.75	0.03	0.29	1.75	1.75			N/A	N/A
2	1									
	2	1.09	0.03	0.28	1.09	1.09			N/A	N/A
	3	43.29	12.04	38.39	75.07	88.48			N/A	N/A
	4	11.79	0.08	1.62	34.37	55.25			N/A	N/A
	5	1.67	0.04	0.35	3.24	8.67			N/A	N/A

17:30 - 17:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	188.91	>199	>199	>199	>199			N/A	N/A
	2	17.87	0.14	6.03	49.66	73.05			N/A	N/A
	3									
	4	1.76	0.03	0.29	1.76	1.76			N/A	N/A
2	1									
	2	1.09	0.03	0.29	1.09	1.31			N/A	N/A
	3	77.88	27.94	71.57	126.96	146.55			N/A	N/A
	4	13.95	0.05	0.53	39.40	74.53			N/A	N/A
	5	2.03	0.04	0.42	5.33	10.03			N/A	N/A

17:45 - 18:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	203.07	>199	>199	>199	>199			N/A	N/A
	2	4.57	0.05	0.48	12.78	23.33			N/A	N/A
	3									
	4	1.13	0.43	1.14	1.28	1.75			N/A	N/A
2	1									
	2	0.76	0.61	1.10	1.54	1.60			N/A	N/A
	3	6.37	0.06	0.55	18.31	31.82			N/A	N/A
	4	3.90	0.05	0.54	11.02	18.53			N/A	N/A
	5	0.67	0.05	0.50	1.54	1.54			N/A	N/A

18:00 - 18:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	167.52	>199	>199	>199	>199			N/A	N/A
	2	2.15	0.03	0.34	3.54	11.01			N/A	N/A
	3									
	4	0.81	0.10	0.90	1.55	1.63			N/A	N/A
2	1									
	2	0.57	0.57	1.10	1.54	1.60			N/A	N/A
	3	1.80	0.03	0.30	1.80	3.48			N/A	N/A
	4	1.70	0.03	0.33	2.38	8.36			N/A	N/A
	5	0.27	0.03	0.32	0.99	1.46			N/A	N/A

D5 - 2028 | FTH Do Minimum + Dev + Site B | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	340.26	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	78.08	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	187.86	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2028	FTH Do Minimum + Dev + Site B	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	721	100.000
	2		ONE HOUR	✓	876	100.000
	3					
	4		ONE HOUR	✓	1355	100.000
2	1					
	2		ONE HOUR	✓	1138	100.000
	3		ONE HOUR	✓	1378	100.000
	4		ONE HOUR	✓	1464	100.000
	5		ONE HOUR	✓	118	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	192	1	528
	2	0	0	269	607
	3	0	0	0	0
	4	0	772	583	0

Demand (PCU/hr)

Junction 2

		To				
		1	2	3	4	5
From	1	0	0	0	0	0
	2	198	0	0	892	48
	3	5	420	0	882	71
	4	564	900	0	0	0
	5	47	43	0	28	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

		To				
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.80	1291.43	218.9	220.0	F	662	992
	2	0.99	76.81	20.0	76.5	F	804	1206
	3							
	4	0.63	4.46	1.8	3.2	A	1243	1865
2	1							
	2	0.50	3.17	1.1	1.6	A	1044	1566
	3	1.11	185.17	87.7	156.3	F	1264	1897
	4	0.95	36.42	15.3	79.7	E	1343	2015
	5	0.70	66.75	2.2	10.9	F	108	162

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	543	136	1017	679	0.800	527	0	0.0	3.8	24.226	C
	2	659	165	824	1065	0.620	653	720	0.0	1.7	9.459	A
	3			838				639				
	4	1020	255	0	2380	0.429	1017	838	0.0	0.8	2.898	A
2	1			1040				609				
	2	857	214	21	2507	0.342	854	1019	0.0	0.6	2.393	A
	3	1037	259	875	1663	0.624	1030	0	0.0	1.8	6.186	A
	4	1102	276	556	1817	0.607	1095	1350	0.0	1.7	5.441	A
	5	89	22	1562	455	0.195	88	89	0.0	0.3	10.741	B

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	648	162	1217	579	1.120	563	0	3.8	25.2	116.355	F
	2	788	197	936	995	0.792	779	843	1.7	3.8	17.694	C
	3			952				764				
	4	1218	305	0	2380	0.512	1217	952	0.8	1.1	3.402	A
2	1			1243				729				
	2	1023	256	25	2504	0.409	1022	1218	0.6	0.8	2.671	A
	3	1239	310	1047	1536	0.806	1229	0	1.8	4.3	12.496	B
	4	1316	329	663	1752	0.751	1310	1613	1.7	3.2	8.835	A
	5	106	27	1867	334	0.318	105	106	0.3	0.5	17.265	C

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	794	198	1489	443	1.792	443	0	25.2	113.0	577.511	F
	2	964	241	966	977	0.987	921	966	3.8	14.8	49.402	E
	3			962				924				
	4	1492	373	0	2380	0.627	1489	962	1.1	1.8	4.433	A
2	1			1452				879				
	2	1253	313	30	2501	0.501	1252	1422	0.8	1.1	3.167	A
	3	1517	379	1281	1363	1.113	1342	0	4.3	48.0	81.261	F
	4	1612	403	754	1698	0.949	1574	1870	3.2	12.7	26.276	D
	5	130	32	2205	198	0.656	125	122	0.5	1.8	50.867	F

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	794	198	1492	442	1.797	442	0	113.0	201.0	1291.433	F
	2	964	241	966	977	0.988	944	968	14.8	20.0	76.815	F
	3			977				932				
	4	1492	373	0	2380	0.627	1492	977	1.8	1.8	4.459	A
2	1			1476				891				
	2	1253	313	30	2500	0.501	1253	1445	1.1	1.1	3.173	A
	3	1517	379	1283	1361	1.115	1358	0	48.0	87.7	185.168	F
	4	1612	403	760	1694	0.951	1601	1882	12.7	15.3	36.418	E
	5	130	32	2238	185	0.702	128	123	1.8	2.2	66.748	F

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	648	162	1221	577	1.124	577	0	201.0	218.9	1257.747	F
	2	788	197	948	987	0.797	848	849	20.0	4.9	36.031	E
	3			1010				787				
	4	1218	305	0	2380	0.512	1221	1010	1.8	1.2	3.423	A
2	1			1366				753				
	2	1023	256	27	2503	0.409	1024	1339	1.1	0.8	2.682	A
	3	1239	310	1051	1533	0.808	1514	0	87.7	18.8	130.800	F
	4	1316	329	767	1690	0.779	1361	1799	15.3	4.1	13.502	B
	5	106	27	2006	278	0.382	112	121	2.2	0.7	24.705	C

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	543	136	1021	676	0.803	673	0	218.9	186.4	1084.636	F
	2	659	165	933	997	0.662	670	761	4.9	2.2	12.479	B
	3			957				646				
	4	1020	255	0	2380	0.429	1021	957	1.2	0.8	2.919	A
2	1			1075				617				
	2	857	214	21	2506	0.342	858	1053	0.8	0.6	2.404	A
	3	1037	259	879	1661	0.625	1105	0	18.8	1.9	8.022	A
	4	1102	276	583	1800	0.612	1111	1401	4.1	1.8	5.823	A
	5	89	22	1602	440	0.202	91	93	0.7	0.3	11.395	B

Queue Variation Results for each time segment

16:45 - 17:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	3.84	0.03	0.30	3.84	7.42			N/A	N/A
	2	1.74	0.56	1.59	2.53	3.06			N/A	N/A
	3									
	4	0.82	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.57	0.57	1.10	1.54	1.60			N/A	N/A
	3	1.79	0.10	1.28	3.74	5.07			N/A	N/A
	4	1.67	0.58	1.54	2.19	2.83			N/A	N/A
	5	0.26	0.00	0.00	0.26	0.26			N/A	N/A

17:00 - 17:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	25.19	0.34	12.86	64.77	89.65			N/A	N/A
	2	3.83	0.09	1.59	9.97	14.61			N/A	N/A
	3									
	4	1.14	0.07	0.81	2.22	3.18			N/A	N/A
2	1									
	2	0.76	0.09	0.88	1.51	1.59			N/A	N/A
	3	4.28	0.06	0.61	12.15	20.29			N/A	N/A
	4	3.20	0.05	0.54	8.90	14.73			N/A	N/A
	5	0.50	0.04	0.41	1.32	1.48			N/A	N/A

17:15 - 17:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	112.98	59.50	108.47	161.35	178.91			N/A	N/A
	2	14.82	0.31	7.92	36.96	50.54			N/A	N/A
	3									
	4	1.82	0.03	0.29	1.82	1.82			N/A	N/A
2	1									
	2	1.10	0.03	0.28	1.10	1.10			N/A	N/A
	3	48.03	15.47	43.42	80.26	93.47			N/A	N/A
	4	12.73	0.09	2.43	36.78	57.43			N/A	N/A
	5	1.80	0.04	0.37	3.96	9.36			N/A	N/A

17:30 - 17:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	201.01	>199	>199	>199	>199			N/A	N/A
	2	20.04	0.21	8.52	53.67	76.46			N/A	N/A
	3									
	4	1.84	0.03	0.29	1.84	1.84			N/A	N/A
2	1									
	2	1.10	0.03	0.29	1.10	1.27			N/A	N/A
	3	87.71	36.00	81.94	137.19	156.35			N/A	N/A
	4	15.33	0.06	1.06	44.62	79.67			N/A	N/A
	5	2.23	0.04	0.44	6.00	10.94			N/A	N/A

17:45 - 18:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	218.87	>199	>199	>199	>199			N/A	N/A
	2	4.87	0.05	0.49	13.68	24.86			N/A	N/A
	3									
	4	1.16	0.36	1.16	1.50	1.88			N/A	N/A
2	1									
	2	0.76	0.61	1.10	1.54	1.60			N/A	N/A
	3	18.82	1.48	14.13	39.12	49.26			N/A	N/A
	4	4.08	0.05	0.54	11.57	19.53			N/A	N/A
	5	0.71	0.05	0.51	1.64	1.78			N/A	N/A

18:00 - 18:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	186.35	>199	>199	>199	>199			N/A	N/A
	2	2.23	0.03	0.34	3.54	11.32			N/A	N/A
	3									
	4	0.83	0.09	0.89	1.20	1.20			N/A	N/A
2	1									
	2	0.57	0.57	1.10	1.54	1.60			N/A	N/A
	3	1.87	0.03	0.30	1.87	3.22			N/A	N/A
	4	1.76	0.03	0.33	2.41	8.62			N/A	N/A
	5	0.28	0.03	0.32	1.01	1.52			N/A	N/A

D6 - 2028 | FTH Do Minimum + Dev + Site B + RF | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	374.35	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	88.53	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	208.80	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2028	FTH Do Minimum + Dev + Site B + RF	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	729	100.000
	2		ONE HOUR	✓	892	100.000
	3					
	4		ONE HOUR	✓	1378	100.000
2	1					
	2		ONE HOUR	✓	1144	100.000
	3		ONE HOUR	✓	1399	100.000
	4		ONE HOUR	✓	1467	100.000
	5		ONE HOUR	✓	118	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	200	1	528
	2	0	0	279	613
	3	0	0	0	0
	4	0	795	583	0

Demand (PCU/hr)

Junction 2

From \ To	1	2	3	4	5
1	0	0	0	0	0
2	203	0	0	893	48
3	5	441	0	882	71
4	564	903	0	0	0
5	47	43	0	28	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

From \ To	1	2	3	4
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10

Heavy Vehicle %

Junction 2

From \ To	1	2	3	4	5
1	10	10	10	10	10
2	10	10	10	10	10
3	10	10	10	10	10
4	10	10	10	10	10
5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.87	1428.96	237.8	237.8	F	669	1003
	2	1.00	83.69	22.5	80.0	F	819	1228
	3							
	4	0.64	4.59	1.9	3.4	A	1264	1897
2	1							
	2	0.50	3.19	1.1	1.6	A	1050	1575
	3	1.14	210.39	100.9	169.8	F	1284	1926
	4	0.96	39.92	16.9	84.2	E	1346	2019
	5	0.73	75.45	2.5	12.1	F	108	162

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	549	137	1034	670	0.819	532	0	0.0	4.2	26.173	D
	2	672	168	823	1065	0.630	664	742	0.0	1.8	9.709	A
	3			842				646				
	4	1037	259	0	2380	0.436	1034	842	0.0	0.8	2.935	A
2	1			1058				613				
	2	861	215	21	2507	0.344	859	1037	0.0	0.6	2.400	A
	3	1053	263	880	1660	0.634	1046	0	0.0	1.9	6.370	A
	4	1104	276	575	1805	0.612	1098	1351	0.0	1.7	5.544	A
	5	89	22	1583	447	0.199	88	89	0.0	0.3	10.994	B

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	655	164	1237	569	1.153	556	0	4.2	29.1	133.071	F
	2	802	200	927	1001	0.801	793	866	1.8	4.0	18.309	C
	3			948				772				
	4	1239	310	0	2380	0.521	1237	948	0.8	1.2	3.461	A
2	1			1264				733				
	2	1028	257	25	2504	0.411	1028	1239	0.6	0.8	2.681	A
	3	1258	314	1053	1532	0.821	1247	0	1.9	4.7	13.367	B
	4	1319	330	686	1738	0.759	1312	1613	1.7	3.3	9.157	A
	5	106	27	1892	323	0.328	105	106	0.3	0.5	18.048	C

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	803	201	1514	431	1.864	430	0	29.1	122.2	647.382	F
	2	982	246	953	985	0.997	934	992	4.0	16.2	52.233	F
	3			953				933				
	4	1517	379	0	2380	0.638	1514	953	1.2	1.9	4.559	A
2	1			1466				882				
	2	1260	315	29	2501	0.504	1258	1436	0.8	1.1	3.184	A
	3	1540	385	1288	1358	1.134	1341	0	4.7	54.5	90.197	F
	4	1615	404	772	1687	0.957	1573	1857	3.3	13.8	27.996	D
	5	130	32	2224	191	0.681	124	121	0.5	2.0	55.529	F

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	803	201	1517	429	1.870	429	0	122.2	215.6	1428.955	F
	2	982	246	953	984	0.998	957	993	16.2	22.5	83.689	F
	3			968				942				
	4	1517	379	0	2380	0.638	1517	968	1.9	1.9	4.590	A
2	1			1490				895				
	2	1260	315	30	2500	0.504	1260	1460	1.1	1.1	3.190	A
	3	1540	385	1290	1356	1.136	1355	0	54.5	100.9	210.387	F
	4	1615	404	777	1684	0.959	1603	1867	13.8	16.9	39.921	E
	5	130	32	2258	177	0.733	128	122	2.0	2.5	75.451	F

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	655	164	1242	566	1.157	566	0	215.6	237.8	1366.706	F
	2	802	200	936	995	0.806	871	872	22.5	5.2	41.409	E
	3			1009				799				
	4	1239	310	0	2380	0.521	1242	1009	1.9	1.2	3.489	A
2	1			1388				760				
	2	1028	257	27	2503	0.411	1030	1361	1.1	0.8	2.692	A
	3	1258	314	1057	1529	0.822	1513	0	100.9	37.2	166.823	F
	4	1319	330	785	1679	0.785	1369	1784	16.9	4.3	14.627	B
	5	106	27	2034	267	0.398	113	120	2.5	0.8	26.838	D

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	549	137	1039	668	0.822	665	0	237.8	208.9	1210.629	F
	2	672	168	922	1004	0.669	683	782	5.2	2.3	12.754	B
	3			951				654				
	4	1037	259	0	2380	0.436	1039	951	1.2	0.9	2.955	A
2	1			1117				622				
	2	861	215	22	2506	0.344	862	1095	0.8	0.6	2.411	A
	3	1053	263	884	1657	0.635	1194	0	37.2	2.0	11.621	B
	4	1104	276	630	1772	0.623	1114	1447	4.3	1.9	6.107	A
	5	89	22	1648	421	0.211	91	97	0.8	0.3	12.047	B

Queue Variation Results for each time segment

16:45 - 17:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	4.24	0.03	0.30	4.24	5.34			N/A	N/A
	2	1.82	0.54	1.65	2.77	3.22			N/A	N/A
	3									
	4	0.85	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.57	0.57	1.10	1.54	1.60			N/A	N/A
	3	1.87	0.09	1.25	4.10	5.62			N/A	N/A
	4	1.71	0.57	1.56	2.39	2.97			N/A	N/A
	5	0.27	0.00	0.00	0.27	0.27			N/A	N/A

17:00 - 17:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	29.10	0.36	14.67	75.31	104.54			N/A	N/A
	2	4.03	0.09	1.15	10.54	15.34			N/A	N/A
	3									
	4	1.18	0.06	0.79	2.45	3.44			N/A	N/A
2	1									
	2	0.76	0.09	0.88	1.52	1.60			N/A	N/A
	3	4.66	0.06	0.80	13.25	21.81			N/A	N/A
	4	3.32	0.05	0.55	9.27	15.23			N/A	N/A
	5	0.52	0.05	0.45	1.37	1.51			N/A	N/A

17:15 - 17:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	122.20	62.12	116.97	177.18	197.33			N/A	N/A
	2	16.18	0.44	9.49	39.05	52.44			N/A	N/A
	3									
	4	1.91	0.03	0.29	1.91	1.91			N/A	N/A
2	1									
	2	1.11	0.03	0.28	1.11	1.11			N/A	N/A
	3	54.48	20.34	50.19	87.32	100.36			N/A	N/A
	4	13.76	0.11	3.47	39.18	59.52			N/A	N/A
	5	1.97	0.04	0.39	4.82	10.20			N/A	N/A

17:30 - 17:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	215.59	>199	>199	>199	>199			N/A	N/A
	2	22.53	0.32	11.49	57.82	80.00			N/A	N/A
	3									
	4	1.92	0.03	0.29	1.92	1.92			N/A	N/A
2	1									
	2	1.11	0.03	0.29	1.11	1.22			N/A	N/A
	3	100.93	47.21	95.72	150.97	169.77			N/A	N/A
	4	16.92	0.07	1.29	49.76	84.22			N/A	N/A
	5	2.51	0.05	0.47	6.85	12.06			N/A	N/A

17:45 - 18:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	237.83	>199	>199	>199	>199			N/A	N/A
	2	5.21	0.05	0.50	14.73	26.56			N/A	N/A
	3									
	4	1.20	0.30	1.18	1.67	1.98			N/A	N/A
2	1									
	2	0.77	0.61	1.10	1.54	1.60			N/A	N/A
	3	37.17	13.54	34.02	59.60	68.58			N/A	N/A
	4	4.27	0.05	0.54	12.08	20.58			N/A	N/A
	5	0.76	0.05	0.51	1.39	2.01			N/A	N/A

18:00 - 18:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	208.91	>199	>199	>199	>199			N/A	N/A
	2	2.31	0.03	0.34	3.54	11.63			N/A	N/A
	3									
	4	0.85	0.09	0.88	1.51	1.51			N/A	N/A
2	1									
	2	0.58	0.58	1.10	1.54	1.60			N/A	N/A
	3	1.97	0.03	0.30	1.97	2.98			N/A	N/A
	4	1.85	0.03	0.33	2.55	9.06			N/A	N/A
	5	0.30	0.03	0.32	1.04	1.59			N/A	N/A

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.1.0.2307
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Filename: Junction 7 - Wrotham Road_A2 Linked Rbt - Base Model AM.j11
Path: C:\Users\mattjohnson\Ridge and Partners LLP\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Modelling\Arcady\Tech Note 2\2030 RF Do Minimum
Report generation date: 02/09/2026 16:06:50

»D1 - 2023 | Base | AM
»D2 - 2025 | Base | AM
»D3 - 2030 | RF Do Minimum | AM
»D4 - 2030 | RF Do Minimum + Dev | AM
»D5 - 2030 | RF Do Minimum + Dev + Site B | AM

Summary of junction performance

	AM			
	Set ID	Queue (PCU)	Delay (s)	RFC
	2023 - Base			
Junction 1 - Arm 1	D1	59.9	271.01	1.17
Junction 1 - Arm 2		6.1	27.81	0.86
Junction 1 - Arm 4		1.2	3.45	0.52
Junction 2 - Arm 2		0.9	2.79	0.44
Junction 2 - Arm 3		2.0	10.68	0.65
Junction 2 - Arm 4		4.3	10.38	0.80
Junction 2 - Arm 5		0.0	0.00	0.00
	2025 - Base			
Junction 1 - Arm 1	D2	67.3	301.88	1.19
Junction 1 - Arm 2		6.5	29.32	0.87
Junction 1 - Arm 4		1.2	3.47	0.52
Junction 2 - Arm 2		0.9	2.80	0.44
Junction 2 - Arm 3		2.1	11.18	0.66
Junction 2 - Arm 4		4.5	10.75	0.81
Junction 2 - Arm 5		0.0	0.00	0.00
	2030 - RF Do Minimum			
Junction 1 - Arm 1	D3	201.7	1063.85	1.65
Junction 1 - Arm 2		31.1	115.23	1.03
Junction 1 - Arm 4		1.7	4.28	0.61
Junction 2 - Arm 2		1.1	3.10	0.49
Junction 2 - Arm 3		5.9	28.14	0.86
Junction 2 - Arm 4		14.4	31.97	0.94
Junction 2 - Arm 5		1.1	34.93	0.51
	2030 - RF Do Minimum + Dev			
Junction 1 - Arm 1	D4	222.5	1176.48	1.72
Junction 1 - Arm 2		70.9	226.46	1.13
Junction 1 - Arm 4		1.8	4.47	0.63
Junction 2 - Arm 2		1.1	3.18	0.51
Junction 2 - Arm 3		9.1	42.15	0.91
Junction 2 - Arm 4		18.0	39.37	0.96
Junction 2 - Arm 5		1.3	41.19	0.55
	2030 - RF Do Minimum + Dev + Site B			
Junction 1 - Arm 1	D5	230.2	1216.84	1.75
Junction 1 - Arm 2		84.7	284.41	1.16
Junction 1 - Arm 4		1.9	4.53	0.63
Junction 2 - Arm 2		1.1	3.22	0.51
Junction 2 - Arm 3		10.7	49.06	0.93
Junction 2 - Arm 4		19.5	42.40	0.97
Junction 2 - Arm 5		1.3	43.71	0.57

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.

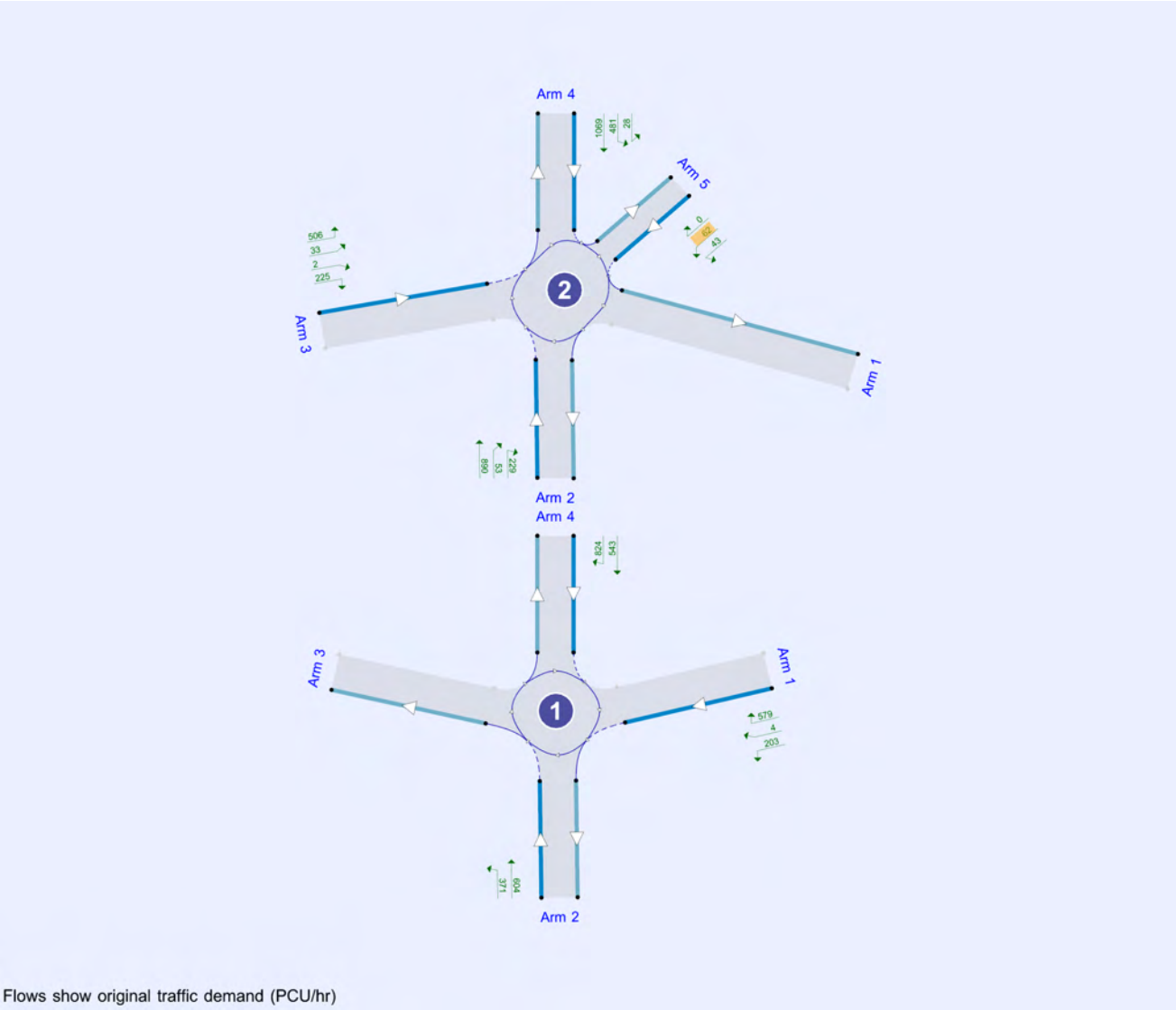
File summary

File Description

Title	
Location	Wrotham Road/A2 Southern Roundabout
Site number	7
Date	09/04/2026
Version	
Status	(new file)
Identifier	MJ
Client	Richborough
Jobnumber	T25512
Enumerator	AzureAD\MatthewJohnson
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	PCU	PCU	perHour	s	-Min	perMin



Flows show original traffic demand (PCU/hr)

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75	✓					0.85	36.00	20.00		

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	Base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2025	Base	AM	ONE HOUR	07:45	09:15	15	✓
D3	2030	RF Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D4	2030	RF Do Minimum + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D5	2030	RF Do Minimum + Dev + Site B	AM	ONE HOUR	07:45	09:15	15	✓

Analysis Set Details

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

D1 - 2023 | Base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	80.91	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	7.91	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	41.44	E

Arms

Arms

Junction	Arm	Name	Description	No give-way line
1	1	A2 (E) Off-Slip		
	2	Wrotham Road S		
	3	A2 (W) On-Slip		
	4	Wrotham Road N - Internal Link		
2	1	A2 (E) On-Slip		
	2	Wrotham Road S - Internal Link		
	3	A2 (W) Off-Slip		
	4	Wrotham Road N		
	5	Hotel access		

Roundabout Geometry

Junction	Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	1	3.70	8.50	10.2	19.1	59.9	60.0	✓	
	2	4.90	9.20	22.2	24.1	59.9	49.0		
	3								✓
	4	7.60	8.10	6.9	20.8	59.9	36.0		
2	1								✓
	2	7.10	9.30	17.9	31.1	63.9	47.0		
	3	7.00	10.20	17.9	40.0	63.9	24.0	✓	
	4	4.60	9.30	22.1	48.8	63.9	50.0		
	5	3.10	5.50	5.4	12.7	63.9	59.0		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Junction	Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1	1	Direct	Calbration	-275
	2	Direct	Calibration	-440
	3			
	4	None		
2	1			
	2	None		
	3	Direct	Calibration	-1000
	4	None		
	5	None		

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1	1	0.499	1245
	2	0.622	1717
	3		
	4	0.671	2380
2	1		
	2	0.662	2521
	3	0.741	1862
	4	0.600	2150
	5	0.400	1080

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

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	Base	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	669	100.000
	2		ONE HOUR	✓	764	100.000
	3					
	4		ONE HOUR	✓	1118	100.000
2	1					
	2		ONE HOUR	✓	1000	100.000
	3		ONE HOUR	✓	614	100.000
	4		ONE HOUR	✓	1390	100.000
	5		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	178	4	487
	2	0	0	251	513
	3	0	0	0	0
	4	0	456	662	0

Demand (PCU/hr)

Junction 2

From \ To	1	2	3	4	5
1	0	0	0	0	0
2	194	0	0	806	0
3	2	166	0	445	1
4	441	949	0	0	0
5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

From \ To	1	2	3	4
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10

Heavy Vehicle %

Junction 2

From \ To	1	2	3	4	5
1	10	10	10	10	10
2	10	10	10	10	10
3	10	10	10	10	10
4	10	10	10	10	10
5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.17	271.01	59.9	105.8	F	614	921
	2	0.86	27.81	6.1	32.5	D	701	1052
	3							
	4	0.52	3.45	1.2	1.6	A	1026	1539
2	1							
	2	0.44	2.79	0.9	2.1	A	918	1376
	3	0.65	10.68	2.0	4.3	B	563	845
	4	0.80	10.38	4.3	18.1	B	1275	1913
	5	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	504	126	839	827	0.609	497	0	0.0	1.7	11.778	B
	2	575	144	862	1181	0.487	571	475	0.0	1.0	6.447	A
	3			745				688				
	4	842	210	0	2380	0.354	839	745	0.0	0.6	2.567	A
2	1			835				478				
	2	753	188	0	2521	0.299	751	835	0.0	0.5	2.236	A
	3	462	116	751	1306	0.354	460	0	0.0	0.6	4.669	A
	4	1046	262	272	1987	0.527	1042	939	0.0	1.2	4.169	A
	5	0	0	1313	555	0.000	0	0.75	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	601	150	1004	745	0.807	592	0	1.7	4.1	24.467	C
	2	687	172	1029	1077	0.638	683	567	1.0	1.9	9.966	A
	3			890				823				
	4	1005	251	0	2380	0.422	1004	890	0.6	0.8	2.877	A
2	1			1000				572				
	2	899	225	0	2521	0.357	898	1000	0.5	0.6	2.441	A
	3	552	138	898	1196	0.461	551	0	0.6	0.9	6.120	A
	4	1250	312	326	1955	0.639	1247	1123	1.2	1.9	5.571	A
	5	0	0	1572	452	0.000	0	0.90	0.0	0.0	0.000	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	737	184	1229	633	1.164	620	0	4.1	33.2	125.772	F
	2	841	210	1183	982	0.857	826	666	1.9	5.6	23.574	C
	3			1006				1003				
	4	1231	308	0	2380	0.517	1229	1006	0.8	1.2	3.437	A
2	1			1220				698				
	2	1101	275	0	2521	0.437	1100	1220	0.6	0.8	2.786	A
	3	676	169	1100	1047	0.646	672	0	0.9	1.9	10.447	B
	4	1530	383	398	1911	0.801	1521	1374	1.9	4.2	9.930	A
	5	0	0	1919	313	0.000	0	1	0.0	0.0	0.000	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	737	184	1231	632	1.166	630	0	33.2	59.9	271.014	F
	2	841	210	1191	977	0.861	839	670	5.6	6.1	27.808	D
	3			1022				1008				
	4	1231	308	0	2380	0.517	1231	1022	1.2	1.2	3.445	A
2	1			1227				701				
	2	1101	275	0	2521	0.437	1101	1227	0.8	0.9	2.789	A
	3	676	169	1101	1046	0.646	676	0	1.9	2.0	10.680	B
	4	1530	383	400	1910	0.801	1530	1377	4.2	4.3	10.376	B
	5	0	0	1928	309	0.000	0	1	0.0	0.0	0.000	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	601	150	1007	744	0.809	730	0	59.9	27.7	218.653	F
	2	687	172	1132	1013	0.678	702	605	6.1	2.4	13.263	B
	3			1003				831				
	4	1005	251	0	2380	0.422	1007	1003	1.2	0.8	2.885	A
2	1			1010				576				
	2	899	225	0	2521	0.357	900	1010	0.9	0.6	2.444	A
	3	552	138	900	1195	0.462	556	0	2.0	1.0	6.233	A
	4	1250	312	328	1954	0.640	1259	1128	4.3	2.0	5.773	A
	5	0	0	1586	446	0.000	0	0.91	0.0	0.0	0.000	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	504	126	843	825	0.610	607	0	27.7	1.8	27.763	D
	2	575	144	944	1130	0.509	580	505	2.4	1.2	7.265	A
	3			831				693				
	4	842	210	0	2380	0.354	843	831	0.8	0.6	2.578	A
2	1			842				481				
	2	753	188	0	2521	0.299	753	842	0.6	0.5	2.243	A
	3	462	116	753	1304	0.355	464	0	1.0	0.6	4.720	A
	4	1046	262	274	1986	0.527	1049	943	2.0	1.2	4.243	A
	5	0	0	1322	551	0.000	0	0.76	0.0	0.0	0.000	A

Queue Variation Results for each time segment

07:45 - 08:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	1.66	0.11	1.29	3.18	4.23			N/A	N/A
	2	1.03	0.61	1.10	1.54	1.60			N/A	N/A
	3									
	4	0.60	0.60	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.47	0.00	0.00	0.47	0.47			N/A	N/A
	3	0.60	0.60	1.10	1.54	1.60			N/A	N/A
	4	1.21	0.61	1.10	1.54	1.60			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	4.05	0.08	1.46	10.91	16.37			N/A	N/A
	2	1.88	0.06	0.77	4.73	7.14			N/A	N/A
	3									
	4	0.80	0.09	0.88	1.54	1.63			N/A	N/A
2	1									
	2	0.61	0.08	0.80	1.48	1.57			N/A	N/A
	3	0.93	0.08	0.87	1.48	1.96			N/A	N/A
	4	1.92	0.05	0.52	5.07	8.13			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	33.19	10.80	29.94	54.91	63.84			N/A	N/A
	2	5.57	0.05	0.45	15.06	29.70			N/A	N/A
	3									
	4	1.17	0.03	0.28	1.17	1.17			N/A	N/A
2	1									
	2	0.85	0.03	0.28	0.85	0.85			N/A	N/A
	3	1.94	0.03	0.30	1.94	3.99			N/A	N/A
	4	4.19	0.03	0.33	4.19	18.07			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	59.88	24.79	55.86	92.95	105.77			N/A	N/A
	2	6.13	0.04	0.37	11.17	32.55			N/A	N/A
	3									
	4	1.17	0.03	0.29	1.17	1.17			N/A	N/A
2	1									
	2	0.85	0.03	0.30	0.85	2.15			N/A	N/A
	3	1.97	0.03	0.30	1.97	4.25			N/A	N/A
	4	4.31	0.03	0.30	4.31	7.14			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	27.66	7.78	24.45	47.32	55.65			N/A	N/A
	2	2.41	0.06	0.60	6.46	10.24			N/A	N/A
	3									
	4	0.81	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.61	0.61	1.10	1.54	1.60			N/A	N/A
	3	0.96	0.08	0.90	1.53	1.98			N/A	N/A
	4	1.99	0.06	0.86	5.00	7.46			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	1.81	0.03	0.30	1.81	3.79			N/A	N/A
	2	1.16	0.04	0.35	2.34	5.84			N/A	N/A
	3									
	4	0.60	0.60	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.47	0.00	0.00	0.47	0.47			N/A	N/A
	3	0.61	0.05	0.45	1.54	1.54			N/A	N/A
	4	1.24	0.04	0.42	3.13	5.49			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

D2 - 2025 | Base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	89.89	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	8.20	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	45.72	E

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025	Base	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	679	100.000
	2		ONE HOUR	✓	770	100.000
	3					
	4		ONE HOUR	✓	1126	100.000
2	1					
	2		ONE HOUR	✓	1007	100.000
	3		ONE HOUR	✓	624	100.000
	4		ONE HOUR	✓	1400	100.000
	5		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	181	4	494
	2	0	0	253	517
	3	0	0	0	0
	4	0	459	667	0

Demand (PCU/hr)

Junction 2

From \ To	1	2	3	4	5
1	0	0	0	0	0
2	195	0	0	812	0
3	2	169	0	452	1
4	444	956	0	0	0
5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

From \ To	1	2	3	4
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10

Heavy Vehicle %

Junction 2

From \ To	1	2	3	4	5
1	10	10	10	10	10
2	10	10	10	10	10
3	10	10	10	10	10
4	10	10	10	10	10
5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.19	301.88	67.3	113.3	F	623	935
	2	0.87	29.32	6.5	35.1	D	707	1060
	3							
	4	0.52	3.47	1.2	1.6	A	1033	1550
2	1							
	2	0.44	2.80	0.9	2.1	A	924	1386
	3	0.66	11.18	2.1	5.1	B	573	859
	4	0.81	10.75	4.5	19.6	B	1285	1927
	5	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	511	128	845	824	0.620	504	0	0.0	1.7	12.136	B
	2	580	145	871	1176	0.493	575	479	0.0	1.1	6.550	A
	3			753				693				
	4	848	212	0	2380	0.356	845	753	0.0	0.6	2.576	A
2	1			843				481				
	2	758	190	0	2521	0.301	756	843	0.0	0.5	2.243	A
	3	470	117	756	1302	0.361	467	0	0.0	0.6	4.733	A
	4	1054	263	275	1985	0.531	1049	948	0.0	1.2	4.209	A
	5	0	0	1324	551	0.000	0	0.75	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	610	153	1011	741	0.824	600	0	1.7	4.4	26.179	D
	2	692	173	1039	1071	0.646	689	572	1.1	1.9	10.254	B
	3			899				829				
	4	1012	253	0	2380	0.425	1011	899	0.6	0.8	2.892	A
2	1			1009				575				
	2	905	226	0	2521	0.359	905	1009	0.5	0.6	2.451	A
	3	561	140	905	1192	0.471	560	0	0.6	1.0	6.250	A
	4	1259	315	329	1953	0.645	1256	1135	1.2	2.0	5.658	A
	5	0	0	1584	447	0.000	0	0.90	0.0	0.0	0.000	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	748	187	1238	628	1.190	618	0	4.4	36.9	137.793	F
	2	848	212	1187	979	0.866	832	669	1.9	5.9	24.620	C
	3			1008				1011				
	4	1240	310	0	2380	0.521	1238	1008	0.8	1.2	3.464	A
2	1			1231				703				
	2	1109	277	0	2521	0.440	1108	1231	0.6	0.9	2.802	A
	3	687	172	1108	1041	0.660	683	0	1.0	2.1	10.909	B
	4	1541	385	403	1909	0.808	1532	1388	2.0	4.4	10.259	B
	5	0	0	1933	307	0.000	0	1	0.0	0.0	0.000	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	748	187	1240	627	1.192	626	0	36.9	67.3	301.877	F
	2	848	212	1193	975	0.869	845	672	5.9	6.5	29.325	D
	3			1023				1016				
	4	1240	310	0	2380	0.521	1240	1023	1.2	1.2	3.472	A
2	1			1238				706				
	2	1109	277	0	2521	0.440	1109	1238	0.9	0.9	2.804	A
	3	687	172	1109	1041	0.660	687	0	2.1	2.1	11.181	B
	4	1541	385	404	1908	0.808	1541	1392	4.4	4.5	10.754	B
	5	0	0	1944	303	0.000	0	1	0.0	0.0	0.000	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	610	153	1014	740	0.825	728	0	67.3	37.9	260.628	F
	2	692	173	1135	1012	0.684	708	607	6.5	2.5	13.683	B
	3			1005				838				
	4	1012	253	0	2380	0.425	1014	1005	1.2	0.8	2.903	A
2	1			1019				580				
	2	905	226	0	2521	0.359	906	1019	0.9	0.6	2.456	A
	3	561	140	906	1191	0.471	565	0	2.1	1.0	6.379	A
	4	1259	315	331	1951	0.645	1268	1140	4.5	2.0	5.878	A
	5	0	0	1599	441	0.000	0	0.91	0.0	0.0	0.000	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	511	128	849	822	0.622	655	0	37.9	1.9	46.648	E
	2	580	145	983	1106	0.524	585	520	2.5	1.2	7.666	A
	3			869				699				
	4	848	212	0	2380	0.356	849	869	0.8	0.6	2.586	A
2	1			849				484				
	2	758	190	0	2521	0.301	759	849	0.6	0.5	2.248	A
	3	470	117	759	1300	0.361	471	0	1.0	0.6	4.788	A
	4	1054	263	277	1984	0.531	1057	953	2.0	1.3	4.285	A
	5	0	0	1333	547	0.000	0	0.76	0.0	0.0	0.000	A

Queue Variation Results for each time segment

07:45 - 08:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	1.73	0.10	1.27	3.53	4.79			N/A	N/A
	2	1.05	0.60	1.10	1.54	1.60			N/A	N/A
	3									
	4	0.61	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.47	0.00	0.00	0.47	0.47			N/A	N/A
	3	0.62	0.61	1.10	1.54	1.60			N/A	N/A
	4	1.23	0.61	1.10	1.54	1.60			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	4.42	0.08	1.62	11.85	17.60			N/A	N/A
	2	1.95	0.06	0.78	4.94	7.45			N/A	N/A
	3									
	4	0.81	0.09	0.88	1.55	1.64			N/A	N/A
2	1									
	2	0.61	0.08	0.81	1.48	1.57			N/A	N/A
	3	0.97	0.08	0.86	1.65	2.08			N/A	N/A
	4	1.96	0.05	0.52	5.21	8.41			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	36.89	13.51	33.78	59.05	67.92			N/A	N/A
	2	5.88	0.05	0.47	16.24	30.90			N/A	N/A
	3									
	4	1.19	0.03	0.28	1.19	1.19			N/A	N/A
2	1									
	2	0.86	0.03	0.28	0.86	0.86			N/A	N/A
	3	2.06	0.03	0.31	2.06	5.11			N/A	N/A
	4	4.36	0.03	0.33	4.36	19.55			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	67.30	31.02	63.57	100.72	113.32			N/A	N/A
	2	6.50	0.04	0.38	12.90	35.11			N/A	N/A
	3									
	4	1.19	0.03	0.29	1.19	1.19			N/A	N/A
2	1									
	2	0.86	0.03	0.30	0.86	2.09			N/A	N/A
	3	2.10	0.03	0.30	2.10	4.69			N/A	N/A
	4	4.49	0.03	0.30	4.49	8.36			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	37.85	15.05	35.01	59.10	67.47			N/A	N/A
	2	2.48	0.05	0.54	6.75	10.89			N/A	N/A
	3									
	4	0.82	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.62	0.61	1.10	1.54	1.60			N/A	N/A
	3	0.99	0.08	0.89	1.70	2.12			N/A	N/A
	4	2.03	0.06	0.82	5.18	7.79			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	1.92	0.03	0.30	1.92	3.90			N/A	N/A
	2	1.23	0.04	0.35	2.54	6.25			N/A	N/A
	3									
	4	0.61	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.47	0.00	0.00	0.47	0.47			N/A	N/A
	3	0.63	0.04	0.45	1.61	1.75			N/A	N/A
	4	1.26	0.04	0.41	3.17	5.71			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

D3 - 2030 | RF Do Minimum | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	315.77	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	22.03	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	155.77	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2030	RF Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	779	100.000
	2		ONE HOUR	✓	854	100.000
	3					
	4		ONE HOUR	✓	1321	100.000
2	1					
	2		ONE HOUR	✓	1131	100.000
	3		ONE HOUR	✓	731	100.000
	4		ONE HOUR	✓	1567	100.000
	5		ONE HOUR	✓	105	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	196	4	579
	2	0	0	291	563
	3	0	0	0	0
	4	0	497	824	0

Demand (PCU/hr)

Junction 2

		To				
		1	2	3	4	5
From	1	0	0	0	0	0
	2	213	0	0	865	53
	3	2	190	0	506	33
	4	481	1058	0	0	28
	5	43	62	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

		To				
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.65	1063.85	201.7	220.0	F	715	1072
	2	1.03	115.23	31.1	86.7	F	784	1175
	3							
	4	0.61	4.28	1.7	2.9	A	1212	1818
2	1							
	2	0.49	3.10	1.1	1.6	A	1038	1557
	3	0.86	28.14	5.9	31.8	D	671	1006
	4	0.94	31.97	14.4	77.1	D	1438	2157
	5	0.51	34.93	1.1	5.1	D	96	145

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	586	147	991	751	0.781	572	0	0.0	3.5	20.773	C
	2	643	161	1047	1066	0.603	636	517	0.0	1.6	9.080	A
	3			845				838				
	4	995	249	0	2380	0.418	991	845	0.0	0.8	2.846	A
2	1			980				553				
	2	851	213	0	2521	0.338	849	980	0.0	0.6	2.366	A
	3	550	138	849	1233	0.446	547	0	0.0	0.9	5.745	A
	4	1180	295	368	1929	0.611	1173	1028	0.0	1.7	5.189	A
	5	79	20	1456	498	0.159	78	85	0.0	0.2	9.416	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	700	175	1186	654	1.071	630	0	3.5	21.1	90.227	F
	2	768	192	1212	964	0.797	759	605	1.6	3.9	18.511	C
	3			968				1002				
	4	1188	297	0	2380	0.499	1186	968	0.8	1.1	3.315	A
2	1			1173				662				
	2	1017	254	0	2521	0.403	1016	1173	0.6	0.7	2.630	A
	3	657	164	1016	1109	0.592	654	0	0.9	1.6	8.653	A
	4	1409	352	440	1886	0.747	1403	1230	1.7	3.1	8.102	A
	5	94	24	1741	384	0.246	94	102	0.2	0.4	13.627	B

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	858	214	1452	522	1.644	521	0	21.1	105.2	450.839	F
	2	940	235	1296	912	1.031	875	677	3.9	20.2	64.351	F
	3			964				1207				
	4	1454	364	0	2380	0.611	1452	964	1.1	1.7	4.257	A
2	1			1412				801				
	2	1245	311	0	2521	0.494	1244	1412	0.7	1.1	3.099	A
	3	805	201	1244	940	0.856	789	0	1.6	5.5	24.055	C
	4	1725	431	535	1829	0.943	1689	1498	3.1	12.2	23.801	C
	5	116	29	2100	240	0.481	113	124	0.4	1.0	30.614	D

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	858	214	1454	520	1.648	520	0	105.2	189.6	910.353	F
	2	940	235	1297	911	1.032	897	678	20.2	31.1	115.227	F
	3			978				1215				
	4	1454	364	0	2380	0.611	1454	978	1.7	1.7	4.278	A
2	1			1436				811				
	2	1245	311	0	2521	0.494	1245	1436	1.1	1.1	3.104	A
	3	805	201	1245	940	0.857	803	0	5.5	5.9	28.137	D
	4	1725	431	540	1826	0.945	1717	1508	12.2	14.4	31.966	D
	5	116	29	2131	228	0.508	115	125	1.0	1.1	34.934	D

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	700	175	1190	652	1.074	652	0	189.6	201.7	1063.845	F
	2	768	192	1230	952	0.806	870	612	31.1	5.5	63.876	F
	3			1058				1042				
	4	1188	297	0	2380	0.499	1190	1058	1.7	1.1	3.334	A
2	1			1213				679				
	2	1017	254	0	2521	0.403	1018	1213	1.1	0.7	2.639	A
	3	657	164	1018	1108	0.593	674	0	5.9	1.6	9.484	A
	4	1409	352	447	1882	0.749	1453	1245	14.4	3.4	10.109	B
	5	94	24	1795	362	0.261	97	104	1.1	0.4	15.087	C

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	586	147	996	749	0.783	745	0	201.7	162.0	879.489	F
	2	643	161	1179	984	0.653	656	562	5.5	2.1	12.524	B
	3			986				849				
	4	995	249	0	2380	0.418	996	986	1.1	0.8	2.865	A
2	1			992				559				
	2	851	213	0	2521	0.338	852	992	0.7	0.6	2.374	A
	3	550	138	852	1231	0.447	553	0	1.6	0.9	5.871	A
	4	1180	295	371	1928	0.612	1186	1035	3.4	1.8	5.388	A
	5	79	20	1471	492	0.161	80	86	0.4	0.2	9.625	A

Queue Variation Results for each time segment

07:45 - 08:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	3.52	0.03	0.32	3.52	11.96			N/A	N/A
	2	1.63	0.22	1.43	2.66	3.22			N/A	N/A
	3									
	4	0.79	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.56	0.56	1.10	1.54	1.60			N/A	N/A
	3	0.88	0.61	1.10	1.54	1.60			N/A	N/A
	4	1.71	0.60	1.58	2.21	2.84			N/A	N/A
	5	0.20	0.00	0.00	0.20	0.20			N/A	N/A

08:00 - 08:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	21.06	0.33	10.97	53.56	73.78			N/A	N/A
	2	3.92	0.08	1.52	10.41	15.41			N/A	N/A
	3									
	4	1.09	0.07	0.84	2.05	2.86			N/A	N/A
2	1									
	2	0.74	0.09	0.88	1.51	1.59			N/A	N/A
	3	1.56	0.05	0.54	3.92	6.03			N/A	N/A
	4	3.14	0.05	0.52	8.75	14.75			N/A	N/A
	5	0.35	0.00	0.00	0.35	0.35			N/A	N/A

08:15 - 08:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	105.23	57.92	101.43	147.45	162.61			N/A	N/A
	2	20.22	1.17	14.64	43.50	55.46			N/A	N/A
	3									
	4	1.71	0.03	0.29	1.71	1.71			N/A	N/A
2	1									
	2	1.07	0.03	0.28	1.07	1.07			N/A	N/A
	3	5.49	0.05	0.46	14.93	29.14			N/A	N/A
	4	12.23	0.08	1.64	35.67	57.46			N/A	N/A
	5	0.96	0.03	0.30	0.96	2.11			N/A	N/A

08:30 - 08:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	189.57	>199	>199	>199	>199			N/A	N/A
	2	31.11	1.93	22.58	67.81	86.69			N/A	N/A
	3									
	4	1.72	0.03	0.29	1.72	1.72			N/A	N/A
2	1									
	2	1.07	0.03	0.29	1.07	1.37			N/A	N/A
	3	5.95	0.04	0.37	11.29	31.82			N/A	N/A
	4	14.37	0.05	0.53	40.44	77.15			N/A	N/A
	5	1.07	0.04	0.38	2.56	5.12			N/A	N/A

08:45 - 09:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	201.66	>199	>199	>199	>199			N/A	N/A
	2	5.48	0.05	0.52	15.60	27.67			N/A	N/A
	3									
	4	1.10	0.48	1.13	1.64	1.64			N/A	N/A
2	1									
	2	0.75	0.61	1.10	1.54	1.60			N/A	N/A
	3	1.64	0.04	0.45	4.31	7.49			N/A	N/A
	4	3.40	0.05	0.46	9.36	17.20			N/A	N/A
	5	0.40	0.03	0.34	1.05	1.35			N/A	N/A

09:00 - 09:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	162.03	>199	>199	>199	>199			N/A	N/A
	2	2.15	0.03	0.33	2.19	9.82			N/A	N/A
	3									
	4	0.79	0.10	0.90	1.53	1.61			N/A	N/A
2	1									
	2	0.56	0.56	1.10	1.54	1.60			N/A	N/A
	3	0.90	0.03	0.34	1.58	4.40			N/A	N/A
	4	1.76	0.03	0.34	2.64	8.77			N/A	N/A
	5	0.21	0.03	0.29	0.52	0.55			N/A	N/A

D4 - 2030 | RF Do Minimum + Dev | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	369.84	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	28.35	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	186.02	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2030	RF Do Minimum + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	783	100.000
	2		ONE HOUR	✓	947	100.000
	3					
	4		ONE HOUR	✓	1357	100.000
2	1					
	2		ONE HOUR	✓	1160	100.000
	3		ONE HOUR	✓	759	100.000
	4		ONE HOUR	✓	1575	100.000
	5		ONE HOUR	✓	105	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	200	4	579
	2	0	0	355	592
	3	0	0	0	0
	4	0	533	824	0

Demand (PCU/hr)

Junction 2

		To				
		1	2	3	4	5
From	1	0	0	0	0	0
	2	223	0	0	884	53
	3	2	218	0	506	33
	4	481	1066	0	0	28
	5	43	62	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

		To				
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.72	1176.48	222.5	222.5	F	718	1078
	2	1.13	226.46	70.9	127.1	F	869	1303
	3							
	4	0.63	4.47	1.8	3.2	A	1245	1868
2	1							
	2	0.51	3.18	1.1	1.6	A	1064	1597
	3	0.91	42.15	9.1	48.8	E	696	1045
	4	0.96	39.37	18.0	88.8	E	1445	2168
	5	0.55	41.19	1.3	6.0	E	96	145

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	589	147	1018	738	0.799	574	0	0.0	3.9	22.456	C
	2	713	178	1046	1067	0.668	704	547	0.0	2.1	10.688	B
	3			865				885				
	4	1022	255	0	2380	0.429	1018	865	0.0	0.8	2.901	A
2	1			1007				561				
	2	873	218	0	2521	0.346	871	1007	0.0	0.6	2.398	A
	3	571	143	871	1217	0.470	568	0	0.0	1.0	6.066	A
	4	1186	296	396	1912	0.620	1179	1042	0.0	1.8	5.347	A
	5	79	20	1490	484	0.163	78	85	0.0	0.2	9.729	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	704	176	1219	638	1.103	620	0	3.9	24.9	105.013	F
	2	851	213	1201	970	0.877	834	637	2.1	6.3	26.405	D
	3			980				1056				
	4	1220	305	0	2380	0.513	1219	980	0.8	1.1	3.407	A
2	1			1204				671				
	2	1043	261	0	2521	0.414	1042	1204	0.6	0.8	2.677	A
	3	682	171	1042	1090	0.626	679	0	1.0	1.8	9.557	A
	4	1416	354	474	1866	0.759	1410	1247	1.8	3.3	8.566	A
	5	94	24	1782	368	0.257	94	102	0.2	0.4	14.415	B

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	862	216	1491	502	1.717	502	0	24.9	115.1	517.081	F
	2	1043	261	1279	922	1.131	908	714	6.3	40.0	106.223	F
	3			939				1249				
	4	1494	374	0	2380	0.628	1491	939	1.1	1.8	4.444	A
2	1			1443				810				
	2	1277	319	0	2521	0.507	1276	1443	0.8	1.1	3.179	A
	3	836	209	1276	917	0.911	811	0	1.8	7.9	32.075	D
	4	1734	434	574	1806	0.960	1690	1513	3.3	14.5	27.230	D
	5	116	29	2140	224	0.515	113	124	0.4	1.1	34.652	D

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	862	216	1494	501	1.722	501	0	115.1	205.5	1007.520	F
	2	1043	261	1280	921	1.132	919	715	40.0	70.9	226.456	F
	3			945				1254				
	4	1494	374	0	2380	0.628	1494	945	1.8	1.8	4.470	A
2	1			1471				820				
	2	1277	319	0	2521	0.507	1277	1471	1.1	1.1	3.184	A
	3	836	209	1277	916	0.912	831	0	7.9	9.1	42.146	E
	4	1734	434	581	1802	0.963	1720	1527	14.5	18.0	39.372	E
	5	116	29	2176	210	0.551	115	125	1.1	1.3	41.193	E

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	704	176	1223	636	1.107	636	0	205.5	222.5	1176.478	F
	2	851	213	1216	961	0.886	947	643	70.9	47.1	225.783	F
	3			1062				1100				
	4	1220	305	0	2380	0.513	1223	1062	1.8	1.2	3.429	A
2	1			1259				692				
	2	1043	261	0	2521	0.414	1044	1259	1.1	0.8	2.684	A
	3	682	171	1044	1088	0.627	711	0	9.1	1.9	11.265	B
	4	1416	354	486	1859	0.762	1473	1270	18.0	3.7	11.688	B
	5	94	24	1854	339	0.279	98	105	1.3	0.4	16.634	C

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	589	147	1023	735	0.801	732	0	222.5	186.9	1007.452	F
	2	713	178	1166	992	0.719	889	589	47.1	3.2	72.904	F
	3			1097				958				
	4	1022	255	0	2380	0.429	1023	1097	1.2	0.8	2.922	A
2	1			1020				567				
	2	873	218	0	2521	0.346	874	1020	0.8	0.6	2.407	A
	3	571	143	874	1214	0.471	575	0	1.9	1.0	6.228	A
	4	1186	296	400	1910	0.621	1193	1049	3.7	1.8	5.577	A
	5	79	20	1507	478	0.166	80	86	0.4	0.2	9.980	A

Queue Variation Results for each time segment

07:45 - 08:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	3.86	0.03	0.31	3.86	9.31			N/A	N/A
	2	2.14	0.11	1.49	4.45	6.06			N/A	N/A
	3									
	4	0.82	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.58	0.58	1.10	1.54	1.60			N/A	N/A
	3	0.96	0.59	1.09	1.54	1.60			N/A	N/A
	4	1.77	0.57	1.61	2.57	3.08			N/A	N/A
	5	0.21	0.00	0.00	0.21	0.21			N/A	N/A

08:00 - 08:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	24.95	0.38	13.18	63.42	87.22			N/A	N/A
	2	6.35	0.14	2.67	16.19	22.79			N/A	N/A
	3									
	4	1.15	0.07	0.81	2.24	3.19			N/A	N/A
2	1									
	2	0.77	0.09	0.88	1.52	1.61			N/A	N/A
	3	1.79	0.05	0.52	4.67	7.44			N/A	N/A
	4	3.34	0.05	0.53	9.35	15.68			N/A	N/A
	5	0.37	0.00	0.00	0.37	0.37			N/A	N/A

08:15 - 08:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	115.09	62.09	110.77	162.76	179.96			N/A	N/A
	2	39.95	12.76	36.03	66.68	77.67			N/A	N/A
	3									
	4	1.83	0.03	0.29	1.83	1.83			N/A	N/A
2	1									
	2	1.12	0.03	0.28	1.12	1.12			N/A	N/A
	3	7.90	0.07	1.48	22.82	36.78			N/A	N/A
	4	14.47	0.11	3.80	41.12	62.22			N/A	N/A
	5	1.08	0.03	0.31	1.08	3.53			N/A	N/A

08:30 - 08:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	205.46	>199	>199	>199	>199			N/A	N/A
	2	70.90	28.55	66.01	111.36	127.14			N/A	N/A
	3									
	4	1.84	0.03	0.29	1.84	1.84			N/A	N/A
2	1									
	2	1.13	0.03	0.29	1.13	1.15			N/A	N/A
	3	9.13	0.05	0.49	25.36	48.82			N/A	N/A
	4	17.96	0.07	1.63	52.98	88.82			N/A	N/A
	5	1.26	0.04	0.39	3.09	6.05			N/A	N/A

08:45 - 09:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	222.49	>199	>199	>199	>199			N/A	N/A
	2	47.10	18.69	43.65	73.92	84.47			N/A	N/A
	3									
	4	1.17	0.35	1.16	1.52	1.89			N/A	N/A
2	1									
	2	0.78	0.61	1.10	1.54	1.60			N/A	N/A
	3	1.90	0.04	0.41	4.95	9.44			N/A	N/A
	4	3.67	0.05	0.46	10.06	18.74			N/A	N/A
	5	0.44	0.04	0.38	1.24	1.45			N/A	N/A

09:00 - 09:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	186.89	>199	>199	>199	>199			N/A	N/A
	2	3.16	0.03	0.33	3.46	14.70			N/A	N/A
	3									
	4	0.83	0.09	0.89	1.23	1.23			N/A	N/A
2	1									
	2	0.59	0.59	1.10	1.54	1.60			N/A	N/A
	3	0.99	0.03	0.32	1.55	4.45			N/A	N/A
	4	1.83	0.03	0.33	2.32	8.78			N/A	N/A
	5	0.22	0.03	0.30	0.54	1.00			N/A	N/A

D5 - 2030 | RF Do Minimum + Dev + Site B | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	396.40	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	31.16	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	200.44	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2030	RF Do Minimum + Dev + Site B	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	786	100.000
	2		ONE HOUR	✓	975	100.000
	3					
	4		ONE HOUR	✓	1367	100.000
2	1					
	2		ONE HOUR	✓	1172	100.000
	3		ONE HOUR	✓	766	100.000
	4		ONE HOUR	✓	1578	100.000
	5		ONE HOUR	✓	105	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	203	4	579
	2	0	0	371	604
	3	0	0	0	0
	4	0	543	824	0

Demand (PCU/hr)

Junction 2

		To				
		1	2	3	4	5
From	1	0	0	0	0	0
	2	229	0	0	890	53
	3	2	225	0	506	33
	4	481	1069	0	0	28
	5	43	62	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

		To				
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.75	1216.84	230.2	230.2	F	721	1082
	2	1.16	284.41	84.7	141.4	F	895	1342
	3							
	4	0.63	4.53	1.9	3.3	A	1254	1882
2	1							
	2	0.51	3.22	1.1	1.6	A	1075	1613
	3	0.93	49.06	10.7	54.7	E	703	1054
	4	0.97	42.40	19.5	92.5	E	1448	2172
	5	0.57	43.71	1.3	6.4	E	96	145

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	592	148	1026	734	0.806	576	0	0.0	4.0	23.124	C
	2	734	184	1045	1067	0.688	725	556	0.0	2.3	11.279	B
	3			873				897				
	4	1029	257	0	2380	0.432	1026	873	0.0	0.8	2.917	A
2	1			1014				565				
	2	882	221	0	2521	0.350	880	1014	0.0	0.6	2.411	A
	3	577	144	880	1210	0.477	573	0	0.0	1.0	6.176	A
	4	1188	297	406	1907	0.623	1181	1047	0.0	1.8	5.405	A
	5	79	20	1502	480	0.165	78	85	0.0	0.2	9.845	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	707	177	1228	633	1.115	617	0	4.0	26.5	110.730	F
	2	877	219	1197	973	0.901	856	647	2.3	7.5	29.759	D
	3			985				1069				
	4	1229	307	0	2380	0.516	1228	985	0.8	1.2	3.434	A
2	1			1213				676				
	2	1054	263	0	2521	0.418	1053	1213	0.6	0.8	2.696	A
	3	689	172	1053	1082	0.636	685	0	1.0	1.9	9.888	A
	4	1419	355	486	1859	0.763	1412	1252	1.8	3.4	8.742	A
	5	94	24	1796	362	0.261	94	102	0.2	0.4	14.726	B

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	865	216	1502	497	1.743	496	0	26.5	118.8	541.493	F
	2	1073	268	1274	925	1.160	915	725	7.5	47.1	121.299	F
	3			932				1256				
	4	1505	376	0	2380	0.632	1502	932	1.2	1.9	4.498	A
2	1			1450				815				
	2	1290	323	0	2521	0.512	1289	1450	0.8	1.1	3.210	A
	3	843	211	1289	907	0.930	815	0	1.9	9.0	35.494	E
	4	1737	434	587	1798	0.966	1690	1517	3.4	15.4	28.555	D
	5	116	29	2153	219	0.527	113	123	0.4	1.1	36.201	E

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	865	216	1505	495	1.748	495	0	118.8	211.4	1041.580	F
	2	1073	268	1274	925	1.161	923	726	47.1	84.7	264.829	F
	3			937				1261				
	4	1505	376	0	2380	0.632	1505	937	1.9	1.9	4.526	A
2	1			1479				826				
	2	1290	323	0	2521	0.512	1290	1479	1.1	1.1	3.218	A
	3	843	211	1290	906	0.931	836	0	9.0	10.7	49.061	E
	4	1737	434	594	1793	0.969	1721	1532	15.4	19.5	42.397	E
	5	116	29	2190	204	0.566	115	125	1.1	1.3	43.714	E

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	707	177	1232	631	1.119	631	0	211.4	230.2	1216.843	F
	2	877	219	1211	964	0.909	952	652	84.7	65.8	284.414	F
	3			1055				1108				
	4	1229	307	0	2380	0.516	1232	1055	1.9	1.2	3.456	A
2	1			1274				700				
	2	1054	263	0	2521	0.418	1055	1274	1.1	0.8	2.704	A
	3	689	172	1055	1080	0.637	724	0	10.7	2.0	12.140	B
	4	1419	355	499	1850	0.767	1481	1279	19.5	3.8	12.445	B
	5	94	24	1876	330	0.286	98	105	1.3	0.5	17.302	C

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	592	148	1031	732	0.809	728	0	230.2	196.1	1054.098	F
	2	734	184	1161	995	0.738	978	597	65.8	4.9	136.942	F
	3			1142				997				
	4	1029	257	0	2380	0.432	1031	1142	1.2	0.8	2.937	A
2	1			1028				571				
	2	882	221	0	2521	0.350	883	1028	0.8	0.6	2.419	A
	3	577	144	883	1208	0.478	581	0	2.0	1.0	6.355	A
	4	1188	297	410	1904	0.624	1196	1054	3.8	1.9	5.646	A
	5	79	20	1519	473	0.167	80	86	0.5	0.2	10.110	B

Queue Variation Results for each time segment

07:45 - 08:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	4.00	0.03	0.31	4.00	8.39			N/A	N/A
	2	2.33	0.10	1.47	5.23	7.21			N/A	N/A
	3									
	4	0.83	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.59	0.59	1.10	1.54	1.60			N/A	N/A
	3	0.99	0.58	1.09	1.55	1.61			N/A	N/A
	4	1.79	0.56	1.62	2.67	3.15			N/A	N/A
	5	0.21	0.00	0.00	0.21	0.21			N/A	N/A

08:00 - 08:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	26.47	0.39	14.00	67.37	92.68			N/A	N/A
	2	7.47	0.18	3.61	18.54	25.58			N/A	N/A
	3									
	4	1.17	0.06	0.80	2.34	3.28			N/A	N/A
2	1									
	2	0.79	0.09	0.88	1.54	1.62			N/A	N/A
	3	1.87	0.05	0.51	4.94	7.92			N/A	N/A
	4	3.41	0.05	0.53	9.57	16.03			N/A	N/A
	5	0.38	0.00	0.00	0.38	0.38			N/A	N/A

08:15 - 08:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	118.79	63.44	114.23	168.73	186.79			N/A	N/A
	2	47.07	17.97	43.42	74.73	85.67			N/A	N/A
	3									
	4	1.87	0.03	0.29	1.87	1.87			N/A	N/A
2	1									
	2	1.15	0.03	0.28	1.15	1.15			N/A	N/A
	3	9.00	0.09	1.92	25.59	39.32			N/A	N/A
	4	15.38	0.13	4.80	43.03	63.87			N/A	N/A
	5	1.13	0.03	0.31	1.13	4.10			N/A	N/A

08:30 - 08:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	211.36	>199	>199	>199	>199			N/A	N/A
	2	84.65	39.92	80.27	125.94	141.40			N/A	N/A
	3									
	4	1.88	0.03	0.29	1.88	1.88			N/A	N/A
2	1									
	2	1.15	0.03	0.29	1.15	1.15			N/A	N/A
	3	10.74	0.06	0.94	31.24	54.71			N/A	N/A
	4	19.50	0.09	2.81	57.32	92.46			N/A	N/A
	5	1.33	0.04	0.39	3.28	6.40			N/A	N/A

08:45 - 09:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	230.18	>199	>199	>199	>199			N/A	N/A
	2	65.77	31.85	62.44	96.63	108.16			N/A	N/A
	3									
	4	1.18	0.33	1.17	1.60	1.93			N/A	N/A
2	1									
	2	0.79	0.61	1.10	1.54	1.60			N/A	N/A
	3	2.00	0.04	0.41	5.13	10.12			N/A	N/A
	4	3.78	0.05	0.46	10.37	19.36			N/A	N/A
	5	0.45	0.04	0.39	1.28	1.47			N/A	N/A

09:00 - 09:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	196.06	>199	>199	>199	>199			N/A	N/A
	2	4.90	0.04	0.39	11.33	26.66			N/A	N/A
	3									
	4	0.84	0.09	0.89	1.39	1.39			N/A	N/A
2	1									
	2	0.59	0.59	1.10	1.54	1.60			N/A	N/A
	3	1.02	0.03	0.32	1.40	4.35			N/A	N/A
	4	1.85	0.03	0.33	2.20	8.77			N/A	N/A
	5	0.22	0.03	0.30	0.55	1.09			N/A	N/A

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.1.0.2307
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Filename: Junction 7 - Wrotham Road_A2 Linked Rbt - Base Model PM.j11
Path: C:\Users\mattjohnson\Ridge and Partners LLP\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Modelling\Arcady\Tech Note 2\2030 RF Do Minimum
Report generation date: 02/09/2026 16:10:00

»D1 - 2023 | Base | PM
»D2 - 2025 | Base | PM
»D3 - 2030 | RF Do Minimum | PM
»D4 - 2030 | RF Do Minimum + Dev | PM
»D5 - 2030 | RF Do Minimum + Dev + Site B | PM

Summary of junction performance

	PM			
	Set ID	Queue (PCU)	Delay (s)	RFC
	2023 - Base			
Junction 1 - Arm 1	D1	60.8	300.18	1.19
Junction 1 - Arm 2		5.8	26.09	0.85
Junction 1 - Arm 4		1.2	3.45	0.52
Junction 2 - Arm 2		0.9	2.81	0.44
Junction 2 - Arm 3		5.2	15.55	0.83
Junction 2 - Arm 4		4.4	11.14	0.80
Junction 2 - Arm 5		0.0	0.00	0.00
	2025 - Base			
Junction 1 - Arm 1	D2	66.9	328.51	1.21
Junction 1 - Arm 2		6.0	27.10	0.86
Junction 1 - Arm 4		1.2	3.47	0.52
Junction 2 - Arm 2		0.9	2.82	0.44
Junction 2 - Arm 3		5.7	17.00	0.85
Junction 2 - Arm 4		4.6	11.54	0.81
Junction 2 - Arm 5		0.0	0.00	0.00
	2030 - RF Do Minimum			
Junction 1 - Arm 1	D3	192.8	1094.00	1.68
Junction 1 - Arm 2		16.5	67.43	0.97
Junction 1 - Arm 4		1.6	4.15	0.60
Junction 2 - Arm 2		1.1	3.17	0.50
Junction 2 - Arm 3		69.3	151.06	1.08
Junction 2 - Arm 4		12.1	29.17	0.93
Junction 2 - Arm 5		1.7	51.55	0.63
	2030 - RF Do Minimum + Dev			
Junction 1 - Arm 1	D4	238.8	1427.14	1.87
Junction 1 - Arm 2		24.3	89.67	1.00
Junction 1 - Arm 4		1.9	4.57	0.64
Junction 2 - Arm 2		1.1	3.21	0.51
Junction 2 - Arm 3		105.6	220.14	1.14
Junction 2 - Arm 4		16.4	38.74	0.96
Junction 2 - Arm 5		2.4	71.58	0.72
	2030 - RF Do Minimum + Dev + Site B			
Junction 1 - Arm 1	D5	255.1	1554.15	1.94
Junction 1 - Arm 2		27.2	97.52	1.01
Junction 1 - Arm 4		2.0	4.69	0.65
Junction 2 - Arm 2		1.1	3.23	0.51
Junction 2 - Arm 3		116.0	240.38	1.16
Junction 2 - Arm 4		18.1	42.36	0.96
Junction 2 - Arm 5		2.6	79.43	0.74

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.

