Appendix 15

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462

For sales and distribution information, program advice and maintenance, contact TRL:
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Filename: 18122 - A259-A2032-A2700 (Mitigation AM-Queues Calibrated).j9
Path: P:\18 Jobs\122 Land at Chatsmore Farm - Goring, West Sussex\Technical Assessments\ARCADY\18122 - A259 - A2032 - A2700 Roundabout
Report generation date: 03/06/2020 10:55:57

»2018 Base, AM
»2024 Base , AM
»2024 Base + Dev, AM
»2033 Base, AM
»2033 Base + Dev, AM

Summary of junction performance

	AM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2018 Base							
1 - A2700 Titnore Lane	16.1	171.84	1.05	F	63.04	F	-13 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	31.1	108.58	1.03	F			
3 - A259 - Goring Street	6.1	18.48	0.87	C			
4 - A259 Littlehampton Road	18.8	45.58	0.97	E			
2024 Base							
1 - A2700 Titnore Lane	98.1	1240.76	1.47	F	561.58	F	-33 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	178.3	666.92	1.30	F			
3 - A259 - Goring Street	131.2	313.67	1.17	F			
4 - A259 Littlehampton Road	236.8	556.49	1.27	F			
2024 Base + Dev							
1 - A2700 Titnore Lane	99.6	1263.22	1.48	F	537.88	F	-32 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	143.6	545.61	1.25	F			
3 - A259 - Goring Street	180.2	450.06	1.22	F			
4 - A259 Littlehampton Road	181.1	444.85	1.22	F			
2033 Base							
1 - A2700 Titnore Lane	92.0	1164.64	1.45	F	560.96	F	-32 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	175.1	663.15	1.30	F			
3 - A259 - Goring Street	131.2	312.01	1.16	F			
4 - A259 Littlehampton Road	248.1	580.03	1.28	F			
2033 Base + Dev							
1 - A2700 Titnore Lane	127.5	1592.86	1.56	F	741.63	F	-36 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	205.8	757.33	1.33	F			
3 - A259 - Goring Street	259.6	625.31	1.29	F			
4 - A259 Littlehampton Road	272.1	641.61	1.30	F			

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

File summary

File Description

Title	18122 - A259 / A2032 / A2700
Location	
Site number	18-122
Date	18/01/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	18-122
Enumerator	Milestone4-PC\Milestone4 - Newer
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Base	AM	ONE HOUR	07:45	09:15	15	✓
D3	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓
D5	2024 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D7	2033 Base	AM	ONE HOUR	07:45	09:15	15	✓
D9	2033 Base + Dev	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

2018 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	63.04	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-13	1 - A2700 Titnore Lane

Arms

Arms

Arm	Name	Description
1	A2700 Titnore Lane	
2	A2032 Littlehampton Road	
3	A259 - Goring Street	
4	A259 Littlehampton Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A2700 Titnore Lane	3.80	6.00	10.0	18.0	60.0	19.0	
2 - A2032 Littlehampton Road	7.40	8.50	10.0	24.0	60.0	19.0	
3 - A259 - Goring Street	6.20	7.50	8.0	34.0	60.0	17.6	
4 - A259 Littlehampton Road	7.30	10.00	7.0	24.0	60.0	17.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A2700 Titnore Lane	0.547	1593
2 - A2032 Littlehampton Road	0.726	2604
3 - A259 - Goring Street	0.673	2273
4 - A259 Littlehampton Road	0.747	2715

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - A2700 Titnore Lane	Percentage		59.40
2 - A2032 Littlehampton Road	Percentage		51.10
3 - A259 - Goring Street	Percentage		84.60
4 - A259 Littlehampton Road	Percentage		77.75

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	299	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	895	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1125	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1407	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	56	216	27
	2 - A2032 Littlehampton Road	87	0	168	640
	3 - A259 - Goring Street	297	371	0	457
	4 - A259 Littlehampton Road	60	727	610	10

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	5	4	7
	2 - A2032 Littlehampton Road	6	0	1	3
	3 - A259 - Goring Street	1	1	0	2
	4 - A259 Littlehampton Road	5	2	1	60

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.05	171.84	16.1	F	274	412
2 - A2032 Littlehampton Road	1.03	108.58	31.1	F	821	1232
3 - A259 - Goring Street	0.87	18.48	6.1	C	1032	1548
4 - A259 Littlehampton Road	0.97	45.58	18.8	E	1291	1937

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	225	56	1286	499	0.451	222	332	0.0	0.8	12.862	B
2 - A2032 Littlehampton Road	674	168	644	1055	0.639	667	863	0.0	1.7	9.131	A
3 - A259 - Goring Street	847	212	569	1563	0.542	842	742	0.0	1.2	4.964	A
4 - A259 Littlehampton Road	1059	265	565	1741	0.608	1053	847	0.0	1.5	5.187	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	269	67	1538	419	0.642	265	397	0.8	1.7	22.909	C
2 - A2032 Littlehampton Road	805	201	770	1008	0.798	797	1033	1.7	3.6	16.472	C
3 - A259 - Goring Street	1011	253	680	1498	0.675	1008	887	1.2	2.0	7.294	A
4 - A259 Littlehampton Road	1265	316	676	1677	0.754	1259	1012	1.5	3.0	8.496	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	329	82	1843	323	1.021	297	477	1.7	9.7	93.373	F
2 - A2032 Littlehampton Road	985	246	904	959	1.028	922	1236	3.6	19.5	58.715	F
3 - A259 - Goring Street	1239	310	786	1436	0.863	1225	1039	2.0	5.6	16.056	C
4 - A259 Littlehampton Road	1549	387	817	1596	0.971	1503	1194	3.0	14.5	29.799	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	329	82	1874	312	1.054	303	483	9.7	16.1	171.841	F
2 - A2032 Littlehampton Road	985	246	922	952	1.035	939	1256	19.5	31.1	108.579	F
3 - A259 - Goring Street	1239	310	801	1427	0.868	1237	1060	5.6	6.1	18.481	C
4 - A259 Littlehampton Road	1549	387	826	1591	0.974	1532	1212	14.5	18.8	45.578	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	269	67	1609	397	0.678	324	416	16.1	2.4	69.377	F
2 - A2032 Littlehampton Road	805	201	848	979	0.822	907	1085	31.1	5.6	63.758	F
3 - A259 - Goring Street	1011	253	775	1443	0.701	1026	979	6.1	2.4	8.919	A
4 - A259 Littlehampton Road	1265	316	697	1665	0.760	1327	1104	18.8	3.3	12.525	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	225	56	1302	494	0.456	231	337	2.4	0.9	14.011	B
2 - A2032 Littlehampton Road	674	168	658	1050	0.642	689	875	5.6	1.8	10.364	B
3 - A259 - Goring Street	847	212	588	1552	0.546	852	759	2.4	1.2	5.176	A
4 - A259 Littlehampton Road	1059	265	573	1737	0.610	1066	867	3.3	1.6	5.423	A

2024 Base , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	561.58	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-33	1 - A2700 Titnore Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	382	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	1100	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1516	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1727	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	66	269	47
	2 - A2032 Littlehampton Road	106	0	216	778
	3 - A259 - Goring Street	388	469	96	563
	4 - A259 Littlehampton Road	80	894	740	13

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	5	4	5
	2 - A2032 Littlehampton Road	5	0	1	3
	3 - A259 - Goring Street	1	1	0	2
	4 - A259 Littlehampton Road	4	2	1	58

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.47	1240.76	98.1	F	351	526
2 - A2032 Littlehampton Road	1.30	666.92	178.3	F	1009	1514
3 - A259 - Goring Street	1.17	313.67	131.2	F	1391	2087
4 - A259 Littlehampton Road	1.27	556.49	236.8	F	1585	2377

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	288	72	1646	386	0.745	277	426	0.0	2.6	30.860	D
2 - A2032 Littlehampton Road	828	207	861	976	0.848	809	1062	0.0	4.8	19.687	C
3 - A259 - Goring Street	1141	285	694	1492	0.765	1129	976	0.0	3.1	9.607	A
4 - A259 Littlehampton Road	1300	325	788	1614	0.805	1285	1035	0.0	3.9	10.479	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	343	86	1908	303	1.134	290	497	2.6	15.8	141.861	F
2 - A2032 Littlehampton Road	989	247	970	936	1.056	911	1228	4.8	24.4	71.813	F
3 - A259 - Goring Street	1363	341	779	1442	0.945	1332	1102	3.1	10.9	27.007	D
4 - A259 Littlehampton Road	1553	388	925	1535	1.011	1480	1185	3.9	22.0	41.865	E

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	421	105	1960	286	1.469	285	524	15.8	49.6	435.912	F
2 - A2032 Littlehampton Road	1211	303	980	933	1.298	931	1266	24.4	94.3	239.554	F
3 - A259 - Goring Street	1669	417	795	1433	1.165	1426	1116	10.9	71.8	113.958	F
4 - A259 Littlehampton Road	1901	475	986	1500	1.268	1498	1235	22.0	122.9	181.680	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	421	105	1962	286	1.472	286	526	49.6	83.4	856.161	F
2 - A2032 Littlehampton Road	1211	303	980	933	1.299	932	1267	94.3	164.0	505.883	F
3 - A259 - Goring Street	1669	417	796	1433	1.165	1432	1117	71.8	131.2	261.525	F
4 - A259 Littlehampton Road	1901	475	990	1498	1.269	1498	1238	122.9	223.9	421.329	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	343	86	1961	286	1.201	286	523	83.4	97.8	1155.837	F
2 - A2032 Littlehampton Road	989	247	981	932	1.061	932	1266	164.0	178.3	666.918	F
3 - A259 - Goring Street	1363	341	795	1433	0.951	1422	1117	131.2	116.4	313.667	F
4 - A259 Littlehampton Road	1553	388	984	1501	1.034	1501	1234	223.9	236.8	556.488	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	288	72	1956	288	1.000	286	523	97.8	98.1	1240.765	F
2 - A2032 Littlehampton Road	828	207	979	933	0.888	928	1263	178.3	153.3	643.784	F
3 - A259 - Goring Street	1141	285	792	1435	0.796	1422	1114	116.4	46.1	208.037	F
4 - A259 Littlehampton Road	1300	325	984	1501	0.866	1495	1231	236.8	188.1	512.082	F

2024 Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	537.88	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-32	1 - A2700 Titnore Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	383	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	1069	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1610	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1636	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	62	276	45
	2 - A2032 Littlehampton Road	99	0	237	733
	3 - A259 - Goring Street	429	536	90	555
	4 - A259 Littlehampton Road	76	842	706	12

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	5	4	5
	2 - A2032 Littlehampton Road	5	0	1	3
	3 - A259 - Goring Street	0	1	0	2
	4 - A259 Littlehampton Road	4	2	1	58

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.48	1263.22	99.6	F	351	527
2 - A2032 Littlehampton Road	1.25	545.61	143.6	F	981	1471
3 - A259 - Goring Street	1.22	450.06	180.2	F	1477	2216
4 - A259 Littlehampton Road	1.22	444.85	181.1	F	1501	2252

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	288	72	1627	392	0.736	279	449	0.0	2.5	29.633	D
2 - A2032 Littlehampton Road	805	201	835	986	0.816	789	1071	0.0	4.0	17.057	C
3 - A259 - Goring Street	1212	303	656	1519	0.798	1197	968	0.0	3.7	10.745	B
4 - A259 Littlehampton Road	1232	308	858	1576	0.781	1218	995	0.0	3.4	9.719	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	344	86	1896	307	1.122	293	521	2.5	15.2	136.073	F
2 - A2032 Littlehampton Road	961	240	947	945	1.017	906	1242	4.0	17.8	56.747	F
3 - A259 - Goring Street	1447	362	750	1464	0.989	1394	1103	3.7	17.0	36.769	E
4 - A259 Littlehampton Road	1471	368	997	1496	0.983	1420	1147	3.4	16.2	34.467	D

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	422	105	1965	285	1.480	284	540	15.2	49.6	434.231	F
2 - A2032 Littlehampton Road	1177	294	964	939	1.254	936	1285	17.8	78.0	195.074	F
3 - A259 - Goring Street	1773	443	773	1450	1.223	1447	1128	17.0	98.6	152.298	F
4 - A259 Littlehampton Road	1801	450	1035	1474	1.222	1471	1185	16.2	98.8	149.057	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	422	105	1968	284	1.485	284	541	49.6	84.1	864.020	F
2 - A2032 Littlehampton Road	1177	294	965	939	1.254	938	1286	78.0	137.7	421.258	F
3 - A259 - Goring Street	1773	443	774	1449	1.223	1449	1129	98.6	179.5	350.945	F
4 - A259 Littlehampton Road	1801	450	1036	1474	1.222	1473	1187	98.8	180.8	346.943	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	344	86	1963	286	1.206	285	540	84.1	98.8	1169.574	F
2 - A2032 Littlehampton Road	961	240	965	939	1.024	937	1284	137.7	143.6	545.606	F
3 - A259 - Goring Street	1447	362	774	1449	0.999	1445	1128	179.5	180.2	450.055	F
4 - A259 Littlehampton Road	1471	368	1034	1475	0.997	1470	1185	180.8	181.1	444.850	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	288	72	1961	286	1.007	285	539	98.8	99.6	1263.216	F
2 - A2032 Littlehampton Road	805	201	964	939	0.857	933	1282	143.6	111.6	493.363	F
3 - A259 - Goring Street	1212	303	770	1452	0.835	1444	1126	180.2	122.3	377.966	F
4 - A259 Littlehampton Road	1232	308	1032	1476	0.835	1468	1181	181.1	122.1	372.790	F

2033 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	560.96	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-32	1 - A2700 Titnore Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2033 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	375	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	1086	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1522	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1740	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	65	264	46
	2 - A2032 Littlehampton Road	106	0	216	764
	3 - A259 - Goring Street	387	469	96	570
	4 - A259 Littlehampton Road	77	871	779	13

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	5	4	4
	2 - A2032 Littlehampton Road	6	0	1	3
	3 - A259 - Goring Street	1	1	0	2
	4 - A259 Littlehampton Road	4	2	1	54

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.45	1164.64	92.0	F	344	516
2 - A2032 Littlehampton Road	1.30	663.15	175.1	F	997	1495
3 - A259 - Goring Street	1.16	312.01	131.2	F	1397	2095
4 - A259 Littlehampton Road	1.28	580.03	248.1	F	1597	2395

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	282	71	1657	383	0.738	272	423	0.0	2.5	30.421	D
2 - A2032 Littlehampton Road	818	204	886	967	0.846	799	1044	0.0	4.7	19.637	C
3 - A259 - Goring Street	1146	286	683	1498	0.765	1133	1001	0.0	3.1	9.564	A
4 - A259 Littlehampton Road	1310	327	787	1615	0.811	1294	1029	0.0	4.0	10.729	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	337	84	1916	301	1.121	287	494	2.5	14.9	136.655	F
2 - A2032 Littlehampton Road	976	244	998	925	1.055	899	1205	4.7	23.9	71.561	F
3 - A259 - Goring Street	1368	342	767	1449	0.944	1337	1131	3.1	10.8	26.794	D
4 - A259 Littlehampton Road	1564	391	924	1536	1.018	1485	1180	4.0	23.7	44.100	E

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	413	103	1964	286	1.445	285	520	14.9	47.0	415.073	F
2 - A2032 Littlehampton Road	1196	299	1008	922	1.297	920	1241	23.9	92.8	238.427	F
3 - A259 - Goring Street	1676	419	784	1440	1.164	1432	1145	10.8	71.8	113.396	F
4 - A259 Littlehampton Road	1916	479	986	1501	1.277	1499	1230	23.7	128.0	189.598	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	413	103	1966	285	1.448	285	522	47.0	79.0	814.265	F
2 - A2032 Littlehampton Road	1196	299	1008	922	1.297	922	1242	92.8	161.3	503.432	F
3 - A259 - Goring Street	1676	419	784	1439	1.165	1438	1145	71.8	131.2	260.395	F
4 - A259 Littlehampton Road	1916	479	989	1498	1.279	1498	1233	128.0	232.4	437.449	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	337	84	1965	285	1.182	285	520	79.0	92.0	1095.155	F
2 - A2032 Littlehampton Road	976	244	1009	921	1.060	921	1241	161.3	175.1	663.154	F
3 - A259 - Goring Street	1368	342	784	1439	0.951	1428	1146	131.2	116.2	312.007	F
4 - A259 Littlehampton Road	1564	391	983	1502	1.042	1501	1229	232.4	248.1	580.027	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	282	71	1960	287	0.984	284	519	92.0	91.7	1164.638	F
2 - A2032 Littlehampton Road	818	204	1006	923	0.886	918	1238	175.1	150.1	638.594	F
3 - A259 - Goring Street	1146	286	781	1441	0.795	1429	1142	116.2	45.5	206.017	F
4 - A259 Littlehampton Road	1310	327	983	1502	0.872	1496	1226	248.1	201.7	541.628	F

2033 Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	741.63	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-36	1 - A2700 Titnore Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2033 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	404	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	1133	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1696	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1736	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	66	291	47
	2 - A2032 Littlehampton Road	106	0	249	778
	3 - A259 - Goring Street	450	562	96	588
	4 - A259 Littlehampton Road	80	894	749	13

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	5	4	4
	2 - A2032 Littlehampton Road	6	0	1	3
	3 - A259 - Goring Street	0	1	0	2
	4 - A259 Littlehampton Road	4	2	1	54

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.56	1592.86	127.5	F	371	556
2 - A2032 Littlehampton Road	1.33	757.33	205.8	F	1040	1559
3 - A259 - Goring Street	1.29	625.31	259.6	F	1556	2334
4 - A259 Littlehampton Road	1.30	641.61	272.1	F	1593	2389

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	304	76	1716	364	0.835	289	470	0.0	3.8	41.794	E
2 - A2032 Littlehampton Road	853	213	878	970	0.879	829	1126	0.0	5.9	22.784	C
3 - A259 - Goring Street	1277	319	690	1498	0.852	1256	1017	0.0	5.2	13.864	B
4 - A259 Littlehampton Road	1307	327	898	1553	0.842	1288	1048	0.0	4.9	12.779	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	363	91	1937	294	1.235	287	531	3.8	22.8	194.582	F
2 - A2032 Littlehampton Road	1019	255	959	940	1.083	922	1266	5.9	30.1	84.317	F
3 - A259 - Goring Street	1525	381	764	1455	1.048	1422	1117	5.2	30.7	56.465	F
4 - A259 Littlehampton Road	1561	390	1016	1485	1.051	1452	1170	4.9	31.9	56.410	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	445	111	1967	285	1.563	284	540	22.8	62.9	564.412	F
2 - A2032 Littlehampton Road	1247	312	967	937	1.331	936	1285	30.1	107.9	274.554	F
3 - A259 - Goring Street	1867	467	775	1449	1.289	1447	1128	30.7	135.7	214.124	F
4 - A259 Littlehampton Road	1911	478	1033	1475	1.296	1474	1189	31.9	141.3	218.471	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	445	111	1968	284	1.565	284	540	62.9	103.1	1069.015	F
2 - A2032 Littlehampton Road	1247	312	967	937	1.331	937	1286	107.9	185.4	570.044	F
3 - A259 - Goring Street	1867	467	775	1448	1.289	1448	1129	135.7	240.5	472.272	F
4 - A259 Littlehampton Road	1911	478	1034	1475	1.296	1475	1190	141.3	250.5	482.885	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	363	91	1968	284	1.278	284	540	103.1	122.9	1444.468	F
2 - A2032 Littlehampton Road	1019	255	967	937	1.087	937	1286	185.4	205.8	757.326	F
3 - A259 - Goring Street	1525	381	775	1449	1.053	1448	1129	240.5	259.6	625.311	F
4 - A259 Littlehampton Road	1561	390	1034	1475	1.058	1474	1190	250.5	272.1	641.611	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	304	76	1964	286	1.064	286	538	122.9	127.5	1592.865	F
2 - A2032 Littlehampton Road	853	213	966	937	0.910	933	1283	205.8	185.8	755.930	F
3 - A259 - Goring Street	1277	319	772	1450	0.880	1445	1127	259.6	217.6	594.972	F
4 - A259 Littlehampton Road	1307	327	1031	1476	0.885	1471	1186	272.1	231.1	616.037	F

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: 18122 - A259-A2032-A2700 (Mitigation AM-Queues Calibrated).j9
Path: P:\18 Jobs\122 Land at Chatsmore Farm - Goring, West Sussex\Technical Assessments\ARCADY\18122 - A259 - A2032 - A2700 Roundabout
Report generation date: 03/06/2020 10:55:57

»2018 Base, AM
»2024 Base , AM
»2024 Base + Dev, AM
»2033 Base, AM
»2033 Base + Dev, AM

Summary of junction performance

	AM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2018 Base							
1 - A2700 Titnore Lane	16.1	171.84	1.05	F	63.04	F	-13 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	31.1	108.58	1.03	F			
3 - A259 - Goring Street	6.1	18.48	0.87	C			
4 - A259 Littlehampton Road	18.8	45.58	0.97	E			
2024 Base							
1 - A2700 Titnore Lane	98.1	1240.76	1.47	F	561.58	F	-33 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	178.3	666.92	1.30	F			
3 - A259 - Goring Street	131.2	313.67	1.17	F			
4 - A259 Littlehampton Road	236.8	556.49	1.27	F			
2024 Base + Dev							
1 - A2700 Titnore Lane	99.6	1263.22	1.48	F	537.88	F	-32 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	143.6	545.61	1.25	F			
3 - A259 - Goring Street	180.2	450.06	1.22	F			
4 - A259 Littlehampton Road	181.1	444.85	1.22	F			
2033 Base							
1 - A2700 Titnore Lane	92.0	1164.64	1.45	F	560.96	F	-32 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	175.1	663.15	1.30	F			
3 - A259 - Goring Street	131.2	312.01	1.16	F			
4 - A259 Littlehampton Road	248.1	580.03	1.28	F			
2033 Base + Dev							
1 - A2700 Titnore Lane	127.5	1592.86	1.56	F	741.63	F	-36 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	205.8	757.33	1.33	F			
3 - A259 - Goring Street	259.6	625.31	1.29	F			
4 - A259 Littlehampton Road	272.1	641.61	1.30	F			

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

File summary

File Description

Title	18122 - A259 / A2032 / A2700
Location	
Site number	18-122
Date	18/01/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	18-122
Enumerator	Milestone4-PC\Milestone4 - Newer
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Base	AM	ONE HOUR	07:45	09:15	15	✓
D3	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓
D5	2024 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D7	2033 Base	AM	ONE HOUR	07:45	09:15	15	✓
D9	2033 Base + Dev	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

2018 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	63.04	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-13	1 - A2700 Titnore Lane

Arms

Arms

Arm	Name	Description
1	A2700 Titnore Lane	
2	A2032 Littlehampton Road	
3	A259 - Goring Street	
4	A259 Littlehampton Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A2700 Titnore Lane	3.80	6.00	10.0	18.0	60.0	19.0	
2 - A2032 Littlehampton Road	7.40	8.50	10.0	24.0	60.0	19.0	
3 - A259 - Goring Street	6.20	7.50	8.0	34.0	60.0	17.6	
4 - A259 Littlehampton Road	7.30	10.00	7.0	24.0	60.0	17.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A2700 Titnore Lane	0.547	1593
2 - A2032 Littlehampton Road	0.726	2604
3 - A259 - Goring Street	0.673	2273
4 - A259 Littlehampton Road	0.747	2715

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - A2700 Titnore Lane	Percentage		59.40
2 - A2032 Littlehampton Road	Percentage		51.10
3 - A259 - Goring Street	Percentage		84.60
4 - A259 Littlehampton Road	Percentage		77.75

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	299	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	895	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1125	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1407	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	56	216	27
	2 - A2032 Littlehampton Road	87	0	168	640
	3 - A259 - Goring Street	297	371	0	457
	4 - A259 Littlehampton Road	60	727	610	10