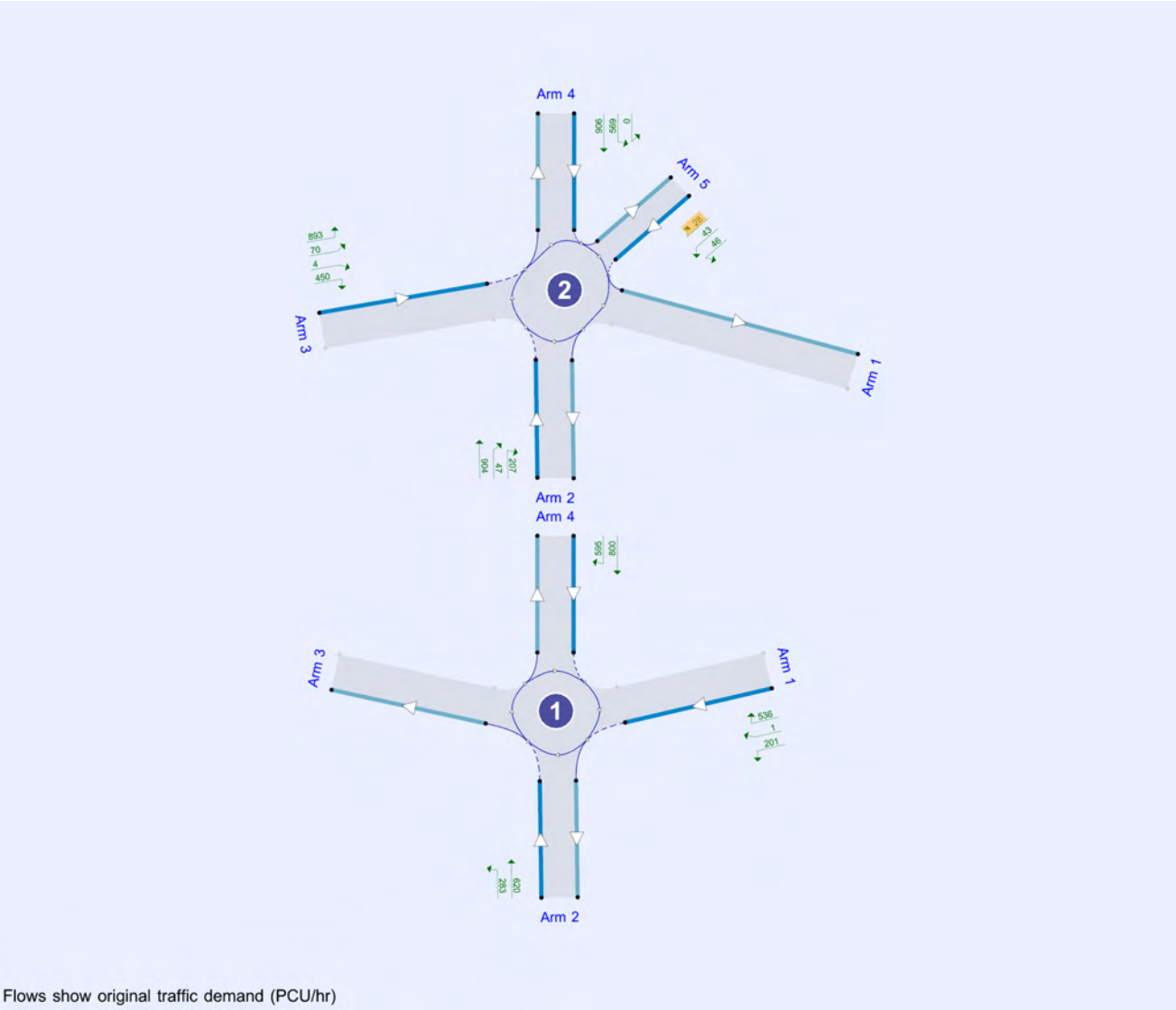
File summary

File Description

Title	
Location	Wrotham Road/A2 Southern Roundabout
Site number	7
Date	09/04/2026
Version	
Status	(new file)
Identifier	MJ
Client	Richborough
Jobnumber	T25512
Enumerator	AzureAD\MatthewJohnson
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	PCU	PCU	perHour	s	-Min	perMin



Flows show original traffic demand (PCU/hr)

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75	✓					0.85	36.00	20.00		

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	Base	PM	ONE HOUR	16:45	18:15	15	✓
D2	2025	Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2030	RF Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D4	2030	RF Do Minimum + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D5	2030	RF Do Minimum + Dev + Site B	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

D1 - 2023 | Base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	83.59	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	10.14	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	40.99	E

Arms

Arms

Junction	Arm	Name	Description	No give-way line
1	1	A2 (E) Off-Slip		
	2	Wrotham Road S		
	3	A2 (W) On-Slip		
	4	Wrotham Road N - Internal Link		
2	1	A2 (E) On-Slip		
	2	Wrotham Road S - Internal Link		
	3	A2 (W) Off-Slip		
	4	Wrotham Road N		
	5	Hotel access		

Roundabout Geometry

Junction	Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	1	3.70	8.50	10.2	19.1	59.9	60.0	✓	
	2	4.90	9.20	22.2	24.1	59.9	49.0		
	3								✓
	4	7.60	8.10	6.9	20.8	59.9	36.0		
2	1								✓
	2	7.10	9.30	17.9	31.1	63.9	47.0		
	3	7.00	10.20	17.9	40.0	63.9	24.0	✓	
	4	4.60	9.30	22.1	48.8	63.9	50.0		
	5	3.10	5.50	5.4	12.7	63.9	59.0		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Junction	Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1	1	Direct	Calbration	-335
	2	Direct	Calibration	-580
	3			
	4	None		
2	1			
	2	None		
	3	Direct	Calibration	-550
	4	None		
	5	None		

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1	1	0.499	1185
	2	0.622	1577
	3		
	4	0.671	2380
2	1		
	2	0.662	2521
	3	0.741	2312
	4	0.600	2150
	5	0.400	1080

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

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	Base	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	617	100.000
	2		ONE HOUR	✓	766	100.000
	3					
	4		ONE HOUR	✓	1118	100.000
2	1					
	2		ONE HOUR	✓	1009	100.000
	3		ONE HOUR	✓	1124	100.000
	4		ONE HOUR	✓	1321	100.000
	5		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	169	1	447
	2	0	0	214	552
	3	0	0	0	0
	4	0	635	483	0

Demand (PCU/hr)

Junction 2

		To				
		1	2	3	4	5
From	1	0	0	0	0	0
	2	182	0	0	827	0
	3	4	332	0	788	0
	4	531	790	0	0	0
	5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

		To				
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.19	300.18	60.8	104.6	F	566	849
	2	0.85	26.09	5.8	29.7	D	703	1054
	3							
	4	0.52	3.45	1.2	1.6	A	1026	1539
2	1							
	2	0.44	2.81	0.9	2.1	A	926	1389
	3	0.83	15.55	5.2	26.3	C	1031	1547
	4	0.80	11.14	4.4	19.2	B	1212	1818
	5	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	465	116	839	767	0.606	458	0	0.0	1.6	12.566	B
	2	577	144	695	1145	0.504	572	602	0.0	1.1	6.864	A
	3			744				523				
	4	842	210	0	2380	0.354	839	744	0.0	0.6	2.567	A
2	1			841				538				
	2	760	190	0	2521	0.301	758	841	0.0	0.5	2.244	A
	3	846	212	758	1751	0.483	842	0	0.0	1.0	4.340	A
	4	995	249	388	1917	0.519	990	1211	0.0	1.2	4.249	A
	5	0	0	1378	529	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	555	139	1004	685	0.810	545	0	1.6	4.1	26.618	D
	2	689	172	830	1061	0.649	685	720	1.1	2.0	10.427	B
	3			889				626				
	4	1005	251	0	2380	0.422	1004	889	0.6	0.8	2.877	A
2	1			1006				643				
	2	907	227	0	2521	0.360	906	1006	0.5	0.6	2.453	A
	3	1010	253	906	1640	0.616	1008	0	1.0	1.7	6.229	A
	4	1188	297	465	1871	0.635	1185	1449	1.2	1.9	5.743	A
	5	0	0	1649	420	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	679	170	1229	573	1.187	562	0	4.1	33.5	138.874	F
	2	843	211	939	993	0.849	830	852	2.0	5.3	22.594	C
	3			1005				764				
	4	1231	308	0	2380	0.517	1229	1005	0.8	1.2	3.437	A
2	1			1226				785				
	2	1111	278	0	2521	0.441	1110	1226	0.6	0.9	2.806	A
	3	1238	309	1110	1490	0.831	1225	0	1.7	4.9	14.304	B
	4	1454	364	566	1810	0.803	1445	1768	1.9	4.2	10.572	B
	5	0	0	2011	276	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	679	170	1231	572	1.188	570	0	33.5	60.8	300.182	F
	2	843	211	946	989	0.853	841	855	5.3	5.8	26.091	D
	3			1019				768				
	4	1231	308	0	2380	0.517	1231	1019	1.2	1.2	3.445	A
2	1			1235				789				
	2	1111	278	0	2521	0.441	1111	1235	0.9	0.9	2.808	A
	3	1238	309	1111	1489	0.831	1237	0	4.9	5.2	15.552	C
	4	1454	364	570	1808	0.804	1454	1778	4.2	4.4	11.136	B
	5	0	0	2024	271	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	555	139	1007	684	0.811	672	0	60.8	31.5	249.036	F
	2	689	172	922	1004	0.686	702	756	5.8	2.5	13.640	B
	3			992				632				
	4	1005	251	0	2380	0.422	1007	992	1.2	0.8	2.885	A
2	1			1018				649				
	2	907	227	0	2521	0.360	908	1018	0.9	0.6	2.456	A
	3	1010	253	908	1639	0.616	1024	0	5.2	1.8	6.569	A
	4	1188	297	470	1868	0.636	1197	1462	4.4	2.0	5.984	A
	5	0	0	1667	413	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	465	116	843	765	0.607	583	0	31.5	1.8	37.948	E
	2	577	144	788	1087	0.530	582	638	2.5	1.3	7.903	A
	3			842				527				
	4	842	210	0	2380	0.354	843	842	0.8	0.6	2.578	A
2	1			847				541				
	2	760	190	0	2521	0.301	760	847	0.6	0.5	2.249	A
	3	846	212	760	1749	0.484	849	0	1.8	1.0	4.418	A
	4	995	249	391	1916	0.519	998	1218	2.0	1.2	4.328	A
	5	0	0	1389	525	0.000	0	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

16:45 - 17:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	1.63	0.10	1.24	3.20	4.29			N/A	N/A
	2	1.10	0.61	1.10	1.54	1.60			N/A	N/A
	3									
	4	0.60	0.60	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.47	0.00	0.00	0.47	0.47			N/A	N/A
	3	1.02	0.61	1.10	1.54	1.60			N/A	N/A
	4	1.17	0.61	1.10	1.54	1.60			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	4.07	0.08	1.51	10.89	16.25			N/A	N/A
	2	1.97	0.06	0.89	4.92	7.31			N/A	N/A
	3									
	4	0.80	0.09	0.88	1.54	1.63			N/A	N/A
2	1									
	2	0.62	0.08	0.82	1.48	1.57			N/A	N/A
	3	1.73	0.05	0.50	4.51	7.30			N/A	N/A
	4	1.88	0.05	0.52	4.94	7.86			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	33.47	11.60	30.43	54.36	62.83			N/A	N/A
	2	5.31	0.04	0.44	13.95	28.60			N/A	N/A
	3									
	4	1.17	0.03	0.28	1.17	1.17			N/A	N/A
2	1									
	2	0.86	0.03	0.28	0.86	0.86			N/A	N/A
	3	4.94	0.04	0.37	9.29	26.30			N/A	N/A
	4	4.25	0.03	0.33	4.25	19.16			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	60.76	26.70	57.07	92.43	104.55			N/A	N/A
	2	5.79	0.04	0.36	9.18	29.67			N/A	N/A
	3									
	4	1.17	0.03	0.29	1.17	1.17			N/A	N/A
2	1									
	2	0.86	0.03	0.30	0.86	2.07			N/A	N/A
	3	5.16	0.03	0.32	5.16	19.47			N/A	N/A
	4	4.38	0.03	0.31	4.38	8.74			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	31.54	10.71	28.58	51.47	59.61			N/A	N/A
	2	2.51	0.06	0.65	6.74	10.67			N/A	N/A
	3									
	4	0.81	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.62	0.61	1.10	1.54	1.60			N/A	N/A
	3	1.80	0.05	0.52	4.69	7.46			N/A	N/A
	4	1.95	0.06	0.81	4.94	7.43			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	1.80	0.03	0.30	1.80	3.47			N/A	N/A
	2	1.26	0.04	0.36	2.83	6.38			N/A	N/A
	3									
	4	0.60	0.60	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.48	0.00	0.00	0.48	0.48			N/A	N/A
	3	1.04	0.04	0.37	2.36	5.09			N/A	N/A
	4	1.20	0.04	0.41	3.02	5.40			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

D2 - 2025 | Base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	91.28	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	10.79	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	44.58	E

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025	Base	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	625	100.000
	2		ONE HOUR	✓	771	100.000
	3					
	4		ONE HOUR	✓	1125	100.000
2	1					
	2		ONE HOUR	✓	1015	100.000
	3		ONE HOUR	✓	1140	100.000
	4		ONE HOUR	✓	1329	100.000
	5		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	171	1	453
	2	0	0	215	556
	3	0	0	0	0
	4	0	639	486	0

Demand (PCU/hr)

Junction 2

From \ To	1	2	3	4	5
1	0	0	0	0	0
2	183	0	0	832	0
3	4	337	0	799	0
4	534	795	0	0	0
5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

From \ To	1	2	3	4
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10

Heavy Vehicle %

Junction 2

From \ To	1	2	3	4	5
1	10	10	10	10	10
2	10	10	10	10	10
3	10	10	10	10	10
4	10	10	10	10	10
5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.21	328.51	66.9	110.8	F	574	860
	2	0.86	27.10	6.0	31.6	D	707	1061
	3							
	4	0.52	3.47	1.2	1.6	A	1032	1548
2	1							
	2	0.44	2.82	0.9	2.0	A	931	1397
	3	0.85	17.00	5.7	29.4	C	1046	1569
	4	0.81	11.54	4.6	20.5	B	1220	1829
	5	0.00	0.00	0.0	~1	A	0	0

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	471	118	845	764	0.616	464	0	0.0	1.7	12.899	B
	2	580	145	702	1141	0.509	576	607	0.0	1.1	6.957	A
	3			751				526				
	4	847	212	0	2380	0.356	845	751	0.0	0.6	2.571	A
2	1			848				541				
	2	764	191	0	2521	0.303	762	848	0.0	0.5	2.250	A
	3	858	215	762	1747	0.491	854	0	0.0	1.1	4.414	A
	4	1001	250	393	1914	0.523	996	1223	0.0	1.2	4.288	A
	5	0	0	1389	525	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	562	140	1011	682	0.824	551	0	1.7	4.4	28.239	D
	2	693	173	837	1057	0.656	689	725	1.1	2.0	10.674	B
	3			897				630				
	4	1011	253	0	2380	0.425	1011	897	0.6	0.8	2.890	A
2	1			1015				647				
	2	912	228	0	2521	0.362	912	1015	0.5	0.6	2.462	A
	3	1025	256	912	1636	0.626	1022	0	1.1	1.8	6.411	A
	4	1195	299	470	1868	0.640	1192	1464	1.2	1.9	5.829	A
	5	0	0	1662	416	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	688	172	1237	569	1.210	559	0	4.4	36.6	150.145	F
	2	849	212	941	992	0.856	835	856	2.0	5.5	23.332	C
	3			1008				768				
	4	1239	310	0	2380	0.520	1237	1008	0.8	1.2	3.461	A
2	1			1236				790				
	2	1118	279	0	2521	0.443	1117	1236	0.6	0.9	2.819	A
	3	1255	314	1117	1485	0.845	1241	0	1.8	5.4	15.397	C
	4	1463	366	572	1807	0.810	1453	1785	1.9	4.4	10.907	B
	5	0	0	2026	270	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	688	172	1239	568	1.212	567	0	36.6	66.9	328.506	F
	2	849	212	947	989	0.859	847	859	5.5	6.0	27.102	D
	3			1021				772				
	4	1239	310	0	2380	0.520	1239	1021	1.2	1.2	3.469	A
2	1			1246				794				
	2	1118	279	0	2521	0.443	1118	1246	0.9	0.9	2.821	A
	3	1255	314	1118	1484	0.846	1254	0	5.4	5.7	17.000	C
	4	1463	366	577	1804	0.811	1463	1795	4.4	4.6	11.542	B
	5	0	0	2039	265	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	562	140	1013	681	0.826	670	0	66.9	40.0	287.014	F
	2	693	173	924	1003	0.691	707	758	6.0	2.6	13.962	B
	3			995				636				
	4	1011	253	0	2380	0.425	1013	995	1.2	0.8	2.901	A
2	1			1028				653				
	2	912	228	0	2521	0.362	913	1028	0.9	0.6	2.465	A
	3	1025	256	913	1635	0.627	1040	0	5.7	1.9	6.819	A
	4	1195	299	476	1865	0.641	1205	1478	4.6	2.0	6.095	A
	5	0	0	1681	408	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	471	118	848	763	0.617	623	0	40.0	1.9	60.300	F
	2	580	145	819	1068	0.543	585	652	2.6	1.3	8.286	A
	3			874				530				
	4	847	212	0	2380	0.356	848	874	0.8	0.6	2.585	A
2	1			855				544				
	2	764	191	0	2521	0.303	765	855	0.6	0.5	2.255	A
	3	858	215	765	1745	0.492	861	0	1.9	1.1	4.496	A
	4	1001	250	396	1913	0.523	1004	1231	2.0	1.2	4.371	A
	5	0	0	1399	521	0.000	0	0	0.0	0.0	0.000	A

Queue Variation Results for each time segment

16:45 - 17:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	1.70	0.09	1.21	3.51	4.82			N/A	N/A
	2	1.12	0.61	1.10	1.54	1.60			N/A	N/A
	3									
	4	0.61	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.48	0.00	0.00	0.48	0.48			N/A	N/A
	3	1.05	0.61	1.10	1.54	1.60			N/A	N/A
	4	1.19	0.61	1.10	1.54	1.60			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	4.39	0.08	1.64	11.74	17.38			N/A	N/A
	2	2.03	0.06	0.90	5.10	7.57			N/A	N/A
	3									
	4	0.81	0.09	0.88	1.55	1.64			N/A	N/A
2	1									
	2	0.62	0.08	0.83	1.49	1.57			N/A	N/A
	3	1.81	0.05	0.50	4.79	7.77			N/A	N/A
	4	1.92	0.05	0.52	5.07	8.13			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	36.56	13.90	33.64	57.89	66.39			N/A	N/A
	2	5.53	0.04	0.45	14.86	29.61			N/A	N/A
	3									
	4	1.18	0.03	0.28	1.18	1.18			N/A	N/A
2	1									
	2	0.87	0.03	0.28	0.87	0.87			N/A	N/A
	3	5.41	0.04	0.38	11.63	29.45			N/A	N/A
	4	4.41	0.03	0.34	4.87	20.54			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	66.92	31.93	63.44	98.88	110.84			N/A	N/A
	2	6.04	0.04	0.36	10.32	31.58			N/A	N/A
	3									
	4	1.19	0.03	0.29	1.19	1.19			N/A	N/A
2	1									
	2	0.87	0.03	0.30	0.87	2.01			N/A	N/A
	3	5.69	0.03	0.33	5.69	24.05			N/A	N/A
	4	4.56	0.03	0.31	4.56	10.06			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:45 - 18:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	40.00	16.89	37.28	61.31	69.61			N/A	N/A
	2	2.57	0.06	0.55	7.01	11.23			N/A	N/A
	3									
	4	0.82	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.63	0.61	1.10	1.54	1.60			N/A	N/A
	3	1.88	0.05	0.50	5.01	8.14			N/A	N/A
	4	2.00	0.06	0.76	5.11	7.73			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

18:00 - 18:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	1.90	0.03	0.30	1.90	3.64			N/A	N/A
	2	1.33	0.04	0.37	3.02	6.76			N/A	N/A
	3									
	4	0.61	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.48	0.00	0.00	0.48	0.48			N/A	N/A
	3	1.07	0.04	0.36	2.32	5.33			N/A	N/A
	4	1.22	0.04	0.40	3.06	5.62			N/A	N/A
	5	0.00	0.00	0.00	0.00	0.00			N/A	N/A

D3 - 2030 | RF Do Minimum | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	298.43	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	62.93	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	160.41	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2030	RF Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	723	100.000
	2		ONE HOUR	✓	839	100.000
	3					
	4		ONE HOUR	✓	1296	100.000
2	1					
	2		ONE HOUR	✓	1137	100.000
	3		ONE HOUR	✓	1342	100.000
	4		ONE HOUR	✓	1451	100.000
	5		ONE HOUR	✓	117	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	186	1	536
	2	0	0	241	598
	3	0	0	0	0
	4	0	701	595	0

Demand (PCU/hr)

Junction 2

		To				
		1	2	3	4	5
From	1	0	0	0	0	0
	2	199	0	0	891	47
	3	4	375	0	893	70
	4	569	882	0	0	0
	5	46	43	0	28	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

		To				
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.68	1094.00	192.8	220.0	F	663	995
	2	0.97	67.43	16.5	70.3	F	770	1155
	3							
	4	0.60	4.15	1.6	2.6	A	1189	1784
2	1							
	2	0.50	3.17	1.1	1.6	A	1043	1565
	3	1.08	151.06	69.3	137.8	F	1231	1847
	4	0.93	29.17	12.1	66.6	D	1331	1997
	5	0.63	51.55	1.7	8.6	F	107	161

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	544	136	973	701	0.777	531	0	0.0	3.4	21.825	C
	2	632	158	841	1054	0.599	625	663	0.0	1.6	9.095	A
	3			839				627				
	4	976	244	0	2380	0.410	973	839	0.0	0.8	2.808	A
2	1			993				613				
	2	856	214	21	2507	0.341	854	973	0.0	0.6	2.392	A
	3	1010	253	875	1664	0.607	1004	0	0.0	1.7	5.938	A
	4	1092	273	521	1838	0.594	1086	1358	0.0	1.6	5.224	A
	5	88	22	1519	473	0.186	87	88	0.0	0.2	10.246	B

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	650	162	1164	605	1.074	582	0	3.4	20.3	94.586	F
	2	754	189	967	976	0.773	747	779	1.6	3.5	16.750	C
	3			964				750				
	4	1165	291	0	2380	0.490	1164	964	0.8	1.0	3.254	A
2	1			1188				733				
	2	1022	256	25	2504	0.408	1021	1163	0.6	0.8	2.669	A
	3	1206	302	1046	1537	0.785	1198	0	1.7	3.8	11.407	B
	4	1304	326	622	1777	0.734	1299	1623	1.6	2.9	8.192	A
	5	105	26	1816	354	0.297	104	105	0.2	0.5	15.820	C

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	796	199	1425	475	1.675	475	0	20.3	100.7	474.321	F
	2	924	231	1007	951	0.971	886	893	3.5	12.8	45.458	E
	3			984				909				
	4	1427	357	0	2380	0.600	1425	984	1.0	1.6	4.135	A
2	1			1402				886				
	2	1252	313	30	2501	0.501	1251	1372	0.8	1.1	3.165	A
	3	1478	369	1280	1364	1.084	1336	0	3.8	39.2	69.406	F
	4	1598	399	718	1720	0.929	1567	1899	2.9	10.5	22.533	C
	5	129	32	2163	215	0.599	125	121	0.5	1.5	42.174	E

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	796	199	1427	474	1.679	474	0	100.7	181.2	943.357	F
	2	924	231	1007	951	0.971	909	894	12.8	16.5	67.429	F
	3			999				917				
	4	1427	357	0	2380	0.600	1427	999	1.6	1.6	4.155	A
2	1			1424				897				
	2	1252	313	31	2500	0.501	1252	1393	1.1	1.1	3.171	A
	3	1478	369	1282	1362	1.085	1357	0	39.2	69.3	151.064	F
	4	1598	399	725	1715	0.931	1591	1915	10.5	12.1	29.174	D
	5	129	32	2193	203	0.635	128	123	1.5	1.7	51.553	F

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	650	162	1167	603	1.077	603	0	181.2	192.8	1093.996	F
	2	754	189	984	965	0.781	803	787	16.5	4.3	29.649	D
	3			1020				767				
	4	1165	291	0	2380	0.490	1167	1020	1.6	1.1	3.271	A
2	1			1289				752				
	2	1022	256	26	2503	0.408	1023	1263	1.1	0.8	2.678	A
	3	1206	302	1050	1534	0.786	1464	0	69.3	4.9	83.043	F
	4	1304	326	711	1723	0.757	1339	1803	12.1	3.6	11.134	B
	5	105	26	1931	308	0.342	110	119	1.7	0.6	20.417	C

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	544	136	977	698	0.779	695	0	192.8	155.3	903.061	F
	2	632	158	964	978	0.646	641	707	4.3	2.1	12.050	B
	3			972				633				
	4	976	244	0	2380	0.410	977	972	1.1	0.8	2.826	A
2	1			1009				620				
	2	856	214	21	2506	0.342	857	987	0.8	0.6	2.403	A
	3	1010	253	878	1661	0.608	1023	0	4.9	1.7	6.321	A
	4	1092	273	528	1834	0.596	1100	1374	3.6	1.6	5.456	A
	5	88	22	1539	465	0.190	89	89	0.6	0.3	10.590	B

Queue Variation Results for each time segment

16:45 - 17:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	3.43	0.03	0.31	3.43	11.27			N/A	N/A
	2	1.60	0.57	1.48	2.13	2.66			N/A	N/A
	3									
	4	0.76	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.57	0.57	1.10	1.54	1.60			N/A	N/A
	3	1.67	0.11	1.31	3.19	4.24			N/A	N/A
	4	1.59	0.61	1.48	2.06	2.31			N/A	N/A
	5	0.25	0.00	0.00	0.25	0.25			N/A	N/A

17:00 - 17:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	20.32	0.31	10.32	52.06	72.04			N/A	N/A
	2	3.47	0.08	1.45	9.05	13.31			N/A	N/A
	3									
	4	1.05	0.07	0.86	1.92	2.57			N/A	N/A
2	1									
	2	0.76	0.09	0.88	1.51	1.59			N/A	N/A
	3	3.80	0.05	0.53	10.71	18.18			N/A	N/A
	4	2.94	0.05	0.53	8.16	13.55			N/A	N/A
	5	0.45	0.03	0.32	0.87	1.26			N/A	N/A

17:15 - 17:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	100.66	54.67	96.89	141.84	156.71			N/A	N/A
	2	12.78	0.19	5.67	33.45	47.15			N/A	N/A
	3									
	4	1.63	0.03	0.28	1.63	1.63			N/A	N/A
2	1									
	2	1.10	0.03	0.28	1.10	1.10			N/A	N/A
	3	39.18	9.26	33.99	70.40	83.95			N/A	N/A
	4	10.53	0.06	1.28	30.73	51.95			N/A	N/A
	5	1.47	0.03	0.33	2.08	7.24			N/A	N/A

17:30 - 17:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	181.15	>199	>199	>199	>199			N/A	N/A
	2	16.54	0.12	4.71	46.83	70.32			N/A	N/A
	3									
	4	1.64	0.03	0.29	1.64	1.64			N/A	N/A
2	1									
	2	1.10	0.03	0.29	1.10	1.28			N/A	N/A
	3	69.32	21.35	62.46	117.81	137.78			N/A	N/A
	4	12.14	0.05	0.46	31.69	66.61			N/A	N/A
	5	1.73	0.04	0.40	4.37	8.63			N/A	N/A

17:45 - 18:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	192.83	>199	>199	>199	>199			N/A	N/A
	2	4.33	0.05	0.48	12.06	22.11			N/A	N/A
	3									
	4	1.06	0.56	1.11	1.28	1.28			N/A	N/A
2	1									
	2	0.76	0.61	1.10	1.54	1.60			N/A	N/A
	3	4.91	0.04	0.44	13.15	26.14			N/A	N/A
	4	3.57	0.05	0.53	10.05	16.98			N/A	N/A
	5	0.59	0.05	0.48	1.48	1.62			N/A	N/A

18:00 - 18:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	155.28	>199	>199	>199	>199			N/A	N/A
	2	2.08	0.03	0.34	3.43	10.64			N/A	N/A
	3									
	4	0.77	0.10	0.91	1.52	1.59			N/A	N/A
2	1									
	2	0.57	0.57	1.10	1.54	1.60			N/A	N/A
	3	1.74	0.03	0.30	1.74	3.68			N/A	N/A
	4	1.64	0.03	0.34	2.57	8.27			N/A	N/A
	5	0.26	0.03	0.32	0.94	1.37			N/A	N/A

D4 - 2030 | RF Do Minimum + Dev | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	377.61	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	91.21	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	211.41	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2030	RF Do Minimum + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	732	100.000
	2		ONE HOUR	✓	888	100.000
	3					
	4		ONE HOUR	✓	1374	100.000
2	1					
	2		ONE HOUR	✓	1152	100.000
	3		ONE HOUR	✓	1402	100.000
	4		ONE HOUR	✓	1469	100.000
	5		ONE HOUR	✓	117	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	195	1	536
	2	0	0	275	613
	3	0	0	0	0
	4	0	779	595	0

Demand (PCU/hr)

Junction 2

		To				
		1	2	3	4	5
From	1	0	0	0	0	0
	2	204	0	0	901	47
	3	4	435	0	893	70
	4	569	900	0	0	0
	5	46	43	0	28	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

		To				
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.87	1427.14	238.8	238.8	F	672	1008
	2	1.00	89.67	24.3	81.7	F	815	1222
	3							
	4	0.64	4.57	1.9	3.4	A	1261	1891
2	1							
	2	0.51	3.21	1.1	1.6	A	1057	1586
	3	1.14	220.14	105.6	174.3	F	1286	1930
	4	0.96	38.74	16.4	82.9	E	1348	2022
	5	0.72	71.58	2.4	11.5	F	107	161

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	551	138	1031	671	0.821	534	0	0.0	4.3	26.267	D
	2	669	167	838	1056	0.633	661	727	0.0	1.8	9.856	A
	3			847				652				
	4	1034	259	0	2380	0.435	1031	847	0.0	0.8	2.928	A
2	1			1051				616				
	2	867	217	21	2507	0.346	865	1031	0.0	0.6	2.409	A
	3	1055	264	886	1656	0.637	1048	0	0.0	1.9	6.439	A
	4	1106	276	569	1809	0.611	1099	1365	0.0	1.7	5.530	A
	5	88	22	1580	448	0.197	87	88	0.0	0.3	10.937	B

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	658	165	1234	570	1.154	558	0	4.3	29.3	133.532	F
	2	798	200	944	991	0.806	789	848	1.8	4.1	18.842	C
	3			953				779				
	4	1235	309	0	2380	0.519	1234	953	0.8	1.2	3.450	A
2	1			1256				737				
	2	1036	259	25	2504	0.414	1035	1231	0.6	0.8	2.694	A
	3	1260	315	1060	1527	0.825	1249	0	1.9	4.8	13.703	B
	4	1321	330	679	1743	0.758	1314	1630	1.7	3.3	9.104	A
	5	105	26	1888	325	0.324	104	105	0.3	0.5	17.861	C

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	806	201	1510	433	1.862	432	0	29.3	122.7	647.249	F
	2	978	244	971	973	1.004	926	971	4.1	17.1	54.787	F
	3			956				941				
	4	1513	378	0	2380	0.636	1510	956	1.2	1.9	4.538	A
2	1			1455				887				
	2	1268	317	30	2501	0.507	1267	1426	0.8	1.1	3.206	A
	3	1544	386	1296	1352	1.142	1336	0	4.8	56.8	93.715	F
	4	1617	404	761	1693	0.955	1577	1871	3.3	13.5	27.467	D
	5	129	32	2219	193	0.669	123	118	0.5	1.9	53.617	F

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	806	201	1513	431	1.869	431	0	122.7	216.4	1427.140	F
	2	978	244	971	973	1.005	949	973	17.1	24.3	89.670	F
	3			971				950				
	4	1513	378	0	2380	0.636	1513	971	1.9	1.9	4.566	A
2	1			1479				900				
	2	1268	317	30	2500	0.507	1268	1449	1.1	1.1	3.213	A
	3	1544	386	1299	1350	1.144	1348	0	56.8	105.6	220.138	F
	4	1617	404	766	1691	0.957	1606	1881	13.5	16.4	38.740	E
	5	129	32	2252	179	0.718	127	119	1.9	2.4	71.584	F

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	658	165	1238	568	1.158	568	0	216.4	238.8	1368.077	F
	2	798	200	953	985	0.811	874	853	24.3	5.4	46.495	E
	3			1019				807				
	4	1235	309	0	2380	0.519	1238	1019	1.9	1.2	3.475	A
2	1			1375				762				
	2	1036	259	27	2503	0.414	1037	1348	1.1	0.8	2.703	A
	3	1260	315	1064	1524	0.827	1508	0	105.6	43.7	180.208	F
	4	1321	330	774	1686	0.783	1369	1798	16.4	4.2	14.220	B
	5	105	26	2025	270	0.389	112	118	2.4	0.7	25.906	D

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	551	138	1036	669	0.824	666	0	238.8	210.1	1213.856	F
	2	669	167	937	994	0.672	681	765	5.4	2.3	13.090	B
	3			958				660				
	4	1034	259	0	2380	0.435	1036	958	1.2	0.9	2.948	A
2	1			1117				625				
	2	867	217	21	2506	0.346	868	1096	0.8	0.6	2.419	A
	3	1055	264	890	1653	0.639	1222	0	43.7	2.0	13.680	B
	4	1106	276	633	1770	0.625	1115	1479	4.2	1.9	6.130	A
	5	88	22	1652	420	0.210	90	96	0.7	0.3	12.069	B

Queue Variation Results for each time segment

16:45 - 17:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	4.27	0.03	0.30	4.27	5.37			N/A	N/A
	2	1.84	0.48	1.10	2.85	3.29			N/A	N/A
	3									
	4	0.84	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.58	0.58	1.10	1.54	1.60			N/A	N/A
	3	1.90	0.09	1.23	4.20	5.86			N/A	N/A
	4	1.70	0.57	1.56	2.36	2.95			N/A	N/A
	5	0.27	0.00	0.00	0.27	0.27			N/A	N/A

17:00 - 17:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	29.34	0.36	14.79	75.92	105.38			N/A	N/A
	2	4.14	0.09	1.23	10.78	15.69			N/A	N/A
	3									
	4	1.18	0.06	0.79	2.41	3.37			N/A	N/A
2	1									
	2	0.77	0.09	0.88	1.52	1.61			N/A	N/A
	3	4.79	0.06	0.87	13.63	22.31			N/A	N/A
	4	3.31	0.05	0.55	9.23	15.16			N/A	N/A
	5	0.51	0.04	0.44	1.35	1.50			N/A	N/A

17:15 - 17:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	122.72	62.24	117.44	178.09	198.40			N/A	N/A
	2	17.07	0.61	10.60	40.18	53.30			N/A	N/A
	3									
	4	1.89	0.03	0.29	1.89	1.89			N/A	N/A
2	1									
	2	1.12	0.03	0.28	1.12	1.12			N/A	N/A
	3	56.78	22.19	52.60	89.79	102.76			N/A	N/A
	4	13.46	0.10	3.14	38.55	59.06			N/A	N/A
	5	1.88	0.04	0.38	4.38	9.76			N/A	N/A

17:30 - 17:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	216.38	>199	>199	>199	>199			N/A	N/A
	2	24.27	0.47	13.72	60.18	81.66			N/A	N/A
	3									
	4	1.91	0.03	0.29	1.91	1.91			N/A	N/A
2	1									
	2	1.13	0.03	0.29	1.13	1.16			N/A	N/A
	3	105.65	51.36	100.61	155.71	174.29			N/A	N/A
	4	16.41	0.07	1.53	48.20	82.94			N/A	N/A
	5	2.36	0.05	0.45	6.41	11.51			N/A	N/A

17:45 - 18:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	238.85	>199	>199	>199	>199			N/A	N/A
	2	5.45	0.05	0.51	15.48	27.66			N/A	N/A
	3									
	4	1.20	0.31	1.17	1.64	1.96			N/A	N/A
2	1									
	2	0.78	0.61	1.10	1.54	1.60			N/A	N/A
	3	43.68	18.67	40.79	66.79	75.75			N/A	N/A
	4	4.21	0.05	0.53	11.90	20.33			N/A	N/A
	5	0.73	0.05	0.51	1.25	1.91			N/A	N/A

18:00 - 18:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	210.11	>199	>199	>199	>199			N/A	N/A
	2	2.35	0.03	0.34	3.51	11.76			N/A	N/A
	3									
	4	0.85	0.09	0.89	1.47	1.47			N/A	N/A
2	1									
	2	0.58	0.58	1.10	1.54	1.60			N/A	N/A
	3	2.00	0.03	0.30	2.00	2.86			N/A	N/A
	4	1.86	0.03	0.34	2.68	9.22			N/A	N/A
	5	0.30	0.03	0.32	1.06	1.57			N/A	N/A

D5 - 2030 | RF Do Minimum + Dev + Site B | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	408.95	F
2	Northern Rbt	Standard Roundabout		1, 2, 3, 4, 5	99.87	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	230.14	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2030	RF Do Minimum + Dev + Site B	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	738	100.000
	2		ONE HOUR	✓	903	100.000
	3					
	4		ONE HOUR	✓	1395	100.000
2	1					
	2		ONE HOUR	✓	1158	100.000
	3		ONE HOUR	✓	1417	100.000
	4		ONE HOUR	✓	1475	100.000
	5		ONE HOUR	✓	117	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	201	1	536
	2	0	0	283	620
	3	0	0	0	0
	4	0	800	595	0

Demand (PCU/hr)

Junction 2

		To				
		1	2	3	4	5
From	1	0	0	0	0	0
	2	207	0	0	904	47
	3	4	450	0	893	70
	4	569	906	0	0	0
	5	46	43	0	28	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

		To				
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.94	1554.15	255.1	255.1	F	677	1016
	2	1.01	97.52	27.2	85.1	F	829	1243
	3							
	4	0.65	4.69	2.0	3.7	A	1280	1920
2	1							
	2	0.51	3.23	1.1	1.6	A	1063	1594
	3	1.16	240.38	116.0	184.8	F	1300	1950
	4	0.96	42.36	18.1	87.8	E	1353	2030
	5	0.74	79.43	2.6	12.4	F	107	161

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	556	139	1047	664	0.837	537	0	0.0	4.7	28.141	D
	2	680	170	837	1057	0.643	672	747	0.0	1.9	10.108	B
	3			851				658				
	4	1050	263	0	2380	0.441	1047	851	0.0	0.9	2.963	A
2	1			1067				618				
	2	872	218	21	2507	0.348	869	1046	0.0	0.6	2.416	A
	3	1067	267	890	1652	0.646	1059	0	0.0	2.0	6.589	A
	4	1110	278	582	1801	0.617	1103	1367	0.0	1.7	5.626	A
	5	88	22	1598	441	0.200	87	88	0.0	0.3	11.155	B

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	663	166	1253	561	1.183	551	0	4.7	32.8	149.357	F
	2	812	203	935	996	0.815	802	868	1.9	4.4	19.506	C
	3			951				786				
	4	1254	314	0	2380	0.527	1253	951	0.9	1.2	3.508	A
2	1			1274				739				
	2	1041	260	25	2504	0.416	1040	1249	0.6	0.8	2.704	A
	3	1274	318	1065	1523	0.836	1261	0	2.0	5.1	14.478	B
	4	1326	331	695	1733	0.765	1319	1632	1.7	3.4	9.409	A
	5	105	26	1909	317	0.332	104	105	0.3	0.5	18.544	C

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	813	203	1533	421	1.929	421	0	32.8	130.7	711.121	F
	2	994	249	960	980	1.014	937	994	4.4	18.6	57.902	F
	3			949				948				
	4	1536	384	0	2380	0.645	1533	949	1.2	2.0	4.659	A
2	1			1468				889				
	2	1275	319	29	2501	0.510	1274	1439	0.8	1.1	3.224	A
	3	1560	390	1303	1347	1.158	1333	0	5.1	61.9	101.047	F
	4	1624	406	772	1687	0.963	1580	1864	3.4	14.5	29.172	D
	5	129	32	2234	187	0.690	123	118	0.5	2.0	57.652	F

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	813	203	1536	420	1.936	420	0	130.7	228.9	1554.145	F
	2	994	249	961	980	1.015	960	995	18.6	27.2	97.516	F
	3			964				956				
	4	1536	384	0	2380	0.645	1536	964	2.0	2.0	4.691	A
2	1			1492				902				
	2	1275	319	30	2500	0.510	1275	1462	1.1	1.1	3.230	A
	3	1560	390	1305	1345	1.160	1344	0	61.9	116.0	240.383	F
	4	1624	406	777	1684	0.964	1610	1872	14.5	18.1	42.361	E
	5	129	32	2268	173	0.744	126	118	2.0	2.6	79.426	F

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	663	166	1257	559	1.187	559	0	228.9	255.1	1464.858	F
	2	812	203	943	991	0.819	897	873	27.2	5.9	54.467	F
	3			1022				818				
	4	1254	314	0	2380	0.527	1257	1022	2.0	1.2	3.535	A
2	1			1395				768				
	2	1041	260	27	2503	0.416	1042	1368	1.1	0.8	2.713	A
	3	1274	318	1069	1520	0.838	1506	0	116.0	58.1	209.144	F
	4	1326	331	785	1679	0.790	1381	1789	18.1	4.4	15.430	C
	5	105	26	2050	260	0.404	113	117	2.6	0.8	27.928	D

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	556	139	1052	661	0.840	658	0	255.1	229.4	1325.144	F
	2	680	170	928	1000	0.680	694	782	5.9	2.4	13.446	B
	3			954				667				
	4	1050	263	0	2380	0.441	1052	954	1.2	0.9	2.986	A
2	1			1153				627				
	2	872	218	22	2506	0.348	873	1131	0.8	0.6	2.426	A
	3	1067	267	894	1650	0.647	1291	0	58.1	2.1	21.193	C
	4	1110	278	669	1749	0.635	1120	1516	4.4	1.9	6.396	A
	5	88	22	1690	404	0.218	90	99	0.8	0.3	12.666	B

Queue Variation Results for each time segment

16:45 - 17:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	4.66	0.03	0.30	4.66	4.66			N/A	N/A
	2	1.92	0.44	1.17	3.02	3.66			N/A	N/A
	3									
	4	0.86	0.61	1.10	1.54	1.60			N/A	N/A
2	1									
	2	0.58	0.58	1.10	1.54	1.60			N/A	N/A
	3	1.96	0.08	1.19	4.46	6.34			N/A	N/A
	4	1.74	0.55	1.58	2.55	3.08			N/A	N/A
	5	0.27	0.00	0.00	0.27	0.27			N/A	N/A

17:00 - 17:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	32.85	0.35	16.06	85.97	120.11			N/A	N/A
	2	4.36	0.09	1.38	11.35	16.43			N/A	N/A
	3									
	4	1.22	0.06	0.77	2.60	3.70			N/A	N/A
2	1									
	2	0.78	0.09	0.88	1.53	1.61			N/A	N/A
	3	5.13	0.06	1.04	14.59	23.59			N/A	N/A
	4	3.43	0.06	0.60	9.59	15.69			N/A	N/A
	5	0.53	0.05	0.47	1.39	1.52			N/A	N/A

17:15 - 17:30

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	130.72	>199	>199	>199	>199			N/A	N/A
	2	18.61	0.96	12.36	42.30	55.20			N/A	N/A
	3									
	4	1.97	0.03	0.29	1.97	1.97			N/A	N/A
2	1									
	2	1.14	0.03	0.28	1.14	1.14			N/A	N/A
	3	61.91	26.26	57.93	95.37	108.27			N/A	N/A
	4	14.54	0.12	4.29	40.89	61.07			N/A	N/A
	5	2.03	0.04	0.40	5.11	10.43			N/A	N/A

17:30 - 17:45

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	228.92	>199	>199	>199	>199			N/A	N/A
	2	27.21	0.99	17.26	64.30	85.15			N/A	N/A
	3									
	4	1.99	0.03	0.29	1.99	1.99			N/A	N/A
2	1									
	2	1.14	0.03	0.29	1.14	1.14			N/A	N/A
	3	116.01	60.47	111.29	166.42	184.76			N/A	N/A
	4	18.12	0.08	2.11	53.47	87.78			N/A	N/A
	5	2.61	0.05	0.48	7.17	12.44			N/A	N/A

17:45 - 18:00

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	255.10	>199	>199	>199	>199			N/A	N/A
	2	5.90	0.05	0.53	16.88	29.68			N/A	N/A
	3									
	4	1.24	0.27	1.19	1.77	2.05			N/A	N/A
2	1									
	2	0.79	0.61	1.10	1.54	1.60			N/A	N/A
	3	58.10	30.39	55.53	82.64	91.66			N/A	N/A
	4	4.39	0.05	0.53	12.43	21.38			N/A	N/A
	5	0.78	0.05	0.51	1.50	2.09			N/A	N/A

18:00 - 18:15

Junction	Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1	229.42	>199	>199	>199	>199			N/A	N/A
	2	2.43	0.03	0.34	3.53	12.09			N/A	N/A
	3									
	4	0.87	0.08	0.88	1.64	1.67			N/A	N/A
2	1									
	2	0.59	0.59	1.10	1.54	1.60			N/A	N/A
	3	2.08	0.03	0.30	2.08	2.71			N/A	N/A
	4	1.95	0.03	0.34	2.81	9.64			N/A	N/A
	5	0.31	0.03	0.32	1.07	1.63			N/A	N/A

APPENDIX K A2/WROTHAM ROAD 'INTERIM' MITIGATION RESULTS

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.1.0.2307
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Filename: Junction 7 - Wrotham Road_A2 Linked Rbt - Lane Sim - AM.j11
Path: C:\Users\mattjohnson\Ridge and Partners LLP\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Modelling\Arcady\Tech Note 2\2028 FTH Do Minimum
Report generation date: 02/09/2026 15:57:44

»D1 - 2028 | FTH Do Minimum | AM
»D2 - 2028 | FTH Do Minimum + Dev | AM
»D3 - 2028 | FTH Do Minimum + Dev + Site B | AM
»D4 - 2028 | FTH Do Minimum + Dev + Site B + RF | AM

Summary of junction performance

	AM			
	Set ID	Queue (PCU)	Delay (s)	RFC
	[Lane Simulation] - 2028 - FTH Do Minimum			
Arm 1	D1	62.8	238.93	
Arm 2		5.4	21.86	
Arm 4		5.4	13.24	
	[Lane Simulation] - 2028 - FTH Do Minimum + Dev			
Arm 1	D2	75.2	298.94	
Arm 2		12.8	43.77	
Arm 4		5.3	13.00	
	[Lane Simulation] - 2028 - FTH Do Minimum + Dev + Site B			
Arm 1	D3	76.5	299.74	
Arm 2		14.5	47.99	
Arm 4		5.4	12.91	
	[Lane Simulation] - 2028 - FTH Do Minimum + Dev + Site B + RF			
Arm 1	D4	80.6	318.00	
Arm 2		20.4	65.83	
Arm 4		5.4	12.57	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

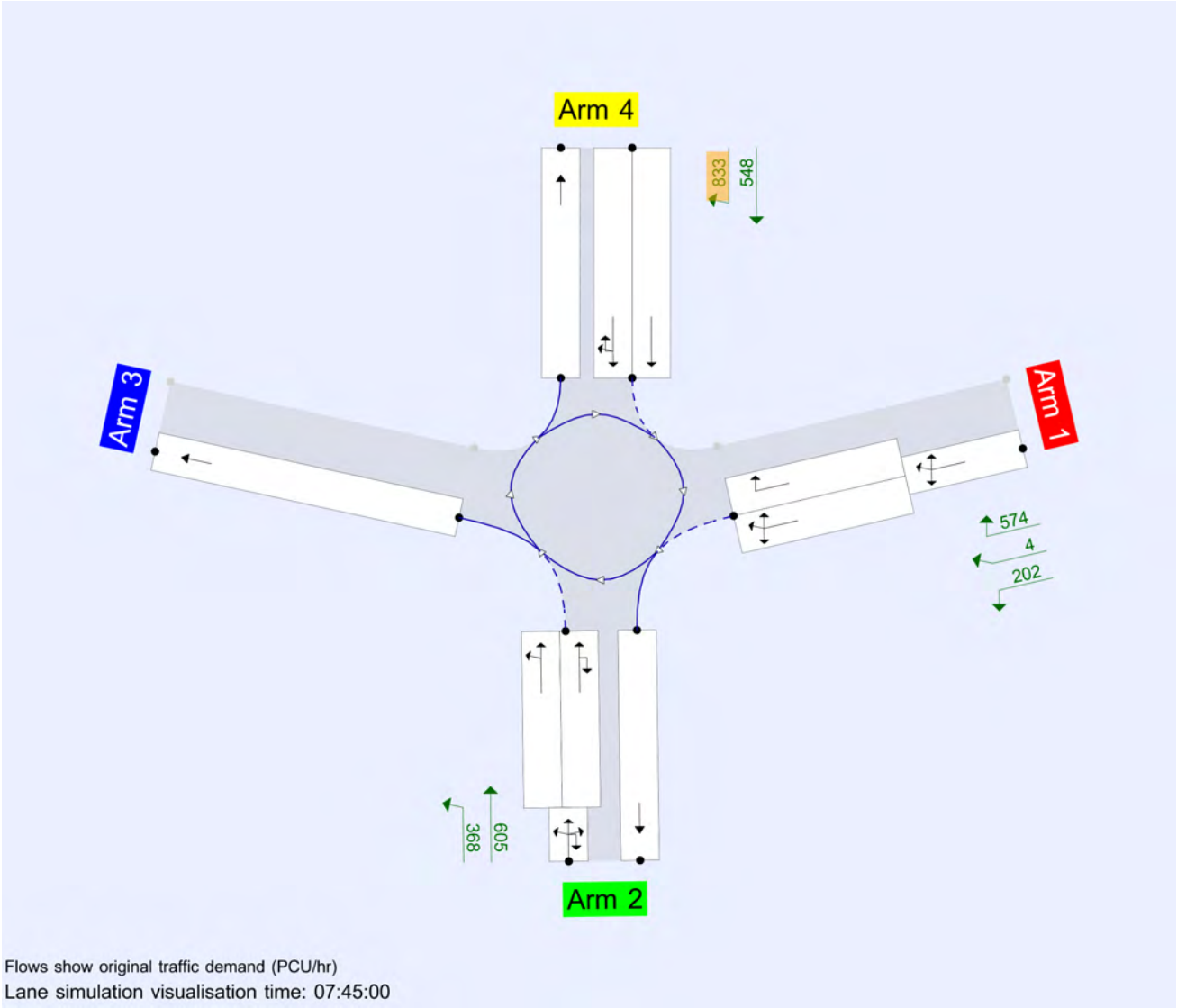
File summary

File Description

Title	
Location	Wrotham Road/A2 Southern Roundabout
Site number	7
Date	09/04/2026
Version	
Status	(new file)
Identifier	MJ
Client	Richborough
Jobnumber	T25512
Enumerator	AzureAD\MatthewJohnson
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	PCU	PCU	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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75	✓					0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	Do not calculate	-1	3	1	60	✓			625838153	243	8.03

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028	FTH Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D2	2028	FTH Do Minimum + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D3	2028	FTH Do Minimum + Dev + Site B	AM	ONE HOUR	07:45	09:15	15	✓
D4	2028	FTH Do Minimum + Dev + Site B + RF	AM	ONE HOUR	07:45	09:15	15	✓

Analysis Set Details

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

D1 - 2028 | FTH Do Minimum | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	75.43	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	75.43	F

Arms

Arms

Arm	Name	Description	No give-way line
1	A2 (E) Off-Slip		
2	Wrotham Road S		
3	A2 (W) On-Slip		
4	Wrotham Road N - Internal Link		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	3.70	8.50	10.2	19.1	59.9	60.0	✓	
2	4.90	9.20	22.2	24.1	59.9	49.0		
3								✓
4	7.60	8.10	6.9	20.8	59.9	36.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.499	1520
2	0.622	2157
3		
4	0.671	2380

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

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1	Evenly split	10.00
2	Evenly split	10.00
3	Evenly split	10.00
4	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1	Entry	1	1	2, 3, 4	✓	4.00			0	99999	
			2	4	✓	4.00			0	99999	
		2	1	(2, 3, 4)		Infinity					
2	Entry	1	1	3, 4	✓	4.00			0	99999	
			2	2, 4	✓	4.00			0	99999	
		2	1	(1, 2, 3, 4)		Infinity					
	Exit	1	1			Infinity					
3	Exit	1	1			Infinity					
4	Entry	1	1	2		Infinity			0	99999	
			2	2, 3, 4		Infinity			0	99999	
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1	Entry	1	1	0.249	760
			2	0.249	760
2	Entry	1	1	0.311	1079
			2	0.311	1079
4	Entry	1	1	0.335	1190
			2	0.335	1190

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			1	2	3	4
1	1	1		✓	✓	✓
		2				✓
	2	1		✓	✓	✓
2	1	1			✓	✓
		2		✓		✓
	2	1	✓	✓	✓	✓
4	1	1		✓		
		2		✓	✓	✓

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028	FTH Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	769	100.000
2		ONE HOUR	✓	815	100.000
3					
4		ONE HOUR	✓	1327	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	191	4	574
	2	0	0	264	551
	3	0	0	0	0
	4	0	493	833	1

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Cyclist %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	238.93	62.8	111.9	F	704	1057
2	21.86	5.4	17.0	C	744	1115
3						
4	13.24	5.4	14.4	B	1212	1817

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	581	145	989	582	571	0	0.0	2.5	12.738	B
2	606	152	1059	607	609	512	0.0	1.2	6.892	A
3			0			818				
4	987	247	0	989	987	848	0.0	1.9	6.450	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	678	170	1182	679	683	0	2.5	4.9	23.441	C
2	721	180	1249	722	735	613	1.2	2.0	10.435	B
3			0			988				
4	1189	297	0	1182	1201	983	1.9	2.9	7.931	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	849	212	1458	740	741	0	4.9	33.1	96.434	F
2	894	224	1461	892	891	736	2.0	5.4	19.399	C
3			0			1204				
4	1450	362	0	1458	1458	1148	2.9	4.6	12.291	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	852	213	1467	742	742	0	33.1	62.8	238.927	F
2	899	225	1482	900	901	726	5.4	5.3	21.858	C
3			0			1213				
4	1468	367	0	1467	1471	1169	4.6	5.4	13.243	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	691	173	1177	837	821	0	62.8	32.9	216.027	F
2	732	183	1362	737	749	652	5.3	2.4	13.408	B
3			0			974				
4	1177	294	0	1177	1203	1125	5.4	2.8	8.703	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	576	144	1002	629	697	0	32.9	5.2	65.781	F
2	610	153	1099	611	624	531	2.4	1.6	9.131	A
3			0			833				
4	999	250	0	1002	1008	878	2.8	1.8	6.596	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	2.46	0.00	1.39	4.96	7.21
2	1.24	0.00	0.25	2.97	4.12
3					
4	1.92	0.00	0.93	4.34	5.61

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	4.86	0.00	2.67	9.64	13.85
2	1.98	0.00	0.90	4.30	5.95
3					
4	2.88	0.00	1.60	5.94	8.21

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	33.15	5.54	30.25	61.70	68.85
2	5.39	0.00	2.93	11.68	16.95
3					
4	4.57	0.00	2.81	10.28	14.43

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	62.82	13.05	59.90	102.70	111.85
2	5.31	0.00	2.91	11.85	16.85
3					
4	5.40	0.00	3.66	11.54	14.43

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	32.90	0.09	22.83	78.90	100.40
2	2.37	0.00	1.10	4.77	8.43
3					
4	2.78	0.00	1.42	6.34	8.43

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	5.25	0.00	1.24	9.35	28.55
2	1.55	0.00	0.67	2.96	4.81
3					
4	1.80	0.00	0.69	4.47	5.86

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	320	514	0.624	320	320	0.0	1.3	12.473	B
			2	4	260	514	0.507	261	252	0.0	0.9	10.810	B
		2	1	(2, 3, 4)	581			581	580	0.0	0.2	0.976	A
2	Entry	1	1	3, 4	359	749	0.480	360	365	0.0	0.7	7.222	A
			2	2, 4	247	749	0.329	247	244	0.0	0.5	5.968	A
		2	1	(1, 2, 3, 4)	606			606	613	0.0	0.1	0.170	A
	Exit	1	1		512			512	510	0.0	0.0	0.000	A
3	Exit	1	1		818			818	819	0.0	0.0	0.000	A
4	Entry	1	1	2	266	1190	0.224	266	267	0.0	0.3	3.929	A
			2	2, 3, 4	721	1190	0.606	724	721	0.0	1.6	7.373	A
	Exit	1	1		848			848	838	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	371	466	0.796	371	372	1.3	2.0	19.420	C
			2	4	308	466	0.662	308	311	0.9	1.6	16.475	C
		2	1	(2, 3, 4)	678			679	688	0.2	1.3	5.315	A
2	Entry	1	1	3, 4	424	690	0.614	424	430	0.7	1.2	10.313	B
			2	2, 4	298	690	0.432	299	305	0.5	0.7	8.378	A
		2	1	(1, 2, 3, 4)	721			722	738	0.1	0.1	0.922	A
	Exit	1	1		613			613	617	0.0	0.0	0.000	A
3	Exit	1	1		988			988	996	0.0	0.0	0.000	A
4	Entry	1	1	2	337	1190	0.283	336	346	0.3	0.6	4.410	A
			2	2, 3, 4	851	1190	0.715	846	855	1.6	2.3	9.350	A
	Exit	1	1		983			983	1006	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	389	397	0.981	389	392	2.0	3.8	31.786	D
			2	4	351	397	0.885	350	349	1.6	2.9	26.621	D
		2	1	(2, 3, 4)	849			741	754	1.3	26.4	66.584	F
2	Entry	1	1	3, 4	501	624	0.803	500	503	1.2	2.2	14.806	B
			2	2, 4	392	624	0.628	392	389	0.7	1.4	11.698	B
		2	1	(1, 2, 3, 4)	894			893	898	0.1	1.7	5.892	A
	Exit	1	1		736			736	730	0.0	0.0	0.000	A
3	Exit	1	1		1204			1204	1202	0.0	0.0	0.000	A
4	Entry	1	1	2	466	1190	0.392	467	465	0.6	0.6	5.175	A
			2	2, 3, 4	984	1190	0.827	991	993	2.3	3.9	15.596	C
	Exit	1	1		1148			1148	1158	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	392	395	0.994	392	393	3.8	3.9	35.568	E
			2	4	352	395	0.892	349	350	2.9	3.1	30.340	D
		2	1	(2, 3, 4)	852			744	744	26.4	55.8	206.387	F
2	Entry	1	1	3, 4	501	618	0.811	500	503	2.2	2.2	15.963	C
			2	2, 4	397	618	0.643	399	398	1.4	1.3	12.665	B
		2	1	(1, 2, 3, 4)	899			898	900	1.7	1.7	7.375	A
	Exit	1	1		726			726	727	0.0	0.0	0.000	A
3	Exit	1	1		1213			1213	1219	0.0	0.0	0.000	A
4	Entry	1	1	2	466	1190	0.392	464	466	0.6	0.8	5.287	A
			2	2, 3, 4	1001	1190	0.842	1003	1005	3.9	4.6	16.938	C
	Exit	1	1		1169			1169	1168	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	441	467	0.945	446	435	3.9	3.3	30.066	D
			2	4	386	467	0.828	391	387	3.1	2.4	25.432	D
		2	1	(2, 3, 4)	691			827	816	55.8	27.2	189.217	F
2	Entry	1	1	3, 4	421	655	0.642	424	432	2.2	1.2	12.246	B
			2	2, 4	312	655	0.476	313	317	1.3	0.8	9.873	A
		2	1	(1, 2, 3, 4)	732			732	743	1.7	0.3	2.224	A
	Exit	1	1		652			652	650	0.0	0.0	0.000	A
3	Exit	1	1		974			974	1005	0.0	0.0	0.000	A
4	Entry	1	1	2	340	1190	0.286	340	346	0.8	0.5	4.367	A
			2	2, 3, 4	837	1190	0.703	838	857	4.6	2.3	10.473	B
	Exit	1	1		1125			1125	1118	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	342	511	0.670	349	379	3.3	1.4	20.774	C
			2	4	278	511	0.545	280	319	2.4	1.1	17.587	C
		2	1	(2, 3, 4)	576			620	685	27.2	2.7	47.658	E
2	Entry	1	1	3, 4	364	737	0.494	365	373	1.2	0.9	9.125	A
			2	2, 4	246	737	0.334	246	251	0.8	0.5	7.626	A
		2	1	(1, 2, 3, 4)	610			610	622	0.3	0.1	0.630	A
	Exit	1	1		531			531	550	0.0	0.0	0.000	A
3	Exit	1	1		833			833	840	0.0	0.0	0.000	A
4	Entry	1	1	2	272	1190	0.228	271	275	0.5	0.4	4.101	A
			2	2, 3, 4	727	1190	0.611	730	734	2.3	1.4	7.530	A
	Exit	1	1		878			878	939	0.0	0.0	0.000	A

Lanes: Queue Variation Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.31	0.00	0.59	2.80	3.46
			2	0.93	0.00	0.09	1.94	4.00
		2	1	0.22	0.00	0.00	0.00	0.21
2	Entry	1	1	0.71	0.00	0.00	1.80	2.56
			2	0.47	0.00	0.00	1.31	1.79
		2	1	0.06	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.32	0.00	0.00	0.84	1.39
			2	1.60	0.00	0.57	3.77	5.29
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:00 - 08:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	2.01	0.00	1.36	3.71	3.91
			2	1.57	0.00	0.81	3.32	3.73
		2	1	1.28	0.00	0.00	2.62	8.95
2	Entry	1	1	1.22	0.00	0.41	2.81	3.44
			2	0.66	0.00	0.00	1.66	2.32
		2	1	0.09	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.56	0.00	0.00	1.58	2.36
			2	2.33	0.00	1.09	4.88	7.48
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:15 - 08:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.80	1.52	3.44	3.94	5.00
			2	2.91	0.00	3.00	3.86	3.96
		2	1	26.44	0.00	23.25	54.85	61.85
2	Entry	1	1	2.23	0.00	1.76	3.72	3.89
			2	1.42	0.00	0.58	3.31	3.70
		2	1	1.74	0.00	0.00	5.85	9.95
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.65	0.00	0.00	1.60	2.14
			2	3.92	0.00	2.21	8.93	11.77
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:30 - 08:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.93	2.15	3.49	3.98	5.00
			2	3.13	0.00	3.14	3.96	5.00
		2	1	55.77	6.15	52.63	95.40	105.93
2	Entry	1	1	2.23	0.00	1.74	3.74	3.93
			2	1.35	0.00	0.48	3.14	3.61
		2	1	1.73	0.00	0.00	5.95	10.46
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.82	0.00	0.00	2.16	2.87
			2	4.58	0.00	2.79	9.90	12.85
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:45 - 09:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.27	0.00	3.27	3.92	5.00
			2	2.39	0.00	2.20	3.82	3.97
		2	1	27.25	0.00	16.50	72.57	92.55
2	Entry	1	1	1.24	0.00	0.39	3.03	3.56
			2	0.81	0.00	0.00	1.84	2.71
		2	1	0.32	0.00	0.00	0.00	1.95
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.46	0.00	0.00	1.37	2.08
			2	2.32	0.00	0.91	5.96	7.77
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

09:00 - 09:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.44	0.00	0.55	3.41	3.80
			2	1.06	0.00	0.17	2.74	4.00
		2	1	2.75	0.00	0.00	1.70	23.93
2	Entry	1	1	0.92	0.00	0.01	2.18	4.00
			2	0.55	0.00	0.00	1.40	1.91
		2	1	0.09	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.35	0.00	0.00	0.84	1.49
			2	1.44	0.00	0.34	3.81	5.48
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	143	36	760	513	0.279	143	142	0.0	0.7	14.422	B
				3	3	0.70	366	263	0.011	3	3	0.0	0.0	14.044	B
				4	174	44	760	513	0.340	175	175	0.0	0.6	10.870	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	260	65	760	514	0.507	261	252	0.0	0.9	10.810	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	143	36	-	-	-	143	144	0.0	0.0	1.365	A
				3	3	0.70	-	-	-	3	3	0.0	0.0	0.785	A
				4	435	109	-	-	-	435	433	0.0	0.2	0.849	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	195	49	1079	749	0.261	195	199	0.0	0.4	8.271	A
				4	164	41	1079	749	0.219	165	166	0.0	0.3	5.967	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	247	62	1079	750	0.329	247	244	0.0	0.5	5.968	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	195	49	-	-	-	195	200	0.0	0.0	0.231	A
				4	411	103	-	-	-	411	413	0.0	0.0	0.140	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	266	67	1190	1190	0.224	266	267	0.0	0.3	3.929	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	103	26	1190	1190	0.086	103	102	0.0	0.1	4.050	A
				3	618	154	1190	1190	0.519	620	618	0.0	1.5	7.914	A
				4	0.94	0.23	191	191	0.005	0.94	0.71	0.0	0.0	8.312	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	175	44	760	465	0.377	175	170	0.7	1.0	21.372	C
				3	3	0.84	425	264	0.013	3	3	0.0	0.0	20.718	C
				4	192	48	760	465	0.413	192	199	0.6	1.0	17.743	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	308	77	760	465	0.663	308	311	0.9	1.6	16.475	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	175	44	-	-	-	175	171	0.0	0.4	6.611	A
				3	3	0.84	-	-	-	3	3	0.0	0.0	5.268	A
				4	500	125	-	-	-	501	514	0.2	0.9	4.886	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	239	60	1079	690	0.347	241	240	0.4	0.7	11.756	B
				4	184	46	1079	690	0.267	183	190	0.3	0.5	8.490	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	298	75	1079	690	0.432	299	305	0.5	0.7	8.378	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	239	60	-	-	-	239	241	0.0	0.0	1.201	A
				4	482	121	-	-	-	483	497	0.0	0.0	0.787	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	337	84	1190	1190	0.283	336	346	0.3	0.6	4.410	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	102	26	1190	1190	0.086	102	101	0.1	0.1	4.332	A
				3	749	187	1190	1190	0.629	744	753	1.5	2.2	10.026	B
				4	0.59	0.15	215	215	0.003	0.54	0.87	0.0	0.0	7.186	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	186	46	760	397	0.468	187	183	1.0	1.7	33.091	D
				3	4	0.96	400	215	0.018	4	4	0.0	0.0	30.595	D
				4	200	50	760	397	0.504	198	205	1.0	2.1	30.653	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	351	88	760	397	0.885	350	349	1.6	2.9	26.621	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	213	53	-	-	-	186	186	0.4	6.8	69.753	F
				3	4	1	-	-	-	4	4	0.0	0.2	67.203	F
				4	631	158	-	-	-	551	564	0.9	19.5	65.531	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	294	74	1079	623	0.472	293	289	0.7	1.4	16.407	C
				4	207	52	1079	623	0.333	207	213	0.5	0.8	12.618	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	392	98	1079	623	0.629	392	389	0.7	1.4	11.698	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	293	73	-	-	-	294	292	0.0	0.6	6.823	A
				4	601	150	-	-	-	599	606	0.0	1.1	5.443	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	466	117	1190	1190	0.392	467	465	0.6	0.6	5.175	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	82	21	1190	1190	0.069	83	83	0.1	0.1	5.197	A
				3	900	225	1190	1190	0.757	908	909	2.2	3.8	16.535	C
				4	0.79	0.20	269	269	0.003	0.89	1	0.0	0.0	14.665	B

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	182	45	760	395	0.459	183	182	1.7	1.8	35.887	E
				3	4	0.93	466	244	0.015	4	4	0.0	0.0	37.780	E
				4	207	52	760	395	0.524	206	207	2.1	2.1	35.244	E
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	352	88	760	394	0.893	349	350	2.9	3.1	30.340	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	212	53	-	-	-	182	182	6.8	14.0	210.602	F
				3	3	0.86	-	-	-	4	4	0.2	0.3	210.303	F
				4	637	159	-	-	-	559	558	19.5	41.5	204.969	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	288	72	1079	618	0.466	287	291	1.4	1.5	17.534	C
				4	213	53	1079	619	0.344	214	212	0.8	0.8	13.815	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	397	99	1079	617	0.643	399	398	1.4	1.3	12.665	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	289	72	-	-	-	288	291	0.6	0.7	8.256	A
				4	610	152	-	-	-	610	609	1.1	1.1	6.956	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	466	117	1190	1190	0.392	464	466	0.6	0.8	5.287	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	79	20	1175	1175	0.067	79	79	0.1	0.1	5.110	A
				3	921	230	1190	1190	0.774	923	924	3.8	4.5	17.946	C
				4	0.89	0.22	235	235	0.004	0.84	0.97	0.0	0.0	20.279	C

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	207	52	760	467	0.442	209	204	1.8	1.7	30.920	D
				3	5	1	463	279	0.016	4	4	0.0	0.0	30.209	D
				4	230	57	760	467	0.492	233	226	2.1	1.6	29.287	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	386	97	760	467	0.827	391	387	3.1	2.4	25.432	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	174	44	-	-	-	207	204	14.0	7.0	191.675	F
				3	4	0.95	-	-	-	5	4	0.3	0.1	179.432	F
				4	513	128	-	-	-	616	608	41.5	20.1	188.460	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	235	59	1079	656	0.358	237	244	1.5	0.8	13.725	B
				4	186	46	1079	656	0.283	187	188	0.8	0.4	10.329	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	312	78	1079	656	0.475	313	317	1.3	0.8	9.873	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	235	59	-	-	-	235	242	0.7	0.2	2.681	A
				4	497	124	-	-	-	497	501	1.1	0.1	2.004	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	340	85	1190	1190	0.286	340	346	0.8	0.5	4.367	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	104	26	1190	1190	0.087	104	99	0.1	0.1	4.381	A
				3	732	183	1190	1190	0.615	733	756	4.5	2.2	11.283	B
				4	1	0.28	225	225	0.005	1	0.91	0.0	0.0	7.783	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	157	39	760	511	0.308	160	176	1.7	0.7	22.405	C
				3	4	0.93	479	317	0.012	4	4	0.0	0.0	22.793	C
				4	181	45	760	510	0.355	184	199	1.6	0.7	19.299	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	278	70	760	510	0.545	280	319	2.4	1.1	17.587	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	145	36	-	-	-	157	172	7.0	0.7	48.317	E
				3	3	0.84	-	-	-	4	4	0.1	0.0	53.933	F
				4	427	107	-	-	-	459	509	20.1	2.0	47.384	E
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	198	50	1079	735	0.270	199	203	0.8	0.6	10.404	B
				4	166	41	1079	735	0.226	166	169	0.4	0.3	7.590	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	246	62	1079	735	0.335	246	251	0.8	0.5	7.626	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	199	50	-	-	-	198	202	0.2	0.1	0.845	A
				4	411	103	-	-	-	412	419	0.1	0.0	0.527	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	272	68	1190	1190	0.228	271	275	0.5	0.4	4.101	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	100	25	1190	1190	0.084	100	100	0.1	0.1	3.986	A
				3	627	157	1190	1190	0.527	630	633	2.2	1.4	8.096	A
				4	0.79	0.20	211	211	0.004	0.84	0.84	0.0	0.0	6.534	A

D2 - 2028 | FTH Do Minimum + Dev | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	95.09	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	95.09	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2028	FTH Do Minimum + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	773	100.000
2		ONE HOUR	✓	908	100.000
3					
4		ONE HOUR	✓	1363	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	195	4	574
	2	0	0	328	580
	3	0	0	0	0
	4	0	529	833	1

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Cyclist %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	298.94	75.2	123.4	F	714	1071
2	43.77	12.8	41.4	E	835	1253
3						
4	13.00	5.3	13.2	B	1251	1877

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	573	143	1043	578	567	0	0.0	2.3	12.379	B
2	694	173	1070	695	687	551	0.0	1.5	7.756	A
3			0			893				
4	1036	259	0	1043	1024	872	0.0	1.5	6.442	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	699	175	1221	696	693	0	2.3	6.3	26.811	D
2	819	205	1268	812	821	649	1.5	3.0	11.574	B
3			0			1043				
4	1227	307	0	1221	1219	1037	1.5	3.0	8.458	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	851	213	1478	728	727	0	6.3	40.6	124.163	F
2	999	250	1454	987	976	752	3.0	10.3	28.677	D
3			0			1263				
4	1474	369	0	1478	1483	1179	3.0	4.8	11.942	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	862	215	1519	733	720	0	40.6	75.2	298.940	F
2	996	249	1477	994	996	775	10.3	12.8	43.771	E
3			0			1287				
4	1513	378	0	1519	1520	1183	4.8	5.3	12.999	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	705	176	1223	843	817	0	75.2	47.0	277.447	F
2	816	204	1372	822	864	694	12.8	3.4	22.004	C
3			0			1043				
4	1228	307	0	1223	1239	1151	5.3	3.0	8.712	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	596	149	1028	685	760	0	47.0	6.2	93.245	F
2	686	171	1136	684	696	576	3.4	1.8	10.777	B
3			0			875				
4	1031	258	0	1028	1033	947	3.0	2.2	6.732	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	2.31	0.00	1.46	4.54	6.34
2	1.49	0.00	0.43	3.12	4.68
3					
4	1.47	0.00	0.44	3.52	4.59

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	6.29	0.00	3.71	14.57	18.35
2	3.01	0.00	1.69	6.34	9.35
3					
4	3.02	0.00	1.67	5.74	9.18

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	40.64	8.55	37.88	69.35	75.18
2	10.29	0.33	6.64	22.70	29.78
3					
4	4.77	0.00	3.54	9.23	12.12

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	75.21	25.65	72.50	115.40	123.40
2	12.83	0.17	7.10	31.10	41.35
3					
4	5.32	0.00	3.75	11.57	13.18

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	46.99	0.65	44.63	84.10	103.45
2	3.35	0.00	1.93	7.90	10.18
3					
4	2.95	0.00	1.18	7.85	11.18

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	6.17	0.00	1.91	17.70	29.20
2	1.83	0.00	0.76	4.21	5.12
3					
4	2.16	0.00	0.87	4.81	6.84

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	323	500	0.646	325	323	0.0	1.3	12.177	B
			2	4	251	500	0.502	253	244	0.0	1.0	10.896	B
		2	1	(2, 3, 4)	573			575	576	0.0	0.1	0.740	A
2	Entry	1	1	3, 4	419	746	0.562	421	416	0.0	0.9	7.988	A
			2	2, 4	274	746	0.368	274	271	0.0	0.5	6.442	A
		2	1	(1, 2, 3, 4)	694			693	693	0.0	0.1	0.377	A
	Exit	1	1		551			551	546	0.0	0.0	0.000	A
3	Exit	1	1		893			893	870	0.0	0.0	0.000	A
4	Entry	1	1	2	289	1190	0.243	290	287	0.0	0.3	4.018	A
			2	2, 3, 4	747	1190	0.628	753	737	0.0	1.2	7.389	A
	Exit	1	1		872			872	862	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	378	456	0.829	377	379	1.3	2.4	20.194	C
			2	4	321	456	0.704	319	314	1.0	1.9	17.840	C
		2	1	(2, 3, 4)	699			698	701	0.1	2.0	7.576	A
2	Entry	1	1	3, 4	475	684	0.694	472	481	0.9	1.6	11.040	B
			2	2, 4	342	684	0.499	340	340	0.5	0.9	8.666	A
		2	1	(1, 2, 3, 4)	819			816	826	0.1	0.5	1.501	A
	Exit	1	1		649			649	654	0.0	0.0	0.000	A
3	Exit	1	1		1043			1043	1037	0.0	0.0	0.000	A
4	Entry	1	1	2	371	1190	0.311	371	371	0.3	0.4	4.545	A
			2	2, 3, 4	856	1190	0.720	850	848	1.2	2.6	10.160	B
	Exit	1	1		1037			1037	1042	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	387	392	0.989	387	387	2.4	3.9	33.419	D
			2	4	341	392	0.869	341	340	1.9	2.8	28.328	D
		2	1	(2, 3, 4)	851			728	737	2.0	33.9	92.475	F
2	Entry	1	1	3, 4	560	627	0.894	558	551	1.6	3.0	16.629	C
			2	2, 4	431	627	0.689	429	424	0.9	1.7	12.868	B
		2	1	(1, 2, 3, 4)	999			991	984	0.5	5.7	13.558	B
	Exit	1	1		752			752	756	0.0	0.0	0.000	A
3	Exit	1	1		1263			1263	1260	0.0	0.0	0.000	A
4	Entry	1	1	2	480	1190	0.403	479	486	0.4	0.9	5.455	A
			2	2, 3, 4	994	1190	0.836	998	997	2.6	3.9	15.103	C
	Exit	1	1		1179			1179	1170	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	384	382	1.005	383	381	3.9	4.0	37.129	E
			2	4	348	382	0.911	350	339	2.8	2.9	31.551	D
		2	1	(2, 3, 4)	862			731	721	33.9	68.3	265.601	F
2	Entry	1	1	3, 4	563	620	0.910	562	560	3.0	2.9	18.513	C
			2	2, 4	432	620	0.697	432	436	1.7	1.9	14.037	B
		2	1	(1, 2, 3, 4)	996			995	996	5.7	8.1	27.259	D
	Exit	1	1		775			775	773	0.0	0.0	0.000	A
3	Exit	1	1		1287			1287	1289	0.0	0.0	0.000	A
4	Entry	1	1	2	505	1190	0.424	507	505	0.9	0.9	5.561	A
			2	2, 3, 4	1008	1190	0.847	1012	1015	3.9	4.4	16.670	C
	Exit	1	1		1183			1183	1174	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	440	455	0.966	443	431	4.0	3.6	31.435	D
			2	4	394	455	0.865	400	386	2.9	2.3	26.397	D
		2	1	(2, 3, 4)	705			834	813	68.3	41.0	249.649	F
2	Entry	1	1	3, 4	477	652	0.732	478	502	2.9	1.8	14.552	B
			2	2, 4	346	652	0.531	344	362	1.9	1.1	11.383	B
		2	1	(1, 2, 3, 4)	816			823	857	8.1	0.5	8.953	A
	Exit	1	1		694			694	684	0.0	0.0	0.000	A
3	Exit	1	1		1043			1043	1077	0.0	0.0	0.000	A
4	Entry	1	1	2	373	1190	0.314	372	375	0.9	0.6	4.598	A
			2	2, 3, 4	855	1190	0.718	851	865	4.4	2.4	10.495	B
	Exit	1	1		1151			1151	1160	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	368	504	0.730	373	410	3.6	1.8	23.389	C
			2	4	306	504	0.607	312	350	2.3	1.2	19.888	C
		2	1	(2, 3, 4)	596			674	749	41.0	3.1	72.288	F
2	Entry	1	1	3, 4	411	725	0.566	411	414	1.8	1.1	10.629	B
			2	2, 4	275	725	0.379	274	282	1.1	0.6	8.055	A
		2	1	(1, 2, 3, 4)	686			686	691	0.5	0.1	1.215	A
	Exit	1	1		576			576	595	0.0	0.0	0.000	A
3	Exit	1	1		875			875	890	0.0	0.0	0.000	A
4	Entry	1	1	2	296	1190	0.249	295	295	0.6	0.3	4.089	A
			2	2, 3, 4	735	1190	0.618	733	738	2.4	1.8	7.788	A
	Exit	1	1		947			947	1003	0.0	0.0	0.000	A

Lanes: Queue Variation Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.27	0.00	0.55	2.69	3.29
			2	0.95	0.00	0.15	2.09	2.92
		2	1	0.08	0.00	0.00	0.00	0.00
2	Entry	1	1	0.86	0.00	0.00	1.96	2.91
			2	0.53	0.00	0.00	1.48	1.95
		2	1	0.10	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.28	0.00	0.00	0.69	1.09
			2	1.19	0.00	0.12	2.95	4.09
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:00 - 08:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	2.40	0.00	1.87	3.83	3.99
			2	1.86	0.00	1.30	3.49	3.79
		2	1	2.04	0.00	0.00	6.90	9.70
2	Entry	1	1	1.61	0.00	0.82	3.42	3.83
			2	0.88	0.00	0.05	1.98	2.53
		2	1	0.52	0.00	0.00	-0.15	3.35
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.44	0.00	0.00	1.21	3.00
			2	2.59	0.00	1.41	5.14	7.35
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:15 - 08:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.94	1.91	3.50	3.99	5.00
			2	2.83	0.00	2.98	3.84	3.94
		2	1	33.86	1.33	31.50	60.40	67.80
2	Entry	1	1	2.95	0.00	2.94	3.88	3.99
			2	1.67	0.00	1.05	3.41	3.73
		2	1	5.66	0.00	0.31	17.85	24.68
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.88	0.00	0.00	2.19	2.93
			2	3.89	0.00	2.58	7.85	10.90
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:30 - 08:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	4.05	3.01	3.53	5.00	5.00
			2	2.89	0.00	3.11	3.87	3.96
		2	1	68.28	20.65	65.50	109.35	116.10
2	Entry	1	1	2.88	0.00	2.87	3.83	3.94
			2	1.86	0.00	1.19	3.60	3.83
		2	1	8.08	0.00	0.10	27.70	33.70
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.91	0.00	0.00	2.24	3.23
			2	4.41	0.00	2.72	9.70	12.59
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:45 - 09:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.62	0.33	3.39	3.96	5.00
			2	2.33	0.00	2.15	3.76	3.92
		2	1	41.04	0.00	38.50	78.70	97.40
2	Entry	1	1	1.77	0.00	1.10	4.00	4.00
			2	1.09	0.00	0.15	2.82	3.44
		2	1	0.50	0.00	0.00	0.90	3.90
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.57	0.00	0.00	1.43	2.09
			2	2.38	0.00	0.74	6.23	8.35
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

09:00 - 09:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.84	0.00	1.10	3.70	3.91
			2	1.22	0.00	0.24	4.00	4.00
		2	1	3.11	0.00	0.00	8.40	20.28
2	Entry	1	1	1.12	0.00	0.28	2.74	3.54
			2	0.59	0.00	0.00	1.51	1.90
		2	1	0.11	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.32	0.00	0.00	0.70	0.97
			2	1.85	0.00	0.61	4.28	6.18
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	146	36	760	499	0.292	147	145	0.0	0.7	13.831	B
				3	3	0.63	314	220	0.012	2	2	0.0	0.0	15.613	C
				4	175	44	760	501	0.349	176	176	0.0	0.5	10.759	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	251	63	760	502	0.501	253	244	0.0	1.0	10.896	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	145	36	-	-	-	146	148	0.0	0.0	1.104	A
				3	3	0.63	-	-	-	3	2	0.0	0.0	2.521	A
				4	425	106	-	-	-	426	426	0.0	0.1	0.604	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	252	63	1079	747	0.337	253	245	0.0	0.5	9.001	A
				4	168	42	1079	748	0.224	168	170	0.0	0.3	6.531	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	274	69	1079	746	0.367	274	271	0.0	0.5	6.442	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	252	63	-	-	-	252	248	0.0	0.0	0.556	A
				4	442	111	-	-	-	442	445	0.0	0.1	0.278	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	289	72	1190	1190	0.243	290	287	0.0	0.3	4.018	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	114	28	1190	1190	0.095	114	114	0.0	0.1	4.126	A
				3	633	158	1190	1190	0.532	638	622	0.0	1.1	7.989	A
				4	0.63	0.16	215	215	0.003	0.81	0.84	0.0	0.0	7.748	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	178	45	760	456	0.391	177	177	0.7	1.1	22.167	C
				3	4	0.99	429	258	0.015	4	4	0.0	0.0	22.539	C
				4	195	49	760	456	0.428	195	199	0.5	1.2	18.400	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	321	80	760	455	0.705	319	314	1.0	1.9	17.840	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	181	45	-	-	-	178	179	0.0	0.7	8.548	A
				3	4	0.99	-	-	-	4	4	0.0	0.0	12.782	B
				4	513	128	-	-	-	516	519	0.1	1.3	7.203	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	295	74	1079	684	0.432	291	292	0.5	1.2	12.279	B
				4	180	45	1079	684	0.263	181	189	0.3	0.4	9.121	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	342	85	1079	684	0.500	340	340	0.5	0.9	8.666	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	296	74	-	-	-	295	295	0.0	0.2	1.889	A
				4	523	131	-	-	-	521	531	0.1	0.3	1.286	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	371	93	1190	1190	0.311	371	371	0.3	0.4	4.545	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	101	25	1190	1190	0.084	101	106	0.1	0.1	4.477	A
				3	755	189	1190	1190	0.634	748	741	1.1	2.5	10.962	B
				4	1	0.29	233	233	0.005	1	0.93	0.0	0.0	8.136	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	179	45	760	391	0.457	179	181	1.1	1.9	34.389	D
				3	4	0.95	429	223	0.017	4	4	0.0	0.0	34.781	D
				4	205	51	760	393	0.522	204	201	1.2	2.0	32.508	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	341	85	760	392	0.870	341	340	1.9	2.8	28.328	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	211	53	-	-	-	179	184	0.7	8.8	96.400	F
				3	4	0.97	-	-	-	4	4	0.0	0.2	93.284	F
				4	635	159	-	-	-	546	549	1.3	24.8	91.143	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	354	89	1079	627	0.565	355	348	1.2	1.8	17.803	C
				4	206	51	1079	626	0.328	203	203	0.4	1.1	14.628	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	431	108	1079	628	0.687	429	424	0.9	1.7	12.868	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	357	89	-	-	-	354	351	0.2	2.2	14.785	B
				4	642	161	-	-	-	637	633	0.3	3.4	12.874	B
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	480	120	1190	1190	0.403	479	486	0.4	0.9	5.455	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	93	23	1190	1190	0.078	93	88	0.1	0.1	5.356	A
				3	900	225	1190	1190	0.756	904	908	2.5	3.8	16.052	C
				4	0.90	0.23	268	268	0.003	0.81	1	0.0	0.0	11.282	B

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	184	46	760	383	0.481	183	182	1.9	2.0	37.165	E
				3	3	0.81	394	203	0.016	3	3	0.0	0.0	34.734	D
				4	196	49	760	382	0.514	196	196	2.0	2.0	37.138	E
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	348	87	760	383	0.909	350	339	2.8	2.9	31.551	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	215	54	-	-	-	184	183	8.8	16.9	267.247	F
				3	5	1	-	-	-	3	3	0.2	0.5	306.958	F
				4	641	160	-	-	-	544	534	24.8	50.8	264.741	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	356	89	1079	619	0.575	358	357	1.8	1.8	19.708	C
				4	208	52	1079	621	0.335	205	203	1.1	1.0	16.402	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	432	108	1079	619	0.697	432	436	1.7	1.9	14.037	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	357	89	-	-	-	356	357	2.2	3.2	28.583	D
				4	639	160	-	-	-	640	639	3.4	4.9	26.517	D
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	505	126	1190	1190	0.424	507	505	0.9	0.9	5.561	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	84	21	1190	1190	0.071	85	86	0.1	0.2	5.487	A
				3	923	231	1190	1190	0.776	927	929	3.8	4.2	17.698	C
				4	0.72	0.18	161	161	0.004	0.54	0.57	0.0	0.0	20.159	C

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	211	53	760	454	0.466	213	204	2.0	1.9	31.935	D
				3	5	1	537	316	0.016	5	5	0.0	0.1	34.451	D
				4	223	56	760	453	0.493	225	222	2.0	1.7	30.900	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	394	99	760	454	0.868	400	386	2.9	2.3	26.397	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	182	45	-	-	-	211	204	16.9	10.6	251.744	F
				3	5	1	-	-	-	5	5	0.5	0.3	257.445	F
				4	518	130	-	-	-	617	604	50.8	30.1	248.865	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	295	74	1079	651	0.453	296	313	1.8	1.1	15.993	C
				4	183	46	1079	651	0.281	182	189	1.0	0.6	12.159	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	346	87	1079	650	0.532	344	362	1.9	1.1	11.383	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	291	73	-	-	-	295	310	3.2	0.2	9.358	A
				4	525	131	-	-	-	529	546	4.9	0.3	8.724	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	373	93	1190	1190	0.314	372	375	0.9	0.6	4.598	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	109	27	1190	1190	0.091	109	105	0.2	0.1	4.426	A
				3	745	186	1190	1190	0.626	742	758	4.2	2.3	11.347	B
				4	0.90	0.23	242	242	0.004	0.81	1	0.0	0.0	11.361	B

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	170	43	760	505	0.337	174	195	1.9	0.9	24.881	C
				3	4	0.90	480	313	0.012	4	5	0.1	0.0	27.565	D
				4	194	49	760	506	0.384	196	211	1.7	0.9	21.933	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	306	76	760	505	0.606	312	350	2.3	1.2	19.888	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	150	37	-	-	-	170	191	10.6	0.8	75.213	F
				3	3	0.81	-	-	-	4	4	0.3	0.0	77.836	F
				4	443	111	-	-	-	500	553	30.1	2.3	71.236	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	247	62	1079	726	0.341	247	254	1.1	0.7	11.905	B
				4	164	41	1079	725	0.226	164	159	0.6	0.5	8.600	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	275	69	1079	727	0.378	274	282	1.1	0.6	8.055	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	247	62	-	-	-	247	252	0.2	0.0	1.445	A
				4	438	110	-	-	-	439	439	0.3	0.1	1.083	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	296	74	1190	1190	0.249	295	295	0.6	0.3	4.089	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	107	27	1190	1190	0.090	107	106	0.1	0.1	4.044	A
				3	628	157	1190	1190	0.527	624	632	2.3	1.8	8.417	A
				4	0.99	0.25	161	161	0.006	0.90	0.72	0.0	0.0	8.882	A

D3 - 2028 | FTH Do Minimum + Dev + Site B | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	95.55	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	95.55	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028	FTH Do Minimum + Dev + Site B	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	776	100.000
2		ONE HOUR	✓	936	100.000
3					
4		ONE HOUR	✓	1373	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	198	4	574
	2	0	0	344	592
	3	0	0	0	0
	4	0	539	833	1

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Cyclist %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	299.74	76.5	129.9	F	709	1063
2	47.99	14.5	46.0	E	855	1282
3						
4	12.91	5.4	15.6	B	1259	1888

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	579	145	1029	581	580	0	0.0	2.5	13.490	B
2	703	176	1055	705	704	556	0.0	1.8	8.393	A
3			0			882				
4	1028	257	0	1029	1026	878	0.0	2.0	6.597	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	688	172	1224	693	690	0	2.5	5.9	28.091	D
2	849	212	1262	850	850	654	1.8	3.1	13.165	B
3			0			1055				
4	1227	307	0	1224	1229	1057	2.0	2.9	8.189	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	851	213	1508	715	721	0	5.9	40.7	122.923	F
2	1033	258	1447	1020	1004	776	3.1	11.6	32.329	D
3			0			1285				
4	1510	377	0	1508	1510	1182	2.9	5.2	12.346	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	857	214	1515	729	719	0	40.7	76.5	299.744	F
2	1019	255	1466	1012	1022	777	11.6	14.5	47.988	E
3			0			1299				
4	1512	378	0	1515	1523	1180	5.2	5.4	12.911	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	699	175	1248	823	810	0	76.5	50.3	288.077	F
2	829	207	1373	830	885	698	14.5	4.4	25.592	D
3			0			1078				
4	1244	311	0	1248	1249	1125	5.4	2.8	8.553	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	578	144	1033	674	764	0	50.3	7.1	101.442	F
2	696	174	1128	699	716	579	4.4	2.0	11.156	B
3			0			881				
4	1033	258	0	1033	1042	946	2.8	2.0	6.764	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	2.51	0.00	1.24	5.82	7.82
2	1.83	0.00	0.65	3.91	5.73
3					
4	1.99	0.00	0.79	4.73	5.95

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	5.89	0.00	3.14	12.70	16.63
2	3.09	0.00	1.76	7.20	9.63
3					
4	2.88	0.00	1.30	6.73	8.73

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	40.74	5.55	38.00	69.80	80.90
2	11.62	0.26	7.69	25.27	31.80
3					
4	5.15	0.00	3.05	11.90	15.58

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	76.50	24.20	77.00	118.90	129.90
2	14.48	0.34	9.14	32.80	45.95
3					
4	5.45	0.00	3.56	11.70	14.95

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	50.32	1.59	47.00	94.80	109.95
2	4.41	0.00	2.28	9.80	13.56
3					
4	2.81	0.00	1.29	5.97	8.30

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	7.12	0.00	1.69	17.60	35.90
2	1.98	0.00	0.80	4.09	5.63
3					
4	2.01	0.00	0.86	4.48	6.23

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	322	504	0.640	322	324	0.0	1.4	13.120	B
			2	4	259	504	0.515	259	256	0.0	0.9	11.087	B
		2	1	(2, 3, 4)	579			582	589	0.0	0.2	1.249	A
2	Entry	1	1	3, 4	425	751	0.566	426	429	0.0	1.1	8.597	A
			2	2, 4	278	751	0.370	279	275	0.0	0.6	6.646	A
		2	1	(1, 2, 3, 4)	703			702	710	0.0	0.2	0.557	A
	Exit	1	1		556			556	553	0.0	0.0	0.000	A
3	Exit	1	1		882			882	883	0.0	0.0	0.000	A
4	Entry	1	1	2	294	1190	0.247	293	291	0.0	0.4	3.990	A
			2	2, 3, 4	734	1190	0.617	737	735	0.0	1.6	7.627	A
	Exit	1	1		878			878	873	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	372	455	0.818	373	371	1.4	2.3	20.904	C
			2	4	318	455	0.700	320	318	0.9	1.6	17.421	C
		2	1	(2, 3, 4)	688			691	696	0.2	2.0	8.690	A
2	Entry	1	1	3, 4	491	686	0.716	492	498	1.1	1.6	11.935	B
			2	2, 4	359	686	0.523	358	353	0.6	0.9	9.289	A
		2	1	(1, 2, 3, 4)	849			850	853	0.2	0.6	2.315	A
	Exit	1	1		654			654	653	0.0	0.0	0.000	A
3	Exit	1	1		1055			1055	1065	0.0	0.0	0.000	A
4	Entry	1	1	2	371	1190	0.312	370	372	0.4	0.5	4.479	A
			2	2, 3, 4	856	1190	0.719	853	857	1.6	2.4	9.788	A
	Exit	1	1		1057			1057	1051	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	377	384	0.982	377	381	2.3	3.9	33.477	D
			2	4	340	384	0.885	339	340	1.6	3.0	27.773	D
		2	1	(2, 3, 4)	851			718	733	2.0	33.8	91.459	F
2	Entry	1	1	3, 4	575	629	0.915	572	566	1.6	3.2	17.515	C
			2	2, 4	450	629	0.715	448	438	0.9	1.8	13.105	B
		2	1	(1, 2, 3, 4)	1033			1025	1014	0.6	6.6	16.632	C
	Exit	1	1		776			776	783	0.0	0.0	0.000	A
3	Exit	1	1		1285			1285	1282	0.0	0.0	0.000	A
4	Entry	1	1	2	498	1190	0.419	499	504	0.5	0.8	5.595	A
			2	2, 3, 4	1011	1190	0.850	1009	1007	2.4	4.4	15.702	C
	Exit	1	1		1182			1182	1171	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	392	383	1.023	391	381	3.9	4.0	36.827	E
			2	4	338	383	0.884	338	338	3.0	3.0	31.750	D
		2	1	(2, 3, 4)	857			730	719	33.8	69.5	266.548	F
2	Entry	1	1	3, 4	571	623	0.916	570	574	3.2	3.2	19.298	C
			2	2, 4	444	623	0.713	442	448	1.8	1.9	14.447	B
		2	1	(1, 2, 3, 4)	1019			1015	1022	6.6	9.4	30.826	D
	Exit	1	1		777			777	780	0.0	0.0	0.000	A
3	Exit	1	1		1299			1299	1303	0.0	0.0	0.000	A
4	Entry	1	1	2	505	1190	0.424	504	508	0.8	0.8	5.458	A
			2	2, 3, 4	1007	1190	0.846	1011	1015	4.4	4.7	16.640	C
	Exit	1	1		1180			1180	1181	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	436	449	0.971	436	430	4.0	3.8	31.737	D
			2	4	390	449	0.869	387	381	3.0	2.9	26.425	D
		2	1	(2, 3, 4)	699			826	809	69.5	43.6	259.992	F
2	Entry	1	1	3, 4	485	652	0.744	485	512	3.2	2.0	15.333	C
			2	2, 4	346	652	0.531	346	373	1.9	1.1	11.489	B
		2	1	(1, 2, 3, 4)	829			831	877	9.4	1.3	12.065	B
	Exit	1	1		698			698	700	0.0	0.0	0.000	A
3	Exit	1	1		1078			1078	1095	0.0	0.0	0.000	A
4	Entry	1	1	2	377	1190	0.317	377	381	0.8	0.5	4.610	A
			2	2, 3, 4	868	1190	0.729	871	868	4.7	2.3	10.305	B
	Exit	1	1		1125			1125	1150	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	359	503	0.715	367	410	3.8	1.8	23.643	C
			2	4	301	503	0.599	307	354	2.9	1.2	19.617	C
		2	1	(2, 3, 4)	578			661	750	43.6	4.1	80.602	F
2	Entry	1	1	3, 4	418	728	0.574	418	426	2.0	1.2	10.600	B
			2	2, 4	281	728	0.386	281	290	1.1	0.6	8.162	A
		2	1	(1, 2, 3, 4)	696			698	710	1.3	0.2	1.613	A
	Exit	1	1		579			579	602	0.0	0.0	0.000	A
3	Exit	1	1		881			881	899	0.0	0.0	0.000	A
4	Entry	1	1	2	295	1190	0.248	296	299	0.5	0.3	4.064	A
			2	2, 3, 4	738	1190	0.620	736	743	2.3	1.7	7.854	A
	Exit	1	1		946			946	1020	0.0	0.0	0.000	A

Lanes: Queue Variation Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.42	0.00	0.64	3.18	3.66
			2	0.90	0.00	0.00	2.27	2.99
		2	1	0.20	0.00	0.00	0.00	0.45
2	Entry	1	1	1.06	0.00	0.13	2.62	4.00
			2	0.59	0.00	0.00	1.49	1.98
		2	1	0.18	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.42	0.00	0.00	0.98	1.76
			2	1.57	0.00	0.50	3.73	4.98
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:00 - 08:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	2.31	0.00	1.83	3.73	3.87
			2	1.61	0.00	0.82	3.49	3.81
		2	1	1.97	0.00	0.00	5.95	10.90
2	Entry	1	1	1.60	0.00	0.89	3.36	3.70
			2	0.87	0.00	0.00	1.97	2.74
		2	1	0.62	0.00	0.00	1.20	5.23
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.52	0.00	0.00	1.46	2.15
			2	2.36	0.00	0.88	5.96	7.70
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:15 - 08:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.94	2.29	3.49	3.97	5.00
			2	2.98	0.00	3.10	3.88	3.98
		2	1	33.83	0.00	31.00	62.80	75.90
2	Entry	1	1	3.20	0.00	3.23	3.91	5.00
			2	1.85	0.00	1.10	3.62	3.89
		2	1	6.57	0.00	1.70	17.80	23.90
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.76	0.00	0.00	1.82	2.49
			2	4.39	0.00	2.19	11.20	14.63
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:30 - 08:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	4.03	2.58	3.52	5.00	5.00
			2	3.03	0.00	3.11	3.93	5.00
		2	1	69.47	17.05	70.00	110.60	123.70
2	Entry	1	1	3.16	0.00	3.18	3.89	3.98
			2	1.91	0.00	1.34	3.54	3.87
		2	1	9.42	0.00	2.50	25.60	38.90
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.77	0.00	0.00	1.79	2.56
			2	4.67	0.00	2.63	10.70	13.45
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:45 - 09:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.78	0.91	3.46	3.99	5.00
			2	2.87	0.00	3.10	3.88	3.98
		2	1	43.65	0.00	40.40	86.80	101.63
2	Entry	1	1	1.96	0.00	1.42	4.00	4.00
			2	1.14	0.00	0.22	2.80	3.39
		2	1	1.31	0.00	0.00	4.60	8.45
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.50	0.00	0.00	1.35	1.81
			2	2.31	0.00	0.98	5.38	6.78
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

09:00 - 09:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.79	0.00	0.96	3.65	3.90
			2	1.25	0.00	0.27	3.31	3.72
		2	1	4.08	0.00	0.00	12.80	27.90
2	Entry	1	1	1.21	0.00	0.44	2.67	3.24
			2	0.58	0.00	0.00	1.47	1.95
		2	1	0.18	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.29	0.00	0.00	0.74	1.19
			2	1.72	0.00	0.64	3.97	5.58
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	148	37	760	503	0.294	149	151	0.0	0.7	15.072	C
				3	3	0.68	358	255	0.011	3	3	0.0	0.0	15.359	C
				4	172	43	760	503	0.341	170	171	0.0	0.7	11.359	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	259	65	760	503	0.515	259	256	0.0	0.9	11.087	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	147	37	-	-	-	148	154	0.0	0.1	1.754	A
				3	3	0.68	-	-	-	3	3	0.0	0.0	1.486	A
				4	429	107	-	-	-	431	433	0.0	0.1	1.069	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	258	64	1079	752	0.343	258	258	0.0	0.7	9.813	A
				4	167	42	1079	750	0.223	168	171	0.0	0.3	6.730	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	278	69	1079	751	0.370	279	275	0.0	0.6	6.646	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	257	64	-	-	-	258	261	0.0	0.0	0.695	A
				4	446	111	-	-	-	445	449	0.0	0.1	0.476	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	294	73	1190	1190	0.247	293	291	0.0	0.4	3.990	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	113	28	1190	1190	0.095	114	111	0.0	0.1	4.102	A
				3	620	155	1190	1190	0.521	621	622	0.0	1.5	8.249	A
				4	1	0.30	230	230	0.005	1	1	0.0	0.0	8.437	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	175	44	760	455	0.386	176	174	0.7	1.2	22.962	C
				3	4	0.89	444	270	0.013	3	4	0.0	0.0	20.310	C
				4	193	48	760	455	0.424	195	194	0.7	1.1	19.067	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	318	80	760	455	0.700	320	318	0.9	1.6	17.421	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	175	44	-	-	-	175	176	0.1	0.6	9.777	A
				3	3	0.86	-	-	-	4	4	0.0	0.0	9.294	A
				4	510	128	-	-	-	512	517	0.1	1.4	8.313	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	307	77	1079	686	0.448	308	312	0.7	1.2	13.328	B
				4	184	46	1079	684	0.269	184	185	0.3	0.4	9.579	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	359	90	1079	686	0.523	358	353	0.6	0.9	9.289	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	306	77	-	-	-	307	314	0.0	0.2	2.731	A
				4	543	136	-	-	-	543	539	0.1	0.4	2.073	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	371	93	1190	1190	0.312	370	372	0.4	0.5	4.479	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	108	27	1190	1190	0.091	109	107	0.1	0.1	4.389	A
				3	746	187	1190	1190	0.627	744	749	1.5	2.3	10.563	B
				4	0.71	0.18	224	224	0.003	0.83	0.89	0.0	0.0	7.924	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	181	45	760	386	0.469	182	184	1.2	1.9	34.441	D
				3	3	0.77	410	213	0.014	3	3	0.0	0.0	32.722	D
				4	193	48	760	384	0.504	191	193	1.1	2.0	32.580	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	340	85	760	384	0.885	339	340	1.6	3.0	27.773	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	214	53	-	-	-	181	187	0.6	8.8	95.216	F
				3	4	0.95	-	-	-	3	4	0.0	0.1	81.830	F
				4	634	158	-	-	-	533	542	1.4	24.9	90.228	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	373	93	1079	629	0.592	369	368	1.2	2.2	18.657	C
				4	203	51	1079	628	0.323	202	199	0.4	1.0	15.401	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	450	112	1079	628	0.716	448	438	0.9	1.8	13.105	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	377	94	-	-	-	373	371	0.2	2.5	17.552	C
				4	656	164	-	-	-	653	643	0.4	4.1	16.099	C
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	498	125	1190	1190	0.419	499	504	0.5	0.8	5.595	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	95	24	1190	1190	0.080	95	95	0.1	0.1	5.481	A
				3	915	229	1190	1190	0.769	913	911	2.3	4.2	16.759	C
				4	1	0.36	259	259	0.006	1	1	0.0	0.0	19.632	C

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	188	47	760	381	0.492	187	183	1.9	2.0	37.184	E
				3	4	0.95	406	205	0.019	4	3	0.0	0.1	37.883	E
				4	200	50	760	382	0.524	200	195	2.0	2.0	36.471	E
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	338	85	760	381	0.886	338	338	3.0	3.0	31.750	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	224	56	-	-	-	188	183	8.8	18.2	269.246	F
				3	3	0.80	-	-	-	4	4	0.1	0.3	270.753	F
				4	629	157	-	-	-	538	533	24.9	51.0	265.591	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	371	93	1079	621	0.597	371	375	2.2	2.3	20.364	C
				4	200	50	1079	622	0.321	199	199	1.0	0.9	17.279	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	444	111	1079	622	0.714	442	448	1.8	1.9	14.447	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	374	93	-	-	-	371	376	2.5	3.8	32.001	D
				4	645	161	-	-	-	644	647	4.1	5.6	30.140	D
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	505	126	1190	1190	0.424	504	508	0.8	0.8	5.458	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	86	21	1190	1190	0.072	86	90	0.1	0.1	5.636	A
				3	920	230	1190	1190	0.773	924	924	4.2	4.5	17.706	C
				4	1	0.28	277	277	0.004	1	1	0.0	0.0	19.468	C

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	210	52	760	450	0.466	211	209	2.0	1.9	32.382	D
				3	4	0.94	470	273	0.014	4	4	0.1	0.0	33.405	D
				4	223	56	760	450	0.495	220	217	2.0	1.9	31.087	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	390	98	760	449	0.870	387	381	3.0	2.9	26.425	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	176	44	-	-	-	210	208	18.2	11.3	262.305	F
				3	4	0.98	-	-	-	4	4	0.3	0.3	273.720	F
				4	519	130	-	-	-	613	597	51.0	32.1	259.091	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	315	79	1079	651	0.484	314	334	2.3	1.4	16.681	C
				4	171	43	1079	651	0.262	171	178	0.9	0.6	12.823	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	346	86	1079	651	0.531	346	373	1.9	1.1	11.489	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	313	78	-	-	-	315	330	3.8	0.5	12.689	B
				4	516	129	-	-	-	517	547	5.6	0.8	11.691	B
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	377	94	1190	1190	0.317	377	381	0.8	0.5	4.610	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	109	27	1190	1190	0.092	109	110	0.1	0.2	4.492	A
				3	757	189	1190	1190	0.636	761	757	4.5	2.2	11.156	B
				4	1	0.31	295	295	0.004	1	1	0.0	0.0	9.472	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	166	42	760	503	0.330	171	195	1.9	1.0	25.076	D
				3	3	0.80	470	305	0.011	3	4	0.0	0.0	23.268	C
				4	190	47	760	504	0.377	193	211	1.9	0.8	22.327	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	301	75	760	503	0.599	307	354	2.9	1.2	19.617	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	145	36	-	-	-	166	191	11.3	1.0	82.038	F
				3	3	0.70	-	-	-	3	4	0.3	0.0	89.868	F
				4	430	108	-	-	-	491	554	32.1	3.0	80.049	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	254	63	1079	727	0.349	254	261	1.4	0.8	11.943	B
				4	164	41	1079	726	0.226	164	164	0.6	0.4	8.479	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	281	70	1079	727	0.386	281	290	1.1	0.6	8.162	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	253	63	-	-	-	254	259	0.5	0.1	1.912	A
				4	443	111	-	-	-	445	451	0.8	0.1	1.442	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	295	74	1190	1190	0.248	296	299	0.5	0.3	4.064	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	112	28	1190	1190	0.094	112	108	0.2	0.2	4.088	A
				3	626	156	1190	1190	0.526	624	634	2.2	1.6	8.496	A
				4	0.48	0.12	153	153	0.003	0.53	0.57	0.0	0.0	8.985	A

D4 - 2028 | FTH Do Minimum + Dev + Site B + RF | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	105.22	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	105.22	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028	FTH Do Minimum + Dev + Site B + RF	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	780	100.000
2		ONE HOUR	✓	973	100.000
3					
4		ONE HOUR	✓	1382	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	202	4	574
	2	0	0	368	605
	3	0	0	0	0
	4	0	548	833	1

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Cyclist %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	318.00	80.6	130.8	F	719	1078
2	65.83	20.4	60.8	F	895	1343
3						
4	12.57	5.4	14.9	B	1270	1904

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	587	147	1046	588	580	0	0.0	2.7	13.469	B
2	732	183	1066	734	724	568	0.0	1.8	8.035	A
3			0			906				
4	1046	261	0	1046	1034	893	0.0	1.9	6.403	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	712	178	1241	704	696	0	2.7	7.3	29.823	D
2	871	218	1271	865	868	674	1.8	3.9	14.010	B
3			0			1076				
4	1243	311	0	1241	1246	1060	1.9	2.7	7.828	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	863	216	1527	723	723	0	7.3	43.1	130.572	F
2	1078	270	1466	1042	1028	784	3.9	17.1	42.313	E
3			0			1318				
4	1525	381	0	1527	1522	1190	2.7	5.4	12.574	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	847	212	1529	712	713	0	43.1	80.6	317.995	F
2	1079	270	1447	1060	1062	795	17.1	20.4	65.828	F
3			0			1320				
4	1525	381	0	1529	1526	1187	5.4	5.1	12.400	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	708	177	1241	838	810	0	80.6	56.2	311.828	F
2	865	216	1362	882	936	717	20.4	5.8	37.889	E
3			0			1079				
4	1242	311	0	1241	1254	1165	5.1	2.8	8.313	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	595	149	1036	717	784	0	56.2	9.6	120.900	F
2	745	186	1171	750	754	582	5.8	2.2	13.109	B
3			0			921				
4	1037	259	0	1036	1051	1000	2.8	2.0	6.567	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	2.68	0.00	1.40	5.88	7.97
2	1.78	0.00	0.58	4.12	5.85
3					
4	1.89	0.00	0.73	4.40	6.42

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	7.30	0.00	4.57	17.15	24.27
2	3.91	0.00	2.17	8.70	11.60
3					
4	2.74	0.00	1.47	6.12	8.60

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	43.08	9.60	40.50	70.60	80.45
2	17.05	0.45	12.50	36.60	45.80
3					
4	5.35	0.00	3.65	10.87	14.90

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	80.62	24.20	82.25	120.60	130.80
2	20.38	0.69	14.14	45.65	60.80
3					
4	5.15	0.00	3.10	11.32	14.20

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	56.22	2.44	56.00	101.60	117.80
2	5.80	0.00	2.88	13.80	17.60
3					
4	2.85	0.00	1.65	5.76	8.47

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	9.64	0.00	2.56	33.60	42.60
2	2.17	0.00	0.92	4.79	7.26
3					
4	1.96	0.00	0.92	4.36	5.60

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	327	500	0.655	326	326	0.0	1.5	13.308	B
			2	4	260	500	0.521	262	254	0.0	0.9	11.137	B
		2	1	(2, 3, 4)	587			587	590	0.0	0.3	1.090	A
2	Entry	1	1	3, 4	445	747	0.596	446	444	0.0	1.1	8.175	A
			2	2, 4	286	747	0.383	288	281	0.0	0.4	6.498	A
		2	1	(1, 2, 3, 4)	732			732	730	0.0	0.2	0.501	A
	Exit	1	1		568			568	561	0.0	0.0	0.000	A
3	Exit	1	1		906			906	898	0.0	0.0	0.000	A
4	Entry	1	1	2	305	1190	0.256	305	297	0.0	0.4	4.038	A
			2	2, 3, 4	741	1190	0.622	741	737	0.0	1.5	7.349	A
	Exit	1	1		893			893	879	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	380	451	0.843	379	379	1.5	2.6	21.449	C
			2	4	325	451	0.721	325	317	0.9	1.7	18.210	C
		2	1	(2, 3, 4)	712			705	704	0.3	3.0	9.719	A
2	Entry	1	1	3, 4	513	684	0.751	512	512	1.1	1.9	12.212	B
			2	2, 4	353	684	0.516	353	356	0.4	1.0	9.204	A
		2	1	(1, 2, 3, 4)	871			866	873	0.2	1.0	3.013	A
	Exit	1	1		674			674	672	0.0	0.0	0.000	A
3	Exit	1	1		1076			1076	1081	0.0	0.0	0.000	A
4	Entry	1	1	2	379	1190	0.318	378	379	0.4	0.5	4.457	A
			2	2, 3, 4	864	1190	0.726	863	866	1.5	2.3	9.307	A
	Exit	1	1		1060			1060	1056	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	386	380	1.017	385	384	2.6	3.9	33.923	D
			2	4	341	380	0.897	338	338	1.7	3.1	28.579	D
		2	1	(2, 3, 4)	863			726	733	3.0	36.1	98.605	F
2	Entry	1	1	3, 4	585	623	0.940	587	585	1.9	3.2	18.377	C
			2	2, 4	453	623	0.727	455	443	1.0	1.9	13.629	B
		2	1	(1, 2, 3, 4)	1078			1038	1037	1.0	12.0	25.865	D
	Exit	1	1		784			784	791	0.0	0.0	0.000	A
3	Exit	1	1		1318			1318	1311	0.0	0.0	0.000	A
4	Entry	1	1	2	512	1190	0.431	515	512	0.5	0.7	5.501	A
			2	2, 3, 4	1013	1190	0.851	1012	1010	2.3	4.7	16.129	C
	Exit	1	1		1190			1190	1171	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	382	379	1.009	382	380	3.9	4.0	37.013	E
			2	4	331	379	0.874	331	333	3.1	3.0	31.192	D
		2	1	(2, 3, 4)	847			714	713	36.1	73.7	284.751	F
2	Entry	1	1	3, 4	592	629	0.941	591	597	3.2	3.4	19.560	C
			2	2, 4	467	629	0.743	469	465	1.9	1.8	14.595	B
		2	1	(1, 2, 3, 4)	1079			1059	1062	12.0	15.2	48.412	E
	Exit	1	1		795			795	792	0.0	0.0	0.000	A
3	Exit	1	1		1320			1320	1318	0.0	0.0	0.000	A
4	Entry	1	1	2	512	1190	0.430	512	512	0.7	0.9	5.677	A
			2	2, 3, 4	1013	1190	0.852	1017	1014	4.7	4.3	15.819	C
	Exit	1	1		1187			1187	1191	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	445	451	0.987	447	432	4.0	3.7	31.541	D
			2	4	392	451	0.870	390	378	3.0	2.8	26.761	D
		2	1	(2, 3, 4)	708			837	809	73.7	49.7	283.822	F
2	Entry	1	1	3, 4	509	655	0.776	509	536	3.4	2.3	16.485	C
			2	2, 4	371	655	0.567	373	401	1.8	1.1	12.147	B
		2	1	(1, 2, 3, 4)	865			880	929	15.2	2.3	23.531	C
	Exit	1	1		717			717	705	0.0	0.0	0.000	A
3	Exit	1	1		1079			1079	1120	0.0	0.0	0.000	A
4	Entry	1	1	2	380	1190	0.319	379	381	0.9	0.5	4.615	A
			2	2, 3, 4	862	1190	0.725	862	873	4.3	2.3	9.936	A
	Exit	1	1		1165			1165	1177	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	386	502	0.769	391	425	3.7	2.2	24.325	C
			2	4	322	502	0.641	326	359	2.8	1.5	20.935	C
		2	1	(2, 3, 4)	595			708	773	49.7	6.0	98.856	F
2	Entry	1	1	3, 4	448	715	0.627	449	449	2.3	1.3	11.627	B
			2	2, 4	301	715	0.422	301	305	1.1	0.7	8.631	A
		2	1	(1, 2, 3, 4)	745			749	748	2.3	0.2	2.793	A
	Exit	1	1		582			582	612	0.0	0.0	0.000	A
3	Exit	1	1		921			921	927	0.0	0.0	0.000	A
4	Entry	1	1	2	289	1190	0.243	290	301	0.5	0.4	4.094	A
			2	2, 3, 4	748	1190	0.628	746	750	2.3	1.6	7.561	A
	Exit	1	1		1000			1000	1050	0.0	0.0	0.000	A

Lanes: Queue Variation Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.50	0.00	0.75	3.25	3.68
			2	0.88	0.00	0.00	2.15	2.81
		2	1	0.30	0.00	0.00	0.00	0.80
2	Entry	1	1	1.12	0.00	0.29	2.85	3.46
			2	0.42	0.00	0.00	0.97	1.72
		2	1	0.23	0.00	0.00	0.00	0.93
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.38	0.00	0.00	0.88	1.41
			2	1.50	0.00	0.45	3.51	4.80
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:00 - 08:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	2.61	0.00	2.36	3.86	5.00
			2	1.70	0.00	1.02	3.49	3.84
		2	1	2.98	0.00	0.00	10.30	17.93
2	Entry	1	1	1.92	0.00	1.10	3.71	3.92
			2	0.99	0.00	0.02	2.48	4.00
		2	1	1.00	0.00	0.00	2.92	5.95
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.50	0.00	0.00	1.37	2.18
			2	2.25	0.00	1.14	4.87	7.45
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:15 - 08:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.94	2.40	3.50	3.98	5.00
			2	3.05	0.00	3.14	3.87	3.96
		2	1	36.07	2.10	33.71	63.30	73.53
2	Entry	1	1	3.16	0.00	3.16	3.91	5.00
			2	1.85	0.00	1.23	3.50	3.81
		2	1	12.04	0.00	7.20	29.73	38.80
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.68	0.00	0.00	1.59	1.97
			2	4.67	0.00	2.96	10.15	13.70
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:30 - 08:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	4.00	3.02	3.51	3.95	5.00
			2	2.96	0.00	3.09	3.85	3.95
		2	1	73.66	17.20	76.40	113.30	123.40
2	Entry	1	1	3.39	0.13	3.27	3.95	5.00
			2	1.83	0.00	1.26	3.51	3.77
		2	1	15.16	0.00	8.00	40.30	54.20
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.89	0.00	0.00	2.48	3.35
			2	4.26	0.00	2.32	9.27	12.93
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:45 - 09:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.71	0.58	3.43	3.97	5.00
			2	2.82	0.00	2.78	3.83	3.95
		2	1	49.68	0.00	48.50	93.50	110.40
2	Entry	1	1	2.34	0.00	1.79	3.79	3.95
			2	1.13	0.00	0.22	2.74	3.36
		2	1	2.34	0.00	0.00	7.87	12.40
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.50	0.00	0.00	1.11	1.85
			2	2.34	0.00	1.22	4.96	6.80
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

09:00 - 09:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	2.17	0.00	1.57	3.77	3.94
			2	1.51	0.00	0.57	3.50	3.81
		2	1	5.96	0.00	0.00	25.20	35.80
2	Entry	1	1	1.30	0.00	0.47	3.18	3.74
			2	0.69	0.00	0.00	1.78	2.48
		2	1	0.17	0.00	0.00	0.00	0.30
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.38	0.00	0.00	0.89	1.52
			2	1.59	0.00	0.65	3.74	4.65
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	151	38	760	499	0.303	151	150	0.0	0.7	15.223	C
				3	3	0.87	380	271	0.013	3	3	0.0	0.0	15.263	C
				4	173	43	760	499	0.346	172	172	0.0	0.8	11.587	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	260	65	760	499	0.522	262	254	0.0	0.9	11.137	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	151	38	-	-	-	151	153	0.0	0.1	1.522	A
				3	4	0.88	-	-	-	3	3	0.0	0.0	1.496	A
				4	433	108	-	-	-	433	433	0.0	0.2	0.933	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	275	69	1079	748	0.368	275	272	0.0	0.8	9.246	A
				4	170	43	1079	747	0.228	170	171	0.0	0.3	6.462	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	286	72	1079	747	0.383	288	281	0.0	0.4	6.498	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	274	69	-	-	-	275	276	0.0	0.1	0.690	A
				4	457	114	-	-	-	457	455	0.0	0.1	0.386	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	305	76	1190	1190	0.256	305	297	0.0	0.4	4.038	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	113	28	1190	1190	0.095	113	114	0.0	0.1	4.013	A
				3	628	157	1190	1190	0.527	628	623	0.0	1.4	7.958	A
				4	0.59	0.15	175	175	0.003	0.59	0.68	0.0	0.0	7.306	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	184	46	760	451	0.408	184	178	0.7	1.4	23.475	C
				3	3	0.78	431	261	0.012	3	4	0.0	0.0	23.664	C
				4	193	48	760	451	0.427	192	197	0.8	1.2	19.571	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	325	81	760	451	0.721	325	317	0.9	1.7	18.210	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	188	47	-	-	-	184	181	0.1	1.0	11.308	B
				3	3	0.75	-	-	-	3	4	0.0	0.0	11.244	B
				4	521	130	-	-	-	518	519	0.2	2.0	9.153	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	325	81	1079	683	0.476	324	326	0.8	1.4	13.663	B
				4	188	47	1079	684	0.275	188	185	0.3	0.5	9.659	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	353	88	1079	682	0.517	353	356	0.4	1.0	9.204	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	328	82	-	-	-	325	329	0.1	0.5	3.519	A
				4	543	136	-	-	-	541	544	0.1	0.5	2.707	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	379	95	1190	1190	0.318	378	379	0.4	0.5	4.457	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	113	28	1190	1190	0.095	112	115	0.1	0.2	4.455	A
				3	750	187	1190	1190	0.630	749	751	1.4	2.1	10.047	B
				4	1	0.36	260	260	0.006	1	1	0.0	0.0	8.599	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	184	46	760	380	0.484	182	188	1.4	2.0	34.863	D
				3	4	0.98	421	216	0.018	4	3	0.0	0.0	32.624	D
				4	198	49	760	382	0.518	199	193	1.2	2.0	33.040	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	341	85	760	380	0.895	338	338	1.7	3.1	28.579	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	219	55	-	-	-	184	190	1.0	9.4	101.297	F
				3	5	1	-	-	-	4	4	0.0	0.2	107.819	F
				4	638	160	-	-	-	538	540	2.0	26.5	97.605	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	389	97	1079	624	0.624	390	390	1.4	2.2	19.499	C
				4	196	49	1079	625	0.314	196	195	0.5	1.0	16.143	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	453	113	1079	623	0.726	455	443	1.0	1.9	13.629	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	406	102	-	-	-	389	393	0.5	4.7	27.008	D
				4	672	168	-	-	-	649	644	0.5	7.3	25.167	D
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	512	128	1190	1190	0.431	515	512	0.5	0.7	5.501	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	86	21	1190	1190	0.072	87	91	0.2	0.1	5.501	A
				3	925	231	1190	1190	0.778	924	918	2.1	4.5	17.163	C
				4	1	0.31	255	255	0.005	1	0.98	0.0	0.0	17.494	C

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	188	47	760	379	0.496	186	184	2.0	2.0	37.486	E
				3	4	0.90	411	206	0.017	3	4	0.0	0.0	37.240	E
				4	191	48	760	380	0.502	192	192	2.0	1.9	36.554	E
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	331	83	760	379	0.873	331	333	3.1	3.0	31.192	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	219	55	-	-	-	188	184	9.4	19.2	288.113	F
				3	4	0.95	-	-	-	4	4	0.2	0.3	287.777	F
				4	624	156	-	-	-	522	525	26.5	54.1	283.546	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	399	100	1079	630	0.634	397	397	2.2	2.5	20.548	C
				4	192	48	1079	631	0.304	194	199	1.0	0.9	17.584	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	467	117	1079	629	0.743	469	465	1.9	1.8	14.595	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	405	101	-	-	-	399	399	4.7	5.8	50.058	F
				4	675	169	-	-	-	660	664	7.3	9.3	47.428	E
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	512	128	1190	1190	0.430	512	512	0.7	0.9	5.677	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	96	24	1190	1190	0.081	96	96	0.1	0.2	5.680	A
				3	916	229	1190	1190	0.770	919	917	4.5	4.1	16.876	C
				4	1	0.36	303	303	0.005	1	1	0.0	0.0	19.245	C

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	216	54	760	452	0.478	220	212	2.0	1.6	32.212	D
				3	4	0.92	438	256	0.014	4	4	0.0	0.0	34.107	D
				4	225	56	760	452	0.498	224	217	1.9	2.1	30.849	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	392	98	760	451	0.870	390	378	3.0	2.8	26.761	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	186	47	-	-	-	216	210	19.2	13.2	286.297	F
				3	4	0.90	-	-	-	4	4	0.3	0.3	283.691	F
				4	518	129	-	-	-	617	595	54.1	36.1	282.940	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	332	83	1079	656	0.507	333	356	2.5	1.7	17.735	C
				4	176	44	1079	656	0.268	177	180	0.9	0.6	13.998	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	371	93	1079	655	0.567	373	401	1.8	1.1	12.147	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	328	82	-	-	-	332	353	5.8	1.0	24.208	C
				4	537	134	-	-	-	548	577	9.3	1.3	23.117	C
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	380	95	1190	1190	0.319	379	381	0.9	0.5	4.615	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	117	29	1190	1190	0.098	118	112	0.2	0.1	4.353	A
				3	744	186	1190	1190	0.625	743	760	4.1	2.2	10.760	B
				4	2	0.39	266	266	0.006	2	1	0.0	0.0	11.073	B

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	178	45	760	502	0.355	180	199	1.6	1.2	25.581	D
				3	3	0.71	428	276	0.010	3	4	0.0	0.0	27.142	D
				4	205	51	760	501	0.409	208	222	2.1	1.0	23.136	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	322	80	760	502	0.641	326	359	2.8	1.5	20.935	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	150	37	-	-	-	178	197	13.2	1.7	100.713	F
				3	2	0.62	-	-	-	3	4	0.3	0.0	102.595	F
				4	443	111	-	-	-	527	572	36.1	4.3	98.203	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	283	71	1079	713	0.397	285	287	1.7	0.9	13.007	B
				4	165	41	1079	712	0.231	164	162	0.6	0.4	9.212	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	301	75	1079	714	0.422	301	305	1.1	0.7	8.631	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	281	70	-	-	-	283	283	1.0	0.1	3.207	A
				4	464	116	-	-	-	466	465	1.3	0.1	2.541	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	289	72	1190	1190	0.243	290	301	0.5	0.4	4.094	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	111	28	1190	1190	0.094	112	112	0.1	0.1	4.079	A
				3	636	159	1190	1190	0.534	633	637	2.2	1.5	8.181	A
				4	0.75	0.19	170	170	0.004	0.75	0.73	0.0	0.0	8.509	A

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.1.0.2307
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Filename: Junction 7 - Wrotham Road_A2 Linked Rbt - Lane Sim - PM.j11
Path: C:\Users\mattjohnson\Ridge and Partners LLP\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Modelling\Arcady\Tech Note 2\2028 FTH Do Minimum
Report generation date: 02/09/2026 16:03:39

»D1 - 2028 | FTH Do Minimum | PM
»D2 - 2028 | FTH Do Minimum + Dev | PM
»D3 - 2028 | FTH Do Minimum + Dev + Site B | PM
»D4 - 2028 | FTH Do Minimum + Dev + Site B + RF | PM

Summary of junction performance

	PM			
	Set ID	Queue (PCU)	Delay (s)	RFC
	[Lane Simulation] - 2028 - FTH Do Minimum			
Arm 1	D1	27.4	117.45	
Arm 2		3.1	13.32	
Arm 4		2.8	7.29	
	[Lane Simulation] - 2028 - FTH Do Minimum + Dev			
Arm 1	D2	40.8	171.35	
Arm 2		4.4	14.83	
Arm 4		3.3	7.69	
	[Lane Simulation] - 2028 - FTH Do Minimum + Dev + Site B			
Arm 1	D3	46.9	194.40	
Arm 2		4.5	15.65	
Arm 4		3.4	7.80	
	[Lane Simulation] - 2028 - FTH Do Minimum + Dev + Site B + RF			
Arm 1	D4	56.8	228.46	
Arm 2		4.6	16.08	
Arm 4		3.5	7.89	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

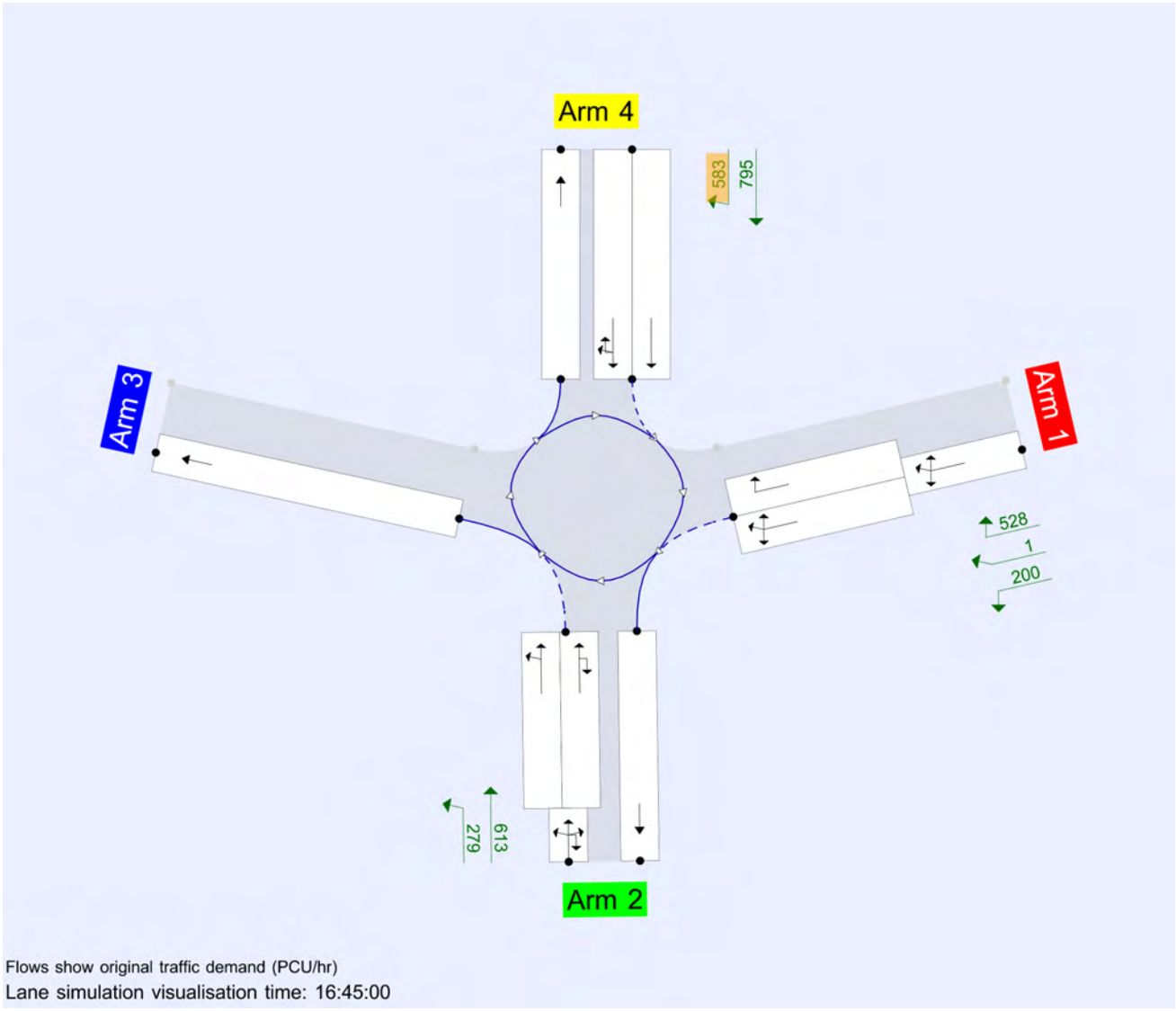
File summary

File Description

Title	
Location	Wrotham Road/A2 Southern Roundabout
Site number	7
Date	09/04/2026
Version	
Status	(new file)
Identifier	MJ
Client	Richborough
Jobnumber	T25512
Enumerator	AzureAD\MatthewJohnson
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	PCU	PCU	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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75	✓					0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	Do not calculate	-1	3	1	60	✓			2012050253	336	8.74

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028	FTH Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D2	2028	FTH Do Minimum + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D3	2028	FTH Do Minimum + Dev + Site B	PM	ONE HOUR	16:45	18:15	15	✓
D4	2028	FTH Do Minimum + Dev + Site B + RF	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

D1 - 2028 | FTH Do Minimum | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	37.06	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	37.06	E

Arms

Arms

Arm	Name	Description	No give-way line
1	A2 (E) Off-Slip		
2	Wrotham Road S		
3	A2 (W) On-Slip		
4	Wrotham Road N - Internal Link		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	3.70	8.50	10.2	19.1	59.9	60.0	✓	
2	4.90	9.20	22.2	24.1	59.9	49.0		
3								✓
4	7.60	8.10	6.9	20.8	59.9	36.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.499	1520
2	0.622	2157
3		
4	0.671	2380

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

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1	Evenly split	10.00
2	Evenly split	10.00
3	Evenly split	10.00
4	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1	Entry	1	1	2, 3, 4	✓	4.00			0	99999	
			2	4	✓	4.00			0	99999	
		2	1	(2, 3, 4)		Infinity					
2	Entry	1	1	3, 4	✓	4.00			0	99999	
			2	2, 4	✓	4.00			0	99999	
		2	1	(1, 2, 3, 4)		Infinity					
	Exit	1	1			Infinity					
3	Exit	1	1			Infinity					
4	Entry	1	1	2		Infinity			0	99999	
			2	2, 3, 4		Infinity			0	99999	
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1	Entry	1	1	0.249	760
			2	0.249	760
2	Entry	1	1	0.311	1079
			2	0.311	1079
4	Entry	1	1	0.335	1190
			2	0.335	1190

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			1	2	3	4
1	1	1		✓	✓	✓
		2				✓
	2	1		✓	✓	✓
2	1	1			✓	✓
		2		✓		✓
	2	1	✓	✓	✓	✓
4	1	1		✓		
		2		✓	✓	✓

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028	FTH Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	706	100.000
2		ONE HOUR	✓	814	100.000
3					
4		ONE HOUR	✓	1256	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	177	1	528
	2	0	2	227	585
	3	0	0	0	0
	4	0	673	583	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	10	10	10
	2	0	10	10	10
	3	0	0	0	0
	4	0	10	10	10

Cyclist %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	117.45	27.4	69.2	F	648	972
2	13.32	3.1	10.0	B	747	1120
3						
4	7.29	2.8	8.7	A	1153	1730

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	531	133	954	535	528	0	0.0	1.7	11.206	B
2	608	152	848	612	615	642	0.0	1.1	6.194	A
3			0			615				
4	953	238	1	953	946	843	0.0	1.4	5.202	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	631	158	1144	632	632	0	1.7	3.5	19.066	C
2	733	183	997	732	735	779	1.1	1.7	8.234	A
3			0			734				
4	1143	286	2	1142	1146	994	1.4	2.2	5.930	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	772	193	1391	741	730	0	3.5	17.9	61.981	F
2	893	223	1197	891	894	935	1.7	3.1	12.087	B
3			0			893				
4	1386	347	2	1389	1388	1193	2.2	2.6	7.288	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	777	194	1372	750	748	0	17.9	27.4	117.446	F
2	894	223	1202	898	910	920	3.1	3.0	13.316	B
3			0			887				
4	1372	343	2	1370	1390	1210	2.6	2.8	7.262	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	643	161	1121	690	731	0	27.4	5.9	68.280	F
2	736	184	1038	735	743	773	3.0	2.0	9.252	A
3			0			728				
4	1120	280	2	1119	1142	1043	2.8	1.8	5.934	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	531	133	947	530	554	0	5.9	2.0	15.095	C
2	617	154	835	617	625	642	2.0	1.1	6.772	A
3			0			609				
4	945	236	2	945	948	841	1.8	1.4	5.061	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	1.75	0.00	0.64	3.84	5.89
2	1.11	0.00	0.18	2.39	3.04
3					
4	1.38	0.00	0.44	3.10	4.30

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	3.49	0.00	1.96	7.65	10.24
2	1.73	0.00	0.65	3.65	5.03
3					
4	2.25	0.00	1.24	4.83	6.27

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	17.87	1.05	13.00	39.70	49.20
2	3.06	0.00	1.49	6.70	10.04
3					
4	2.58	0.00	1.39	5.79	7.05

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	27.45	0.78	22.33	58.85	69.20
2	3.05	0.00	1.79	6.45	8.55
3					
4	2.82	0.00	1.44	6.49	8.74

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	5.87	0.00	2.53	14.70	23.60
2	1.97	0.00	0.94	4.17	5.52
3					
4	1.79	0.00	0.81	3.91	5.47

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	1.96	0.00	0.98	3.90	5.05
2	1.15	0.00	0.23	2.52	3.58
3					
4	1.40	0.00	0.39	3.18	4.69

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	298	522	0.570	300	298	0.0	0.9	11.363	B
			2	4	233	522	0.447	235	230	0.0	0.7	9.753	A
		2	1	(2, 3, 4)	531			531	535	0.0	0.1	0.529	A
2	Entry	1	1	3, 4	357	815	0.438	359	362	0.0	0.7	6.395	A
			2	2, 4	252	815	0.309	253	254	0.0	0.4	5.637	A
		2	1	(1, 2, 3, 4)	608			608	620	0.0	0.0	0.109	A
	Exit	1	1		642			642	642	0.0	0.0	0.000	A
3	Exit	1	1		615			615	609	0.0	0.0	0.000	A
4	Entry	1	1	2	333	1189	0.280	332	329	0.0	0.4	4.139	A
			2	2, 3, 4	620	1189	0.521	621	617	0.0	1.0	5.768	A
	Exit	1	1		843			843	838	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	347	475	0.731	348	348	0.9	1.7	17.088	C
			2	4	283	475	0.596	284	284	0.7	1.2	14.671	B
		2	1	(2, 3, 4)	631			631	637	0.1	0.6	3.044	A
2	Entry	1	1	3, 4	419	769	0.545	419	422	0.7	1.0	8.290	A
			2	2, 4	313	769	0.407	313	313	0.4	0.7	7.070	A
		2	1	(1, 2, 3, 4)	733			732	737	0.0	0.1	0.460	A
	Exit	1	1		779			779	778	0.0	0.0	0.000	A
3	Exit	1	1		734			734	736	0.0	0.0	0.000	A
4	Entry	1	1	2	416	1189	0.350	415	416	0.4	0.6	4.532	A
			2	2, 3, 4	727	1189	0.611	728	730	1.0	1.6	6.723	A
	Exit	1	1		994			994	999	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	395	413	0.955	395	390	1.7	3.4	28.436	D
			2	4	348	413	0.841	346	341	1.2	2.7	24.300	C
		2	1	(2, 3, 4)	772			743	743	0.6	11.8	35.099	E
2	Entry	1	1	3, 4	494	706	0.700	496	499	1.0	1.5	11.092	B
			2	2, 4	396	706	0.561	395	396	0.7	1.0	9.114	A
		2	1	(1, 2, 3, 4)	893			891	898	0.1	0.6	1.851	A
	Exit	1	1		935			935	928	0.0	0.0	0.000	A
3	Exit	1	1		893			893	898	0.0	0.0	0.000	A
4	Entry	1	1	2	526	1189	0.442	527	529	0.6	0.8	5.134	A
			2	2, 3, 4	861	1189	0.724	863	858	1.6	1.8	8.618	A
	Exit	1	1		1193			1193	1187	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	400	418	0.955	399	397	3.4	3.6	31.658	D
			2	4	352	418	0.842	351	351	2.7	2.7	27.186	D
		2	1	(2, 3, 4)	777			751	749	11.8	21.2	88.008	F
2	Entry	1	1	3, 4	500	705	0.710	501	506	1.5	1.6	11.650	B
			2	2, 4	396	705	0.561	397	404	1.0	1.1	9.790	A
		2	1	(1, 2, 3, 4)	894			896	911	0.6	0.4	2.506	A
	Exit	1	1		920			920	930	0.0	0.0	0.000	A
3	Exit	1	1		887			887	901	0.0	0.0	0.000	A
4	Entry	1	1	2	521	1189	0.438	521	530	0.8	0.8	5.258	A
			2	2, 3, 4	851	1189	0.716	849	860	1.8	2.0	8.496	A
	Exit	1	1		1210			1210	1217	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	370	481	0.769	375	393	3.6	1.9	24.260	C
			2	4	312	481	0.650	315	338	2.7	1.5	20.693	C
		2	1	(2, 3, 4)	643			682	719	21.2	2.5	46.623	E
2	Entry	1	1	3, 4	420	756	0.556	418	422	1.6	1.2	9.219	A
			2	2, 4	316	756	0.419	317	321	1.1	0.7	7.725	A
		2	1	(1, 2, 3, 4)	736			737	740	0.4	0.1	0.688	A
	Exit	1	1		773			773	798	0.0	0.0	0.000	A
3	Exit	1	1		728			728	738	0.0	0.0	0.000	A
4	Entry	1	1	2	405	1189	0.340	404	416	0.8	0.5	4.459	A
			2	2, 3, 4	715	1189	0.602	715	726	2.0	1.3	6.779	A
	Exit	1	1		1043			1043	1079	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	300	524	0.572	299	309	1.9	1.1	13.761	B
			2	4	232	524	0.443	231	245	1.5	0.7	11.779	B
		2	1	(2, 3, 4)	531			532	548	2.5	0.1	2.434	A
2	Entry	1	1	3, 4	361	819	0.441	362	364	1.2	0.7	7.059	A
			2	2, 4	256	819	0.312	255	261	0.7	0.5	6.000	A
		2	1	(1, 2, 3, 4)	617			617	622	0.1	0.0	0.162	A
	Exit	1	1		642			642	652	0.0	0.0	0.000	A
3	Exit	1	1		609			609	613	0.0	0.0	0.000	A
4	Entry	1	1	2	327	1189	0.275	328	330	0.5	0.3	4.007	A
			2	2, 3, 4	617	1189	0.519	617	618	1.3	1.0	5.623	A
	Exit	1	1		841			841	862	0.0	0.0	0.000	A

Lanes: Queue Variation Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	0.95	0.00	0.09	2.32	4.00
			2	0.68	0.00	0.00	1.76	2.54
		2	1	0.12	0.00	0.00	0.00	0.00
2	Entry	1	1	0.68	0.00	0.00	1.64	2.22
			2	0.40	0.00	0.00	0.90	1.48
		2	1	0.03	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.41	0.00	0.00	0.96	1.55
			2	0.97	0.00	0.00	2.14	3.24
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:00 - 17:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.70	0.00	0.89	3.53	3.81
			2	1.22	0.00	0.42	2.86	3.47
		2	1	0.56	0.00	0.00	1.06	3.70
2	Entry	1	1	0.97	0.00	0.05	2.30	4.00
			2	0.67	0.00	0.00	1.64	2.09
		2	1	0.10	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.64	0.00	0.00	1.57	1.94
			2	1.61	0.00	0.64	3.39	5.03
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:15 - 17:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.39	-0.01	3.30	3.94	5.00
			2	2.65	0.00	2.55	3.85	3.98
		2	1	11.82	0.00	5.73	31.80	42.10
2	Entry	1	1	1.51	0.00	0.66	3.35	3.71
			2	0.99	0.00	0.13	2.10	2.83
		2	1	0.56	0.00	0.00	0.48	3.55
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.77	0.00	0.00	1.85	2.93
			2	1.81	0.00	0.81	4.09	5.40
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:30 - 17:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.56	0.04	3.40	3.98	5.00
			2	2.65	0.00	2.68	3.87	3.99
		2	1	21.22	0.00	15.29	51.10	61.60
2	Entry	1	1	1.57	0.00	0.80	3.30	3.69
			2	1.09	0.00	0.35	2.29	3.07
		2	1	0.39	0.00	0.00	0.00	2.30
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.78	0.00	0.00	1.75	2.56
			2	2.04	0.00	0.80	4.62	6.64
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:45 - 18:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.88	0.00	1.17	3.63	3.84
			2	1.46	0.00	0.64	3.27	3.67
		2	1	2.54	0.00	0.00	6.80	16.20
2	Entry	1	1	1.24	0.00	0.47	2.81	3.43
			2	0.65	0.00	0.00	1.57	2.02
		2	1	0.07	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.52	0.00	0.00	1.13	1.78
			2	1.28	0.00	0.37	2.73	3.65
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

18:00 - 18:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.14	0.00	0.39	2.47	4.00
			2	0.74	0.00	0.00	1.69	2.12
		2	1	0.08	0.00	0.00	0.00	0.00
2	Entry	1	1	0.67	0.00	0.00	1.63	1.96
			2	0.45	0.00	0.00	1.02	1.69
		2	1	0.02	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.35	0.00	0.00	0.89	1.53
			2	1.05	0.00	0.13	2.44	3.69
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	129	32	760	522	0.248	131	132	0.0	0.5	13.312	B
				3	0.96	0.24	122	89	0.011	1	0.77	0.0	0.0	13.720	B
				4	167	42	760	523	0.320	168	166	0.0	0.5	9.801	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	233	58	760	523	0.446	235	230	0.0	0.7	9.753	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	129	32	-	-	-	129	134	0.0	0.0	0.815	A
				3	0.96	0.24	-	-	-	0.96	0.80	0.0	0.0	0.288	A
				4	401	100	-	-	-	401	401	0.0	0.1	0.434	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	170	42	1079	816	0.208	171	172	0.0	0.4	7.312	A
				4	187	47	1079	816	0.229	188	190	0.0	0.3	5.562	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.31	295	234	0.005	1	1	0.0	0.0	6.647	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	250	63	1079	815	0.307	252	252	0.0	0.4	5.632	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.31	-	-	-	1	1	0.0	0.0	0.047	A
				3	170	42	-	-	-	170	173	0.0	0.0	0.187	A
				4	437	109	-	-	-	437	445	0.0	0.0	0.079	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	333	83	1190	1189	0.280	332	329	0.0	0.4	4.139	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	177	44	1190	1189	0.149	177	180	0.0	0.2	4.024	A
				3	443	111	1190	1189	0.372	444	437	0.0	0.7	6.487	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	160	40	760	476	0.336	161	161	0.5	0.9	19.282	C
				3	0.71	0.18	133	86	0.008	0.75	0.86	0.0	0.0	17.327	C
				4	186	47	760	475	0.392	187	186	0.5	0.8	15.196	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	283	71	760	476	0.595	284	284	0.7	1.2	14.671	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	160	40	-	-	-	160	162	0.0	0.2	3.889	A
				3	0.71	0.18	-	-	-	0.71	0.83	0.0	0.0	2.458	A
				4	470	118	-	-	-	470	474	0.1	0.4	2.756	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	208	52	1079	769	0.271	207	206	0.4	0.6	9.553	A
				4	211	53	1079	769	0.274	212	216	0.3	0.4	7.081	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.39	337	242	0.006	2	2	0.0	0.0	7.131	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	311	78	1079	768	0.405	311	312	0.4	0.7	7.070	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.39	-	-	-	2	2	0.0	0.0	0.536	A
				3	208	52	-	-	-	208	207	0.0	0.0	0.588	A
				4	523	131	-	-	-	522	529	0.0	0.1	0.409	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	416	104	1190	1189	0.350	415	416	0.4	0.6	4.532	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	202	51	1190	1189	0.170	202	200	0.2	0.3	4.475	A
				3	525	131	1190	1189	0.441	526	529	0.7	1.3	7.570	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	187	47	760	414	0.450	187	184	0.9	1.6	29.891	D
				3	0.96	0.24	163	91	0.011	1	1	0.0	0.0	33.135	D
				4	207	52	760	413	0.502	207	205	0.8	1.7	27.117	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	348	87	760	414	0.840	346	341	1.2	2.7	24.300	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	191	48	-	-	-	187	187	0.2	3.0	37.426	E
				3	1	0.25	-	-	-	0.96	1	0.0	0.0	45.648	E
				4	581	145	-	-	-	555	555	0.4	8.8	34.300	D
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	249	62	1079	708	0.351	250	251	0.6	0.9	12.648	B
				4	246	61	1079	707	0.348	246	247	0.4	0.7	9.513	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.51	430	286	0.007	2	2	0.0	0.0	11.110	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	394	99	1079	707	0.558	393	393	0.7	1.0	9.103	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.52	-	-	-	2	2	0.0	0.0	1.377	A
				3	249	62	-	-	-	249	252	0.0	0.2	2.221	A
				4	642	160	-	-	-	640	643	0.1	0.4	1.707	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	526	131	1190	1189	0.442	527	529	0.6	0.8	5.134	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	219	55	1190	1189	0.185	220	213	0.3	0.3	5.194	A
				3	641	160	1190	1189	0.539	643	645	1.3	1.5	9.746	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	185	46	760	417	0.444	186	185	1.6	1.6	32.592	D
				3	1	0.25	152	84	0.012	0.82	0.99	0.0	0.0	32.300	D
				4	213	53	760	417	0.512	213	212	1.7	1.9	30.838	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	352	88	760	417	0.844	351	351	2.7	2.7	27.186	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	195	49	-	-	-	185	185	3.0	5.6	90.741	F
				3	1	0.29	-	-	-	1	1	0.0	0.0	89.363	F
				4	581	145	-	-	-	565	563	8.8	15.6	87.098	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	248	62	1079	706	0.352	249	253	0.9	0.8	13.165	B
				4	252	63	1079	705	0.358	251	252	0.7	0.8	10.129	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.56	414	271	0.008	2	2	0.0	0.0	10.252	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	394	98	1079	705	0.558	395	402	1.0	1.1	9.787	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.57	-	-	-	2	2	0.0	0.0	3.358	A
				3	248	62	-	-	-	248	253	0.2	0.1	3.017	A
				4	644	161	-	-	-	646	656	0.4	0.3	2.306	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	521	130	1190	1189	0.438	521	530	0.8	0.8	5.258	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	212	53	1190	1189	0.179	212	213	0.3	0.3	5.129	A
				3	639	160	1190	1189	0.537	637	647	1.5	1.7	9.603	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	170	42	760	481	0.353	173	184	1.6	0.9	25.859	D
				3	1	0.27	167	101	0.011	1	1	0.0	0.0	28.190	D
				4	199	50	760	481	0.414	200	207	1.9	1.0	22.816	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	312	78	760	481	0.650	315	338	2.7	1.5	20.693	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	161	40	-	-	-	170	181	5.6	0.7	48.514	E
				3	1	0.26	-	-	-	1	1	0.0	0.0	45.480	E
				4	481	120	-	-	-	512	537	15.6	1.8	45.991	E
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	209	52	1079	756	0.276	206	207	0.8	0.7	10.583	B
				4	212	53	1079	755	0.280	212	215	0.8	0.5	7.899	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.56	411	279	0.008	2	2	0.0	0.0	9.047	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	314	79	1079	756	0.416	315	319	1.1	0.6	7.717	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.56	-	-	-	2	2	0.0	0.0	0.397	A
				3	208	52	-	-	-	209	207	0.1	0.0	0.899	A
				4	526	131	-	-	-	526	531	0.3	0.0	0.607	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	405	101	1190	1189	0.340	404	416	0.8	0.5	4.459	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	194	48	1190	1189	0.163	194	197	0.3	0.2	4.419	A
				3	521	130	1190	1189	0.438	521	530	1.7	1.0	7.656	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	133	33	760	525	0.253	132	141	0.9	0.5	15.906	C
				3	0.68	0.17	122	84	0.008	0.64	0.67	0.0	0.0	12.058	B
				4	166	42	760	525	0.317	166	168	1.0	0.6	11.962	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	232	58	760	524	0.442	231	245	1.5	0.7	11.779	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	132	33	-	-	-	133	140	0.7	0.0	2.967	A
				3	0.68	0.17	-	-	-	0.68	0.67	0.0	0.0	1.697	A
				4	398	100	-	-	-	399	408	1.8	0.1	2.253	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	170	42	1079	819	0.207	171	175	0.7	0.3	8.118	A
				4	191	48	1079	819	0.234	191	189	0.5	0.3	6.081	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.38	302	224	0.007	2	1	0.0	0.0	6.239	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	254	64	1079	819	0.311	254	260	0.6	0.5	5.998	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.38	-	-	-	2	1	0.0	0.0	0.479	A
				3	170	42	-	-	-	170	173	0.0	0.0	0.242	A
				4	445	111	-	-	-	446	448	0.0	0.0	0.130	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	327	82	1190	1189	0.275	328	330	0.5	0.3	4.007	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	179	45	1190	1189	0.151	180	180	0.2	0.2	4.074	A
				3	438	110	1190	1189	0.369	437	438	1.0	0.8	6.261	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

D2 - 2028 | FTH Do Minimum + Dev | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	50.18	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	50.18	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2028	FTH Do Minimum + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	715	100.000
2		ONE HOUR	✓	863	100.000
3					
4		ONE HOUR	✓	1334	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	186	1	528
	2	0	2	261	600
	3	0	0	0	0
	4	0	751	583	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Cyclist %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	171.35	40.8	90.2	F	659	988
2	14.83	4.4	13.4	B	788	1182
3						
4	7.69	3.3	10.3	A	1223	1834

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	534	134	1006	539	531	0	0.0	1.9	11.965	B
2	635	159	846	638	643	699	0.0	1.1	6.398	A
3			0			641				
4	1006	251	1	1005	1002	843	0.0	1.4	5.274	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	645	161	1202	652	644	0	1.9	4.1	22.201	C
2	765	191	1008	763	776	846	1.1	2.1	8.570	A
3			0			757				
4	1198	300	1	1201	1202	1013	1.4	2.1	5.985	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	797	199	1464	723	711	0	4.1	26.4	84.096	F
2	945	236	1176	935	942	1011	2.1	4.4	13.607	B
3			0			925				
4	1466	366	2	1463	1478	1184	2.1	3.3	7.690	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	797	199	1457	740	737	0	26.4	40.8	171.347	F
2	958	239	1194	948	950	1003	4.4	4.2	14.833	B
3			0			932				
4	1455	364	2	1455	1466	1208	3.3	3.3	7.505	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	642	160	1212	733	758	0	40.8	12.8	119.647	F
2	777	194	1074	779	794	871	4.2	2.1	10.367	B
3			0			770				
4	1210	302	1	1211	1216	1081	3.3	2.0	6.051	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	537	134	1004	546	584	0	12.8	2.2	26.515	D
2	648	162	842	647	656	709	2.1	1.4	7.284	A
3			0			636				
4	1002	250	1	1003	1021	852	2.0	1.5	5.225	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	1.94	0.00	0.91	3.94	6.06
2	1.05	0.00	0.15	2.36	3.04
3					
4	1.45	0.00	0.43	3.47	4.79

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	4.12	0.00	2.22	8.69	11.86
2	2.11	0.00	0.86	4.68	6.47
3					
4	2.05	0.00	0.90	4.97	5.89

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	26.40	3.84	21.40	48.80	55.77
2	4.41	0.00	2.49	9.84	13.38
3					
4	3.32	0.00	1.79	6.92	10.26

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	40.77	2.68	37.67	76.20	90.20
2	4.16	0.00	2.59	8.12	12.43
3					
4	3.27	0.00	2.12	6.51	8.46

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	12.84	0.00	3.94	40.30	50.30
2	2.12	0.00	1.13	4.72	6.06
3					
4	2.00	0.00	1.09	4.13	5.55

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	2.21	0.00	0.96	4.66	5.86
2	1.36	0.00	0.26	3.20	4.91
3					
4	1.49	0.00	0.63	3.11	4.16

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	298	509	0.586	300	302	0.0	1.1	12.002	B
			2	4	237	509	0.465	238	229	0.0	0.7	10.133	B
		2	1	(2, 3, 4)	534			535	538	0.0	0.1	0.751	A
2	Entry	1	1	3, 4	376	816	0.461	377	382	0.0	0.7	6.654	A
			2	2, 4	259	816	0.317	261	261	0.0	0.4	5.715	A
		2	1	(1, 2, 3, 4)	635			635	647	0.0	0.0	0.124	A
	Exit	1	1		699			699	701	0.0	0.0	0.000	A
3	Exit	1	1		641			641	633	0.0	0.0	0.000	A
4	Entry	1	1	2	367	1190	0.308	366	363	0.0	0.5	4.178	A
			2	2, 3, 4	639	1190	0.537	639	639	0.0	1.0	5.895	A
	Exit	1	1		843			843	841	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	356	461	0.774	358	353	1.1	1.8	18.662	C
			2	4	294	461	0.638	294	291	0.7	1.4	15.872	C
		2	1	(2, 3, 4)	645			650	650	0.1	0.9	4.760	A
2	Entry	1	1	3, 4	441	765	0.576	440	448	0.7	1.2	8.654	A
			2	2, 4	324	765	0.423	323	328	0.4	0.8	7.155	A
		2	1	(1, 2, 3, 4)	765			765	780	0.0	0.1	0.547	A
	Exit	1	1		846			846	847	0.0	0.0	0.000	A
3	Exit	1	1		757			757	759	0.0	0.0	0.000	A
4	Entry	1	1	2	451	1189	0.379	451	453	0.5	0.6	4.631	A
			2	2, 3, 4	748	1189	0.629	750	749	1.0	1.4	6.806	A
	Exit	1	1		1013			1013	1016	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	386	395	0.976	384	379	1.8	3.8	31.210	D
			2	4	342	395	0.865	339	332	1.4	2.9	26.350	D
		2	1	(2, 3, 4)	797			727	725	0.9	19.7	54.641	F
2	Entry	1	1	3, 4	523	713	0.734	521	530	1.2	2.0	11.698	B
			2	2, 4	415	713	0.581	414	412	0.8	1.2	9.488	A
		2	1	(1, 2, 3, 4)	945			938	946	0.1	1.2	2.850	A
	Exit	1	1		1011			1011	1021	0.0	0.0	0.000	A
3	Exit	1	1		925			925	928	0.0	0.0	0.000	A
4	Entry	1	1	2	581	1189	0.489	578	592	0.6	1.1	5.753	A
			2	2, 3, 4	885	1189	0.744	885	887	1.4	2.2	8.981	A
	Exit	1	1		1184			1184	1181	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	394	397	0.993	394	392	3.8	3.8	34.556	D
			2	4	346	397	0.871	346	346	2.9	2.9	29.202	D
		2	1	(2, 3, 4)	797			740	737	19.7	34.0	139.643	F
2	Entry	1	1	3, 4	539	707	0.762	536	535	2.0	2.0	12.237	B
			2	2, 4	416	707	0.588	412	415	1.2	1.4	10.009	B
		2	1	(1, 2, 3, 4)	958			955	951	1.2	0.8	3.583	A
	Exit	1	1		1003			1003	1016	0.0	0.0	0.000	A
3	Exit	1	1		932			932	935	0.0	0.0	0.000	A
4	Entry	1	1	2	578	1189	0.486	577	588	1.1	0.9	5.473	A
			2	2, 3, 4	878	1189	0.738	878	878	2.2	2.3	8.865	A
	Exit	1	1		1208			1208	1203	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	389	458	0.850	396	406	3.8	2.4	27.874	D
			2	4	331	458	0.723	337	352	2.9	1.7	23.288	C
		2	1	(2, 3, 4)	642			721	748	34.0	8.7	94.958	F
2	Entry	1	1	3, 4	445	745	0.598	446	453	2.0	1.2	9.927	A
			2	2, 4	332	745	0.446	333	341	1.4	0.7	8.009	A
		2	1	(1, 2, 3, 4)	777			777	788	0.8	0.1	1.289	A
	Exit	1	1		871			871	882	0.0	0.0	0.000	A
3	Exit	1	1		770			770	776	0.0	0.0	0.000	A
4	Entry	1	1	2	452	1189	0.380	453	459	0.9	0.5	4.684	A
			2	2, 3, 4	758	1189	0.637	757	757	2.3	1.5	6.881	A
	Exit	1	1		1081			1081	1109	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	305	510	0.599	307	325	2.4	1.1	16.508	C
			2	4	239	510	0.469	239	258	1.7	0.8	14.283	B
		2	1	(2, 3, 4)	537			544	575	8.7	0.3	11.702	B
2	Entry	1	1	3, 4	381	817	0.467	381	386	1.2	0.8	7.532	A
			2	2, 4	266	817	0.326	267	270	0.7	0.5	6.273	A
		2	1	(1, 2, 3, 4)	648			647	653	0.1	0.1	0.280	A
	Exit	1	1		709			709	731	0.0	0.0	0.000	A
3	Exit	1	1		636			636	646	0.0	0.0	0.000	A
4	Entry	1	1	2	366	1189	0.308	367	374	0.5	0.4	4.228	A
			2	2, 3, 4	636	1189	0.534	636	648	1.5	1.1	5.802	A
	Exit	1	1		852			852	884	0.0	0.0	0.000	A

Lanes: Queue Variation Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.09	0.00	0.26	2.64	3.40
			2	0.71	0.00	0.00	1.68	2.14
		2	1	0.14	0.00	0.00	0.00	0.00
2	Entry	1	1	0.68	0.00	0.00	1.65	2.04
			2	0.36	0.00	0.00	0.85	1.33
		2	1	0.02	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.46	0.00	0.00	1.16	1.79
			2	0.98	0.00	0.00	2.17	3.26
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:00 - 17:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.82	0.00	1.02	3.62	3.85
			2	1.37	0.00	0.56	3.06	3.59
		2	1	0.93	0.00	0.00	2.36	4.83
2	Entry	1	1	1.22	0.00	0.38	2.94	4.00
			2	0.80	0.00	0.00	1.91	4.00
		2	1	0.09	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.65	0.00	0.00	1.64	2.13
			2	1.40	0.00	0.45	3.08	3.81
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:15 - 17:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.82	1.45	3.46	3.97	5.00
			2	2.92	0.00	3.10	3.86	3.95
		2	1	19.66	0.00	14.40	42.60	48.30
2	Entry	1	1	1.99	0.00	1.43	3.68	3.92
			2	1.19	0.00	0.28	2.89	3.49
		2	1	1.23	0.00	0.00	4.36	7.33
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	1.08	0.00	0.02	2.53	3.59
			2	2.24	0.00	1.03	5.18	7.29
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:30 - 17:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.83	0.90	3.48	3.97	5.00
			2	2.90	0.00	3.02	3.87	3.98
		2	1	34.04	0.00	31.00	69.30	83.15
2	Entry	1	1	1.96	0.00	1.39	3.58	3.84
			2	1.37	0.00	0.61	2.92	3.54
		2	1	0.84	0.00	0.00	1.77	6.10
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.95	0.00	0.12	1.92	2.86
			2	2.33	0.00	1.36	4.63	5.70
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:45 - 18:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	2.43	0.00	2.18	3.82	3.95
			2	1.73	0.00	0.98	3.56	3.81
		2	1	8.67	0.00	0.00	34.20	42.60
2	Entry	1	1	1.25	0.00	0.45	2.78	3.33
			2	0.74	0.00	0.00	1.85	2.66
		2	1	0.14	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.51	0.00	0.00	1.28	1.79
			2	1.49	0.00	0.58	3.20	3.96
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