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	5	4	7
	2 - A2032 Littlehampton Road	6	0	1	3
	3 - A259 - Goring Street	1	1	0	2
	4 - A259 Littlehampton Road	5	2	1	60

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.05	171.84	16.1	F	274	412
2 - A2032 Littlehampton Road	1.03	108.58	31.1	F	821	1232
3 - A259 - Goring Street	0.87	18.48	6.1	C	1032	1548
4 - A259 Littlehampton Road	0.97	45.58	18.8	E	1291	1937

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	225	56	1286	499	0.451	222	332	0.0	0.8	12.862	B
2 - A2032 Littlehampton Road	674	168	644	1055	0.639	667	863	0.0	1.7	9.131	A
3 - A259 - Goring Street	847	212	569	1563	0.542	842	742	0.0	1.2	4.964	A
4 - A259 Littlehampton Road	1059	265	565	1741	0.608	1053	847	0.0	1.5	5.187	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	269	67	1538	419	0.642	265	397	0.8	1.7	22.909	C
2 - A2032 Littlehampton Road	805	201	770	1008	0.798	797	1033	1.7	3.6	16.472	C
3 - A259 - Goring Street	1011	253	680	1498	0.675	1008	887	1.2	2.0	7.294	A
4 - A259 Littlehampton Road	1265	316	676	1677	0.754	1259	1012	1.5	3.0	8.496	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	329	82	1843	323	1.021	297	477	1.7	9.7	93.373	F
2 - A2032 Littlehampton Road	985	246	904	959	1.028	922	1236	3.6	19.5	58.715	F
3 - A259 - Goring Street	1239	310	786	1436	0.863	1225	1039	2.0	5.6	16.056	C
4 - A259 Littlehampton Road	1549	387	817	1596	0.971	1503	1194	3.0	14.5	29.799	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	329	82	1874	312	1.054	303	483	9.7	16.1	171.841	F
2 - A2032 Littlehampton Road	985	246	922	952	1.035	939	1256	19.5	31.1	108.579	F
3 - A259 - Goring Street	1239	310	801	1427	0.868	1237	1060	5.6	6.1	18.481	C
4 - A259 Littlehampton Road	1549	387	826	1591	0.974	1532	1212	14.5	18.8	45.578	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	269	67	1609	397	0.678	324	416	16.1	2.4	69.377	F
2 - A2032 Littlehampton Road	805	201	848	979	0.822	907	1085	31.1	5.6	63.758	F
3 - A259 - Goring Street	1011	253	775	1443	0.701	1026	979	6.1	2.4	8.919	A
4 - A259 Littlehampton Road	1265	316	697	1665	0.760	1327	1104	18.8	3.3	12.525	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	225	56	1302	494	0.456	231	337	2.4	0.9	14.011	B
2 - A2032 Littlehampton Road	674	168	658	1050	0.642	689	875	5.6	1.8	10.364	B
3 - A259 - Goring Street	847	212	588	1552	0.546	852	759	2.4	1.2	5.176	A
4 - A259 Littlehampton Road	1059	265	573	1737	0.610	1066	867	3.3	1.6	5.423	A

2024 Base , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	561.58	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-33	1 - A2700 Titnore Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	382	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	1100	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1516	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1727	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	66	269	47
	2 - A2032 Littlehampton Road	106	0	216	778
	3 - A259 - Goring Street	388	469	96	563
	4 - A259 Littlehampton Road	80	894	740	13

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	5	4	5
	2 - A2032 Littlehampton Road	5	0	1	3
	3 - A259 - Goring Street	1	1	0	2
	4 - A259 Littlehampton Road	4	2	1	58

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.47	1240.76	98.1	F	351	526
2 - A2032 Littlehampton Road	1.30	666.92	178.3	F	1009	1514
3 - A259 - Goring Street	1.17	313.67	131.2	F	1391	2087
4 - A259 Littlehampton Road	1.27	556.49	236.8	F	1585	2377

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	288	72	1646	386	0.745	277	426	0.0	2.6	30.860	D
2 - A2032 Littlehampton Road	828	207	861	976	0.848	809	1062	0.0	4.8	19.687	C
3 - A259 - Goring Street	1141	285	694	1492	0.765	1129	976	0.0	3.1	9.607	A
4 - A259 Littlehampton Road	1300	325	788	1614	0.805	1285	1035	0.0	3.9	10.479	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	343	86	1908	303	1.134	290	497	2.6	15.8	141.861	F
2 - A2032 Littlehampton Road	989	247	970	936	1.056	911	1228	4.8	24.4	71.813	F
3 - A259 - Goring Street	1363	341	779	1442	0.945	1332	1102	3.1	10.9	27.007	D
4 - A259 Littlehampton Road	1553	388	925	1535	1.011	1480	1185	3.9	22.0	41.865	E

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	421	105	1960	286	1.469	285	524	15.8	49.6	435.912	F
2 - A2032 Littlehampton Road	1211	303	980	933	1.298	931	1266	24.4	94.3	239.554	F
3 - A259 - Goring Street	1669	417	795	1433	1.165	1426	1116	10.9	71.8	113.958	F
4 - A259 Littlehampton Road	1901	475	986	1500	1.268	1498	1235	22.0	122.9	181.680	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	421	105	1962	286	1.472	286	526	49.6	83.4	856.161	F
2 - A2032 Littlehampton Road	1211	303	980	933	1.299	932	1267	94.3	164.0	505.883	F
3 - A259 - Goring Street	1669	417	796	1433	1.165	1432	1117	71.8	131.2	261.525	F
4 - A259 Littlehampton Road	1901	475	990	1498	1.269	1498	1238	122.9	223.9	421.329	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	343	86	1961	286	1.201	286	523	83.4	97.8	1155.837	F
2 - A2032 Littlehampton Road	989	247	981	932	1.061	932	1266	164.0	178.3	666.918	F
3 - A259 - Goring Street	1363	341	795	1433	0.951	1422	1117	131.2	116.4	313.667	F
4 - A259 Littlehampton Road	1553	388	984	1501	1.034	1501	1234	223.9	236.8	556.488	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	288	72	1956	288	1.000	286	523	97.8	98.1	1240.765	F
2 - A2032 Littlehampton Road	828	207	979	933	0.888	928	1263	178.3	153.3	643.784	F
3 - A259 - Goring Street	1141	285	792	1435	0.796	1422	1114	116.4	46.1	208.037	F
4 - A259 Littlehampton Road	1300	325	984	1501	0.866	1495	1231	236.8	188.1	512.082	F

2024 Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	537.88	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-32	1 - A2700 Titnore Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	383	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	1069	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1610	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1636	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	62	276	45
	2 - A2032 Littlehampton Road	99	0	237	733
	3 - A259 - Goring Street	429	536	90	555
	4 - A259 Littlehampton Road	76	842	706	12

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	5	4	5
	2 - A2032 Littlehampton Road	5	0	1	3
	3 - A259 - Goring Street	0	1	0	2
	4 - A259 Littlehampton Road	4	2	1	58

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.48	1263.22	99.6	F	351	527
2 - A2032 Littlehampton Road	1.25	545.61	143.6	F	981	1471
3 - A259 - Goring Street	1.22	450.06	180.2	F	1477	2216
4 - A259 Littlehampton Road	1.22	444.85	181.1	F	1501	2252

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	288	72	1627	392	0.736	279	449	0.0	2.5	29.633	D
2 - A2032 Littlehampton Road	805	201	835	986	0.816	789	1071	0.0	4.0	17.057	C
3 - A259 - Goring Street	1212	303	656	1519	0.798	1197	968	0.0	3.7	10.745	B
4 - A259 Littlehampton Road	1232	308	858	1576	0.781	1218	995	0.0	3.4	9.719	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	344	86	1896	307	1.122	293	521	2.5	15.2	136.073	F
2 - A2032 Littlehampton Road	961	240	947	945	1.017	906	1242	4.0	17.8	56.747	F
3 - A259 - Goring Street	1447	362	750	1464	0.989	1394	1103	3.7	17.0	36.769	E
4 - A259 Littlehampton Road	1471	368	997	1496	0.983	1420	1147	3.4	16.2	34.467	D

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	422	105	1965	285	1.480	284	540	15.2	49.6	434.231	F
2 - A2032 Littlehampton Road	1177	294	964	939	1.254	936	1285	17.8	78.0	195.074	F
3 - A259 - Goring Street	1773	443	773	1450	1.223	1447	1128	17.0	98.6	152.298	F
4 - A259 Littlehampton Road	1801	450	1035	1474	1.222	1471	1185	16.2	98.8	149.057	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	422	105	1968	284	1.485	284	541	49.6	84.1	864.020	F
2 - A2032 Littlehampton Road	1177	294	965	939	1.254	938	1286	78.0	137.7	421.258	F
3 - A259 - Goring Street	1773	443	774	1449	1.223	1449	1129	98.6	179.5	350.945	F
4 - A259 Littlehampton Road	1801	450	1036	1474	1.222	1473	1187	98.8	180.8	346.943	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	344	86	1963	286	1.206	285	540	84.1	98.8	1169.574	F
2 - A2032 Littlehampton Road	961	240	965	939	1.024	937	1284	137.7	143.6	545.606	F
3 - A259 - Goring Street	1447	362	774	1449	0.999	1445	1128	179.5	180.2	450.055	F
4 - A259 Littlehampton Road	1471	368	1034	1475	0.997	1470	1185	180.8	181.1	444.850	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	288	72	1961	286	1.007	285	539	98.8	99.6	1263.216	F
2 - A2032 Littlehampton Road	805	201	964	939	0.857	933	1282	143.6	111.6	493.363	F
3 - A259 - Goring Street	1212	303	770	1452	0.835	1444	1126	180.2	122.3	377.966	F
4 - A259 Littlehampton Road	1232	308	1032	1476	0.835	1468	1181	181.1	122.1	372.790	F

2033 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	560.96	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-32	1 - A2700 Titnore Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2033 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	375	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	1086	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1522	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1740	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	65	264	46
	2 - A2032 Littlehampton Road	106	0	216	764
	3 - A259 - Goring Street	387	469	96	570
	4 - A259 Littlehampton Road	77	871	779	13

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	5	4	4
	2 - A2032 Littlehampton Road	6	0	1	3
	3 - A259 - Goring Street	1	1	0	2
	4 - A259 Littlehampton Road	4	2	1	54

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.45	1164.64	92.0	F	344	516
2 - A2032 Littlehampton Road	1.30	663.15	175.1	F	997	1495
3 - A259 - Goring Street	1.16	312.01	131.2	F	1397	2095
4 - A259 Littlehampton Road	1.28	580.03	248.1	F	1597	2395

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	282	71	1657	383	0.738	272	423	0.0	2.5	30.421	D
2 - A2032 Littlehampton Road	818	204	886	967	0.846	799	1044	0.0	4.7	19.637	C
3 - A259 - Goring Street	1146	286	683	1498	0.765	1133	1001	0.0	3.1	9.564	A
4 - A259 Littlehampton Road	1310	327	787	1615	0.811	1294	1029	0.0	4.0	10.729	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	337	84	1916	301	1.121	287	494	2.5	14.9	136.655	F
2 - A2032 Littlehampton Road	976	244	998	925	1.055	899	1205	4.7	23.9	71.561	F
3 - A259 - Goring Street	1368	342	767	1449	0.944	1337	1131	3.1	10.8	26.794	D
4 - A259 Littlehampton Road	1564	391	924	1536	1.018	1485	1180	4.0	23.7	44.100	E

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	413	103	1964	286	1.445	285	520	14.9	47.0	415.073	F
2 - A2032 Littlehampton Road	1196	299	1008	922	1.297	920	1241	23.9	92.8	238.427	F
3 - A259 - Goring Street	1676	419	784	1440	1.164	1432	1145	10.8	71.8	113.396	F
4 - A259 Littlehampton Road	1916	479	986	1501	1.277	1499	1230	23.7	128.0	189.598	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	413	103	1966	285	1.448	285	522	47.0	79.0	814.265	F
2 - A2032 Littlehampton Road	1196	299	1008	922	1.297	922	1242	92.8	161.3	503.432	F
3 - A259 - Goring Street	1676	419	784	1439	1.165	1438	1145	71.8	131.2	260.395	F
4 - A259 Littlehampton Road	1916	479	989	1498	1.279	1498	1233	128.0	232.4	437.449	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	337	84	1965	285	1.182	285	520	79.0	92.0	1095.155	F
2 - A2032 Littlehampton Road	976	244	1009	921	1.060	921	1241	161.3	175.1	663.154	F
3 - A259 - Goring Street	1368	342	784	1439	0.951	1428	1146	131.2	116.2	312.007	F
4 - A259 Littlehampton Road	1564	391	983	1502	1.042	1501	1229	232.4	248.1	580.027	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	282	71	1960	287	0.984	284	519	92.0	91.7	1164.638	F
2 - A2032 Littlehampton Road	818	204	1006	923	0.886	918	1238	175.1	150.1	638.594	F
3 - A259 - Goring Street	1146	286	781	1441	0.795	1429	1142	116.2	45.5	206.017	F
4 - A259 Littlehampton Road	1310	327	983	1502	0.872	1496	1226	248.1	201.7	541.628	F

2033 Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	741.63	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-36	1 - A2700 Titnore Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2033 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	404	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	1133	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1696	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1736	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	66	291	47
	2 - A2032 Littlehampton Road	106	0	249	778
	3 - A259 - Goring Street	450	562	96	588
	4 - A259 Littlehampton Road	80	894	749	13

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	5	4	4
	2 - A2032 Littlehampton Road	6	0	1	3
	3 - A259 - Goring Street	0	1	0	2
	4 - A259 Littlehampton Road	4	2	1	54

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.56	1592.86	127.5	F	371	556
2 - A2032 Littlehampton Road	1.33	757.33	205.8	F	1040	1559
3 - A259 - Goring Street	1.29	625.31	259.6	F	1556	2334
4 - A259 Littlehampton Road	1.30	641.61	272.1	F	1593	2389

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	304	76	1716	364	0.835	289	470	0.0	3.8	41.794	E
2 - A2032 Littlehampton Road	853	213	878	970	0.879	829	1126	0.0	5.9	22.784	C
3 - A259 - Goring Street	1277	319	690	1498	0.852	1256	1017	0.0	5.2	13.864	B
4 - A259 Littlehampton Road	1307	327	898	1553	0.842	1288	1048	0.0	4.9	12.779	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	363	91	1937	294	1.235	287	531	3.8	22.8	194.582	F
2 - A2032 Littlehampton Road	1019	255	959	940	1.083	922	1266	5.9	30.1	84.317	F
3 - A259 - Goring Street	1525	381	764	1455	1.048	1422	1117	5.2	30.7	56.465	F
4 - A259 Littlehampton Road	1561	390	1016	1485	1.051	1452	1170	4.9	31.9	56.410	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	445	111	1967	285	1.563	284	540	22.8	62.9	564.412	F
2 - A2032 Littlehampton Road	1247	312	967	937	1.331	936	1285	30.1	107.9	274.554	F
3 - A259 - Goring Street	1867	467	775	1449	1.289	1447	1128	30.7	135.7	214.124	F
4 - A259 Littlehampton Road	1911	478	1033	1475	1.296	1474	1189	31.9	141.3	218.471	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	445	111	1968	284	1.565	284	540	62.9	103.1	1069.015	F
2 - A2032 Littlehampton Road	1247	312	967	937	1.331	937	1286	107.9	185.4	570.044	F
3 - A259 - Goring Street	1867	467	775	1448	1.289	1448	1129	135.7	240.5	472.272	F
4 - A259 Littlehampton Road	1911	478	1034	1475	1.296	1475	1190	141.3	250.5	482.885	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	363	91	1968	284	1.278	284	540	103.1	122.9	1444.468	F
2 - A2032 Littlehampton Road	1019	255	967	937	1.087	937	1286	185.4	205.8	757.326	F
3 - A259 - Goring Street	1525	381	775	1449	1.053	1448	1129	240.5	259.6	625.311	F
4 - A259 Littlehampton Road	1561	390	1034	1475	1.058	1474	1190	250.5	272.1	641.611	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	304	76	1964	286	1.064	286	538	122.9	127.5	1592.865	F
2 - A2032 Littlehampton Road	853	213	966	937	0.910	933	1283	205.8	185.8	755.930	F
3 - A259 - Goring Street	1277	319	772	1450	0.880	1445	1127	259.6	217.6	594.972	F
4 - A259 Littlehampton Road	1307	327	1031	1476	0.885	1471	1186	272.1	231.1	616.037	F

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: 18122 - A259-Aldsworth Avenue (AM Calibration - Mitigation).j9
Path: P:\18 Jobs\122 Land at Chatsmore Farm - Goring, West Sussex\Technical Assessments\ARCADY\18122 - A259 - Aldsworth Avenue Roundabout
Report generation date: 03/06/2020 11:32:24

»2018 Base, AM
»2024 Base, AM
»2024 Base + Dev, AM
»2033 Base, AM
»2033 Base + Dev, AM

Summary of junction performance

	AM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2018 Base						
1 - A259 North	15.3	45.37	0.96	E	49.53	E	-11 % [2 - Ardingly Drive]
2 - Ardingly Drive	1.7	61.20	0.66	F			
3 - A259 Goring Way East	11.1	55.28	0.95	F			
4 - Aldsworth Avenue	4.3	63.49	0.84	F			
5 - Goring Way West	5.8	41.82	0.87	E			
	2024 Base						
1 - A259 North	86.9	201.15	1.12	F	209.47	F	-30 % [4 - Aldsworth Avenue]
2 - Ardingly Drive	2.9	94.35	0.78	F			
3 - A259 Goring Way East	47.9	183.62	1.10	F			
4 - Aldsworth Avenue	41.3	481.60	1.22	F			
5 - Goring Way West	20.3	121.62	1.02	F			
	2024 Base + Dev						
1 - A259 North	138.6	365.51	1.19	F	295.69	F	-31 % [4 - Aldsworth Avenue]
2 - Ardingly Drive	2.9	95.42	0.78	F			
3 - A259 Goring Way East	58.6	230.41	1.12	F			
4 - Aldsworth Avenue	41.1	485.38	1.22	F			
5 - Goring Way West	22.8	134.47	1.04	F			
	2033 Base						
1 - A259 North	134.3	354.16	1.18	F	342.08	F	-34 % [4 - Aldsworth Avenue]
2 - Ardingly Drive	3.7	114.65	0.83	F			
3 - A259 Goring Way East	75.4	323.72	1.16	F			
4 - Aldsworth Avenue	56.9	657.86	1.29	F			
5 - Goring Way West	35.3	190.54	1.09	F			
	2033 Base + Dev						
1 - A259 North	201.2	536.92	1.26	F	440.70	F	-34 % [4 - Aldsworth Avenue]
2 - Ardingly Drive	3.7	115.18	0.83	F			
3 - A259 Goring Way East	87.9	383.37	1.19	F			
4 - Aldsworth Avenue	56.8	655.70	1.28	F			
5 - Goring Way West	38.6	210.02	1.10	F			

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

File summary

File Description

Title	18122 - A259 / Aldsworth Avenue
Location	
Site number	18-122
Date	18/01/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	18-122
Enumerator	Milestone4-PC\Milestone4 - Newer
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Base	AM	ONE HOUR	07:45	09:15	15	✓
D3	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓
D5	2024 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D7	2033 Base	AM	ONE HOUR	07:45	09:15	15	✓
D9	2033 Base + Dev	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

2018 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	49.53	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-11	2 - Ardingly Drive

Arms

Arms

Arm	Name	Description
1	A259 North	
2	Ardingly Drive	
3	A259 Goring Way East	
4	Aldsworth Avenue	
5	Goring Way West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A259 North	3.69	7.50	12.0	44.6	41.0	23.0	
2 - Ardingly Drive	4.40	5.00	2.5	10.3	41.0	44.0	
3 - A259 Goring Way East	4.34	8.50	10.0	21.5	41.0	19.0	
4 - Aldsworth Avenue	4.84	7.50	10.0	22.3	41.0	33.0	
5 - Goring Way West	3.62	7.50	20.0	38.5	41.0	26.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A259 North	0.670	1776
2 - Ardingly Drive	0.531	1300
3 - A259 Goring Way East	0.698	1933
4 - Aldsworth Avenue	0.676	1892
5 - Goring Way West	0.689	1890

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - A259 North	Percentage		85.50
2 - Ardingly Drive	Percentage		36.00
3 - A259 Goring Way East	Percentage		56.25
4 - Aldsworth Avenue	Percentage		29.50
5 - Goring Way West	Percentage		50.80

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A259 North		ONE HOUR	✓	1164	100.000
2 - Ardingly Drive		ONE HOUR	✓	100	100.000
3 - A259 Goring Way East		ONE HOUR	✓	701	100.000
4 - Aldsworth Avenue		ONE HOUR	✓	242	100.000
5 - Goring Way West		ONE HOUR	✓	486	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	698	149	317
	2 - Ardingly Drive	39	0	34	15	12
	3 - A259 Goring Way East	614	0	2	8	77
	4 - Aldsworth Avenue	177	0	31	1	33
	5 - Goring Way West	270	0	184	26	6

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	2	2	1
	2 - Ardingly Drive	0	0	0	0	0
	3 - A259 Goring Way East	2	0	0	0	13
	4 - Aldsworth Avenue	2	0	0	0	0
	5 - Goring Way West	0	0	5	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A259 North	0.96	45.37	15.3	E	1068	1602
2 - Ardingly Drive	0.66	61.20	1.7	F	92	138
3 - A259 Goring Way East	0.95	55.28	11.1	F	643	965
4 - Aldsworth Avenue	0.84	63.49	4.3	F	222	333
5 - Goring Way West	0.87	41.82	5.8	E	446	669

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	876	219	186	1384	0.633	870	818	0.0	1.7	6.912	A
2 - Ardingly Drive	75	19	1055	262	0.288	74	0	0.0	0.4	18.993	C
3 - A259 Goring Way East	528	132	421	891	0.592	522	708	0.0	1.4	9.611	A
4 - Aldsworth Avenue	182	46	795	390	0.467	179	148	0.0	0.8	16.791	C
5 - Goring Way West	366	91	642	717	0.511	362	332	0.0	1.0	10.041	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1046	262	223	1362	0.768	1041	981	1.7	3.2	10.996	B
2 - Ardingly Drive	90	22	1264	221	0.407	89	0	0.4	0.7	26.997	D
3 - A259 Goring Way East	630	158	505	859	0.733	625	848	1.4	2.6	15.095	C
4 - Aldsworth Avenue	218	54	952	358	0.607	215	178	0.8	1.5	24.707	C
5 - Goring Way West	437	109	770	672	0.650	434	397	1.0	1.8	14.934	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1282	320	268	1336	0.960	1245	1174	3.2	12.3	31.512	D
2 - Ardingly Drive	110	28	1513	172	0.639	107	0	0.7	1.5	52.218	F
3 - A259 Goring Way East	772	193	604	821	0.940	746	1016	2.6	8.9	39.242	E
4 - Aldsworth Avenue	266	67	1138	321	0.830	257	213	1.5	3.7	50.631	F
5 - Goring Way West	535	134	920	620	0.864	522	475	1.8	5.0	33.308	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1282	320	273	1333	0.962	1269	1199	12.3	15.3	45.373	E
2 - Ardingly Drive	110	28	1543	167	0.661	109	0	1.5	1.7	61.203	F
3 - A259 Goring Way East	772	193	616	816	0.946	763	1036	8.9	11.1	55.284	F
4 - Aldsworth Avenue	266	67	1162	316	0.843	264	217	3.7	4.3	63.492	F
5 - Goring Way West	535	134	941	612	0.874	532	485	5.0	5.8	41.817	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1046	262	233	1356	0.771	1093	1034	15.3	3.6	15.840	C
2 - Ardingly Drive	90	22	1326	209	0.430	94	0	1.7	0.8	32.150	D
3 - A259 Goring Way East	630	158	530	849	0.742	662	890	11.1	3.1	22.012	C
4 - Aldsworth Avenue	218	54	1006	348	0.626	228	187	4.3	1.8	32.127	D
5 - Goring Way West	437	109	815	656	0.666	452	418	5.8	2.1	18.743	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	876	219	190	1381	0.634	884	839	3.6	1.8	7.337	A
2 - Ardingly Drive	75	19	1074	258	0.292	77	0	0.8	0.4	20.002	C
3 - A259 Goring Way East	528	132	430	888	0.594	534	721	3.1	1.5	10.340	B
4 - Aldsworth Avenue	182	46	812	387	0.471	186	151	1.8	0.9	18.219	C
5 - Goring Way West	366	91	660	710	0.515	370	338	2.1	1.1	10.698	B