18:00 - 18:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.11	0.00	0.29	2.53	4.00
			2	0.79	0.00	0.00	1.93	2.71
		2	1	0.32	0.00	0.00	0.00	0.00
2	Entry	1	1	0.78	0.00	0.00	2.04	4.00
			2	0.50	0.00	0.00	1.30	1.85
		2	1	0.08	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.42	0.00	0.00	1.13	1.64
			2	1.06	0.00	0.21	2.39	3.03
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	138	34	760	510	0.270	139	138	0.0	0.6	13.898	B
				3	1	0.26	114	78	0.013	1	0.77	0.0	0.0	17.942	C
				4	159	40	760	509	0.313	160	163	0.0	0.5	10.368	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	237	59	760	509	0.466	238	229	0.0	0.7	10.133	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	138	34	-	-	-	138	140	0.0	0.1	1.073	A
				3	1	0.26	-	-	-	1	0.77	0.0	0.0	0.794	A
				4	395	99	-	-	-	396	397	0.0	0.1	0.638	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	192	48	1079	816	0.235	193	193	0.0	0.4	7.655	A
				4	184	46	1079	815	0.226	184	189	0.0	0.2	5.630	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.27	276	219	0.005	1	1	0.0	0.0	6.858	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	258	64	1079	815	0.316	260	260	0.0	0.4	5.709	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.27	-	-	-	1	1	0.0	0.0	0.000	A
				3	192	48	-	-	-	192	194	0.0	0.0	0.193	A
				4	442	110	-	-	-	442	451	0.0	0.0	0.095	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	367	92	1190	1190	0.308	366	363	0.0	0.5	4.178	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	192	48	1190	1190	0.162	192	199	0.0	0.2	4.192	A
				3	446	112	1190	1190	0.375	447	440	0.0	0.7	6.667	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	169	42	760	461	0.368	169	167	0.6	1.0	20.831	C
				3	0.83	0.21	150	94	0.009	0.83	0.96	0.0	0.0	20.810	C
				4	186	47	760	461	0.404	187	185	0.5	0.9	16.693	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	294	73	760	460	0.638	294	291	0.7	1.4	15.872	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	168	42	-	-	-	169	168	0.1	0.3	5.930	A
				3	0.88	0.22	-	-	-	0.83	0.98	0.0	0.0	9.487	A
				4	476	119	-	-	-	480	480	0.1	0.7	4.339	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	230	58	1079	766	0.301	230	235	0.4	0.7	9.938	A
				4	211	53	1079	765	0.275	210	213	0.2	0.5	7.242	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.41	346	251	0.006	1	2	0.0	0.0	9.219	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	322	81	1079	766	0.421	322	327	0.4	0.8	7.143	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.42	-	-	-	2	2	0.0	0.0	0.417	A
				3	230	58	-	-	-	230	236	0.0	0.1	0.741	A
				4	533	133	-	-	-	533	542	0.0	0.0	0.462	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	451	113	1190	1189	0.379	451	453	0.5	0.6	4.631	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	225	56	1190	1189	0.189	225	226	0.2	0.3	4.625	A
				3	523	131	1190	1189	0.440	526	523	0.7	1.1	7.747	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	187	47	760	396	0.474	188	184	1.0	1.8	32.152	D
				3	0.70	0.18	117	61	0.012	0.70	0.74	0.0	0.0	31.807	D
				4	198	49	760	396	0.499	195	194	0.9	2.0	30.318	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	342	85	760	395	0.866	339	332	1.4	2.9	26.350	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	202	51	-	-	-	187	187	0.3	5.1	57.450	F
				3	0.79	0.20	-	-	-	0.70	0.74	0.0	0.0	69.257	F
				4	594	149	-	-	-	539	537	0.7	14.5	53.642	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	286	71	1079	713	0.401	283	284	0.7	1.3	13.186	B
				4	238	59	1079	713	0.333	238	245	0.5	0.7	9.962	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.48	429	288	0.007	2	2	0.0	0.0	10.908	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	413	103	1079	713	0.579	412	410	0.8	1.2	9.481	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.49	-	-	-	2	2	0.0	0.0	2.575	A
				3	289	72	-	-	-	286	286	0.1	0.5	3.382	A
				4	654	164	-	-	-	650	658	0.0	0.7	2.618	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	581	145	1190	1189	0.489	578	592	0.6	1.1	5.753	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	243	61	1190	1189	0.205	244	243	0.3	0.3	5.686	A
				3	641	160	1190	1189	0.539	641	643	1.1	1.9	10.222	B
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	191	48	760	396	0.482	189	190	1.8	2.0	35.381	E
				3	1	0.33	169	87	0.015	1	1	0.0	0.0	32.948	D
				4	202	51	760	398	0.508	204	200	2.0	1.8	33.776	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	346	86	760	397	0.871	346	346	2.9	2.9	29.202	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	209	52	-	-	-	191	191	5.1	9.1	143.055	F
				3	0.92	0.23	-	-	-	1	1	0.0	0.0	171.540	F
				4	586	147	-	-	-	548	545	14.5	24.9	138.377	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	289	72	1079	707	0.409	287	291	1.3	1.1	13.755	B
				4	250	63	1079	708	0.353	249	244	0.7	0.8	10.435	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.55	429	281	0.008	2	2	0.0	0.0	11.436	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	414	103	1079	708	0.584	410	413	1.2	1.4	10.001	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.54	-	-	-	2	2	0.0	0.0	3.250	A
				3	290	73	-	-	-	289	290	0.5	0.3	4.209	A
				4	665	166	-	-	-	664	658	0.7	0.5	3.309	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	578	144	1190	1189	0.486	577	588	1.1	0.9	5.473	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	235	59	1190	1189	0.197	234	235	0.3	0.4	5.616	A
				3	643	161	1190	1189	0.541	644	643	1.9	1.9	10.055	B
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	189	47	760	458	0.413	192	198	2.0	1.3	29.129	D
				3	1	0.27	175	104	0.010	1	1	0.0	0.0	27.602	D
				4	199	50	760	459	0.434	203	206	1.8	1.2	26.669	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	331	83	760	459	0.721	337	352	2.9	1.7	23.288	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	168	42	-	-	-	189	195	9.1	2.4	97.529	F
				3	1	0.25	-	-	-	1	1	0.0	0.0	86.468	F
				4	473	118	-	-	-	530	551	24.9	6.3	94.065	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	235	59	1079	745	0.315	236	241	1.1	0.7	11.245	B
				4	210	53	1079	744	0.283	210	212	0.8	0.5	8.425	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.36	362	245	0.006	1	2	0.0	0.0	7.647	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	331	83	1079	745	0.444	331	339	1.4	0.7	8.011	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.36	-	-	-	1	2	0.0	0.0	0.438	A
				3	234	59	-	-	-	235	240	0.3	0.1	1.604	A
				4	541	135	-	-	-	541	547	0.5	0.1	1.154	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	452	113	1190	1189	0.380	453	459	0.9	0.5	4.684	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	225	56	1190	1189	0.189	224	223	0.4	0.3	4.594	A
				3	533	133	1190	1189	0.448	533	534	1.9	1.2	7.836	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	142	36	760	510	0.279	142	155	1.3	0.6	18.659	C
				3	0.88	0.22	125	82	0.011	1	0.76	0.0	0.0	17.753	C
				4	162	41	760	509	0.319	163	170	1.2	0.5	14.541	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	239	60	760	509	0.469	239	258	1.7	0.8	14.283	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	140	35	-	-	-	142	152	2.4	0.1	12.036	B
				3	0.88	0.22	-	-	-	0.88	0.74	0.0	0.0	7.471	A
				4	396	99	-	-	-	401	422	6.3	0.2	11.589	B
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	198	49	1079	817	0.242	197	199	0.7	0.5	8.632	A
				4	183	46	1079	817	0.224	184	187	0.5	0.3	6.365	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.35	287	210	0.007	1	1	0.0	0.0	6.785	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	265	66	1079	817	0.324	265	269	0.7	0.5	6.271	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.35	-	-	-	1	1	0.0	0.0	0.825	A
				3	198	49	-	-	-	198	198	0.1	0.0	0.400	A
				4	449	112	-	-	-	448	454	0.1	0.1	0.226	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	366	92	1190	1189	0.308	367	374	0.5	0.4	4.228	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	198	50	1190	1189	0.167	198	201	0.3	0.2	4.156	A
				3	438	109	1190	1189	0.368	438	446	1.2	0.8	6.545	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

D3 - 2028 | FTH Do Minimum + Dev + Site B | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	55.55	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	55.55	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028	FTH Do Minimum + Dev + Site B	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	721	100.000
2		ONE HOUR	✓	878	100.000
3					
4		ONE HOUR	✓	1355	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	192	1	528
	2	0	2	269	607
	3	0	0	0	0
	4	0	772	583	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Cyclist %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	194.40	46.9	98.3	F	660	989
2	15.65	4.5	14.2	C	808	1211
3						
4	7.80	3.4	9.3	A	1243	1865

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	543	136	1027	542	533	0	0.0	2.3	12.284	B
2	675	169	837	672	664	732	0.0	1.6	6.585	A
3			0			647				
4	1024	256	2	1025	1017	859	0.0	1.5	5.154	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	652	163	1218	653	649	0	2.3	4.7	23.424	C
2	787	197	1007	788	794	864	1.6	1.9	8.700	A
3			0			771				
4	1217	304	2	1217	1221	1022	1.5	2.2	6.165	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	788	197	1518	701	704	0	4.7	26.7	85.701	F
2	962	241	1164	961	962	1055	1.9	4.0	13.710	B
3			0			940				
4	1511	378	2	1516	1502	1183	2.2	2.9	7.799	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	801	200	1472	735	720	0	26.7	46.9	194.401	F
2	974	243	1172	970	973	1035	4.0	4.5	15.649	C
3			0			931				
4	1474	369	2	1470	1488	1209	2.9	3.4	7.612	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	643	161	1213	747	771	0	46.9	16.3	142.442	F
2	785	196	1074	786	808	886	4.5	2.0	10.322	B
3			0			764				
4	1212	303	2	1211	1223	1094	3.4	2.1	6.078	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	531	133	1026	541	603	0	16.3	2.3	30.401	D
2	662	166	837	662	673	729	2.0	1.4	7.541	A
3			0			639				
4	1024	256	2	1024	1026	858	2.1	1.5	5.288	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	2.32	0.00	1.16	5.03	6.52
2	1.61	0.00	0.53	3.75	5.16
3					
4	1.45	0.00	0.46	3.35	4.28

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	4.74	0.00	2.71	10.04	13.88
2	1.89	0.00	0.85	3.97	6.29
3					
4	2.20	0.00	1.20	4.64	6.11

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	26.71	1.73	24.07	49.65	59.66
2	3.99	0.00	2.40	7.88	10.83
3					
4	2.87	0.00	1.68	6.13	8.33

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	46.89	7.59	43.69	80.87	98.33
2	4.49	0.00	2.40	9.88	14.16
3					
4	3.45	0.00	2.09	7.30	9.28

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	16.30	0.00	6.17	47.10	58.22
2	1.97	0.00	0.80	4.43	5.94
3					
4	2.07	0.00	1.01	4.64	5.93

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	2.25	0.00	0.80	4.88	6.93
2	1.39	0.00	0.49	3.18	4.08
3					
4	1.49	0.00	0.56	3.03	4.51

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	306	504	0.606	306	304	0.0	1.2	12.544	B
			2	4	237	504	0.470	237	230	0.0	0.9	10.404	B
		2	1	(2, 3, 4)	543			543	542	0.0	0.2	0.641	A
2	Entry	1	1	3, 4	396	818	0.484	395	393	0.0	0.9	6.875	A
			2	2, 4	279	818	0.341	277	271	0.0	0.6	5.667	A
		2	1	(1, 2, 3, 4)	675			675	670	0.0	0.1	0.199	A
	Exit	1	1		732			732	728	0.0	0.0	0.000	A
3	Exit	1	1		647			647	641	0.0	0.0	0.000	A
4	Entry	1	1	2	378	1189	0.318	378	374	0.0	0.4	4.161	A
			2	2, 3, 4	645	1189	0.543	646	644	0.0	1.0	5.729	A
	Exit	1	1		859			859	847	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	354	457	0.775	354	354	1.2	2.1	19.570	C
			2	4	299	457	0.655	299	295	0.9	1.5	16.250	C
		2	1	(2, 3, 4)	652			653	655	0.2	1.1	5.296	A
2	Entry	1	1	3, 4	458	766	0.598	457	459	0.9	1.2	8.781	A
			2	2, 4	328	766	0.429	330	335	0.6	0.6	7.180	A
		2	1	(1, 2, 3, 4)	787			786	795	0.1	0.1	0.592	A
	Exit	1	1		864			864	871	0.0	0.0	0.000	A
3	Exit	1	1		771			771	767	0.0	0.0	0.000	A
4	Entry	1	1	2	466	1189	0.392	467	469	0.4	0.6	4.764	A
			2	2, 3, 4	750	1189	0.631	750	752	1.0	1.6	7.037	A
	Exit	1	1		1022			1022	1026	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	375	382	0.982	374	375	2.1	3.7	31.934	D
			2	4	330	382	0.863	326	328	1.5	3.0	27.110	D
		2	1	(2, 3, 4)	788			705	716	1.1	20.0	55.512	F
2	Entry	1	1	3, 4	537	717	0.749	536	538	1.2	1.9	11.903	B
			2	2, 4	425	717	0.593	424	425	0.6	1.2	9.342	A
		2	1	(1, 2, 3, 4)	962			962	968	0.1	0.9	2.915	A
	Exit	1	1		1055			1055	1046	0.0	0.0	0.000	A
3	Exit	1	1		940			940	937	0.0	0.0	0.000	A
4	Entry	1	1	2	615	1189	0.517	615	610	0.6	0.9	5.819	A
			2	2, 3, 4	896	1189	0.754	901	893	1.6	2.0	9.153	A
	Exit	1	1		1183			1183	1186	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	392	393	0.996	391	383	3.7	4.0	35.721	E
			2	4	343	393	0.873	345	337	3.0	2.8	29.945	D
		2	1	(2, 3, 4)	801			735	720	20.0	40.2	161.765	F
2	Entry	1	1	3, 4	541	714	0.758	542	544	1.9	1.9	12.622	B
			2	2, 4	431	714	0.603	429	429	1.2	1.3	9.949	A
		2	1	(1, 2, 3, 4)	974			972	973	0.9	1.3	4.206	A
	Exit	1	1		1035			1035	1041	0.0	0.0	0.000	A
3	Exit	1	1		931			931	941	0.0	0.0	0.000	A
4	Entry	1	1	2	595	1189	0.501	593	598	0.9	1.1	5.716	A
			2	2, 3, 4	879	1189	0.739	876	889	2.0	2.4	8.889	A
	Exit	1	1		1209			1209	1198	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	395	458	0.862	400	413	4.0	2.7	29.099	D
			2	4	342	458	0.746	347	358	2.8	2.0	24.658	C
		2	1	(2, 3, 4)	643			736	763	40.2	11.6	116.607	F
2	Entry	1	1	3, 4	452	745	0.607	454	464	1.9	1.1	9.814	A
			2	2, 4	333	745	0.447	332	344	1.3	0.7	8.020	A
		2	1	(1, 2, 3, 4)	785			785	802	1.3	0.1	1.312	A
	Exit	1	1		886			886	905	0.0	0.0	0.000	A
3	Exit	1	1		764			764	776	0.0	0.0	0.000	A
4	Entry	1	1	2	467	1189	0.393	466	469	1.1	0.6	4.687	A
			2	2, 3, 4	745	1189	0.626	745	754	2.4	1.4	6.944	A
	Exit	1	1		1094			1094	1121	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	300	505	0.594	303	334	2.7	1.1	17.405	C
			2	4	237	505	0.470	238	269	2.0	0.8	14.624	B
		2	1	(2, 3, 4)	531			537	591	11.6	0.3	15.065	C
2	Entry	1	1	3, 4	385	818	0.471	385	392	1.1	0.8	7.882	A
			2	2, 4	277	818	0.339	276	281	0.7	0.5	6.418	A
		2	1	(1, 2, 3, 4)	662			662	671	0.1	0.0	0.280	A
	Exit	1	1		729			729	749	0.0	0.0	0.000	A
3	Exit	1	1		639			639	646	0.0	0.0	0.000	A
4	Entry	1	1	2	377	1189	0.317	378	379	0.6	0.4	4.280	A
			2	2, 3, 4	647	1189	0.544	646	648	1.4	1.1	5.876	A
	Exit	1	1		858			858	908	0.0	0.0	0.000	A

Lanes: Queue Variation Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.24	0.00	0.38	2.87	3.46
			2	0.87	0.00	0.07	1.83	2.51
		2	1	0.20	0.00	0.00	0.00	0.29
2	Entry	1	1	0.92	0.00	-0.01	2.03	3.20
			2	0.60	0.00	0.00	1.48	1.96
		2	1	0.09	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.43	0.00	0.00	0.97	1.68
			2	1.01	0.00	0.08	2.35	3.43
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:00 - 17:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	2.07	0.00	1.45	3.67	3.85
			2	1.54	0.00	0.75	3.36	3.70
		2	1	1.13	0.00	0.00	3.43	6.83
2	Entry	1	1	1.16	0.00	0.33	2.77	3.44
			2	0.60	0.00	0.00	1.40	1.95
		2	1	0.13	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.64	0.00	0.00	1.63	2.40
			2	1.55	0.00	0.64	3.29	4.27
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:15 - 17:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.70	0.59	3.43	3.96	5.00
			2	2.99	0.00	3.11	3.94	5.00
		2	1	20.02	0.00	17.19	42.33	51.65
2	Entry	1	1	1.89	0.00	1.21	3.62	3.87
			2	1.22	0.00	0.45	2.75	3.39
		2	1	0.88	0.00	0.00	2.05	4.65
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.87	0.00	0.00	1.98	2.81
			2	2.01	0.00	0.85	4.81	6.20
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:30 - 17:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.95	2.30	3.50	3.99	5.00
			2	2.78	0.00	2.89	3.85	3.96
		2	1	40.16	0.00	37.63	72.83	90.83
2	Entry	1	1	1.86	0.00	1.16	3.59	3.83
			2	1.32	0.00	0.52	2.88	3.46
		2	1	1.30	0.00	0.00	5.03	8.33
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	1.07	0.00	0.04	2.53	3.33
			2	2.38	0.00	1.23	5.13	7.24
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:45 - 18:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	2.74	0.00	3.01	3.85	3.96
			2	1.95	0.00	1.32	3.64	3.83
		2	1	11.60	0.00	0.00	39.77	50.65
2	Entry	1	1	1.12	0.00	0.27	2.73	3.38
			2	0.70	0.00	0.00	1.68	2.28
		2	1	0.14	0.00	0.00	0.00	-0.09
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.64	0.00	0.00	1.58	2.27
			2	1.43	0.00	0.51	3.02	4.29
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

18:00 - 18:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.12	0.00	0.20	2.73	3.35
			2	0.82	0.00	0.00	1.89	2.89
		2	1	0.32	0.00	0.00	0.00	0.00
2	Entry	1	1	0.83	0.00	0.01	1.88	2.63
			2	0.53	0.00	0.00	1.35	1.79
		2	1	0.03	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.39	0.00	0.00	0.91	1.51
			2	1.09	0.00	0.24	2.49	3.47
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	145	36	760	504	0.288	145	144	0.0	0.7	14.405	B
				3	0.94	0.23	109	80	0.012	0.98	0.69	0.0	0.0	14.984	B
				4	160	40	760	505	0.316	160	159	0.0	0.5	10.832	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	237	59	760	505	0.469	237	230	0.0	0.9	10.404	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	145	36	-	-	-	145	147	0.0	0.1	0.922	A
				3	0.94	0.23	-	-	-	0.94	0.70	0.0	0.0	1.396	A
				4	397	99	-	-	-	396	394	0.0	0.1	0.535	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	209	52	1079	819	0.255	207	205	0.0	0.6	7.931	A
				4	187	47	1079	819	0.229	188	188	0.0	0.3	5.726	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.49	351	283	0.007	2	2	0.0	0.0	5.628	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	277	69	1079	819	0.338	275	269	0.0	0.6	5.667	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.49	-	-	-	2	2	0.0	0.0	0.137	A
				3	209	52	-	-	-	209	207	0.0	0.1	0.280	A
				4	464	116	-	-	-	464	462	0.0	0.0	0.163	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	378	95	1190	1189	0.318	378	374	0.0	0.4	4.161	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	208	52	1190	1189	0.175	207	208	0.0	0.3	4.125	A
				3	438	109	1190	1189	0.368	439	435	0.0	0.7	6.495	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	170	43	760	457	0.373	171	173	0.7	1.1	21.884	C
				3	0.63	0.16	119	72	0.009	0.66	0.74	0.0	0.0	19.850	C
				4	183	46	760	457	0.399	182	180	0.5	1.0	17.363	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	299	75	760	457	0.655	299	295	0.9	1.5	16.250	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	171	43	-	-	-	170	174	0.1	0.4	6.435	A
				3	0.63	0.16	-	-	-	0.63	0.76	0.0	0.0	5.854	A
				4	481	120	-	-	-	481	480	0.1	0.8	4.882	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	247	62	1079	765	0.322	245	242	0.6	0.8	10.113	B
				4	211	53	1079	765	0.276	212	217	0.3	0.4	7.292	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.44	372	267	0.007	2	2	0.0	0.0	9.182	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	327	82	1079	765	0.427	328	333	0.6	0.6	7.169	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.44	-	-	-	2	2	0.0	0.0	0.893	A
				3	247	62	-	-	-	247	242	0.1	0.1	0.828	A
				4	538	135	-	-	-	538	551	0.0	0.1	0.487	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	466	117	1190	1189	0.392	467	469	0.4	0.6	4.764	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	224	56	1190	1189	0.189	225	227	0.3	0.3	4.731	A
				3	526	131	1190	1189	0.442	526	525	0.7	1.2	8.032	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	182	46	760	383	0.477	184	185	1.1	1.9	33.114	D
				3	1	0.25	126	65	0.016	1	0.81	0.0	0.0	30.526	D
				4	192	48	760	382	0.502	189	190	1.0	1.8	30.792	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	330	82	760	382	0.863	326	328	1.5	3.0	27.110	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	207	52	-	-	-	182	188	0.4	5.6	58.785	F
				3	1	0.26	-	-	-	1	0.82	0.0	0.0	75.214	F
				4	580	145	-	-	-	521	527	0.8	14.4	54.304	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	292	73	1079	716	0.407	291	293	0.8	1.2	13.424	B
				4	245	61	1079	717	0.342	245	245	0.4	0.7	10.086	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.43	397	267	0.006	2	2	0.0	0.0	13.195	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	424	106	1079	718	0.590	423	423	0.6	1.2	9.322	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.43	-	-	-	2	2	0.0	0.0	1.996	A
				3	292	73	-	-	-	292	294	0.1	0.3	3.431	A
				4	669	167	-	-	-	669	671	0.1	0.6	2.692	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	615	154	1190	1189	0.517	615	610	0.6	0.9	5.819	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	253	63	1190	1189	0.213	254	249	0.3	0.4	5.891	A
				3	643	161	1190	1189	0.541	647	644	1.2	1.6	10.410	B
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	194	49	760	394	0.493	194	191	1.9	2.0	36.107	E
				3	0.90	0.22	139	72	0.013	0.82	0.94	0.0	0.0	39.470	E
				4	197	49	760	393	0.500	196	191	1.8	1.9	35.314	E
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	343	86	760	395	0.870	345	337	3.0	2.8	29.945	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	215	54	-	-	-	194	192	5.6	11.0	164.736	F
				3	0.98	0.24	-	-	-	0.90	0.95	0.0	0.0	148.550	F
				4	585	146	-	-	-	540	527	14.4	29.1	160.704	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	299	75	1079	715	0.418	299	300	1.2	1.2	14.052	B
				4	243	61	1079	715	0.339	243	243	0.7	0.7	10.855	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.60	432	288	0.008	2	2	0.0	0.0	10.639	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	428	107	1079	714	0.600	426	427	1.2	1.3	9.946	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.59	-	-	-	2	2	0.0	0.0	5.471	A
				3	299	75	-	-	-	299	300	0.3	0.4	4.799	A
				4	673	168	-	-	-	671	671	0.6	0.9	3.937	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	595	149	1190	1189	0.501	593	598	0.9	1.1	5.716	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	245	61	1190	1189	0.206	246	250	0.4	0.4	5.670	A
				3	634	159	1190	1189	0.533	631	640	1.6	2.0	10.136	B
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	191	48	760	457	0.418	192	204	2.0	1.5	30.096	D
				3	1	0.29	188	110	0.011	1	1	0.0	0.0	28.206	D
				4	202	51	760	457	0.442	206	208	1.9	1.3	28.123	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	342	85	760	457	0.748	347	358	2.8	2.0	24.658	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	170	42	-	-	-	191	202	11.0	3.2	118.860	F
				3	1	0.27	-	-	-	1	1	0.0	0.0	124.181	F
				4	472	118	-	-	-	544	560	29.1	8.4	115.782	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	242	61	1079	744	0.326	244	250	1.2	0.7	11.185	B
				4	210	52	1079	744	0.282	210	213	0.7	0.5	8.209	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.44	393	268	0.007	2	2	0.0	0.0	8.835	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	331	83	1079	744	0.445	331	342	1.3	0.7	8.015	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.44	-	-	-	2	2	0.0	0.0	1.226	A
				3	242	61	-	-	-	242	248	0.4	0.1	1.633	A
				4	541	135	-	-	-	541	552	0.9	0.1	1.168	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	467	117	1190	1189	0.393	466	469	1.1	0.6	4.687	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	226	57	1190	1189	0.190	226	230	0.4	0.4	4.681	A
				3	518	130	1190	1189	0.436	519	524	2.0	1.1	7.947	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	142	35	760	504	0.281	143	161	1.5	0.6	19.455	C
				3	0.94	0.23	141	93	0.010	1	0.89	0.0	0.0	19.229	C
				4	157	39	760	505	0.311	158	172	1.3	0.5	15.482	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	237	59	760	505	0.470	238	269	2.0	0.8	14.624	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	139	35	-	-	-	142	158	3.2	0.1	16.310	C
				3	0.94	0.23	-	-	-	0.94	0.89	0.0	0.0	11.334	B
				4	390	98	-	-	-	394	433	8.4	0.2	14.620	B
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	198	50	1079	819	0.242	199	205	0.7	0.5	9.141	A
				4	187	47	1079	819	0.229	187	188	0.5	0.4	6.512	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.45	295	219	0.008	2	2	0.0	0.0	6.579	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	275	69	1079	818	0.336	274	279	0.7	0.5	6.417	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.45	-	-	-	2	2	0.0	0.0	0.106	A
				3	198	50	-	-	-	198	204	0.1	0.0	0.423	A
				4	462	116	-	-	-	462	466	0.1	0.0	0.218	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	377	94	1190	1189	0.317	378	379	0.6	0.4	4.280	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	205	51	1190	1189	0.173	206	207	0.4	0.3	4.229	A
				3	441	110	1190	1189	0.371	440	440	1.1	0.8	6.651	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

D4 - 2028 | FTH Do Minimum + Dev + Site B + RF | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	64.07	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	64.07	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028	FTH Do Minimum + Dev + Site B + RF	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	729	100.000
2		ONE HOUR	✓	894	100.000
3					
4		ONE HOUR	✓	1378	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	200	1	528
	2	0	2	279	613
	3	0	0	0	0
	4	0	795	583	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Cyclist %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	228.46	56.8	107.9	F	675	1012
2	16.08	4.6	15.7	C	828	1242
3						
4	7.89	3.5	8.9	A	1266	1900

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	549	137	1064	551	546	0	0.0	2.3	12.103	B
2	674	169	846	675	674	769	0.0	1.3	6.468	A
3			0			651				
4	1061	265	2	1062	1043	868	0.0	1.4	5.188	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	673	168	1224	671	654	0	2.3	5.4	25.992	D
2	816	204	996	817	812	899	1.3	2.0	8.898	A
3			0			772				
4	1222	306	2	1222	1239	1038	1.4	1.9	6.027	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	802	200	1514	725	713	0	5.4	29.7	98.601	F
2	988	247	1179	991	984	1061	2.0	4.4	14.628	B
3			0			950				
4	1508	377	2	1512	1517	1217	1.9	3.1	7.813	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	809	202	1525	708	707	0	29.7	56.8	228.459	F
2	991	248	1154	990	993	1078	4.4	4.6	16.080	C
3			0			954				
4	1518	380	3	1522	1531	1187	3.1	3.5	7.886	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	664	166	1241	776	785	0	56.8	26.7	189.831	F
2	822	205	1086	823	824	931	4.6	2.2	10.811	B
3			0			781				
4	1238	309	2	1239	1243	1127	3.5	2.1	6.146	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	549	137	1056	584	654	0	26.7	3.1	50.480	F
2	679	170	873	681	681	767	2.2	1.5	7.768	A
3			0			659				
4	1050	263	2	1054	1053	892	2.1	1.5	5.320	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	2.27	0.00	1.28	4.76	6.11
2	1.30	0.00	0.31	2.99	4.06
3					
4	1.44	0.00	0.53	2.90	4.11

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	5.40	0.00	3.02	13.48	18.45
2	2.05	0.00	1.15	4.39	5.36
3					
4	1.91	0.00	0.78	3.94	5.64

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	29.70	4.59	27.50	51.95	61.90
2	4.43	0.00	2.66	9.48	12.11
3					
4	3.13	0.00	1.66	6.90	8.93

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	56.82	12.28	56.13	94.80	107.90
2	4.56	0.00	2.66	10.45	15.73
3					
4	3.47	0.00	2.24	7.08	8.09

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	26.65	0.03	16.33	67.98	77.15
2	2.20	0.00	0.99	4.73	6.69
3					
4	2.11	0.00	1.23	4.41	5.69

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	3.08	0.00	1.30	6.65	9.48
2	1.46	0.00	0.46	2.98	5.15
3					
4	1.49	0.00	0.58	3.43	4.21

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	315	495	0.636	314	311	0.0	1.3	12.170	B
			2	4	235	495	0.476	237	235	0.0	0.9	10.616	B
		2	1	(2, 3, 4)	549			550	555	0.0	0.1	0.586	A
2	Entry	1	1	3, 4	396	816	0.485	396	400	0.0	0.9	6.775	A
			2	2, 4	279	816	0.342	279	274	0.0	0.4	5.668	A
		2	1	(1, 2, 3, 4)	674			675	679	0.0	0.0	0.143	A
	Exit	1	1		769			769	752	0.0	0.0	0.000	A
3	Exit	1	1		651			651	652	0.0	0.0	0.000	A
4	Entry	1	1	2	391	1189	0.329	392	385	0.0	0.4	4.221	A
			2	2, 3, 4	670	1189	0.564	670	658	0.0	1.0	5.752	A
	Exit	1	1		868			868	859	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	371	455	0.816	370	360	1.3	2.2	20.487	C
			2	4	301	455	0.661	301	294	0.9	1.4	16.883	C
		2	1	(2, 3, 4)	673			672	660	0.1	1.7	7.049	A
2	Entry	1	1	3, 4	467	769	0.608	467	468	0.9	1.2	8.849	A
			2	2, 4	349	769	0.454	349	344	0.4	0.8	7.289	A
		2	1	(1, 2, 3, 4)	816			817	815	0.0	0.1	0.708	A
	Exit	1	1		899			899	902	0.0	0.0	0.000	A
3	Exit	1	1		772			772	778	0.0	0.0	0.000	A
4	Entry	1	1	2	472	1189	0.397	473	481	0.4	0.6	4.713	A
			2	2, 3, 4	750	1189	0.631	750	758	1.0	1.3	6.862	A
	Exit	1	1		1038			1038	1026	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	387	383	1.012	387	381	2.2	3.9	32.725	D
			2	4	337	383	0.881	338	332	1.4	2.8	28.141	D
		2	1	(2, 3, 4)	802			724	726	1.7	23.0	67.524	F
2	Entry	1	1	3, 4	555	712	0.779	557	553	1.2	2.0	12.081	B
			2	2, 4	436	712	0.612	434	431	0.8	1.4	9.759	A
		2	1	(1, 2, 3, 4)	988			991	989	0.1	1.1	3.548	A
	Exit	1	1		1061			1061	1071	0.0	0.0	0.000	A
3	Exit	1	1		950			950	945	0.0	0.0	0.000	A
4	Entry	1	1	2	611	1189	0.514	613	618	0.6	1.0	5.902	A
			2	2, 3, 4	897	1189	0.754	899	900	1.3	2.2	9.127	A
	Exit	1	1		1217			1217	1198	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	373	380	0.981	373	373	3.9	3.9	37.351	E
			2	4	336	380	0.884	334	334	2.8	2.9	30.725	D
		2	1	(2, 3, 4)	809			709	708	23.0	49.9	195.024	F
2	Entry	1	1	3, 4	559	720	0.777	557	556	2.0	2.1	12.569	B
			2	2, 4	432	720	0.601	432	437	1.4	1.3	9.972	A
		2	1	(1, 2, 3, 4)	991			992	993	1.1	1.2	4.634	A
	Exit	1	1		1078			1078	1083	0.0	0.0	0.000	A
3	Exit	1	1		954			954	955	0.0	0.0	0.000	A
4	Entry	1	1	2	621	1189	0.522	621	627	1.0	1.1	5.907	A
			2	2, 3, 4	897	1189	0.755	900	905	2.2	2.4	9.261	A
	Exit	1	1		1187			1187	1193	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	415	451	0.920	419	418	3.9	3.1	30.677	D
			2	4	356	451	0.789	357	367	2.9	2.3	25.215	D
		2	1	(2, 3, 4)	664			771	779	49.9	21.2	162.674	F
2	Entry	1	1	3, 4	473	741	0.638	473	474	2.1	1.3	10.029	B
			2	2, 4	350	741	0.472	350	349	1.3	0.8	8.271	A
		2	1	(1, 2, 3, 4)	822			823	819	1.2	0.1	1.582	A
	Exit	1	1		931			931	935	0.0	0.0	0.000	A
3	Exit	1	1		781			781	783	0.0	0.0	0.000	A
4	Entry	1	1	2	476	1189	0.401	477	482	1.1	0.6	4.810	A
			2	2, 3, 4	761	1189	0.640	762	761	2.4	1.5	6.992	A
	Exit	1	1		1127			1127	1134	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	322	497	0.648	326	360	3.1	1.4	19.933	C
			2	4	258	497	0.519	258	294	2.3	1.0	16.842	C
		2	1	(2, 3, 4)	549			580	641	21.2	0.7	33.003	D
2	Entry	1	1	3, 4	402	807	0.498	404	402	1.3	0.9	7.968	A
			2	2, 4	277	807	0.343	277	280	0.8	0.5	6.642	A
		2	1	(1, 2, 3, 4)	679			679	679	0.1	0.1	0.349	A
	Exit	1	1		767			767	786	0.0	0.0	0.000	A
3	Exit	1	1		659			659	659	0.0	0.0	0.000	A
4	Entry	1	1	2	394	1189	0.331	395	393	0.6	0.4	4.308	A
			2	2, 3, 4	656	1189	0.552	659	660	1.5	1.0	5.922	A
	Exit	1	1		892			892	943	0.0	0.0	0.000	A

Lanes: Queue Variation Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.31	0.00	0.59	2.77	4.00
			2	0.88	0.00	0.00	2.27	2.75
		2	1	0.09	0.00	0.00	0.00	0.00
2	Entry	1	1	0.85	0.00	0.00	2.07	2.88
			2	0.44	0.00	0.00	0.98	1.59
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.44	0.00	0.00	0.98	1.59
			2	1.00	0.00	0.13	2.09	3.29
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:00 - 17:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	2.23	0.00	1.66	3.73	3.91
			2	1.43	0.00	0.62	3.17	3.63
		2	1	1.73	0.00	0.00	6.38	11.45
2	Entry	1	1	1.19	0.00	0.36	2.69	3.22
			2	0.80	0.00	0.01	1.75	2.25
		2	1	0.06	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.60	0.00	0.00	1.45	1.97
			2	1.30	0.00	0.38	2.94	3.86
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:15 - 17:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.86	1.69	3.46	3.96	5.00
			2	2.84	0.00	3.01	3.86	3.96
		2	1	23.00	0.00	21.63	44.45	54.45
2	Entry	1	1	1.95	0.00	1.33	3.68	3.89
			2	1.37	0.00	0.58	3.05	3.60
		2	1	1.11	0.00	0.00	3.63	6.82
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.96	0.00	-0.01	2.24	3.21
			2	2.18	0.00	1.01	4.81	7.11
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:30 - 17:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.95	2.47	3.49	3.96	5.00
			2	2.95	0.00	3.06	3.89	3.99
		2	1	49.91	4.55	48.38	89.85	100.90
2	Entry	1	1	2.05	0.00	1.39	3.72	3.93
			2	1.27	0.00	0.44	2.99	3.58
		2	1	1.24	0.00	0.00	3.90	7.30
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	1.11	0.00	0.16	2.61	3.35
			2	2.36	0.00	1.36	5.09	6.29
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:45 - 18:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.11	0.00	3.21	3.89	3.98
			2	2.32	0.00	1.96	3.76	3.92
		2	1	21.21	0.00	10.13	59.95	68.45
2	Entry	1	1	1.32	0.00	0.52	3.09	3.59
			2	0.76	0.00	0.00	1.92	2.77
		2	1	0.12	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.63	0.00	0.00	1.56	2.05
			2	1.48	0.00	0.63	2.96	4.31
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

18:00 - 18:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.35	0.00	0.56	4.00	4.00
			2	1.02	0.00	0.15	2.43	3.13
		2	1	0.70	0.00	0.00	0.00	3.23
2	Entry	1	1	0.89	0.00	0.00	2.07	2.88
			2	0.52	0.00	0.00	1.23	1.85
		2	1	0.06	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.44	0.00	0.00	0.98	1.53
			2	1.05	0.00	0.01	2.68	3.50
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	153	38	760	495	0.308	152	149	0.0	0.7	14.077	B
				3	0.80	0.20	126	89	0.009	0.80	0.82	0.0	0.0	13.241	B
				4	162	40	760	494	0.327	161	161	0.0	0.6	10.410	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	235	59	760	495	0.476	237	235	0.0	0.9	10.616	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	152	38	-	-	-	153	152	0.0	0.0	0.824	A
				3	0.80	0.20	-	-	-	0.80	0.85	0.0	0.0	1.146	A
				4	397	99	-	-	-	397	402	0.0	0.0	0.496	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	202	51	1079	815	0.248	203	210	0.0	0.5	7.774	A
				4	193	48	1079	815	0.237	193	190	0.0	0.3	5.668	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.37	240	190	0.008	2	1	0.0	0.0	7.448	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	278	69	1079	815	0.341	277	273	0.0	0.4	5.661	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.37	-	-	-	1	1	0.0	0.0	0.075	A
				3	202	51	-	-	-	202	212	0.0	0.0	0.223	A
				4	471	118	-	-	-	471	466	0.0	0.0	0.107	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	391	98	1190	1189	0.329	392	385	0.0	0.4	4.221	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	223	56	1190	1189	0.188	223	217	0.0	0.3	4.187	A
				3	447	112	1190	1189	0.376	447	441	0.0	0.7	6.524	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	192	48	760	455	0.421	191	181	0.7	1.2	22.808	C
				3	1	0.26	141	84	0.012	1	0.97	0.0	0.0	23.610	C
				4	179	45	760	454	0.394	178	178	0.6	1.0	18.105	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	301	75	760	456	0.661	301	294	0.9	1.4	16.883	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	191	48	-	-	-	192	183	0.0	0.5	8.259	A
				3	0.91	0.23	-	-	-	1	0.93	0.0	0.0	7.942	A
				4	482	120	-	-	-	480	476	0.0	1.3	6.583	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	254	63	1079	770	0.330	255	256	0.5	0.8	9.987	A
				4	213	53	1079	769	0.278	213	212	0.3	0.4	7.471	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.50	378	272	0.007	2	2	0.0	0.0	7.795	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	347	87	1079	771	0.451	347	342	0.4	0.8	7.286	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.50	-	-	-	2	2	0.0	0.0	0.553	A
				3	254	63	-	-	-	254	257	0.0	0.0	0.886	A
				4	560	140	-	-	-	560	555	0.0	0.0	0.626	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	472	118	1190	1189	0.397	473	481	0.4	0.6	4.713	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	233	58	1190	1189	0.196	234	237	0.3	0.3	4.685	A
				3	517	129	1190	1189	0.435	516	521	0.7	1.0	7.845	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	188	47	760	385	0.487	188	190	1.2	1.9	33.442	D
				3	0.74	0.18	130	67	0.011	0.74	0.80	0.0	0.0	34.852	D
				4	199	50	760	385	0.518	198	190	1.0	1.9	31.998	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	337	84	760	384	0.878	338	332	1.4	2.8	28.141	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	217	54	-	-	-	188	193	0.5	6.7	70.501	F
				3	0.74	0.18	-	-	-	0.74	0.80	0.0	0.0	65.341	F
				4	584	146	-	-	-	536	532	1.3	16.3	66.430	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	305	76	1079	712	0.428	308	305	0.8	1.1	13.549	B
				4	250	63	1079	712	0.352	249	248	0.4	0.8	10.284	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.55	455	306	0.007	2	2	0.0	0.0	12.388	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	434	108	1079	713	0.609	432	428	0.8	1.4	9.744	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.53	-	-	-	2	2	0.0	0.0	4.758	A
				3	302	76	-	-	-	305	306	0.0	0.3	4.095	A
				4	683	171	-	-	-	684	680	0.0	0.8	3.297	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	611	153	1190	1189	0.514	613	618	0.6	1.0	5.902	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	257	64	1190	1189	0.216	258	260	0.3	0.3	5.808	A
				3	640	160	1190	1189	0.538	641	640	1.0	1.8	10.467	B
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	194	48	760	380	0.510	195	194	1.9	2.0	37.691	E
				3	1	0.27	133	67	0.016	0.91	0.83	0.0	0.0	43.477	E
				4	178	45	760	380	0.468	177	178	1.9	1.9	36.948	E
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	336	84	760	380	0.885	334	334	2.8	2.9	30.725	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	220	55	-	-	-	194	194	6.7	13.9	197.378	F
				3	1	0.34	-	-	-	1	0.93	0.0	0.1	167.863	F
				4	589	147	-	-	-	514	513	16.3	36.0	194.190	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	312	78	1079	718	0.435	311	310	1.1	1.2	14.012	B
				4	247	62	1079	720	0.343	246	245	0.8	0.8	10.746	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.61	404	269	0.009	3	2	0.0	0.0	11.586	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	430	108	1079	719	0.598	429	435	1.4	1.3	9.964	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.61	-	-	-	2	2	0.0	0.0	3.715	A
				3	313	78	-	-	-	312	310	0.3	0.5	5.206	A
				4	675	169	-	-	-	677	680	0.8	0.7	4.376	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	621	155	1190	1189	0.522	621	627	1.0	1.1	5.907	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	258	65	1190	1189	0.217	259	260	0.3	0.4	5.914	A
				3	639	160	1190	1189	0.537	641	644	1.8	1.9	10.613	B
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	214	53	760	452	0.473	215	215	2.0	1.7	31.361	D
				3	0.80	0.20	191	109	0.007	1	1	0.0	0.0	33.819	D
				4	201	50	760	451	0.444	202	201	1.9	1.4	29.924	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	356	89	760	451	0.789	357	367	2.9	2.3	25.215	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	184	46	-	-	-	214	214	13.9	5.9	164.087	F
				3	0.97	0.24	-	-	-	0.80	1	0.1	0.1	163.504	F
				4	479	120	-	-	-	557	564	36.0	15.2	162.137	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	253	63	1079	740	0.342	254	256	1.2	0.8	11.425	B
				4	220	55	1079	741	0.296	219	218	0.8	0.5	8.391	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.45	307	209	0.009	2	2	0.0	0.0	8.911	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	348	87	1079	741	0.470	348	348	1.3	0.8	8.268	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.45	-	-	-	2	2	0.0	0.0	2.758	A
				3	253	63	-	-	-	253	255	0.5	0.0	2.018	A
				4	567	142	-	-	-	568	563	0.7	0.1	1.381	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	476	119	1190	1189	0.401	477	482	1.1	0.6	4.810	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	237	59	1190	1189	0.199	236	236	0.4	0.3	4.708	A
				3	524	131	1190	1189	0.441	526	525	1.9	1.2	8.028	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	153	38	760	495	0.309	157	177	1.7	0.6	21.626	C
				3	0.74	0.18	159	103	0.007	0.68	1	0.0	0.0	21.877	C
				4	168	42	760	496	0.340	169	181	1.4	0.7	18.271	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	258	64	760	496	0.519	258	294	2.3	1.0	16.842	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	146	36	-	-	-	153	173	5.9	0.2	35.228	E
				3	0.68	0.17	-	-	-	0.74	1	0.1	0.0	25.501	D
				4	403	101	-	-	-	426	467	15.2	0.5	32.198	D
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	211	53	1079	806	0.261	213	212	0.8	0.5	9.151	A
				4	191	48	1079	807	0.237	191	190	0.5	0.4	6.652	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.53	368	266	0.008	2	2	0.0	0.0	8.558	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	275	69	1079	807	0.341	275	278	0.8	0.5	6.630	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.53	-	-	-	2	2	0.0	0.0	0.297	A
				3	211	53	-	-	-	211	211	0.0	0.0	0.528	A
				4	466	116	-	-	-	466	466	0.1	0.0	0.268	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	394	98	1190	1189	0.331	395	393	0.6	0.4	4.308	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	212	53	1190	1189	0.179	213	214	0.3	0.2	4.224	A
				3	444	111	1190	1189	0.373	446	446	1.2	0.8	6.740	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.1.0.2307
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Filename: Junction 7 - Wrotham Road_A2 Linked Rbt - Lane Sim - AM.j11
Path: C:\Users\mattjohnson\Ridge and Partners LLP\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Modelling\Arcady\Tech Note 2\2030 RF Do Minimum
Report generation date: 02/09/2026 16:12:08

»D1 - 2030 | RF Do Minimum | AM
»D2 - 2030 | RF Do Minimum + Dev | AM
»D3 - 2030 | RF Do Minimum + Dev + Site B | AM

Summary of junction performance

	AM			
	Set ID	Queue (PCU)	Delay (s)	RFC
	[Lane Simulation] - 2030 - RF Do Minimum			
Arm 1	D1	65.6	252.16	
Arm 2		8.3	28.18	
Arm 4		5.4	11.96	
	[Lane Simulation] - 2030 - RF Do Minimum + Dev			
Arm 1	D2	75.5	294.48	
Arm 2		17.4	59.81	
Arm 4		5.3	12.91	
	[Lane Simulation] - 2030 - RF Do Minimum + Dev + Site B			
Arm 1	D3	82.6	325.38	
Arm 2		23.2	76.15	
Arm 4		5.8	13.02	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

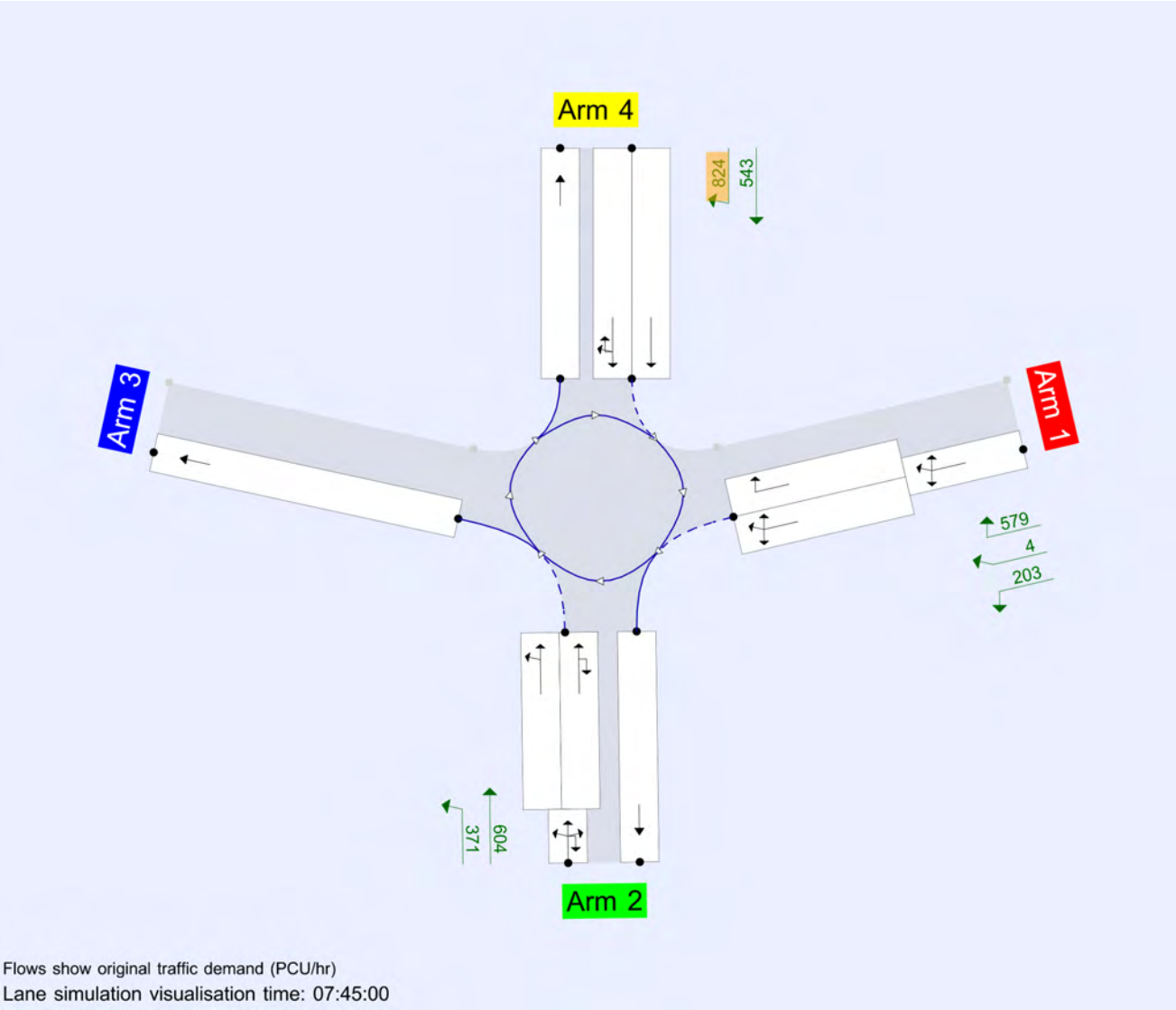
File summary

File Description

Title	
Location	Wrotham Road/A2 Southern Roundabout
Site number	7
Date	09/04/2026
Version	
Status	(new file)
Identifier	MJ
Client	Richborough
Jobnumber	T25512
Enumerator	AzureAD\MatthewJohnson
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	PCU	PCU	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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75	✓					0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	Do not calculate	-1	3	1	60	✓			1791651674	134	7.65

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2030	RF Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓
D2	2030	RF Do Minimum + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D3	2030	RF Do Minimum + Dev + Site B	AM	ONE HOUR	07:45	09:15	15	✓

Analysis Set Details

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

D1 - 2030 | RF Do Minimum | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	79.93	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	79.93	F

Arms

Arms

Arm	Name	Description	No give-way line
1	A2 (E) Off-Slip		
2	Wrotham Road S		
3	A2 (W) On-Slip		
4	Wrotham Road N - Internal Link		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	3.70	8.50	10.2	19.1	59.9	60.0	✓	
2	4.90	9.20	22.2	24.1	59.9	49.0		
3								✓
4	7.60	8.10	6.9	20.8	59.9	36.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.499	1520
2	0.622	2157
3		
4	0.671	2380

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

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1	Evenly split	10.00
2	Evenly split	10.00
3	Evenly split	10.00
4	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1	Entry	1	1	2, 3, 4	✓	4.00			0	99999	
			2	4	✓	4.00			0	99999	
		2	1	(2, 3, 4)		Infinity					
2	Entry	1	1	3, 4	✓	4.00			0	99999	
			2	2, 4	✓	4.00			0	99999	
		2	1	(1, 2, 3, 4)		Infinity					
	Exit	1	1			Infinity					
3	Exit	1	1			Infinity					
4	Entry	1	1	2		Infinity			0	99999	
			2	2, 3, 4		Infinity			0	99999	
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1	Entry	1	1	0.249	760
			2	0.249	760
2	Entry	1	1	0.311	1079
			2	0.311	1079
4	Entry	1	1	0.335	1190
			2	0.335	1190

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			1	2	3	4
1	1	1		✓	✓	✓
		2				✓
	2	1		✓	✓	✓
2	1	1			✓	✓
		2		✓		✓
	2	1	✓	✓	✓	✓
4	1	1		✓		
		2		✓	✓	✓

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2030	RF Do Minimum	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	779	100.000
2		ONE HOUR	✓	854	100.000
3					
4		ONE HOUR	✓	1322	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	196	4	579
	2	0	0	291	563
	3	0	0	0	0
	4	0	497	824	1

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Cyclist %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	252.16	65.6	120.5	F	717	1075
2	28.18	8.3	26.1	D	787	1180
3						
4	11.96	5.4	14.7	B	1217	1826

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	585	146	1005	586	576	0	0.0	2.5	12.787	B
2	647	162	1062	644	642	529	0.0	1.6	7.121	A
3			0			843				
4	1005	251	0	1005	998	863	0.0	1.7	6.349	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	716	179	1183	712	700	0	2.5	6.2	27.103	D
2	777	194	1278	783	773	617	1.6	2.0	10.735	B
3			0			1013				
4	1187	297	0	1183	1186	1048	1.7	2.9	7.842	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	853	213	1459	746	754	0	6.2	34.9	103.331	F
2	948	237	1460	960	933	746	2.0	6.7	24.188	C
3			0			1231				
4	1467	367	0	1459	1445	1189	2.9	5.4	11.930	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	854	213	1467	752	741	0	34.9	65.6	252.159	F
2	958	240	1484	946	941	736	6.7	8.3	28.177	D
3			0			1234				
4	1465	366	0	1467	1461	1195	5.4	4.9	11.958	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	704	176	1194	837	825	0	65.6	38.4	234.865	F
2	759	190	1370	762	792	661	8.3	3.0	16.220	C
3			0			1000				
4	1187	297	0	1194	1211	1132	4.9	2.9	8.480	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	589	147	994	647	722	0	38.4	6.0	76.296	F
2	633	158	1109	637	649	532	3.0	1.2	9.583	A
3			0			848				
4	993	248	0	994	1004	898	2.9	1.8	6.495	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	2.49	0.00	1.38	5.12	7.10
2	1.58	0.00	0.83	3.09	4.08
3					
4	1.69	0.00	0.84	3.51	4.33

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	6.23	0.00	4.71	11.60	16.45
2	1.96	0.00	0.89	4.10	5.65
3					
4	2.95	0.00	1.71	6.52	7.86

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	34.92	4.68	34.50	58.20	67.30
2	6.67	0.00	3.93	13.83	16.86
3					
4	5.36	0.00	3.23	12.52	14.65

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	65.63	13.80	63.50	103.60	120.53
2	8.26	-0.02	4.70	20.60	26.10
3					
4	4.94	0.00	3.24	10.80	13.43

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	38.37	0.39	31.00	87.53	107.50
2	2.99	0.00	2.00	6.09	7.10
3					
4	2.87	0.00	1.52	6.73	8.58

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	5.98	0.00	1.80	12.60	38.30
2	1.18	0.00	0.24	2.84	3.76
3					
4	1.78	0.00	0.53	4.60	5.72

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	330	510	0.648	329	323	0.0	1.4	12.710	B
			2	4	255	510	0.500	256	253	0.0	0.9	11.002	B
		2	1	(2, 3, 4)	585			585	585	0.0	0.2	0.816	A
2	Entry	1	1	3, 4	385	748	0.515	383	387	0.0	1.0	7.363	A
			2	2, 4	262	748	0.350	260	254	0.0	0.6	6.140	A
		2	1	(1, 2, 3, 4)	647			647	648	0.0	0.0	0.243	A
	Exit	1	1		529			529	515	0.0	0.0	0.000	A
3	Exit	1	1		843			843	842	0.0	0.0	0.000	A
4	Entry	1	1	2	276	1190	0.232	276	269	0.0	0.3	4.052	A
			2	2, 3, 4	729	1190	0.612	730	729	0.0	1.4	7.192	A
	Exit	1	1		863			863	859	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	396	465	0.851	392	381	1.4	2.6	20.289	C
			2	4	324	465	0.697	321	318	0.9	1.9	17.655	C
		2	1	(2, 3, 4)	716			720	709	0.2	1.7	7.914	A
2	Entry	1	1	3, 4	453	681	0.665	456	451	1.0	1.2	10.367	B
			2	2, 4	326	681	0.479	328	322	0.6	0.6	8.228	A
		2	1	(1, 2, 3, 4)	777			779	774	0.0	0.1	1.254	A
	Exit	1	1		617			617	627	0.0	0.0	0.000	A
3	Exit	1	1		1013			1013	1001	0.0	0.0	0.000	A
4	Entry	1	1	2	344	1190	0.289	345	347	0.3	0.5	4.460	A
			2	2, 3, 4	843	1190	0.708	839	839	1.4	2.5	9.234	A
	Exit	1	1		1048			1048	1031	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	400	397	1.010	401	403	2.6	3.9	31.594	D
			2	4	349	397	0.881	346	351	1.9	3.2	27.667	D
		2	1	(2, 3, 4)	853			750	764	1.7	27.8	73.004	F
2	Entry	1	1	3, 4	537	625	0.860	540	524	1.2	2.5	16.147	C
			2	2, 4	420	625	0.671	420	409	0.6	1.5	12.479	B
		2	1	(1, 2, 3, 4)	948			957	942	0.1	2.7	9.599	A
	Exit	1	1		746			746	738	0.0	0.0	0.000	A
3	Exit	1	1		1231			1231	1218	0.0	0.0	0.000	A
4	Entry	1	1	2	466	1190	0.392	464	461	0.5	0.8	5.073	A
			2	2, 3, 4	1001	1190	0.841	995	984	2.5	4.5	15.115	C
	Exit	1	1		1189			1189	1176	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	394	395	0.998	394	391	3.9	4.0	35.930	E
			2	4	359	395	0.909	359	351	3.2	3.0	29.890	D
		2	1	(2, 3, 4)	854			753	741	27.8	58.6	219.920	F
2	Entry	1	1	3, 4	534	617	0.865	531	529	2.5	2.7	16.828	C
			2	2, 4	415	617	0.672	415	413	1.5	1.5	13.055	B
		2	1	(1, 2, 3, 4)	958			949	942	2.7	4.1	12.966	B
	Exit	1	1		736			736	735	0.0	0.0	0.000	A
3	Exit	1	1		1234			1234	1232	0.0	0.0	0.000	A
4	Entry	1	1	2	463	1190	0.389	462	466	0.8	0.8	5.348	A
			2	2, 3, 4	1002	1190	0.842	1005	996	4.5	4.1	15.062	C
	Exit	1	1		1195			1195	1177	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	440	463	0.952	446	439	4.0	3.4	30.280	D
			2	4	386	463	0.835	392	386	3.0	2.4	25.568	D
		2	1	(2, 3, 4)	704			826	820	58.6	32.6	207.781	F
2	Entry	1	1	3, 4	436	653	0.668	436	454	2.7	1.7	13.053	B
			2	2, 4	327	653	0.502	326	338	1.5	1.1	10.333	B
		2	1	(1, 2, 3, 4)	759			763	786	4.1	0.2	4.502	A
	Exit	1	1		661			661	660	0.0	0.0	0.000	A
3	Exit	1	1		1000			1000	1030	0.0	0.0	0.000	A
4	Entry	1	1	2	346	1190	0.291	346	355	0.8	0.5	4.630	A
			2	2, 3, 4	840	1190	0.706	848	856	4.1	2.4	10.077	B
	Exit	1	1		1132			1132	1137	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	355	512	0.692	355	387	3.4	1.8	21.603	C
			2	4	290	512	0.566	292	335	2.4	1.1	17.678	C
		2	1	(2, 3, 4)	589			644	711	32.6	3.0	57.651	F
2	Entry	1	1	3, 4	379	734	0.517	382	386	1.7	0.7	9.583	A
			2	2, 4	255	734	0.347	255	263	1.1	0.4	7.694	A
		2	1	(1, 2, 3, 4)	633			634	642	0.2	0.0	0.770	A
	Exit	1	1		532			532	556	0.0	0.0	0.000	A
3	Exit	1	1		848			848	852	0.0	0.0	0.000	A
4	Entry	1	1	2	266	1190	0.224	265	276	0.5	0.3	4.005	A
			2	2, 3, 4	727	1190	0.611	729	728	2.4	1.5	7.438	A
	Exit	1	1		898			898	966	0.0	0.0	0.000	A

Lanes: Queue Variation Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.38	0.00	0.66	4.00	4.00
			2	0.92	0.00	0.18	1.86	2.66
		2	1	0.19	0.00	0.00	0.00	0.15
2	Entry	1	1	1.01	0.00	0.35	1.96	2.70
			2	0.56	0.00	0.00	1.48	1.89
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.28	0.00	0.00	0.72	1.26
			2	1.41	0.00	0.51	3.08	3.91
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:00 - 08:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	2.64	0.00	2.50	3.86	3.99
			2	1.87	0.00	1.10	3.61	3.82
		2	1	1.71	0.00	0.00	5.53	10.30
2	Entry	1	1	1.19	0.00	0.42	2.74	4.00
			2	0.65	0.00	0.00	1.40	1.88
		2	1	0.13	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.48	0.00	0.00	1.37	1.74
			2	2.47	0.00	1.19	6.10	7.33
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:15 - 08:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.87	1.96	3.48	3.97	5.00
			2	3.22	0.00	3.17	3.94	5.00
		2	1	27.83	0.00	27.00	54.20	61.15
2	Entry	1	1	2.55	0.00	2.28	3.90	5.00
			2	1.46	0.00	0.67	4.00	4.00
		2	1	2.67	0.00	0.00	8.27	12.30
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.84	0.00	0.00	1.93	3.08
			2	4.53	0.00	2.42	10.53	13.15
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:30 - 08:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	4.00	2.54	3.53	5.00	5.00
			2	2.99	0.00	3.10	3.89	3.99
		2	1	58.64	6.90	55.75	99.00	112.53
2	Entry	1	1	2.66	0.00	2.48	3.84	3.97
			2	1.53	0.00	0.77	3.29	3.71
		2	1	4.08	0.00	0.00	14.30	18.77
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.84	0.00	0.00	2.12	3.92
			2	4.10	0.00	2.64	9.20	12.30
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:45 - 09:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.37	0.00	3.32	3.93	5.00
			2	2.41	0.00	2.05	3.76	3.92
		2	1	32.59	0.00	25.33	80.80	102.30
2	Entry	1	1	1.68	0.00	1.15	3.27	3.66
			2	1.06	0.00	0.26	2.44	2.89
		2	1	0.24	0.00	0.00	0.00	0.86
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.51	0.00	0.00	1.42	2.08
			2	2.36	0.00	1.00	6.08	6.91
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

09:00 - 09:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.79	0.00	1.04	3.56	3.82
			2	1.14	0.00	0.05	3.05	3.56
		2	1	3.04	0.00	0.00	5.80	26.50
2	Entry	1	1	0.74	0.00	0.00	1.76	2.38
			2	0.44	0.00	0.00	1.13	1.69
		2	1	0.00	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.31	0.00	0.00	0.72	1.26
			2	1.47	0.00	0.29	4.10	5.26
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	145	36	760	511	0.284	145	139	0.0	0.6	14.659	B
				3	4	0.92	369	256	0.014	3	3	0.0	0.0	15.645	C
				4	181	45	760	511	0.355	182	180	0.0	0.7	11.143	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	255	64	760	511	0.498	256	253	0.0	0.9	11.002	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	146	36	-	-	-	145	142	0.0	0.1	1.257	A
				3	4	0.92	-	-	-	4	3	0.0	0.0	2.339	A
				4	436	109	-	-	-	436	440	0.0	0.1	0.662	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	218	55	1079	749	0.291	219	217	0.0	0.6	8.380	A
				4	167	42	1079	749	0.223	165	171	0.0	0.4	6.072	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	262	66	1079	749	0.350	260	254	0.0	0.6	6.140	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	218	54	-	-	-	218	219	0.0	0.0	0.358	A
				4	429	107	-	-	-	429	429	0.0	0.0	0.184	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	276	69	1190	1190	0.232	276	269	0.0	0.3	4.052	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	109	27	1190	1190	0.091	109	106	0.0	0.1	3.815	A
				3	619	155	1190	1190	0.520	621	622	0.0	1.3	7.766	A
				4	0.45	0.11	186	186	0.002	0.45	0.75	0.0	0.0	7.991	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	179	45	760	467	0.382	177	176	0.6	1.3	22.445	C
				3	5	1	454	279	0.017	4	4	0.0	0.0	21.359	C
				4	212	53	760	465	0.456	210	202	0.7	1.3	18.389	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	324	81	760	464	0.699	321	318	0.9	1.9	17.655	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	179	45	-	-	-	179	178	0.1	0.6	9.437	A
				3	5	1	-	-	-	5	4	0.0	0.0	7.928	A
				4	533	133	-	-	-	536	526	0.1	1.1	7.396	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	263	66	1079	682	0.386	266	263	0.6	0.8	11.627	B
				4	190	48	1079	681	0.279	189	188	0.4	0.4	8.594	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	326	82	1079	679	0.480	328	322	0.6	0.6	8.228	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	262	66	-	-	-	263	264	0.0	0.1	1.518	A
				4	514	129	-	-	-	516	510	0.0	0.1	1.118	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	344	86	1190	1190	0.289	345	347	0.3	0.5	4.460	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	96	24	1190	1190	0.081	95	105	0.1	0.1	4.418	A
				3	746	186	1190	1190	0.627	742	733	1.3	2.3	9.924	A
				4	1	0.29	284	284	0.004	1	1	0.0	0.0	7.690	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	191	48	760	399	0.479	192	188	1.3	1.8	32.483	D
				3	3	0.83	443	237	0.014	4	4	0.0	0.0	36.606	E
				4	206	51	760	396	0.520	205	211	1.3	2.0	30.711	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	349	87	760	398	0.877	346	351	1.9	3.2	27.667	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	218	54	-	-	-	191	190	0.6	7.3	77.374	F
				3	4	1	-	-	-	3	4	0.0	0.1	76.699	F
				4	631	158	-	-	-	555	570	1.1	20.4	71.509	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	322	80	1079	625	0.515	323	320	0.8	1.8	17.610	C
				4	215	54	1079	625	0.344	217	204	0.4	0.8	13.844	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	420	105	1079	625	0.672	420	409	0.6	1.5	12.479	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	320	80	-	-	-	322	324	0.1	1.0	10.126	B
				4	628	157	-	-	-	635	617	0.1	1.7	9.324	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	466	117	1190	1190	0.392	464	461	0.5	0.8	5.073	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	89	22	1190	1190	0.075	89	89	0.1	0.1	5.135	A
				3	910	228	1190	1190	0.765	904	894	2.3	4.4	16.080	C
				4	1	0.31	266	266	0.005	1	1	0.0	0.0	18.477	C

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	190	47	760	395	0.480	190	187	1.8	2.0	36.374	E
				3	5	1	414	223	0.021	5	4	0.0	0.0	32.740	D
				4	199	50	760	396	0.503	199	200	2.0	2.0	35.579	E
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	359	90	760	396	0.907	359	351	3.2	3.0	29.890	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	216	54	-	-	-	190	187	7.3	15.3	225.511	F
				3	3	0.87	-	-	-	5	4	0.1	0.2	224.544	F
				4	634	159	-	-	-	558	549	20.4	43.1	217.970	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	314	78	1079	618	0.507	309	316	1.8	1.8	18.260	C
				4	220	55	1079	617	0.357	222	213	0.8	0.8	14.699	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	415	104	1079	618	0.671	415	413	1.5	1.5	13.055	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	317	79	-	-	-	314	316	1.0	1.4	13.893	B
				4	641	160	-	-	-	635	626	1.7	2.7	12.497	B
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	463	116	1190	1190	0.389	462	466	0.8	0.8	5.348	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	84	21	1190	1190	0.071	84	83	0.1	0.2	5.274	A
				3	917	229	1190	1190	0.771	920	911	4.4	3.9	15.958	C
				4	0.90	0.22	249	249	0.004	0.90	1	0.0	0.0	11.140	B

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	205	51	760	463	0.442	210	209	2.0	1.4	30.859	D
				3	4	1	499	300	0.014	4	4	0.0	0.0	32.226	D
				4	232	58	760	462	0.501	231	226	2.0	1.9	29.711	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	386	97	760	464	0.833	392	386	3.0	2.4	25.568	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	174	44	-	-	-	205	207	15.3	8.3	211.326	F
				3	4	0.94	-	-	-	4	4	0.2	0.2	220.956	F
				4	526	131	-	-	-	618	609	43.1	24.1	206.493	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	252	63	1079	655	0.385	254	268	1.8	1.0	14.503	B
				4	183	46	1079	653	0.281	182	186	0.8	0.6	10.960	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	327	82	1079	653	0.501	326	338	1.5	1.1	10.333	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	251	63	-	-	-	252	265	1.4	0.1	4.971	A
				4	507	127	-	-	-	511	521	2.7	0.1	4.262	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	346	87	1190	1190	0.291	346	355	0.8	0.5	4.630	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	105	26	1190	1190	0.089	105	97	0.2	0.2	4.487	A
				3	734	183	1190	1190	0.616	741	758	3.9	2.2	10.789	B
				4	1	0.31	213	213	0.006	1	1	0.0	0.0	12.920	B

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	167	42	760	513	0.325	167	181	1.4	0.9	23.056	C
				3	3	0.85	454	303	0.011	3	4	0.0	0.0	21.683	C
				4	184	46	760	513	0.360	185	202	1.9	0.8	20.282	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	290	72	760	512	0.566	292	335	2.4	1.1	17.678	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	150	38	-	-	-	167	179	8.3	0.7	60.241	F
				3	3	0.81	-	-	-	3	4	0.2	0.0	53.725	F
				4	436	109	-	-	-	474	527	24.1	2.3	56.808	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	214	54	1079	734	0.292	217	220	1.0	0.5	10.864	B
				4	165	41	1079	733	0.225	165	166	0.6	0.3	7.879	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	255	64	1079	734	0.347	255	263	1.1	0.4	7.694	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	214	53	-	-	-	214	217	0.1	0.0	0.942	A
				4	419	105	-	-	-	419	425	0.1	0.0	0.682	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	266	67	1190	1190	0.224	265	276	0.5	0.3	4.005	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	99	25	1190	1190	0.083	100	99	0.2	0.1	4.052	A
				3	627	157	1190	1190	0.527	628	628	2.2	1.4	7.977	A
				4	0.81	0.20	195	195	0.004	0.90	0.72	0.0	0.0	6.182	A

D2 - 2030 | RF Do Minimum + Dev | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	98.75	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	98.75	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2030	RF Do Minimum + Dev	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	783	100.000
2		ONE HOUR	✓	947	100.000
3					
4		ONE HOUR	✓	1358	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	200	4	579
	2	0	0	355	592
	3	0	0	0	0
	4	0	533	824	1

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Cyclist %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	294.48	75.5	131.6	F	720	1080
2	59.81	17.4	56.7	F	861	1292
3						
4	12.91	5.3	16.3	B	1251	1876

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	596	149	1018	595	586	0	0.0	2.4	13.095	B
2	705	176	1069	702	700	543	0.0	2.1	8.320	A
3			0			892				
4	1019	255	0	1018	1016	880	0.0	1.8	6.577	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	693	173	1230	699	696	0	2.4	5.6	27.688	D
2	839	210	1278	838	839	651	2.1	3.1	12.542	B
3			0			1064				
4	1231	308	0	1230	1226	1052	1.8	2.7	8.166	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	864	216	1506	716	736	0	5.6	39.6	112.292	F
2	1039	260	1443	1013	1001	780	3.1	13.6	37.365	E
3			0			1286				
4	1506	377	0	1506	1499	1170	2.7	5.3	12.018	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	859	215	1519	726	723	0	39.6	75.5	294.479	F
2	1027	257	1454	1031	1027	792	13.6	17.4	59.813	F
3			0			1304				
4	1515	379	0	1519	1512	1181	5.3	5.1	12.915	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	722	180	1215	845	818	0	75.5	51.3	287.118	F
2	865	216	1370	872	917	689	17.4	4.3	29.372	D
3			0			1069				
4	1213	303	0	1215	1238	1174	5.1	2.7	8.442	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	585	146	1021	697	766	0	51.3	9.3	113.281	F
2	692	173	1140	697	720	578	4.3	1.9	11.718	B
3			0			883				
4	1019	255	0	1021	1029	954	2.7	1.8	6.754	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	2.44	0.00	1.26	5.28	6.65
2	2.14	0.00	0.90	4.55	6.87
3					
4	1.85	0.00	0.65	4.62	6.27

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	5.57	0.00	3.67	11.73	15.60
2	3.08	0.00	1.59	6.87	9.30
3					
4	2.68	0.00	1.33	5.74	7.80

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	39.58	7.40	39.00	66.40	73.80
2	13.63	0.03	8.63	33.80	42.60
3					
4	5.32	0.00	3.61	11.20	16.30

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	75.47	24.40	74.00	120.20	131.60
2	17.39	0.00	11.00	44.07	56.67
3					
4	5.08	0.00	2.96	10.44	13.65

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	51.26	1.23	48.67	98.60	115.90
2	4.35	0.00	2.40	9.80	12.30
3					
4	2.65	0.00	1.41	5.58	7.30

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	9.26	0.00	2.00	30.40	43.60
2	1.85	0.00	0.75	4.28	6.12
3					
4	1.82	0.00	0.89	3.83	4.90

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	334	506	0.660	333	330	0.0	1.4	12.902	B
			2	4	262	506	0.517	262	256	0.0	0.9	11.294	B
		2	1	(2, 3, 4)	596			596	595	0.0	0.2	0.891	A
2	Entry	1	1	3, 4	426	746	0.571	423	425	0.0	1.3	8.410	A
			2	2, 4	277	746	0.371	279	275	0.0	0.5	6.625	A
		2	1	(1, 2, 3, 4)	705			703	707	0.0	0.3	0.602	A
	Exit	1	1		543			543	544	0.0	0.0	0.000	A
3	Exit	1	1		892			892	882	0.0	0.0	0.000	A
4	Entry	1	1	2	288	1190	0.242	286	287	0.0	0.4	4.042	A
			2	2, 3, 4	731	1190	0.615	732	729	0.0	1.4	7.577	A
	Exit	1	1		880			880	875	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	378	454	0.833	377	379	1.4	2.4	20.651	C
			2	4	323	454	0.712	322	317	0.9	1.7	17.801	C
		2	1	(2, 3, 4)	693			701	704	0.2	1.5	8.238	A
2	Entry	1	1	3, 4	488	681	0.717	488	494	1.3	1.6	11.643	B
			2	2, 4	349	681	0.512	350	346	0.5	0.9	8.868	A
		2	1	(1, 2, 3, 4)	839			837	842	0.3	0.5	2.025	A
	Exit	1	1		651			651	658	0.0	0.0	0.000	A
3	Exit	1	1		1064			1064	1060	0.0	0.0	0.000	A
4	Entry	1	1	2	372	1190	0.312	371	371	0.4	0.5	4.426	A
			2	2, 3, 4	860	1190	0.722	859	855	1.4	2.2	9.787	A
	Exit	1	1		1052			1052	1044	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	383	385	0.996	382	394	2.4	4.0	32.473	D
			2	4	337	385	0.876	334	342	1.7	3.0	28.298	D
		2	1	(2, 3, 4)	864			721	748	1.5	32.6	81.260	F
2	Entry	1	1	3, 4	572	630	0.907	572	566	1.6	3.1	18.238	C
			2	2, 4	439	630	0.696	441	435	0.9	1.6	13.455	B
		2	1	(1, 2, 3, 4)	1039			1011	1010	0.5	9.0	21.073	C
	Exit	1	1		780			780	775	0.0	0.0	0.000	A
3	Exit	1	1		1286			1286	1281	0.0	0.0	0.000	A
4	Entry	1	1	2	501	1190	0.421	502	496	0.5	0.7	5.491	A
			2	2, 3, 4	1005	1190	0.845	1004	1003	2.2	4.6	15.202	C
	Exit	1	1		1170			1170	1179	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	386	382	1.011	386	382	4.0	4.0	36.840	E
			2	4	337	382	0.883	340	341	3.0	2.8	30.757	D
		2	1	(2, 3, 4)	859			723	722	32.6	68.7	261.283	F
2	Entry	1	1	3, 4	578	627	0.922	579	580	3.1	3.2	19.879	C
			2	2, 4	448	627	0.715	452	447	1.6	1.7	14.693	B
		2	1	(1, 2, 3, 4)	1027			1026	1028	9.0	12.5	42.239	E
	Exit	1	1		792			792	785	0.0	0.0	0.000	A
3	Exit	1	1		1304			1304	1304	0.0	0.0	0.000	A
4	Entry	1	1	2	501	1190	0.421	504	504	0.7	0.7	5.556	A
			2	2, 3, 4	1015	1190	0.853	1016	1009	4.6	4.4	16.595	C
	Exit	1	1		1181			1181	1173	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	442	457	0.966	444	432	4.0	3.7	31.460	D
			2	4	398	457	0.869	401	386	2.8	2.8	26.464	D
		2	1	(2, 3, 4)	722			839	816	68.7	44.8	259.321	F
2	Entry	1	1	3, 4	503	653	0.771	503	527	3.2	2.1	15.610	C
			2	2, 4	370	653	0.567	370	389	1.7	1.1	11.793	B
		2	1	(1, 2, 3, 4)	865			873	910	12.5	1.2	15.639	C
	Exit	1	1		689			689	691	0.0	0.0	0.000	A
3	Exit	1	1		1069			1069	1105	0.0	0.0	0.000	A
4	Entry	1	1	2	365	1190	0.307	365	375	0.7	0.5	4.469	A
			2	2, 3, 4	847	1190	0.712	850	863	4.4	2.2	10.187	B
	Exit	1	1		1174			1174	1176	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	375	506	0.742	379	412	3.7	2.0	23.596	C
			2	4	312	506	0.617	318	354	2.8	1.3	19.916	C
		2	1	(2, 3, 4)	585			687	753	44.8	6.0	92.457	F
2	Entry	1	1	3, 4	420	724	0.579	420	431	2.1	1.2	11.083	B
			2	2, 4	276	724	0.381	277	288	1.1	0.6	8.431	A
		2	1	(1, 2, 3, 4)	692			695	714	1.2	0.1	1.730	A
	Exit	1	1		578			578	596	0.0	0.0	0.000	A
3	Exit	1	1		883			883	903	0.0	0.0	0.000	A
4	Entry	1	1	2	289	1190	0.243	288	291	0.5	0.4	4.099	A
			2	2, 3, 4	730	1190	0.614	733	739	2.2	1.5	7.801	A
	Exit	1	1		954			954	1016	0.0	0.0	0.000	A

Lanes: Queue Variation Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.39	0.00	0.52	3.30	3.70
			2	0.85	0.00	0.06	1.87	2.62
		2	1	0.20	0.00	0.00	0.00	0.65
2	Entry	1	1	1.33	0.00	0.45	3.13	3.62
			2	0.52	0.00	0.00	1.39	1.79
		2	1	0.29	0.00	0.00	0.00	0.70
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.43	0.00	0.00	1.01	1.61
			2	1.42	0.00	0.25	3.60	4.90
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:00 - 08:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	2.43	0.00	2.17	3.82	3.96
			2	1.68	0.00	0.92	3.49	3.78
		2	1	1.47	0.00	0.00	5.40	8.53
2	Entry	1	1	1.65	0.00	0.97	3.51	3.81
			2	0.90	0.00	0.00	2.18	2.88
		2	1	0.54	0.00	0.00	0.70	3.40
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.51	0.00	0.00	0.95	1.87
			2	2.17	0.00	0.92	4.91	7.40
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:15 - 08:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.97	2.44	3.50	3.98	5.00
			2	3.02	0.00	3.09	3.88	3.98
		2	1	32.60	0.40	32.00	58.20	69.60
2	Entry	1	1	3.08	0.00	3.14	3.95	5.00
			2	1.60	0.00	1.00	4.00	4.00
		2	1	8.96	0.00	2.25	28.05	35.20
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.74	0.00	0.00	1.75	2.51
			2	4.57	0.00	2.80	9.91	13.60
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:30 - 08:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.97	2.54	3.49	3.95	5.00
			2	2.85	0.00	3.01	3.84	3.95
		2	1	68.66	16.40	68.00	112.20	124.20
2	Entry	1	1	3.20	0.00	3.25	3.93	5.00
			2	1.65	0.00	0.71	3.62	3.85
		2	1	12.52	0.00	4.75	38.20	53.40
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.71	0.00	0.00	1.77	2.29
			2	4.37	0.00	2.42	9.44	12.60
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:45 - 09:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.67	0.23	3.43	3.96	5.00
			2	2.77	0.00	3.04	3.88	3.98
		2	1	44.84	0.00	41.40	92.60	108.80
2	Entry	1	1	2.05	0.00	1.48	3.69	3.88
			2	1.11	0.00	0.21	2.72	4.00
		2	1	1.18	0.00	0.00	4.07	7.80
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.49	0.00	0.00	1.34	1.81
			2	2.17	0.00	0.91	4.74	7.30
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

09:00 - 09:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	2.01	0.00	1.17	3.74	3.93
			2	1.25	0.00	0.26	4.00	4.00
		2	1	6.01	0.00	0.00	24.20	35.20
2	Entry	1	1	1.16	0.00	0.28	2.84	3.43
			2	0.55	0.00	0.00	1.37	1.90
		2	1	0.14	0.00	0.00	0.00	0.15
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.37	0.00	0.00	0.88	1.51
			2	1.45	0.00	0.55	3.22	4.15
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	153	38	760	506	0.303	152	149	0.0	0.8	14.607	B
				3	3	0.79	394	278	0.011	3	3	0.0	0.0	16.912	C
				4	178	44	760	507	0.350	178	178	0.0	0.6	11.388	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	262	65	760	506	0.517	262	256	0.0	0.9	11.294	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	153	38	-	-	-	153	152	0.0	0.1	1.312	A
				3	3	0.79	-	-	-	3	3	0.0	0.0	0.990	A
				4	439	110	-	-	-	440	440	0.0	0.1	0.745	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	266	66	1079	747	0.355	263	259	0.0	0.9	9.550	A
				4	160	40	1079	746	0.215	161	165	0.0	0.4	6.614	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	277	69	1079	745	0.372	279	275	0.0	0.5	6.625	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	267	67	-	-	-	266	263	0.0	0.2	0.828	A
				4	438	109	-	-	-	437	444	0.0	0.1	0.468	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	288	72	1190	1190	0.242	286	287	0.0	0.4	4.042	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	105	26	1190	1190	0.088	105	109	0.0	0.1	3.916	A
				3	626	156	1190	1190	0.526	626	620	0.0	1.3	8.216	A
				4	0.86	0.21	184	184	0.005	0.86	0.74	0.0	0.0	9.015	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	175	44	760	455	0.385	173	177	0.8	1.1	22.194	C
				3	4	0.96	439	262	0.015	4	4	0.0	0.0	21.502	C
				4	199	50	760	455	0.438	200	199	0.6	1.2	19.262	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	323	81	760	454	0.711	322	317	0.9	1.7	17.801	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	172	43	-	-	-	175	178	0.1	0.4	9.452	A
				3	4	0.93	-	-	-	4	4	0.0	0.0	8.508	A
				4	518	129	-	-	-	522	522	0.1	1.1	7.820	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	310	77	1079	681	0.455	309	312	0.9	1.1	12.954	B
				4	178	45	1079	680	0.263	180	182	0.4	0.5	9.379	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	349	87	1079	681	0.512	350	346	0.5	0.9	8.868	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	310	78	-	-	-	310	313	0.2	0.3	2.368	A
				4	528	132	-	-	-	527	529	0.1	0.3	1.822	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	372	93	1190	1190	0.312	371	371	0.4	0.5	4.426	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	108	27	1190	1190	0.091	107	110	0.1	0.2	4.524	A
				3	751	188	1190	1190	0.631	751	744	1.3	2.0	10.566	B
				4	0.57	0.14	163	163	0.004	0.57	0.74	0.0	0.0	10.599	B

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	181	45	760	385	0.470	180	183	1.1	2.0	33.156	D
				3	3	0.80	389	203	0.016	3	4	0.0	0.0	33.615	D
				4	199	50	760	386	0.517	199	208	1.2	2.0	31.851	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	337	84	760	385	0.877	334	342	1.7	3.0	28.298	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	226	56	-	-	-	181	186	0.4	9.0	85.967	F
				3	4	1	-	-	-	3	3	0.0	0.2	86.934	F
				4	634	158	-	-	-	537	558	1.1	23.4	79.617	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	378	95	1079	628	0.602	377	373	1.1	2.1	19.231	C
				4	193	48	1079	631	0.307	195	193	0.5	1.0	16.310	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	439	110	1079	630	0.697	441	435	0.9	1.6	13.455	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	391	98	-	-	-	378	377	0.3	3.6	22.001	C
				4	648	162	-	-	-	632	633	0.3	5.4	20.519	C
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	501	125	1190	1190	0.421	502	496	0.5	0.7	5.491	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	97	24	1190	1190	0.082	97	97	0.2	0.1	5.328	A
				3	906	227	1190	1190	0.762	905	905	2.0	4.4	16.248	C
				4	1	0.30	312	312	0.004	1	1	0.0	0.0	16.952	C

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	193	48	760	383	0.504	193	189	2.0	2.0	37.451	E
				3	4	0.98	434	225	0.018	4	4	0.0	0.0	36.104	E
				4	189	47	760	382	0.494	189	189	2.0	1.9	36.240	E
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	337	84	760	383	0.880	340	341	3.0	2.8	30.757	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	220	55	-	-	-	193	189	9.0	17.6	263.897	F
				3	4	1	-	-	-	4	4	0.2	0.3	246.302	F
				4	636	159	-	-	-	526	529	23.4	50.8	260.470	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	380	95	1079	626	0.607	380	385	2.1	2.3	20.924	C
				4	198	49	1079	626	0.316	199	196	1.0	0.9	17.806	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	448	112	1079	628	0.713	452	447	1.6	1.7	14.693	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	379	95	-	-	-	380	385	3.6	4.6	43.334	E
				4	648	162	-	-	-	646	643	5.4	8.0	41.586	E
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	501	125	1190	1190	0.421	504	504	0.7	0.7	5.556	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	95	24	1190	1190	0.080	96	92	0.1	0.1	5.699	A
				3	919	230	1190	1190	0.772	919	916	4.4	4.2	17.676	C
				4	0.93	0.23	198	198	0.005	0.86	0.76	0.0	0.0	20.963	C

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	209	52	760	457	0.456	212	208	2.0	1.7	31.972	D
				3	4	0.89	416	244	0.015	4	4	0.0	0.0	32.405	D
				4	230	57	760	457	0.503	229	220	1.9	2.0	30.963	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	398	99	760	457	0.870	401	386	2.8	2.8	26.464	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	184	46	-	-	-	209	207	17.6	11.6	261.784	F
				3	4	0.89	-	-	-	4	4	0.3	0.3	277.343	F
				4	535	134	-	-	-	627	606	50.8	33.0	258.374	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	328	82	1079	654	0.502	329	347	2.3	1.4	16.875	C
				4	175	44	1079	653	0.268	173	180	0.9	0.6	13.189	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	370	93	1079	653	0.567	370	389	1.7	1.1	11.793	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	326	81	-	-	-	328	344	4.6	0.5	16.728	C
				4	539	135	-	-	-	545	566	8.0	0.7	14.975	B
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	365	91	1190	1190	0.307	365	375	0.7	0.5	4.469	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	112	28	1190	1190	0.094	113	108	0.1	0.1	4.429	A
				3	734	184	1190	1190	0.617	736	754	4.2	2.0	11.017	B
				4	1	0.30	198	198	0.006	1	0.74	0.0	0.0	12.582	B

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	174	44	760	506	0.345	178	196	1.7	1.0	25.028	D
				3	4	1	475	313	0.014	4	4	0.0	0.0	26.527	D
				4	196	49	760	506	0.388	197	213	2.0	1.0	22.219	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	312	78	760	507	0.616	318	354	2.8	1.3	19.916	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	147	37	-	-	-	174	193	11.6	1.5	94.503	F
				3	4	0.89	-	-	-	4	4	0.3	0.0	100.005	F
				4	434	109	-	-	-	508	556	33.0	4.5	91.690	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	258	65	1079	723	0.358	259	271	1.4	0.8	12.464	B
				4	161	40	1079	724	0.222	161	160	0.6	0.3	8.757	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	276	69	1079	723	0.381	277	288	1.1	0.6	8.431	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	257	64	-	-	-	258	269	0.5	0.1	2.056	A
				4	435	109	-	-	-	437	445	0.7	0.1	1.533	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	289	72	1190	1190	0.243	288	291	0.5	0.4	4.099	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	112	28	1190	1190	0.094	112	110	0.1	0.1	4.057	A
				3	617	154	1190	1190	0.519	620	628	2.0	1.3	8.454	A
				4	1	0.25	248	248	0.004	0.93	1	0.0	0.0	9.168	A

D3 - 2030 | RF Do Minimum + Dev + Site B | AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Simulation	Arm 1	Arm 1: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	111.29	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	111.29	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2030	RF Do Minimum + Dev + Site B	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	786	100.000
2		ONE HOUR	✓	975	100.000
3					
4		ONE HOUR	✓	1368	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	203	4	579
	2	0	0	371	604
	3	0	0	0	0
	4	0	543	824	1

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Cyclist %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	325.38	82.6	130.2	F	726	1089
2	76.15	23.2	65.1	F	901	1352
3						
4	13.02	5.8	15.1	B	1259	1889

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	600	150	1016	600	587	0	0.0	2.5	13.114	B
2	746	186	1053	747	736	562	0.0	2.1	8.167	A
3			0			892				
4	1014	253	0	1016	1018	909	0.0	1.8	6.376	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	704	176	1228	701	698	0	2.5	5.7	25.853	D
2	879	220	1265	875	884	665	2.1	4.2	15.101	C
3			0			1075				
4	1239	310	0	1228	1231	1064	1.8	3.2	8.031	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	869	217	1507	737	729	0	5.7	42.5	128.078	F
2	1097	274	1455	1051	1031	789	4.2	18.8	45.235	E
3			0			1306				
4	1513	378	0	1507	1503	1200	3.2	5.2	11.945	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	879	220	1518	732	724	0	42.5	82.6	315.762	F
2	1069	267	1466	1066	1063	784	18.8	23.2	76.153	F
3			0			1334				
4	1528	382	0	1518	1507	1197	5.2	5.8	13.016	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	708	177	1233	830	810	0	82.6	59.8	325.385	F
2	875	219	1356	904	954	706	23.2	6.0	43.072	E
3			0			1087				
4	1232	308	0	1233	1247	1173	5.8	2.9	8.669	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	596	149	1034	723	792	0	59.8	10.6	127.649	F
2	741	185	1168	749	756	589	6.0	2.1	13.077	B
3			0			913				
4	1031	258	0	1034	1034	1004	2.9	1.8	6.587	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	2.46	0.00	1.23	5.55	6.85
2	2.10	0.00	1.00	4.46	6.05
3					
4	1.75	0.00	0.82	3.74	5.28

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	5.70	0.00	3.57	12.20	18.03
2	4.16	0.00	2.26	8.70	12.10
3					
4	3.15	0.00	1.79	7.40	9.03

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	42.50	8.45	42.50	74.20	81.55
2	18.80	2.13	14.00	37.20	47.55
3					
4	5.20	0.00	3.24	11.24	15.10

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	82.60	27.80	84.75	120.10	130.20
2	23.20	0.74	16.00	53.60	65.05
3					
4	5.81	0.00	4.14	11.80	13.37

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	59.85	2.23	62.00	104.40	124.20
2	6.02	0.00	2.75	15.07	19.55
3					
4	2.88	0.00	1.71	6.13	6.90

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	10.56	0.00	2.67	31.60	43.80
2	2.07	0.00	1.17	3.92	5.55
3					
4	1.83	0.00	0.73	3.93	5.62

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	338	507	0.667	337	330	0.0	1.4	13.097	B
			2	4	260	507	0.514	263	258	0.0	0.8	11.308	B
		2	1	(2, 3, 4)	600			599	596	0.0	0.2	0.780	A
2	Entry	1	1	3, 4	451	751	0.601	451	450	0.0	1.3	8.236	A
			2	2, 4	296	751	0.394	296	285	0.0	0.7	6.639	A
		2	1	(1, 2, 3, 4)	746			747	743	0.0	0.1	0.546	A
	Exit	1	1		562			562	557	0.0	0.0	0.000	A
3	Exit	1	1		892			892	889	0.0	0.0	0.000	A
4	Entry	1	1	2	291	1190	0.244	291	291	0.0	0.3	3.993	A
			2	2, 3, 4	723	1190	0.608	724	727	0.0	1.4	7.324	A
	Exit	1	1		909			909	894	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	390	454	0.859	390	384	1.4	2.3	19.897	C
			2	4	312	454	0.687	312	314	0.8	1.7	17.566	C
		2	1	(2, 3, 4)	704			702	705	0.2	1.7	6.936	A
2	Entry	1	1	3, 4	516	685	0.753	514	519	1.3	2.0	12.648	B
			2	2, 4	360	685	0.526	360	365	0.7	0.9	9.509	A
		2	1	(1, 2, 3, 4)	879			877	888	0.1	1.2	3.720	A
	Exit	1	1		665			665	671	0.0	0.0	0.000	A
3	Exit	1	1		1075			1075	1077	0.0	0.0	0.000	A
4	Entry	1	1	2	382	1190	0.321	381	379	0.3	0.5	4.432	A
			2	2, 3, 4	857	1190	0.720	847	852	1.4	2.7	9.629	A
	Exit	1	1		1064			1064	1066	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	390	385	1.014	389	384	2.3	3.9	33.626	D
			2	4	351	385	0.914	348	345	1.7	2.8	28.094	D
		2	1	(2, 3, 4)	869			741	740	1.7	35.7	96.515	F
2	Entry	1	1	3, 4	597	626	0.953	591	588	2.0	3.6	18.497	C
			2	2, 4	455	626	0.727	459	443	0.9	1.7	13.818	B
		2	1	(1, 2, 3, 4)	1097			1052	1040	1.2	13.5	28.570	D
	Exit	1	1		789			789	784	0.0	0.0	0.000	A
3	Exit	1	1		1306			1306	1300	0.0	0.0	0.000	A
4	Entry	1	1	2	503	1190	0.423	499	499	0.5	0.9	5.454	A
			2	2, 3, 4	1010	1190	0.849	1008	1004	2.7	4.3	15.142	C
	Exit	1	1		1200			1200	1179	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	379	382	0.993	380	379	3.9	4.0	37.191	E
			2	4	351	382	0.919	352	345	2.8	2.9	30.699	D
		2	1	(2, 3, 4)	879			730	724	35.7	75.7	282.649	F
2	Entry	1	1	3, 4	598	623	0.959	599	599	3.6	3.4	20.117	C
			2	2, 4	467	623	0.749	468	464	1.7	2.0	14.571	B
		2	1	(1, 2, 3, 4)	1069			1064	1063	13.5	17.9	58.488	F
	Exit	1	1		784			784	775	0.0	0.0	0.000	A
3	Exit	1	1		1334			1334	1325	0.0	0.0	0.000	A
4	Entry	1	1	2	514	1190	0.432	510	503	0.9	1.1	5.389	A
			2	2, 3, 4	1014	1190	0.852	1008	1003	4.3	4.8	16.835	C
	Exit	1	1		1197			1197	1193	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	435	453	0.959	435	428	4.0	3.8	32.079	D
			2	4	391	453	0.863	395	382	2.9	2.7	26.539	D
		2	1	(2, 3, 4)	708			825	808	75.7	53.4	297.267	F
2	Entry	1	1	3, 4	519	657	0.791	523	547	3.4	2.1	16.913	C
			2	2, 4	380	657	0.578	381	407	2.0	1.2	12.463	B
		2	1	(1, 2, 3, 4)	875			899	947	17.9	2.6	28.340	D
	Exit	1	1		706			706	701	0.0	0.0	0.000	A
3	Exit	1	1		1087			1087	1120	0.0	0.0	0.000	A
4	Entry	1	1	2	382	1190	0.321	383	386	1.1	0.5	4.570	A
			2	2, 3, 4	850	1190	0.714	850	860	4.8	2.3	10.525	B
	Exit	1	1		1173			1173	1190	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	385	502	0.765	392	425	3.8	2.1	24.340	C
			2	4	325	502	0.646	332	367	2.7	1.5	20.312	C
		2	1	(2, 3, 4)	596			709	781	53.4	7.0	106.061	F
2	Entry	1	1	3, 4	449	715	0.628	452	451	2.1	1.2	11.569	B
			2	2, 4	295	715	0.413	297	304	1.2	0.7	8.994	A
		2	1	(1, 2, 3, 4)	741			744	750	2.6	0.2	2.660	A
	Exit	1	1		589			589	610	0.0	0.0	0.000	A
3	Exit	1	1		913			913	921	0.0	0.0	0.000	A
4	Entry	1	1	2	293	1190	0.246	294	296	0.5	0.3	3.992	A
			2	2, 3, 4	738	1190	0.620	740	738	2.3	1.5	7.627	A
	Exit	1	1		1004			1004	1052	0.0	0.0	0.000	A

Lanes: Queue Variation Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.41	0.00	0.53	4.00	4.00
			2	0.83	0.00	0.03	1.82	2.44
		2	1	0.22	0.00	0.00	0.00	1.22
2	Entry	1	1	1.28	0.00	0.39	3.09	3.58
			2	0.70	0.00	0.00	1.68	2.42
		2	1	0.13	0.00	0.00	0.00	0.03
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.30	0.00	0.00	0.68	0.96
			2	1.44	0.00	0.52	3.03	4.37
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:00 - 08:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	2.30	0.00	1.80	3.80	3.98
			2	1.73	0.00	1.04	3.65	3.96
		2	1	1.67	0.00	0.00	6.20	10.55
2	Entry	1	1	2.03	0.00	1.30	3.66	3.84
			2	0.94	0.00	0.19	1.92	4.00
		2	1	1.17	0.00	0.00	3.73	6.70
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.49	0.00	0.00	1.18	1.76
			2	2.67	0.00	1.29	5.70	8.37
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:15 - 08:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.93	2.16	3.52	5.00	5.00
			2	2.81	0.00	2.96	3.83	3.94
		2	1	35.74	-0.10	35.17	67.13	74.10
2	Entry	1	1	3.59	0.99	3.34	3.92	3.99
			2	1.68	0.00	0.90	3.57	3.87
		2	1	13.53	0.00	8.25	33.13	41.10
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.86	0.00	0.00	1.80	2.44
			2	4.35	0.00	2.36	10.24	13.10
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:30 - 08:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.96	2.61	3.49	3.94	5.00
			2	2.94	0.00	3.10	3.89	3.99
		2	1	75.70	18.70	77.50	113.07	123.10
2	Entry	1	1	3.36	0.09	3.29	3.94	5.00
			2	1.96	0.00	1.41	3.70	3.93
		2	1	17.89	0.00	9.75	46.80	58.40
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	1.05	0.00	0.00	2.74	3.85
			2	4.76	0.00	3.08	10.03	12.03
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

08:45 - 09:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.81	1.23	3.47	3.97	5.00
			2	2.66	0.00	2.71	3.83	3.95
		2	1	53.38	0.00	55.00	97.40	116.20
2	Entry	1	1	2.15	0.00	1.52	3.84	5.00
			2	1.21	0.00	0.26	3.16	3.65
		2	1	2.64	0.00	0.00	9.73	13.37
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.53	0.00	0.00	1.51	1.94
			2	2.35	0.00	1.37	5.04	6.53
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

09:00 - 09:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	2.09	0.00	1.36	3.79	3.95
			2	1.49	0.00	0.57	3.42	3.73
		2	1	6.99	0.00	0.00	26.20	36.70
2	Entry	1	1	1.22	0.00	0.46	2.64	3.16
			2	0.70	0.00	0.00	1.75	3.00
		2	1	0.16	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.29	0.00	0.00	0.77	1.26
			2	1.54	0.00	0.37	3.60	5.22
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	158	40	760	509	0.311	157	150	0.0	0.9	15.011	C
				3	2	0.54	353	254	0.009	2	3	0.0	0.0	14.690	B
				4	178	45	760	508	0.350	179	177	0.0	0.5	11.438	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	260	65	760	508	0.513	263	258	0.0	0.8	11.308	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	159	40	-	-	-	158	153	0.0	0.1	1.141	A
				3	2	0.54	-	-	-	2	3	0.0	0.0	0.418	A
				4	439	110	-	-	-	438	441	0.0	0.1	0.656	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	282	70	1079	751	0.375	281	278	0.0	0.9	9.295	A
				4	169	42	1079	754	0.225	170	173	0.0	0.4	6.537	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	296	74	1079	752	0.394	296	285	0.0	0.7	6.639	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	281	70	-	-	-	282	281	0.0	0.1	0.742	A
				4	465	116	-	-	-	465	462	0.0	0.1	0.427	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	291	73	1190	1190	0.244	291	291	0.0	0.3	3.993	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	113	28	1190	1190	0.095	114	117	0.0	0.1	3.907	A
				3	609	152	1190	1190	0.512	609	609	0.0	1.4	7.971	A
				4	0.78	0.20	233	233	0.003	0.78	1	0.0	0.0	9.775	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	175	44	760	453	0.385	173	178	0.9	1.2	21.973	C
				3	4	1	391	238	0.018	5	4	0.0	0.0	22.713	C
				4	212	53	760	455	0.465	213	202	0.5	1.1	18.015	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	312	78	760	454	0.687	312	314	0.8	1.7	17.566	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	176	44	-	-	-	175	179	0.1	0.5	7.851	A
				3	4	1	-	-	-	4	4	0.0	0.0	11.125	B
				4	523	131	-	-	-	524	522	0.1	1.1	6.589	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	337	84	1079	686	0.491	336	336	0.9	1.4	14.100	B
				4	180	45	1079	685	0.262	179	184	0.4	0.7	10.015	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	360	90	1079	686	0.525	360	365	0.7	0.9	9.509	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	337	84	-	-	-	337	337	0.1	0.5	4.395	A
				4	541	135	-	-	-	540	551	0.1	0.7	3.306	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	382	95	1190	1190	0.321	381	379	0.3	0.5	4.432	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	112	28	1190	1190	0.094	111	114	0.1	0.2	4.450	A
				3	744	186	1190	1190	0.625	735	737	1.4	2.4	10.419	B
				4	0.78	0.20	241	241	0.003	0.87	0.93	0.0	0.0	10.706	B

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	186	47	760	386	0.482	186	186	1.2	2.0	34.288	D
				3	3	0.74	408	214	0.014	3	4	0.0	0.0	35.337	E
				4	201	50	760	387	0.518	200	194	1.1	1.9	32.964	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	351	88	760	386	0.910	348	345	1.7	2.8	28.094	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	219	55	-	-	-	186	189	0.5	9.2	99.074	F
				3	4	1	-	-	-	3	4	0.0	0.2	94.338	F
				4	645	161	-	-	-	552	547	1.1	26.3	95.646	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	405	101	1079	626	0.647	400	393	1.4	2.6	19.541	C
				4	192	48	1079	625	0.306	192	195	0.7	1.0	16.400	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	455	114	1079	625	0.728	459	443	0.9	1.7	13.818	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	420	105	-	-	-	405	398	0.5	5.3	29.777	D
				4	677	169	-	-	-	647	643	0.7	8.3	27.826	D
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	503	126	1190	1190	0.423	499	499	0.5	0.9	5.454	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	104	26	1190	1190	0.087	104	99	0.2	0.1	5.147	A
				3	904	226	1190	1190	0.760	903	904	2.4	4.2	16.220	C
				4	2	0.43	310	310	0.006	2	1	0.0	0.0	14.886	B

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	183	46	760	384	0.477	183	183	2.0	1.9	37.918	E
				3	3	0.85	408	208	0.016	4	4	0.0	0.0	34.713	D
				4	193	48	760	382	0.505	192	192	1.9	2.0	36.545	E
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	351	88	760	381	0.920	352	345	2.8	2.9	30.699	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	224	56	-	-	-	183	183	9.2	19.7	287.906	F
				3	4	0.96	-	-	-	3	4	0.2	0.4	280.947	F
				4	652	163	-	-	-	543	538	26.3	55.7	280.853	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	413	103	1079	624	0.662	414	407	2.6	2.4	20.967	C
				4	185	46	1079	627	0.295	185	192	1.0	1.0	18.307	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	467	117	1079	623	0.749	468	464	1.7	2.0	14.571	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	414	104	-	-	-	413	407	5.3	7.0	59.744	F
				4	655	164	-	-	-	651	656	8.3	10.9	57.710	F
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	514	128	1190	1190	0.432	510	503	0.9	1.1	5.389	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	90	23	1190	1190	0.076	90	89	0.1	0.2	5.652	A
				3	923	231	1190	1190	0.776	917	914	4.2	4.6	17.915	C
				4	0.78	0.20	207	207	0.004	0.87	0.96	0.0	0.0	18.946	C

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	208	52	760	452	0.461	211	207	1.9	1.7	32.950	D
				3	3	0.74	408	242	0.012	3	3	0.0	0.0	31.273	D
				4	223	56	760	453	0.492	222	218	2.0	2.1	31.269	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	391	98	760	454	0.862	395	382	2.9	2.7	26.539	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	180	45	-	-	-	208	206	19.7	14.0	303.668	F
				3	3	0.87	-	-	-	3	4	0.4	0.3	265.000	F
				4	525	131	-	-	-	614	599	55.7	39.1	295.255	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	343	86	1079	657	0.523	348	365	2.4	1.5	18.058	C
				4	176	44	1079	658	0.268	175	182	1.0	0.7	14.616	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	380	95	1079	658	0.577	381	407	2.0	1.2	12.463	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	332	83	-	-	-	343	362	7.0	1.0	29.317	D
				4	543	136	-	-	-	556	585	10.9	1.7	27.736	D
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	382	96	1190	1190	0.321	383	386	1.1	0.5	4.570	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	112	28	1190	1190	0.094	113	108	0.2	0.1	4.550	A
				3	738	184	1190	1190	0.620	736	752	4.6	2.3	11.381	B
				4	0.70	0.17	198	198	0.004	0.70	0.81	0.0	0.0	12.549	B

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	180	45	760	505	0.357	186	205	1.7	1.0	25.436	D
				3	4	0.91	441	292	0.013	3	4	0.0	0.0	27.236	D
				4	200	50	760	504	0.397	202	217	2.1	1.0	23.248	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	325	81	760	503	0.645	332	367	2.7	1.5	20.312	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	153	38	-	-	-	180	202	14.0	1.9	106.840	F
				3	3	0.74	-	-	-	4	4	0.3	0.0	105.502	F
				4	440	110	-	-	-	525	575	39.1	5.0	105.785	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	278	70	1079	716	0.389	280	288	1.5	0.8	12.925	B
				4	171	43	1079	715	0.239	172	163	0.7	0.4	9.187	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	295	74	1079	716	0.413	297	304	1.2	0.7	8.994	A

		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	277	69	-	-	-	278	286	1.0	0.1	3.212	A
				4	464	116	-	-	-	466	464	1.7	0.1	2.321	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	293	73	1190	1190	0.246	294	296	0.5	0.3	3.992	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	109	27	1190	1190	0.092	110	109	0.1	0.1	4.166	A
				3	628	157	1190	1190	0.527	630	628	2.3	1.5	8.236	A
				4	0.96	0.24	241	241	0.004	0.96	0.93	0.0	0.0	5.299	A

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.1.0.2307
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Filename: Junction 7 - Wrotham Road_A2 Linked Rbt - Lane Sim - PM.j11
Path: C:\Users\mattjohnson\Ridge and Partners LLP\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Modelling\Arcady\Tech Note 2\2030 RF Do Minimum
Report generation date: 02/09/2026 16:13:54

»D1 - 2030 | RF Do Minimum | PM
»D2 - 2030 | RF Do Minimum + Dev | PM
»D3 - 2030 | RF Do Minimum + Dev + Site B | PM

Summary of junction performance

	PM			
	Set ID	Queue (PCU)	Delay (s)	RFC
	[Lane Simulation] - 2030 - RF Do Minimum			
Arm 1	D1	37.3	154.01	
Arm 2		4.0	13.85	
Arm 4		3.4	7.47	
	[Lane Simulation] - 2030 - RF Do Minimum + Dev			
Arm 1	D2	55.7	224.53	
Arm 2		4.3	16.17	
Arm 4		3.5	8.00	
	[Lane Simulation] - 2030 - RF Do Minimum + Dev + Site B			
Arm 1	D3	60.1	240.81	
Arm 2		5.8	17.75	
Arm 4		4.5	8.56	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

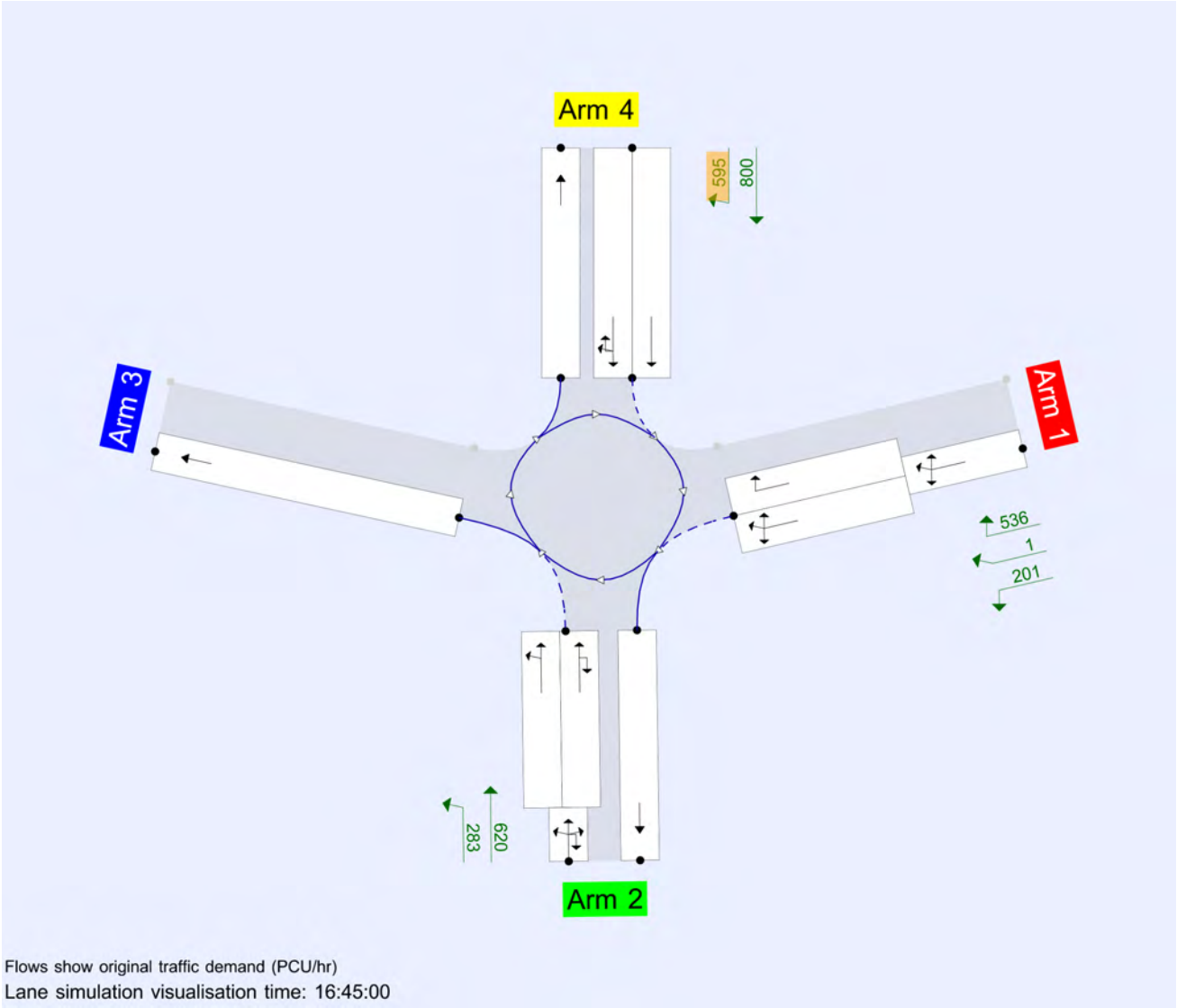
File summary

File Description

Title	
Location	Wrotham Road/A2 Southern Roundabout
Site number	7
Date	09/04/2026
Version	
Status	(new file)
Identifier	MJ
Client	Richborough
Jobnumber	T25512
Enumerator	AzureAD\MatthewJohnson
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	PCU	PCU	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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75	✓					0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	Do not calculate	-1	3	1	60	✓			2116432520	306	10.63

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2030	RF Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓
D2	2030	RF Do Minimum + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D3	2030	RF Do Minimum + Dev + Site B	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

D1 - 2030 | RF Do Minimum | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	46.21	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	46.21	E

Arms

Arms

Arm	Name	Description	No give-way line
1	A2 (E) Off-Slip		
2	Wrotham Road S		
3	A2 (W) On-Slip		
4	Wrotham Road N - Internal Link		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	3.70	8.50	10.2	19.1	59.9	60.0	✓	
2	4.90	9.20	22.2	24.1	59.9	49.0		
3								✓
4	7.60	8.10	6.9	20.8	59.9	36.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.499	1520
2	0.622	2157
3		
4	0.671	2380

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

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1	Evenly split	10.00
2	Evenly split	10.00
3	Evenly split	10.00
4	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1	Entry	1	1	2, 3, 4	✓	4.00			0	99999	
			2	4	✓	4.00			0	99999	
		2	1	(2, 3, 4)		Infinity					
2	Entry	1	1	3, 4	✓	4.00			0	99999	
			2	2, 4	✓	4.00			0	99999	
		2	1	(1, 2, 3, 4)		Infinity					
	Exit	1	1			Infinity					
3	Exit	1	1			Infinity					
4	Entry	1	1	2		Infinity			0	99999	
			2	2, 3, 4		Infinity			0	99999	
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1	Entry	1	1	0.249	760
			2	0.249	760
2	Entry	1	1	0.311	1079
			2	0.311	1079
4	Entry	1	1	0.335	1190
			2	0.335	1190

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			1	2	3	4
1	1	1		✓	✓	✓
		2				✓
	2	1		✓	✓	✓
2	1	1			✓	✓
		2		✓		✓
	2	1	✓	✓	✓	✓
4	1	1		✓		
		2		✓	✓	✓

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2030	RF Do Minimum	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	723	100.000
2		ONE HOUR	✓	841	100.000
3					
4		ONE HOUR	✓	1296	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	186	1	536
	2	0	2	241	598
	3	0	0	0	0
	4	0	701	595	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	10	10	10
	2	0	10	10	10
	3	0	0	0	0
	4	0	10	10	10

Cyclist %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	154.01	37.3	84.8	F	660	991
2	13.85	4.0	11.9	B	774	1161
3						
4	7.47	3.4	9.8	A	1191	1787

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	537	134	980	537	534	0	0.0	2.3	11.935	B
2	634	159	852	632	631	665	0.0	1.3	6.288	A
3			0			636				
4	979	245	1	979	972	846	0.0	1.6	5.174	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	646	162	1182	651	656	0	2.3	4.1	22.179	C
2	762	190	1033	758	764	800	1.3	2.0	8.360	A
3			0			765				
4	1180	295	2	1180	1175	1025	1.6	2.1	6.054	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	800	200	1423	734	729	0	4.1	22.7	72.819	F
2	922	230	1199	916	923	958	2.0	4.0	12.909	B
3			0			921				
4	1425	356	2	1422	1427	1192	2.1	3.3	7.462	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	789	197	1420	760	743	0	22.7	37.3	154.011	F
2	928	232	1209	930	933	971	4.0	3.4	13.853	B
3			0			920				
4	1424	356	2	1418	1432	1217	3.3	3.4	7.471	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	647	162	1158	728	762	0	37.3	9.9	100.024	F
2	757	189	1075	755	766	810	3.4	1.9	9.894	A
3			0			755				
4	1157	289	1	1157	1173	1074	3.4	2.0	6.121	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	543	136	982	545	583	0	9.9	2.0	19.692	C
2	643	161	859	643	645	668	1.9	1.3	7.038	A
3			0			635				
4	982	246	2	980	985	866	2.0	1.7	5.284	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	2.26	0.00	1.04	5.28	7.27
2	1.34	0.00	0.29	3.28	4.46
3					
4	1.56	0.00	0.46	3.76	5.09

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	4.10	0.00	2.21	9.47	12.39
2	2.00	0.00	0.97	4.40	6.23
3					
4	2.11	0.00	0.98	4.63	5.81

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	22.73	0.81	19.70	45.70	57.27
2	3.99	0.00	2.26	8.43	11.94
3					
4	3.31	0.00	2.12	6.85	8.12

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	37.28	2.33	33.80	72.60	84.80
2	3.41	0.00	2.02	7.63	10.45
3					
4	3.39	0.00	1.95	7.70	9.84

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	9.93	0.00	3.79	28.47	35.40
2	1.92	0.00	0.83	4.45	6.12
3					
4	2.00	0.00	0.94	4.30	6.46

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	2.00	0.00	0.76	4.46	6.14
2	1.32	0.00	0.28	3.03	3.96
3					
4	1.66	0.00	0.81	3.40	4.34

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	303	516	0.586	303	302	0.0	1.2	11.868	B
			2	4	235	516	0.455	234	232	0.0	0.9	10.211	B
		2	1	(2, 3, 4)	537			537	542	0.0	0.2	0.774	A
2	Entry	1	1	3, 4	369	814	0.454	368	370	0.0	0.8	6.584	A
			2	2, 4	265	814	0.325	264	261	0.0	0.5	5.513	A
		2	1	(1, 2, 3, 4)	634			634	636	0.0	0.0	0.145	A
	Exit	1	1		665			665	662	0.0	0.0	0.000	A
3	Exit	1	1		636			636	627	0.0	0.0	0.000	A
4	Entry	1	1	2	342	1189	0.288	342	340	0.0	0.5	4.060	A
			2	2, 3, 4	636	1189	0.535	637	632	0.0	1.1	5.771	A
	Exit	1	1		846			846	847	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	353	466	0.759	354	358	1.2	1.9	18.696	C
			2	4	295	466	0.633	297	298	0.9	1.3	15.865	C
		2	1	(2, 3, 4)	646			648	660	0.2	0.9	4.721	A
2	Entry	1	1	3, 4	435	757	0.575	433	437	0.8	1.2	8.453	A
			2	2, 4	326	757	0.430	325	327	0.5	0.7	7.072	A
		2	1	(1, 2, 3, 4)	762			761	766	0.0	0.1	0.493	A
	Exit	1	1		800			800	805	0.0	0.0	0.000	A
3	Exit	1	1		765			765	758	0.0	0.0	0.000	A
4	Entry	1	1	2	429	1189	0.361	431	430	0.5	0.5	4.599	A
			2	2, 3, 4	752	1189	0.632	750	744	1.1	1.6	6.892	A
	Exit	1	1		1025			1025	1031	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	387	405	0.955	385	388	1.9	3.7	29.502	D
			2	4	351	405	0.865	349	341	1.3	2.7	24.770	C
		2	1	(2, 3, 4)	800			738	742	0.9	16.4	44.977	E
2	Entry	1	1	3, 4	516	706	0.732	515	515	1.2	1.9	11.507	B
			2	2, 4	403	706	0.572	401	408	0.7	1.3	9.526	A
		2	1	(1, 2, 3, 4)	922			920	928	0.1	0.8	2.260	A
	Exit	1	1		958			958	959	0.0	0.0	0.000	A
3	Exit	1	1		921			921	925	0.0	0.0	0.000	A
4	Entry	1	1	2	547	1189	0.460	546	550	0.5	0.9	5.384	A
			2	2, 3, 4	879	1189	0.739	875	876	1.6	2.4	8.764	A
	Exit	1	1		1192			1192	1195	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	403	406	0.992	405	393	3.7	3.7	33.532	D
			2	4	355	406	0.874	355	350	2.7	2.9	28.395	D
		2	1	(2, 3, 4)	789			758	744	16.4	30.6	123.210	F
2	Entry	1	1	3, 4	514	703	0.732	515	519	1.9	1.7	12.013	B
			2	2, 4	414	703	0.589	415	415	1.3	1.0	9.806	A
		2	1	(1, 2, 3, 4)	928			928	932	0.8	0.7	2.827	A
	Exit	1	1		971			971	969	0.0	0.0	0.000	A
3	Exit	1	1		920			920	926	0.0	0.0	0.000	A
4	Entry	1	1	2	553	1189	0.465	552	557	0.9	1.0	5.425	A
			2	2, 3, 4	870	1189	0.732	866	875	2.4	2.4	8.775	A
	Exit	1	1		1217			1217	1213	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	390	472	0.827	395	411	3.7	2.3	26.218	D
			2	4	331	472	0.702	333	351	2.9	1.8	22.535	C
		2	1	(2, 3, 4)	647			721	752	30.6	5.8	76.582	F
2	Entry	1	1	3, 4	435	744	0.584	434	438	1.7	1.1	9.584	A
			2	2, 4	322	744	0.432	321	328	1.0	0.7	7.993	A
		2	1	(1, 2, 3, 4)	757			757	763	0.7	0.1	1.012	A
	Exit	1	1		810			810	832	0.0	0.0	0.000	A
3	Exit	1	1		755			755	762	0.0	0.0	0.000	A
4	Entry	1	1	2	419	1190	0.353	421	430	1.0	0.5	4.680	A
			2	2, 3, 4	737	1190	0.620	736	743	2.4	1.5	6.955	A
	Exit	1	1		1074			1074	1107	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	304	515	0.589	304	325	2.3	1.1	15.130	C
			2	4	241	515	0.467	242	257	1.8	0.7	13.173	B
		2	1	(2, 3, 4)	543			544	574	5.8	0.1	5.903	A
2	Entry	1	1	3, 4	374	811	0.461	376	375	1.1	0.7	7.341	A
			2	2, 4	269	811	0.331	268	270	0.7	0.5	6.216	A
		2	1	(1, 2, 3, 4)	643			643	643	0.1	0.1	0.176	A
	Exit	1	1		668			668	684	0.0	0.0	0.000	A
3	Exit	1	1		635			635	638	0.0	0.0	0.000	A
4	Entry	1	1	2	346	1189	0.291	345	346	0.5	0.5	4.155	A
			2	2, 3, 4	636	1189	0.535	635	638	1.5	1.2	5.898	A
	Exit	1	1		866			866	891	0.0	0.0	0.000	A

Lanes: Queue Variation Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.19	0.00	0.25	3.01	3.56
			2	0.89	0.00	0.03	1.97	2.91
		2	1	0.17	0.00	0.00	0.00	0.00
2	Entry	1	1	0.81	0.00	0.00	1.89	2.69
			2	0.49	0.00	0.00	1.39	1.87
		2	1	0.04	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.45	0.00	0.00	1.07	1.84
			2	1.10	0.00	0.11	2.59	3.67
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:00 - 17:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.90	0.00	1.16	3.61	3.84
			2	1.32	0.00	0.50	2.98	3.54
		2	1	0.88	0.00	0.00	2.63	5.18
2	Entry	1	1	1.17	0.00	0.30	2.72	3.37
			2	0.74	0.00	0.00	1.74	2.26
		2	1	0.09	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.50	0.00	0.00	1.31	1.88
			2	1.61	0.00	0.70	3.40	4.71
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:15 - 17:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.66	0.00	3.43	5.00	5.00
			2	2.69	0.00	2.65	3.83	3.95
		2	1	16.38	0.00	12.83	38.80	50.70
2	Entry	1	1	1.90	0.00	1.12	3.62	3.85
			2	1.28	0.00	0.54	2.76	3.37
		2	1	0.81	0.00	0.00	2.70	5.85
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.88	0.00	0.00	1.89	2.75
			2	2.43	0.00	1.38	4.93	6.61
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:30 - 17:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.75	1.21	3.44	3.96	5.00
			2	2.89	0.00	3.05	3.92	5.00
		2	1	30.64	0.00	26.40	65.27	75.10
2	Entry	1	1	1.70	0.00	1.00	3.40	3.74
			2	1.04	0.00	0.27	2.18	2.98
		2	1	0.67	0.00	0.00	2.30	4.28
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.97	0.00	0.00	2.44	3.47
			2	2.42	0.00	1.27	5.46	6.84
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:45 - 18:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	2.32	0.00	1.98	3.79	3.94
			2	1.81	0.00	1.11	3.64	3.90
		2	1	5.81	0.00	0.00	21.68	27.40
2	Entry	1	1	1.10	0.00	0.20	2.62	3.11
			2	0.72	0.00	0.00	1.83	2.54
		2	1	0.10	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.48	0.00	0.00	1.21	1.80
			2	1.52	0.00	0.49	3.56	4.95
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

18:00 - 18:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.14	0.00	0.22	2.86	3.49
			2	0.74	0.00	0.00	1.82	2.67
		2	1	0.12	0.00	0.00	0.00	0.00
2	Entry	1	1	0.72	0.00	0.00	1.89	2.59
			2	0.55	0.00	0.00	1.37	1.86
		2	1	0.06	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.48	0.00	0.00	1.27	1.76
			2	1.18	0.00	0.32	2.59	3.19
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	138	35	760	516	0.268	138	135	0.0	0.6	13.947	B
				3	0.67	0.17	124	93	0.007	0.63	0.84	0.0	0.0	16.007	C
				4	163	41	760	516	0.317	164	166	0.0	0.6	10.132	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	235	59	760	517	0.454	234	232	0.0	0.9	10.211	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	138	35	-	-	-	138	138	0.0	0.1	1.168	A
				3	0.67	0.17	-	-	-	0.67	0.85	0.0	0.0	0.542	A
				4	398	99	-	-	-	398	403	0.0	0.1	0.639	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	183	46	1079	813	0.225	182	180	0.0	0.5	7.624	A
				4	186	47	1079	815	0.229	186	190	0.0	0.3	5.599	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.37	310	244	0.006	1	2	0.0	0.0	6.104	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	263	66	1079	814	0.324	262	259	0.0	0.5	5.510	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.37	-	-	-	1	2	0.0	0.0	0.110	A
				3	183	46	-	-	-	183	181	0.0	0.0	0.225	A
				4	450	112	-	-	-	449	453	0.0	0.0	0.113	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	342	86	1190	1189	0.288	342	340	0.0	0.5	4.060	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	183	46	1190	1189	0.154	183	185	0.0	0.2	4.076	A
				3	453	113	1190	1189	0.381	453	447	0.0	0.9	6.471	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	166	42	760	465	0.358	165	168	0.6	1.0	20.802	C
				3	0.55	0.14	119	75	0.007	0.55	0.72	0.0	0.0	15.972	C
				4	186	47	760	466	0.399	188	189	0.6	0.9	16.823	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	295	74	760	465	0.634	297	298	0.9	1.3	15.865	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	166	42	-	-	-	166	169	0.1	0.3	5.715	A
				3	0.55	0.14	-	-	-	0.55	0.71	0.0	0.0	5.991	A
				4	480	120	-	-	-	481	490	0.1	0.6	4.373	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	218	55	1079	758	0.288	217	218	0.5	0.6	9.829	A
				4	217	54	1079	757	0.287	217	219	0.3	0.5	7.081	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.45	381	272	0.007	2	2	0.0	0.0	7.884	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	324	81	1079	758	0.427	323	325	0.5	0.7	7.068	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.45	-	-	-	2	2	0.0	0.0	0.714	A
				3	218	55	-	-	-	218	219	0.0	0.0	0.751	A
				4	541	135	-	-	-	541	546	0.0	0.0	0.389	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	429	107	1190	1189	0.361	431	430	0.5	0.5	4.599	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	202	51	1190	1189	0.170	202	205	0.2	0.3	4.541	A
				3	549	137	1190	1189	0.462	547	539	0.9	1.3	7.779	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	190	47	760	404	0.470	188	188	1.0	1.9	30.697	D
				3	1	0.28	159	88	0.013	1	1	0.0	0.0	24.704	C
				4	196	49	760	405	0.485	196	199	0.9	1.8	28.397	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	351	88	760	404	0.867	349	341	1.3	2.7	24.770	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	205	51	-	-	-	190	192	0.3	4.3	47.667	E
				3	1	0.36	-	-	-	1	1	0.0	0.0	46.666	E
				4	594	148	-	-	-	547	549	0.6	12.0	44.032	E
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	266	66	1079	705	0.377	266	266	0.6	1.0	13.021	B
				4	251	63	1079	705	0.356	248	249	0.5	0.9	9.901	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.42	412	273	0.006	2	2	0.0	0.0	9.512	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	402	100	1079	706	0.569	399	406	0.7	1.3	9.526	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.41	-	-	-	2	2	0.0	0.0	2.026	A
				3	267	67	-	-	-	266	267	0.0	0.3	2.752	A
				4	653	163	-	-	-	652	659	0.0	0.5	2.062	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	547	137	1190	1189	0.460	546	550	0.5	0.9	5.384	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	223	56	1190	1189	0.187	222	218	0.3	0.4	5.377	A
				3	656	164	1190	1189	0.552	653	658	1.3	2.0	9.890	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	195	49	760	406	0.481	197	191	1.9	1.8	34.250	D
				3	1	0.28	179	96	0.012	1	1	0.0	0.0	35.492	E
				4	207	52	760	406	0.509	207	201	1.8	1.9	32.839	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	355	89	760	406	0.875	355	350	2.7	2.9	28.395	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	201	50	-	-	-	195	191	4.3	8.0	126.990	F
				3	1	0.30	-	-	-	1	1	0.0	0.1	129.617	F
				4	587	147	-	-	-	562	552	12.0	22.6	121.889	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	273	68	1079	702	0.389	273	269	1.0	1.0	13.508	B
				4	241	60	1079	703	0.343	242	249	0.9	0.7	10.392	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.52	419	271	0.008	2	2	0.0	0.0	10.408	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	412	103	1079	702	0.587	413	412	1.3	1.0	9.803	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.52	-	-	-	2	2	0.0	0.0	3.332	A
				3	273	68	-	-	-	273	270	0.3	0.2	3.290	A
				4	653	163	-	-	-	653	660	0.5	0.4	2.637	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	553	138	1190	1189	0.465	552	557	0.9	1.0	5.425	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	221	55	1190	1189	0.186	220	219	0.4	0.4	5.428	A
				3	650	162	1190	1189	0.546	646	655	2.0	2.0	9.889	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	185	46	760	472	0.391	187	197	1.8	1.1	27.349	D
				3	0.98	0.25	204	123	0.008	1	1	0.0	0.0	27.001	D
				4	204	51	760	471	0.434	207	212	1.9	1.2	25.168	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	331	83	760	471	0.703	333	351	2.9	1.8	22.535	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	166	42	-	-	-	185	194	8.0	1.6	77.700	F
				3	1	0.26	-	-	-	0.98	1	0.1	0.0	79.166	F
				4	480	120	-	-	-	535	557	22.6	4.2	76.188	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	219	55	1079	745	0.295	219	222	1.0	0.6	11.095	B
				4	216	54	1079	743	0.290	215	217	0.7	0.5	8.045	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.28	293	199	0.006	1	1	0.0	0.0	7.509	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	320	80	1079	743	0.431	320	327	1.0	0.7	7.995	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.28	-	-	-	1	1	0.0	0.0	1.364	A
				3	220	55	-	-	-	219	220	0.2	0.0	1.244	A
				4	536	134	-	-	-	536	541	0.4	0.1	0.916	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	419	105	1190	1190	0.353	421	430	1.0	0.5	4.680	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	201	50	1190	1190	0.169	201	204	0.4	0.3	4.571	A
				3	536	134	1190	1190	0.451	535	539	2.0	1.2	7.861	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	136	34	760	515	0.265	136	151	1.1	0.6	17.072	C
				3	0.78	0.20	129	86	0.009	0.82	0.77	0.0	0.0	20.001	C
				4	166	42	760	515	0.323	167	174	1.2	0.5	13.420	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	241	60	760	515	0.467	242	257	1.8	0.7	13.173	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	136	34	-	-	-	136	149	1.6	0.0	6.529	A
				3	0.78	0.20	-	-	-	0.78	0.78	0.0	0.0	4.981	A
				4	406	102	-	-	-	407	424	4.2	0.1	5.685	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	184	46	1079	813	0.226	184	184	0.6	0.4	8.397	A
				4	190	48	1079	811	0.235	192	190	0.5	0.3	6.318	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.47	324	240	0.008	2	1	0.0	0.0	6.824	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	267	67	1079	811	0.329	266	269	0.7	0.5	6.212	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.47	-	-	-	2	1	0.0	0.0	0.000	A
				3	184	46	-	-	-	184	184	0.0	0.0	0.279	A
				4	458	114	-	-	-	457	458	0.1	0.0	0.135	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	346	86	1190	1189	0.291	345	346	0.5	0.5	4.155	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	185	46	1190	1189	0.155	185	186	0.3	0.2	4.096	A
				3	452	113	1190	1189	0.380	450	453	1.2	1.0	6.638	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

D2 - 2030 | RF Do Minimum + Dev | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	63.33	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	63.33	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2030	RF Do Minimum + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	732	100.000
2		ONE HOUR	✓	890	100.000
3					
4		ONE HOUR	✓	1374	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	195	1	536
	2	0	2	275	613
	3	0	0	0	0
	4	0	779	595	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Cyclist %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	224.53	55.7	108.3	F	672	1008
2	16.17	4.3	14.0	C	819	1228
3						
4	8.00	3.5	10.3	A	1259	1888

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	554	139	1029	554	546	0	0.0	2.3	12.709	B
2	679	170	854	679	671	730	0.0	1.5	6.612	A
3			0			654				
4	1028	257	2	1028	1028	876	0.0	1.7	5.254	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	658	164	1240	660	657	0	2.3	5.0	24.869	C
2	804	201	1023	804	802	878	1.5	2.1	9.017	A
3			0			784				
4	1238	309	2	1238	1239	1040	1.7	2.1	6.180	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	801	200	1509	710	707	0	5.0	29.9	95.594	F
2	985	246	1175	987	984	1044	2.1	4.3	14.896	B
3			0			961				
4	1509	377	2	1507	1511	1199	2.1	3.5	7.970	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	807	202	1510	717	711	0	29.9	55.7	224.533	F
2	982	245	1181	985	985	1046	4.3	4.2	16.168	C
3			0			957				
4	1511	378	2	1507	1516	1206	3.5	3.5	7.999	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	661	165	1231	781	783	0	55.7	26.6	193.361	F
2	796	199	1102	794	814	910	4.2	2.4	10.867	B
3			0			774				
4	1232	308	1	1229	1244	1121	3.5	2.2	6.243	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	548	137	1036	581	649	0	26.6	3.0	49.756	E
2	668	167	882	668	683	735	2.4	1.5	7.916	A
3			0			661				
4	1034	259	1	1035	1045	888	2.2	1.6	5.317	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	2.29	0.00	1.26	4.76	6.39
2	1.51	0.00	0.50	3.15	4.43
3					
4	1.65	0.00	0.67	3.68	4.74

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	4.96	0.00	2.88	10.66	14.29
2	2.15	0.00	1.07	4.68	5.84
3					
4	2.12	0.00	1.01	4.78	6.29

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	29.91	2.99	26.39	57.33	65.58
2	4.29	0.00	2.28	9.45	12.16
3					
4	3.48	0.00	2.24	6.94	8.83

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	55.71	13.97	51.94	94.65	108.26
2	4.16	0.00	2.22	8.94	14.04
3					
4	3.52	0.00	2.02	7.41	10.31

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	26.56	0.06	17.08	68.43	81.15
2	2.40	0.00	1.09	4.94	8.12
3					
4	2.18	0.00	1.03	4.80	5.96

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	3.03	0.00	1.21	5.42	7.92
2	1.52	0.00	0.53	3.19	4.72
3					
4	1.58	0.00	0.67	3.36	4.51

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	312	504	0.620	312	309	0.0	1.3	12.711	B
			2	4	242	504	0.481	242	237	0.0	0.8	10.713	B
		2	1	(2, 3, 4)	554			554	555	0.0	0.2	0.844	A
2	Entry	1	1	3, 4	399	813	0.491	399	397	0.0	0.9	6.796	A
			2	2, 4	280	813	0.344	279	274	0.0	0.5	5.734	A
		2	1	(1, 2, 3, 4)	679			679	677	0.0	0.1	0.244	A
	Exit	1	1		730			730	730	0.0	0.0	0.000	A
3	Exit	1	1		654			654	650	0.0	0.0	0.000	A
4	Entry	1	1	2	375	1189	0.315	375	377	0.0	0.5	4.175	A
			2	2, 3, 4	653	1189	0.549	653	651	0.0	1.2	5.878	A
	Exit	1	1		876			876	866	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	360	451	0.798	360	361	1.3	2.1	19.901	C
			2	4	300	451	0.665	300	296	0.8	1.5	16.856	C
		2	1	(2, 3, 4)	658			660	663	0.2	1.3	6.267	A
2	Entry	1	1	3, 4	465	761	0.611	464	465	0.9	1.3	8.966	A
			2	2, 4	340	761	0.448	340	338	0.5	0.7	7.354	A
		2	1	(1, 2, 3, 4)	804			805	805	0.1	0.1	0.728	A
	Exit	1	1		878			878	878	0.0	0.0	0.000	A
3	Exit	1	1		784			784	784	0.0	0.0	0.000	A
4	Entry	1	1	2	471	1189	0.396	472	474	0.5	0.6	4.727	A
			2	2, 3, 4	767	1189	0.645	766	765	1.2	1.5	7.081	A
	Exit	1	1		1040			1040	1036	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	380	384	0.991	380	377	2.1	3.8	32.343	D
			2	4	331	384	0.863	330	329	1.5	2.9	27.612	D
		2	1	(2, 3, 4)	801			712	719	1.3	23.2	64.901	F
2	Entry	1	1	3, 4	554	713	0.777	555	551	1.3	1.9	12.257	B
			2	2, 4	431	713	0.604	431	433	0.7	1.2	9.916	A
		2	1	(1, 2, 3, 4)	985			985	988	0.1	1.2	3.649	A
	Exit	1	1		1044			1044	1043	0.0	0.0	0.000	A
3	Exit	1	1		961			961	959	0.0	0.0	0.000	A
4	Entry	1	1	2	611	1189	0.514	609	611	0.6	1.1	5.869	A
			2	2, 3, 4	898	1189	0.755	898	900	1.5	2.4	9.398	A
	Exit	1	1		1199			1199	1199	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	382	384	0.995	381	377	3.8	4.0	36.823	E
			2	4	337	384	0.877	336	334	2.9	3.0	30.833	D
		2	1	(2, 3, 4)	807			718	713	23.2	48.7	191.182	F
2	Entry	1	1	3, 4	551	711	0.774	551	552	1.9	1.9	12.570	B
			2	2, 4	433	711	0.608	433	433	1.2	1.2	10.080	B
		2	1	(1, 2, 3, 4)	982			983	985	1.2	1.1	4.691	A
	Exit	1	1		1046			1046	1050	0.0	0.0	0.000	A
3	Exit	1	1		957			957	964	0.0	0.0	0.000	A
4	Entry	1	1	2	610	1189	0.513	609	613	1.1	1.1	5.897	A
			2	2, 3, 4	901	1189	0.757	898	902	2.4	2.5	9.427	A
	Exit	1	1		1206			1206	1198	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	415	453	0.914	418	418	4.0	3.2	30.785	D
			2	4	362	453	0.797	363	365	3.0	2.4	25.621	D
		2	1	(2, 3, 4)	661			776	778	48.7	21.0	165.998	F
2	Entry	1	1	3, 4	456	736	0.620	456	467	1.9	1.3	10.268	B
			2	2, 4	338	736	0.459	338	347	1.2	0.8	8.365	A
		2	1	(1, 2, 3, 4)	796			794	810	1.1	0.3	1.442	A
	Exit	1	1		910			910	916	0.0	0.0	0.000	A
3	Exit	1	1		774			774	793	0.0	0.0	0.000	A
4	Entry	1	1	2	468	1189	0.394	468	476	1.1	0.6	4.852	A
			2	2, 3, 4	763	1189	0.642	761	769	2.5	1.6	7.104	A
	Exit	1	1		1121			1121	1133	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	321	502	0.639	325	356	3.2	1.3	19.633	C
			2	4	253	502	0.504	256	292	2.4	0.9	16.835	C
		2	1	(2, 3, 4)	548			573	635	21.0	0.8	32.548	D
2	Entry	1	1	3, 4	394	804	0.489	394	400	1.3	0.9	8.121	A
			2	2, 4	274	804	0.341	274	283	0.8	0.5	6.677	A
		2	1	(1, 2, 3, 4)	668			668	680	0.3	0.1	0.404	A
	Exit	1	1		735			735	765	0.0	0.0	0.000	A
3	Exit	1	1		661			661	666	0.0	0.0	0.000	A
4	Entry	1	1	2	378	1189	0.318	379	383	0.6	0.4	4.244	A
			2	2, 3, 4	656	1189	0.552	656	661	1.6	1.1	5.942	A
	Exit	1	1		888			888	945	0.0	0.0	0.000	A

Lanes: Queue Variation Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.30	0.00	0.51	2.88	3.48
			2	0.80	0.00	0.00	1.83	2.51
		2	1	0.19	0.00	0.00	0.00	0.24
2	Entry	1	1	0.87	0.00	0.00	2.24	2.98
			2	0.54	0.00	0.00	1.35	1.83
		2	1	0.10	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.48	0.00	0.00	1.14	1.70
			2	1.18	0.00	0.29	2.59	3.73
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:00 - 17:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	2.12	0.00	1.57	3.72	3.91
			2	1.53	0.00	0.68	3.48	3.80
		2	1	1.31	0.00	0.00	3.83	7.29
2	Entry	1	1	1.28	0.00	0.48	2.84	3.43
			2	0.74	0.00	0.00	1.76	2.46
		2	1	0.13	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.58	0.00	0.00	1.40	1.94
			2	1.54	0.00	0.50	3.68	4.79
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:15 - 17:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.82	1.44	3.47	3.98	5.00
			2	2.85	0.00	3.03	3.89	4.00
		2	1	23.23	0.00	18.88	49.90	58.58
2	Entry	1	1	1.91	0.00	1.28	3.58	3.82
			2	1.18	0.00	0.32	2.89	3.48
		2	1	1.21	0.00	0.00	3.66	6.79
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	1.12	0.00	0.19	2.53	3.54
			2	2.36	0.00	1.33	4.98	6.47
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:30 - 17:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	4.02	2.73	3.53	5.00	5.00
			2	2.97	0.00	3.12	3.90	5.00
		2	1	48.72	6.46	45.07	87.83	101.04
2	Entry	1	1	1.88	0.00	1.21	3.56	3.80
			2	1.16	0.00	0.33	2.75	3.39
		2	1	1.12	0.00	0.00	2.95	7.38
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	1.07	0.00	0.04	2.55	3.48
			2	2.45	0.00	1.28	5.03	7.18
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:45 - 18:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.20	0.00	3.23	3.90	3.98
			2	2.38	0.00	2.10	3.78	3.92
		2	1	20.97	0.00	9.81	60.86	74.15
2	Entry	1	1	1.31	0.00	0.56	2.90	3.48
			2	0.81	0.00	0.00	1.94	2.89
		2	1	0.28	0.00	0.00	0.00	1.02
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.61	0.00	0.00	1.60	2.27
			2	1.56	0.00	0.64	3.58	4.46
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

18:00 - 18:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.32	0.00	0.51	3.07	3.62
			2	0.87	0.00	0.00	2.01	2.79
		2	1	0.84	0.00	0.00	0.00	2.31
2	Entry	1	1	0.92	0.00	0.05	2.14	3.01
			2	0.52	0.00	0.00	1.32	1.83
		2	1	0.08	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.44	0.00	0.00	0.97	1.65
			2	1.14	0.00	0.22	2.56	3.61
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	147	37	760	503	0.291	145	144	0.0	0.8	14.652	B
				3	0.93	0.23	131	92	0.010	1.00	0.83	0.0	0.0	13.236	B
				4	165	41	760	504	0.327	166	165	0.0	0.5	10.993	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	242	61	760	504	0.481	242	237	0.0	0.8	10.713	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	147	37	-	-	-	147	147	0.0	0.1	1.179	A
				3	0.93	0.23	-	-	-	0.93	0.84	0.0	0.0	0.974	A
				4	406	102	-	-	-	407	407	0.0	0.1	0.722	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	209	52	1079	814	0.257	209	205	0.0	0.5	7.765	A
				4	190	48	1079	813	0.234	190	192	0.0	0.3	5.754	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.47	346	270	0.007	2	2	0.0	0.0	5.773	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	278	70	1079	813	0.342	278	272	0.0	0.5	5.734	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.47	-	-	-	2	2	0.0	0.0	0.058	A
				3	209	52	-	-	-	209	207	0.0	0.0	0.348	A
				4	468	117	-	-	-	468	468	0.0	0.1	0.199	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	375	94	1190	1189	0.315	375	377	0.0	0.5	4.175	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	209	52	1190	1189	0.175	208	207	0.0	0.3	4.205	A
				3	445	111	1190	1189	0.374	445	444	0.0	0.9	6.654	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	176	44	760	451	0.390	177	175	0.8	1.1	22.128	C
				3	0.93	0.23	135	83	0.011	0.86	0.86	0.0	0.0	22.481	C
				4	183	46	760	451	0.405	183	185	0.5	1.0	17.781	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	300	75	760	451	0.665	300	296	0.8	1.5	16.856	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	176	44	-	-	-	176	176	0.1	0.4	7.504	A
				3	0.88	0.22	-	-	-	0.93	0.87	0.0	0.0	8.351	A
				4	481	120	-	-	-	483	486	0.1	0.9	5.813	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	245	61	1079	760	0.322	245	246	0.5	0.7	10.280	B
				4	220	55	1079	760	0.289	219	218	0.3	0.5	7.487	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.54	355	251	0.009	2	2	0.0	0.0	9.062	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	338	85	1079	760	0.445	338	336	0.5	0.7	7.345	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.54	-	-	-	2	2	0.0	0.0	0.665	A
				3	245	61	-	-	-	245	247	0.0	0.1	0.968	A
				4	557	139	-	-	-	558	556	0.1	0.1	0.622	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	471	118	1190	1189	0.396	472	474	0.5	0.6	4.727	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	228	57	1190	1189	0.191	228	228	0.3	0.3	4.752	A
				3	539	135	1190	1189	0.453	539	537	0.9	1.2	8.072	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	190	47	760	384	0.494	190	186	1.1	1.9	33.375	D
				3	0.72	0.18	151	80	0.009	0.67	1	0.0	0.0	33.981	D
				4	190	47	760	384	0.495	189	190	1.0	1.9	31.324	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	331	83	760	384	0.862	330	329	1.5	2.9	27.612	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	214	53	-	-	-	190	189	0.4	6.3	68.178	F
				3	0.95	0.24	-	-	-	0.72	1	0.0	0.0	61.046	F
				4	587	147	-	-	-	521	529	0.9	16.9	63.729	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	305	76	1079	713	0.428	305	302	0.7	1.2	13.657	B
				4	249	62	1079	714	0.348	250	250	0.5	0.7	10.556	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.57	440	294	0.008	2	2	0.0	0.0	11.333	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	428	107	1079	713	0.600	429	430	0.7	1.2	9.908	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.55	-	-	-	2	2	0.0	0.0	2.898	A
				3	306	76	-	-	-	305	304	0.1	0.5	4.206	A
				4	677	169	-	-	-	677	682	0.1	0.7	3.402	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	611	153	1190	1189	0.514	609	611	0.6	1.1	5.869	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	243	61	1190	1189	0.204	243	244	0.3	0.4	5.924	A
				3	656	164	1190	1189	0.551	655	656	1.2	2.0	10.681	B
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	193	48	760	383	0.503	191	189	1.9	2.1	37.242	E
				3	0.86	0.21	134	68	0.013	0.77	0.90	0.0	0.0	38.215	E
				4	188	47	760	384	0.490	189	187	1.9	2.0	36.393	E
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	337	84	760	384	0.876	336	334	2.9	3.0	30.833	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	218	55	-	-	-	193	190	6.3	13.4	194.935	F
				3	1	0.31	-	-	-	0.86	0.89	0.0	0.1	207.948	F
				4	588	147	-	-	-	525	522	16.9	35.2	189.782	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	301	75	1079	711	0.423	302	306	1.2	1.1	14.009	B
				4	250	62	1079	711	0.351	250	246	0.7	0.7	10.785	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.57	430	284	0.008	2	2	0.0	0.0	11.200	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	430	108	1079	711	0.605	431	431	1.2	1.2	10.074	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.60	-	-	-	2	2	0.0	0.0	5.120	A
				3	300	75	-	-	-	301	306	0.5	0.4	5.268	A
				4	679	170	-	-	-	680	677	0.7	0.7	4.429	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	610	153	1190	1189	0.513	609	613	1.1	1.1	5.897	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	244	61	1190	1189	0.205	243	245	0.4	0.5	5.818	A
				3	657	164	1190	1189	0.552	655	657	2.0	2.0	10.777	B
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	207	52	760	453	0.457	208	210	2.1	1.6	31.530	D
				3	1	0.28	178	103	0.011	1	1	0.0	0.0	31.945	D
				4	206	52	760	453	0.455	208	207	2.0	1.6	30.021	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	362	90	760	453	0.798	363	365	3.0	2.4	25.621	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	176	44	-	-	-	207	208	13.4	5.8	168.662	F
				3	0.86	0.21	-	-	-	1	1	0.1	0.0	164.155	F
				4	484	121	-	-	-	568	568	35.2	15.2	165.029	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	244	61	1079	735	0.332	243	252	1.1	0.8	11.705	B
				4	212	53	1079	736	0.289	212	215	0.7	0.5	8.592	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.37	315	214	0.007	1	1	0.0	0.0	9.018	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	336	84	1079	735	0.457	337	346	1.2	0.8	8.362	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.37	-	-	-	1	1	0.0	0.0	1.681	A
				3	245	61	-	-	-	244	250	0.4	0.1	1.762	A
				4	549	137	-	-	-	548	559	0.7	0.2	1.298	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	468	117	1190	1189	0.394	468	476	1.1	0.6	4.852	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	232	58	1190	1189	0.195	232	229	0.5	0.3	4.756	A
				3	531	133	1190	1189	0.447	529	540	2.0	1.2	8.108	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	150	37	760	503	0.297	151	171	1.6	0.8	21.386	C
				3	0.72	0.18	129	84	0.009	0.74	0.83	0.0	0.0	21.523	C
				4	170	43	760	502	0.339	173	184	1.6	0.5	17.988	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	253	63	760	502	0.503	256	292	2.4	0.9	16.835	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	143	36	-	-	-	150	168	5.8	0.2	33.548	D
				3	0.65	0.16	-	-	-	0.72	0.83	0.0	0.0	36.927	E
				4	405	101	-	-	-	423	466	15.2	0.6	32.181	D
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	209	52	1079	804	0.260	208	213	0.8	0.6	9.269	A
				4	184	46	1079	804	0.229	185	188	0.5	0.3	6.816	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.32	309	223	0.006	1	1	0.0	0.0	7.423	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	273	68	1079	805	0.339	273	281	0.8	0.5	6.673	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.32	-	-	-	1	1	0.0	0.0	0.078	A
				3	209	52	-	-	-	209	212	0.1	0.0	0.561	A
				4	457	114	-	-	-	457	467	0.2	0.0	0.333	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	378	95	1190	1189	0.318	379	383	0.6	0.4	4.244	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	204	51	1190	1189	0.172	205	209	0.3	0.3	4.235	A
				3	452	113	1190	1189	0.380	452	452	1.2	0.9	6.734	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

D3 - 2030 | RF Do Minimum + Dev + Site B | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Southern Rbt	Standard Roundabout		1, 2, 3, 4	67.59	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	67.59	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2030	RF Do Minimum + Dev + Site B	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	738	100.000
2		ONE HOUR	✓	905	100.000
3					
4		ONE HOUR	✓	1395	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	201	1	536
	2	0	2	283	620
	3	0	0	0	0
	4	0	800	595	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Cyclist %

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	240.81	60.1	101.9	F	673	1010
2	17.75	5.8	19.9	C	828	1242
3						
4	8.56	4.5	12.0	A	1277	1916

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	543	136	1034	544	550	0	0.0	2.1	12.541	B
2	674	169	826	677	681	753	0.0	1.2	6.909	A
3			0			654				
4	1037	259	1	1033	1039	847	0.0	1.8	5.330	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	655	164	1270	650	650	0	2.1	5.7	24.515	C
2	797	199	1021	791	797	900	1.2	2.6	9.130	A
3			0			792				
4	1268	317	2	1268	1265	1018	1.8	2.3	6.214	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	805	201	1543	702	707	0	5.7	31.0	96.936	F
2	961	240	1177	959	977	1068	2.6	4.0	14.817	B
3			0			966				
4	1547	387	2	1541	1532	1168	2.3	3.6	7.992	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	824	206	1519	712	702	0	31.0	60.1	240.811	F
2	1036	259	1166	1025	1013	1065	4.0	5.8	17.752	C
3			0			961				
4	1525	381	2	1517	1541	1228	3.6	4.5	8.556	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	660	165	1242	785	784	0	60.1	30.2	211.302	F
2	825	206	1096	829	838	932	5.8	2.2	11.036	B
3			0			784				
4	1240	310	2	1240	1262	1139	4.5	2.1	6.237	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	554	139	1048	603	674	0	30.2	3.4	57.992	F
2	673	168	890	678	690	761	2.2	1.5	8.012	A
3			0			664				
4	1047	262	2	1046	1065	903	2.1	1.7	5.339	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	2.09	0.00	1.33	3.92	4.83
2	1.17	0.00	0.20	2.66	3.59
3					
4	1.79	0.00	0.85	3.18	5.32

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	5.68	0.00	3.50	12.45	16.95
2	2.60	0.00	1.14	6.23	7.98
3					
4	2.33	0.00	1.32	5.23	6.49

17:15 - 17:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	31.02	5.61	30.13	54.30	56.48
2	3.98	0.00	2.74	7.70	9.98
3					
4	3.56	0.00	2.21	7.45	8.98

17:30 - 17:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	60.10	15.15	56.33	94.70	101.85
2	5.80	0.00	3.26	12.80	19.90
3					
4	4.45	0.00	3.08	8.95	11.95

17:45 - 18:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	30.21	0.68	22.50	75.85	87.90
2	2.24	0.00	1.16	5.15	6.24
3					
4	2.12	0.00	1.08	4.45	4.95

18:00 - 18:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	3.40	0.00	1.09	6.97	8.98
2	1.52	0.00	0.59	3.24	3.98
3					
4	1.68	0.00	0.76	3.54	4.48

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	304	502	0.606	308	313	0.0	1.1	12.547	B
			2	4	238	502	0.473	237	236	0.0	0.9	10.673	B
		2	1	(2, 3, 4)	543			543	557	0.0	0.1	0.788	A
2	Entry	1	1	3, 4	403	822	0.490	405	404	0.0	0.7	7.123	A
			2	2, 4	272	822	0.331	272	277	0.0	0.5	5.819	A
		2	1	(1, 2, 3, 4)	674			675	685	0.0	0.0	0.318	A
	Exit	1	1		753			753	746	0.0	0.0	0.000	A
3	Exit	1	1		654			654	662	0.0	0.0	0.000	A
4	Entry	1	1	2	380	1189	0.320	381	385	0.0	0.5	4.134	A
			2	2, 3, 4	656	1189	0.552	652	654	0.0	1.3	6.032	A
	Exit	1	1		847			847	861	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	357	444	0.806	358	355	1.1	2.3	20.036	C
			2	4	293	444	0.661	293	294	0.9	1.7	16.766	C
		2	1	(2, 3, 4)	655			651	658	0.1	1.7	5.868	A
2	Entry	1	1	3, 4	453	761	0.595	451	459	0.7	1.4	9.193	A
			2	2, 4	343	761	0.450	340	338	0.5	0.9	7.379	A
		2	1	(1, 2, 3, 4)	797			796	802	0.0	0.3	0.693	A
	Exit	1	1		900			900	897	0.0	0.0	0.000	A
3	Exit	1	1		792			792	789	0.0	0.0	0.000	A
4	Entry	1	1	2	486	1189	0.409	486	488	0.5	0.7	4.654	A
			2	2, 3, 4	781	1189	0.657	782	776	1.3	1.6	7.200	A
	Exit	1	1		1018			1018	1025	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	377	376	1.003	374	379	2.3	3.9	32.860	D
			2	4	326	376	0.868	328	328	1.7	2.7	27.841	D
		2	1	(2, 3, 4)	805			703	718	1.7	24.3	65.786	F
2	Entry	1	1	3, 4	543	713	0.762	542	549	1.4	1.9	12.285	B
			2	2, 4	419	713	0.588	416	428	0.9	1.4	10.089	B
		2	1	(1, 2, 3, 4)	961			962	981	0.3	0.7	3.488	A
	Exit	1	1		1068			1068	1072	0.0	0.0	0.000	A
3	Exit	1	1		966			966	960	0.0	0.0	0.000	A
4	Entry	1	1	2	633	1189	0.532	629	623	0.7	1.1	5.975	A
			2	2, 3, 4	914	1189	0.768	911	909	1.6	2.5	9.372	A
	Exit	1	1		1168			1168	1184	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	375	382	0.983	376	370	3.9	4.0	37.886	E
			2	4	334	382	0.876	336	332	2.7	2.9	30.949	D
		2	1	(2, 3, 4)	824			709	702	24.3	53.2	206.860	F
2	Entry	1	1	3, 4	574	716	0.802	572	566	1.9	2.2	13.033	B
			2	2, 4	455	716	0.636	453	447	1.4	1.5	10.339	B
		2	1	(1, 2, 3, 4)	1036			1029	1015	0.7	2.1	5.872	A
	Exit	1	1		1065			1065	1080	0.0	0.0	0.000	A
3	Exit	1	1		961			961	976	0.0	0.0	0.000	A
4	Entry	1	1	2	630	1189	0.530	628	634	1.1	1.4	6.313	A
			2	2, 3, 4	894	1189	0.752	890	907	2.5	3.0	10.130	B
	Exit	1	1		1228			1228	1200	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	410	451	0.910	413	415	4.0	3.5	31.252	D
			2	4	369	451	0.819	373	369	2.9	2.4	25.502	D
		2	1	(2, 3, 4)	660			780	780	53.2	24.4	184.172	F
2	Entry	1	1	3, 4	480	738	0.651	480	483	2.2	1.3	10.355	B
			2	2, 4	345	738	0.468	349	355	1.5	0.7	8.699	A
		2	1	(1, 2, 3, 4)	825			826	832	2.1	0.2	1.460	A
	Exit	1	1		932			932	938	0.0	0.0	0.000	A
3	Exit	1	1		784			784	800	0.0	0.0	0.000	A
4	Entry	1	1	2	479	1189	0.403	478	488	1.4	0.8	4.865	A
			2	2, 3, 4	760	1189	0.639	762	774	3.0	1.4	7.107	A
	Exit	1	1		1139			1139	1145	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	326	499	0.653	333	368	3.5	1.3	20.645	C
			2	4	267	499	0.535	271	306	2.4	1.0	17.203	C
		2	1	(2, 3, 4)	554			592	660	24.4	1.2	40.057	E
2	Entry	1	1	3, 4	395	802	0.493	398	404	1.3	0.9	8.167	A
			2	2, 4	279	802	0.349	280	287	0.7	0.6	6.673	A
		2	1	(1, 2, 3, 4)	673			674	688	0.2	0.0	0.469	A
	Exit	1	1		761			761	794	0.0	0.0	0.000	A
3	Exit	1	1		664			664	672	0.0	0.0	0.000	A
4	Entry	1	1	2	384	1189	0.323	384	396	0.8	0.5	4.405	A
			2	2, 3, 4	663	1189	0.557	663	670	1.4	1.1	5.891	A
	Exit	1	1		903			903	963	0.0	0.0	0.000	A

Lanes: Queue Variation Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.09	0.00	0.32	2.46	2.86
			2	0.89	0.00	0.13	1.90	2.49
		2	1	0.11	0.00	0.00	0.00	0.00
2	Entry	1	1	0.66	0.00	0.00	1.60	1.90
			2	0.48	0.00	0.00	1.16	1.66
		2	1	0.02	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.50	0.00	0.00	1.30	1.77
			2	1.29	0.00	0.38	2.59	3.98
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:00 - 17:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	2.31	0.00	1.85	3.82	3.97
			2	1.68	0.00	0.91	3.52	3.81
		2	1	1.69	0.00	0.00	5.23	8.95
2	Entry	1	1	1.42	0.00	0.60	3.33	3.73
			2	0.93	0.00	0.00	2.56	3.37
		2	1	0.26	0.00	0.00	0.00	0.48
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.70	0.00	0.00	1.74	2.33
			2	1.63	0.00	0.66	3.61	4.74
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:15 - 17:30