2024 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	209.47	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-30	4 - Aldsworth Avenue

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A259 North		ONE HOUR	✓	1342	100.000
2 - Ardingly Drive		ONE HOUR	✓	109	100.000
3 - A259 Goring Way East		ONE HOUR	✓	795	100.000
4 - Aldsworth Avenue		ONE HOUR	✓	342	100.000
5 - Goring Way West		ONE HOUR	✓	544	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	788	191	363
	2 - Ardingly Drive	43	0	37	16	13
	3 - A259 Goring Way East	695	0	2	9	89
	4 - Aldsworth Avenue	271	0	34	1	36
	5 - Goring Way West	303	0	206	28	7

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	2	2	1
	2 - Ardingly Drive	0	0	0	0	0
	3 - A259 Goring Way East	2	0	0	0	12
	4 - Aldsworth Avenue	1	0	1	0	0
	5 - Goring Way West	0	0	5	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A259 North	1.12	201.15	86.9	F	1231	1847
2 - Ardingly Drive	0.78	94.35	2.9	F	100	150
3 - A259 Goring Way East	1.10	183.62	47.9	F	730	1094
4 - Aldsworth Avenue	1.22	481.60	41.3	F	314	471
5 - Goring Way West	1.02	121.62	20.3	F	499	749

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1010	253	206	1372	0.736	1000	970	0.0	2.7	9.414	A
2 - Ardingly Drive	82	21	1205	232	0.353	80	0	0.0	0.5	23.312	C
3 - A259 Goring Way East	599	150	492	865	0.692	590	793	0.0	2.1	12.737	B
4 - Aldsworth Avenue	257	64	900	371	0.694	249	182	0.0	2.0	27.972	D
5 - Goring Way West	410	102	772	672	0.610	404	377	0.0	1.5	13.144	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1206	302	245	1349	0.894	1189	1152	2.7	7.0	20.606	C
2 - Ardingly Drive	98	24	1434	188	0.522	96	0	0.5	1.0	38.479	E
3 - A259 Goring Way East	715	179	586	828	0.863	702	944	2.1	5.2	26.296	D
4 - Aldsworth Avenue	307	77	1072	336	0.914	293	217	2.0	5.8	66.430	F
5 - Goring Way West	489	122	916	622	0.787	482	449	1.5	3.3	24.557	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1478	369	280	1328	1.113	1313	1284	7.0	48.0	86.424	F
2 - Ardingly Drive	120	30	1594	156	0.767	114	0	1.0	2.4	76.544	F
3 - A259 Goring Way East	875	219	654	802	1.091	785	1054	5.2	27.9	91.164	F
4 - Aldsworth Avenue	377	94	1197	311	1.211	305	242	5.8	23.6	199.480	F
5 - Goring Way West	599	150	1006	590	1.015	558	496	3.3	13.5	71.345	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1478	369	287	1324	1.116	1322	1303	48.0	86.9	191.546	F
2 - Ardingly Drive	120	30	1609	154	0.782	118	0	2.4	2.9	94.351	F
3 - A259 Goring Way East	875	219	662	799	1.095	795	1065	27.9	47.9	183.618	F
4 - Aldsworth Avenue	377	94	1212	308	1.223	307	245	23.6	41.0	399.229	F
5 - Goring Way West	599	150	1018	586	1.022	572	500	13.5	20.3	121.624	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1206	302	275	1331	0.906	1316	1276	86.9	59.5	201.146	F
2 - Ardingly Drive	98	24	1591	157	0.624	102	0	2.9	1.9	69.038	F
3 - A259 Goring Way East	715	179	647	805	0.888	789	1046	47.9	29.4	179.125	F
4 - Aldsworth Avenue	307	77	1195	311	0.987	306	240	41.0	41.3	481.598	F
5 - Goring Way West	489	122	1006	590	0.828	545	496	20.3	6.2	85.108	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1010	253	224	1361	0.742	1235	1146	59.5	3.2	62.756	F
2 - Ardingly Drive	82	21	1459	183	0.448	86	0	1.9	0.9	38.504	E
3 - A259 Goring Way East	599	150	595	825	0.726	705	950	29.4	2.9	49.222	E
4 - Aldsworth Avenue	257	64	1081	335	0.770	327	219	41.3	24.0	364.740	F
5 - Goring Way West	410	102	944	612	0.669	426	463	6.2	2.1	20.841	C

2024 Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	295.69	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-31	4 - Aldsworth Avenue

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A259 North		ONE HOUR	✓	1433	100.000
2 - Ardingly Drive		ONE HOUR	✓	109	100.000
3 - A259 Goring Way East		ONE HOUR	✓	825	100.000
4 - Aldsworth Avenue		ONE HOUR	✓	342	100.000
5 - Goring Way West		ONE HOUR	✓	546	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	874	191	368
	2 - Ardingly Drive	43	0	37	16	13
	3 - A259 Goring Way East	725	0	2	9	89
	4 - Aldsworth Avenue	271	0	34	1	36
	5 - Goring Way West	305	0	206	28	7

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	2	2	1
	2 - Ardingly Drive	0	0	0	0	0
	3 - A259 Goring Way East	2	0	0	0	12
	4 - Aldsworth Avenue	1	0	0	0	0
	5 - Goring Way West	0	0	5	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A259 North	1.19	365.51	138.6	F	1315	1972
2 - Ardingly Drive	0.78	95.42	2.9	F	100	150
3 - A259 Goring Way East	1.12	230.41	58.6	F	757	1136
4 - Aldsworth Avenue	1.22	485.38	41.1	F	314	471
5 - Goring Way West	1.04	134.47	22.8	F	501	752

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1079	270	206	1372	0.786	1065	992	0.0	3.5	11.265	B
2 - Ardingly Drive	82	21	1271	220	0.373	80	0	0.0	0.6	25.332	D
3 - A259 Goring Way East	621	155	495	864	0.719	611	856	0.0	2.4	13.775	B
4 - Aldsworth Avenue	257	64	924	367	0.702	249	182	0.0	2.1	28.894	D
5 - Goring Way West	411	103	793	665	0.619	405	380	0.0	1.6	13.561	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1288	322	245	1349	0.955	1255	1176	3.5	11.8	30.721	D
2 - Ardingly Drive	98	24	1500	175	0.560	96	0	0.6	1.2	44.107	E
3 - A259 Goring Way East	742	185	585	829	0.894	726	1011	2.4	6.4	30.763	D
4 - Aldsworth Avenue	307	77	1095	332	0.926	291	215	2.1	6.1	70.184	F
5 - Goring Way West	491	123	938	614	0.799	483	449	1.6	3.5	26.036	D

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1578	394	279	1329	1.187	1323	1301	11.8	75.4	128.386	F
2 - Ardingly Drive	120	30	1602	155	0.775	115	0	1.2	2.5	79.724	F
3 - A259 Goring Way East	908	227	628	812	1.118	800	1088	6.4	33.6	104.994	F
4 - Aldsworth Avenue	377	94	1197	311	1.209	306	231	6.1	23.8	202.471	F
5 - Goring Way West	601	150	1024	584	1.029	556	479	3.5	14.8	76.856	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1578	394	285	1326	1.190	1325	1319	75.4	138.6	296.969	F
2 - Ardingly Drive	120	30	1610	153	0.782	118	0	2.5	2.9	95.418	F
3 - A259 Goring Way East	908	227	632	811	1.120	808	1096	33.6	58.6	216.580	F
4 - Aldsworth Avenue	377	94	1208	309	1.218	308	233	23.8	41.0	398.826	F
5 - Goring Way West	601	150	1034	580	1.036	569	481	14.8	22.8	134.473	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1288	322	278	1330	0.969	1320	1298	138.6	130.6	365.511	F
2 - Ardingly Drive	98	24	1598	156	0.629	102	0	2.9	1.9	70.677	F
3 - A259 Goring Way East	742	185	619	816	0.909	802	1081	58.6	43.4	230.412	F
4 - Aldsworth Avenue	307	77	1192	312	0.985	307	229	41.0	41.1	485.383	F
5 - Goring Way West	491	123	1022	585	0.839	553	477	22.8	7.2	101.603	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1079	270	224	1362	0.792	1351	1204	130.6	62.5	259.044	F
2 - Ardingly Drive	82	21	1575	161	0.511	85	0	1.9	1.1	49.542	E
3 - A259 Goring Way East	621	155	612	819	0.759	779	1048	43.4	4.0	105.410	F
4 - Aldsworth Avenue	257	64	1167	317	0.811	310	224	41.1	28.0	405.375	F
5 - Goring Way West	411	103	997	593	0.693	430	479	7.2	2.4	24.246	C

2033 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	342.08	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-34	4 - Aldsworth Avenue

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2033 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A259 North		ONE HOUR	✓	1424	100.000
2 - Ardingly Drive		ONE HOUR	✓	116	100.000
3 - A259 Goring Way East		ONE HOUR	✓	843	100.000
4 - Aldsworth Avenue		ONE HOUR	✓	359	100.000
5 - Goring Way West		ONE HOUR	✓	578	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	837	201	386
	2 - Ardingly Drive	46	0	39	17	14
	3 - A259 Goring Way East	738	0	2	9	94
	4 - Aldsworth Avenue	284	0	36	1	38
	5 - Goring Way West	322	0	219	30	7

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	2	1	1
	2 - Ardingly Drive	0	0	0	0	0
	3 - A259 Goring Way East	2	0	0	0	13
	4 - Aldsworth Avenue	1	0	0	0	0
	5 - Goring Way West	0	0	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A259 North	1.18	354.16	134.3	F	1307	1960
2 - Ardingly Drive	0.83	114.65	3.7	F	106	160
3 - A259 Goring Way East	1.16	323.72	75.4	F	774	1160
4 - Aldsworth Avenue	1.29	657.86	56.9	F	329	494
5 - Goring Way West	1.09	190.54	35.3	F	530	796

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1072	268	218	1367	0.784	1058	1024	0.0	3.4	11.209	B
2 - Ardingly Drive	87	22	1276	219	0.399	85	0	0.0	0.6	26.367	D
3 - A259 Goring Way East	635	159	521	853	0.744	624	840	0.0	2.7	15.043	C
4 - Aldsworth Avenue	270	68	953	361	0.750	260	191	0.0	2.6	33.081	D
5 - Goring Way West	435	109	814	658	0.662	428	399	0.0	1.9	15.207	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1280	320	258	1344	0.953	1248	1204	3.4	11.5	30.328	D
2 - Ardingly Drive	104	26	1505	174	0.598	102	0	0.6	1.3	47.732	E
3 - A259 Goring Way East	758	189	615	817	0.927	736	992	2.7	8.1	37.119	E
4 - Aldsworth Avenue	323	81	1125	326	0.991	299	226	2.6	8.6	90.820	F
5 - Goring Way West	520	130	954	609	0.853	508	470	1.9	4.7	32.577	D

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1568	392	286	1327	1.181	1321	1300	11.5	73.3	125.443	F
2 - Ardingly Drive	128	32	1607	154	0.827	121	0	1.3	3.1	91.345	F
3 - A259 Goring Way East	928	232	662	799	1.161	791	1066	8.1	42.4	129.384	F
4 - Aldsworth Avenue	395	99	1210	309	1.281	305	243	8.6	31.1	259.377	F
5 - Goring Way West	636	159	1015	587	1.083	570	500	4.7	21.2	100.065	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1568	392	290	1324	1.184	1324	1312	73.3	134.3	288.739	F
2 - Ardingly Drive	128	32	1614	153	0.835	125	0	3.1	3.7	114.651	F
3 - A259 Goring Way East	928	232	667	797	1.164	796	1073	42.4	75.4	276.626	F
4 - Aldsworth Avenue	395	99	1218	307	1.288	306	245	31.1	53.3	514.407	F
5 - Goring Way West	636	159	1022	585	1.088	580	502	21.2	35.3	190.542	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1280	320	287	1327	0.965	1317	1299	134.3	125.2	354.155	F
2 - Ardingly Drive	104	26	1604	155	0.673	109	0	3.7	2.4	84.910	F
3 - A259 Goring Way East	758	189	653	803	0.944	792	1060	75.4	66.9	323.719	F
4 - Aldsworth Avenue	323	81	1204	310	1.042	308	241	53.3	56.9	657.862	F
5 - Goring Way West	520	130	1014	588	0.884	571	498	35.3	22.3	185.026	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1072	268	260	1342	0.799	1332	1258	125.2	60.2	252.514	F
2 - Ardingly Drive	87	22	1592	157	0.555	91	0	2.4	1.4	57.208	F
3 - A259 Goring Way East	635	159	643	806	0.787	794	1040	66.9	26.9	216.505	F
4 - Aldsworth Avenue	270	68	1200	310	0.871	305	237	56.9	48.2	621.902	F
5 - Goring Way West	435	109	1006	590	0.737	512	499	22.3	3.2	65.653	F

2033 Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	440.70	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-34	4 - Aldsworth Avenue

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2033 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A259 North		ONE HOUR	✓	1515	100.000
2 - Ardingly Drive		ONE HOUR	✓	116	100.000
3 - A259 Goring Way East		ONE HOUR	✓	873	100.000
4 - Aldsworth Avenue		ONE HOUR	✓	359	100.000
5 - Goring Way West		ONE HOUR	✓	580	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	923	201	391
	2 - Ardingly Drive	46	0	39	17	14
	3 - A259 Goring Way East	768	0	2	9	94
	4 - Aldsworth Avenue	284	0	36	1	38
	5 - Goring Way West	324	0	219	30	7

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	2	1	1
	2 - Ardingly Drive	0	0	0	0	0
	3 - A259 Goring Way East	2	0	0	0	13
	4 - Aldsworth Avenue	1	0	0	0	0
	5 - Goring Way West	0	0	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A259 North	1.26	536.92	201.2	F	1390	2085
2 - Ardingly Drive	0.83	115.18	3.7	F	106	160
3 - A259 Goring Way East	1.19	383.37	87.9	F	801	1202
4 - Aldsworth Avenue	1.28	655.70	56.8	F	329	494
5 - Goring Way West	1.10	210.02	38.6	F	532	798

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1141	285	218	1367	0.834	1122	1046	0.0	4.6	13.825	B
2 - Ardingly Drive	87	22	1340	207	0.423	85	0	0.0	0.7	28.905	D
3 - A259 Goring Way East	657	164	523	853	0.771	645	902	0.0	3.1	16.446	C
4 - Aldsworth Avenue	270	68	977	356	0.760	259	191	0.0	2.7	34.376	D
5 - Goring Way West	437	109	834	650	0.671	429	402	0.0	1.9	15.751	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1362	340	257	1344	1.014	1296	1225	4.6	21.1	46.826	E
2 - Ardingly Drive	104	26	1553	165	0.632	101	0	0.7	1.5	53.812	F
3 - A259 Goring Way East	785	196	607	821	0.956	757	1047	3.1	10.1	43.591	E
4 - Aldsworth Avenue	323	81	1142	322	1.001	297	222	2.7	9.1	95.051	F
5 - Goring Way West	521	130	973	602	0.866	509	466	1.9	5.0	34.732	D

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1668	417	284	1328	1.256	1326	1314	21.1	106.7	181.946	F
2 - Ardingly Drive	128	32	1610	154	0.830	121	0	1.5	3.2	93.970	F
3 - A259 Goring Way East	961	240	635	810	1.187	804	1095	10.1	49.5	147.391	F
4 - Aldsworth Avenue	395	99	1207	309	1.279	306	232	9.1	31.4	262.960	F
5 - Goring Way West	639	160	1031	582	1.097	567	483	5.0	22.9	107.134	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1668	417	288	1326	1.258	1325	1325	106.7	192.3	411.411	F
2 - Ardingly Drive	128	32	1613	153	0.834	125	0	3.2	3.7	115.184	F
3 - A259 Goring Way East	961	240	639	808	1.189	807	1100	49.5	87.9	315.792	F
4 - Aldsworth Avenue	395	99	1213	308	1.284	307	233	31.4	53.4	514.693	F
5 - Goring Way West	639	160	1037	580	1.101	576	484	22.9	38.6	207.121	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1362	340	284	1328	1.026	1327	1312	192.3	201.2	536.918	F
2 - Ardingly Drive	104	26	1611	154	0.679	109	0	3.7	2.5	87.281	F
3 - A259 Goring Way East	785	196	628	813	0.966	803	1092	87.9	83.3	383.370	F
4 - Aldsworth Avenue	323	81	1201	310	1.040	309	231	53.4	56.8	655.704	F
5 - Goring Way West	521	130	1028	583	0.895	568	482	38.6	26.9	210.017	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1141	285	267	1338	0.853	1331	1285	201.2	153.5	480.209	F
2 - Ardingly Drive	87	22	1598	156	0.560	92	0	2.5	1.4	58.812	F
3 - A259 Goring Way East	657	164	616	817	0.804	808	1074	83.3	45.7	289.994	F
4 - Aldsworth Avenue	270	68	1197	311	0.868	306	227	56.8	47.9	617.740	F
5 - Goring Way West	437	109	1022	585	0.746	530	480	26.9	3.6	88.643	F

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: 18122 - A259-Aldsworth Avenue (PM Calibration - Mitigation).j9
Path: P:\18 Jobs\122 Land at Chatsmore Farm - Goring, West Sussex\Technical Assessments\ARCADY\18122 - A259 - Aldsworth Avenue Roundabout
Report generation date: 03/06/2020 11:41:57

»2018 Base, PM
»2024 Base, PM
»2024 Base + Dev, PM
»2033 Base, PM
»2033 Base + Dev , PM

Summary of junction performance

	PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2018 Base						
1 - A259 North	5.9	18.61	0.86	C	37.40	E	-9 % [2 - Ardingly Drive]
2 - Ardingly Drive	1.7	52.60	0.65	F			
3 - A259 Goring Way East	10.9	50.24	0.94	F			
4 - Aldsworth Avenue	3.7	54.28	0.81	F			
5 - Goring Way West	5.3	50.22	0.87	F			
	2024 Base						
1 - A259 North	29.6	74.52	1.01	F	135.54	F	-22 % [4 - Aldsworth Avenue]
2 - Ardingly Drive	3.9	115.16	0.85	F			
3 - A259 Goring Way East	59.8	210.65	1.12	F			
4 - Aldsworth Avenue	17.4	189.34	1.05	F			
5 - Goring Way West	16.8	131.78	1.02	F			
	2024 Base + Dev						
1 - A259 North	50.2	113.77	1.05	F	219.29	F	-25 % [4 - Aldsworth Avenue]
2 - Ardingly Drive	4.2	124.02	0.87	F			
3 - A259 Goring Way East	100.8	417.38	1.21	F			
4 - Aldsworth Avenue	17.8	194.20	1.05	F			
5 - Goring Way West	20.2	153.86	1.04	F			
	2033 Base						
1 - A259 North	62.5	137.33	1.07	F	232.68	F	-27 % [4 - Aldsworth Avenue]
2 - Ardingly Drive	6.0	162.36	0.94	F			
3 - A259 Goring Way East	91.8	381.97	1.20	F			
4 - Aldsworth Avenue	26.1	282.89	1.12	F			
5 - Goring Way West	27.8	197.63	1.08	F			
	2033 Base + Dev						
1 - A259 North	89.7	198.85	1.11	F	332.80	F	-29 % [4 - Aldsworth Avenue]
2 - Ardingly Drive	6.2	166.38	0.94	F			
3 - A259 Goring Way East	146.7	602.10	1.29	F			
4 - Aldsworth Avenue	26.4	289.02	1.12	F			
5 - Goring Way West	32.4	234.47	1.10	F			

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

File summary

File Description

Title	18122 - A259 / Aldsworth Avenue
Location	
Site number	18-122
Date	18/01/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	18-122
Enumerator	Milestone4-PC\Milestone4 - Newer
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Base	PM	ONE HOUR	16:45	18:15	15	✓
D4	2024 Base	PM	ONE HOUR	16:45	18:15	15	✓
D6	2024 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D8	2033 Base	PM	ONE HOUR	16:45	18:15	15	✓
D10	2033 Base + Dev	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

2018 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	37.40	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-9	2 - Ardingly Drive

Arms

Arms

Arm	Name	Description
1	A259 North	
2	Ardingly Drive	
3	A259 Goring Way East	
4	Aldsworth Avenue	
5	Goring Way West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A259 North	3.69	7.50	12.0	44.6	41.0	23.0	
2 - Ardingly Drive	4.40	5.00	2.5	10.3	41.0	44.0	
3 - A259 Goring Way East	4.34	8.50	10.0	21.5	41.0	19.0	
4 - Aldsworth Avenue	4.84	7.50	10.0	22.3	41.0	33.0	
5 - Goring Way West	3.62	7.50	20.0	38.5	41.0	26.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A259 North	0.670	1776
2 - Ardingly Drive	0.531	1300
3 - A259 Goring Way East	0.698	1933
4 - Aldsworth Avenue	0.676	1892
5 - Goring Way West	0.689	1890

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - A259 North	Percentage		85.50
2 - Ardingly Drive	Percentage		34.80
3 - A259 Goring Way East	Percentage		59.15
4 - Aldsworth Avenue	Percentage		32.00
5 - Goring Way West	Percentage		41.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A259 North		ONE HOUR	✓	1095	100.000
2 - Ardingly Drive		ONE HOUR	✓	112	100.000
3 - A259 Goring Way East		ONE HOUR	✓	758	100.000
4 - Aldsworth Avenue		ONE HOUR	✓	239	100.000
5 - Goring Way West		ONE HOUR	✓	373	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	668	105	322
	2 - Ardingly Drive	58	0	26	5	23
	3 - A259 Goring Way East	655	0	0	7	96
	4 - Aldsworth Avenue	171	0	29	1	38
	5 - Goring Way West	219	0	138	13	3

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	0	2	0
	2 - Ardingly Drive	0	0	0	0	0
	3 - A259 Goring Way East	1	0	0	0	6
	4 - Aldsworth Avenue	2	0	0	0	0
	5 - Goring Way West	1	0	7	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A259 North	0.86	18.61	5.9	C	1005	1507
2 - Ardingly Drive	0.65	52.60	1.7	F	103	154
3 - A259 Goring Way East	0.94	50.24	10.9	F	696	1043
4 - Aldsworth Avenue	0.81	54.28	3.7	F	219	329
5 - Goring Way West	0.87	50.22	5.3	F	342	513

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	824	206	137	1433	0.575	819	820	0.0	1.3	5.813	A
2 - Ardingly Drive	84	21	956	274	0.308	83	0	0.0	0.4	18.651	C
3 - A259 Goring Way East	571	143	395	963	0.592	565	643	0.0	1.4	8.916	A
4 - Aldsworth Avenue	180	45	863	411	0.438	177	98	0.0	0.8	15.200	C
5 - Goring Way West	281	70	680	562	0.500	277	360	0.0	1.0	12.484	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	984	246	164	1417	0.695	981	984	1.3	2.2	8.195	A
2 - Ardingly Drive	101	25	1145	239	0.422	100	0	0.4	0.7	25.696	D
3 - A259 Goring Way East	681	170	474	931	0.732	677	770	1.4	2.6	13.893	B
4 - Aldsworth Avenue	215	54	1034	374	0.574	213	117	0.8	1.3	22.030	C
5 - Goring Way West	335	84	815	524	0.640	332	431	1.0	1.7	18.493	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1206	301	197	1397	0.863	1192	1178	2.2	5.6	16.605	C
2 - Ardingly Drive	123	31	1389	193	0.639	120	0	0.7	1.6	47.148	E
3 - A259 Goring Way East	835	209	575	890	0.938	809	934	2.6	9.0	36.466	E
4 - Aldsworth Avenue	263	66	1242	329	0.800	255	142	1.3	3.2	44.750	E
5 - Goring Way West	411	103	976	480	0.856	399	521	1.7	4.6	39.881	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1206	301	201	1394	0.865	1204	1204	5.6	5.9	18.605	C
2 - Ardingly Drive	123	31	1405	190	0.649	123	0	1.6	1.7	52.598	F
3 - A259 Goring Way East	835	209	582	887	0.941	827	946	9.0	10.9	50.238	F
4 - Aldsworth Avenue	263	66	1265	324	0.812	261	144	3.2	3.7	54.281	F
5 - Goring Way West	411	103	998	474	0.867	408	529	4.6	5.3	50.223	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	984	246	172	1412	0.697	999	1035	5.9	2.4	9.002	A
2 - Ardingly Drive	101	25	1171	234	0.431	104	0	1.7	0.8	28.504	D
3 - A259 Goring Way East	681	170	485	927	0.735	713	790	10.9	3.0	19.047	C
4 - Aldsworth Avenue	215	54	1079	364	0.590	224	120	3.7	1.5	26.919	D
5 - Goring Way West	335	84	858	512	0.654	349	444	5.3	2.0	23.503	C

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	824	206	140	1431	0.576	828	840	2.4	1.4	6.016	A
2 - Ardingly Drive	84	21	969	271	0.311	86	0	0.8	0.5	19.504	C
3 - A259 Goring Way East	571	143	402	961	0.594	576	653	3.0	1.5	9.506	A
4 - Aldsworth Avenue	180	45	879	407	0.442	183	99	1.5	0.8	16.225	C
5 - Goring Way West	281	70	696	557	0.504	285	366	2.0	1.0	13.397	B

2024 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	135.54	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-22	4 - Aldsworth Avenue

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A259 North		ONE HOUR	✓	1274	100.000
2 - Ardingly Drive		ONE HOUR	✓	123	100.000
3 - A259 Goring Way East		ONE HOUR	✓	859	100.000
4 - Aldsworth Avenue		ONE HOUR	✓	302	100.000
5 - Goring Way West		ONE HOUR	✓	422	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	743	174	357
	2 - Ardingly Drive	65	0	28	5	25
	3 - A259 Goring Way East	744	0	0	8	107
	4 - Aldsworth Avenue	229	0	31	1	41
	5 - Goring Way West	253	0	152	14	3

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	0	1	0
	2 - Ardingly Drive	0	0	0	0	0
	3 - A259 Goring Way East	1	0	0	0	7
	4 - Aldsworth Avenue	1	0	0	0	0
	5 - Goring Way West	1	0	7	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A259 North	1.01	74.52	29.6	F	1169	1754
2 - Ardingly Drive	0.85	115.16	3.9	F	113	169
3 - A259 Goring Way East	1.12	210.65	59.8	F	788	1182
4 - Aldsworth Avenue	1.05	189.34	17.4	F	277	416
5 - Goring Way West	1.02	131.78	16.8	F	387	581

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	959	240	148	1427	0.672	951	956	0.0	2.0	7.451	A
2 - Ardingly Drive	93	23	1100	247	0.375	90	0	0.0	0.6	22.628	C
3 - A259 Goring Way East	647	162	479	928	0.697	638	710	0.0	2.2	12.062	B
4 - Aldsworth Avenue	227	57	967	391	0.582	222	151	0.0	1.3	20.748	C
5 - Goring Way West	318	79	792	532	0.598	312	397	0.0	1.4	16.019	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1145	286	177	1409	0.813	1137	1140	2.0	4.0	12.854	B
2 - Ardingly Drive	111	28	1315	207	0.534	109	0	0.6	1.1	35.832	E
3 - A259 Goring Way East	772	193	574	890	0.868	759	849	2.2	5.4	25.328	D
4 - Aldsworth Avenue	271	68	1153	350	0.775	265	180	1.3	2.9	39.493	E
5 - Goring Way West	379	95	944	490	0.775	373	474	1.4	3.0	29.319	D

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1403	351	204	1393	1.007	1339	1276	4.0	20.1	43.185	E
2 - Ardingly Drive	135	34	1543	165	0.823	127	0	1.1	3.1	83.431	F
3 - A259 Goring Way East	946	236	675	849	1.114	834	996	5.4	33.3	98.296	F
4 - Aldsworth Avenue	333	83	1298	319	1.042	300	211	2.9	11.1	109.538	F
5 - Goring Way West	465	116	1049	461	1.008	431	549	3.0	11.3	79.465	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1403	351	210	1389	1.010	1365	1296	20.1	29.6	74.516	F
2 - Ardingly Drive	135	34	1575	159	0.854	132	0	3.1	3.9	115.158	F
3 - A259 Goring Way East	946	236	690	843	1.122	840	1017	33.3	59.8	209.905	F
4 - Aldsworth Avenue	333	83	1314	316	1.054	308	215	11.1	17.4	189.344	F
5 - Goring Way West	465	116	1063	457	1.017	443	559	11.3	16.8	131.782	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1145	286	201	1395	0.821	1243	1287	29.6	5.1	33.233	D
2 - Ardingly Drive	111	28	1444	183	0.604	119	0	3.9	1.7	61.995	F
3 - A259 Goring Way East	772	193	628	868	0.890	853	935	59.8	39.5	210.647	F
4 - Aldsworth Avenue	271	68	1284	322	0.843	307	198	17.4	8.5	164.834	F
5 - Goring Way West	379	95	1068	456	0.833	420	524	16.8	6.6	100.736	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	959	240	161	1419	0.676	971	1133	5.1	2.1	8.243	A
2 - Ardingly Drive	93	23	1133	241	0.384	97	0	1.7	0.7	25.638	D
3 - A259 Goring Way East	647	162	494	922	0.701	795	735	39.5	2.6	55.404	F
4 - Aldsworth Avenue	227	57	1133	355	0.641	253	156	8.5	2.0	42.373	E
5 - Goring Way West	318	79	958	486	0.654	336	428	6.6	2.0	26.548	D

2024 Base + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	219.29	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-25	4 - Aldsworth Avenue

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A259 North		ONE HOUR	✓	1328	100.000
2 - Ardingly Drive		ONE HOUR	✓	123	100.000
3 - A259 Goring Way East		ONE HOUR	✓	936	100.000
4 - Aldsworth Avenue		ONE HOUR	✓	302	100.000
5 - Goring Way West		ONE HOUR	✓	427	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	794	174	360
	2 - Ardingly Drive	65	0	28	5	25
	3 - A259 Goring Way East	821	0	0	8	107
	4 - Aldsworth Avenue	229	0	31	1	41
	5 - Goring Way West	258	0	152	14	3

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	0	1	0
	2 - Ardingly Drive	0	0	0	0	0
	3 - A259 Goring Way East	1	0	0	0	7
	4 - Aldsworth Avenue	1	0	0	0	0
	5 - Goring Way West	1	0	7	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A259 North	1.05	113.77	50.2	F	1219	1828
2 - Ardingly Drive	0.87	124.02	4.2	F	113	169
3 - A259 Goring Way East	1.21	417.38	100.8	F	859	1288
4 - Aldsworth Avenue	1.05	194.20	17.8	F	277	416
5 - Goring Way West	1.04	153.86	20.2	F	392	588

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1000	250	148	1427	0.701	991	1014	0.0	2.3	8.093	A
2 - Ardingly Drive	93	23	1139	240	0.386	90	0	0.0	0.6	23.682	C
3 - A259 Goring Way East	705	176	481	928	0.759	693	748	0.0	2.9	14.656	B
4 - Aldsworth Avenue	227	57	1024	379	0.601	222	150	0.0	1.4	22.242	C
5 - Goring Way West	321	80	847	517	0.622	315	398	0.0	1.6	17.390	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1194	298	177	1410	0.847	1183	1199	2.3	5.0	15.177	C
2 - Ardingly Drive	111	28	1360	199	0.556	108	0	0.6	1.1	38.871	E
3 - A259 Goring Way East	841	210	575	890	0.946	815	893	2.9	9.6	38.640	E
4 - Aldsworth Avenue	271	68	1211	338	0.803	264	180	1.4	3.3	44.631	E
5 - Goring Way West	384	96	1000	474	0.809	376	474	1.6	3.6	34.033	D

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1462	366	203	1394	1.049	1362	1299	5.0	30.1	57.645	F
2 - Ardingly Drive	135	34	1564	161	0.843	127	0	1.1	3.3	89.767	F
3 - A259 Goring Way East	1031	258	664	854	1.207	848	1027	9.6	55.1	150.560	F
4 - Aldsworth Avenue	333	83	1306	317	1.048	299	206	3.3	11.6	114.766	F
5 - Goring Way West	470	118	1070	455	1.033	432	536	3.6	13.2	90.396	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1462	366	208	1391	1.051	1382	1314	30.1	50.2	113.772	F
2 - Ardingly Drive	135	34	1590	156	0.869	132	0	3.3	4.2	124.022	F
3 - A259 Goring Way East	1031	258	676	849	1.214	848	1045	55.1	100.8	339.381	F
4 - Aldsworth Avenue	333	83	1315	315	1.054	308	209	11.6	17.8	194.197	F
5 - Goring Way West	470	118	1079	453	1.039	442	543	13.2	20.2	153.858	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1194	298	203	1394	0.857	1360	1305	50.2	8.6	81.818	F
2 - Ardingly Drive	111	28	1563	161	0.688	117	0	4.2	2.6	89.440	F
3 - A259 Goring Way East	841	210	656	857	0.982	857	1025	100.8	96.9	417.378	F
4 - Aldsworth Avenue	271	68	1307	317	0.856	304	205	17.8	9.6	176.910	F
5 - Goring Way West	384	96	1076	453	0.847	432	535	20.2	8.2	127.293	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1000	250	163	1418	0.705	1024	1252	8.6	2.5	9.672	A
2 - Ardingly Drive	93	23	1187	231	0.401	100	0	2.6	0.7	28.948	D
3 - A259 Goring Way East	705	176	504	919	0.767	910	784	96.9	45.7	284.899	F
4 - Aldsworth Avenue	227	57	1255	328	0.693	255	158	9.6	2.6	60.250	F
5 - Goring Way West	321	80	1072	455	0.707	344	439	8.2	2.7	37.084	E

2033 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	232.68	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-27	4 - Aldsworth Avenue

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2033 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A259 North		ONE HOUR	✓	1351	100.000
2 - Ardingly Drive		ONE HOUR	✓	132	100.000
3 - A259 Goring Way East		ONE HOUR	✓	912	100.000
4 - Aldsworth Avenue		ONE HOUR	✓	319	100.000
5 - Goring Way West		ONE HOUR	✓	448	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	790	181	380
	2 - Ardingly Drive	69	0	30	6	27
	3 - A259 Goring Way East	790	0	0	8	114
	4 - Aldsworth Avenue	241	0	33	1	44
	5 - Goring Way West	269	0	161	15	3

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	0	1	0
	2 - Ardingly Drive	0	0	0	0	0
	3 - A259 Goring Way East	1	0	0	0	6
	4 - Aldsworth Avenue	1	0	0	0	0
	5 - Goring Way West	1	0	7	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A259 North	1.07	137.33	62.5	F	1240	1860
2 - Ardingly Drive	0.94	162.36	6.0	F	121	182
3 - A259 Goring Way East	1.20	381.97	91.8	F	837	1255
4 - Aldsworth Avenue	1.12	282.89	26.1	F	293	439
5 - Goring Way West	1.08	197.63	27.8	F	411	617

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1017	254	157	1422	0.715	1007	1010	0.0	2.4	8.502	A
2 - Ardingly Drive	99	25	1164	235	0.423	97	0	0.0	0.7	25.503	D
3 - A259 Goring Way East	687	172	507	918	0.748	675	754	0.0	2.8	14.248	B
4 - Aldsworth Avenue	240	60	1025	378	0.635	234	157	0.0	1.6	23.953	C
5 - Goring Way West	337	84	837	519	0.650	330	422	0.0	1.7	18.446	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1215	304	186	1404	0.865	1202	1195	2.4	5.7	16.804	C
2 - Ardingly Drive	119	30	1388	193	0.613	116	0	0.7	1.4	44.742	E
3 - A259 Goring Way East	820	205	605	878	0.934	796	899	2.8	8.7	36.375	E
4 - Aldsworth Avenue	287	72	1214	337	0.850	277	187	1.6	4.1	52.282	F
5 - Goring Way West	403	101	989	477	0.844	393	502	1.7	4.3	38.527	E

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1487	372	209	1390	1.070	1365	1290	5.7	36.2	66.341	F
2 - Ardingly Drive	145	36	1574	159	0.916	133	0	1.4	4.4	109.810	F
3 - A259 Goring Way East	1004	251	689	844	1.190	837	1019	8.7	50.3	140.429	F
4 - Aldsworth Avenue	351	88	1314	316	1.112	304	212	4.1	15.9	144.604	F
5 - Goring Way West	493	123	1057	458	1.076	442	561	4.3	17.1	108.308	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1487	372	213	1388	1.072	1382	1304	36.2	62.5	137.328	F
2 - Ardingly Drive	145	36	1595	155	0.939	139	0	4.4	6.0	162.362	F
3 - A259 Goring Way East	1004	251	700	839	1.196	838	1034	50.3	91.8	314.162	F
4 - Aldsworth Avenue	351	88	1324	314	1.120	310	215	15.9	26.1	266.112	F
5 - Goring Way West	493	123	1066	456	1.082	450	568	17.1	27.8	197.632	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1215	304	210	1390	0.874	1368	1288	62.5	24.2	117.737	F
2 - Ardingly Drive	119	30	1577	158	0.750	128	0	6.0	3.8	127.879	F
3 - A259 Goring Way East	820	205	685	845	0.970	836	1020	91.8	87.7	381.974	F
4 - Aldsworth Avenue	287	72	1309	317	0.905	305	212	26.1	21.6	282.888	F
5 - Goring Way West	403	101	1054	459	0.877	443	560	27.8	17.7	189.449	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1017	254	190	1402	0.726	1103	1295	24.2	2.8	15.564	C
2 - Ardingly Drive	99	25	1293	211	0.471	111	0	3.8	1.0	39.137	E
3 - A259 Goring Way East	687	172	560	896	0.766	886	843	87.7	37.8	257.871	F
4 - Aldsworth Avenue	240	60	1272	325	0.740	309	175	21.6	4.4	163.474	F
5 - Goring Way West	337	84	1092	449	0.751	393	489	17.7	3.6	81.862	F

2033 Base + Dev , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	332.80	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-29	4 - Aldsworth Avenue

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2033 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A259 North		ONE HOUR	✓	1405	100.000
2 - Ardingly Drive		ONE HOUR	✓	132	100.000
3 - A259 Goring Way East		ONE HOUR	✓	989	100.000
4 - Aldsworth Avenue		ONE HOUR	✓	319	100.000
5 - Goring Way West		ONE HOUR	✓	453	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	841	181	383
	2 - Ardingly Drive	69	0	30	6	27
	3 - A259 Goring Way East	867	0	0	8	114
	4 - Aldsworth Avenue	241	0	33	1	44
	5 - Goring Way West	274	0	161	15	3

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A259 North	2 - Ardingly Drive	3 - A259 Goring Way East	4 - Aldsworth Avenue	5 - Goring Way West
From	1 - A259 North	0	0	0	1	0
	2 - Ardingly Drive	0	0	0	0	0
	3 - A259 Goring Way East	1	0	0	0	6
	4 - Aldsworth Avenue	1	0	0	0	0
	5 - Goring Way West	1	0	7	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A259 North	1.11	198.85	89.7	F	1289	1934
2 - Ardingly Drive	0.94	166.38	6.2	F	121	182
3 - A259 Goring Way East	1.29	602.10	146.7	F	908	1361
4 - Aldsworth Avenue	1.12	289.02	26.4	F	293	439
5 - Goring Way West	1.10	234.47	32.4	F	416	624

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1058	264	157	1422	0.744	1047	1067	0.0	2.8	9.334	A
2 - Ardingly Drive	99	25	1203	228	0.436	96	0	0.0	0.7	26.819	D
3 - A259 Goring Way East	745	186	509	918	0.811	729	791	0.0	3.9	17.842	C
4 - Aldsworth Avenue	240	60	1081	366	0.656	233	157	0.0	1.8	25.865	D
5 - Goring Way West	341	85	891	505	0.676	333	423	0.0	1.9	20.209	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1263	316	185	1404	0.899	1245	1242	2.8	7.3	20.545	C
2 - Ardingly Drive	119	30	1430	186	0.639	115	0	0.7	1.6	49.075	E
3 - A259 Goring Way East	889	222	606	878	1.012	839	940	3.9	16.5	57.590	F
4 - Aldsworth Avenue	287	72	1258	328	0.874	275	186	1.8	4.6	58.359	F
5 - Goring Way West	407	102	1033	465	0.875	395	500	1.9	5.1	44.628	E

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1547	387	207	1392	1.112	1377	1310	7.3	49.8	85.332	F
2 - Ardingly Drive	145	36	1583	157	0.925	133	0	1.6	4.6	114.746	F
3 - A259 Goring Way East	1089	272	674	850	1.281	848	1043	16.5	76.7	209.524	F
4 - Aldsworth Avenue	351	88	1316	315	1.114	305	206	4.6	16.3	149.920	F
5 - Goring Way West	499	125	1076	453	1.100	440	545	5.1	19.6	122.272	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1547	387	210	1390	1.113	1387	1320	49.8	89.7	188.697	F
2 - Ardingly Drive	145	36	1597	154	0.941	139	0	4.6	6.2	166.376	F
3 - A259 Goring Way East	1089	272	683	847	1.286	846	1053	76.7	137.3	462.178	F
4 - Aldsworth Avenue	351	88	1322	314	1.118	311	208	16.3	26.4	269.825	F
5 - Goring Way West	499	125	1082	452	1.104	448	550	19.6	32.4	227.046	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1263	316	206	1392	0.908	1376	1309	89.7	61.4	198.852	F
2 - Ardingly Drive	119	30	1583	157	0.755	128	0	6.2	3.9	132.044	F
3 - A259 Goring Way East	889	222	670	852	1.043	851	1041	137.3	146.7	602.096	F
4 - Aldsworth Avenue	287	72	1316	315	0.909	304	206	26.4	22.1	289.025	F
5 - Goring Way West	407	102	1075	454	0.898	440	544	32.4	24.2	234.466	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A259 North	1058	264	199	1396	0.758	1289	1304	61.4	3.5	68.693	F
2 - Ardingly Drive	99	25	1488	175	0.569	109	0	3.9	1.5	60.182	F
3 - A259 Goring Way East	745	186	619	873	0.853	867	978	146.7	116.2	546.843	F
4 - Aldsworth Avenue	240	60	1293	320	0.750	307	193	22.1	5.3	176.048	F
5 - Goring Way West	341	85	1082	452	0.755	421	519	24.2	4.1	120.361	F

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462

For sales and distribution information, program advice and maintenance, contact TRL:
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Filename: 18122 - A280 - A27 - Arundel Road - Mitigation.j9
Path: P:\18 Jobs\122 Land at Chatsmore Farm - Goring, West Sussex\Technical Assessments\ARCADY\18122 - A27 - Angmering Bypass
Report generation date: 10/06/2020 15:57:23

»2018, AM
»2018, PM
»2024 Base, AM
»2024 Base, PM
»2024 Base + Dev, AM
»2024 Base + Dev, PM
»2033 Base, AM
»2033 Base, PM
»2033 Base + Dev, AM
»2033 Base + Dev, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2018														
1 - A280 Long Furlong	0.7	3.54	0.43	A	5.12	A	28 % [4 - A27 Off-Slip]	1.2	3.91	0.55	A	3.76	A	59 % [1 - A280 Long Furlong]
3 - A280 South	1.0	3.86	0.51	A				0.6	3.08	0.37	A			
4 - A27 Off-Slip	1.6	8.55	0.61	A				0.5	4.40	0.32	A			
5 - Arundel Road	0.1	6.86	0.10	A				0.1	4.54	0.07	A			
2024 Base														
1 - A280 Long Furlong	1.0	4.45	0.51	A	8.11	A	9 % [4 - A27 Off-Slip]	1.9	5.34	0.65	A	4.76	A	35 % [1 - A280 Long Furlong]
3 - A280 South	1.5	4.76	0.60	A				0.8	3.47	0.45	A			
4 - A27 Off-Slip	3.5	16.74	0.78	C				0.7	5.39	0.42	A			
5 - Arundel Road	0.2	9.71	0.14	A				0.1	5.34	0.09	A			
2024 Base + Dev														
1 - A280 Long Furlong	1.0	4.35	0.51	A	7.34	A	11 % [4 - A27 Off-Slip]	2.0	5.55	0.67	A	4.88	A	33 % [1 - A280 Long Furlong]
3 - A280 South	1.6	4.96	0.62	A				0.8	3.53	0.46	A			
4 - A27 Off-Slip	2.9	14.35	0.75	B				0.7	5.39	0.42	A			
5 - Arundel Road	0.2	9.50	0.14	A				0.1	5.43	0.09	A			
2033 Base														
1 - A280 Long Furlong	1.2	5.00	0.56	A	11.32	B	2 % [4 - A27 Off-Slip]	2.3	6.27	0.70	A	5.32	A	28 % [1 - A280 Long Furlong]
3 - A280 South	1.8	5.27	0.64	A				0.9	3.64	0.47	A			
4 - A27 Off-Slip	5.8	26.76	0.87	D				0.8	5.67	0.45	A			
5 - Arundel Road	0.2	11.69	0.17	B				0.1	5.64	0.09	A			
2033 Base + Dev														
1 - A280 Long Furlong	1.2	4.84	0.55	A	9.49	A	5 % [4 - A27 Off-Slip]	2.5	6.55	0.72	A	5.51	A	26 % [1 - A280 Long Furlong]
3 - A280 South	1.9	5.48	0.65	A				0.9	3.71	0.48	A			
4 - A27 Off-Slip	4.5	20.97	0.83	C				0.8	5.86	0.46	A			
5 - Arundel Road	0.2	11.27	0.17	B				0.1	5.77	0.10	A			

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. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	10/06/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mtp\MTPGeneral
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	ONE HOUR	07:45	09:15	15	✓
D2	2018	PM	ONE HOUR	16:45	18:15	15	✓
D3	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 Base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2024 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2024 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D7	2033 Base	AM	ONE HOUR	07:45	09:15	15	✓
D8	2033 Base	PM	ONE HOUR	16:45	18:15	15	✓
D9	2033 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D10	2033 Base + Dev	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

2018, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.12	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	28	4 - A27 Off-Slip

Arms

Arms

Arm	Name	Description
1	A280 Long Furlong	
2	A27 On-Slip	
3	A280 South	
4	A27 Off-Slip	
5	Arundel Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A280 Long Furlong	3.65	8.40	62.0	45.0	60.0	20.0	
2 - A27 On-Slip							✓
3 - A280 South	3.65	8.10	14.0	37.0	60.0	12.0	
4 - A27 Off-Slip	3.65	6.60	30.0	15.0	60.0	44.0	
5 - Arundel Road	3.65	6.30	6.5	25.0	60.0	45.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A280 Long Furlong	0.695	2402
2 - A27 On-Slip		
3 - A280 South	0.618	1925
4 - A27 Off-Slip	0.535	1670
5 - Arundel Road	0.493	1393