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.92	2.01	3.51	5.00	5.00
			2	2.74	0.00	3.03	3.91	5.00
		2	1	24.33	0.00	22.63	46.63	49.95
2	Entry	1	1	1.91	0.00	1.35	3.52	3.88
			2	1.42	0.00	0.63	2.99	3.60
		2	1	0.65	0.00	0.00	1.30	3.49
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	1.07	0.00	0.11	2.49	3.33
			2	2.50	0.00	1.31	4.89	6.95
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:30 - 17:45

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.96	3.00	3.50	3.94	3.99
			2	2.90	0.00	3.12	3.87	3.97
		2	1	53.24	9.58	49.50	87.80	95.27
2	Entry	1	1	2.20	0.00	1.64	3.72	3.91
			2	1.48	0.00	0.64	3.30	3.77
		2	1	2.12	0.00	0.00	7.45	13.90
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	1.45	0.00	0.43	3.65	4.56
			2	3.01	0.00	1.57	5.95	8.95
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

17:45 - 18:00

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	3.48	0.21	3.34	3.95	5.00
			2	2.36	0.00	2.13	3.75	3.90
		2	1	24.42	0.00	16.50	69.87	79.90
2	Entry	1	1	1.33	0.00	0.54	3.08	3.58
			2	0.73	0.00	0.00	1.85	2.49
		2	1	0.18	0.00	0.00	0.00	0.98
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.75	0.00	0.00	1.78	2.49
			2	1.36	0.00	0.40	3.27	4.19
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

18:00 - 18:15

Arm	Side	Lane level	Lane	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)
1	Entry	1	1	1.28	0.00	0.45	4.00	4.00
			2	0.96	0.00	0.00	2.58	4.00
		2	1	1.16	0.00	0.00	0.00	1.95
2	Entry	1	1	0.89	0.00	0.00	1.92	2.49
			2	0.61	0.00	0.00	1.46	1.82
		2	1	0.02	0.00	0.00	0.00	0.00
	Exit	1	1	0.00	0.00	0.00	0.00	0.00
3	Exit	1	1	0.00	0.00	0.00	0.00	0.00
4	Entry	1	1	0.55	0.00	0.00	1.42	1.73
			2	1.14	0.00	0.23	2.61	3.24
	Exit	1	1	0.00	0.00	0.00	0.00	0.00

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	152	38	760	503	0.301	154	151	0.0	0.7	14.476	B
				3	0.79	0.20	145	110	0.007	0.79	0.86	0.0	0.0	10.819	B
				4	152	38	760	503	0.302	153	162	0.0	0.4	10.737	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	238	59	760	503	0.473	237	236	0.0	0.9	10.673	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	152	38	-	-	-	152	154	0.0	0.0	1.150	A
				3	0.79	0.20	-	-	-	0.79	0.86	0.0	0.0	0.166	A
				4	390	98	-	-	-	390	403	0.0	0.1	0.650	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	218	54	1079	822	0.265	219	216	0.0	0.4	8.255	A
				4	185	46	1079	822	0.225	187	188	0.0	0.3	5.827	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.30	285	228	0.005	1	1	0.0	0.0	6.650	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	271	68	1079	822	0.330	270	276	0.0	0.5	5.815	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.30	-	-	-	1	1	0.0	0.0	0.000	A
				3	217	54	-	-	-	218	218	0.0	0.0	0.489	A
				4	456	114	-	-	-	456	466	0.0	0.0	0.239	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	380	95	1190	1189	0.320	381	385	0.0	0.5	4.134	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	218	54	1190	1189	0.183	217	209	0.0	0.3	4.210	A
				3	438	110	1190	1189	0.369	435	445	0.0	1.0	6.886	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	176	44	760	444	0.398	177	173	0.7	1.2	22.186	C
				3	0.60	0.15	138	83	0.007	0.50	0.79	0.0	0.0	20.539	C
				4	180	45	760	442	0.409	181	181	0.4	1.0	17.965	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	293	73	760	442	0.663	293	294	0.9	1.7	16.766	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	177	44	-	-	-	176	175	0.0	0.5	7.284	A
				3	0.60	0.15	-	-	-	0.60	0.83	0.0	0.0	2.291	A
				4	478	119	-	-	-	474	482	0.1	1.2	5.356	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	245	61	1079	761	0.322	244	246	0.4	0.8	10.529	B
				4	208	52	1079	761	0.273	207	213	0.3	0.6	7.650	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.60	357	251	0.009	2	2	0.0	0.0	7.510	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	341	85	1079	762	0.447	338	337	0.5	0.9	7.378	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.60	-	-	-	2	2	0.0	0.0	1.045	A
				3	245	61	-	-	-	245	248	0.0	0.1	0.920	A
				4	550	137	-	-	-	548	553	0.0	0.2	0.590	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	486	122	1190	1189	0.409	486	488	0.5	0.7	4.654	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	235	59	1190	1189	0.198	235	234	0.3	0.4	4.875	A
				3	546	136	1190	1189	0.459	547	542	1.0	1.2	8.195	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	193	48	760	376	0.513	193	192	1.2	2.1	33.845	D
				3	0.60	0.15	151	80	0.007	0.60	0.99	0.0	0.0	30.828	D
				4	183	46	760	375	0.488	181	186	1.0	1.9	31.854	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	326	81	760	376	0.868	328	328	1.7	2.7	27.841	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	225	56	-	-	-	193	195	0.5	7.1	69.692	F
				3	0.50	0.12	-	-	-	0.60	0.96	0.0	0.0	53.229	F
				4	580	145	-	-	-	509	522	1.2	17.2	64.332	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	297	74	1079	713	0.417	297	305	0.8	1.1	13.577	B
				4	246	61	1079	713	0.345	246	244	0.6	0.8	10.685	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.52	428	286	0.007	2	2	0.0	0.0	13.153	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	417	104	1079	714	0.584	414	426	0.9	1.4	10.073	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.52	-	-	-	2	2	0.0	0.0	5.500	A
				3	297	74	-	-	-	297	306	0.1	0.3	3.971	A
				4	662	165	-	-	-	663	673	0.2	0.4	3.263	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	633	158	1190	1189	0.532	629	623	0.7	1.1	5.975	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	244	61	1190	1189	0.205	243	255	0.4	0.5	6.002	A
				3	670	167	1190	1189	0.563	668	654	1.2	2.0	10.683	B
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	192	48	760	382	0.504	191	195	2.1	2.0	37.873	E
				3	1	0.35	176	92	0.015	1	1	0.0	0.0	38.029	E
				4	181	45	760	384	0.472	183	174	1.9	1.9	37.900	E
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	334	84	760	381	0.877	336	332	2.7	2.9	30.949	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	219	55	-	-	-	192	195	7.1	14.1	209.939	F
				3	1	0.27	-	-	-	1	1	0.0	0.1	188.822	F
				4	603	151	-	-	-	516	506	17.2	39.0	205.746	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	316	79	1079	716	0.441	314	317	1.1	1.3	14.437	B
				4	259	65	1079	716	0.361	257	249	0.8	0.9	11.255	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.40	348	231	0.007	2	2	0.0	0.0	9.682	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	454	113	1079	716	0.634	452	445	1.4	1.5	10.342	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.45	-	-	-	2	2	0.0	0.0	8.254	A
				3	318	80	-	-	-	316	318	0.3	0.7	6.558	A
				4	716	179	-	-	-	712	695	0.4	1.4	5.553	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	630	158	1190	1189	0.530	628	634	1.1	1.4	6.313	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	247	62	1190	1189	0.208	244	249	0.5	0.6	6.256	A
				3	647	162	1190	1189	0.544	646	658	2.0	2.4	11.598	B
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	213	53	760	450	0.474	214	211	2.0	1.8	32.002	D
				3	2	0.52	195	112	0.019	2	1	0.0	0.0	31.419	D
				4	195	49	760	448	0.434	197	203	1.9	1.7	30.479	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	369	92	760	450	0.820	373	369	2.9	2.4	25.502	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	181	45	-	-	-	213	210	14.1	7.1	186.889	F
				3	1	0.30	-	-	-	2	1	0.1	0.0	197.063	F
				4	477	119	-	-	-	564	569	39.0	17.3	183.130	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	260	65	1079	736	0.353	258	263	1.3	0.9	11.591	B
				4	221	55	1079	739	0.299	222	220	0.9	0.5	8.867	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.45	357	239	0.007	2	2	0.0	0.0	13.540	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	344	86	1079	737	0.466	347	354	1.5	0.7	8.676	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.45	-	-	-	2	2	0.0	0.0	1.279	A
				3	260	65	-	-	-	260	261	0.7	0.1	1.673	A
				4	563	141	-	-	-	564	569	1.4	0.1	1.363	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	479	120	1190	1189	0.403	478	488	1.4	0.8	4.865	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	238	59	1190	1189	0.200	238	238	0.6	0.3	4.763	A
				3	523	131	1190	1189	0.439	524	536	2.4	1.1	8.155	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	163	41	760	498	0.327	166	184	1.8	0.7	22.110	C
				3	0.89	0.22	145	95	0.009	0.79	1	0.0	0.0	21.428	C
				4	162	40	760	498	0.325	166	183	1.7	0.6	19.166	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	267	67	760	499	0.535	271	306	2.4	1.0	17.203	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	152	38	-	-	-	163	179	7.1	0.3	39.997	E
				3	0.89	0.22	-	-	-	0.89	1	0.0	0.0	34.769	D
				4	402	101	-	-	-	429	479	17.3	0.8	40.090	E
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	208	52	1079	804	0.259	210	215	0.9	0.5	9.290	A
				4	187	47	1079	802	0.233	188	188	0.5	0.4	6.888	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.37	267	189	0.008	2	1	0.0	0.0	6.725	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	278	69	1079	803	0.346	279	286	0.7	0.6	6.673	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.37	-	-	-	1	1	0.0	0.0	0.074	A
				3	207	52	-	-	-	208	214	0.1	0.0	0.643	A
				4	464	116	-	-	-	465	473	0.1	0.0	0.391	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	384	96	1190	1189	0.323	384	396	0.8	0.5	4.405	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	209	52	1190	1189	0.176	209	213	0.3	0.2	4.225	A
				3	454	113	1190	1189	0.382	453	456	1.1	0.9	6.674	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

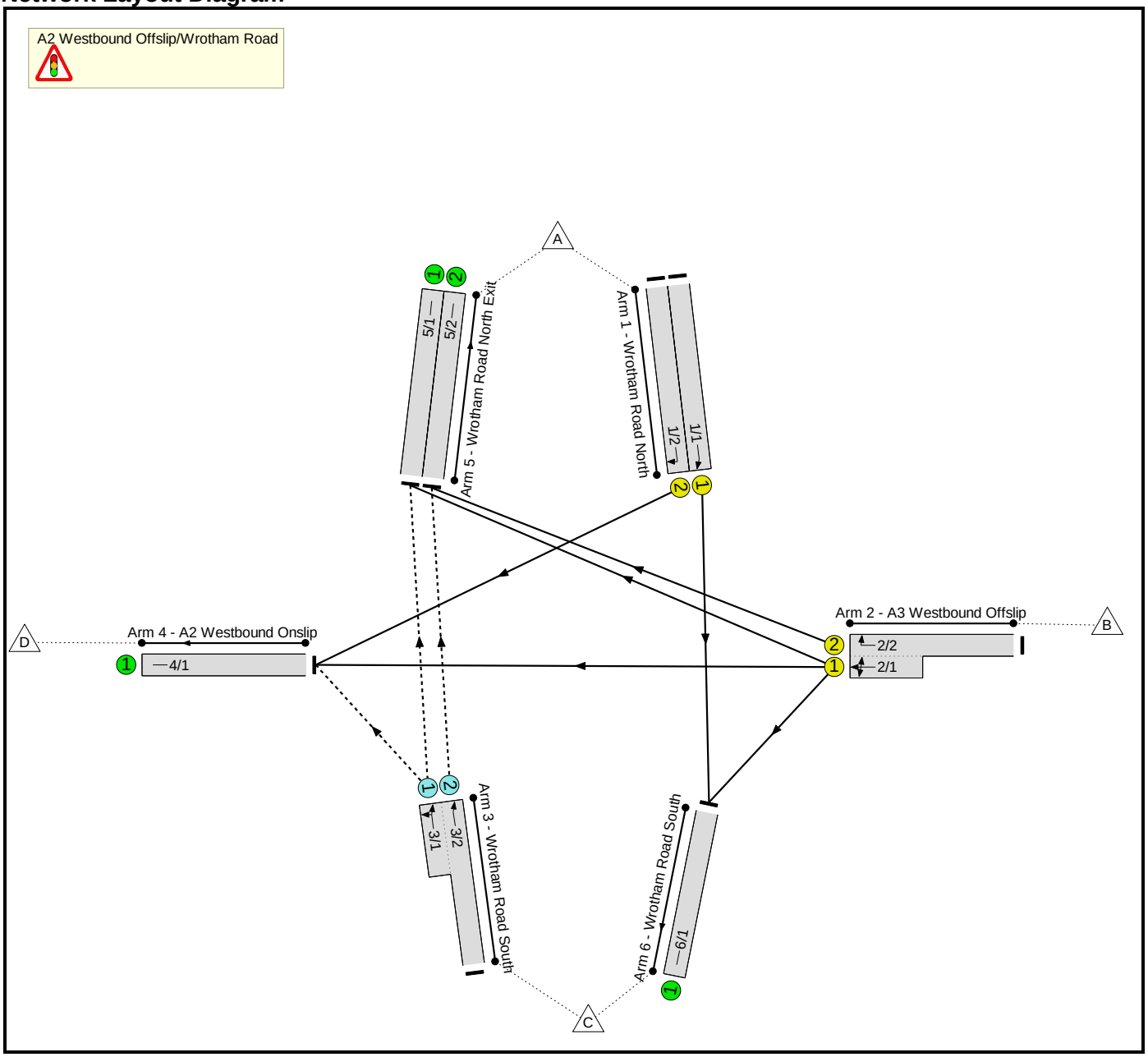
APPENDIX L A2/WROTHAM ROAD 'FINAL' MITIGATION RESULTS

Detailed Input Data And Results

User and Project Details

Project:	**Land east of Wrotham Road**
Title:	**A2/Wrotham Road Southern Rbt Signalisation**
Location:	
Client:	Richborough
Additional detail:	
File name:	T25526 A2_Wrotham Road - Southern Rbt Signalisation.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 2, 0

Network Layout Diagram



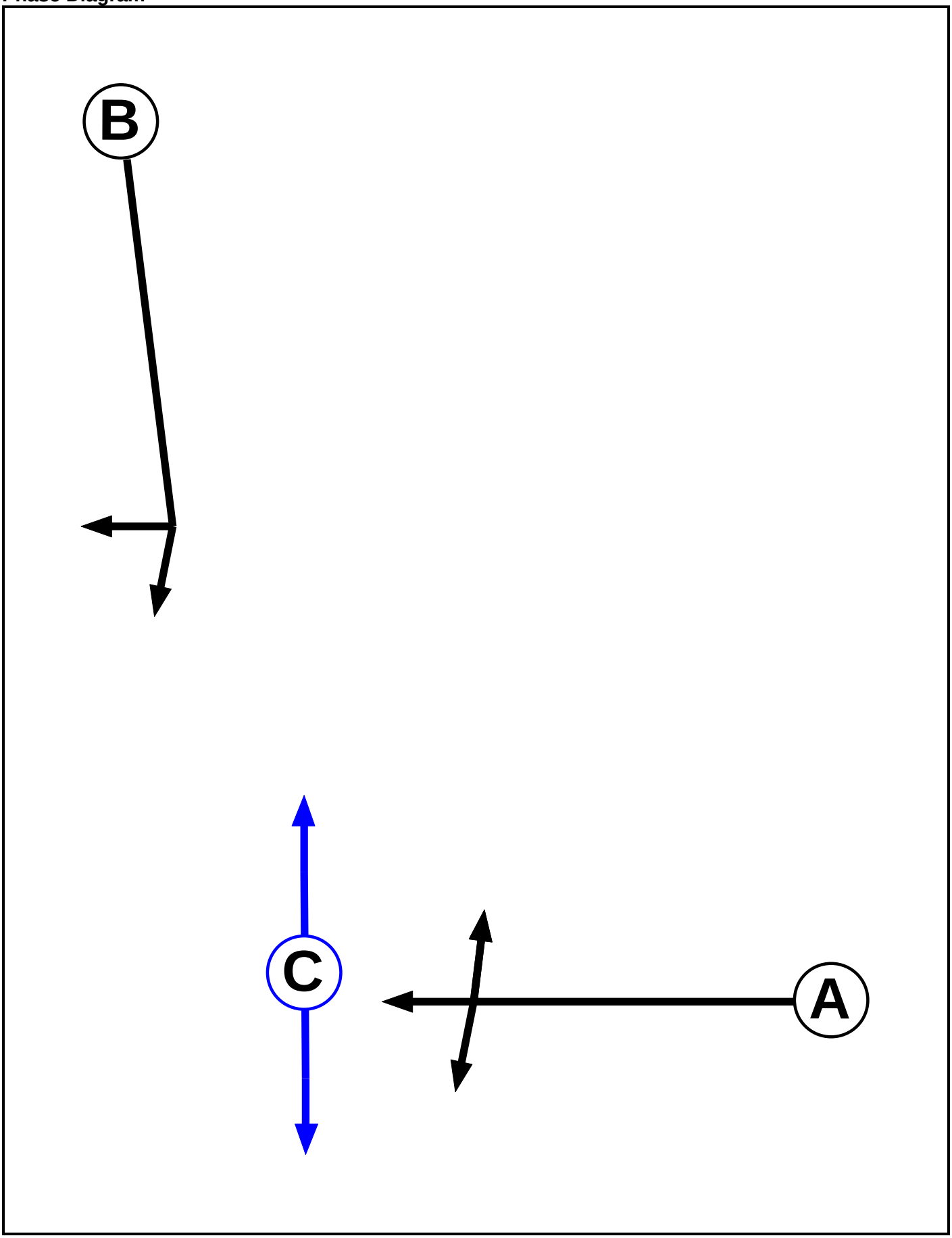
Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2028 FTH Do Minimum AM	2028 FTH Do Minimum AM	Network Control Plan 1	08:00 - 09:00	55	2.6	15.00
2	2028 FTH Do Minimum PM	2028 FTH Do Minimum PM	Network Control Plan 1	17:00 - 18:00	45	14.3	9.97
3	2028 FTH Do Minimum + Dev AM	2028 FTH Do Minimum + Dev AM	Network Control Plan 1	08:00 - 09:00	55	2.6	15.69
4	2028 FTH Do Minimum + Dev PM	2028 FTH Do Minimum + Dev PM	Network Control Plan 1	17:00 - 18:00	45	12.7	10.93
5	2028 FTH Do Minimum + Dev + Site B AM	2028 FTH Do Minimum + Dev + Site B AM	Network Control Plan 1	08:00 - 09:00	55	2.6	15.93
6	2028 FTH Do Minimum + Dev + Site B PM	2028 FTH Do Minimum + Dev + Site B PM	Network Control Plan 1	17:00 - 18:00	45	11.8	11.30
7	2028 FTH Do Minimum + Dev + Site B + RF AM	2028 FTH Do Minimum + Dev + Site B + RF AM	Network Control Plan 1	08:00 - 09:00	55	2.6	16.34
8	2028 FTH Do Minimum + Dev + Site B + RF PM	2028 FTH Do Minimum + Dev + Site B + RF PM	Network Control Plan 1	17:00 - 18:00	45	10.5	11.79

Controller Summary

Controller	Type	SCN	Stage Stream	Num Phases	Num Stages	Controls Junctions	Controller Notes
C1	Gen		Stage Stream 1	3	2	A2 Westbound Offslip/Wrotham Road	

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	4
C	Pedestrian		5	5

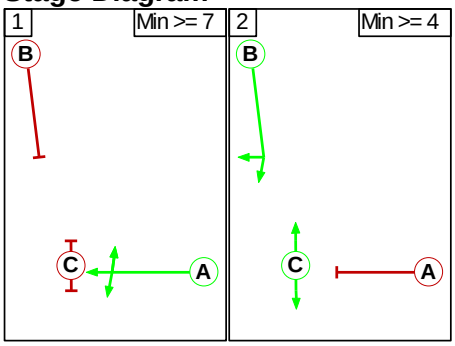
Phase Intergreens Matrix

		Starting Phase		
		A	B	C
Terminating Phase	A		6	5
	B	6		-
	C	9	-	

Phases in Stage

Stage No.	Phases in Stage
1	A
2	B C

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
2	1	B	Losing	3	3

Prohibited Stage Change

		To Stage	
		1	2
From Stage	1		6
	2	9	

Lane Input Data

Junction: A2 Westbound Offslip/Wrotham Road

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (Wrotham Road North)	U	B	2	3	60.0	Geom	-	3.90	0.00	Y	Arm 6 Ahead	Inf
1/2 (Wrotham Road North)	U	B	2	3	60.0	Geom	-	3.90	0.00	Y	Arm 4 Right	20.00
2/1 (A3 Westbound Offslip)	U	A	2	3	5.0	Geom	-	3.90	0.00	Y	Arm 4 Ahead	Inf
											Arm 5 Right	Inf
											Arm 6 Left	25.00
2/2 (A3 Westbound Offslip)	U	A	2	3	60.0	Geom	-	3.90	0.00	Y	Arm 5 Right	25.00
3/1 (Wrotham Road South)	O		2	3	5.0	Geom	-	4.25	0.00	Y	Arm 4 Left	Inf
											Arm 5 Ahead	Inf
3/2 (Wrotham Road South)	O		2	3	60.0	Geom	-	4.25	0.00	Y	Arm 5 Ahead	Inf
4/1 (A2 Westbound Onslip)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Wrotham Road North Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2 (Wrotham Road North Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Wrotham Road South)	U		2	3	60.0	Inf	-	-	-	-	-	-

Give-Way Lane Input Data

Junction: A2 Westbound Offslip/Wrotham Road

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
3/1 (Wrotham Road South)	4/1 (Left)	1079	0	1/2	0.31	All	-	-	-	-	-
				2/1	0.31	To 4/1 (Ahead) To 5/1 (Right)					
				2/2	0.31	All					
	5/1 (Ahead)	1079	0	1/2	0.31	All					
				2/1	0.31	To 4/1 (Ahead) To 5/1 (Right)					
				2/2	0.31	All					
3/2 (Wrotham Road South)	5/2 (Ahead)	1079	0	2/1	0.31	To 4/1 (Ahead) To 5/1 (Right)	-	-	-	-	-
				1/2	0.31	All					
				2/2	0.31	All					

Lane Connector Input Data

Junction: A2 Westbound Offslip/Wrotham Road				
Org Lane	Dest Lane	Junction	Modelled Mean Cruise Time (s)	Platoon Dispersion
1/1	6/1	Internal	26	N/A
1/2	4/1	Internal	5	35
2/1	4/1	Internal	5	35
2/1	5/1	Internal	5	35
2/1	6/1	Internal	5	N/A
2/2	5/2	Internal	5	35
3/1	4/1	Internal	26	35
3/1	5/1	Internal	26	35
3/2	5/2	Internal	26	35

Scenario 1: '2028 FTH Do Minimum AM' (FG1: '2028 FTH Do Minimum AM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A2 Westbound Offslip/Wrotham Road								
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 (Wrotham Road North)	3.90	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2005	2005
1/2 (Wrotham Road North)	3.90	0.00	Y	Arm 4 Right	20.00	100.0 %	1865	1865
2/1 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 4 Ahead	Inf	1.0 %	1948	1948
				Arm 5 Right	Inf	50.0 %		
				Arm 6 Left	25.00	49.0 %		
2/2 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 5 Right	25.00	100.0 %	1892	1892
3/1 (Wrotham Road South)	4.25	0.00	Y	Arm 4 Left	Inf	64.7 %	2040	2040
				Arm 5 Ahead	Inf	35.3 %		
3/2 (Wrotham Road South)	4.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2040	2040
4/1 (A2 Westbound Onslip Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Wrotham Road North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Wrotham Road North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrotham Road South Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 1

Scenario 2: '2028 FTH Do Minimum PM' (FG2: '2028 FTH Do Minimum PM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A2 Westbound Offslip/Wrotham Road								
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 (Wrotham Road North)	3.90	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2005	2005
1/2 (Wrotham Road North)	3.90	0.00	Y	Arm 4 Right	20.00	100.0 %	1865	1865
2/1 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 4 Ahead	Inf	0.3 %	1947	1947
				Arm 5 Right	Inf	50.3 %		
				Arm 6 Left	25.00	49.4 %		
2/2 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 5 Right	25.00	100.0 %	1892	1892
3/1 (Wrotham Road South)	4.25	0.00	Y	Arm 4 Left	Inf	55.9 %	2040	2040
				Arm 5 Ahead	Inf	44.1 %		
3/2 (Wrotham Road South)	4.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2040	2040
4/1 (A2 Westbound Onslip Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Wrotham Road North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Wrotham Road North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrotham Road South Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Scenario 3: '2028 FTH Do Minimum + Dev AM' (FG3: '2028 FTH Do Minimum + Dev AM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A2 Westbound Offslip/Wrotham Road

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 (Wrotham Road North)	3.90	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2005	2005
1/2 (Wrotham Road North)	3.90	0.00	Y	Arm 4 Right	20.00	100.0 %	1865	1865
2/1 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 4 Ahead	Inf	1.0 %	1947	1947
				Arm 5 Right	Inf	49.2 %		
				Arm 6 Left	25.00	49.7 %		
2/2 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 5 Right	25.00	100.0 %	1892	1892
3/1 (Wrotham Road South)	4.25	0.00	Y	Arm 4 Left	Inf	72.2 %	2040	2040
				Arm 5 Ahead	Inf	27.8 %		
3/2 (Wrotham Road South)	4.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2040	2040
4/1 (A2 Westbound Onslip Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Wrotham Road North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Wrotham Road North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrotham Road South Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 3

Scenario 4: '2028 FTH Do Minimum + Dev PM' (FG4: '2028 FTH Do Minimum + Dev PM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A2 Westbound Offslip/Wrotham Road

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 (Wrotham Road North)	3.90	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2005	2005
1/2 (Wrotham Road North)	3.90	0.00	Y	Arm 4 Right	20.00	100.0 %	1865	1865
2/1 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 4 Ahead	Inf	0.3 %	1945	1945
				Arm 5 Right	Inf	48.3 %		
				Arm 6 Left	25.00	51.4 %		
2/2 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 5 Right	25.00	100.0 %	1892	1892
3/1 (Wrotham Road South)	4.25	0.00	Y	Arm 4 Left	Inf	60.6 %	2040	2040
				Arm 5 Ahead	Inf	39.4 %		
3/2 (Wrotham Road South)	4.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2040	2040
4/1 (A2 Westbound Onslip Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Wrotham Road North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Wrotham Road North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrotham Road South Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 4

Scenario 5: '2028 FTH Do Minimum + Dev + Site B AM' (FG5: '2028 FTH Do Minimum + Dev + Site B AM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A2 Westbound Offslip/Wrotham Road

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 (Wrotham Road North)	3.90	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2005	2005
1/2 (Wrotham Road North)	3.90	0.00	Y	Arm 4 Right	20.00	100.0 %	1865	1865
2/1 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 4 Ahead	Inf	1.0 %	1946	1946
				Arm 5 Right	Inf	48.9 %		
				Arm 6 Left	25.00	50.1 %		
2/2 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 5 Right	25.00	100.0 %	1892	1892
3/1 (Wrotham Road South)	4.25	0.00	Y	Arm 4 Left	Inf	73.5 %	2040	2040
				Arm 5 Ahead	Inf	26.5 %		
3/2 (Wrotham Road South)	4.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2040	2040
4/1 (A2 Westbound Onslip Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Wrotham Road North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Wrotham Road North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrotham Road South Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 5

Scenario 6: '2028 FTH Do Minimum + Dev + Site B PM' (FG6: '2028 FTH Do Minimum + Dev + Site B PM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A2 Westbound Offslip/Wrotham Road

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 (Wrotham Road North)	3.90	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2005	2005
1/2 (Wrotham Road North)	3.90	0.00	Y	Arm 4 Right	20.00	100.0 %	1865	1865
2/1 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 4 Ahead	Inf	0.3 %	1944	1944
				Arm 5 Right	Inf	47.1 %		
				Arm 6 Left	25.00	52.6 %		
2/2 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 5 Right	25.00	100.0 %	1892	1892
3/1 (Wrotham Road South)	4.25	0.00	Y	Arm 4 Left	Inf	61.4 %	2040	2040
				Arm 5 Ahead	Inf	38.6 %		
3/2 (Wrotham Road South)	4.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2040	2040
4/1 (A2 Westbound Onslip Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Wrotham Road North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Wrotham Road North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrotham Road South Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 6

Scenario 7: '2028 FTH Do Minimum + Dev + Site B + RF AM' (FG7: '2028 FTH Do Minimum + Dev + Site B + RF AM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A2 Westbound Offslip/Wrotham Road

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 (Wrotham Road North)	3.90	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2005	2005
1/2 (Wrotham Road North)	3.90	0.00	Y	Arm 4 Right	20.00	100.0 %	1865	1865
2/1 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 4 Ahead	Inf	1.0 %	1946	1946
				Arm 5 Right	Inf	48.1 %		
				Arm 6 Left	25.00	50.9 %		
2/2 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 5 Right	25.00	100.0 %	1892	1892
3/1 (Wrotham Road South)	4.25	0.00	Y	Arm 4 Left	Inf	75.6 %	2040	2040
				Arm 5 Ahead	Inf	24.4 %		
3/2 (Wrotham Road South)	4.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2040	2040
4/1 (A2 Westbound Onslip Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Wrotham Road North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Wrotham Road North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrotham Road South Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 7

Scenario 8: '2028 FTH Do Minimum + Dev + Site B + RF PM' (FG8: '2028 FTH Do Minimum + Dev + Site B + RF PM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A2 Westbound Offslip/Wrotham Road

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 (Wrotham Road North)	3.90	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2005	2005
1/2 (Wrotham Road North)	3.90	0.00	Y	Arm 4 Right	20.00	100.0 %	1865	1865
2/1 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 4 Ahead	Inf	0.3 %	1942	1942
				Arm 5 Right	Inf	45.5 %		
				Arm 6 Left	25.00	54.2 %		
2/2 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 5 Right	25.00	100.0 %	1892	1892
3/1 (Wrotham Road South)	4.25	0.00	Y	Arm 4 Left	Inf	62.6 %	2040	2040
				Arm 5 Ahead	Inf	37.4 %		
3/2 (Wrotham Road South)	4.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2040	2040
4/1 (A2 Westbound Onslip Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Wrotham Road North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Wrotham Road North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrotham Road South Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 8

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2028 FTH Do Minimum AM'	08:00	09:00	01:00	
2: '2028 FTH Do Minimum PM'	17:00	18:00	01:00	
3: '2028 FTH Do Minimum + Dev AM'	08:00	09:00	01:00	
4: '2028 FTH Do Minimum + Dev PM'	17:00	18:00	01:00	
5: '2028 FTH Do Minimum + Dev + Site B AM'	08:00	09:00	01:00	
6: '2028 FTH Do Minimum + Dev + Site B PM'	17:00	18:00	01:00	
7: '2028 FTH Do Minimum + Dev + Site B + RF AM'	08:00	09:00	01:00	
8: '2028 FTH Do Minimum + Dev + Site B + RF PM'	17:00	18:00	01:00	

Traffic Flows, Desired

FG1: '2028 FTH Do Minimum AM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	493	833	1326
	B	574	0	191	4	769
	C	551	0	0	264	815
	D	0	0	0	0	0
	Tot.	1125	0	684	1101	2910

FG2: '2028 FTH Do Minimum PM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	673	583	1256
	B	528	0	177	1	706
	C	585	0	0	227	812
	D	0	0	0	0	0
	Tot.	1113	0	850	811	2774

FG3: '2028 FTH Do Minimum + Dev AM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	529	833	1362
	B	574	0	195	4	773
	C	580	0	0	328	908
	D	0	0	0	0	0
	Tot.	1154	0	724	1165	3043

FG4: '2028 FTH Do Minimum + Dev PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	751	583	1334
	B	528	0	186	1	715
	C	600	0	0	261	861
	D	0	0	0	0	0
	Tot.	1128	0	937	845	2910

FG5: '2028 FTH Do Minimum + Dev + Site B AM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	539	833	1372
	B	574	0	198	4	776
	C	592	0	0	344	936
	D	0	0	0	0	0
	Tot.	1166	0	737	1181	3084

FG6: '2028 FTH Do Minimum + Dev + Site B PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	772	583	1355
	B	528	0	192	1	721
	C	607	0	0	269	876
	D	0	0	0	0	0
	Tot.	1135	0	964	853	2952

FG7: '2028 FTH Do Minimum + Dev + Site B + RF AM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	548	833	1381
	B	574	0	202	4	780
	C	605	0	0	368	973
	D	0	0	0	0	0
	Tot.	1179	0	750	1205	3134

FG8: '2028 FTH Do Minimum + Dev + Site B + RF PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	795	583	1378
	B	528	0	200	1	729
	C	613	0	0	279	892
	D	0	0	0	0	0
	Tot.	1141	0	995	863	2999

Scenario 1: '2028 FTH Do Minimum AM' (FG1: '2028 FTH Do Minimum AM', Plan 1: 'Network Control Plan 1')
Traffic Flows, Actual
Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	493	833	1326
	B	574	0	191	4	769
	C	551	0	0	264	815
	D	0	0	0	0	0
	Tot.	1125	0	684	1101	2910

Traffic Flows, Difference
Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 2: '2028 FTH Do Minimum PM' (FG2: '2028 FTH Do Minimum PM', Plan 1: 'Network Control Plan 1')
Traffic Flows, Actual
Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	673	583	1256
	B	528	0	177	1	706
	C	585	0	0	227	812
	D	0	0	0	0	0
	Tot.	1113	0	850	811	2774

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 3: '2028 FTH Do Minimum + Dev AM' (FG3: '2028 FTH Do Minimum + Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	529	833	1362
	B	574	0	195	4	773
	C	580	0	0	328	908
	D	0	0	0	0	0
	Tot.	1154	0	724	1165	3043

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 4: '2028 FTH Do Minimum + Dev PM' (FG4: '2028 FTH Do Minimum + Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	751	583	1334
	B	528	0	186	1	715
	C	600	0	0	261	861
	D	0	0	0	0	0
	Tot.	1128	0	937	845	2910

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 5: '2028 FTH Do Minimum + Dev + Site B AM' (FG5: '2028 FTH Do Minimum + Dev + Site B AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	539	833	1372
	B	574	0	198	4	776
	C	592	0	0	344	936
	D	0	0	0	0	0
	Tot.	1166	0	737	1181	3084

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 6: '2028 FTH Do Minimum + Dev + Site B PM' (FG6: '2028 FTH Do Minimum + Dev + Site B PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	772	583	1355
	B	528	0	192	1	721
	C	607	0	0	269	876
	D	0	0	0	0	0
	Tot.	1135	0	964	853	2952

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 7: '2028 FTH Do Minimum + Dev + Site B + RF AM' (FG7: '2028 FTH Do Minimum + Dev + Site B + RF AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	548	833	1381
	B	574	0	202	4	780
	C	605	0	0	368	973
	D	0	0	0	0	0
	Tot.	1179	0	750	1205	3134

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 8: '2028 FTH Do Minimum + Dev + Site B + RF PM' (FG8: '2028 FTH Do Minimum + Dev + Site B + RF PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	795	583	1378
	B	528	0	200	1	729
	C	613	0	0	279	892
	D	0	0	0	0	0
	Tot.	1141	0	995	863	2999

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

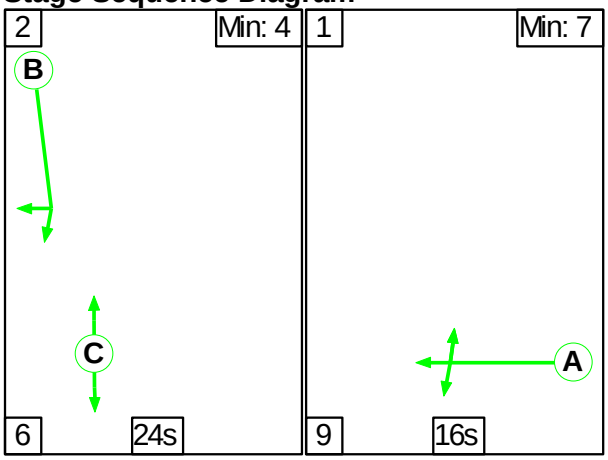
Traffic Lane Flows

Lane	Scenario 1: 2028 FTH Do Minimum AM	Scenario 2: 2028 FTH Do Minimum PM	Scenario 3: 2028 FTH Do Minimum + Dev AM	Scenario 4: 2028 FTH Do Minimum + Dev PM	Scenario 5: 2028 FTH Do Minimum + Dev + Site B AM	Scenario 6: 2028 FTH Do Minimum + Dev + Site B PM
Junction: A2 Westbound Offslip/Wrotham Road						
1/1	493	673	529	751	539	772
1/2	833	583	833	583	833	583
2/1 (short)	390	358	392	362	395	365
2/2 (with short)	769(In) 379(Out)	706(In) 348(Out)	773(In) 381(Out)	715(In) 353(Out)	776(In) 381(Out)	721(In) 356(Out)
3/1 (short)	408	406	454	431	468	438
3/2 (with short)	815(In) 407(Out)	812(In) 406(Out)	908(In) 454(Out)	861(In) 430(Out)	936(In) 468(Out)	876(In) 438(Out)
4/1	1101	811	1165	845	1181	853
5/1	339	359	319	345	317	341
5/2	786	754	835	783	849	794
6/1	684	850	724	937	737	964

Lane	Scenario 7: 2028 FTH Do Minimum + Dev + Site B + RF AM	Scenario 8: 2028 FTH Do Minimum + Dev + Site B + RF PM
Junction: A2 Westbound Offslip/Wrotham Road		
1/1	548	795
1/2	833	583
2/1 (short)	397	369
2/2 (with short)	780(In) 383(Out)	729(In) 360(Out)
3/1 (short)	487	446
3/2 (with short)	973(In) 486(Out)	892(In) 446(Out)
4/1	1205	863
5/1	310	335
5/2	869	806
6/1	750	995

Scenario 1: '2028 FTH Do Minimum AM' (FG1: '2028 FTH Do Minimum AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



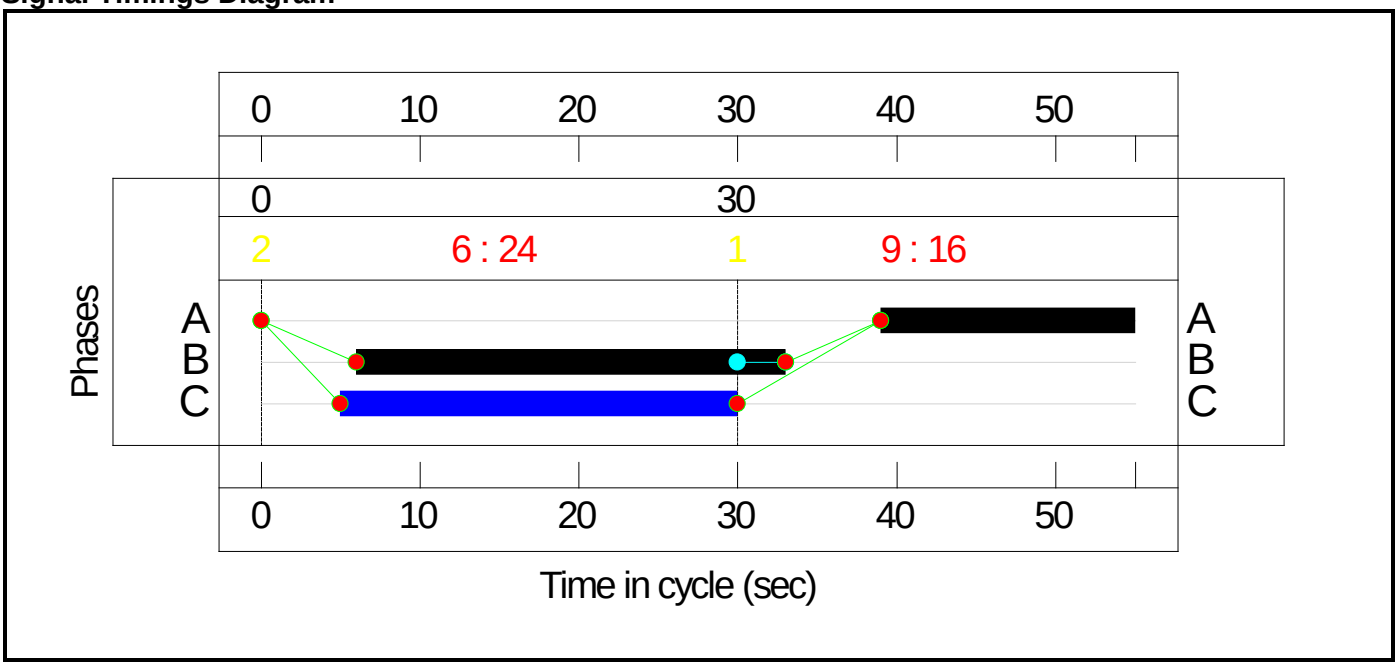
Stage Timings

Stage	2	1
Duration	24	16
Change Point	0	30

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A3 Westbound Offslip Ahead Right Left	Traffic	16	39	0
B	Wrotham Road North Right Ahead	Traffic	27	6	33
C	Pedestrians across	Pedestrian	25	5	30

Signal Timings Diagram



Lane Green Times

Junction: A2 Westbound Offslip/Wrotham Road					
Lane	Description	Type	Phases	Start Green	End Green
1/1	Wrotham Road North Ahead	U	B	6	33
1/2	Wrotham Road North Right	U	B	6	33
2/1	A3 Westbound Offslip Ahead Right Left	U	A	39	0
2/2	A3 Westbound Offslip Right	U	A	39	0

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**87.7%**
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**87.7%**
1/1	Wrotham Road North Ahead	U	N/A	N/A	B		1	27	-	-	493	2005	1021	48.3%
1/2	Wrotham Road North Right	U	N/A	N/A	B		1	27	-	-	833	1865	949	87.7%
2/2+2/1	A3 Westbound Offslip Ahead Right Left	U	N/A	N/A	A		1	16	-	-	769	1892:1948	448+461	84.7 : 84.7%
3/2+3/1	Wrotham Road South Left Ahead	O	N/A	N/A	-		-	-	-	-	815	2040:2040	642+642	63.4 : 63.6%
4/1	A2 Westbound Onslip	U	N/A	N/A	-		-	-	-	-	1101	Inf	Inf	0.0%
5/1	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	339	Inf	Inf	0.0%
5/2	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	786	Inf	Inf	0.0%
6/1	Wrotham Road South	U	N/A	N/A	-		-	-	-	-	684	Inf	Inf	0.0%

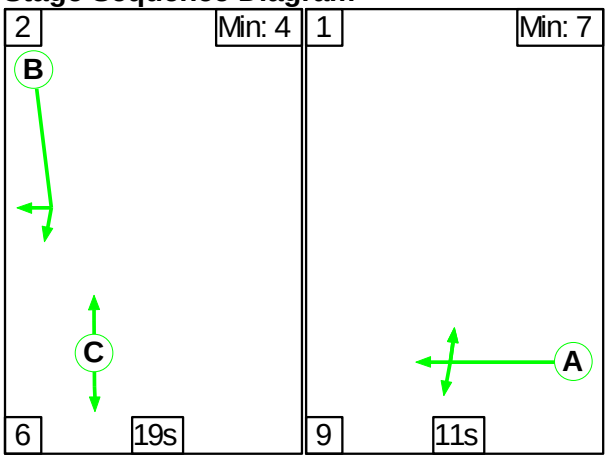
Detailed Input Data And Results

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: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**1334**	**296**	**0**	**7.6**	**7.4**	**0.0**	**15.0**	**-**	**-**	**-**	**-**	
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**1334**	**296**	**0**	**7.6**	**7.4**	**0.0**	**15.0**	**-**	**-**	**-**	**-**	
1/1	493	493	-	-	-	1.2	0.5	-	1.7	12.2	4.8	0.5	5.3	
1/2	833	833	-	-	-	2.8	3.4	-	6.2	26.6	11.1	3.4	14.5	
2/2+2/1	769	769	-	-	-	3.5	2.7	-	6.2	28.9	5.4	2.7	8.1	
3/2+3/1	815	815	1334	296	0	0.1	0.9	-	1.0	4.5	1.5	0.9	2.3	
4/1	1101	1101	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	339	339	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	786	786	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	684	684	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 2.6 Total Delay for Signalled Lanes (pcuHr): 13.99 Cycle Time (s): 55
PRC Over All Lanes (%): 2.6 Total Delay Over All Lanes(pcuHr): 15.00

Scenario 2: '2028 FTH Do Minimum PM' (FG2: '2028 FTH Do Minimum PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



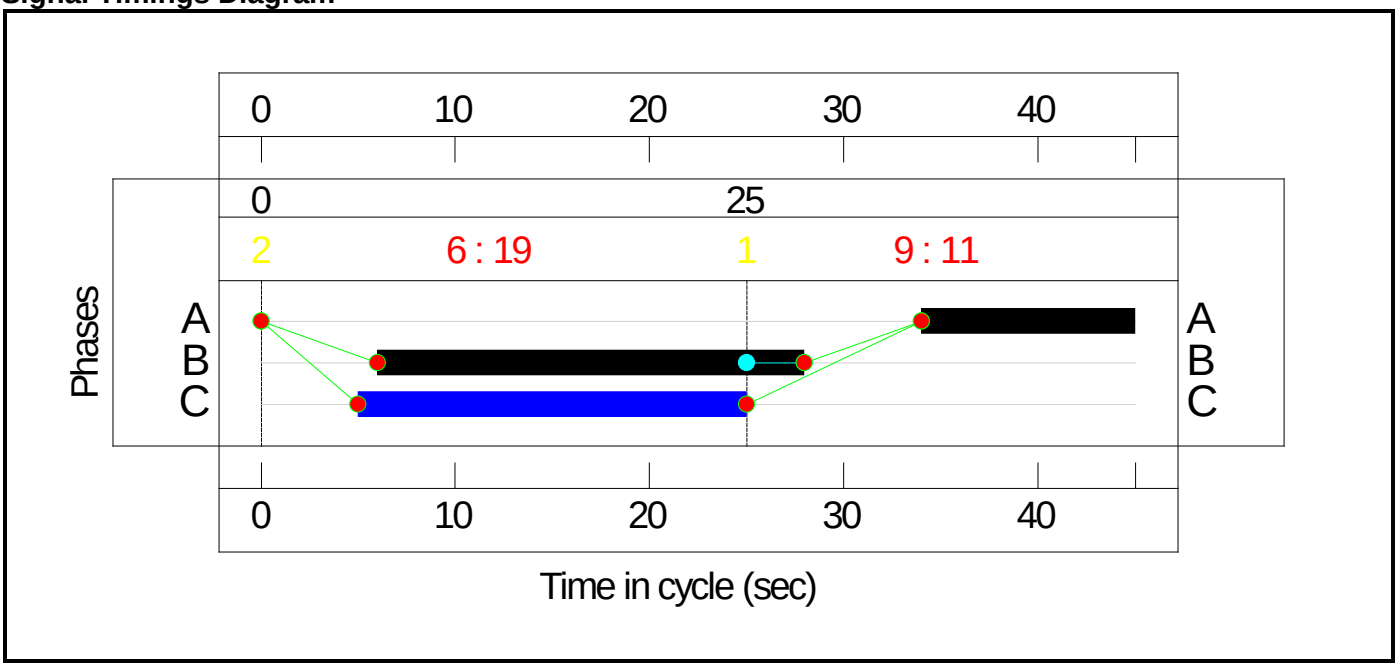
Stage Timings

Stage	2	1
Duration	19	11
Change Point	0	25

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A3 Westbound Offslip Ahead Right Left	Traffic	11	34	0
B	Wrotham Road North Right Ahead	Traffic	22	6	28
C	Pedestrians across	Pedestrian	20	5	25

Signal Timings Diagram



Lane Green Times

Junction: A2 Westbound Offslip/Wrotham Road					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Wrotham Road North Ahead	U	B	6	28
1/2	Wrotham Road North Right	U	B	6	28
2/1	A3 Westbound Offslip Ahead Right Left	U	A	34	0
2/2	A3 Westbound Offslip Right	U	A	34	0

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**78.7%**
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**78.7%**
1/1	Wrotham Road North Ahead	U	N/A	N/A	B		1	22	-	-	673	2005	1025	65.7%
1/2	Wrotham Road North Right	U	N/A	N/A	B		1	22	-	-	583	1865	953	61.2%
2/2+2/1	A3 Westbound Offslip Ahead Right Left	U	N/A	N/A	A		1	11	-	-	706	1892:1947	442+455	78.7 : 78.7%
3/2+3/1	Wrotham Road South Left Ahead	O	N/A	N/A	-		-	-	-	-	812	2040:2040	734+734	55.3 : 55.3%
4/1	A2 Westbound Onslip	U	N/A	N/A	-		-	-	-	-	811	Inf	Inf	0.0%
5/1	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	359	Inf	Inf	0.0%
5/2	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	754	Inf	Inf	0.0%
6/1	Wrotham Road South	U	N/A	N/A	-		-	-	-	-	850	Inf	Inf	0.0%

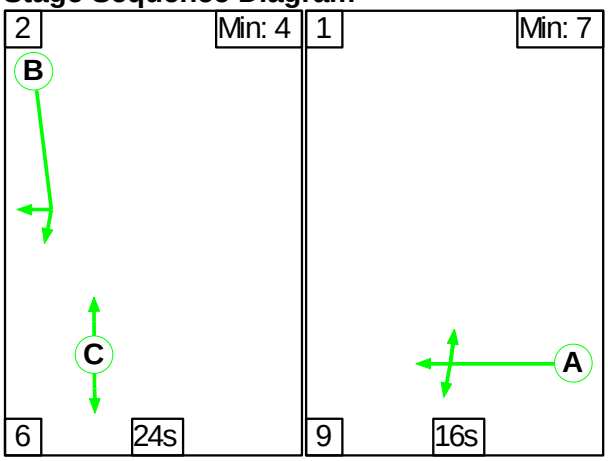
Detailed Input Data And Results

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: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**1263**	**361**	**0**	**5.8**	**4.2**	**0.0**	**10.0**	**-**	**-**	**-**	**-**	
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**1263**	**361**	**0**	**5.8**	**4.2**	**0.0**	**10.0**	**-**	**-**	**-**	**-**	
1/1	673	673	-	-	-	1.5	1.0	-	2.5	13.2	6.2	1.0	7.1	
1/2	583	583	-	-	-	1.3	0.8	-	2.1	12.7	5.2	0.8	6.0	
2/2+2/1	706	706	-	-	-	2.9	1.8	-	4.7	24.1	4.0	1.8	5.8	
3/2+3/1	812	812	1263	361	0	0.1	0.6	-	0.7	3.2	1.1	0.6	1.7	
4/1	811	811	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	359	359	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	754	754	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	850	850	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 14.3 Total Delay for Signalled Lanes (pcuHr): 9.24 Cycle Time (s): 45
PRC Over All Lanes (%): 14.3 Total Delay Over All Lanes(pcuHr): 9.97

Scenario 3: '2028 FTH Do Minimum + Dev AM' (FG3: '2028 FTH Do Minimum + Dev AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



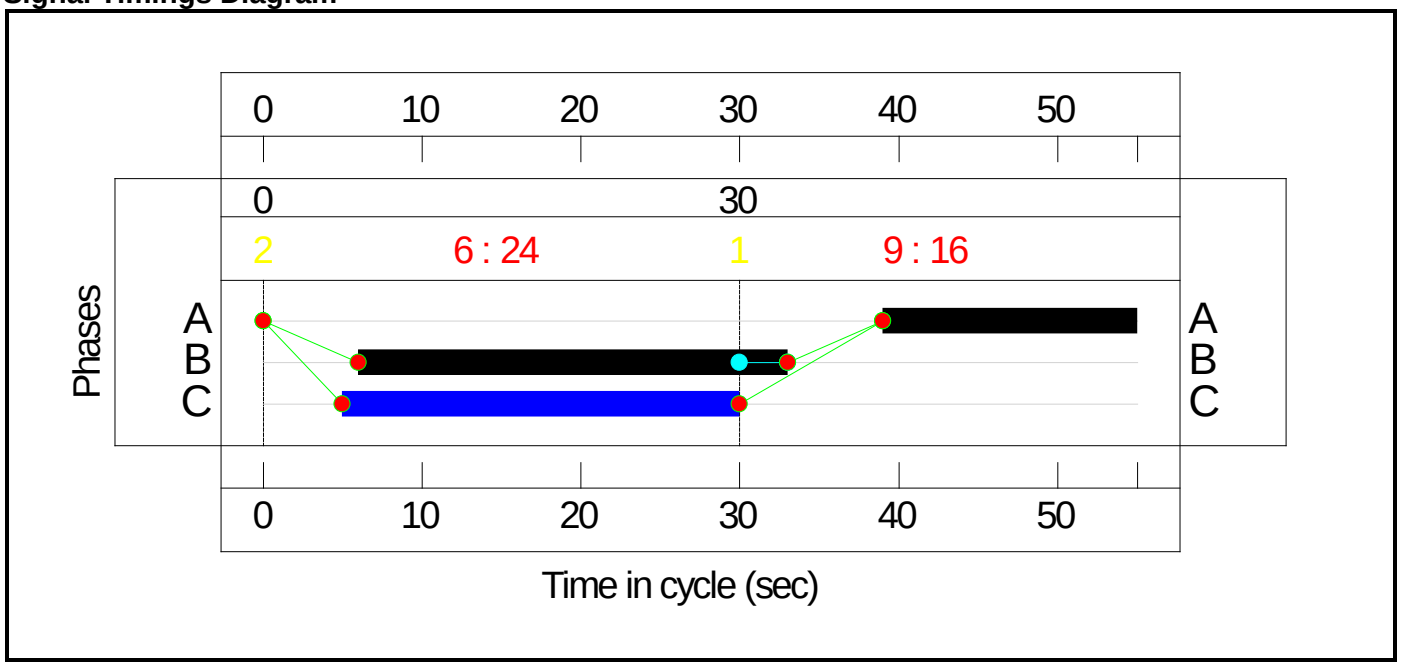
Stage Timings

Stage	2	1
Duration	24	16
Change Point	0	30

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A3 Westbound Offslip Ahead Right Left	Traffic	16	39	0
B	Wrotham Road North Right Ahead	Traffic	27	6	33
C	Pedestrians across	Pedestrian	25	5	30

Signal Timings Diagram



Lane Green Times

Junction: A2 Westbound Offslip/Wrotham Road					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Wrotham Road North Ahead	U	B	6	33
1/2	Wrotham Road North Right	U	B	6	33
2/1	A3 Westbound Offslip Ahead Right Left	U	A	39	0
2/2	A3 Westbound Offslip Right	U	A	39	0

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**87.7%**
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**87.7%**
1/1	Wrotham Road North Ahead	U	N/A	N/A	B		1	27	-	-	529	2005	1021	51.8%
1/2	Wrotham Road North Right	U	N/A	N/A	B		1	27	-	-	833	1865	949	87.7%
2/2+2/1	A3 Westbound Offslip Ahead Right Left	U	N/A	N/A	A		1	16	-	-	773	1892:1947	448+461	85.1 : 85.1%
3/2+3/1	Wrotham Road South Left Ahead	O	N/A	N/A	-		-	-	-	-	908	2040:2040	642+642	70.8 : 70.8%
4/1	A2 Westbound Onslip	U	N/A	N/A	-		-	-	-	-	1165	Inf	Inf	0.0%
5/1	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	319	Inf	Inf	0.0%
5/2	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	835	Inf	Inf	0.0%
6/1	Wrotham Road South	U	N/A	N/A	-		-	-	-	-	724	Inf	Inf	0.0%

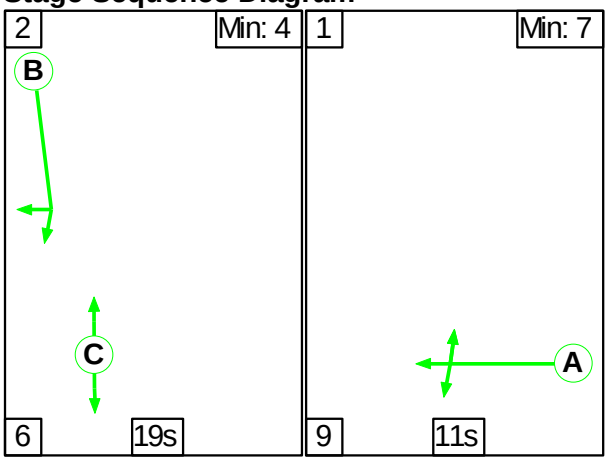
Detailed Input Data And Results

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: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**1486**	**330**	**0**	**7.8**	**7.9**	**0.0**	**15.7**	**-**	**-**	**-**	**-**	
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**1486**	**330**	**0**	**7.8**	**7.9**	**0.0**	**15.7**	**-**	**-**	**-**	**-**	
1/1	529	529	-	-	-	1.3	0.5	-	1.9	12.7	5.3	0.5	5.8	
1/2	833	833	-	-	-	2.8	3.4	-	6.2	26.6	11.1	3.4	14.5	
2/2+2/1	773	773	-	-	-	3.5	2.7	-	6.3	29.2	5.4	2.7	8.2	
3/2+3/1	908	908	1486	330	0	0.2	1.2	-	1.4	5.5	1.9	1.2	3.1	
4/1	1165	1165	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	319	319	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	835	835	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	724	724	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 2.6 Total Delay for Signalled Lanes (pcuHr): 14.29 Cycle Time (s): 55
PRC Over All Lanes (%): 2.6 Total Delay Over All Lanes(pcuHr): 15.69

Scenario 4: '2028 FTH Do Minimum + Dev PM' (FG4: '2028 FTH Do Minimum + Dev PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



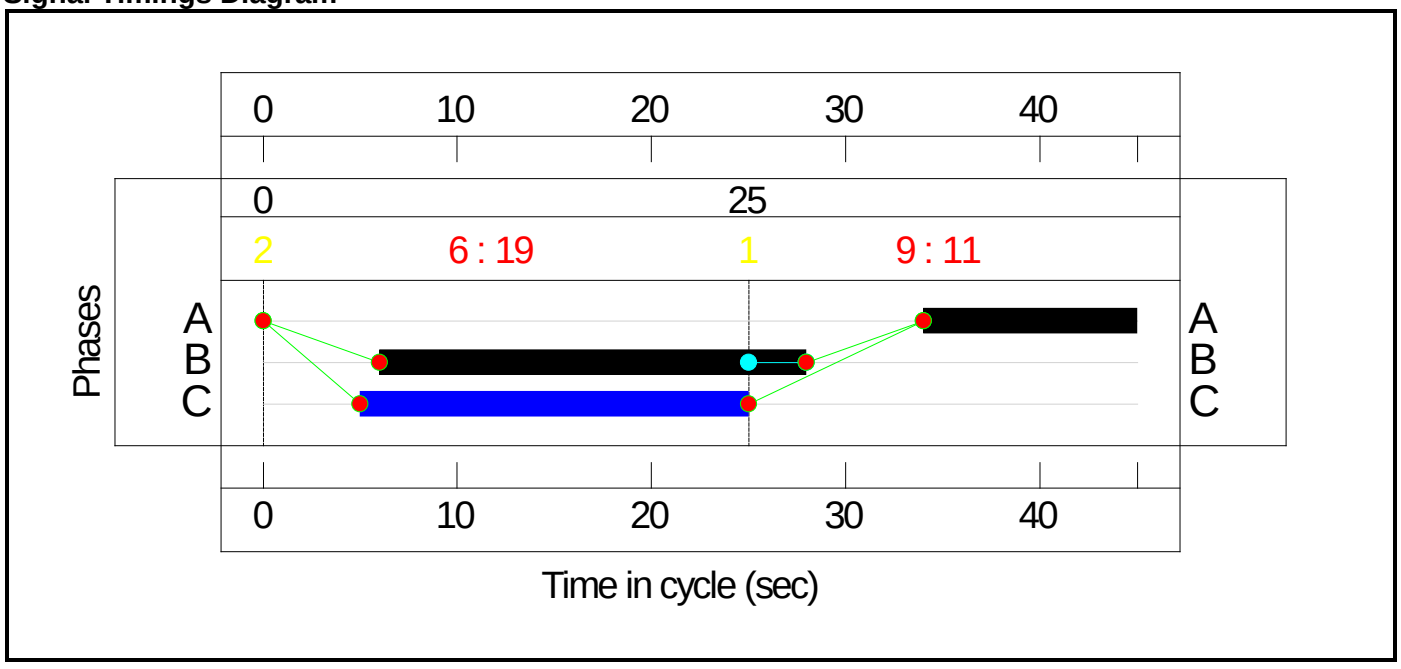
Stage Timings

Stage	2	1
Duration	19	11
Change Point	0	25

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A3 Westbound Offslip Ahead Right Left	Traffic	11	34	0
B	Wrotham Road North Right Ahead	Traffic	22	6	28
C	Pedestrians across	Pedestrian	20	5	25

Signal Timings Diagram



Lane Green Times

Junction: A2 Westbound Offslip/Wrotham Road					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Wrotham Road North Ahead	U	B	6	28
1/2	Wrotham Road North Right	U	B	6	28
2/1	A3 Westbound Offslip Ahead Right Left	U	A	34	0
2/2	A3 Westbound Offslip Right	U	A	34	0

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**79.8%**
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**79.8%**
1/1	Wrotham Road North Ahead	U	N/A	N/A	B		1	22	-	-	751	2005	1025	73.3%
1/2	Wrotham Road North Right	U	N/A	N/A	B		1	22	-	-	583	1865	953	61.2%
2/2+2/1	A3 Westbound Offslip Ahead Right Left	U	N/A	N/A	A		1	11	-	-	715	1892:1945	442+453	79.8 : 79.8%
3/2+3/1	Wrotham Road South Left Ahead	O	N/A	N/A	-		-	-	-	-	861	2040:2040	734+734	58.6 : 58.7%
4/1	A2 Westbound Onslip	U	N/A	N/A	-		-	-	-	-	845	Inf	Inf	0.0%
5/1	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	345	Inf	Inf	0.0%
5/2	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	783	Inf	Inf	0.0%
6/1	Wrotham Road South	U	N/A	N/A	-		-	-	-	-	937	Inf	Inf	0.0%

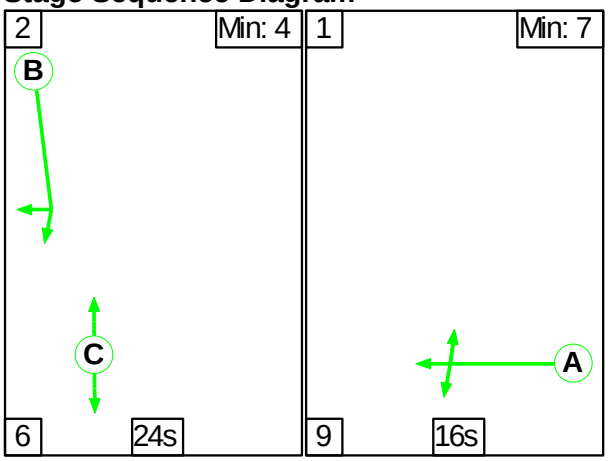
Detailed Input Data And Results

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: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**1339**	**383**	**0**	**6.1**	**4.8**	**0.0**	**10.9**	**-**	**-**	**-**	**-**	
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**1339**	**383**	**0**	**6.1**	**4.8**	**0.0**	**10.9**	**-**	**-**	**-**	**-**	
1/1	751	751	-	-	-	1.8	1.4	-	3.2	15.1	7.3	1.4	8.7	
1/2	583	583	-	-	-	1.3	0.8	-	2.1	12.7	5.2	0.8	6.0	
2/2+2/1	715	715	-	-	-	3.0	1.9	-	4.9	24.6	4.0	1.9	6.0	
3/2+3/1	861	861	1339	383	0	0.1	0.7	-	0.8	3.5	1.3	0.7	2.0	
4/1	845	845	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	345	345	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	783	783	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	937	937	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 12.7 Total Delay for Signalled Lanes (pcuHr): 10.10 Cycle Time (s): 45
PRC Over All Lanes (%): 12.7 Total Delay Over All Lanes(pcuHr): 10.93

Scenario 5: '2028 FTH Do Minimum + Dev + Site B AM' (FG5: '2028 FTH Do Minimum + Dev + Site B AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



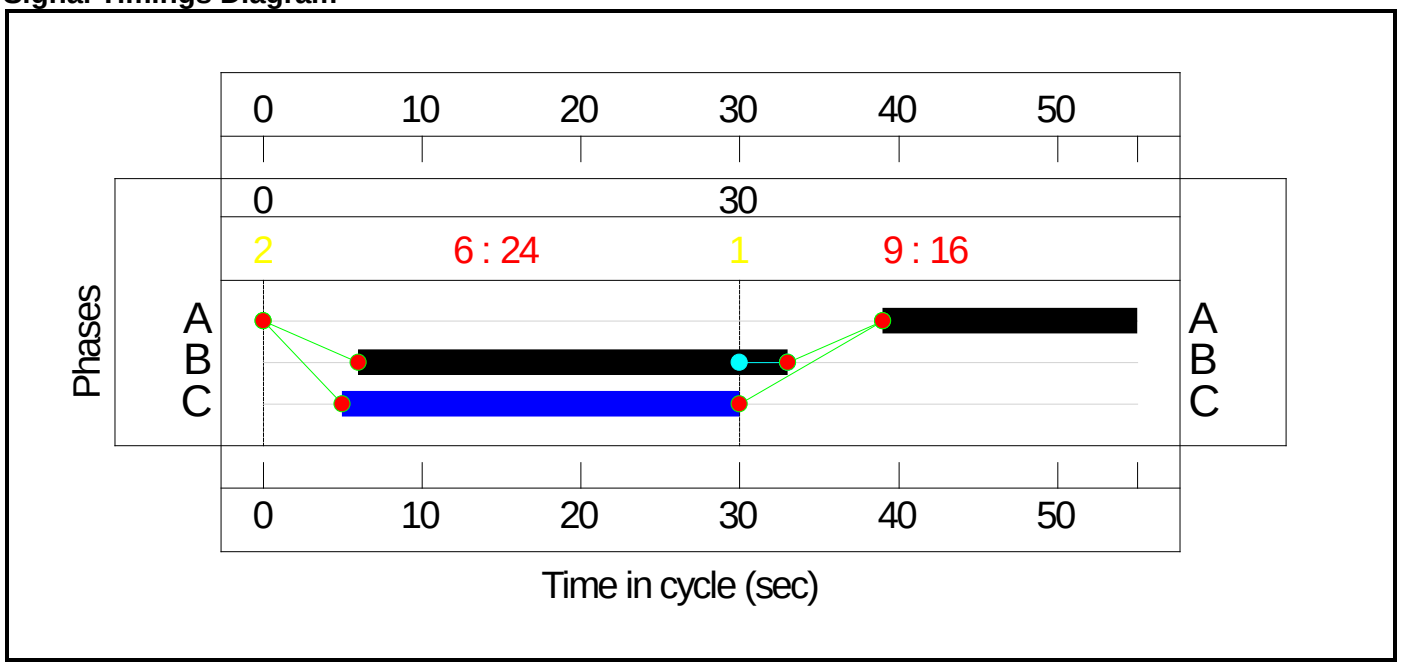
Stage Timings

Stage	2	1
Duration	24	16
Change Point	0	30

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A3 Westbound Offslip Ahead Right Left	Traffic	16	39	0
B	Wrotham Road North Right Ahead	Traffic	27	6	33
C	Pedestrians across	Pedestrian	25	5	30

Signal Timings Diagram



Lane Green Times

Junction: A2 Westbound Offslip/Wrotham Road					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Wrotham Road North Ahead	U	B	6	33
1/2	Wrotham Road North Right	U	B	6	33
2/1	A3 Westbound Offslip Ahead Right Left	U	A	39	0
2/2	A3 Westbound Offslip Right	U	A	39	0

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**87.7%**
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**87.7%**
1/1	Wrotham Road North Ahead	U	N/A	N/A	B		1	27	-	-	539	2005	1021	52.8%
1/2	Wrotham Road North Right	U	N/A	N/A	B		1	27	-	-	833	1865	949	87.7%
2/2+2/1	A3 Westbound Offslip Ahead Right Left	U	N/A	N/A	A		1	16	-	-	776	1892:1946	447+464	85.2 : 85.2%
3/2+3/1	Wrotham Road South Left Ahead	O	N/A	N/A	-		-	-	-	-	936	2040:2040	642+642	73.0 : 73.0%
4/1	A2 Westbound Onslip	U	N/A	N/A	-		-	-	-	-	1181	Inf	Inf	0.0%
5/1	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	317	Inf	Inf	0.0%
5/2	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	849	Inf	Inf	0.0%
6/1	Wrotham Road South	U	N/A	N/A	-		-	-	-	-	737	Inf	Inf	0.0%

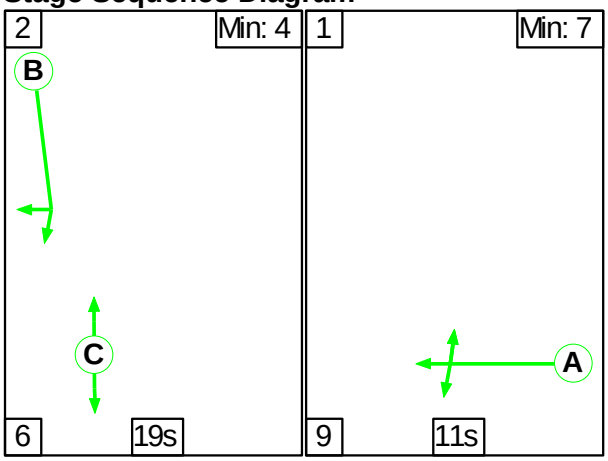
Detailed Input Data And Results

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: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**1532**	**340**	**0**	**7.9**	**8.0**	**0.0**	**15.9**	**-**	**-**	**-**	**-**	
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**1532**	**340**	**0**	**7.9**	**8.0**	**0.0**	**15.9**	**-**	**-**	**-**	**-**	
1/1	539	539	-	-	-	1.4	0.6	-	1.9	12.8	5.4	0.6	5.9	
1/2	833	833	-	-	-	2.8	3.4	-	6.2	26.6	11.1	3.4	14.5	
2/2+2/1	776	776	-	-	-	3.6	2.8	-	6.3	29.3	5.6	2.8	8.4	
3/2+3/1	936	936	1532	340	0	0.2	1.3	-	1.5	6.0	1.9	1.3	3.3	
4/1	1181	1181	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	317	317	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	849	849	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	737	737	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 2.6 Total Delay for Signalled Lanes (pcuHr): 14.38 Cycle Time (s): 55
PRC Over All Lanes (%): 2.6 Total Delay Over All Lanes(pcuHr): 15.93

Scenario 6: '2028 FTH Do Minimum + Dev + Site B PM' (FG6: '2028 FTH Do Minimum + Dev + Site B PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



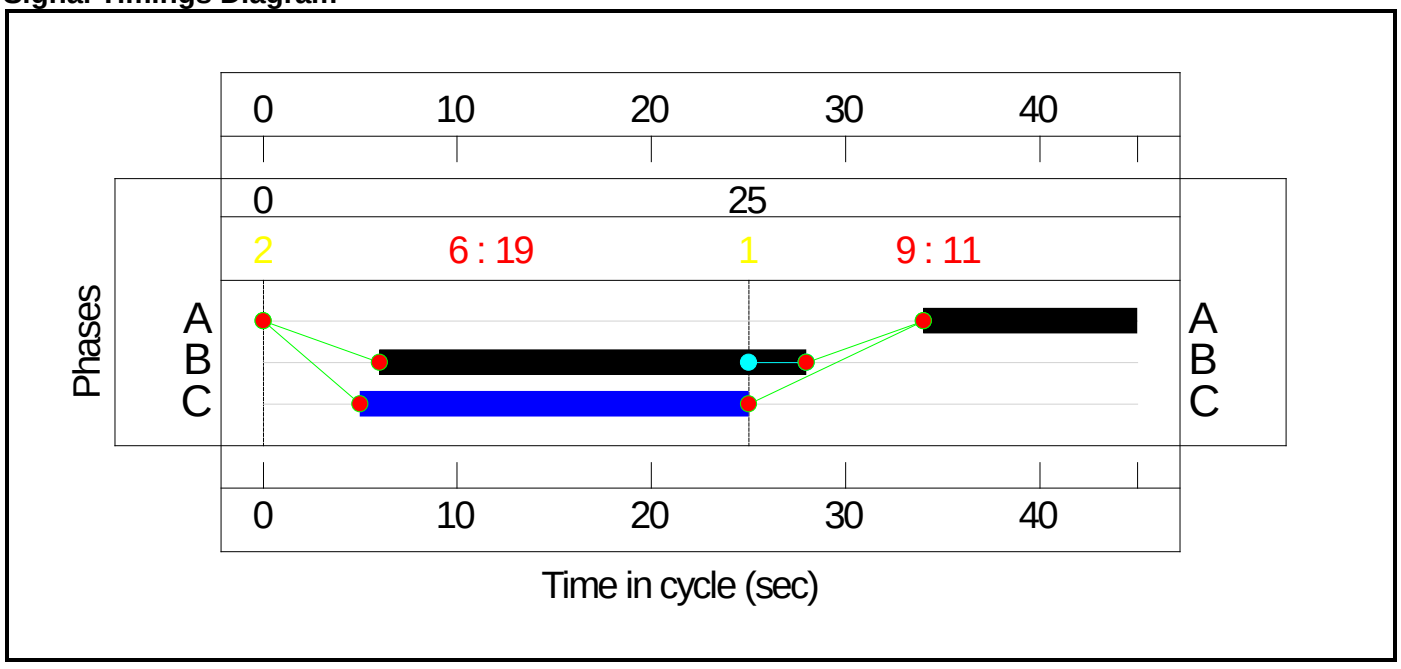
Stage Timings

Stage	2	1
Duration	19	11
Change Point	0	25

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A3 Westbound Offslip Ahead Right Left	Traffic	11	34	0
B	Wrotham Road North Right Ahead	Traffic	22	6	28
C	Pedestrians across	Pedestrian	20	5	25

Signal Timings Diagram



Lane Green Times

Junction: A2 Westbound Offslip/Wrotham Road					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Wrotham Road North Ahead	U	B	6	28
1/2	Wrotham Road North Right	U	B	6	28
2/1	A3 Westbound Offslip Ahead Right Left	U	A	34	0
2/2	A3 Westbound Offslip Right	U	A	34	0

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**80.5%**
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**80.5%**
1/1	Wrotham Road North Ahead	U	N/A	N/A	B		1	22	-	-	772	2005	1025	75.3%
1/2	Wrotham Road North Right	U	N/A	N/A	B		1	22	-	-	583	1865	953	61.2%
2/2+2/1	A3 Westbound Offslip Ahead Right Left	U	N/A	N/A	A		1	11	-	-	721	1892:1944	442+453	80.5 : 80.5%
3/2+3/1	Wrotham Road South Left Ahead	O	N/A	N/A	-		-	-	-	-	876	2040:2040	734+734	59.7 : 59.7%
4/1	A2 Westbound Onslip	U	N/A	N/A	-		-	-	-	-	853	Inf	Inf	0.0%
5/1	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	341	Inf	Inf	0.0%
5/2	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	794	Inf	Inf	0.0%
6/1	Wrotham Road South	U	N/A	N/A	-		-	-	-	-	964	Inf	Inf	0.0%

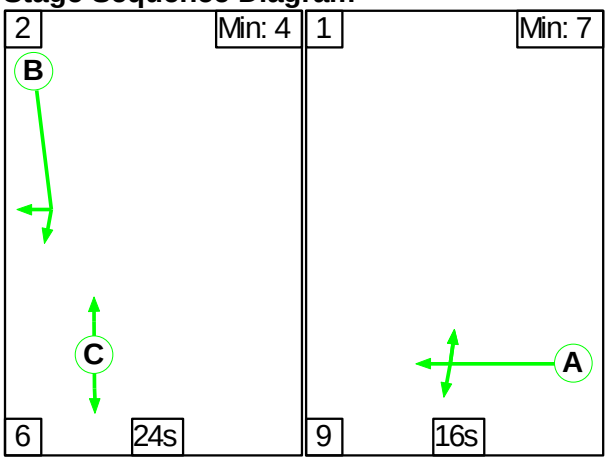
Detailed Input Data And Results

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: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**1363**	**389**	**0**	**6.3**	**5.1**	**0.0**	**11.3**	**-**	**-**	**-**	**-**	
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**1363**	**389**	**0**	**6.3**	**5.1**	**0.0**	**11.3**	**-**	**-**	**-**	**-**	
1/1	772	772	-	-	-	1.9	1.5	-	3.4	15.8	7.5	1.5	9.0	
1/2	583	583	-	-	-	1.3	0.8	-	2.1	12.7	5.2	0.8	6.0	
2/2+2/1	721	721	-	-	-	3.0	2.0	-	5.0	25.0	4.1	2.0	6.1	
3/2+3/1	876	876	1363	389	0	0.1	0.7	-	0.9	3.5	1.3	0.7	2.1	
4/1	853	853	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	341	341	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	794	794	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	964	964	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 11.8 Total Delay for Signalled Lanes (pcuHr): 10.44 Cycle Time (s): 45
PRC Over All Lanes (%): 11.8 Total Delay Over All Lanes(pcuHr): 11.30

Scenario 7: '2028 FTH Do Minimum + Dev + Site B + RF AM' (FG7: '2028 FTH Do Minimum + Dev + Site B + RF AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