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 Long Furlong		ONE HOUR	✓	685	100.000
2 - A27 On-Slip					
3 - A280 South		ONE HOUR	✓	867	100.000
4 - A27 Off-Slip		ONE HOUR	✓	603	100.000
5 - Arundel Road		ONE HOUR	✓	50	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	19	664	0	2
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	655	191	0	0	21
	4 - A27 Off-Slip	178	29	396	0	0
	5 - Arundel Road	19	6	25	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	7	0	50
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	2	1	0	0	5
	4 - A27 Off-Slip	11	0	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 Long Furlong	0.43	3.54	0.7	A	629	943
2 - A27 On-Slip						
3 - A280 South	0.51	3.86	1.0	A	796	1193
4 - A27 Off-Slip	0.61	8.55	1.6	A	553	830
5 - Arundel Road	0.10	6.86	0.1	A	46	69

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	516	129	485	1922	0.268	514	639	0.0	0.4	2.554	A
2 - A27 On-Slip			815				184				
3 - A280 South	653	163	2	1889	0.346	651	814	0.0	0.5	2.902	A
4 - A27 Off-Slip	454	113	652	1241	0.366	452	0	0.0	0.6	4.546	A
5 - Arundel Road	38	9	1087	839	0.045	37	17	0.0	0.0	4.491	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	616	154	581	1858	0.331	615	765	0.4	0.5	2.894	A
2 - A27 On-Slip			976				220				
3 - A280 South	779	195	2	1888	0.413	779	974	0.5	0.7	3.242	A
4 - A27 Off-Slip	542	136	781	1175	0.461	541	0	0.6	0.8	5.666	A
5 - Arundel Road	45	11	1301	730	0.062	45	21	0.0	0.1	5.257	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	754	189	710	1772	0.426	753	936	0.5	0.7	3.530	A
2 - A27 On-Slip			1194				269				
3 - A280 South	955	239	2	1888	0.506	953	1192	0.7	1.0	3.847	A
4 - A27 Off-Slip	664	166	956	1085	0.612	661	0	0.8	1.5	8.435	A
5 - Arundel Road	55	14	1591	581	0.095	55	25	0.1	0.1	6.835	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	754	189	712	1770	0.426	754	938	0.7	0.7	3.541	A
2 - A27 On-Slip			1197				270				
3 - A280 South	955	239	2	1888	0.506	955	1195	1.0	1.0	3.856	A
4 - A27 Off-Slip	664	166	957	1085	0.612	664	0	1.5	1.6	8.553	A
5 - Arundel Road	55	14	1595	579	0.095	55	25	0.1	0.1	6.864	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	616	154	584	1856	0.332	617	768	0.7	0.5	2.906	A
2 - A27 On-Slip			980				221				
3 - A280 South	779	195	2	1888	0.413	781	978	1.0	0.7	3.255	A
4 - A27 Off-Slip	542	136	782	1174	0.462	545	0	1.6	0.9	5.743	A
5 - Arundel Road	45	11	1307	727	0.062	45	21	0.1	0.1	5.282	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	516	129	488	1920	0.269	516	642	0.5	0.4	2.566	A
2 - A27 On-Slip			820				185				
3 - A280 South	653	163	2	1889	0.346	653	818	0.7	0.5	2.917	A
4 - A27 Off-Slip	454	113	655	1240	0.366	455	0	0.9	0.6	4.592	A
5 - Arundel Road	38	9	1093	836	0.045	38	17	0.1	0.0	4.513	A

2018, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.76	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	59	1 - A280 Long Furlong

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 Long Furlong		ONE HOUR	✓	1023	100.000
2 - A27 On-Slip					
3 - A280 South		ONE HOUR	✓	633	100.000
4 - A27 Off-Slip		ONE HOUR	✓	354	100.000
5 - Arundel Road		ONE HOUR	✓	51	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	33	985	0	5
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	449	158	0	0	26
	4 - A27 Off-Slip	153	14	186	0	1
	5 - Arundel Road	8	8	35	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	1	0	0	0
	4 - A27 Off-Slip	9	7	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 Long Furlong	0.55	3.91	1.2	A	939	1408
2 - A27 On-Slip						
3 - A280 South	0.37	3.08	0.6	A	581	871
4 - A27 Off-Slip	0.32	4.40	0.5	A	325	487
5 - Arundel Road	0.07	4.54	0.1	A	47	70

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	770	193	301	2146	0.359	768	458	0.0	0.6	2.607	A
2 - A27 On-Slip			909				160				
3 - A280 South	477	119	4	1865	0.256	475	905	0.0	0.3	2.587	A
4 - A27 Off-Slip	267	67	479	1323	0.201	266	0	0.0	0.3	3.401	A
5 - Arundel Road	38	10	720	1022	0.038	38	24	0.0	0.0	3.657	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	920	230	360	2105	0.437	919	548	0.6	0.8	3.034	A
2 - A27 On-Slip			1088				191				
3 - A280 South	569	142	4	1865	0.305	569	1083	0.3	0.4	2.777	A
4 - A27 Off-Slip	318	80	573	1274	0.250	318	0	0.3	0.3	3.764	A
5 - Arundel Road	46	11	862	949	0.048	46	29	0.0	0.1	3.983	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	1126	282	441	2048	0.550	1125	671	0.8	1.2	3.890	A
2 - A27 On-Slip			1331				234				
3 - A280 South	697	174	5	1864	0.374	696	1326	0.4	0.6	3.081	A
4 - A27 Off-Slip	390	97	702	1207	0.323	389	0	0.3	0.5	4.397	A
5 - Arundel Road	56	14	1056	850	0.066	56	35	0.1	0.1	4.534	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	1126	282	442	2048	0.550	1126	672	1.2	1.2	3.906	A
2 - A27 On-Slip			1333				235				
3 - A280 South	697	174	6	1864	0.374	697	1328	0.6	0.6	3.083	A
4 - A27 Off-Slip	390	97	702	1207	0.323	390	0	0.5	0.5	4.403	A
5 - Arundel Road	56	14	1057	849	0.066	56	35	0.1	0.1	4.537	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	920	230	361	2104	0.437	921	549	1.2	0.8	3.050	A
2 - A27 On-Slip			1091				192				
3 - A280 South	569	142	5	1865	0.305	570	1086	0.6	0.4	2.782	A
4 - A27 Off-Slip	318	80	574	1274	0.250	319	0	0.5	0.3	3.774	A
5 - Arundel Road	46	11	864	949	0.048	46	29	0.1	0.1	3.988	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	770	193	302	2145	0.359	771	460	0.8	0.6	2.620	A
2 - A27 On-Slip			913				161				
3 - A280 South	477	119	4	1865	0.256	477	909	0.4	0.3	2.593	A
4 - A27 Off-Slip	267	67	481	1322	0.202	267	0	0.3	0.3	3.414	A
5 - Arundel Road	38	10	723	1021	0.038	38	24	0.1	0.0	3.663	A

2024 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	8.11	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	9	4 - A27 Off-Slip

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 Long Furlong		ONE HOUR	✓	773	100.000
2 - A27 On-Slip					
3 - A280 South		ONE HOUR	✓	1033	100.000
4 - A27 Off-Slip		ONE HOUR	✓	705	100.000
5 - Arundel Road		ONE HOUR	✓	55	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	21	750	0	2
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	757	252	0	0	24
	4 - A27 Off-Slip	193	31	481	0	0
	5 - Arundel Road	21	7	27	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	7	0	50
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	2	0	0	0	4
	4 - A27 Off-Slip	11	10	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 Long Furlong	0.51	4.45	1.0	A	709	1064
2 - A27 On-Slip						
3 - A280 South	0.60	4.76	1.5	A	948	1422
4 - A27 Off-Slip	0.78	16.74	3.5	C	647	970
5 - Arundel Road	0.14	9.71	0.2	A	50	76

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	582	145	598	1847	0.315	580	728	0.0	0.5	2.838	A
2 - A27 On-Slip			944				233				
3 - A280 South	778	194	2	1894	0.411	775	943	0.0	0.7	3.208	A
4 - A27 Off-Slip	531	133	776	1175	0.452	528	0	0.0	0.8	5.530	A
5 - Arundel Road	41	10	1284	738	0.056	41	20	0.0	0.1	5.163	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	695	174	716	1768	0.393	694	872	0.5	0.6	3.350	A
2 - A27 On-Slip			1130				279				
3 - A280 South	929	232	2	1894	0.490	928	1129	0.7	1.0	3.722	A
4 - A27 Off-Slip	634	158	929	1097	0.578	632	0	0.8	1.3	7.702	A
5 - Arundel Road	49	12	1538	609	0.081	49	23	0.1	0.1	6.427	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	851	213	872	1664	0.512	850	1065	0.6	1.0	4.414	A
2 - A27 On-Slip			1380				341				
3 - A280 South	1137	284	2	1894	0.601	1135	1378	1.0	1.5	4.734	A
4 - A27 Off-Slip	776	194	1137	990	0.784	768	0	1.3	3.4	15.658	C
5 - Arundel Road	61	15	1877	436	0.139	60	29	0.1	0.2	9.565	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	851	213	878	1660	0.513	851	1069	1.0	1.0	4.452	A
2 - A27 On-Slip			1387				342				
3 - A280 South	1137	284	2	1894	0.601	1137	1385	1.5	1.5	4.760	A
4 - A27 Off-Slip	776	194	1140	989	0.785	776	0	3.4	3.5	16.739	C
5 - Arundel Road	61	15	1887	431	0.140	61	29	0.2	0.2	9.706	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	695	174	724	1762	0.394	696	877	1.0	0.7	3.384	A
2 - A27 On-Slip			1140				281				
3 - A280 South	929	232	2	1894	0.490	931	1138	1.5	1.0	3.747	A
4 - A27 Off-Slip	634	158	933	1095	0.579	642	0	3.5	1.4	8.084	A
5 - Arundel Road	49	12	1551	602	0.082	50	23	0.2	0.1	6.521	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	582	145	603	1844	0.316	583	732	0.7	0.5	2.856	A
2 - A27 On-Slip			951				235				
3 - A280 South	778	194	2	1894	0.411	779	949	1.0	0.7	3.232	A
4 - A27 Off-Slip	531	133	780	1173	0.452	533	0	1.4	0.8	5.644	A
5 - Arundel Road	41	10	1294	734	0.056	42	20	0.1	0.1	5.202	A

2024 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.76	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	35	1 - A280 Long Furlong

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 Long Furlong		ONE HOUR	✓	1162	100.000
2 - A27 On-Slip					
3 - A280 South		ONE HOUR	✓	757	100.000
4 - A27 Off-Slip		ONE HOUR	✓	438	100.000
5 - Arundel Road		ONE HOUR	✓	58	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	36	1121	0	5
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	519	209	0	0	29
	4 - A27 Off-Slip	166	15	256	0	1
	5 - Arundel Road	9	9	40	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	0	0	0	0
	4 - A27 Off-Slip	9	0	3	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 Long Furlong	0.65	5.34	1.9	A	1066	1599
2 - A27 On-Slip						
3 - A280 South	0.45	3.47	0.8	A	695	1042
4 - A27 Off-Slip	0.42	5.39	0.7	A	402	603
5 - Arundel Road	0.09	5.34	0.1	A	53	80

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	875	219	397	2082	0.420	872	521	0.0	0.7	2.967	A
2 - A27 On-Slip			1067				202				
3 - A280 South	570	142	4	1871	0.305	568	1063	0.0	0.4	2.758	A
4 - A27 Off-Slip	330	82	572	1289	0.256	328	0	0.0	0.3	3.742	A
5 - Arundel Road	44	11	874	946	0.046	43	26	0.0	0.0	3.987	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	1045	261	475	2028	0.515	1043	623	0.7	1.1	3.652	A
2 - A27 On-Slip			1277				242				
3 - A280 South	681	170	4	1871	0.364	680	1272	0.4	0.6	3.020	A
4 - A27 Off-Slip	394	98	684	1230	0.320	393	0	0.3	0.5	4.297	A
5 - Arundel Road	52	13	1046	858	0.061	52	31	0.0	0.1	4.466	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	1279	320	581	1954	0.655	1276	763	1.1	1.9	5.284	A
2 - A27 On-Slip			1562				296				
3 - A280 South	833	208	5	1870	0.446	833	1556	0.6	0.8	3.465	A
4 - A27 Off-Slip	482	121	838	1150	0.419	481	0	0.5	0.7	5.374	A
5 - Arundel Road	64	16	1281	738	0.087	64	38	0.1	0.1	5.337	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	1279	320	582	1953	0.655	1279	764	1.9	1.9	5.340	A
2 - A27 On-Slip			1566				296				
3 - A280 South	833	208	6	1870	0.446	833	1560	0.8	0.8	3.470	A
4 - A27 Off-Slip	482	121	839	1150	0.419	482	0	0.7	0.7	5.393	A
5 - Arundel Road	64	16	1283	737	0.087	64	39	0.1	0.1	5.345	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	1045	261	477	2027	0.515	1048	625	1.9	1.1	3.691	A
2 - A27 On-Slip			1282				242				
3 - A280 South	681	170	5	1871	0.364	681	1278	0.8	0.6	3.027	A
4 - A27 Off-Slip	394	98	686	1230	0.320	395	0	0.7	0.5	4.316	A
5 - Arundel Road	52	13	1049	857	0.061	52	32	0.1	0.1	4.475	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	875	219	399	2080	0.420	876	523	1.1	0.7	2.994	A
2 - A27 On-Slip			1072				203				
3 - A280 South	570	142	4	1871	0.305	570	1068	0.6	0.4	2.769	A
4 - A27 Off-Slip	330	82	574	1288	0.256	330	0	0.5	0.3	3.759	A
5 - Arundel Road	44	11	878	944	0.046	44	26	0.1	0.0	4.000	A

2024 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	7.34	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	11	4 - A27 Off-Slip

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 Long Furlong		ONE HOUR	✓	781	100.000
2 - A27 On-Slip					
3 - A280 South		ONE HOUR	✓	1061	100.000
4 - A27 Off-Slip		ONE HOUR	✓	684	100.000
5 - Arundel Road		ONE HOUR	✓	55	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	21	758	0	2
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	780	257	0	0	24
	4 - A27 Off-Slip	193	491	0	0	0
	5 - Arundel Road	21	7	27	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	7	0	50
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	2	0	0	0	4
	4 - A27 Off-Slip	11	0	0	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 Long Furlong	0.51	4.35	1.0	A	717	1075
2 - A27 On-Slip						
3 - A280 South	0.62	4.96	1.6	A	974	1460
4 - A27 Off-Slip	0.75	14.35	2.9	B	628	941
5 - Arundel Road	0.14	9.50	0.2	A	50	76

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	588	147	586	1866	0.315	586	745	0.0	0.5	2.810	A
2 - A27 On-Slip			591				581				
3 - A280 South	799	200	2	1894	0.422	796	589	0.0	0.7	3.270	A
4 - A27 Off-Slip	515	129	797	1199	0.429	512	0	0.0	0.7	5.217	A
5 - Arundel Road	41	10	1290	744	0.056	41	20	0.0	0.1	5.123	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	702	176	701	1790	0.392	701	892	0.5	0.6	3.304	A
2 - A27 On-Slip			707				696				
3 - A280 South	954	238	2	1894	0.504	953	705	0.7	1.0	3.819	A
4 - A27 Off-Slip	615	154	954	1116	0.551	613	0	0.7	1.2	7.126	A
5 - Arundel Road	49	12	1544	616	0.080	49	23	0.1	0.1	6.354	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	860	215	856	1690	0.509	858	1091	0.6	1.0	4.320	A
2 - A27 On-Slip			865				849				
3 - A280 South	1168	292	2	1893	0.617	1166	863	1.0	1.6	4.931	A
4 - A27 Off-Slip	753	188	1168	1004	0.750	747	0	1.2	2.8	13.659	B
5 - Arundel Road	61	15	1886	444	0.136	60	29	0.1	0.2	9.383	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	860	215	861	1687	0.510	860	1094	1.0	1.0	4.352	A
2 - A27 On-Slip			866				854				
3 - A280 South	1168	292	2	1893	0.617	1168	864	1.6	1.6	4.962	A
4 - A27 Off-Slip	753	188	1170	1003	0.751	753	0	2.8	2.9	14.354	B
5 - Arundel Road	61	15	1894	439	0.138	61	29	0.2	0.2	9.501	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	702	176	709	1786	0.393	704	897	1.0	0.7	3.333	A
2 - A27 On-Slip			709				703				
3 - A280 South	954	238	2	1894	0.504	956	707	1.6	1.0	3.848	A
4 - A27 Off-Slip	615	154	958	1115	0.552	622	0	2.9	1.3	7.396	A
5 - Arundel Road	49	12	1556	610	0.081	50	23	0.2	0.1	6.431	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	588	147	590	1863	0.316	589	750	0.7	0.5	2.829	A
2 - A27 On-Slip			593				586				
3 - A280 South	799	200	2	1894	0.422	800	592	1.0	0.7	3.292	A
4 - A27 Off-Slip	515	129	801	1197	0.430	517	0	1.3	0.8	5.307	A
5 - Arundel Road	41	10	1299	739	0.056	42	20	0.1	0.1	5.162	A

2024 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.88	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	33	1 - A280 Long Furlong

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 Long Furlong		ONE HOUR	✓	1182	100.000
2 - A27 On-Slip					
3 - A280 South		ONE HOUR	✓	773	100.000
4 - A27 Off-Slip		ONE HOUR	✓	448	100.000
5 - Arundel Road		ONE HOUR	✓	58	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	36	1141	0	5
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	532	212	0	0	29
	4 - A27 Off-Slip	166	281	0	0	1
	5 - Arundel Road	9	9	40	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	0	0	0	0
	4 - A27 Off-Slip	9	0	0	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 Long Furlong	0.67	5.55	2.0	A	1085	1627
2 - A27 On-Slip						
3 - A280 South	0.46	3.53	0.8	A	709	1064
4 - A27 Off-Slip	0.42	5.39	0.7	A	411	617
5 - Arundel Road	0.09	5.43	0.1	A	53	80

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	890	222	407	2079	0.428	887	530	0.0	0.7	3.012	A
2 - A27 On-Slip			890				404				
3 - A280 South	582	145	4	1871	0.311	580	886	0.0	0.4	2.785	A
4 - A27 Off-Slip	337	84	584	1306	0.258	336	0	0.0	0.3	3.708	A
5 - Arundel Road	44	11	894	939	0.046	43	26	0.0	0.0	4.018	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	1063	266	487	2024	0.525	1061	635	0.7	1.1	3.733	A
2 - A27 On-Slip			1065				483				
3 - A280 South	695	174	4	1871	0.371	694	1060	0.4	0.6	3.058	A
4 - A27 Off-Slip	403	101	699	1245	0.324	402	0	0.3	0.5	4.271	A
5 - Arundel Road	52	13	1070	850	0.061	52	31	0.0	0.1	4.512	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	1301	325	596	1950	0.667	1298	777	1.1	2.0	5.490	A
2 - A27 On-Slip			1302				591				
3 - A280 South	851	213	5	1870	0.455	850	1297	0.6	0.8	3.526	A
4 - A27 Off-Slip	493	123	856	1161	0.425	492	0	0.5	0.7	5.374	A
5 - Arundel Road	64	16	1309	728	0.088	64	38	0.1	0.1	5.419	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	1301	325	597	1949	0.668	1301	778	2.0	2.0	5.552	A
2 - A27 On-Slip			1306				592				
3 - A280 South	851	213	6	1870	0.455	851	1300	0.8	0.8	3.531	A
4 - A27 Off-Slip	493	123	857	1161	0.425	493	0	0.7	0.7	5.393	A
5 - Arundel Road	64	16	1311	727	0.088	64	39	0.1	0.1	5.427	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	1063	266	488	2023	0.525	1066	637	2.0	1.1	3.776	A
2 - A27 On-Slip			1070				485				
3 - A280 South	695	174	5	1871	0.371	696	1065	0.8	0.6	3.068	A
4 - A27 Off-Slip	403	101	700	1244	0.324	404	0	0.7	0.5	4.290	A
5 - Arundel Road	52	13	1073	848	0.061	52	32	0.1	0.1	4.524	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	890	222	409	2078	0.428	891	533	1.1	0.8	3.037	A
2 - A27 On-Slip			894				406				
3 - A280 South	582	145	4	1871	0.311	583	891	0.6	0.5	2.796	A
4 - A27 Off-Slip	337	84	586	1304	0.259	338	0	0.5	0.4	3.728	A
5 - Arundel Road	44	11	898	937	0.047	44	26	0.1	0.0	4.031	A

2033 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	11.32	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	2	4 - A27 Off-Slip

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2033 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 Long Furlong		ONE HOUR	✓	821	100.000
2 - A27 On-Slip					
3 - A280 South		ONE HOUR	✓	1095	100.000
4 - A27 Off-Slip		ONE HOUR	✓	749	100.000
5 - Arundel Road		ONE HOUR	✓	58	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	22	797	0	2
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	804	266	0	0	25
	4 - A27 Off-Slip	206	34	509	0	0
	5 - Arundel Road	22	7	29	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	7	0	50
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	2	1	0	0	4
	4 - A27 Off-Slip	11	9	4	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 Long Furlong	0.56	5.00	1.2	A	753	1130
2 - A27 On-Slip						
3 - A280 South	0.64	5.27	1.8	A	1005	1507
4 - A27 Off-Slip	0.87	26.76	5.8	D	687	1031
5 - Arundel Road	0.17	11.69	0.2	B	53	80

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	618	155	633	1823	0.339	616	774	0.0	0.5	2.978	A
2 - A27 On-Slip			1002				247				
3 - A280 South	824	206	2	1890	0.436	821	1000	0.0	0.8	3.360	A
4 - A27 Off-Slip	564	141	823	1151	0.490	560	0	0.0	0.9	6.056	A
5 - Arundel Road	44	11	1363	698	0.063	43	20	0.0	0.1	5.500	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	738	185	757	1739	0.424	737	926	0.5	0.7	3.589	A
2 - A27 On-Slip			1199				295				
3 - A280 South	984	246	2	1889	0.521	983	1197	0.8	1.1	3.966	A
4 - A27 Off-Slip	673	168	985	1068	0.631	670	0	0.9	1.7	9.000	A
5 - Arundel Road	52	13	1631	561	0.093	52	24	0.1	0.1	7.077	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	904	226	919	1631	0.554	902	1130	0.7	1.2	4.927	A
2 - A27 On-Slip			1460				361				
3 - A280 South	1206	301	2	1889	0.638	1203	1458	1.1	1.7	5.228	A
4 - A27 Off-Slip	825	206	1205	955	0.864	810	0	1.7	5.3	22.910	C
5 - Arundel Road	64	16	1985	380	0.168	63	30	0.1	0.2	11.365	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	904	226	929	1624	0.557	904	1136	1.2	1.2	4.999	A
2 - A27 On-Slip			1471				362				
3 - A280 South	1206	301	2	1889	0.638	1206	1469	1.7	1.8	5.267	A
4 - A27 Off-Slip	825	206	1208	953	0.865	823	0	5.3	5.8	26.762	D
5 - Arundel Road	64	16	2001	372	0.172	64	30	0.2	0.2	11.685	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	738	185	772	1729	0.427	740	934	1.2	0.8	3.649	A
2 - A27 On-Slip			1215				297				
3 - A280 South	984	246	2	1889	0.521	987	1213	1.8	1.1	4.000	A
4 - A27 Off-Slip	673	168	989	1066	0.632	689	0	5.8	1.8	9.960	A
5 - Arundel Road	52	13	1654	549	0.095	53	24	0.2	0.1	7.263	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	618	155	639	1818	0.340	619	779	0.8	0.5	3.005	A
2 - A27 On-Slip			1010				248				
3 - A280 South	824	206	2	1890	0.436	826	1008	1.1	0.8	3.389	A
4 - A27 Off-Slip	564	141	827	1149	0.491	567	0	1.8	1.0	6.222	A
5 - Arundel Road	44	11	1374	692	0.063	44	20	0.1	0.1	5.556	A