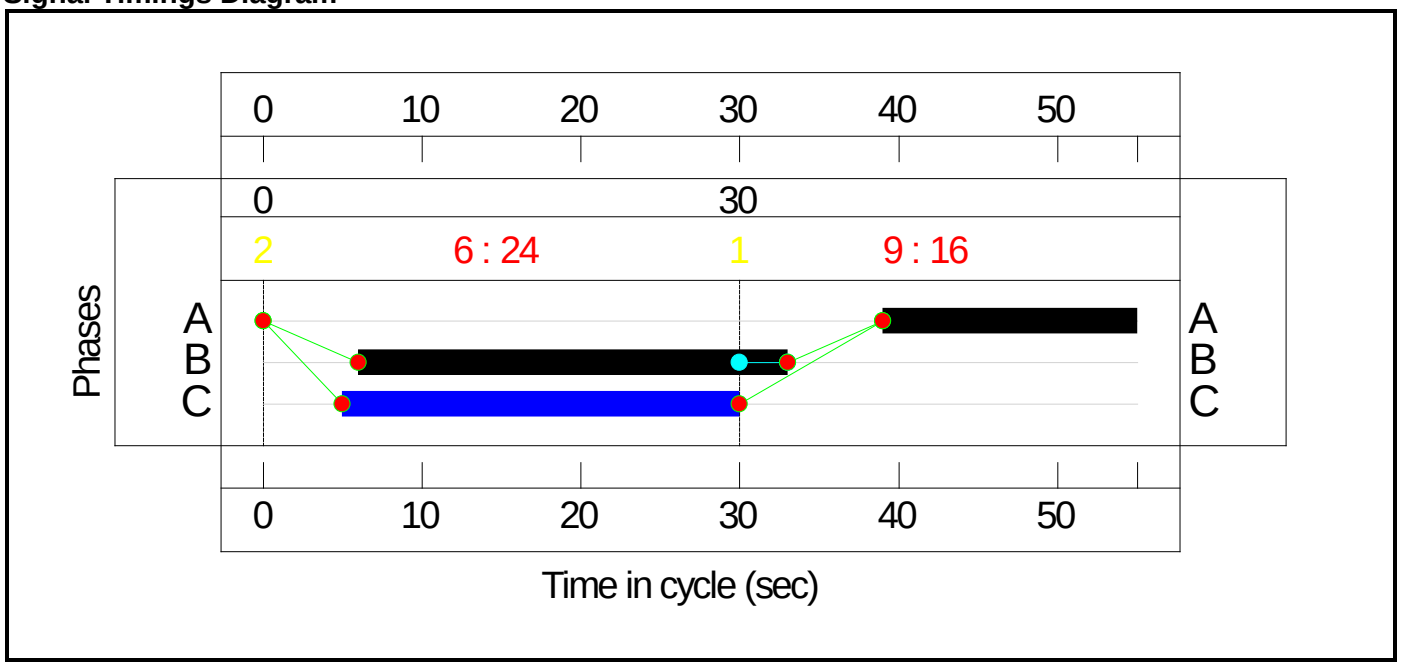
Stage Timings

Stage	2	1
Duration	24	16
Change Point	0	30

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A3 Westbound Offslip Ahead Right Left	Traffic	16	39	0
B	Wrotham Road North Right Ahead	Traffic	27	6	33
C	Pedestrians across	Pedestrian	25	5	30

Signal Timings Diagram



Lane Green Times

Junction: A2 Westbound Offslip/Wrotham Road					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Wrotham Road North Ahead	U	B	6	33
1/2	Wrotham Road North Right	U	B	6	33
2/1	A3 Westbound Offslip Ahead Right Left	U	A	39	0
2/2	A3 Westbound Offslip Right	U	A	39	0

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**87.7%**
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**87.7%**
1/1	Wrotham Road North Ahead	U	N/A	N/A	B		1	27	-	-	548	2005	1021	53.7%
1/2	Wrotham Road North Right	U	N/A	N/A	B		1	27	-	-	833	1865	949	87.7%
2/2+2/1	A3 Westbound Offslip Ahead Right Left	U	N/A	N/A	A		1	16	-	-	780	1892:1946	447+464	85.6 : 85.6%
3/2+3/1	Wrotham Road South Left Ahead	O	N/A	N/A	-		-	-	-	-	973	2040:2040	642+642	75.8 : 75.9%
4/1	A2 Westbound Onslip	U	N/A	N/A	-		-	-	-	-	1205	Inf	Inf	0.0%
5/1	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	310	Inf	Inf	0.0%
5/2	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	869	Inf	Inf	0.0%
6/1	Wrotham Road South	U	N/A	N/A	-		-	-	-	-	750	Inf	Inf	0.0%

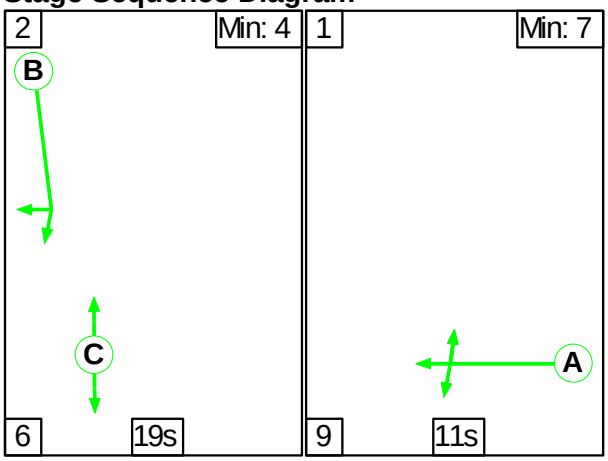
Detailed Input Data And Results

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: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**1592**	**354**	**0**	**8.0**	**8.4**	**0.0**	**16.3**	**-**	**-**	**-**	**-**	
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**1592**	**354**	**0**	**8.0**	**8.4**	**0.0**	**16.3**	**-**	**-**	**-**	**-**	
1/1	548	548	-	-	-	1.4	0.6	-	2.0	12.9	5.6	0.6	6.2	
1/2	833	833	-	-	-	2.8	3.4	-	6.2	26.6	11.1	3.4	14.5	
2/2+2/1	780	780	-	-	-	3.6	2.9	-	6.4	29.7	5.9	2.9	8.7	
3/2+3/1	973	973	1592	354	0	0.2	1.6	-	1.8	6.6	2.2	1.6	3.7	
4/1	1205	1205	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	310	310	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	869	869	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	750	750	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 2.6 Total Delay for Signalled Lanes (pcuHr): 14.55 Cycle Time (s): 55
PRC Over All Lanes (%): 2.6 Total Delay Over All Lanes(pcuHr): 16.34

Scenario 8: '2028 FTH Do Minimum + Dev + Site B + RF PM' (FG8: '2028 FTH Do Minimum + Dev + Site B + RF PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



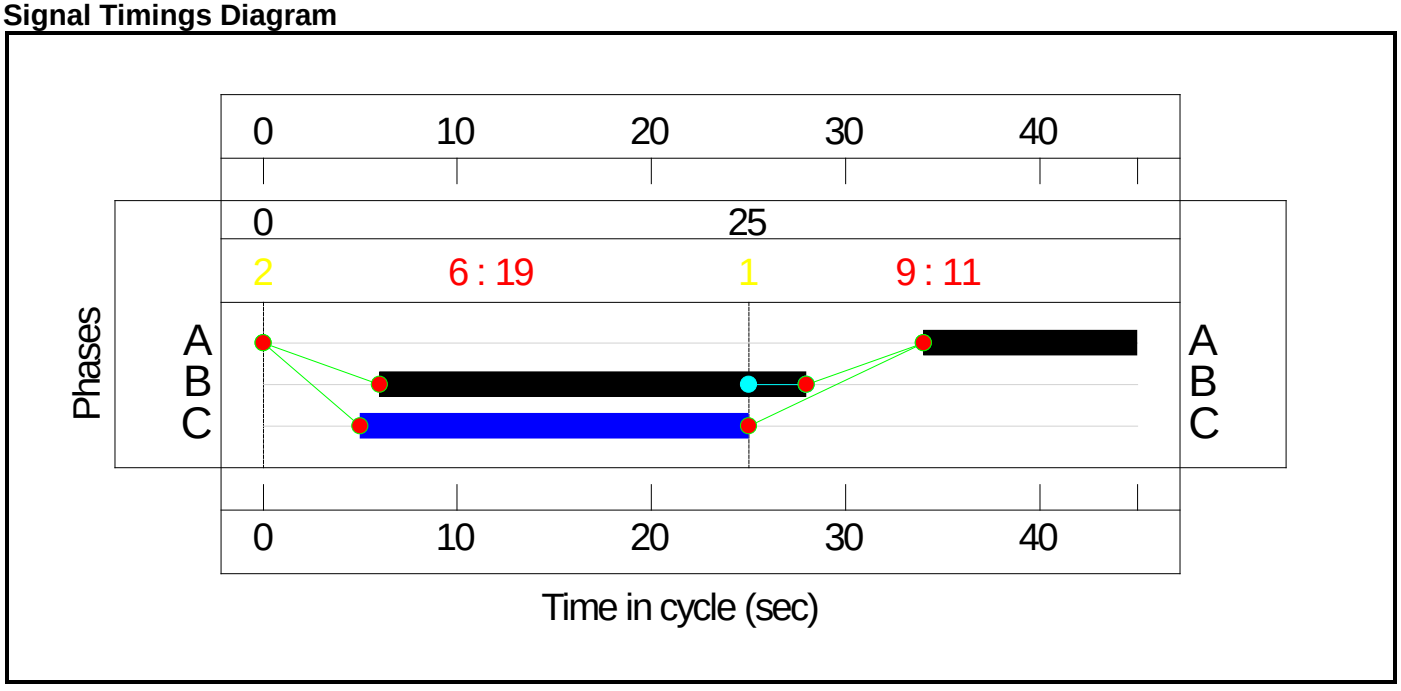
Stage Timings

Stage	2	1
Duration	19	11
Change Point	0	25

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A3 Westbound Offslip Ahead Right Left	Traffic	11	34	0
B	Wrotham Road North Right Ahead	Traffic	22	6	28
C	Pedestrians across	Pedestrian	20	5	25

Signal Timings Diagram



Lane Green Times

Junction: A2 Westbound Offslip/Wrotham Road					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Wrotham Road North Ahead	U	B	6	28
1/2	Wrotham Road North Right	U	B	6	28
2/1	A3 Westbound Offslip Ahead Right Left	U	A	34	0
2/2	A3 Westbound Offslip Right	U	A	34	0

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**81.4%**
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**81.4%**
1/1	Wrotham Road North Ahead	U	N/A	N/A	B		1	22	-	-	795	2005	1025	77.6%
1/2	Wrotham Road North Right	U	N/A	N/A	B		1	22	-	-	583	1865	953	61.2%
2/2+2/1	A3 Westbound Offslip Ahead Right Left	U	N/A	N/A	A		1	11	-	-	729	1892:1942	442+453	81.4 : 81.4%
3/2+3/1	Wrotham Road South Left Ahead	O	N/A	N/A	-		-	-	-	-	892	2040:2040	734+734	60.7 : 60.7%
4/1	A2 Westbound Onslip	U	N/A	N/A	-		-	-	-	-	863	Inf	Inf	0.0%
5/1	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	335	Inf	Inf	0.0%
5/2	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	806	Inf	Inf	0.0%
6/1	Wrotham Road South	U	N/A	N/A	-		-	-	-	-	995	Inf	Inf	0.0%

Detailed 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: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**1388**	**396**	**0**	**6.4**	**5.4**	**0.0**	**11.8**	**-**	**-**	**-**	**-**	
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**1388**	**396**	**0**	**6.4**	**5.4**	**0.0**	**11.8**	**-**	**-**	**-**	**-**	
1/1	795	795	-	-	-	2.0	1.7	-	3.7	16.6	7.9	1.7	9.7	
1/2	583	583	-	-	-	1.3	0.8	-	2.1	12.7	5.2	0.8	6.0	
2/2+2/1	729	729	-	-	-	3.0	2.1	-	5.2	25.5	4.1	2.1	6.2	
3/2+3/1	892	892	1388	396	0	0.1	0.8	-	0.9	3.6	1.4	0.8	2.1	
4/1	863	863	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	335	335	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	806	806	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	995	995	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

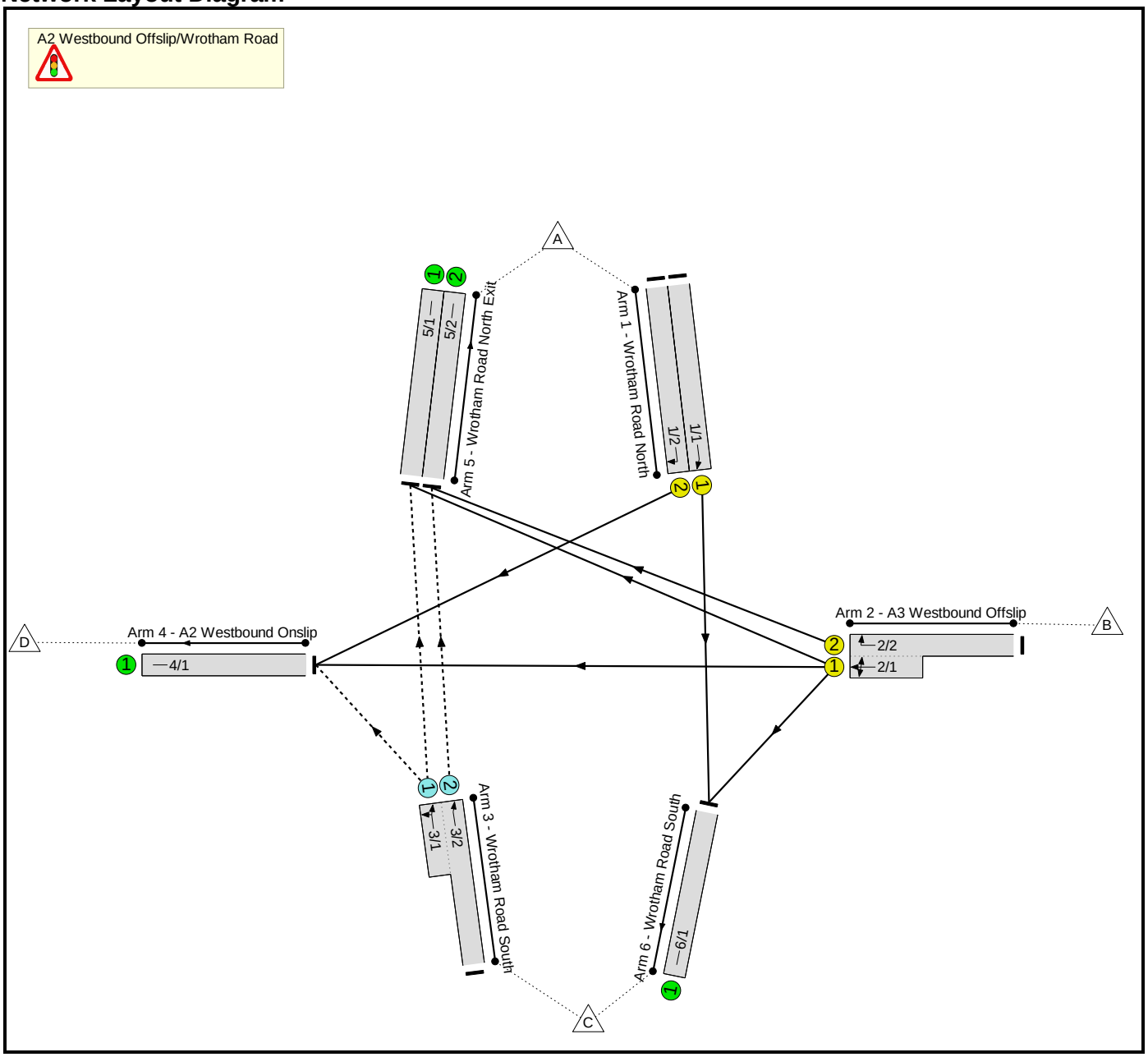
C1 PRC for Signalled Lanes (%): 10.5 Total Delay for Signalled Lanes (pcuHr): 10.89 Cycle Time (s): 45
PRC Over All Lanes (%): 10.5 Total Delay Over All Lanes(pcuHr): 11.79

Detailed Input Data And Results

User and Project Details

Project:	**Land east of Wrotham Road**
Title:	**A2/Wrotham Road Southern Rbt Signalisation**
Location:	
Client:	Richborough
Additional detail:	
File name:	T25526 A2_Wrotham Road - Southern Rbt Signalisation.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 2, 0

Network Layout Diagram



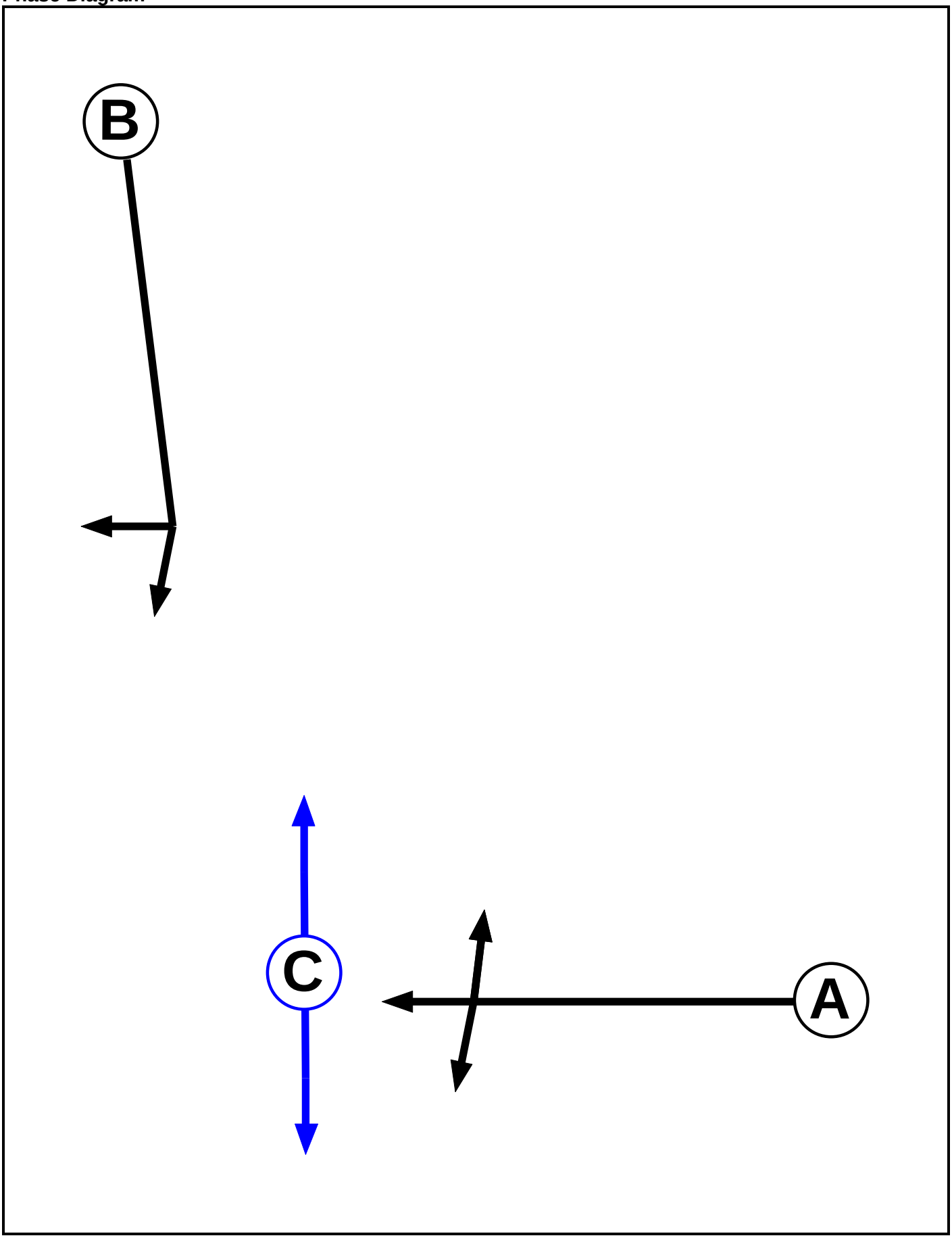
Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2030 RF Do Minimum AM	2030 RF Do Minimum AM	Network Control Plan 1	08:00 - 09:00	55	3.7	15.11
2	2030 RF Do Minimum PM	2030 RF Do Minimum PM	Network Control Plan 1	17:00 - 18:00	45	17.0	10.61
3	2030 RF Do Minimum + Dev AM	2030 RF Do Minimum + Dev AM	Network Control Plan 1	08:00 - 09:00	55	3.7	15.73
4	2030 RF Do Minimum + Dev PM	2030 RF Do Minimum + Dev PM	Network Control Plan 1	17:00 - 18:00	45	10.2	11.73
5	2030 RF Do Minimum + Dev + Site B AM	2030 RF Do Minimum + Dev + Site B AM	Network Control Plan 1	08:00 - 09:00	55	3.7	16.19
6	2030 RF Do Minimum + Dev + Site B PM	2030 RF Do Minimum + Dev + Site B PM	Network Control Plan 1	17:00 - 18:00	45	9.3	12.17

Controller Summary

Controller	Type	SCN	Stage Stream	Num Phases	Num Stages	Controls Junctions	Controller Notes
C1	Gen		Stage Stream 1	3	2	A2 Westbound Offslip/Wrotham Road	

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	4
C	Pedestrian		5	5

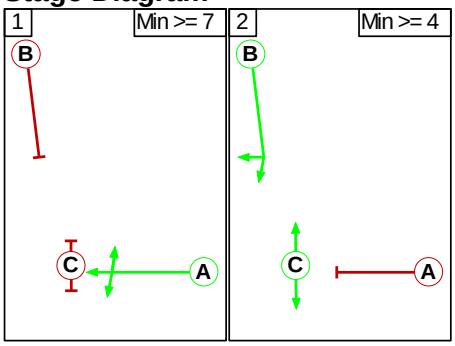
Phase Intergreens Matrix

		Starting Phase		
		A	B	C
Terminating Phase	A		6	5
	B	6		-
	C	9	-	

Phases in Stage

Stage No.	Phases in Stage
1	A
2	B C

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
2	1	B	Losing	3	3

Prohibited Stage Change

		To Stage	
		1	2
From Stage	1		6
	2	9	

Lane Input Data

Junction: A2 Westbound Offslip/Wrotham Road

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (Wrotham Road North)	U	B	2	3	60.0	Geom	-	3.90	0.00	Y	Arm 6 Ahead	Inf
1/2 (Wrotham Road North)	U	B	2	3	60.0	Geom	-	3.90	0.00	Y	Arm 4 Right	20.00
2/1 (A3 Westbound Offslip)	U	A	2	3	5.0	Geom	-	3.90	0.00	Y	Arm 4 Ahead	Inf
											Arm 5 Right	Inf
											Arm 6 Left	25.00
2/2 (A3 Westbound Offslip)	U	A	2	3	60.0	Geom	-	3.90	0.00	Y	Arm 5 Right	25.00
3/1 (Wrotham Road South)	O		2	3	5.0	Geom	-	4.25	0.00	Y	Arm 4 Left	Inf
											Arm 5 Ahead	Inf
3/2 (Wrotham Road South)	O		2	3	60.0	Geom	-	4.25	0.00	Y	Arm 5 Ahead	Inf
4/1 (A2 Westbound Onslip)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Wrotham Road North Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2 (Wrotham Road North Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Wrotham Road South)	U		2	3	60.0	Inf	-	-	-	-	-	-

Give-Way Lane Input Data

Junction: A2 Westbound Offslip/Wrotham Road

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
3/1 (Wrotham Road South)	4/1 (Left)	1079	0	1/2	0.31	All	-	-	-	-	-
				2/1	0.31	To 4/1 (Ahead) To 5/1 (Right)					
				2/2	0.31	All					
	5/1 (Ahead)	1079	0	1/2	0.31	All					
				2/1	0.31	To 4/1 (Ahead) To 5/1 (Right)					
				2/2	0.31	All					
3/2 (Wrotham Road South)	5/2 (Ahead)	1079	0	2/1	0.31	To 4/1 (Ahead) To 5/1 (Right)	-	-	-	-	-
				1/2	0.31	All					
				2/2	0.31	All					

Lane Connector Input Data

Junction: A2 Westbound Offslip/Wrotham Road				
Org Lane	Dest Lane	Junction	Modelled Mean Cruise Time (s)	Platoon Dispersion
1/1	6/1	Internal	26	N/A
1/2	4/1	Internal	5	35
2/1	4/1	Internal	5	35
2/1	5/1	Internal	5	35
2/1	6/1	Internal	5	N/A
2/2	5/2	Internal	5	35
3/1	4/1	Internal	26	35
3/1	5/1	Internal	26	35
3/2	5/2	Internal	26	35

Scenario 1: '2030 RF Do Minimum AM' (FG1: '2030 RF Do Minimum AM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A2 Westbound Offslip/Wrotham Road								
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 (Wrotham Road North)	3.90	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2005	2005
1/2 (Wrotham Road North)	3.90	0.00	Y	Arm 4 Right	20.00	100.0 %	1865	1865
2/1 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 4 Ahead	Inf	1.0 %	1947	1947
				Arm 5 Right	Inf	49.5 %		
				Arm 6 Left	25.00	49.5 %		
2/2 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 5 Right	25.00	100.0 %	1892	1892
3/1 (Wrotham Road South)	4.25	0.00	Y	Arm 4 Left	Inf	68.1 %	2040	2040
				Arm 5 Ahead	Inf	31.9 %		
3/2 (Wrotham Road South)	4.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2040	2040
4/1 (A2 Westbound Onslip Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Wrotham Road North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Wrotham Road North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrotham Road South Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 1

Scenario 2: '2030 RF Do Minimum PM' (FG2: '2030 RF Do Minimum PM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A2 Westbound Offslip/Wrotham Road								
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 (Wrotham Road North)	3.90	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2005	2005
1/2 (Wrotham Road North)	3.90	0.00	Y	Arm 4 Right	20.00	100.0 %	1865	1865
2/1 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 4 Ahead	Inf	0.3 %	1946	1946
				Arm 5 Right	Inf	49.0 %		
				Arm 6 Left	25.00	50.7 %		
2/2 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 5 Right	25.00	100.0 %	1892	1892
3/1 (Wrotham Road South)	4.25	0.00	Y	Arm 4 Left	Inf	57.4 %	2040	2040
				Arm 5 Ahead	Inf	42.6 %		
3/2 (Wrotham Road South)	4.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2040	2040
4/1 (A2 Westbound Onslip Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Wrotham Road North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Wrotham Road North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrotham Road South Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Scenario 3: '2030 RF Do Minimum + Dev AM' (FG3: '2030 RF Do Minimum + Dev AM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A2 Westbound Offslip/Wrotham Road

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 (Wrotham Road North)	3.90	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2005	2005
1/2 (Wrotham Road North)	3.90	0.00	Y	Arm 4 Right	20.00	100.0 %	1865	1865
2/1 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 4 Ahead	Inf	1.0 %	1946	1946
				Arm 5 Right	Inf	48.9 %		
				Arm 6 Left	25.00	50.1 %		
2/2 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 5 Right	25.00	100.0 %	1892	1892
3/1 (Wrotham Road South)	4.25	0.00	Y	Arm 4 Left	Inf	72.2 %	2040	2040
				Arm 5 Ahead	Inf	27.8 %		
3/2 (Wrotham Road South)	4.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2040	2040
4/1 (A2 Westbound Onslip Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Wrotham Road North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Wrotham Road North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrotham Road South Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 3

Scenario 4: '2030 RF Do Minimum + Dev PM' (FG4: '2030 RF Do Minimum + Dev PM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A2 Westbound Offslip/Wrotham Road

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 (Wrotham Road North)	3.90	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2005	2005
1/2 (Wrotham Road North)	3.90	0.00	Y	Arm 4 Right	20.00	100.0 %	1865	1865
2/1 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 4 Ahead	Inf	0.3 %	1944	1944
				Arm 5 Right	Inf	47.2 %		
				Arm 6 Left	25.00	52.6 %		
2/2 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 5 Right	25.00	100.0 %	1892	1892
3/1 (Wrotham Road South)	4.25	0.00	Y	Arm 4 Left	Inf	61.9 %	2040	2040
				Arm 5 Ahead	Inf	38.1 %		
3/2 (Wrotham Road South)	4.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2040	2040
4/1 (A2 Westbound Onslip Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Wrotham Road North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Wrotham Road North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrotham Road South Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 4

Scenario 5: '2030 RF Do Minimum + Dev + Site B AM' (FG5: '2030 RF Do Minimum + Dev + Site B AM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A2 Westbound Offslip/Wrotham Road

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 (Wrotham Road North)	3.90	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2005	2005
1/2 (Wrotham Road North)	3.90	0.00	Y	Arm 4 Right	20.00	100.0 %	1865	1865
2/1 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 4 Ahead	Inf	1.0 %	1946	1946
				Arm 5 Right	Inf	48.2 %		
				Arm 6 Left	25.00	50.7 %		
2/2 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 5 Right	25.00	100.0 %	1892	1892
3/1 (Wrotham Road South)	4.25	0.00	Y	Arm 4 Left	Inf	76.0 %	2040	2040
				Arm 5 Ahead	Inf	24.0 %		
3/2 (Wrotham Road South)	4.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2040	2040
4/1 (A2 Westbound Onslip Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Wrotham Road North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Wrotham Road North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrotham Road South Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 5

Scenario 6: '2030 RF Do Minimum + Dev + Site B PM' (FG6: '2030 RF Do Minimum + Dev + Site B PM', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A2 Westbound Offslip/Wrotham Road

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 (Wrotham Road North)	3.90	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2005	2005
1/2 (Wrotham Road North)	3.90	0.00	Y	Arm 4 Right	20.00	100.0 %	1865	1865
2/1 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 4 Ahead	Inf	0.3 %	1942	1942
				Arm 5 Right	Inf	46.0 %		
				Arm 6 Left	25.00	53.7 %		
2/2 (A3 Westbound Offslip)	3.90	0.00	Y	Arm 5 Right	25.00	100.0 %	1892	1892
3/1 (Wrotham Road South)	4.25	0.00	Y	Arm 4 Left	Inf	62.6 %	2040	2040
				Arm 5 Ahead	Inf	37.4 %		
3/2 (Wrotham Road South)	4.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2040	2040
4/1 (A2 Westbound Onslip Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Wrotham Road North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Wrotham Road North Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Wrotham Road South Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 6

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2030 RF Do Minimum AM'	08:00	09:00	01:00	
2: '2030 RF Do Minimum PM'	17:00	18:00	01:00	
3: '2030 RF Do Minimum + Dev AM'	08:00	09:00	01:00	
4: '2030 RF Do Minimum + Dev PM'	17:00	18:00	01:00	
5: '2030 RF Do Minimum + Dev + Site B AM'	08:00	09:00	01:00	
6: '2030 RF Do Minimum + Dev + Site B PM'	17:00	18:00	01:00	

Traffic Flows, Desired

FG1: '2030 RF Do Minimum AM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	497	824	1321
	B	579	0	196	4	779
	C	563	0	0	291	854
	D	0	0	0	0	0
	Tot.	1142	0	693	1119	2954

FG2: '2030 RF Do Minimum PM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	701	595	1296
	B	536	0	186	1	723
	C	598	0	0	241	839
	D	0	0	0	0	0
	Tot.	1134	0	887	837	2858

FG3: '2030 RF Do Minimum + Dev AM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	533	824	1357
	B	579	0	200	4	783
	C	592	0	0	335	927
	D	0	0	0	0	0
	Tot.	1171	0	733	1163	3067

FG4: '2030 RF Do Minimum + Dev PM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	779	595	1374
	B	536	0	195	1	732
	C	613	0	0	275	888
	D	0	0	0	0	0
	Tot.	1149	0	974	871	2994

FG5: '2030 RF Do Minimum + Dev + Site B AM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	543	824	1367
	B	579	0	203	4	786
	C	604	0	0	371	975
	D	0	0	0	0	0
	Tot.	1183	0	746	1199	3128

FG6: '2030 RF Do Minimum + Dev + Site B PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	800	595	1395
	B	536	0	201	1	738
	C	620	0	0	283	903
	D	0	0	0	0	0
	Tot.	1156	0	1001	879	3036

Scenario 1: '2030 RF Do Minimum AM' (FG1: '2030 RF Do Minimum AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	497	824	1321
	B	579	0	196	4	779
	C	563	0	0	291	854
	D	0	0	0	0	0
	Tot.	1142	0	693	1119	2954

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 2: '2030 RF Do Minimum PM' (FG2: '2030 RF Do Minimum PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	701	595	1296
	B	536	0	186	1	723
	C	598	0	0	241	839
	D	0	0	0	0	0
	Tot.	1134	0	887	837	2858

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 3: '2030 RF Do Minimum + Dev AM' (FG3: '2030 RF Do Minimum + Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	533	824	1357
	B	579	0	200	4	783
	C	592	0	0	335	927
	D	0	0	0	0	0
	Tot.	1171	0	733	1163	3067

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 4: '2030 RF Do Minimum + Dev PM' (FG4: '2030 RF Do Minimum + Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	779	595	1374
	B	536	0	195	1	732
	C	613	0	0	275	888
	D	0	0	0	0	0
	Tot.	1149	0	974	871	2994

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 5: '2030 RF Do Minimum + Dev + Site B AM' (FG5: '2030 RF Do Minimum + Dev + Site B AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	543	824	1367
	B	579	0	203	4	786
	C	604	0	0	371	975
	D	0	0	0	0	0
	Tot.	1183	0	746	1199	3128

Traffic Flows, Difference

Difference :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Scenario 6: '2030 RF Do Minimum + Dev + Site B PM' (FG6: '2030 RF Do Minimum + Dev + Site B PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	800	595	1395
	B	536	0	201	1	738
	C	620	0	0	283	903
	D	0	0	0	0	0
	Tot.	1156	0	1001	879	3036

Traffic Flows, Difference

Difference :

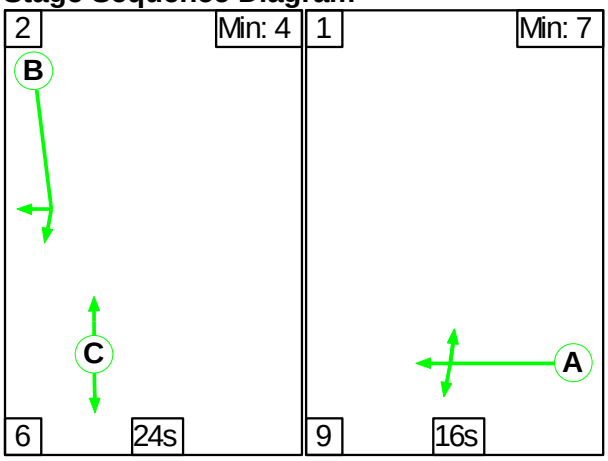
		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	0	0	0
	B	0	0	0	0	0
	C	0	0	0	0	0
	D	0	0	0	0	0
	Tot.	0	0	0	0	0

Traffic Lane Flows

Lane	Scenario 1: 2030 RF Do Minimum AM	Scenario 2: 2030 RF Do Minimum PM	Scenario 3: 2030 RF Do Minimum + Dev AM	Scenario 4: 2030 RF Do Minimum + Dev PM	Scenario 5: 2030 RF Do Minimum + Dev + Site B AM	Scenario 6: 2030 RF Do Minimum + Dev + Site B PM
Junction: A2 Westbound Offslip/Wrotham Road						
1/1	497	701	533	779	543	800
1/2	824	595	824	595	824	595
2/1 (short)	396	367	399	371	400	374
2/2 (with short)	779(In) 383(Out)	723(In) 356(Out)	783(In) 384(Out)	732(In) 361(Out)	786(In) 386(Out)	738(In) 364(Out)
3/1 (short)	427	420	464	444	488	452
3/2 (with short)	854(In) 427(Out)	839(In) 419(Out)	927(In) 463(Out)	888(In) 444(Out)	975(In) 487(Out)	903(In) 451(Out)
4/1	1119	837	1163	871	1199	879
5/1	332	359	324	344	310	341
5/2	810	775	847	805	873	815
6/1	693	887	733	974	746	1001

Scenario 1: '2030 RF Do Minimum AM' (FG1: '2030 RF Do Minimum AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



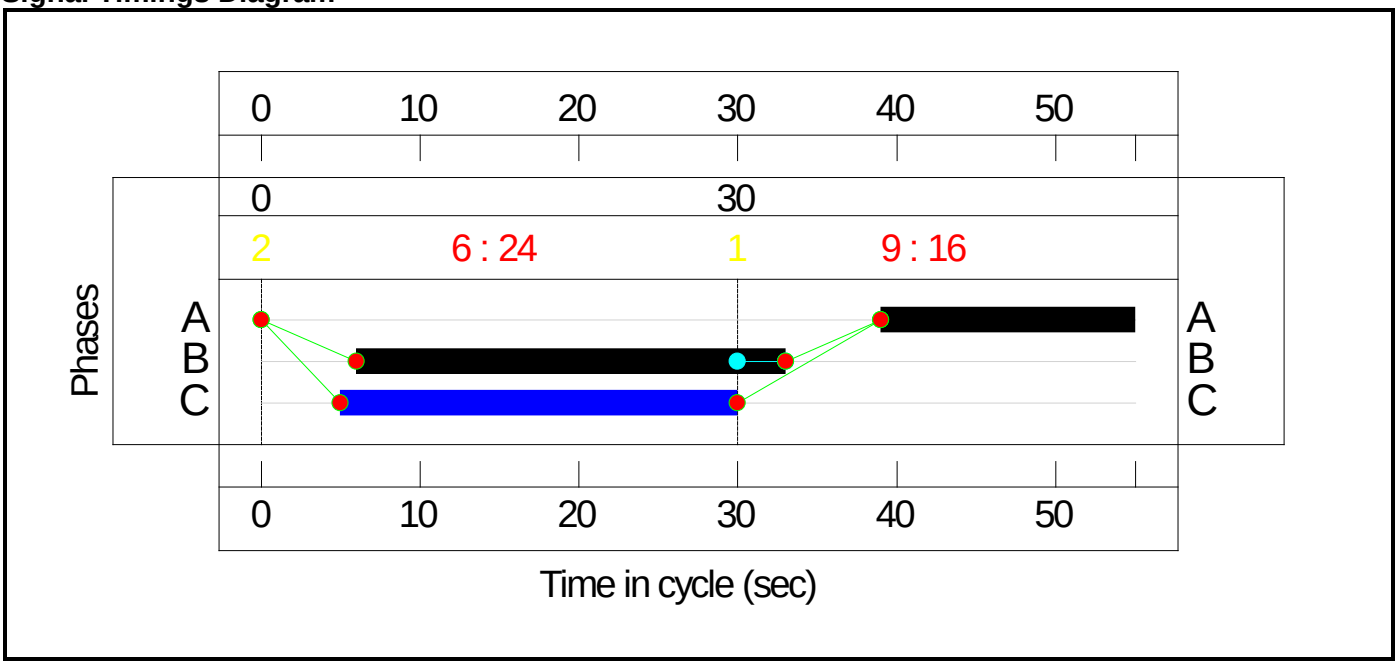
Stage Timings

Stage	2	1
Duration	24	16
Change Point	0	30

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A3 Westbound Offslip Ahead Right Left	Traffic	16	39	0
B	Wrotham Road North Right Ahead	Traffic	27	6	33
C	Pedestrians across	Pedestrian	25	5	30

Signal Timings Diagram



Lane Green Times

Junction: A2 Westbound Offslip/Wrotham Road					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Wrotham Road North Ahead	U	B	6	33
1/2	Wrotham Road North Right	U	B	6	33
2/1	A3 Westbound Offslip Ahead Right Left	U	A	39	0
2/2	A3 Westbound Offslip Right	U	A	39	0

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**86.8%**
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**86.8%**
1/1	Wrotham Road North Ahead	U	N/A	N/A	B		1	27	-	-	497	2005	1021	48.7%
1/2	Wrotham Road North Right	U	N/A	N/A	B		1	27	-	-	824	1865	949	86.8%
2/2+2/1	A3 Westbound Offslip Ahead Right Left	U	N/A	N/A	A		1	16	-	-	779	1892:1947	447+463	85.6 : 85.6%
3/2+3/1	Wrotham Road South Left Ahead	O	N/A	N/A	-		-	-	-	-	854	2040:2040	643+643	66.4 : 66.4%
4/1	A2 Westbound Onslip	U	N/A	N/A	-		-	-	-	-	1119	Inf	Inf	0.0%
5/1	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	332	Inf	Inf	0.0%
5/2	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	810	Inf	Inf	0.0%
6/1	Wrotham Road South	U	N/A	N/A	-		-	-	-	-	693	Inf	Inf	0.0%

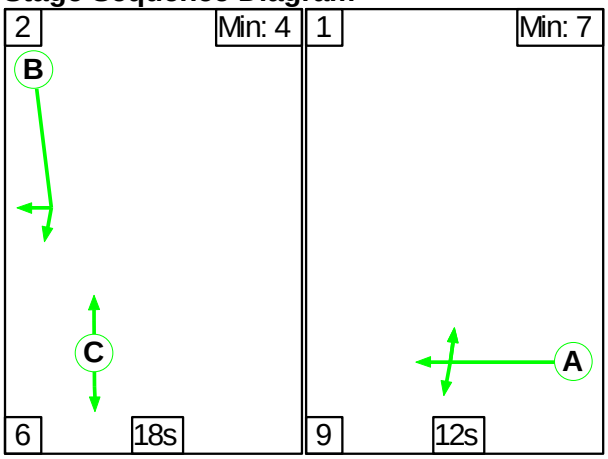
Detailed Input Data And Results

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: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**1397**	**311**	**0**	**7.7**	**7.4**	**0.0**	**15.1**	**-**	**-**	**-**	**-**	
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**1397**	**311**	**0**	**7.7**	**7.4**	**0.0**	**15.1**	**-**	**-**	**-**	**-**	
1/1	497	497	-	-	-	1.2	0.5	-	1.7	12.2	4.8	0.5	5.3	
1/2	824	824	-	-	-	2.7	3.1	-	5.8	25.5	11.0	3.1	14.1	
2/2+2/1	779	779	-	-	-	3.6	2.9	-	6.4	29.7	5.9	2.9	8.7	
3/2+3/1	854	854	1397	311	0	0.2	1.0	-	1.2	4.9	1.7	1.0	2.6	
4/1	1119	1119	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	332	332	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	810	810	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	693	693	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 3.7 Total Delay for Signalled Lanes (pcuHr): 13.96 Cycle Time (s): 55
PRC Over All Lanes (%): 3.7 Total Delay Over All Lanes(pcuHr): 15.11

Scenario 2: '2030 RF Do Minimum PM' (FG2: '2030 RF Do Minimum PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



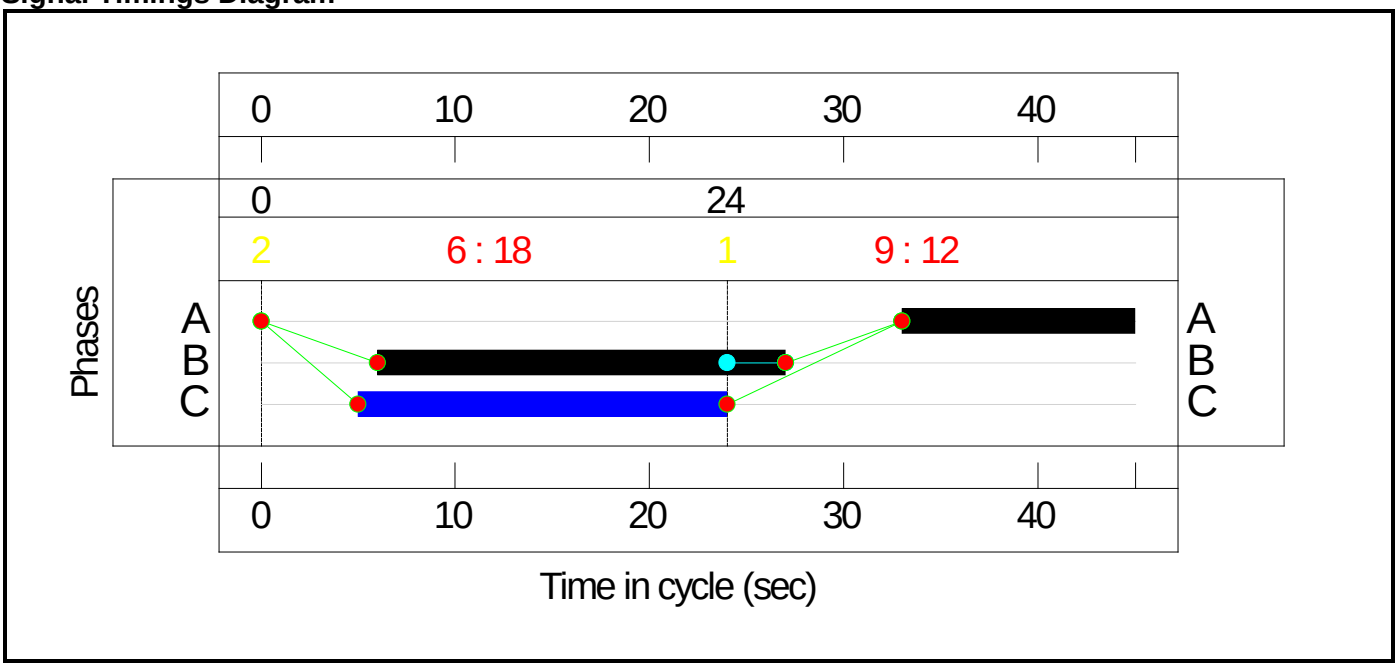
Stage Timings

Stage	2	1
Duration	18	12
Change Point	0	24

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A3 Westbound Offslip Ahead Right Left	Traffic	12	33	0
B	Wrotham Road North Right Ahead	Traffic	21	6	27
C	Pedestrians across	Pedestrian	19	5	24

Signal Timings Diagram



Lane Green Times

Junction: A2 Westbound Offslip/Wrotham Road					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Wrotham Road North Ahead	U	B	6	27
1/2	Wrotham Road North Right	U	B	6	27
2/1	A3 Westbound Offslip Ahead Right Left	U	A	33	0
2/2	A3 Westbound Offslip Right	U	A	33	0

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**76.9%**
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**76.9%**
1/1	Wrotham Road North Ahead	U	N/A	N/A	B		1	21	-	-	701	2005	980	71.5%
1/2	Wrotham Road North Right	U	N/A	N/A	B		1	21	-	-	595	1865	912	65.3%
2/2+2/1	A3 Westbound Offslip Ahead Right Left	U	N/A	N/A	A		1	12	-	-	723	1892:1946	463+477	76.9 : 76.9%
3/2+3/1	Wrotham Road South Left Ahead	O	N/A	N/A	-		-	-	-	-	839	2040:2040	728+728	57.6 : 57.7%
4/1	A2 Westbound Onslip	U	N/A	N/A	-		-	-	-	-	837	Inf	Inf	0.0%
5/1	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	359	Inf	Inf	0.0%
5/2	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	775	Inf	Inf	0.0%
6/1	Wrotham Road South	U	N/A	N/A	-		-	-	-	-	887	Inf	Inf	0.0%

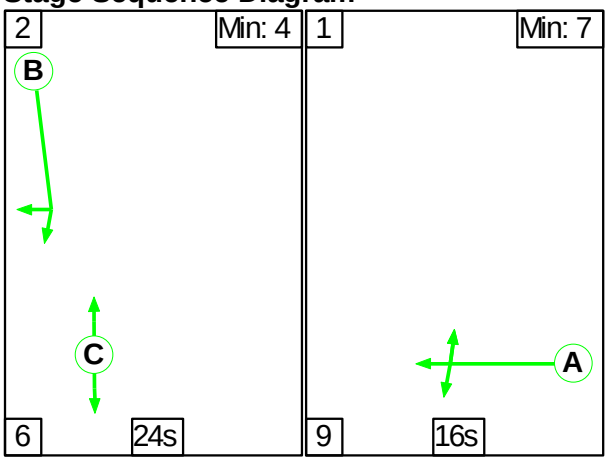
Detailed Input Data And Results

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: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**1305**	**373**	**0**	**6.1**	**4.5**	**0.0**	**10.6**	**-**	**-**	**-**	**-**	
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**1305**	**373**	**0**	**6.1**	**4.5**	**0.0**	**10.6**	**-**	**-**	**-**	**-**	
1/1	701	701	-	-	-	1.8	1.2	-	3.0	15.4	6.8	1.2	8.1	
1/2	595	595	-	-	-	1.4	0.9	-	2.4	14.3	5.5	0.9	6.4	
2/2+2/1	723	723	-	-	-	2.8	1.6	-	4.5	22.2	4.0	1.6	5.6	
3/2+3/1	839	839	1305	373	0	0.1	0.7	-	0.8	3.4	1.2	0.7	1.8	
4/1	837	837	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	359	359	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	775	775	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	887	887	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 17.0 Total Delay for Signalled Lanes (pcuHr): 9.82 Cycle Time (s): 45
PRC Over All Lanes (%): 17.0 Total Delay Over All Lanes(pcuHr): 10.61

Scenario 3: '2030 RF Do Minimum + Dev AM' (FG3: '2030 RF Do Minimum + Dev AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



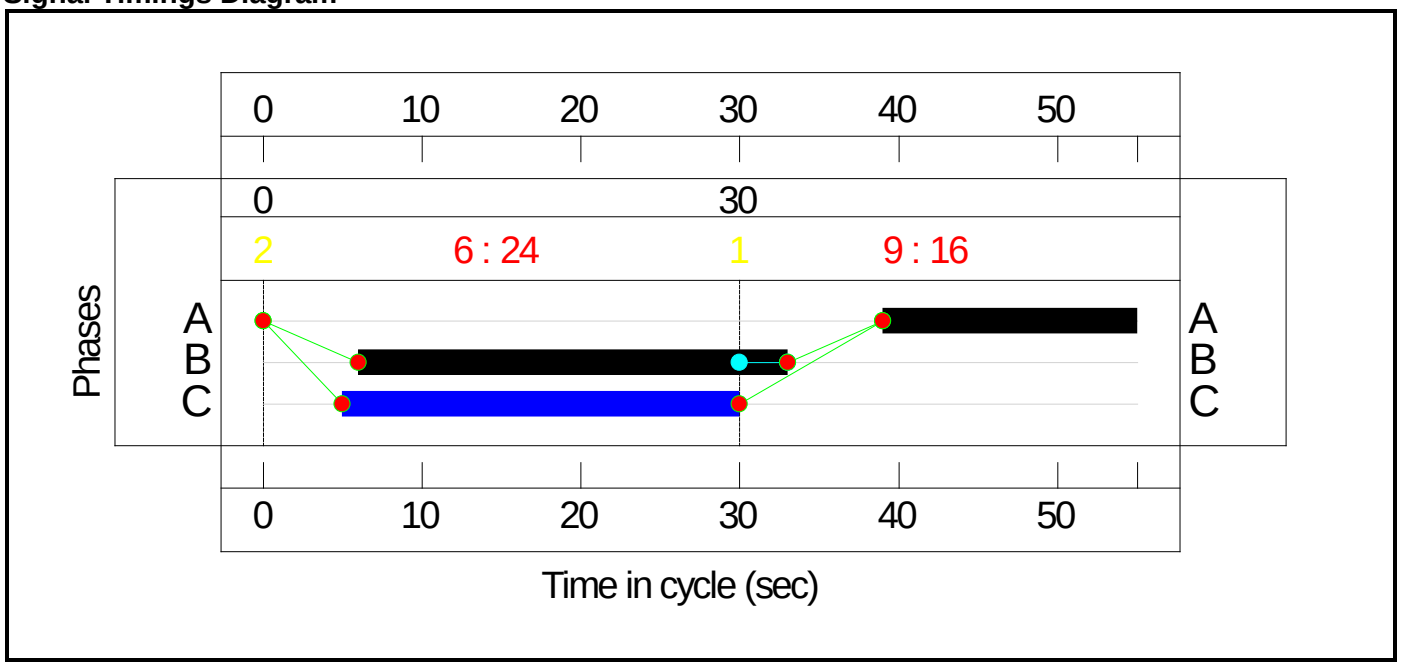
Stage Timings

Stage	2	1
Duration	24	16
Change Point	0	30

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A3 Westbound Offslip Ahead Right Left	Traffic	16	39	0
B	Wrotham Road North Right Ahead	Traffic	27	6	33
C	Pedestrians across	Pedestrian	25	5	30

Signal Timings Diagram



Lane Green Times

Junction: A2 Westbound Offslip/Wrotham Road					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Wrotham Road North Ahead	U	B	6	33
1/2	Wrotham Road North Right	U	B	6	33
2/1	A3 Westbound Offslip Ahead Right Left	U	A	39	0
2/2	A3 Westbound Offslip Right	U	A	39	0

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**86.8%**
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**86.8%**
1/1	Wrotham Road North Ahead	U	N/A	N/A	B		1	27	-	-	533	2005	1021	52.2%
1/2	Wrotham Road North Right	U	N/A	N/A	B		1	27	-	-	824	1865	949	86.8%
2/2+2/1	A3 Westbound Offslip Ahead Right Left	U	N/A	N/A	A		1	16	-	-	783	1892:1946	447+465	85.9 : 85.9%
3/2+3/1	Wrotham Road South Left Ahead	O	N/A	N/A	-		-	-	-	-	927	2040:2040	643+643	72.0 : 72.2%
4/1	A2 Westbound Onslip	U	N/A	N/A	-		-	-	-	-	1163	Inf	Inf	0.0%
5/1	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	324	Inf	Inf	0.0%
5/2	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	847	Inf	Inf	0.0%
6/1	Wrotham Road South	U	N/A	N/A	-		-	-	-	-	733	Inf	Inf	0.0%

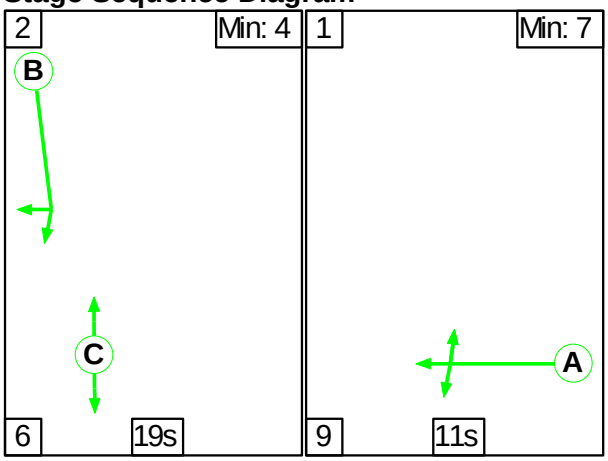
Detailed Input Data And Results

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: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**1517**	**337**	**0**	**7.9**	**7.9**	**0.0**	**15.7**	**-**	**-**	**-**	**-**	
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**1517**	**337**	**0**	**7.9**	**7.9**	**0.0**	**15.7**	**-**	**-**	**-**	**-**	
1/1	533	533	-	-	-	1.3	0.5	-	1.9	12.7	5.3	0.5	5.9	
1/2	824	824	-	-	-	2.7	3.1	-	5.8	25.5	11.0	3.1	14.1	
2/2+2/1	783	783	-	-	-	3.6	2.9	-	6.5	29.9	5.9	2.9	8.8	
3/2+3/1	927	927	1517	337	0	0.2	1.3	-	1.5	5.8	1.9	1.3	3.2	
4/1	1163	1163	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	324	324	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	847	847	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	733	733	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 3.7 Total Delay for Signalled Lanes (pcuHr): 14.24 Cycle Time (s): 55
PRC Over All Lanes (%): 3.7 Total Delay Over All Lanes(pcuHr): 15.73

Scenario 4: '2030 RF Do Minimum + Dev PM' (FG4: '2030 RF Do Minimum + Dev PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



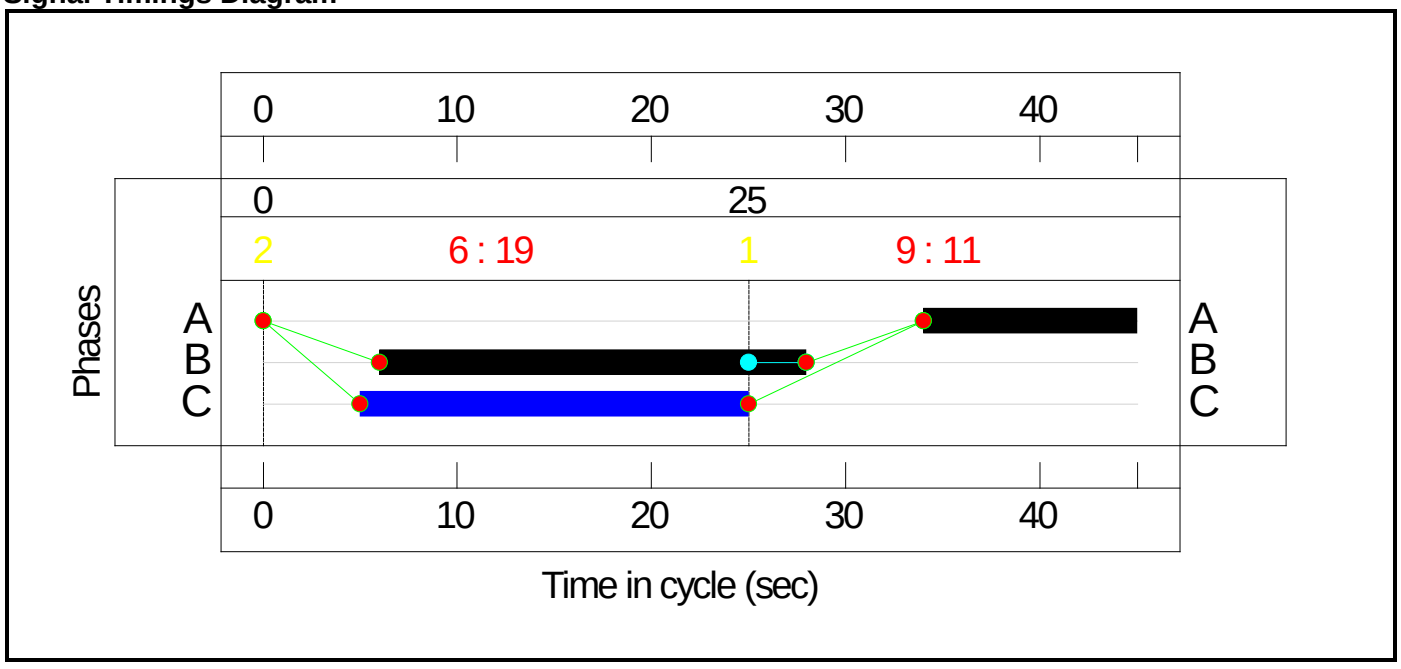
Stage Timings

Stage	2	1
Duration	19	11
Change Point	0	25

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A3 Westbound Offslip Ahead Right Left	Traffic	11	34	0
B	Wrotham Road North Right Ahead	Traffic	22	6	28
C	Pedestrians across	Pedestrian	20	5	25

Signal Timings Diagram



Lane Green Times

Junction: A2 Westbound Offslip/Wrotham Road					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Wrotham Road North Ahead	U	B	6	28
1/2	Wrotham Road North Right	U	B	6	28
2/1	A3 Westbound Offslip Ahead Right Left	U	A	34	0
2/2	A3 Westbound Offslip Right	U	A	34	0

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**81.7%**
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**81.7%**
1/1	Wrotham Road North Ahead	U	N/A	N/A	B		1	22	-	-	779	2005	1025	76.0%
1/2	Wrotham Road North Right	U	N/A	N/A	B		1	22	-	-	595	1865	953	62.4%
2/2+2/1	A3 Westbound Offslip Ahead Right Left	U	N/A	N/A	A		1	11	-	-	732	1892:1944	442+454	81.7 : 81.7%
3/2+3/1	Wrotham Road South Left Ahead	O	N/A	N/A	-		-	-	-	-	888	2040:2040	728+728	61.0 : 61.0%
4/1	A2 Westbound Onslip	U	N/A	N/A	-		-	-	-	-	871	Inf	Inf	0.0%
5/1	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	344	Inf	Inf	0.0%
5/2	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	805	Inf	Inf	0.0%
6/1	Wrotham Road South	U	N/A	N/A	-		-	-	-	-	974	Inf	Inf	0.0%

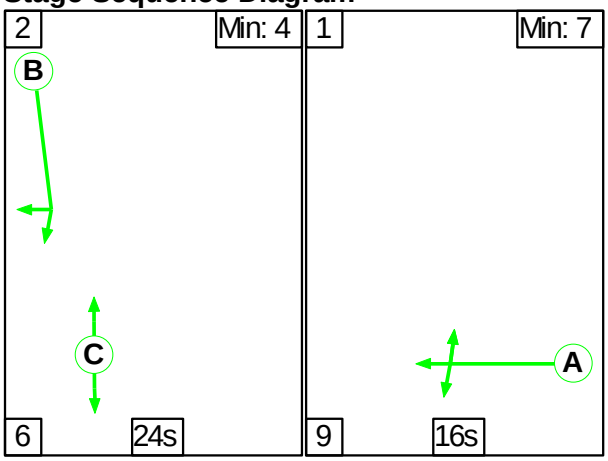
Detailed Input Data And Results

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: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**1381**	**395**	**0**	**6.4**	**5.3**	**0.0**	**11.7**	**-**	**-**	**-**	**-**	
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**1381**	**395**	**0**	**6.4**	**5.3**	**0.0**	**11.7**	**-**	**-**	**-**	**-**	
1/1	779	779	-	-	-	1.9	1.6	-	3.5	16.0	7.6	1.6	9.1	
1/2	595	595	-	-	-	1.3	0.8	-	2.1	12.9	5.3	0.8	6.1	
2/2+2/1	732	732	-	-	-	3.0	2.2	-	5.2	25.6	4.1	2.2	6.3	
3/2+3/1	888	888	1381	395	0	0.1	0.8	-	0.9	3.7	1.4	0.8	2.1	
4/1	871	871	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	344	344	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	805	805	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	974	974	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 10.2 Total Delay for Signalled Lanes (pcuHr): 10.81 Cycle Time (s): 45
PRC Over All Lanes (%): 10.2 Total Delay Over All Lanes(pcuHr): 11.73

Scenario 5: '2030 RF Do Minimum + Dev + Site B AM' (FG5: '2030 RF Do Minimum + Dev + Site B AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



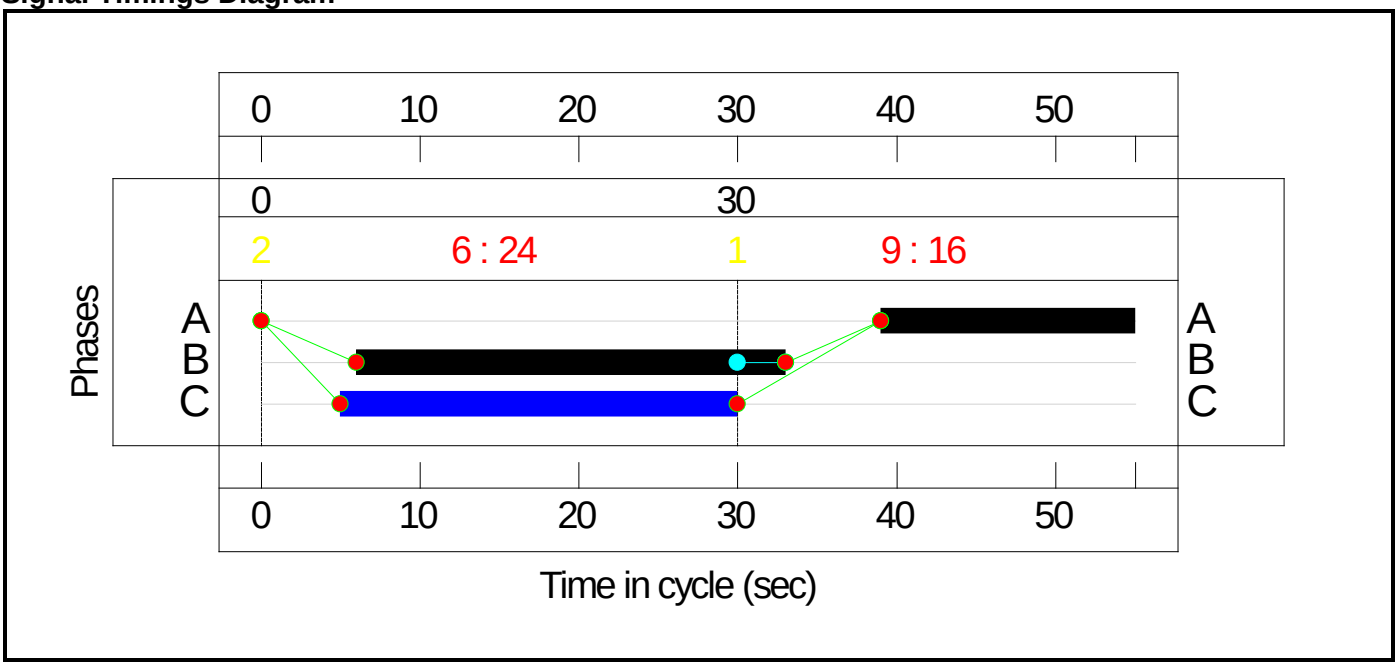
Stage Timings

Stage	2	1
Duration	24	16
Change Point	0	30

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A3 Westbound Offslip Ahead Right Left	Traffic	16	39	0
B	Wrotham Road North Right Ahead	Traffic	27	6	33
C	Pedestrians across	Pedestrian	25	5	30

Signal Timings Diagram



Lane Green Times

Junction: A2 Westbound Offslip/Wrotham Road					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Wrotham Road North Ahead	U	B	6	33
1/2	Wrotham Road North Right	U	B	6	33
2/1	A3 Westbound Offslip Ahead Right Left	U	A	39	0
2/2	A3 Westbound Offslip Right	U	A	39	0

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**86.8%**
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**86.8%**
1/1	Wrotham Road North Ahead	U	N/A	N/A	B		1	27	-	-	543	2005	1021	53.2%
1/2	Wrotham Road North Right	U	N/A	N/A	B		1	27	-	-	824	1865	949	86.8%
2/2+2/1	A3 Westbound Offslip Ahead Right Left	U	N/A	N/A	A		1	16	-	-	786	1892:1946	447+463	86.3 : 86.3%
3/2+3/1	Wrotham Road South Left Ahead	O	N/A	N/A	-		-	-	-	-	975	2040:2040	643+643	75.8 : 75.9%
4/1	A2 Westbound Onslip	U	N/A	N/A	-		-	-	-	-	1199	Inf	Inf	0.0%
5/1	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	310	Inf	Inf	0.0%
5/2	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	873	Inf	Inf	0.0%
6/1	Wrotham Road South	U	N/A	N/A	-		-	-	-	-	746	Inf	Inf	0.0%

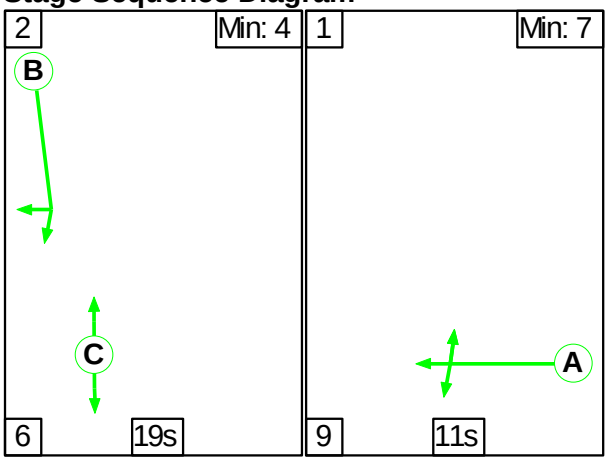
Detailed Input Data And Results

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: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**1595**	**355**	**0**	**7.9**	**8.3**	**0.0**	**16.2**	**-**	**-**	**-**	**-**	
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**1595**	**355**	**0**	**7.9**	**8.3**	**0.0**	**16.2**	**-**	**-**	**-**	**-**	
1/1	543	543	-	-	-	1.4	0.6	-	1.9	12.8	5.6	0.6	6.1	
1/2	824	824	-	-	-	2.7	3.1	-	5.8	25.5	11.0	3.1	14.1	
2/2+2/1	786	786	-	-	-	3.6	3.0	-	6.6	30.3	5.9	3.0	8.9	
3/2+3/1	975	975	1595	355	0	0.2	1.6	-	1.8	6.6	2.2	1.6	3.7	
4/1	1199	1199	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	310	310	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	873	873	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	746	746	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 3.7 Total Delay for Signalled Lanes (pcuHr): 14.40 Cycle Time (s): 55
PRC Over All Lanes (%): 3.7 Total Delay Over All Lanes(pcuHr): 16.19

Scenario 6: '2030 RF Do Minimum + Dev + Site B PM' (FG6: '2030 RF Do Minimum + Dev + Site B PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



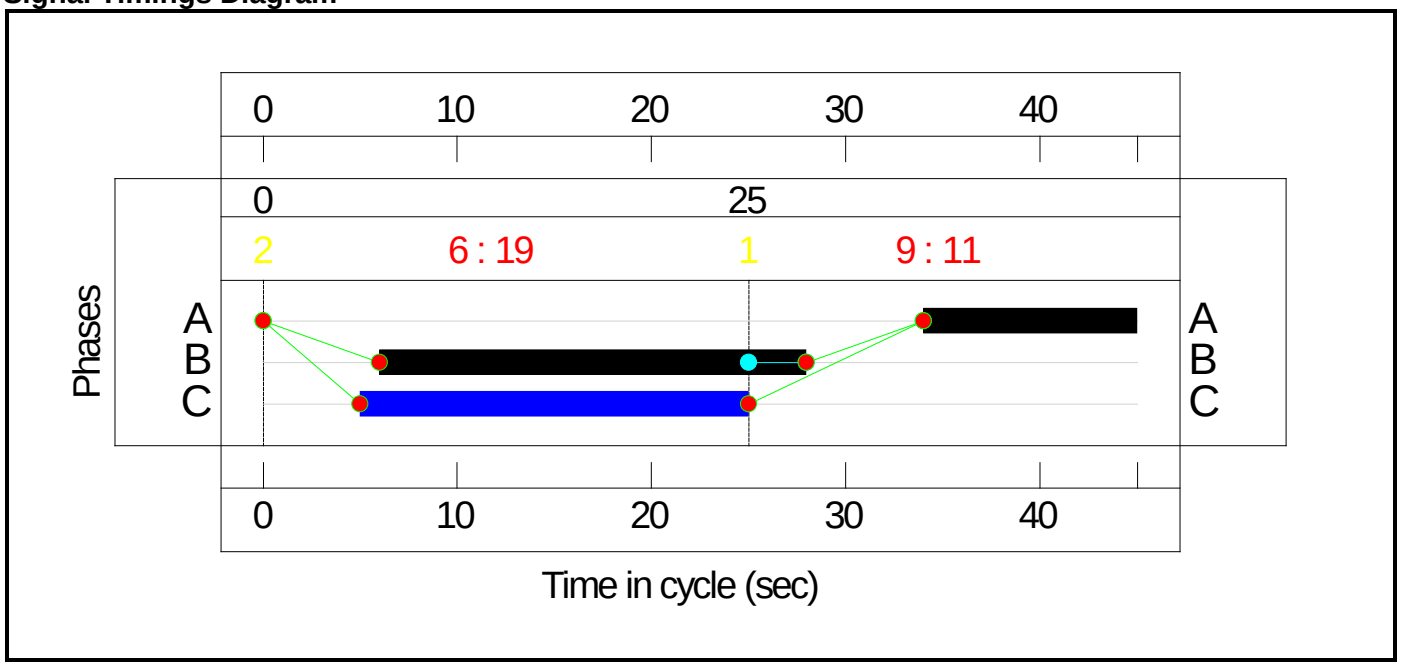
Stage Timings

Stage	2	1
Duration	19	11
Change Point	0	25

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A3 Westbound Offslip Ahead Right Left	Traffic	11	34	0
B	Wrotham Road North Right Ahead	Traffic	22	6	28
C	Pedestrians across	Pedestrian	20	5	25

Signal Timings Diagram



Lane Green Times

Junction: A2 Westbound Offslip/Wrotham Road					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Wrotham Road North Ahead	U	B	6	28
1/2	Wrotham Road North Right	U	B	6	28
2/1	A3 Westbound Offslip Ahead Right Left	U	A	34	0
2/2	A3 Westbound Offslip Right	U	A	34	0

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**82.3%**
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**82.3%**
1/1	Wrotham Road North Ahead	U	N/A	N/A	B		1	22	-	-	800	2005	1025	78.1%
1/2	Wrotham Road North Right	U	N/A	N/A	B		1	22	-	-	595	1865	953	62.4%
2/2+2/1	A3 Westbound Offslip Ahead Right Left	U	N/A	N/A	A		1	11	-	-	738	1892:1942	442+454	82.3 : 82.3%
3/2+3/1	Wrotham Road South Left Ahead	O	N/A	N/A	-		-	-	-	-	903	2040:2040	728+728	61.9 : 62.1%
4/1	A2 Westbound Onslip	U	N/A	N/A	-		-	-	-	-	879	Inf	Inf	0.0%
5/1	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	341	Inf	Inf	0.0%
5/2	Wrotham Road North Exit	U	N/A	N/A	-		-	-	-	-	815	Inf	Inf	0.0%
6/1	Wrotham Road South	U	N/A	N/A	-		-	-	-	-	1001	Inf	Inf	0.0%

Detailed 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: A2/Wrotham Road Southern Rbt Signalisation	**-**	**-**	**1405**	**401**	**0**	**6.5**	**5.7**	**0.0**	**12.2**	**-**	**-**	**-**	**-**	
A2 Westbound Offslip/Wrotham Road	**-**	**-**	**1405**	**401**	**0**	**6.5**	**5.7**	**0.0**	**12.2**	**-**	**-**	**-**	**-**	
1/1	800	800	-	-	-	2.0	1.8	-	3.7	16.8	8.0	1.8	9.8	
1/2	595	595	-	-	-	1.3	0.8	-	2.1	12.9	5.3	0.8	6.1	
2/2+2/1	738	738	-	-	-	3.1	2.3	-	5.3	26.1	4.2	2.3	6.4	
3/2+3/1	903	903	1405	401	0	0.1	0.8	-	1.0	3.8	1.4	0.8	2.2	
4/1	879	879	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	341	341	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	815	815	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	1001	1001	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 PRC for Signalled Lanes (%): 9.3 Total Delay for Signalled Lanes (pcuHr): 11.21 Cycle Time (s): 45
PRC Over All Lanes (%): 9.3 Total Delay Over All Lanes(pcuHr): 12.17

APPENDIX M UPDATED MERGE/DIVERGE ASSESSMENT – 2028 FTH DO MINIMUM ASSESSMENT

Tempro Growth	2028
Gravesham 012	
AM	1.0325
PM	1.0324

350	Dwellings

Peak Period	Trip Rate (per dwelling)		Trips		Total
	In	Out	In	Out	
AM	0.156	0.355	55	124	179
PM	0.332	0.187	116	65	182

Route	Description	Gravesham 012	%
B	A2 West	728	38%
D	B260	330	17%
A	A227 North	286	15%
F	A227 South	268	14%
C	A2 East	269	14%
E	e Street (via Green La	36	2%
Total		**1,916**	**100%**



Monthly report for SiteId : 5398

Nov-25

24 Hour Flows by Day of Month

Mon	Flow	6.6m	Tue	Flow	6.6m	Wed	Flow	6.6m	Thur	Flow	6.6m	Fri	Flow	6.6m	Sat	Flow	6.6m	Sun	Flow	6.6m
															1	66429	6.5	2	58401	5.9
3	67169	14.1	4	55366	13.6	5	68913	15	6	70912	15.2	7	76227	13.7	8	61887	7	9	57750	6.1
10	65731	15.1	11	65144	15.2	12	68419	14.5	13	43259	15.2	14	73278	13.5	15	65039	6.9	16	58588	6.2
17	55175	16.4	18	69370	14.7	19	65668	15.3	20	68057	15.2	21	75416	13.3	22	63838	7.2	23	52253	6.8
24	66531	14.8	25	73144	16.5	26	70597	15.8	27	71723	15.8	28	78727	13.3	29	65621	7.6	30	59655	6.5

Average Flows

	Mon	Tue	Wed	Thur	Fri	Sat	Sun	ADT	AWT
24hr	63652	65756	68399	63488	75912	64563	57329	66570	70007
%>6.6m	15	15.1	15.1	15.4	13.4	7.1	6.3	12	14.8
18hr	55612	57661	60499	55442	68168	60438	54045	60198	62022
%>6.6m	14.5	14.3	14.3	14.5	12.4	6	5.8	11.1	14
16hr	54027	56436	58882	53682	66038	58220	52418	58332	60225
%>6.6m	14.4	14.2	14.3	14.4	12.5	6	5.6	11.1	13.9
12hr	44403	46346	48909	43794	54609	50656	45362	49148	49897
%>6.6m	14.4	14.2	14.4	14.5	12.4	5.6	5.2	10.9	14
No.days	4	4	4	4	4	5	5		

Average Hi	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon	382	242	291	523	1533	5070	4618	3705	3829	4062	3617	3642	3527	3378	3489	3713	4222	4149	3070	2100	1582	1324	959	627
Tue	417	307	326	548	1434	5064	4993	4848	5263	4855	3363	3735	3586	3585	3155	3979	4596	4554	3555	2341	1583	1174	1022	611
Wed	424	284	340	514	1448	4996	4711	4588	5224	4704	3783	3522	3543	3499	3619	3940	4583	4461	3444	2263	1624	1376	1007	611
Thur	419	316	359	563	1435	4954	4498	4600	5368	4958	4163	3356	3717	3623	3755	3999	4683	4518	3128	2327	1680	1383	1073	688
Fri	454	334	373	614	1385	4585	5408	5280	5101	4937	4547	4240	4104	4084	4244	4520	4924	4582	4047	2662	1859	1500	1241	889
Sat	624	428	374	473	717	1510	2032	2558	3782	4557	5022	5214	5064	4764	4009	4120	4300	4080	3185	2301	1793	1439	1303	915
Sun	747	431	325	351	487	943	1239	1547	2397	3828	4897	5000	4838	4695	4086	3825	3906	3492	2851	2462	1961	1394	1042	585
									5285									**4511**						

Monthly report for SiteId : 3261

Nov-25

24 Hour Flows by Day of Month

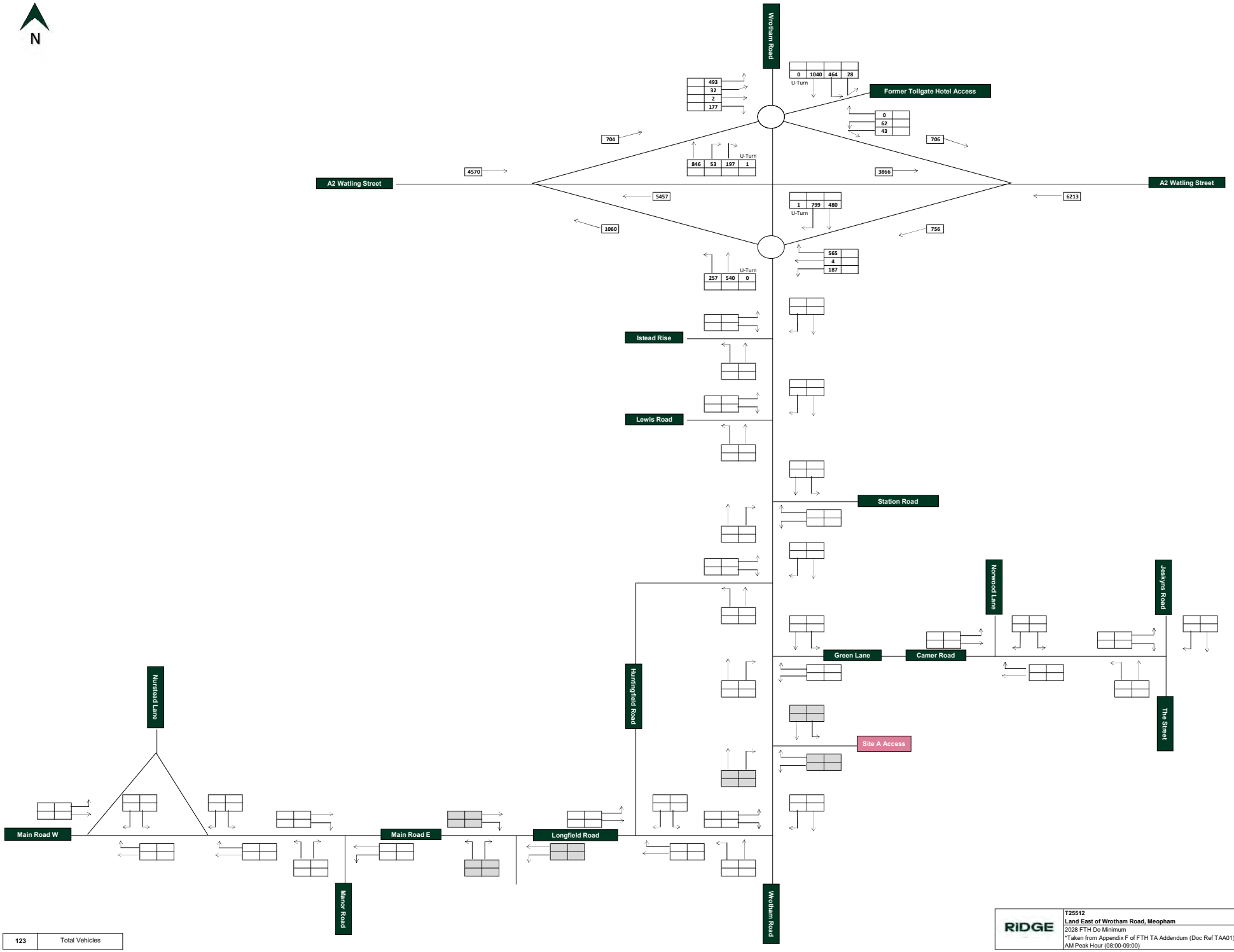
Mon	Flow	6.6m	Tue	Flow	6.6m	Wed	Flow	6.6m	Thur	Flow	6.6m	Fri	Flow	6.6m	Sat	Flow	6.6m	Sun	Flow	6.6m
															1	63388	6.8	2	55737	5.7
3	65238	13.5	4	54299	12.2	5	70981	13.5	6	72244	14.2	7	72046	12.9	8	62133	7	9	55114	5.7
10	66561	13.6	11	64221	14.3	12	69451	13.8	13	38240	15.9	14	70934	12.6	15	63306	7.2	16	55669	5.6
17	64499	13.9	18	68812	14.3	19	68648	14.1	20	71834	13.9	21	73074	12.9	22	62202	7.5	23	28787	6.4
24	64632	14.1	25	71005	14.1	26	67879	14.3	27	70899	14.1	28	75192	12.4	29	64919	7.3	30	57917	5.9