2033 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.32	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	28	1 - A280 Long Furlong

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2033 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 Long Furlong		ONE HOUR	✓	1234	100.000
2 - A27 On-Slip					
3 - A280 South		ONE HOUR	✓	801	100.000
4 - A27 Off-Slip		ONE HOUR	✓	463	100.000
5 - Arundel Road		ONE HOUR	✓	60	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	38	1190	0	6
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	550	220	0	0	31
	4 - A27 Off-Slip	177	16	269	0	1
	5 - Arundel Road	9	9	42	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	0	0	0	0
	4 - A27 Off-Slip	4	0	3	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 Long Furlong	0.70	6.27	2.3	A	1132	1699
2 - A27 On-Slip						
3 - A280 South	0.47	3.64	0.9	A	735	1103
4 - A27 Off-Slip	0.45	5.67	0.8	A	425	637
5 - Arundel Road	0.09	5.64	0.1	A	55	83

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	929	232	417	2068	0.449	926	552	0.0	0.8	3.142	A
2 - A27 On-Slip			1130				212				
3 - A280 South	603	151	5	1871	0.322	601	1126	0.0	0.5	2.832	A
4 - A27 Off-Slip	349	87	606	1295	0.269	347	0	0.0	0.4	3.794	A
5 - Arundel Road	45	11	924	924	0.049	45	29	0.0	0.1	4.095	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	1109	277	499	2011	0.552	1108	661	0.8	1.2	3.978	A
2 - A27 On-Slip			1353				254				
3 - A280 South	720	180	5	1870	0.385	719	1347	0.5	0.6	3.126	A
4 - A27 Off-Slip	416	104	725	1231	0.338	416	0	0.4	0.5	4.410	A
5 - Arundel Road	54	13	1106	831	0.065	54	34	0.1	0.1	4.630	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	1359	340	611	1934	0.703	1354	809	1.2	2.3	6.166	A
2 - A27 On-Slip			1654				311				
3 - A280 South	882	220	7	1870	0.472	881	1648	0.6	0.9	3.638	A
4 - A27 Off-Slip	510	127	887	1145	0.445	509	0	0.5	0.8	5.647	A
5 - Arundel Road	66	17	1354	705	0.094	66	42	0.1	0.1	5.627	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	1359	340	612	1933	0.703	1359	810	2.3	2.3	6.265	A
2 - A27 On-Slip			1659				312				
3 - A280 South	882	220	7	1870	0.472	882	1653	0.9	0.9	3.643	A
4 - A27 Off-Slip	510	127	889	1144	0.445	510	0	0.8	0.8	5.672	A
5 - Arundel Road	66	17	1356	704	0.094	66	42	0.1	0.1	5.639	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	1109	277	501	2010	0.552	1114	663	2.3	1.2	4.036	A
2 - A27 On-Slip			1360				255				
3 - A280 South	720	180	5	1870	0.385	721	1354	0.9	0.6	3.137	A
4 - A27 Off-Slip	416	104	727	1231	0.338	417	0	0.8	0.5	4.434	A
5 - Arundel Road	54	13	1110	830	0.065	54	34	0.1	0.1	4.642	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	929	232	419	2066	0.450	931	555	1.2	0.8	3.173	A
2 - A27 On-Slip			1137				213				
3 - A280 South	603	151	5	1871	0.322	604	1132	0.6	0.5	2.843	A
4 - A27 Off-Slip	349	87	608	1294	0.269	349	0	0.5	0.4	3.816	A
5 - Arundel Road	45	11	929	921	0.049	45	29	0.1	0.1	4.108	A

2033 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	9.49	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	5	4 - A27 Off-Slip

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2033 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 Long Furlong		ONE HOUR	✓	829	100.000
2 - A27 On-Slip					
3 - A280 South		ONE HOUR	✓	1123	100.000
4 - A27 Off-Slip		ONE HOUR	✓	725	100.000
5 - Arundel Road		ONE HOUR	✓	58	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	22	805	0	2
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	827	271	0	0	25
	4 - A27 Off-Slip	206	519	0	0	0
	5 - Arundel Road	22	7	29	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	7	0	50
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	2	0	0	0	4
	4 - A27 Off-Slip	11	0	0	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 Long Furlong	0.55	4.84	1.2	A	761	1141
2 - A27 On-Slip						
3 - A280 South	0.65	5.48	1.9	A	1030	1546
4 - A27 Off-Slip	0.83	20.97	4.5	C	665	998
5 - Arundel Road	0.17	11.27	0.2	B	53	80

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	624	156	618	1844	0.338	622	791	0.0	0.5	2.940	A
2 - A27 On-Slip			627				613				
3 - A280 South	845	211	2	1894	0.446	842	626	0.0	0.8	3.413	A
4 - A27 Off-Slip	546	136	844	1175	0.465	542	0	0.0	0.9	5.664	A
5 - Arundel Road	44	11	1366	705	0.062	43	20	0.0	0.1	5.434	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	745	186	740	1765	0.422	744	947	0.5	0.7	3.523	A
2 - A27 On-Slip			751				734				
3 - A280 South	1010	252	2	1894	0.533	1008	749	0.8	1.1	4.059	A
4 - A27 Off-Slip	652	163	1010	1087	0.600	649	0	0.9	1.5	8.181	A
5 - Arundel Road	52	13	1635	570	0.092	52	24	0.1	0.1	6.949	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	913	228	901	1661	0.550	911	1156	0.7	1.2	4.786	A
2 - A27 On-Slip			918				893				
3 - A280 South	1236	309	2	1893	0.653	1234	916	1.1	1.9	5.431	A
4 - A27 Off-Slip	798	200	1236	968	0.825	787	0	1.5	4.2	18.887	C
5 - Arundel Road	64	16	1993	390	0.164	63	30	0.1	0.2	11.028	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	913	228	909	1656	0.551	913	1161	1.2	1.2	4.844	A
2 - A27 On-Slip			920				901				
3 - A280 South	1236	309	2	1893	0.653	1236	918	1.9	1.9	5.478	A
4 - A27 Off-Slip	798	200	1239	966	0.826	797	0	4.2	4.5	20.975	C
5 - Arundel Road	64	16	2006	383	0.167	64	30	0.2	0.2	11.275	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	745	186	752	1758	0.424	747	954	1.2	0.7	3.568	A
2 - A27 On-Slip			754				745				
3 - A280 South	1010	252	2	1894	0.533	1012	752	1.9	1.2	4.098	A
4 - A27 Off-Slip	652	163	1014	1085	0.601	663	0	4.5	1.5	8.771	A
5 - Arundel Road	52	13	1653	561	0.093	53	24	0.2	0.1	7.091	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	624	156	624	1841	0.339	625	796	0.7	0.5	2.962	A
2 - A27 On-Slip			630				619				
3 - A280 South	845	211	2	1894	0.446	847	629	1.2	0.8	3.443	A
4 - A27 Off-Slip	546	136	848	1172	0.466	548	0	1.5	0.9	5.797	A
5 - Arundel Road	44	11	1376	700	0.062	44	20	0.1	0.1	5.486	A

2033 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A280 Long Furlong - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.51	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	26	1 - A280 Long Furlong

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2033 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 Long Furlong		ONE HOUR	✓	1254	100.000
2 - A27 On-Slip					
3 - A280 South		ONE HOUR	✓	817	100.000
4 - A27 Off-Slip		ONE HOUR	✓	472	100.000
5 - Arundel Road		ONE HOUR	✓	60	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	38	1210	0	6
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	563	223	0	0	31
	4 - A27 Off-Slip	177	294	0	0	1
	5 - Arundel Road	9	9	42	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 Long Furlong	2 - A27 On-Slip	3 - A280 South	4 - A27 Off-Slip	5 - Arundel Road
From	1 - A280 Long Furlong	0	0	2	0	0
	2 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	3 - A280 South	4	0	0	0	0
	4 - A27 Off-Slip	9	0	0	0	0
	5 - Arundel Road	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 Long Furlong	0.72	6.55	2.5	A	1151	1726
2 - A27 On-Slip						
3 - A280 South	0.48	3.71	0.9	A	750	1125
4 - A27 Off-Slip	0.46	5.86	0.8	A	433	650
5 - Arundel Road	0.10	5.77	0.1	A	55	83

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	944	236	426	2066	0.457	941	562	0.0	0.8	3.190	A
2 - A27 On-Slip			944				423				
3 - A280 South	615	154	5	1871	0.329	613	939	0.0	0.5	2.859	A
4 - A27 Off-Slip	355	89	618	1287	0.276	354	0	0.0	0.4	3.850	A
5 - Arundel Road	45	11	943	914	0.049	45	29	0.0	0.1	4.141	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	1127	282	510	2009	0.561	1126	673	0.8	1.3	4.068	A
2 - A27 On-Slip			1129				506				
3 - A280 South	734	184	5	1870	0.393	734	1124	0.5	0.6	3.166	A
4 - A27 Off-Slip	424	106	739	1223	0.347	424	0	0.4	0.5	4.504	A
5 - Arundel Road	54	13	1129	820	0.066	54	34	0.1	0.1	4.701	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	1381	345	624	1931	0.715	1376	823	1.3	2.4	6.433	A
2 - A27 On-Slip			1380				620				
3 - A280 South	900	225	7	1869	0.481	898	1374	0.6	0.9	3.704	A
4 - A27 Off-Slip	520	130	905	1134	0.458	518	0	0.5	0.8	5.832	A
5 - Arundel Road	66	17	1382	691	0.096	66	42	0.1	0.1	5.755	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	1381	345	625	1930	0.715	1381	825	2.4	2.5	6.548	A
2 - A27 On-Slip			1385				621				
3 - A280 South	900	225	7	1869	0.481	900	1378	0.9	0.9	3.710	A
4 - A27 Off-Slip	520	130	906	1134	0.458	520	0	0.8	0.8	5.860	A
5 - Arundel Road	66	17	1384	690	0.096	66	42	0.1	0.1	5.768	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	1127	282	512	2007	0.562	1132	675	2.5	1.3	4.136	A
2 - A27 On-Slip			1136				508				
3 - A280 South	734	184	5	1870	0.393	736	1130	0.9	0.7	3.177	A
4 - A27 Off-Slip	424	106	741	1222	0.347	426	0	0.8	0.5	4.528	A
5 - Arundel Road	54	13	1132	818	0.066	54	34	0.1	0.1	4.715	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 Long Furlong	944	236	428	2064	0.457	946	565	1.3	0.8	3.225	A
2 - A27 On-Slip			949				425				
3 - A280 South	615	154	5	1871	0.329	616	944	0.7	0.5	2.871	A
4 - A27 Off-Slip	355	89	620	1286	0.276	356	0	0.5	0.4	3.875	A
5 - Arundel Road	45	11	948	912	0.050	45	29	0.1	0.1	4.154	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: 18122 - A27 - Titnore Lane - A280 - Mitigation.j9
Path: P:\18 Jobs\122 Land at Chatsmore Farm - Goring, West Sussex\Technical Assessments\ARCADY\18122 - A27 - Angmering Bypass
Report generation date: 10/06/2020 15:55:27

»2018, AM
»2018, PM
»2024 Base, AM
»2024 Base, PM
»2024 Base + Dev, AM
»2024 Base + Dev, PM
»2033 Base, AM
»2033 Base, PM
»2033 Base + Dev, AM
»2033 Base + Dev, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2018														
1 - A280 North	1.6	5.15	0.62	A	5.50	A	35 % [4 - A280 South West]	2.2	5.88	0.69	A	5.61	A	37 % [1 - A280 North]
2 - A27 Off-Slip	0.6	6.53	0.38	A				0.6	6.81	0.39	A			
3 - Titnore Lane	0.7	4.43	0.42	A				1.0	5.90	0.50	A			
4 - A280 South West	1.6	6.24	0.61	A				0.6	3.83	0.36	A			
2024 Base														
1 - A280 North	2.6	7.36	0.73	A	9.66	A	9 % [4 - A280 South West]	4.1	9.69	0.81	A	8.97	A	16 % [2 - A27 Off-Slip]
2 - A27 Off-Slip	1.1	9.91	0.52	A				1.3	11.44	0.57	B			
3 - Titnore Lane	1.1	5.93	0.54	A				2.0	9.81	0.67	A			
4 - A280 South West	4.6	14.42	0.83	B				1.0	5.13	0.51	A			
2024 Base + Dev														
1 - A280 North	2.8	7.69	0.74	A	10.72	B	7 % [4 - A280 South West]	5.0	11.31	0.84	B	10.22	B	13 % [2 - A27 Off-Slip]
2 - A27 Off-Slip	1.1	10.33	0.54	B				1.5	12.94	0.60	B			
3 - Titnore Lane	1.4	6.66	0.59	A				2.4	11.03	0.71	B			
4 - A280 South West	5.4	17.02	0.85	C				1.1	5.35	0.52	A			
2033 Base														
1 - A280 North	3.4	8.99	0.78	A	13.55	B	3 % [4 - A280 South West]	6.0	13.31	0.86	B	11.96	B	9 % [2 - A27 Off-Slip]
2 - A27 Off-Slip	1.5	12.65	0.60	B				1.8	15.43	0.65	C			
3 - Titnore Lane	1.4	6.84	0.58	A				2.8	13.19	0.74	B			
4 - A280 South West	7.5	23.12	0.89	C				1.2	5.74	0.55	A			
2033 Base + Dev														
1 - A280 North	3.6	9.47	0.79	A	15.92	C	1 % [4 - A280 South West]	7.5	16.42	0.89	C	14.25	B	7 % [1 - A280 North]
2 - A27 Off-Slip	1.5	13.29	0.61	B				2.1	18.23	0.69	C			
3 - Titnore Lane	1.7	7.83	0.64	A				3.4	15.25	0.78	C			
4 - A280 South West	9.6	29.62	0.92	D				1.3	6.00	0.56	A			

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. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	10/06/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	mtp\MTPGeneral
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	ONE HOUR	07:45	09:15	15	✓
D2	2018	PM	ONE HOUR	16:45	18:15	15	✓
D3	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 Base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2024 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2024 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D7	2033 Base	AM	ONE HOUR	07:45	09:15	15	✓
D8	2033 Base	PM	ONE HOUR	16:45	18:15	15	✓
D9	2033 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D10	2033 Base + Dev	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

2018, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A27 Off-Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.50	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	35	4 - A280 South West

Arms

Arms

Arm	Name	Description
1	A280 North	
2	A27 Off-Slip	
3	Titnore Lane	
4	A280 South West	
5	A27 On-Slip	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A280 North	3.70	7.80	22.0	42.0	60.0	10.0	
2 - A27 Off-Slip	4.00	6.00	35.0	25.0	60.0	38.0	
3 - Titnore Lane	3.40	7.80	30.0	25.0	60.0	24.0	
4 - A280 South West	3.65	7.50	50.0	20.0	60.0	33.0	
5 - A27 On-Slip							✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A280 North	0.648	2080
2 - A27 Off-Slip	0.551	1693
3 - Titnore Lane	0.617	1997
4 - A280 South West	0.610	2021
5 - A27 On-Slip		

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 North		ONE HOUR	✓	1037	100.000
2 - A27 Off-Slip		ONE HOUR	✓	313	100.000
3 - Titnore Lane		ONE HOUR	✓	527	100.000
4 - A280 South West		ONE HOUR	✓	828	100.000
5 - A27 On-Slip					

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	525	292	220
	2 - A27 Off-Slip	51	0	25	237	0
	3 - Titnore Lane	227	0	0	79	221
	4 - A280 South West	589	0	194	0	45
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	4	3	12
	2 - A27 Off-Slip	2	0	8	1	0
	3 - Titnore Lane	1	0	0	11	1
	4 - A280 South West	2	0	1	0	4
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 North	0.62	5.15	1.6	A	952	1427
2 - A27 Off-Slip	0.38	6.53	0.6	A	287	431
3 - Titnore Lane	0.42	4.43	0.7	A	484	725
4 - A280 South West	0.61	6.24	1.6	A	760	1140
5 - A27 On-Slip						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	781	195	145	1883	0.415	778	650	0.0	0.7	3.250	A
2 - A27 Off-Slip	236	59	923	1141	0.207	235	0	0.0	0.3	3.969	A
3 - Titnore Lane	397	99	600	1570	0.253	395	558	0.0	0.3	3.063	A
4 - A280 South West	623	156	539	1646	0.379	621	456	0.0	0.6	3.506	A
5 - A27 On-Slip			796				365				

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	932	233	174	1865	0.500	931	778	0.7	1.0	3.850	A
2 - A27 Off-Slip	281	70	1105	1038	0.271	281	0	0.3	0.4	4.755	A
3 - Titnore Lane	474	118	718	1495	0.317	473	668	0.3	0.5	3.520	A
4 - A280 South West	744	186	646	1580	0.471	743	546	0.6	0.9	4.298	A
5 - A27 On-Slip			952				436				

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1142	285	213	1841	0.620	1139	952	1.0	1.6	5.113	A
2 - A27 Off-Slip	345	86	1352	897	0.384	344	0	0.4	0.6	6.489	A
3 - Titnore Lane	580	145	879	1394	0.416	579	817	0.5	0.7	4.412	A
4 - A280 South West	912	228	790	1489	0.612	909	668	0.9	1.6	6.173	A
5 - A27 On-Slip			1165				534				

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1142	285	214	1840	0.620	1142	955	1.6	1.6	5.152	A
2 - A27 Off-Slip	345	86	1355	896	0.385	345	0	0.6	0.6	6.532	A
3 - Titnore Lane	580	145	881	1393	0.417	580	819	0.7	0.7	4.429	A
4 - A280 South West	912	228	792	1489	0.612	912	669	1.6	1.6	6.237	A
5 - A27 On-Slip			1168				535				

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	932	233	175	1864	0.500	935	782	1.6	1.0	3.882	A
2 - A27 Off-Slip	281	70	1110	1035	0.272	282	0	0.6	0.4	4.789	A
3 - Titnore Lane	474	118	721	1493	0.317	475	671	0.7	0.5	3.539	A
4 - A280 South West	744	186	648	1578	0.472	747	548	1.6	0.9	4.345	A
5 - A27 On-Slip			957				438				

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	781	195	146	1882	0.415	782	654	1.0	0.7	3.277	A
2 - A27 Off-Slip	236	59	928	1138	0.207	236	0	0.4	0.3	3.995	A
3 - Titnore Lane	397	99	603	1568	0.253	397	561	0.5	0.3	3.076	A
4 - A280 South West	623	156	542	1645	0.379	625	458	0.9	0.6	3.535	A
5 - A27 On-Slip			800				366				

2018, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A27 Off-Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	5.61	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	37	1 - A280 North

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 North		ONE HOUR	✓	1240	100.000
2 - A27 Off-Slip		ONE HOUR	✓	309	100.000
3 - Titnore Lane		ONE HOUR	✓	563	100.000
4 - A280 South West		ONE HOUR	✓	488	100.000
5 - A27 On-Slip					

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	477	471	292
	2 - A27 Off-Slip	26	0	28	249	6
	3 - Titnore Lane	242	0	0	144	177
	4 - A280 South West	362	0	98	0	28
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	1	2	2
	2 - A27 Off-Slip	0	0	0	0	0
	3 - Titnore Lane	4	0	0	1	6
	4 - A280 South West	2	0	1	0	4
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 North	0.69	5.88	2.2	A	1138	1707
2 - A27 Off-Slip	0.39	6.81	0.6	A	284	425
3 - Titnore Lane	0.50	5.90	1.0	A	517	775
4 - A280 South West	0.36	3.83	0.6	A	448	672
5 - A27 On-Slip						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	934	233	74	1999	0.467	930	473	0.0	0.9	3.355	A
2 - A27 Off-Slip	233	58	1004	1131	0.206	232	0	0.0	0.3	3.997	A
3 - Titnore Lane	424	106	783	1451	0.292	422	452	0.0	0.4	3.492	A
4 - A280 South West	367	92	557	1637	0.224	366	648	0.0	0.3	2.829	A
5 - A27 On-Slip			546				377				

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1115	279	88	1990	0.560	1113	566	0.9	1.3	4.098	A
2 - A27 Off-Slip	278	69	1201	1021	0.272	277	0	0.3	0.4	4.838	A
3 - Titnore Lane	506	127	937	1358	0.373	505	541	0.4	0.6	4.218	A
4 - A280 South West	439	110	667	1569	0.280	438	776	0.3	0.4	3.182	A
5 - A27 On-Slip			654				452				

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1365	341	108	1977	0.690	1362	692	1.3	2.2	5.812	A
2 - A27 Off-Slip	340	85	1469	871	0.391	339	0	0.4	0.6	6.758	A
3 - Titnore Lane	620	155	1146	1232	0.503	618	662	0.6	1.0	5.848	A
4 - A280 South West	537	134	816	1477	0.364	537	949	0.4	0.6	3.827	A
5 - A27 On-Slip			800				552				

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1365	341	108	1977	0.690	1365	694	2.2	2.2	5.879	A
2 - A27 Off-Slip	340	85	1473	869	0.392	340	0	0.6	0.6	6.811	A
3 - Titnore Lane	620	155	1149	1230	0.504	620	664	1.0	1.0	5.896	A
4 - A280 South West	537	134	818	1476	0.364	537	951	0.6	0.6	3.834	A
5 - A27 On-Slip			802				554				

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1115	279	88	1990	0.560	1118	568	2.2	1.3	4.147	A
2 - A27 Off-Slip	278	69	1207	1018	0.273	279	0	0.6	0.4	4.878	A
3 - Titnore Lane	506	127	942	1355	0.373	508	544	1.0	0.6	4.256	A
4 - A280 South West	439	110	670	1568	0.280	439	779	0.6	0.4	3.192	A
5 - A27 On-Slip			656				454				

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	934	233	74	1999	0.467	935	475	1.3	0.9	3.387	A
2 - A27 Off-Slip	233	58	1009	1128	0.206	233	0	0.4	0.3	4.024	A
3 - Titnore Lane	424	106	787	1448	0.293	425	455	0.6	0.4	3.518	A
4 - A280 South West	367	92	560	1636	0.225	368	652	0.4	0.3	2.839	A
5 - A27 On-Slip			549				379				

2024 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A27 Off-Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	9.66	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	9	4 - A280 South West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 North		ONE HOUR	✓	1187	100.000
2 - A27 Off-Slip		ONE HOUR	✓	362	100.000
3 - Titnore Lane		ONE HOUR	✓	635	100.000
4 - A280 South West		ONE HOUR	✓	1072	100.000
5 - A27 On-Slip					

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	591	357	239
	2 - A27 Off-Slip	55	0	28	279	0
	3 - Titnore Lane	261	0	0	119	255
	4 - A280 South West	734	0	263	0	75
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	4	3	12
	2 - A27 Off-Slip	2	0	7	1	0
	3 - Titnore Lane	1	0	0	8	1
	4 - A280 South West	2	0	1	0	3
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 North	0.73	7.36	2.6	A	1089	1634
2 - A27 Off-Slip	0.52	9.91	1.1	A	332	498
3 - Titnore Lane	0.54	5.93	1.1	A	583	874
4 - A280 South West	0.83	14.42	4.6	B	984	1476
5 - A27 On-Slip						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	894	223	197	1852	0.482	890	787	0.0	0.9	3.727	A
2 - A27 Off-Slip	273	68	1087	1050	0.260	271	0	0.0	0.3	4.613	A
3 - Titnore Lane	478	120	697	1512	0.316	476	661	0.0	0.5	3.469	A
4 - A280 South West	807	202	607	1605	0.503	803	566	0.0	1.0	4.467	A
5 - A27 On-Slip			984				427				

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1067	267	236	1828	0.584	1065	942	0.9	1.4	4.706	A
2 - A27 Off-Slip	325	81	1301	929	0.350	325	0	0.3	0.5	5.952	A
3 - Titnore Lane	571	143	834	1425	0.400	570	791	0.5	0.7	4.205	A
4 - A280 South West	964	241	727	1530	0.630	961	677	1.0	1.7	6.294	A
5 - A27 On-Slip			1177				511				