Average Flows

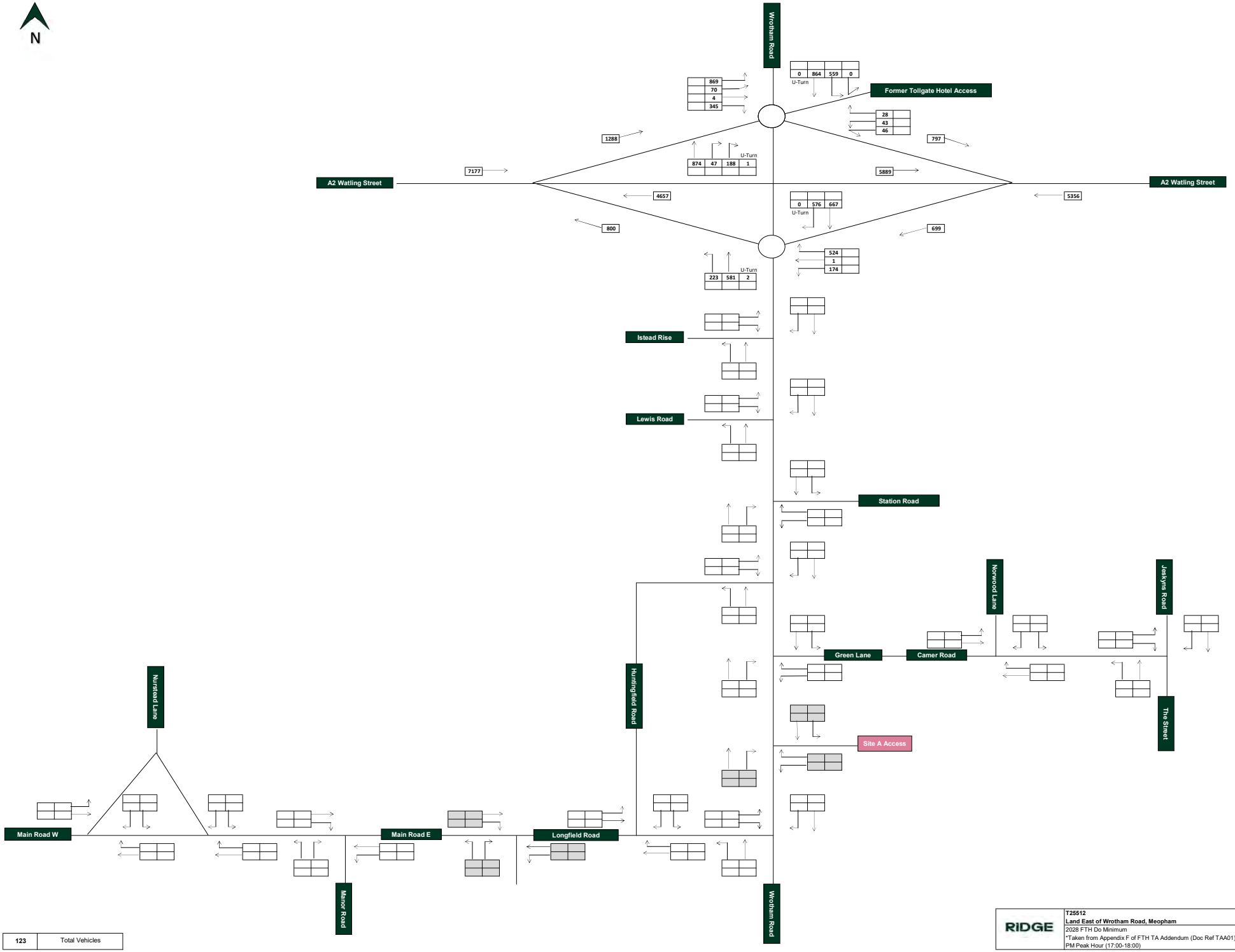
	Mon	Tue	Wed	Thur	Fri	Sat	Sun	ADT	AWT
24hr	65233	64584	69240	63304	72812	63190	50645	64861	69655
%>6.6m	13.8	13.8	13.9	14.4	12.7	7.1	5.8	11.4	13.6
18hr	61832	60793	65437	59202	68601	59157	46853	60958	65763
%>6.6m	13.1	12.8	13	13.3	11.7	6.1	5.3	10.6	12.8
16hr	59516	58510	62525	55963	64991	55588	44397	57955	62810
%>6.6m	13.1	13	13.1	13.6	12	6.2	5.2	10.7	12.9
12hr	49159	48091	51241	44403	52677	45734	36243	47473	51461
%>6.6m	13.6	13.4	13.6	14.2	12.5	6.1	4.9	11	13.4
No.days	4	4	4	4	4	5	5		

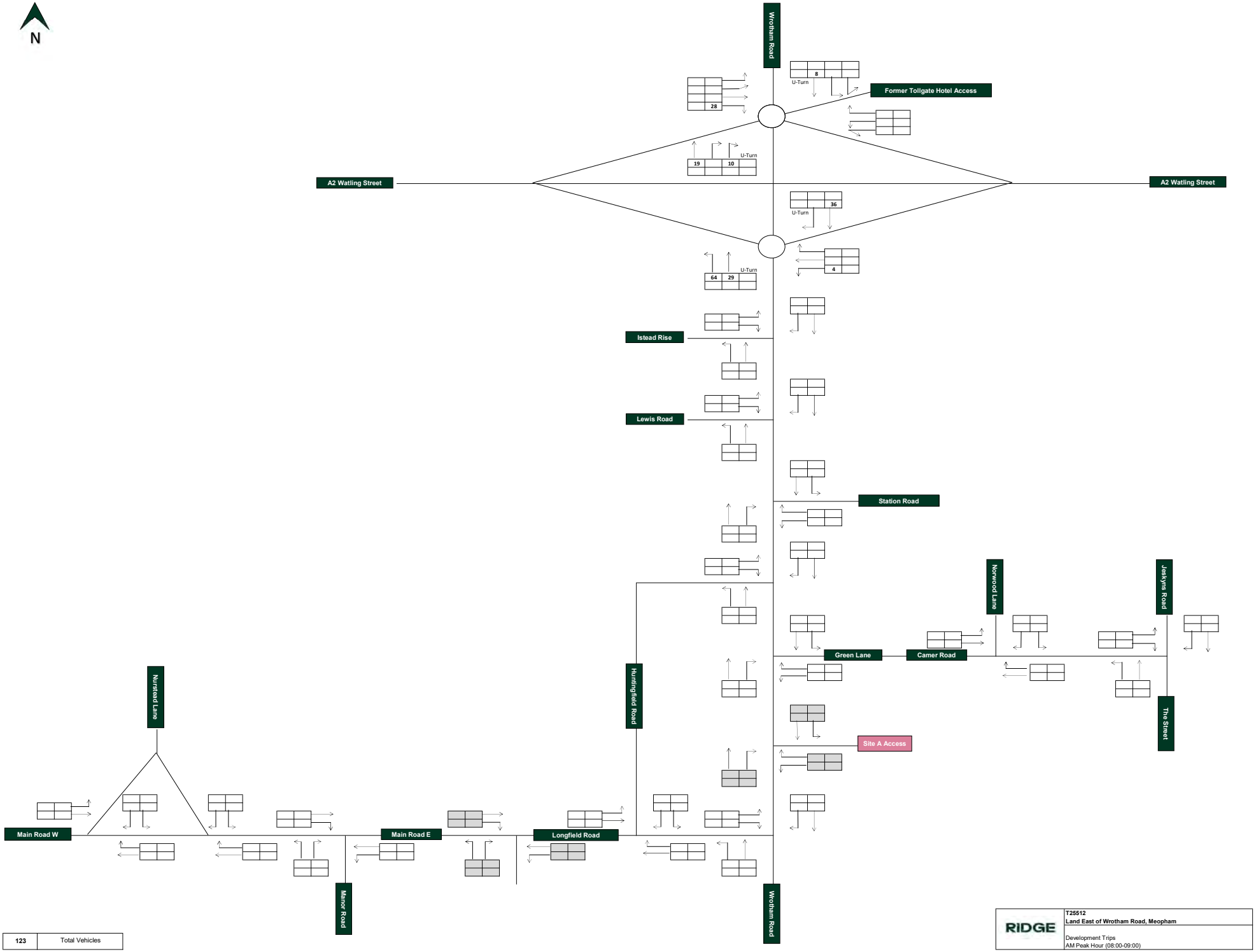
Average Hourly Variation

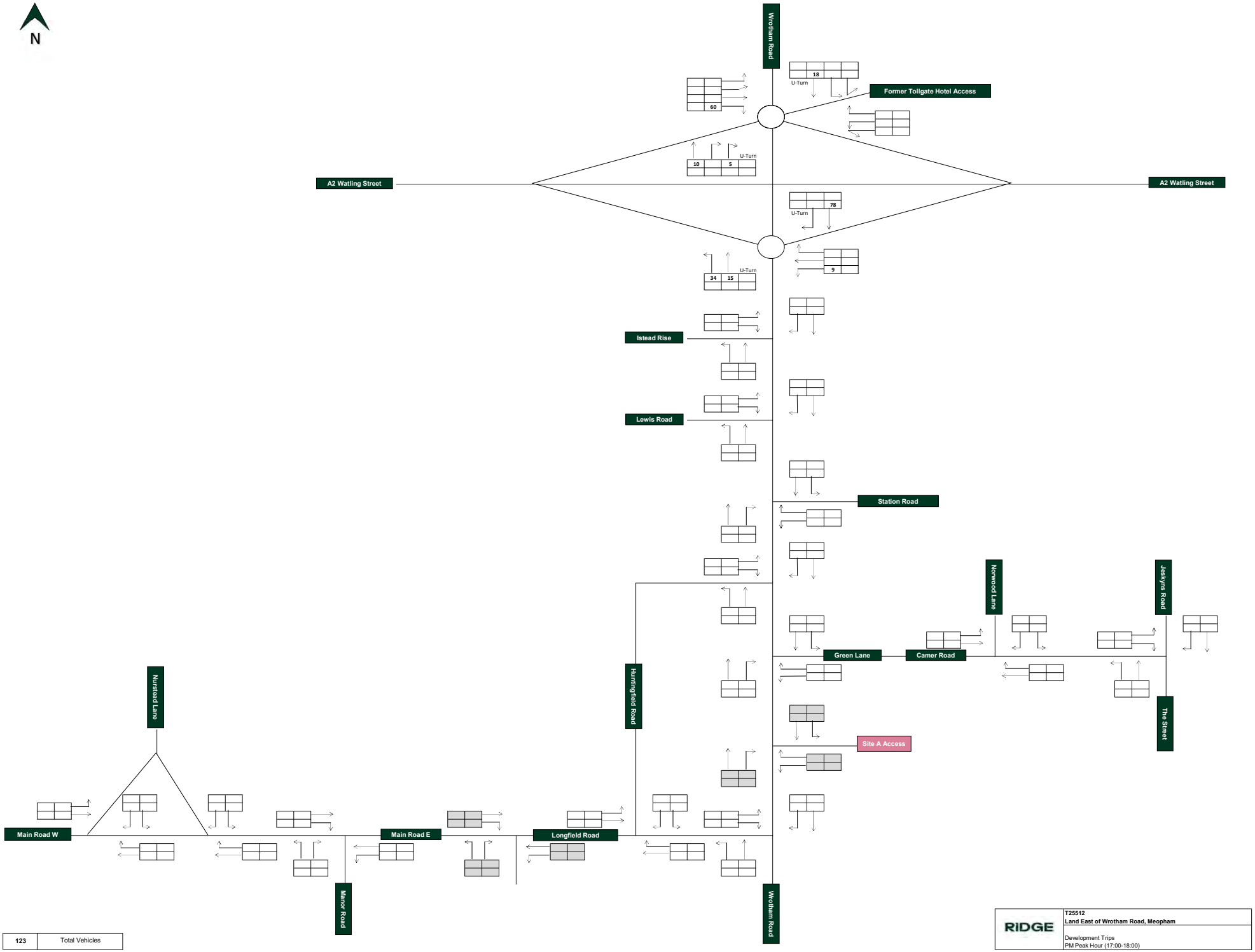
Mon	587	443	340	370	533	1130	2581	3552	3467	2915	2727	3091	3554	4025	4942	5540	5364	4963	5021	3356	2557	1863	1361	956
Tue	591	427	396	422	701	1256	2653	3651	3862	3107	2361	3102	3543	4007	4489	5793	6169	5689	4982	3392	2586	1788	1829	1215
Wed	719	453	416	464	675	1255	2601	3572	3654	2915	2815	3207	3652	4118	5110	5699	5876	5559	5066	3880	2699	2104	1684	1228
Thur	715	485	438	500	700	1265	2699	3624	3718	3130	2792	2904	3759	4212	5119	5806	6227	5865	4995	3764	2810	2288	1805	1434
Fri	785	519	486	509	695	1217	2575	3476	3451	3036	3000	3440	4207	4685	5457	5832	5769	5436	4889	3876	3191	2672	2080	1531
Sat	1046	694	544	484	518	746	1215	1666	2392	2972	3581	4007	4364	4437	4456	4478	4653	4599	4128	3271	2837	2532	2005	1564
Sun	1297	774	495	369	359	498	774	1002	1529	2239	2580	3047	3509	3701	3763	3791	3964	3875	3245	3032	2572	1776	1471	985
									3745									**5704**						

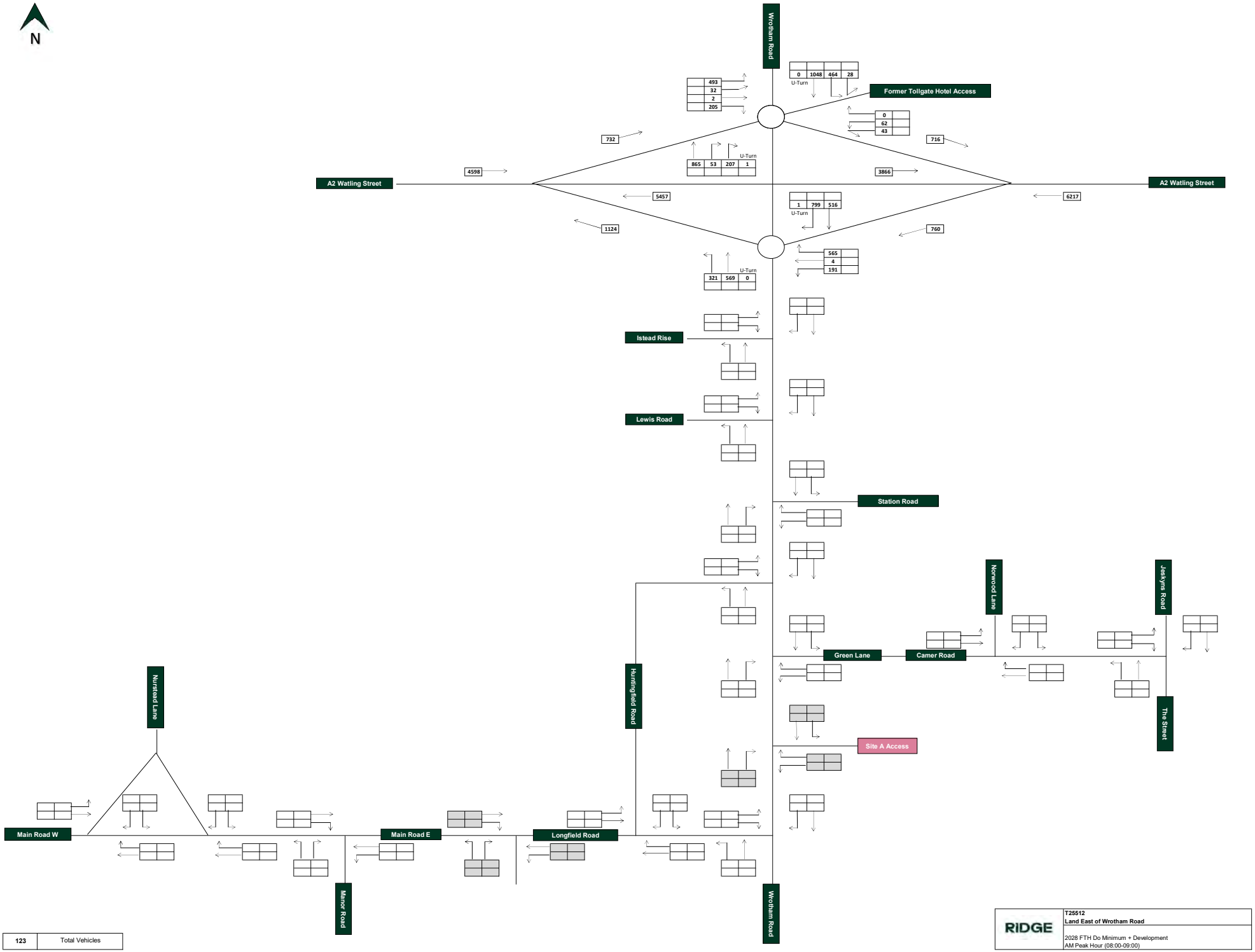


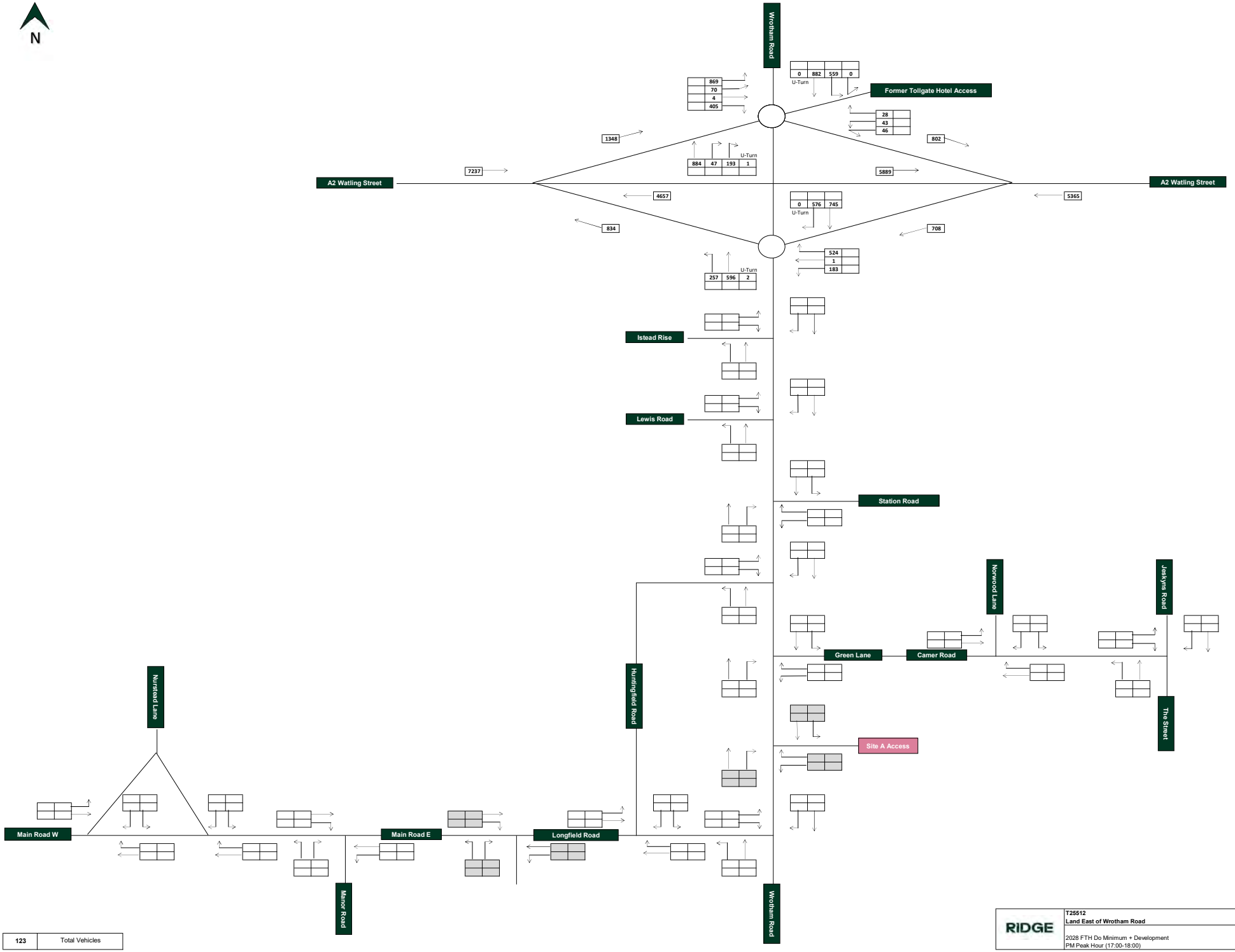
RIDGE	**T25512** **Land East of Wrotham Road, Meopham** 2026 FTH Do Minimum *Taken from Appendix F of FTH TA Addendum (Doc Ref TAA01) AM Peak Hour (08:00-09:00)

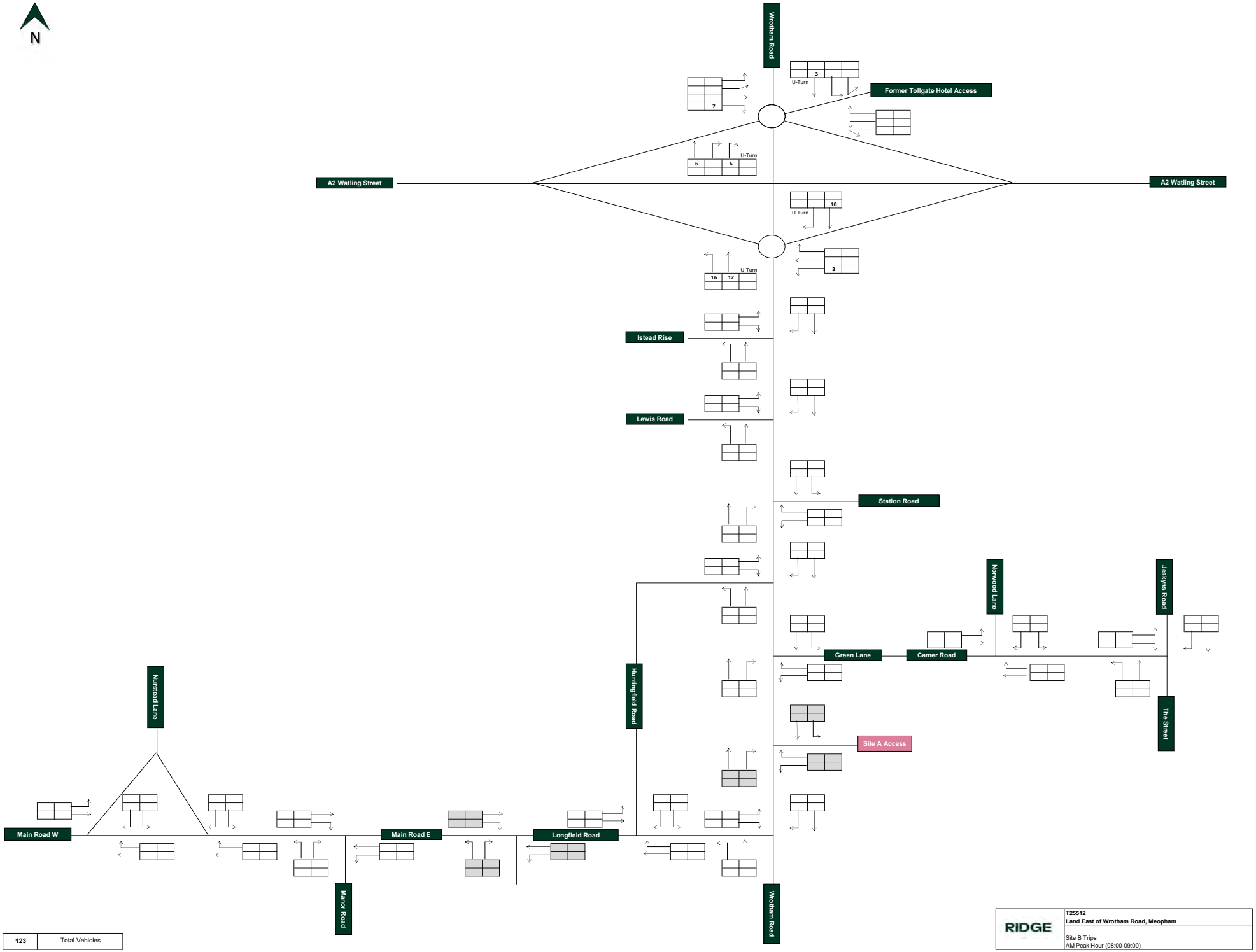

N
Wrotham Road
Former Tollgate Hotel Access
A2 Watling Street
A2 Watling Street
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Site A Access
Hurlingfield Road
Nurstead Lane
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
U-Turn
U-Turn
U-Turn
U-Turn
0 864 559 0
869 70 4 345
28 43 46
1288
797
7177
874 47 188 1
5889
4657
5356
0 576 667
800
699
524 1 174
223 581 2
123 Total Vehicles
RIDGE
T25512
Land East of Wrotham Road, Meopham
2026 FTH Do Minimum
*Taken from Appendix F of FTH TA Addendum (Doc Ref TAA01)
PM Peak Hour (17:00-18:00)


N
Wrotham Road
Former Tollgate Hotel Access
A2 Watling Street
A2 Watling Street
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Site A Access
Hurstingfield Road
Nurstead Lane
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
U-Turn
28
8
19
10
36
64
29
4
123
Total Vehicles
RIDGE
T25512
Land East of Wrotham Road, Meopham
Development Trips
AM Peak Hour (08:00-09:00)


N
Wrotham Road
Former Tollgate Hotel Access
A2 Watling Street
A2 Watling Street
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Site A Access
Hurlingfield Road
Nurstead Lane
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
U-Turn
60
18
10
5
78
9
34
15
123
Total Vehicles
RIDGE
T25512
Land East of Wrotham Road, Meopham
Development Trips
PM Peak Hour (17:00-18:00)


N
Wrotham Road
Former Tollgate Hotel Access
A2 Watling Street
A2 Watling Street
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Site A Access
Hurlingfield Road
Nurstead Lane
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
U-Turn
493
32
2
205
0 1048 464 28
0
62
43
732
716
865 53 207 1
4598
3866
5457
6217
1 799 516
1124
760
565
4
191
321 569 0
123
Total Vehicles
RIDGE
T25512
Land East of Wrotham Road
2028 FTH Do Minimum + Development
AM Peak Hour (08:00-09:00)


N
Wrotham Road
Former Tollgate Hotel Access
A2 Watling Street
A2 Watling Street
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Site A Access
Hurlingfield Road
Nurstead Lane
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
U-Turn
123
Total Vehicles
RIDGE
T25512
Land East of Wrotham Road
2028 FTH Do Minimum + Development
PM Peak Hour (17:00-18:00)

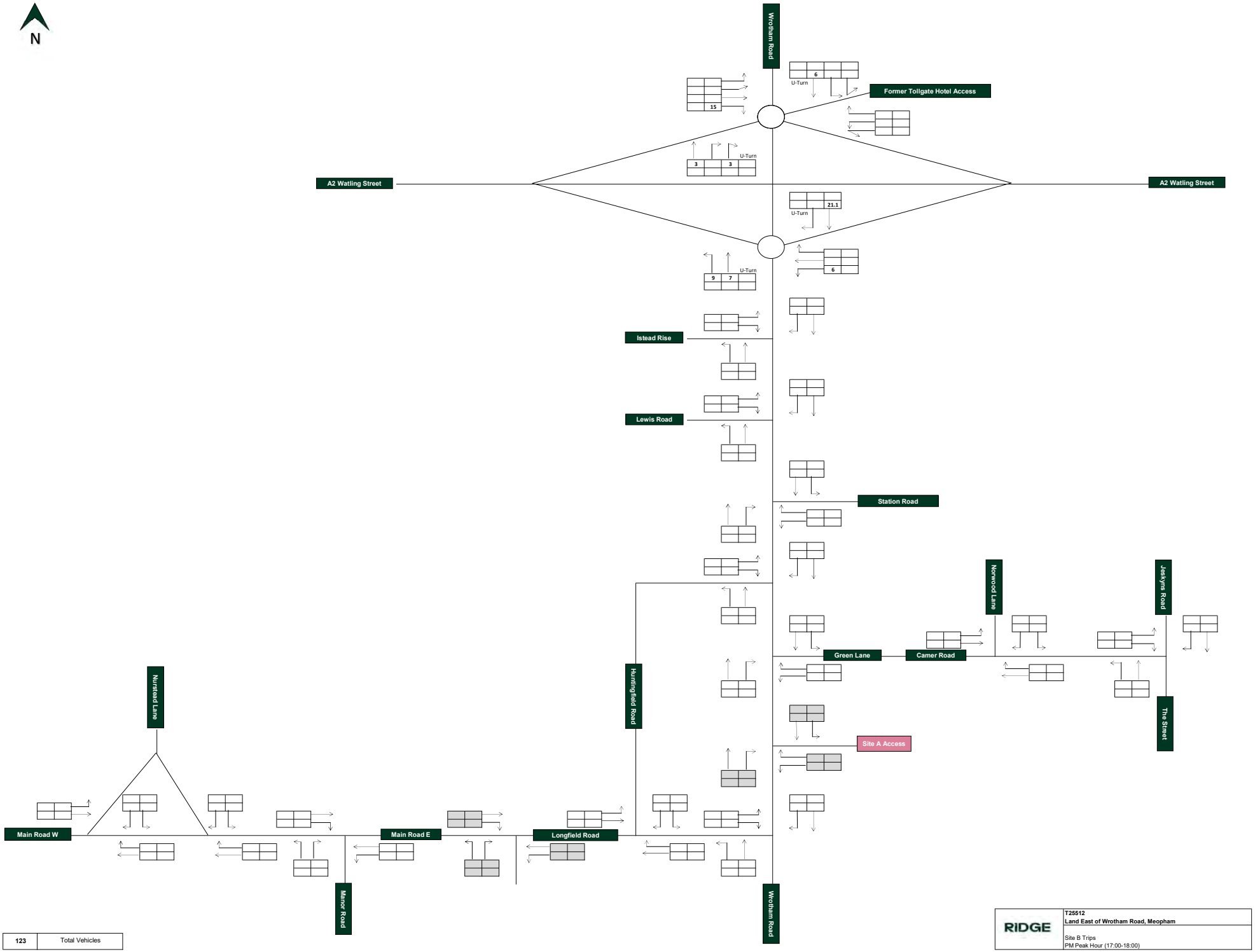


123	Total Vehicles

RIDGE

T25512
Land East of Wrotham Road, Meopham

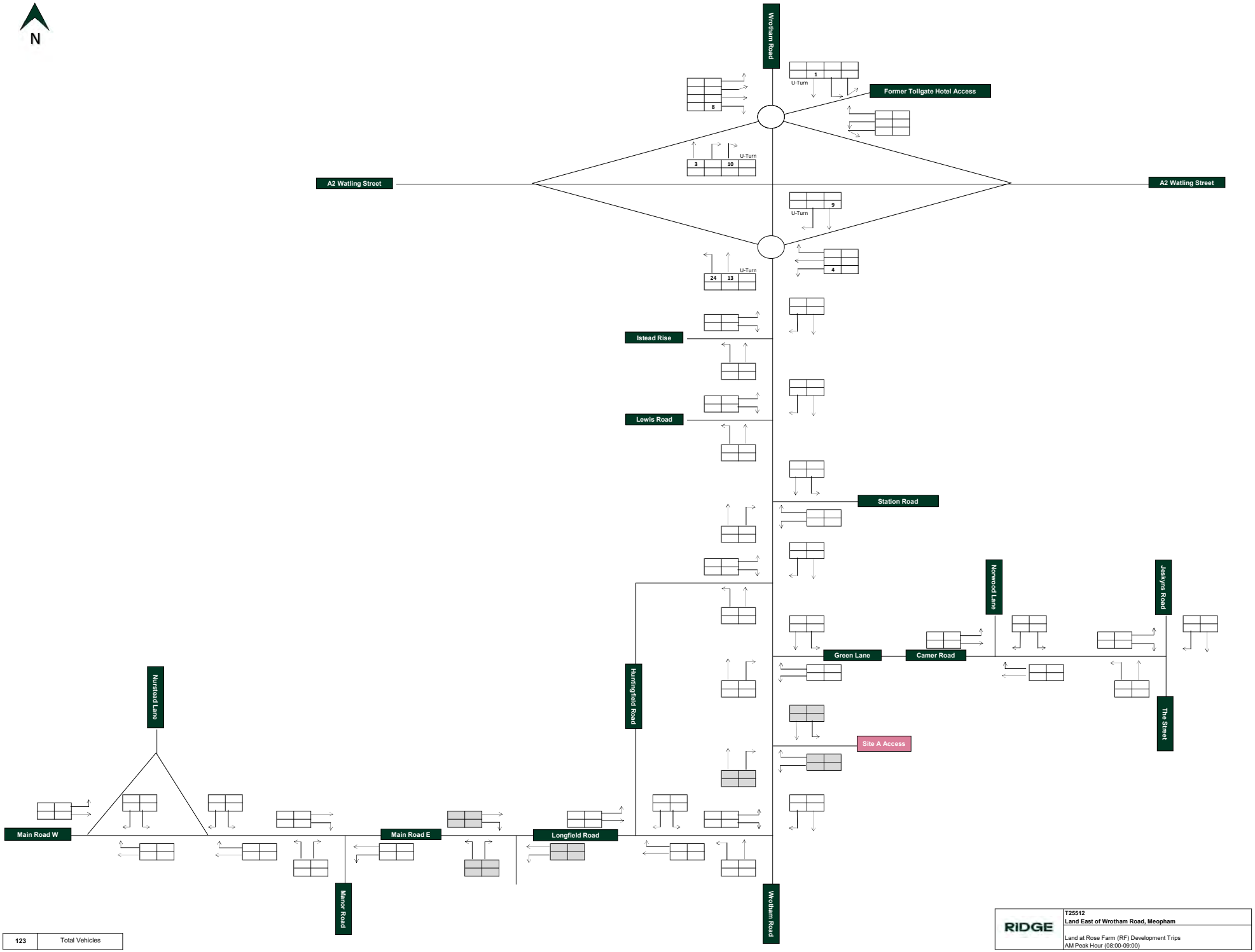
Site B Trips
AM Peak Hour (08:00-09:00)



RIDGE

T25512
Land East of Wrotham Road, Meopham

Site B Trips
PM Peak Hour (17:00-18:00)

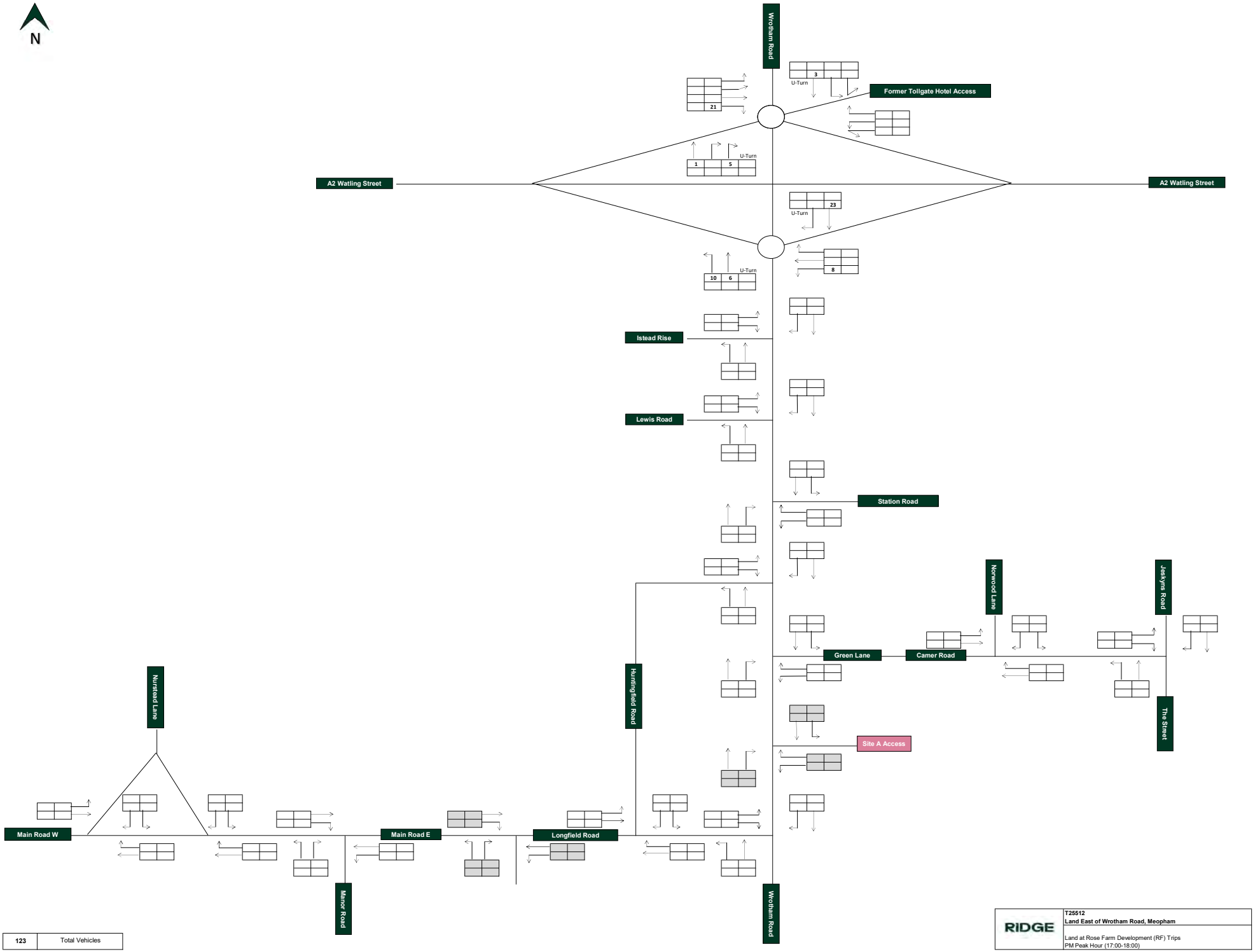


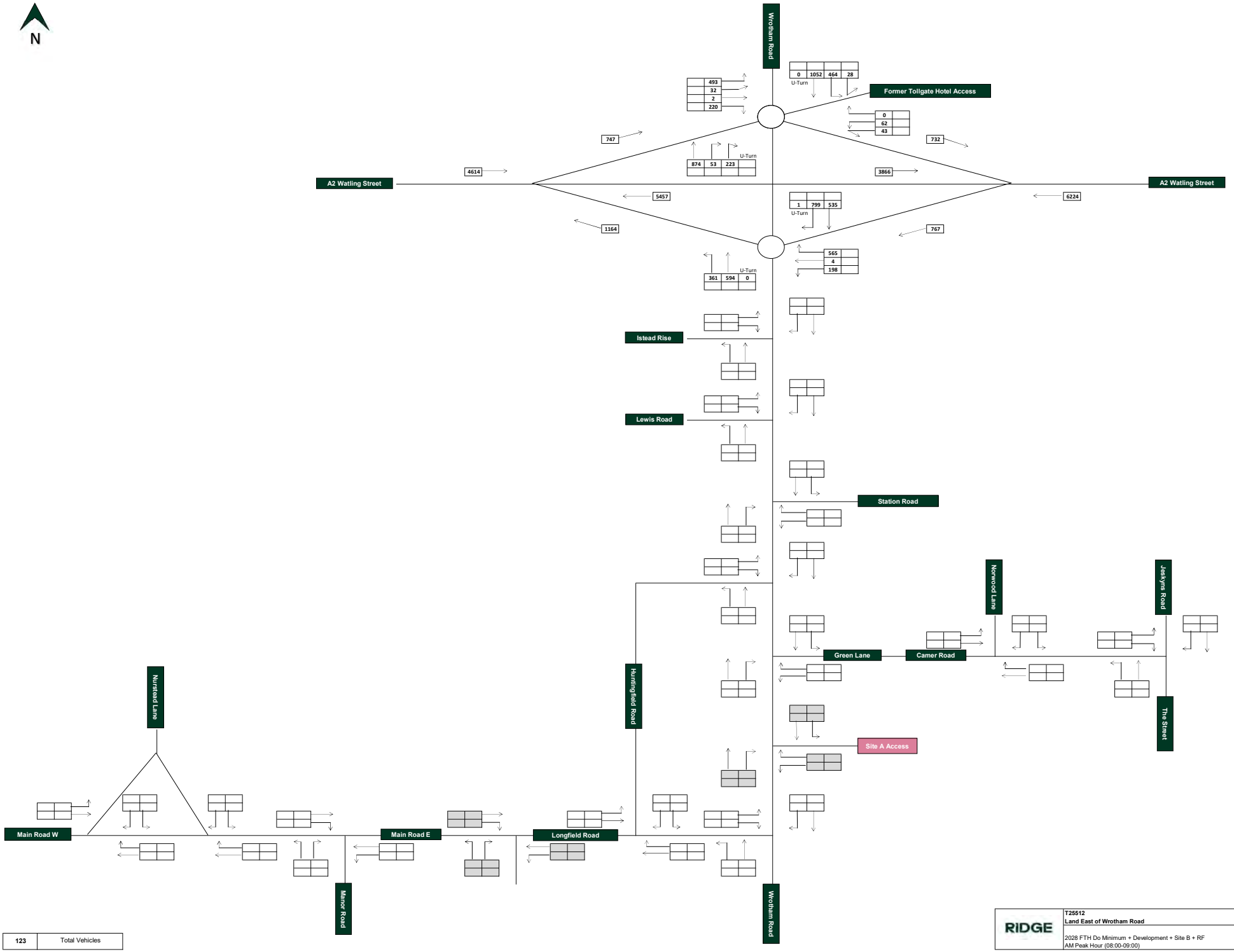
123	Total Vehicles

RIDGE

T25512
Land East of Wrotham Road, Meopham

Land at Rose Farm (RF) Development Trips
AM Peak Hour (08:00-09:00)


N
Wrotham Road
Former Tollgate Hotel Access
A2 Watling Street
A2 Watling Street
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Site A Access
Hurlingfield Road
Nurstead Lane
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
U-Turn
21
3
1
5
23
8
10
6
123
Total Vehicles
RIDGE
T25512
Land East of Wrotham Road, Meopham
Land at Rose Farm Development (RF) Trips
PM Peak Hour (17:00-18:00)

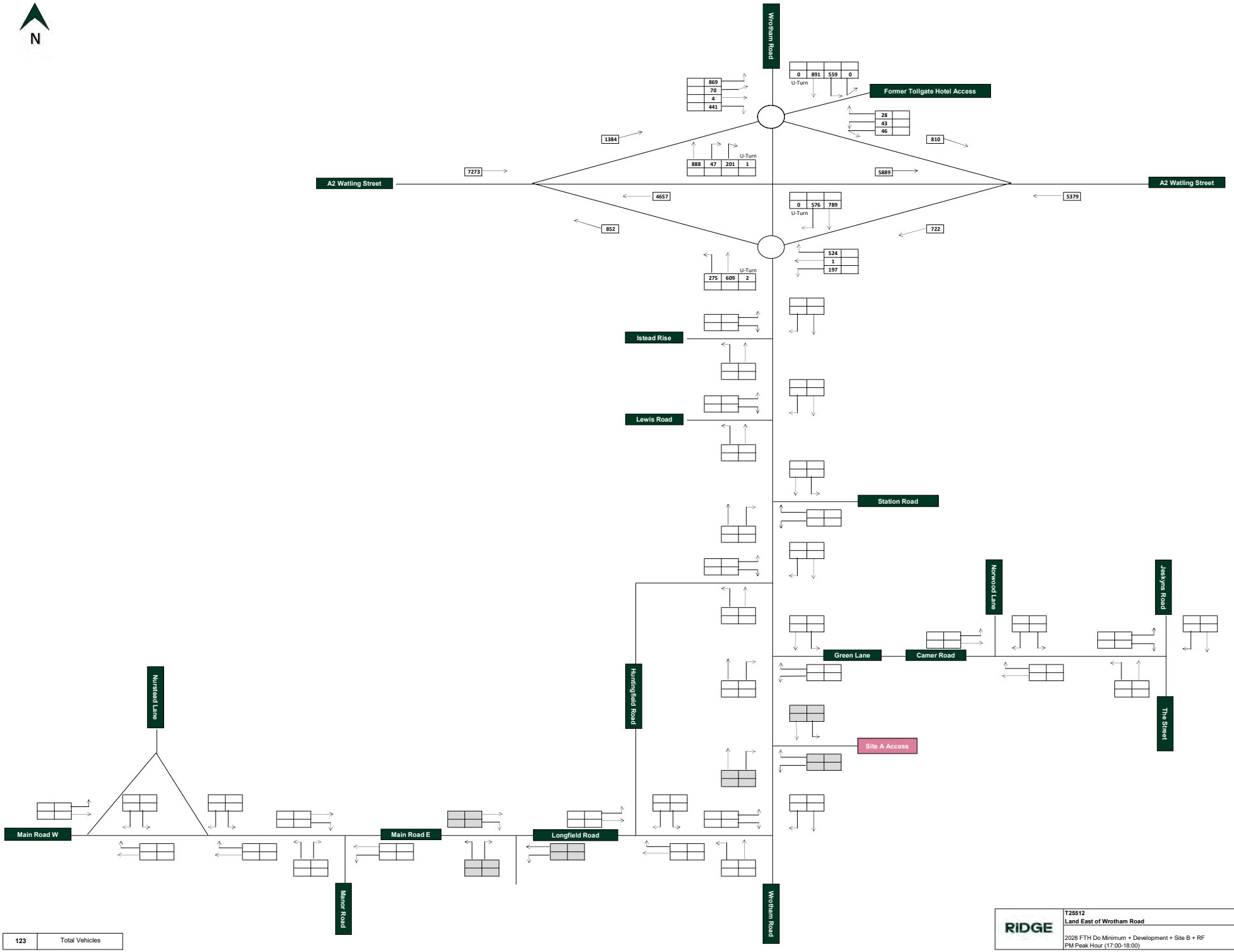


123	Total Vehicles

RIDGE

T25512
Land East of Wrotham Road

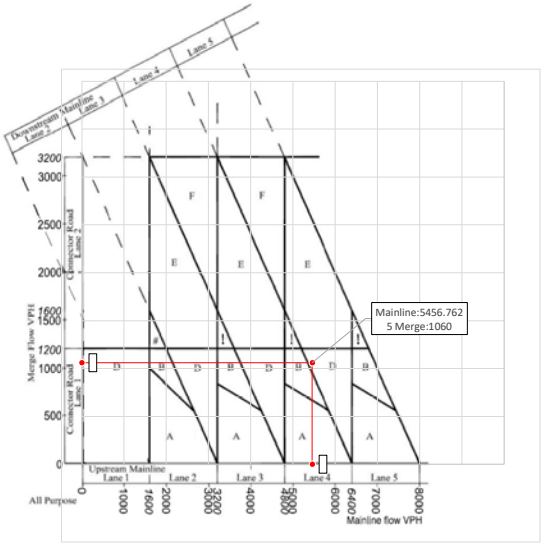
2028 FTH Do Minimum + Development + Site B + RF
AM Peak Hour (08:00-09:00)


N
Wrotham Road
Former Tollgate Hotel Access
A2 Watling Street
A2 Watling Street
Istead Rise
Lewis Road
Station Road
Norwood Lane
Jeskyns Road
Green Lane
Camer Road
The Street
Site A Access
Hurlingfield Road
Nurstead Lane
Main Road W
Main Road E
Longfield Road
Manor Road
Wrotham Road
U-Turn
123
Total Vehicles
RIDGE
T25512
Land East of Wrotham Road
2028 FTH Do Minimum + Development + Site B + RF
PM Peak Hour (17:00-18:00)

Junction: A2/Wrotham Road Southern Rbt (Westbound)
Dataset: Webtris Site A2/8374B
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum (AM Peak)
Date: 25/08/2026

The method for the following graphs was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.12a All-purpose road merging diagram

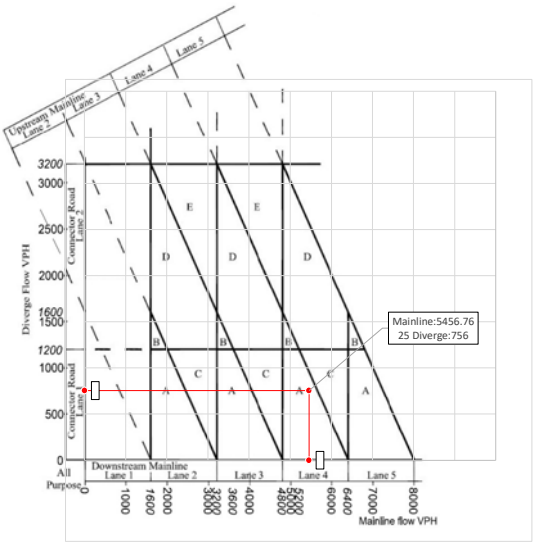


Mainline Flow:	5457
Merge Flow:	1060

Junction: A2/Wrotham Road Southern Rbt (Westbound)
Dataset: Webtris Site A2/8375A
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum (AM Peak)
Date: 25/08/2026

The method for the following graph was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.26a All-purpose road diverging diagram

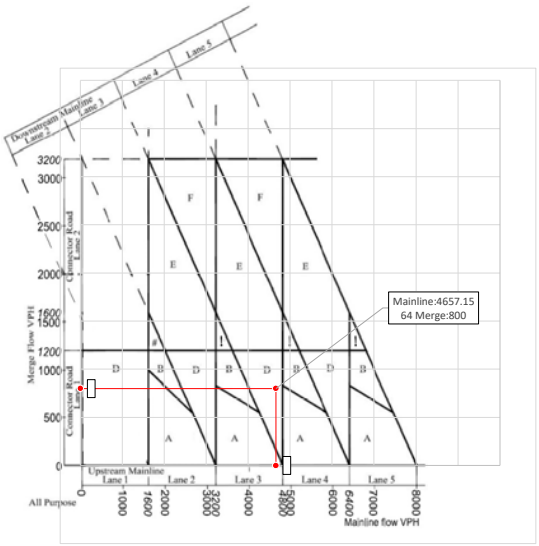


Mainline Flow:	5457
Diverge Flow:	756

Junction: A2/Wrotham Road Southern Rbt (Westbound)
Dataset: Webtris Site A2/8374B
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum (PM Peak)
Date: 25/08/2026

The method for the following graphs was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.12a All-purpose road merging diagram

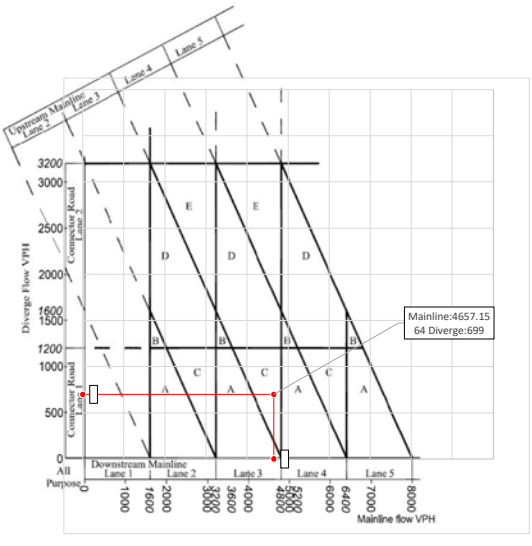


Mainline Flow:	4657
Merge Flow:	800

Junction: A2/Wrotham Road Southern Rbt (Westbound)
Dataset: Webtris Site A2/8374B
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum (PM Peak)
Date: 25/08/2026

The method for the following graph was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.26a All-purpose road diverging diagram

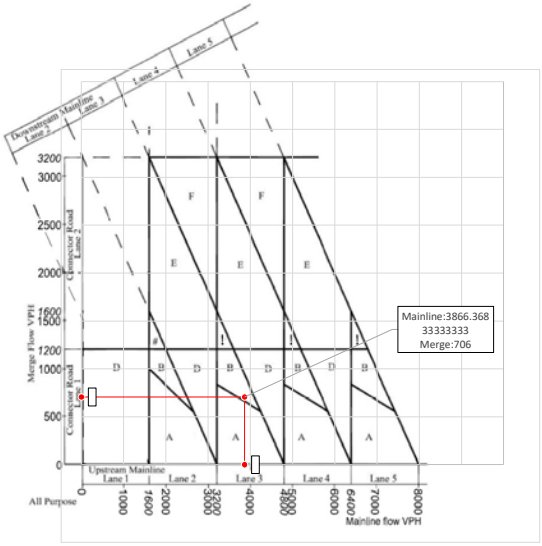


Mainline Flow:	4657
Diverge Flow:	699

Junction: A2/Wrotham Road Northern Rbt (Eastbound)
Dataset: Webtris Site A2/8375A
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum (AM Peak)
Date: 25/08/2026

The method for the following graphs was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.12a All-purpose road merging diagram

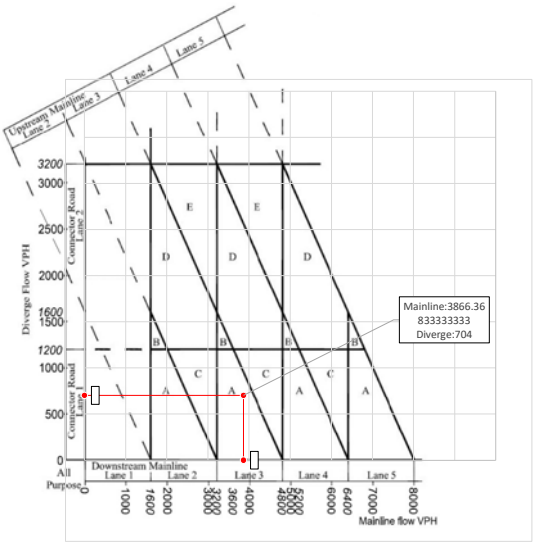


Mainline Flow:	3866
Merge Flow:	706

Junction: A2/Wrotham Road Northern Rbt (Eastbound)
Dataset: Webtris Site A2/8375A
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum (AM Peak)
Date: 25/08/2026

The method for the following graph was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.26a All-purpose road diverging diagram

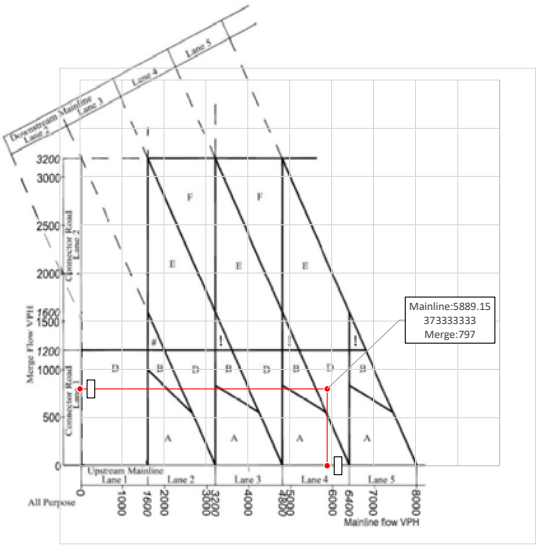


Mainline Flow:	3866
Diverge Flow:	704

Junction: A2/Wrotham Road Northern Rbt (Eastbound)
Dataset: Webtris Site A2/8375A
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum (PM Peak)
Date: 25/08/2026

The method for the following graphs was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.12a All-purpose road merging diagram

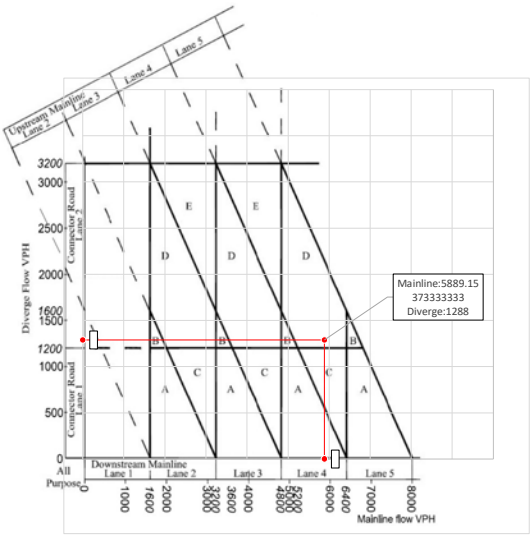


Mainline Flow:	5889
Merge Flow:	797

Junction: A2/Wrotham Road Northern Rbt (Eastbound)
Dataset: Webtris Site A2/8375A
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum (PM Peak)
Date: 25/08/2026

The method for the following graph was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.26a All-purpose road diverging diagram

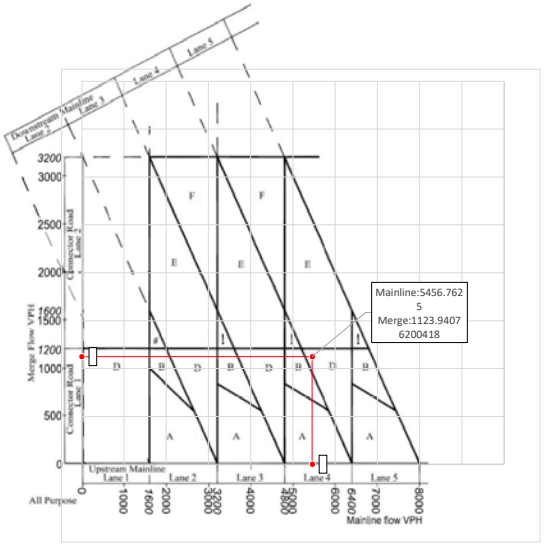


Mainline Flow:	5889
Diverge Flow:	1288

Junction: A2/Wrotham Road Southern Rbt (Westbound)
Dataset: Webtris Site A2/8374B
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum + Dev (AM Peak)
Date: 25/08/2026

The method for the following graphs was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.12a All-purpose road merging diagram

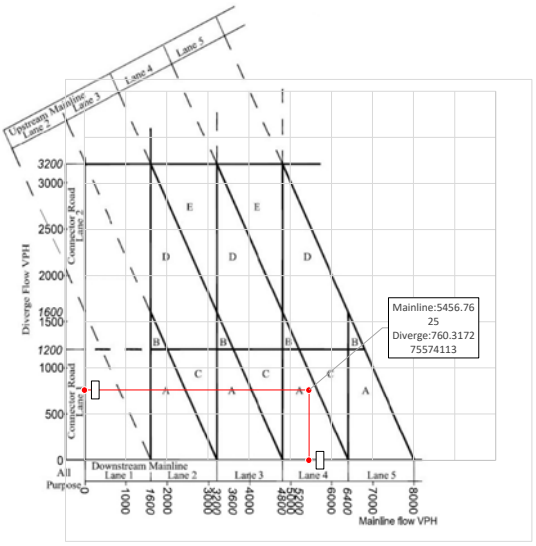


Mainline Flow:	5457
Merge Flow:	1124

Junction: A2/Wrotham Road Southern Rbt (Westbound)
Dataset: Webtris Site A2/8375A
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum + Dev (AM Peak)
Date: 25/08/2026

The method for the following graph was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.26a All-purpose road diverging diagram

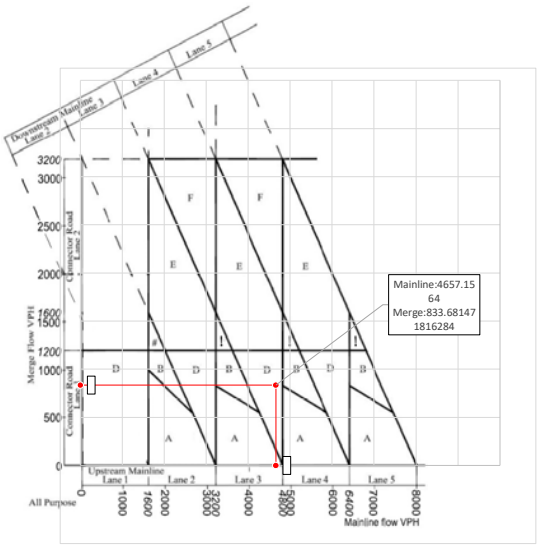


Mainline Flow:	5457
Diverge Flow:	760

Junction: A2/Wrotham Road Southern Rbt (Westbound)
Dataset: Webtris Site A2/8374B
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum + Dev (PM Peak)
Date: 25/08/2026

The method for the following graphs was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.12a All-purpose road merging diagram

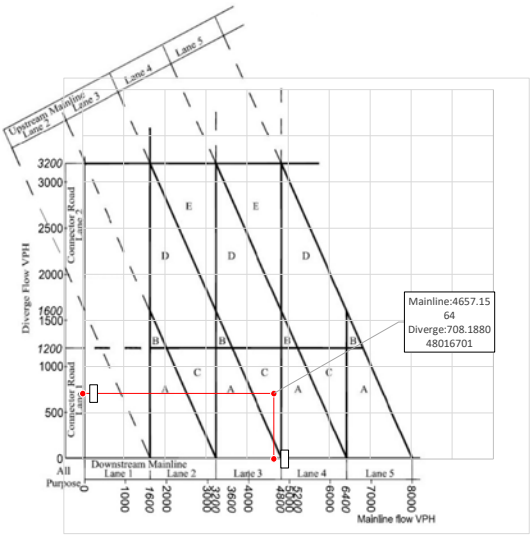


Mainline Flow:	4657
Merge Flow:	834

Junction: A2/Wrotham Road Southern Rbt (Westbound)
Dataset: Webtris Site A2/8374B
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum + Dev (PM Peak)
Date: 25/08/2026

The method for the following graph was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.26a All-purpose road diverging diagram

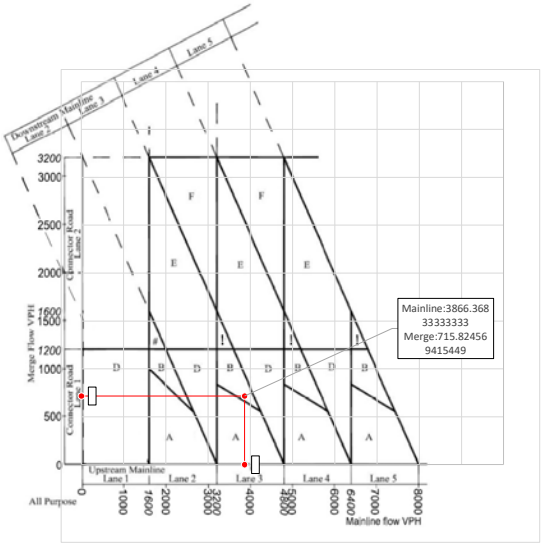


Mainline Flow:	4657
Diverge Flow:	708

Junction: A2/Wrotham Road Northern Rbt (Eastbound)
Dataset: Webtris Site A2/8375A
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum + Dev (AM Peak)
Date: 25/08/2026

The method for the following graphs was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.12a All-purpose road merging diagram

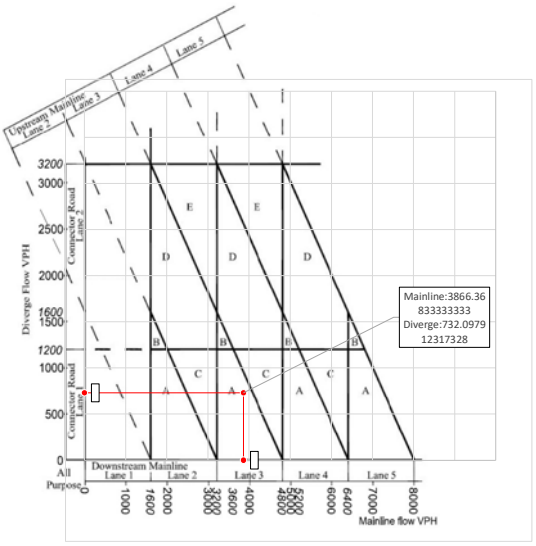


Mainline Flow:	3866
Merge Flow:	716

Junction: A2/Wrotham Road Northern Rbt (Eastbound)
Dataset: Webtris Site A2/8375A
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum + Dev (AM Peak)
Date: 25/08/2026

The method for the following graph was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.26a All-purpose road diverging diagram

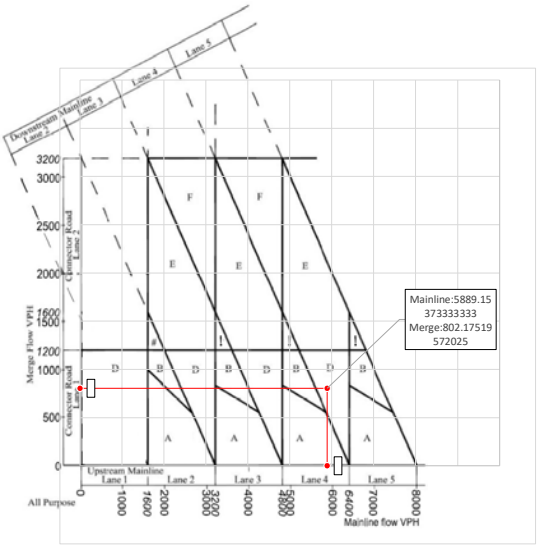


Mainline Flow:	3866
Diverge Flow:	732

Junction: A2/Wrotham Road Northern Rbt (Eastbound)
Dataset: Webtris Site A2/8375A
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum + Dev (PM Peak)
Date: 25/08/2026

The method for the following graphs was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.12a All-purpose road merging diagram

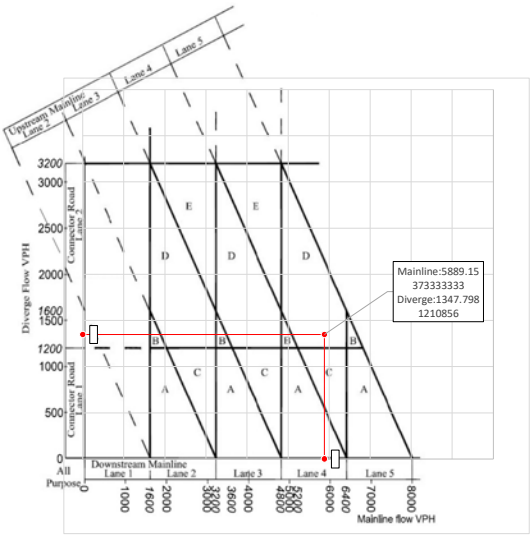


Mainline Flow:	5889
Merge Flow:	802

Junction: A2/Wrotham Road Northern Rbt (Eastbound)
Dataset: Webtris Site A2/8375A
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum + Dev (PM Peak)
Date: 25/08/2026

The method for the following graph was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.26a All-purpose road diverging diagram

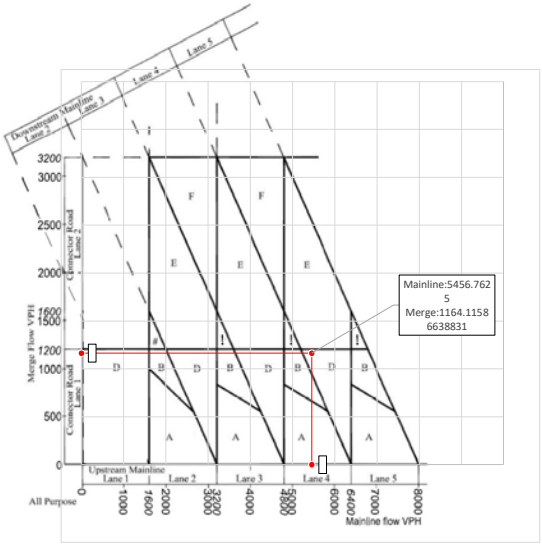


Mainline Flow:	5889
Diverge Flow:	1348

Junction: A2/Wrotham Road Southern Rbt (Westbound)
Dataset: Webtris Site A2/8374B
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum + Development + Site B + RF (AM Peak)
Date: 25/08/2026

The method for the following graphs was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.12a All-purpose road merging diagram

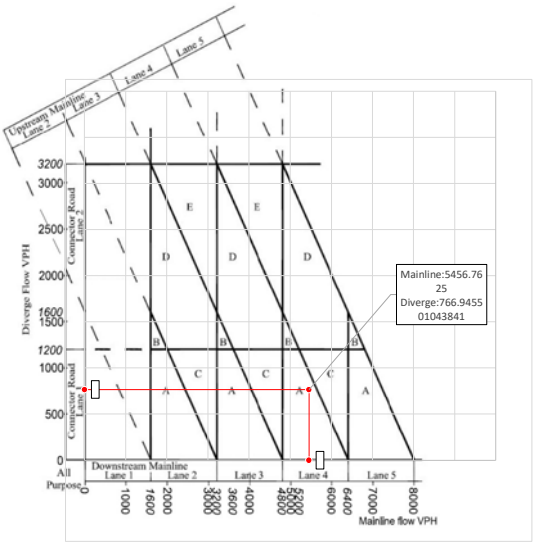


Mainline Flow:	5457
Merge Flow:	1164

Junction: A2/Wrotham Road Southern Rbt (Westbound)
Dataset: Webtris Site A2/8375A
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum + Development + Site B + RF (AM Peak)
Date: 25/08/2026

The method for the following graph was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.26a All-purpose road diverging diagram

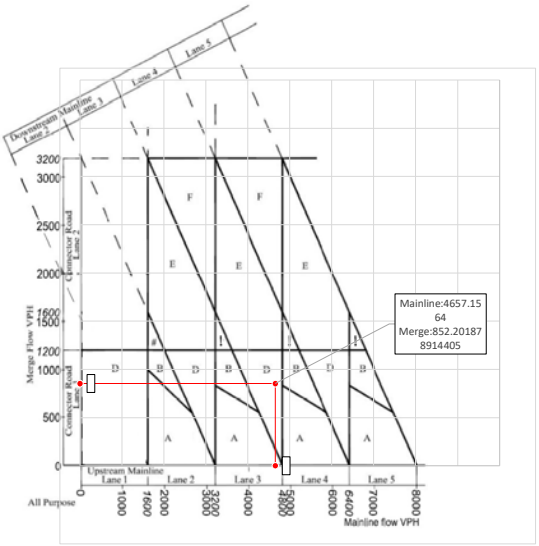


Mainline Flow:	5457
Diverge Flow:	767

Junction: A2/Wrotham Road Southern Rbt (Westbound)
Dataset: Webtris Site A2/8374B
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum + Development + Site B + RF (PM Peak)
Date: 25/08/2026

The method for the following graphs was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.12a All-purpose road merging diagram

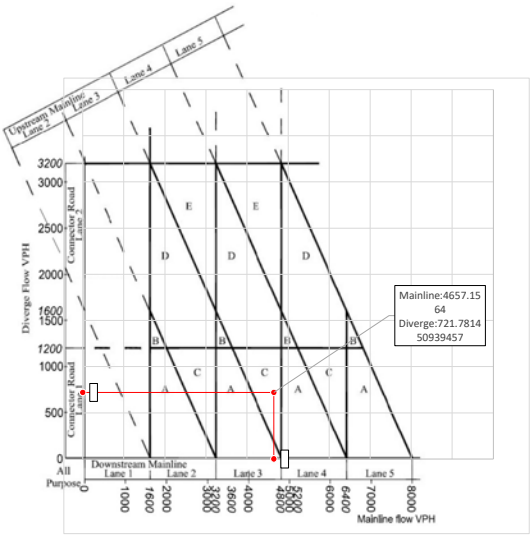


Mainline Flow:	4657
Merge Flow:	852

Junction: A2/Wrotham Road Southern Rbt (Westbound)
Dataset: Webtris Site A2/8374B
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario: 2028 FTH Do Minimum + Development + Site B + RF (PM Peak)
Date: 25/08/2026

The method for the following graph was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.26a All-purpose road diverging diagram

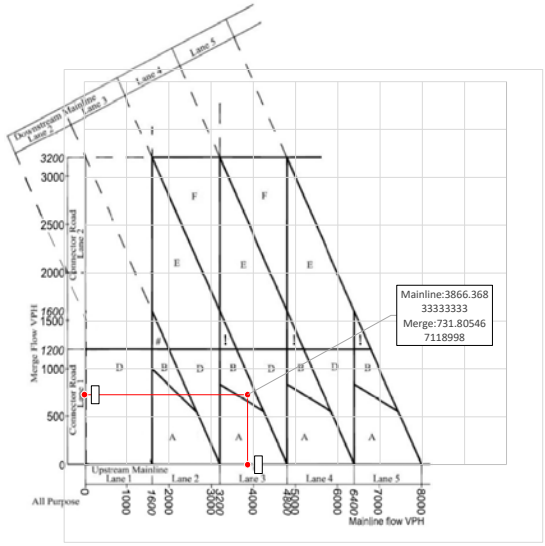


Mainline Flow:	4657
Diverge Flow:	722

Junction A2/Wrotham Road Northern Rbt (Eastbound)
Dataset: Webtris Site A2/8375A
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario 2028 FTH Do Minimum + Development + Site B + RF (AM Peak)
Date: 25/08/2026

The method for the following graphs was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.12a All-purpose road merging diagram

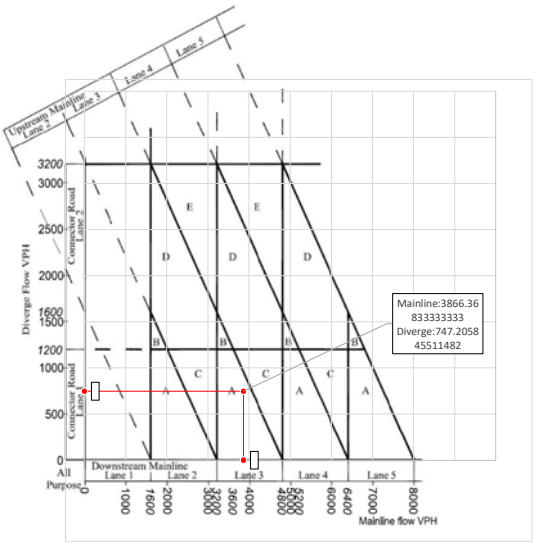


Mainline Flow:	3866
Merge Flow:	732

Junction A2/Wrotham Road Northern Rbt (Eastbound)
Dataset: Webtris Site A2/8375A
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario 2028 FTH Do Minimum + Development + Site B + RF (AM Peak)
Date: 25/08/2026

The method for the following graph was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.26a All-purpose road diverging diagram

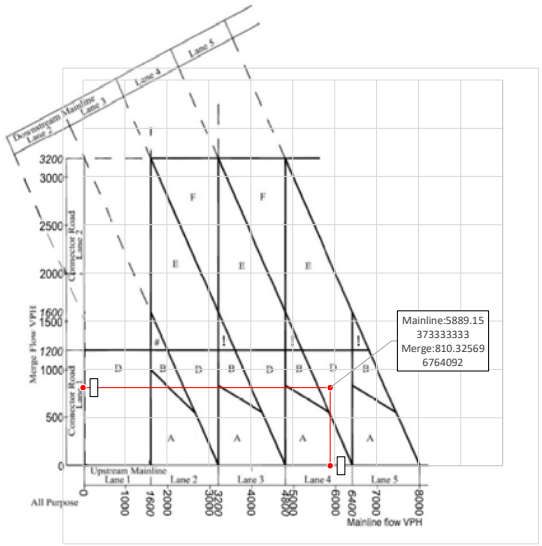


Mainline Flow:	3866
Diverge Flow:	747

Junction A2/Wrotham Road Northern Rbt (Eastbound)
Dataset: Webtris Site A2/8375A
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario 2028 FTH Do Minimum + Development + Site B + RF (PM Peak)
Date: 25/08/2026

The method for the following graphs was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.12a All-purpose road merging diagram

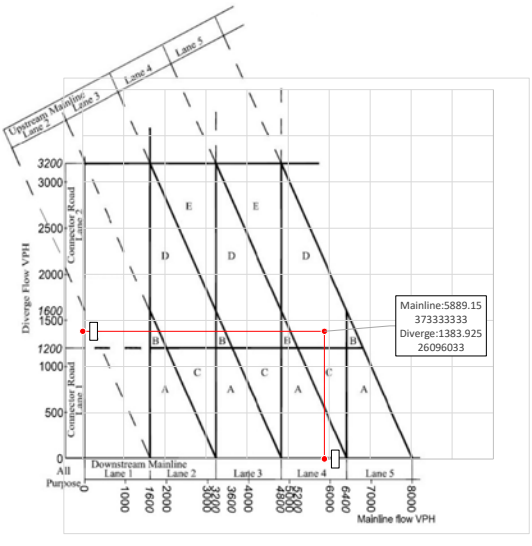


Mainline Flow:	5889
Merge Flow:	810

Junction A2/Wrotham Road Northern Rbt (Eastbound)
Dataset: Webtris Site A2/8375A
Source: Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\T25512 Wrotham Road, Meopham\Technical\Spreadsheets
Scenario 2028 FTH Do Minimum + Development + Site B + RF (PM Peak)
Date: 25/08/2026

The method for the following graph was taken from CD 122 guidance of DMRB, under section 4.0

Figure 3.26a All-purpose road diverging diagram



Mainline Flow:	5889
Diverge Flow:	1384