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1307	327	287	1797	0.727	1302	1148	1.4	2.6	7.209	A
2 - A27 Off-Slip	399	100	1589	765	0.521	396	0	0.5	1.1	9.701	A
3 - Titnore Lane	699	175	1020	1309	0.534	697	966	0.7	1.1	5.870	A
4 - A280 South West	1180	295	889	1429	0.826	1169	828	1.7	4.4	13.346	B
5 - A27 On-Slip			1434				624				

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1307	327	289	1795	0.728	1307	1156	2.6	2.6	7.364	A
2 - A27 Off-Slip	399	100	1596	761	0.523	398	0	1.1	1.1	9.915	A
3 - Titnore Lane	699	175	1024	1306	0.535	699	971	1.1	1.1	5.930	A
4 - A280 South West	1180	295	892	1427	0.827	1180	831	4.4	4.6	14.418	B
5 - A27 On-Slip			1445				626				

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1067	267	239	1826	0.584	1072	953	2.6	1.4	4.802	A
2 - A27 Off-Slip	325	81	1311	923	0.353	328	0	1.1	0.6	6.068	A
3 - Titnore Lane	571	143	840	1422	0.402	573	798	1.1	0.7	4.249	A
4 - A280 South West	964	241	731	1528	0.631	975	682	4.6	1.7	6.641	A
5 - A27 On-Slip			1192				514				

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	894	223	199	1851	0.483	896	793	1.4	0.9	3.775	A
2 - A27 Off-Slip	273	68	1094	1046	0.261	273	0	0.6	0.4	4.665	A
3 - Titnore Lane	478	120	702	1509	0.317	479	666	0.7	0.5	3.496	A
4 - A280 South West	807	202	611	1603	0.504	810	570	1.7	1.0	4.558	A
5 - A27 On-Slip			992				429				

2024 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A27 Off-Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	8.97	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	16	2 - A27 Off-Slip

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 North		ONE HOUR	✓	1429	100.000
2 - A27 Off-Slip		ONE HOUR	✓	371	100.000
3 - Titnore Lane		ONE HOUR	✓	681	100.000
4 - A280 South West		ONE HOUR	✓	652	100.000
5 - A27 On-Slip					

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	544	569	316
	2 - A27 Off-Slip	28	0	32	304	7
	3 - Titnore Lane	277	0	0	202	202
	4 - A280 South West	458	0	146	0	48
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	1	2	2
	2 - A27 Off-Slip	0	0	0	0	0
	3 - Titnore Lane	4	0	0	1	5
	4 - A280 South West	2	0	1	0	2
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 North	0.81	9.69	4.1	A	1311	1967
2 - A27 Off-Slip	0.57	11.44	1.3	B	340	511
3 - Titnore Lane	0.67	9.81	2.0	A	625	937
4 - A280 South West	0.51	5.13	1.0	A	598	897
5 - A27 On-Slip						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1076	269	110	1976	0.544	1071	572	0.0	1.2	3.957	A
2 - A27 Off-Slip	279	70	1181	1032	0.271	278	0	0.0	0.4	4.762	A
3 - Titnore Lane	513	128	917	1376	0.373	510	541	0.0	0.6	4.147	A
4 - A280 South West	491	123	622	1600	0.307	489	806	0.0	0.4	3.234	A
5 - A27 On-Slip			682				429				

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1285	321	131	1962	0.655	1282	685	1.2	1.9	5.270	A
2 - A27 Off-Slip	334	83	1413	902	0.370	333	0	0.4	0.6	6.310	A
3 - Titnore Lane	612	153	1098	1267	0.483	611	648	0.6	0.9	5.475	A
4 - A280 South West	586	147	745	1524	0.384	585	964	0.4	0.6	3.834	A
5 - A27 On-Slip			816				514				

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1573	393	160	1943	0.810	1565	837	1.9	4.0	9.298	A
2 - A27 Off-Slip	408	102	1725	728	0.561	406	0	0.6	1.2	11.096	B
3 - Titnore Lane	750	187	1340	1121	0.669	746	791	0.9	2.0	9.495	A
4 - A280 South West	718	179	909	1423	0.505	716	1177	0.6	1.0	5.084	A
5 - A27 On-Slip			998				628				

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1573	393	161	1943	0.810	1573	840	4.0	4.1	9.695	A
2 - A27 Off-Slip	408	102	1734	723	0.565	408	0	1.2	1.3	11.438	B
3 - Titnore Lane	750	187	1347	1116	0.672	750	795	2.0	2.0	9.808	A
4 - A280 South West	718	179	914	1420	0.506	718	1183	1.0	1.0	5.128	A
5 - A27 On-Slip			1001				631				

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1285	321	132	1962	0.655	1293	689	4.1	1.9	5.456	A
2 - A27 Off-Slip	334	83	1425	896	0.372	336	0	1.3	0.6	6.468	A
3 - Titnore Lane	612	153	1108	1261	0.486	616	653	2.0	1.0	5.624	A
4 - A280 South West	586	147	751	1520	0.386	588	973	1.0	0.6	3.867	A
5 - A27 On-Slip			821				518				

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1076	269	110	1976	0.545	1079	576	1.9	1.2	4.025	A
2 - A27 Off-Slip	279	70	1189	1028	0.272	280	0	0.6	0.4	4.820	A
3 - Titnore Lane	513	128	924	1372	0.374	514	545	1.0	0.6	4.202	A
4 - A280 South West	491	123	627	1597	0.307	492	812	0.6	0.4	3.259	A
5 - A27 On-Slip			686				433				

2024 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A27 Off-Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	10.72	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	7	4 - A280 South West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 North		ONE HOUR	✓	1205	100.000
2 - A27 Off-Slip		ONE HOUR	✓	364	100.000
3 - Titnore Lane		ONE HOUR	✓	696	100.000
4 - A280 South West		ONE HOUR	✓	1074	100.000
5 - A27 On-Slip					

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	609	357	239
	2 - A27 Off-Slip	55	0	30	279	0
	3 - Titnore Lane	289	0	0	124	283
	4 - A280 South West	734	0	265	0	75
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	4	3	12
	2 - A27 Off-Slip	2	0	7	1	0
	3 - Titnore Lane	1	0	0	8	1
	4 - A280 South West	2	0	1	0	3
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 North	0.74	7.69	2.8	A	1106	1659
2 - A27 Off-Slip	0.54	10.33	1.1	B	334	501
3 - Titnore Lane	0.59	6.66	1.4	A	639	958
4 - A280 South West	0.85	17.02	5.4	C	986	1478
5 - A27 On-Slip						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	907	227	198	1852	0.490	903	808	0.0	1.0	3.779	A
2 - A27 Off-Slip	274	69	1102	1041	0.263	273	0	0.0	0.4	4.674	A
3 - Titnore Lane	524	131	697	1513	0.346	522	678	0.0	0.5	3.624	A
4 - A280 South West	809	202	649	1580	0.512	804	570	0.0	1.0	4.621	A
5 - A27 On-Slip			1006				448				

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1083	271	238	1828	0.593	1081	967	1.0	1.4	4.811	A
2 - A27 Off-Slip	327	82	1319	918	0.356	326	0	0.4	0.5	6.074	A
3 - Titnore Lane	626	156	834	1426	0.439	625	811	0.5	0.8	4.484	A
4 - A280 South West	966	241	777	1500	0.644	963	682	1.0	1.8	6.669	A
5 - A27 On-Slip			1204				536				

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1327	332	289	1796	0.739	1322	1177	1.4	2.7	7.505	A
2 - A27 Off-Slip	401	100	1610	753	0.532	399	0	0.5	1.1	10.081	B
3 - Titnore Lane	766	192	1019	1310	0.585	764	989	0.8	1.4	6.567	A
4 - A280 South West	1182	296	950	1392	0.849	1169	833	1.8	5.1	15.331	C
5 - A27 On-Slip			1465				654				

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1327	332	291	1794	0.739	1327	1186	2.7	2.8	7.691	A
2 - A27 Off-Slip	401	100	1618	749	0.535	401	0	1.1	1.1	10.332	B
3 - Titnore Lane	766	192	1024	1307	0.586	766	995	1.4	1.4	6.655	A
4 - A280 South West	1182	296	953	1390	0.851	1181	837	5.1	5.4	17.019	C
5 - A27 On-Slip			1478				657				

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1083	271	242	1825	0.594	1089	980	2.8	1.5	4.921	A
2 - A27 Off-Slip	327	82	1330	912	0.359	330	0	1.1	0.6	6.202	A
3 - Titnore Lane	626	156	841	1422	0.440	628	819	1.4	0.8	4.547	A
4 - A280 South West	966	241	782	1497	0.645	980	687	5.4	1.9	7.140	A
5 - A27 On-Slip			1222				540				

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	907	227	200	1851	0.490	909	814	1.5	1.0	3.830	A
2 - A27 Off-Slip	274	69	1110	1037	0.264	275	0	0.6	0.4	4.727	A
3 - Titnore Lane	524	131	702	1510	0.347	525	682	0.8	0.5	3.660	A
4 - A280 South West	809	202	653	1577	0.513	812	574	1.9	1.1	4.722	A
5 - A27 On-Slip			1015				450				

2024 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A27 Off-Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	10.22	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	13	2 - A27 Off-Slip

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 North		ONE HOUR	✓	1475	100.000
2 - A27 Off-Slip		ONE HOUR	✓	376	100.000
3 - Titnore Lane		ONE HOUR	✓	718	100.000
4 - A280 South West		ONE HOUR	✓	657	100.000
5 - A27 On-Slip					

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	590	569	316
	2 - A27 Off-Slip	28	0	37	304	7
	3 - Titnore Lane	294	0	0	205	219
	4 - A280 South West	458	0	151	0	48
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	1	2	2
	2 - A27 Off-Slip	0	0	0	0	0
	3 - Titnore Lane	4	0	0	1	5
	4 - A280 South West	2	0	1	0	2
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 North	0.84	11.31	5.0	B	1353	2030
2 - A27 Off-Slip	0.60	12.94	1.5	B	345	518
3 - Titnore Lane	0.71	11.03	2.4	B	659	988
4 - A280 South West	0.52	5.35	1.1	A	603	904
5 - A27 On-Slip						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1110	278	113	1974	0.563	1105	585	0.0	1.3	4.120	A
2 - A27 Off-Slip	283	71	1219	1011	0.280	282	0	0.0	0.4	4.924	A
3 - Titnore Lane	541	135	917	1376	0.393	538	583	0.0	0.6	4.284	A
4 - A280 South West	495	124	647	1584	0.312	493	808	0.0	0.5	3.292	A
5 - A27 On-Slip			698				442				

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1326	331	136	1960	0.677	1323	700	1.3	2.1	5.624	A
2 - A27 Off-Slip	338	85	1458	877	0.385	337	0	0.4	0.6	6.657	A
3 - Titnore Lane	645	161	1098	1267	0.510	644	698	0.6	1.0	5.767	A
4 - A280 South West	591	148	775	1506	0.392	590	967	0.5	0.6	3.928	A
5 - A27 On-Slip			836				529				

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1624	406	166	1940	0.837	1613	855	2.1	4.8	10.659	B
2 - A27 Off-Slip	414	103	1779	698	0.593	411	0	0.6	1.4	12.414	B
3 - Titnore Lane	791	198	1338	1121	0.705	785	852	1.0	2.3	10.565	B
4 - A280 South West	723	181	945	1400	0.517	722	1179	0.6	1.1	5.293	A
5 - A27 On-Slip			1021				646				

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1624	406	166	1940	0.837	1623	859	4.8	5.0	11.308	B
2 - A27 Off-Slip	414	103	1790	692	0.599	414	0	1.4	1.5	12.937	B
3 - Titnore Lane	791	198	1347	1116	0.708	790	856	2.3	2.4	11.033	B
4 - A280 South West	723	181	951	1396	0.518	723	1186	1.1	1.1	5.347	A
5 - A27 On-Slip			1025				649				

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1326	331	136	1959	0.677	1337	705	5.0	2.1	5.890	A
2 - A27 Off-Slip	338	85	1473	869	0.389	341	0	1.5	0.6	6.869	A
3 - Titnore Lane	645	161	1110	1259	0.513	651	705	2.4	1.1	5.967	A
4 - A280 South West	591	148	783	1500	0.394	592	978	1.1	0.7	3.971	A
5 - A27 On-Slip			841				535				

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1110	278	114	1974	0.563	1114	589	2.1	1.3	4.202	A
2 - A27 Off-Slip	283	71	1228	1006	0.281	284	0	0.6	0.4	4.991	A
3 - Titnore Lane	541	135	924	1371	0.394	542	587	1.1	0.7	4.349	A
4 - A280 South West	495	124	652	1581	0.313	495	814	0.7	0.5	3.316	A
5 - A27 On-Slip			702				445				

2033 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A27 Off-Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	13.55	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	3	4 - A280 South West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2033 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 North		ONE HOUR	✓	1260	100.000
2 - A27 Off-Slip		ONE HOUR	✓	385	100.000
3 - Titnore Lane		ONE HOUR	✓	673	100.000
4 - A280 South West		ONE HOUR	✓	1130	100.000
5 - A27 On-Slip					

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	628	378	254
	2 - A27 Off-Slip	59	0	30	296	0
	3 - Titnore Lane	278	0	0	124	271
	4 - A280 South West	776	0	276	0	78
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	4	3	12
	2 - A27 Off-Slip	2	0	7	1	0
	3 - Titnore Lane	1	0	0	8	1
	4 - A280 South West	2	0	1	0	3
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 North	0.78	8.99	3.4	A	1156	1734
2 - A27 Off-Slip	0.60	12.65	1.5	B	353	530
3 - Titnore Lane	0.58	6.84	1.4	A	618	926
4 - A280 South West	0.89	23.12	7.5	C	1037	1555
5 - A27 On-Slip						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	949	237	207	1846	0.514	944	834	0.0	1.0	3.973	A
2 - A27 Off-Slip	290	72	1151	1014	0.286	288	0	0.0	0.4	4.951	A
3 - Titnore Lane	507	127	739	1486	0.341	505	700	0.0	0.5	3.661	A
4 - A280 South West	851	213	646	1581	0.538	846	598	0.0	1.2	4.871	A
5 - A27 On-Slip			1040				452				

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1133	283	247	1821	0.622	1130	998	1.0	1.6	5.193	A
2 - A27 Off-Slip	346	87	1378	885	0.391	345	0	0.4	0.6	6.654	A
3 - Titnore Lane	605	151	885	1394	0.434	604	838	0.5	0.8	4.553	A
4 - A280 South West	1016	254	774	1501	0.677	1012	716	1.2	2.0	7.309	A
5 - A27 On-Slip			1245				541				

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1387	347	299	1789	0.775	1381	1211	1.6	3.3	8.670	A
2 - A27 Off-Slip	424	106	1680	714	0.594	421	0	0.6	1.4	12.154	B
3 - Titnore Lane	741	185	1080	1271	0.583	739	1020	0.8	1.4	6.735	A
4 - A280 South West	1244	311	945	1394	0.893	1225	874	2.0	6.9	19.406	C
5 - A27 On-Slip			1510				660				

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1387	347	303	1786	0.777	1387	1224	3.3	3.4	8.992	A
2 - A27 Off-Slip	424	106	1690	708	0.599	424	0	1.4	1.5	12.648	B
3 - Titnore Lane	741	185	1086	1267	0.585	741	1028	1.4	1.4	6.842	A
4 - A280 South West	1244	311	949	1392	0.894	1242	878	6.9	7.5	23.115	C
5 - A27 On-Slip			1527				664				

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1133	283	253	1817	0.623	1140	1017	3.4	1.7	5.364	A
2 - A27 Off-Slip	346	87	1393	877	0.395	349	0	1.5	0.7	6.867	A
3 - Titnore Lane	605	151	894	1388	0.436	607	849	1.4	0.8	4.623	A
4 - A280 South West	1016	254	779	1498	0.678	1037	722	7.5	2.2	8.168	A
5 - A27 On-Slip			1270				546				

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	949	237	209	1845	0.514	951	841	1.7	1.1	4.036	A
2 - A27 Off-Slip	290	72	1160	1009	0.287	291	0	0.7	0.4	5.021	A
3 - Titnore Lane	507	127	745	1482	0.342	508	705	0.8	0.5	3.700	A
4 - A280 South West	851	213	650	1578	0.539	855	602	2.2	1.2	5.004	A
5 - A27 On-Slip			1050				455				

2033 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A27 Off-Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	11.96	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	9	2 - A27 Off-Slip

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2033 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 North		ONE HOUR	✓	1518	100.000
2 - A27 Off-Slip		ONE HOUR	✓	392	100.000
3 - Titnore Lane		ONE HOUR	✓	720	100.000
4 - A280 South West		ONE HOUR	✓	687	100.000
5 - A27 On-Slip					

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	578	603	337
	2 - A27 Off-Slip	30	0	34	321	7
	3 - Titnore Lane	294	0	0	212	214
	4 - A280 South West	484	0	153	0	50
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	1	2	2
	2 - A27 Off-Slip	0	0	0	0	0
	3 - Titnore Lane	4	0	0	1	6
	4 - A280 South West	2	0	1	0	2
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 North	0.86	13.31	6.0	B	1393	2089
2 - A27 Off-Slip	0.65	15.43	1.8	C	360	540
3 - Titnore Lane	0.74	13.19	2.8	B	661	991
4 - A280 South West	0.55	5.74	1.2	A	630	946
5 - A27 On-Slip						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1143	286	115	1973	0.579	1137	606	0.0	1.4	4.283	A
2 - A27 Off-Slip	295	74	1252	992	0.297	293	0	0.0	0.4	5.138	A
3 - Titnore Lane	542	136	972	1339	0.405	539	573	0.0	0.7	4.486	A
4 - A280 South West	517	129	661	1575	0.328	515	851	0.0	0.5	3.390	A
5 - A27 On-Slip			720				456				

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1365	341	137	1958	0.697	1361	725	1.4	2.3	5.993	A
2 - A27 Off-Slip	352	88	1498	854	0.412	351	0	0.4	0.7	7.138	A
3 - Titnore Lane	647	162	1164	1224	0.529	646	686	0.7	1.1	6.208	A
4 - A280 South West	618	154	791	1495	0.413	617	1018	0.5	0.7	4.096	A
5 - A27 On-Slip			862				545				

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1671	418	168	1938	0.862	1658	885	2.3	5.7	12.250	B
2 - A27 Off-Slip	432	108	1826	671	0.643	427	0	0.7	1.7	14.523	B
3 - Titnore Lane	793	198	1417	1071	0.740	786	836	1.1	2.7	12.380	B
4 - A280 South West	756	189	963	1388	0.545	754	1240	0.7	1.2	5.668	A
5 - A27 On-Slip			1053				664				

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1671	418	168	1938	0.862	1670	889	5.7	6.0	13.306	B
2 - A27 Off-Slip	432	108	1839	664	0.650	431	0	1.7	1.8	15.427	C
3 - Titnore Lane	793	198	1428	1064	0.745	792	842	2.7	2.8	13.193	B
4 - A280 South West	756	189	971	1383	0.547	756	1250	1.2	1.2	5.743	A
5 - A27 On-Slip			1058				669				

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1365	341	138	1958	0.697	1379	731	6.0	2.4	6.371	A
2 - A27 Off-Slip	352	88	1517	844	0.417	357	0	1.8	0.7	7.448	A
3 - Titnore Lane	647	162	1180	1214	0.533	654	694	2.8	1.2	6.504	A
4 - A280 South West	618	154	801	1488	0.415	620	1032	1.2	0.7	4.154	A
5 - A27 On-Slip			869				552				

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1143	286	115	1972	0.579	1147	610	2.4	1.4	4.381	A
2 - A27 Off-Slip	295	74	1262	987	0.299	296	0	0.7	0.4	5.223	A
3 - Titnore Lane	542	136	981	1334	0.406	544	578	1.2	0.7	4.568	A
4 - A280 South West	517	129	666	1572	0.329	518	858	0.7	0.5	3.420	A
5 - A27 On-Slip			725				459				

2033 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A27 Off-Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	15.92	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	1	4 - A280 South West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2033 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 North		ONE HOUR	✓	1278	100.000
2 - A27 Off-Slip		ONE HOUR	✓	387	100.000
3 - Titnore Lane		ONE HOUR	✓	734	100.000
4 - A280 South West		ONE HOUR	✓	1132	100.000
5 - A27 On-Slip					

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	646	378	254
	2 - A27 Off-Slip	59	0	32	296	0
	3 - Titnore Lane	306	0	0	129	299
	4 - A280 South West	776	0	278	0	78
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	4	3	12
	2 - A27 Off-Slip	2	0	6	1	0
	3 - Titnore Lane	1	0	0	8	1
	4 - A280 South West	2	0	1	0	3
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 North	0.79	9.47	3.6	A	1173	1759
2 - A27 Off-Slip	0.61	13.29	1.5	B	355	533
3 - Titnore Lane	0.64	7.83	1.7	A	674	1010
4 - A280 South West	0.92	29.62	9.6	D	1039	1558
5 - A27 On-Slip						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	962	241	208	1846	0.521	958	854	0.0	1.1	4.035	A
2 - A27 Off-Slip	291	73	1166	1006	0.290	290	0	0.0	0.4	5.016	A
3 - Titnore Lane	553	138	739	1487	0.372	550	716	0.0	0.6	3.836	A
4 - A280 South West	852	213	688	1555	0.548	847	602	0.0	1.2	5.054	A
5 - A27 On-Slip			1063				473				

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1149	287	249	1821	0.631	1146	1022	1.1	1.7	5.322	A
2 - A27 Off-Slip	348	87	1395	876	0.397	347	0	0.4	0.7	6.796	A
3 - Titnore Lane	660	165	885	1395	0.473	659	857	0.6	0.9	4.883	A
4 - A280 South West	1018	254	824	1471	0.692	1014	720	1.2	2.2	7.806	A
5 - A27 On-Slip			1271				566				

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1407	352	300	1789	0.787	1400	1237	1.7	3.5	9.082	A
2 - A27 Off-Slip	426	107	1700	703	0.606	423	0	0.7	1.5	12.698	B
3 - Titnore Lane	808	202	1080	1272	0.636	805	1042	0.9	1.7	7.659	A
4 - A280 South West	1246	312	1006	1357	0.918	1221	879	2.2	8.4	23.194	C
5 - A27 On-Slip			1537				690				

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1407	352	305	1786	0.788	1407	1253	3.5	3.6	9.474	A
2 - A27 Off-Slip	426	107	1712	696	0.612	426	0	1.5	1.5	13.293	B
3 - Titnore Lane	808	202	1086	1268	0.638	808	1051	1.7	1.7	7.828	A
4 - A280 South West	1246	312	1011	1354	0.920	1242	884	8.4	9.6	29.623	D
5 - A27 On-Slip			1558				694				

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1149	287	257	1815	0.633	1156	1048	3.6	1.8	5.522	A
2 - A27 Off-Slip	348	87	1413	866	0.402	351	0	1.5	0.7	7.048	A
3 - Titnore Lane	660	165	894	1389	0.475	663	871	1.7	0.9	4.981	A
4 - A280 South West	1018	254	830	1467	0.694	1047	727	9.6	2.3	9.133	A
5 - A27 On-Slip			1305				572				

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	962	241	210	1844	0.522	965	863	1.8	1.1	4.103	A
2 - A27 Off-Slip	291	73	1175	1001	0.291	292	0	0.7	0.4	5.090	A
3 - Titnore Lane	553	138	745	1483	0.373	554	722	0.9	0.6	3.880	A
4 - A280 South West	852	213	693	1552	0.549	857	606	2.3	1.2	5.205	A
5 - A27 On-Slip			1073				476				

2033 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - A27 Off-Slip - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A280 South West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	14.25	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	7	1 - A280 North

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2033 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A280 North		ONE HOUR	✓	1564	100.000
2 - A27 Off-Slip		ONE HOUR	✓	397	100.000
3 - Titnore Lane		ONE HOUR	✓	757	100.000
4 - A280 South West		ONE HOUR	✓	692	100.000
5 - A27 On-Slip					

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	624	603	337
	2 - A27 Off-Slip	30	0	39	321	7
	3 - Titnore Lane	311	0	0	215	231
	4 - A280 South West	484	0	158	0	50
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A280 North	2 - A27 Off-Slip	3 - Titnore Lane	4 - A280 South West	5 - A27 On-Slip
From	1 - A280 North	0	0	1	2	2
	2 - A27 Off-Slip	0	0	0	0	0
	3 - Titnore Lane	4	0	0	1	5
	4 - A280 South West	2	0	1	0	2
	5 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A280 North	0.89	16.42	7.5	C	1435	2153
2 - A27 Off-Slip	0.69	18.23	2.1	C	364	546
3 - Titnore Lane	0.78	15.25	3.4	C	695	1042
4 - A280 South West	0.56	6.00	1.3	A	635	952
5 - A27 On-Slip						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1177	294	118	1971	0.597	1172	618	0.0	1.5	4.474	A
2 - A27 Off-Slip	299	75	1290	971	0.308	297	0	0.0	0.4	5.326	A
3 - Titnore Lane	570	142	972	1342	0.425	567	615	0.0	0.7	4.624	A
4 - A280 South West	521	130	686	1561	0.334	519	853	0.0	0.5	3.451	A
5 - A27 On-Slip			737				468				

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1406	352	142	1956	0.719	1402	740	1.5	2.5	6.451	A
2 - A27 Off-Slip	357	89	1544	829	0.430	356	0	0.4	0.7	7.580	A
3 - Titnore Lane	681	170	1163	1227	0.555	679	736	0.7	1.2	6.541	A
4 - A280 South West	622	156	821	1477	0.421	621	1021	0.5	0.7	4.202	A
5 - A27 On-Slip			882				560				

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1722	430	173	1935	0.890	1704	903	2.5	7.0	14.528	B
2 - A27 Off-Slip	437	109	1877	643	0.680	432	0	0.7	2.0	16.713	C
3 - Titnore Lane	833	208	1414	1076	0.775	825	896	1.2	3.2	13.973	B
4 - A280 South West	762	190	998	1367	0.557	760	1241	0.7	1.2	5.908	A
5 - A27 On-Slip			1077				682				

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1722	430	174	1935	0.890	1720	908	7.0	7.5	16.420	C
2 - A27 Off-Slip	437	109	1894	633	0.690	437	0	2.0	2.1	18.232	C
3 - Titnore Lane	833	208	1428	1067	0.781	833	903	3.2	3.4	15.252	C
4 - A280 South West	762	190	1008	1361	0.560	762	1253	1.2	1.3	6.004	A
5 - A27 On-Slip			1082				688				

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1406	352	143	1955	0.719	1425	747	7.5	2.6	7.035	A
2 - A27 Off-Slip	357	89	1568	816	0.438	362	0	2.1	0.8	8.031	A
3 - Titnore Lane	681	170	1183	1215	0.560	689	747	3.4	1.3	6.953	A
4 - A280 South West	622	156	834	1469	0.424	624	1038	1.3	0.7	4.272	A
5 - A27 On-Slip			890				569				

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A280 North	1177	294	119	1970	0.598	1182	623	2.6	1.5	4.592	A
2 - A27 Off-Slip	299	75	1301	965	0.310	300	0	0.8	0.5	5.425	A
3 - Titnore Lane	570	142	981	1337	0.426	572	620	1.3	0.7	4.720	A
4 - A280 South West	521	130	692	1557	0.335	522	861	0.7	0.5	3.481	A
5 - A27 On-Slip			742				472				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

For sales and distribution information, program advice and maintenance, contact TRL:
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Filename: 18122 - A259-The Strand(LeftOnly).j9
Path: P:\18 Jobs\122 Land at Chatsmore Farm - Goring, West Sussex\Technical Assessments\PICADY\18122 - A259 - The Strand Junction
Report generation date: 10/06/2020 11:21:31

»2024 Base, AM
»2024 Base, PM
»2024 Base + Dev, AM
»2024 Base + Dev, PM
»2033 Base , AM
»2033 Base, PM
»2033 Base + Dev, AM
»2033 Base + Dev, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2024 Base														
Stream B-AC	3.4	34.86	0.79	D	4.02	A	0 % [Stream B-AC]	0.5	12.26	0.34	B	0.61	A	40 % [Stream B-AC]
Stream C-B	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
2024 Base + Dev														
Stream B-AC	4.1	41.79	0.82	E	4.46	A	-3 % [Stream B-AC]	0.6	14.50	0.39	B	0.68	A	28 % [Stream B-AC]
Stream C-B	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
2033 Base														
Stream B-AC	5.2	50.08	0.86	F	5.82	A	-5 % [Stream B-AC]	0.6	13.57	0.38	B	0.67	A	32 % [Stream B-AC]
Stream C-B	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
2033 Base + Dev														
Stream B-AC	7.1	68.71	0.91	F	7.38	A	-8 % [Stream B-AC]	0.8	16.36	0.43	C	0.77	A	21 % [Stream B-AC]
Stream C-B	0.0	0.00	0.00	A				0.0	0.00	0.00	A			

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

File summary

File Description

Title	18122 - A259 / The Strand
Location	
Site number	18-122
Date	17/01/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	Milestone4-PC\Milestone4 - Newer
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 Base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2024 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2024 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D7	2033 Base	AM	ONE HOUR	07:45	09:15	15	✓
D8	2033 Base	PM	ONE HOUR	16:45	18:15	15	✓
D9	2033 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D10	2033 Base + Dev	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

2024 Base, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.02	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	0	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	A259 (North)		Major
B	The Strand		Minor
C	A259 (South)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A259 (South)	11.80			250.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - The Strand	One lane	5.00	40	40

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	612	0.083	0.211	0.133	0.301
B-C	779	0.089	0.226	-	-
C-B	719	0.208	0.208	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A259 (North)		ONE HOUR	✓	1256	100.000
B - The Strand		ONE HOUR	✓	341	100.000
C - A259 (South)		ONE HOUR	✓	1352	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A259 (North)	B - The Strand	C - A259 (South)
From	A - A259 (North)	0	127	1129
	B - The Strand	0	0	341
	C - A259 (South)	1352	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A259 (North)	B - The Strand	C - A259 (South)
From	A - A259 (North)	0	0	2
	B - The Strand	0	0	1
	C - A259 (South)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.79	34.86	3.4	D	313	469
C-A					1241	1861
C-B	0.00	0.00	0.0	A	0	0
A-B					117	175
A-C					1036	1554

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	257	64	569	0.451	254	0.0	0.8	11.295	B
C-A	1018	254			1018				
C-B	0	0	518	0.000	0	0.0	0.0	0.000	A
A-B	96	24			96				
A-C	850	212			850				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	307	77	530	0.578	304	0.8	1.3	15.816	C
C-A	1215	304			1215				
C-B	0	0	479	0.000	0	0.0	0.0	0.000	A
A-B	114	29			114				
A-C	1015	254			1015				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	375	94	476	0.789	368	1.3	3.2	31.352	D
C-A	1489	372			1489				
C-B	0	0	426	0.000	0	0.0	0.0	0.000	A
A-B	140	35			140				
A-C	1243	311			1243				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	375	94	476	0.789	375	3.2	3.4	34.857	D
C-A	1489	372			1489				
C-B	0	0	426	0.000	0	0.0	0.0	0.000	A
A-B	140	35			140				
A-C	1243	311			1243				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	307	77	530	0.578	315	3.4	1.4	17.293	C
C-A	1215	304			1215				
C-B	0	0	479	0.000	0	0.0	0.0	0.000	A
A-B	114	29			114				
A-C	1015	254			1015				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	257	64	569	0.451	259	1.4	0.8	11.696	B
C-A	1018	254			1018				
C-B	0	0	518	0.000	0	0.0	0.0	0.000	A
A-B	96	24			96				
A-C	850	212			850				

2024 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.61	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	40	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A259 (North)		ONE HOUR	✓	1468	100.000
B - The Strand		ONE HOUR	✓	140	100.000
C - A259 (South)		ONE HOUR	✓	1219	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A259 (North)	B - The Strand	C - A259 (South)
From	A - A259 (North)	0	252	1216
	B - The Strand	0	0	140
	C - A259 (South)	1219	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A259 (North)	B - The Strand	C - A259 (South)
From	A - A259 (North)	0	0	0
	B - The Strand	0	0	1
	C - A259 (South)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.34	12.26	0.5	B	128	193
C-A					1119	1678
C-B	0.00	0.00	0.0	A	0	0
A-B					231	347
A-C					1116	1674

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	105	26	550	0.192	104	0.0	0.2	8.062	A
C-A	918	229			918				
C-B	0	0	489	0.000	0	0.0	0.0	0.000	A
A-B	190	47			190				
A-C	915	229			915				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	126	31	507	0.248	125	0.2	0.3	9.427	A
C-A	1096	274			1096				
C-B	0	0	444	0.000	0	0.0	0.0	0.000	A
A-B	227	57			227				
A-C	1093	273			1093				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	39	448	0.344	153	0.3	0.5	12.201	B
C-A	1342	336			1342				
C-B	0	0	382	0.000	0	0.0	0.0	0.000	A
A-B	277	69			277				
A-C	1339	335			1339				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	39	448	0.344	154	0.5	0.5	12.261	B
C-A	1342	336			1342				
C-B	0	0	382	0.000	0	0.0	0.0	0.000	A
A-B	277	69			277				
A-C	1339	335			1339				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	126	31	507	0.248	127	0.5	0.3	9.481	A
C-A	1096	274			1096				
C-B	0	0	444	0.000	0	0.0	0.0	0.000	A
A-B	227	57			227				
A-C	1093	273			1093				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	105	26	550	0.192	106	0.3	0.2	8.111	A
C-A	918	229			918				
C-B	0	0	489	0.000	0	0.0	0.0	0.000	A
A-B	190	47			190				
A-C	915	229			915				

2024 Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		4.46	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-3	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A259 (North)		ONE HOUR	✓	1321	100.000
B - The Strand		ONE HOUR	✓	343	100.000
C - A259 (South)		ONE HOUR	✓	1538	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A259 (North)	B - The Strand	C - A259 (South)
From	A - A259 (North)	0	127	1194
	B - The Strand	0	0	343
	C - A259 (South)	1538	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A259 (North)	B - The Strand	C - A259 (South)
From	A - A259 (North)	0	0	2
	B - The Strand	0	0	1
	C - A259 (South)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.82	41.79	4.1	E	315	472
C-A					1411	2117
C-B	0.00	0.00	0.0	A	0	0
A-B					117	175
A-C					1096	1643

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	258	65	558	0.463	255	0.0	0.8	11.751	B
C-A	1158	289			1158				
C-B	0	0	508	0.000	0	0.0	0.0	0.000	A
A-B	96	24			96				
A-C	899	225			899				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	308	77	517	0.597	306	0.8	1.4	16.903	C
C-A	1383	346			1383				
C-B	0	0	467	0.000	0	0.0	0.0	0.000	A
A-B	114	29			114				
A-C	1073	268			1073				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	378	94	459	0.822	368	1.4	3.8	36.227	E
C-A	1693	423			1693				
C-B	0	0	410	0.000	0	0.0	0.0	0.000	A
A-B	140	35			140				
A-C	1315	329			1315				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	378	94	459	0.822	376	3.8	4.1	41.787	E
C-A	1693	423			1693				
C-B	0	0	410	0.000	0	0.0	0.0	0.000	A
A-B	140	35			140				
A-C	1315	329			1315				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	308	77	517	0.597	319	4.1	1.5	19.030	C
C-A	1383	346			1383				
C-B	0	0	467	0.000	0	0.0	0.0	0.000	A
A-B	114	29			114				
A-C	1073	268			1073				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	258	65	558	0.463	261	1.5	0.9	12.222	B
C-A	1158	289			1158				
C-B	0	0	508	0.000	0	0.0	0.0	0.000	A
A-B	96	24			96				
A-C	899	225			899				

2024 Base + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.68	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	28	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A259 (North)		ONE HOUR	✓	1630	100.000
B - The Strand		ONE HOUR	✓	145	100.000
C - A259 (South)		ONE HOUR	✓	1329	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A259 (North)	B - The Strand	C - A259 (South)
From	A - A259 (North)	0	252	1378
	B - The Strand	0	0	145
	C - A259 (South)	1329	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A259 (North)	B - The Strand	C - A259 (South)
From	A - A259 (North)	0	0	0
	B - The Strand	0	0	1
	C - A259 (South)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.39	14.50	0.6	B	133	200
C-A					1220	1829
C-B	0.00	0.00	0.0	A	0	0
A-B					231	347
A-C					1264	1897

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	109	27	523	0.209	108	0.0	0.3	8.660	A
C-A	1001	250			1001				
C-B	0	0	463	0.000	0	0.0	0.0	0.000	A
A-B	190	47			190				
A-C	1037	259			1037				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	130	33	475	0.275	130	0.3	0.4	10.432	B
C-A	1195	299			1195				
C-B	0	0	414	0.000	0	0.0	0.0	0.000	A
A-B	227	57			227				
A-C	1239	310			1239				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	160	40	408	0.391	159	0.4	0.6	14.384	B
C-A	1463	366			1463				
C-B	0	0	345	0.000	0	0.0	0.0	0.000	A
A-B	277	69			277				
A-C	1517	379			1517				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	160	40	408	0.391	160	0.6	0.6	14.499	B
C-A	1463	366			1463				
C-B	0	0	345	0.000	0	0.0	0.0	0.000	A
A-B	277	69			277				
A-C	1517	379			1517				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	130	33	475	0.275	131	0.6	0.4	10.521	B
C-A	1195	299			1195				
C-B	0	0	414	0.000	0	0.0	0.0	0.000	A
A-B	227	57			227				
A-C	1239	310			1239				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	109	27	523	0.209	110	0.4	0.3	8.724	A
C-A	1001	250			1001				
C-B	0	0	463	0.000	0	0.0	0.0	0.000	A
A-B	190	47			190				
A-C	1037	259			1037				

2033 Base , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.82	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-5	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2033 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A259 (North)		ONE HOUR	✓	1332	100.000
B - The Strand		ONE HOUR	✓	362	100.000
C - A259 (South)		ONE HOUR	✓	1432	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A259 (North)	B - The Strand	C - A259 (South)
From	A - A259 (North)	0	135	1197
	B - The Strand	0	0	362
	C - A259 (South)	1432	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A259 (North)	B - The Strand	C - A259 (South)
From	A - A259 (North)	0	0	0
	B - The Strand	0	0	1
	C - A259 (South)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.86	50.08	5.2	F	332	498
C-A					1314	1971
C-B	0.00	0.00	0.0	A	0	0
A-B					124	186
A-C					1098	1648

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	273	68	561	0.486	269	0.0	0.9	12.175	B
C-A	1078	270			1078				
C-B	0	0	510	0.000	0	0.0	0.0	0.000	A
A-B	102	25			102				
A-C	901	225			901				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	325	81	520	0.626	323	0.9	1.6	17.983	C
C-A	1287	322			1287				
C-B	0	0	469	0.000	0	0.0	0.0	0.000	A
A-B	121	30			121				
A-C	1076	269			1076				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	399	100	464	0.859	386	1.6	4.6	41.350	E
C-A	1577	394			1577				
C-B	0	0	413	0.000	0	0.0	0.0	0.000	A
A-B	149	37			149				
A-C	1318	329			1318				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	399	100	464	0.859	396	4.6	5.2	50.078	F
C-A	1577	394			1577				
C-B	0	0	413	0.000	0	0.0	0.0	0.000	A
A-B	149	37			149				
A-C	1318	329			1318				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	325	81	520	0.626	339	5.2	1.8	21.184	C
C-A	1287	322			1287				
C-B	0	0	469	0.000	0	0.0	0.0	0.000	A
A-B	121	30			121				
A-C	1076	269			1076				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	273	68	561	0.486	276	1.8	1.0	12.751	B
C-A	1078	270			1078				
C-B	0	0	510	0.000	0	0.0	0.0	0.000	A
A-B	102	25			102				
A-C	901	225			901				

2033 Base, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.67	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	32	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2033 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A259 (North)		ONE HOUR	✓	1557	100.000
B - The Strand		ONE HOUR	✓	148	100.000
C - A259 (South)		ONE HOUR	✓	1290	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A259 (North)	B - The Strand	C - A259 (South)
From	A - A259 (North)	0	268	1289
	B - The Strand	0	0	148
	C - A259 (South)	1290	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A259 (North)	B - The Strand	C - A259 (South)
From	A - A259 (North)	0	0	0
	B - The Strand	0	0	1
	C - A259 (South)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.38	13.57	0.6	B	136	204
C-A					1184	1776
C-B	0.00	0.00	0.0	A	0	0
A-B					246	369
A-C					1183	1774

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	111	28	537	0.208	110	0.0	0.3	8.425	A
C-A	971	243			971				
C-B	0	0	475	0.000	0	0.0	0.0	0.000	A
A-B	202	50			202				
A-C	970	243			970				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	133	33	491	0.271	133	0.3	0.4	10.029	B
C-A	1160	290			1160				
C-B	0	0	427	0.000	0	0.0	0.0	0.000	A
A-B	241	60			241				
A-C	1159	290			1159				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	163	41	428	0.381	162	0.4	0.6	13.477	B
C-A	1420	355			1420				
C-B	0	0	362	0.000	0	0.0	0.0	0.000	A
A-B	295	74			295				
A-C	1419	355			1419				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	163	41	428	0.381	163	0.6	0.6	13.568	B
C-A	1420	355			1420				
C-B	0	0	362	0.000	0	0.0	0.0	0.000	A
A-B	295	74			295				
A-C	1419	355			1419				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	133	33	491	0.271	134	0.6	0.4	10.104	B
C-A	1160	290			1160				
C-B	0	0	427	0.000	0	0.0	0.0	0.000	A
A-B	241	60			241				
A-C	1159	290			1159				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	111	28	537	0.208	112	0.4	0.3	8.482	A
C-A	971	243			971				
C-B	0	0	475	0.000	0	0.0	0.0	0.000	A
A-B	202	50			202				
A-C	970	243			970				

2033 Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		7.38	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-8	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2033 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A259 (North)		ONE HOUR	✓	1397	100.000
B - The Strand		ONE HOUR	✓	364	100.000
C - A259 (South)		ONE HOUR	✓	1618	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A259 (North)	B - The Strand	C - A259 (South)
From	A - A259 (North)	0	135	1262
	B - The Strand	0	0	364
	C - A259 (South)	1618	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A259 (North)	B - The Strand	C - A259 (South)
From	A - A259 (North)	0	0	2
	B - The Strand	0	0	1
	C - A259 (South)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.91	68.71	7.1	F	334	501
C-A					1485	2227
C-B	0.00	0.00	0.0	A	0	0
A-B					124	186
A-C					1158	1737

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	69	546	0.502	270	0.0	1.0	12.884	B
C-A	1218	305			1218				
C-B	0	0	496	0.000	0	0.0	0.0	0.000	A
A-B	102	25			102				
A-C	950	238			950				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	327	82	502	0.652	324	1.0	1.8	19.873	C
C-A	1455	364			1455				
C-B	0	0	453	0.000	0	0.0	0.0	0.000	A
A-B	121	30			121				
A-C	1135	284			1135				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	401	100	442	0.908	384	1.8	6.0	51.812	F
C-A	1781	445			1781				
C-B	0	0	393	0.000	0	0.0	0.0	0.000	A
A-B	149	37			149				
A-C	1389	347			1389				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	401	100	442	0.908	396	6.0	7.1	68.706	F
C-A	1781	445			1781				
C-B	0	0	393	0.000	0	0.0	0.0	0.000	A
A-B	149	37			149				
A-C	1389	347			1389				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	327	82	502	0.652	348	7.1	2.0	25.904	D
C-A	1455	364			1455				
C-B	0	0	453	0.000	0	0.0	0.0	0.000	A
A-B	121	30			121				
A-C	1135	284			1135				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	69	546	0.502	278	2.0	1.0	13.617	B
C-A	1218	305			1218				
C-B	0	0	496	0.000	0	0.0	0.0	0.000	A
A-B	102	25			102				
A-C	950	238			950				

2033 Base + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.77	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	21	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2033 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A259 (North)		ONE HOUR	✓	1719	100.000
B - The Strand		ONE HOUR	✓	153	100.000
C - A259 (South)		ONE HOUR	✓	1400	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A259 (North)	B - The Strand	C - A259 (South)
From	A - A259 (North)	0	268	1451
	B - The Strand	0	0	153
	C - A259 (South)	1400	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A259 (North)	B - The Strand	C - A259 (South)
From	A - A259 (North)	0	0	0
	B - The Strand	0	0	1
	C - A259 (South)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.43	16.36	0.8	C	140	211
C-A					1285	1927
C-B	0.00	0.00	0.0	A	0	0
A-B					246	369
A-C					1331	1997

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	29	509	0.226	114	0.0	0.3	9.079	A
C-A	1054	263			1054				
C-B	0	0	449	0.000	0	0.0	0.0	0.000	A
A-B	202	50			202				
A-C	1092	273			1092				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	138	34	459	0.300	137	0.3	0.4	11.175	B
C-A	1259	315			1259				
C-B	0	0	397	0.000	0	0.0	0.0	0.000	A
A-B	241	60			241				
A-C	1304	326			1304				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	168	42	388	0.434	167	0.4	0.7	16.184	C
C-A	1541	385			1541				
C-B	0	0	325	0.000	0	0.0	0.0	0.000	A
A-B	295	74			295				
A-C	1598	399			1598				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	168	42	388	0.434	168	0.7	0.8	16.356	C
C-A	1541	385			1541				
C-B	0	0	325	0.000	0	0.0	0.0	0.000	A
A-B	295	74			295				
A-C	1598	399			1598				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	138	34	459	0.300	139	0.8	0.4	11.301	B
C-A	1259	315			1259				
C-B	0	0	397	0.000	0	0.0	0.0	0.000	A
A-B	241	60			241				
A-C	1304	326			1304				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	29	509	0.226	116	0.4	0.3	9.156	A
C-A	1054	263			1054				
C-B	0	0	449	0.000	0	0.0	0.0	0.000	A
A-B	202	50			202				
A-C	1092	273			1092				

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: 18122 - A259-A2032-A2700(WSP Mitigation-AM-Queues Calibrated).j9
Path: P:\18 Jobs\122 Land at Chatsmore Farm - Goring, West Sussex\Technical Assessments\ARCADY\18122 - A259 - A2032 - A2700 Roundabout
Report generation date: 03/06/2020 10:47:03

»2018 Base, AM
»2024 Base, AM
»2024 Base + Dev, AM
»2033 Base, AM
»2033 Base + Dev, AM

Summary of junction performance

	AM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2018 Base							
1 - A2700 Titnore Lane	30.9	374.63	1.19	F	85.18	F	-24 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	3.8	14.28	0.80	B			
3 - A259 - Goring Street	1.6	4.75	0.62	A			
4 - A259 Littlehampton Road	62.9	131.57	1.07	F			
2024 Base							
1 - A2700 Titnore Lane	95.0	1272.14	1.47	F	371.58	F	-37 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	10.7	36.03	0.93	E			
3 - A259 - Goring Street	4.5	10.52	0.82	B			
4 - A259 Littlehampton Road	284.4	697.53	1.38	F			
2024 Base + Dev							
1 - A2700 Titnore Lane	122.1	1606.49	1.56	F	457.34	F	-40 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	13.5	43.82	0.95	E			
3 - A259 - Goring Street	9.8	21.10	0.92	C			
4 - A259 Littlehampton Road	356.8	884.41	1.47	F			
2033 Base							
1 - A2700 Titnore Lane	121.6	1601.32	1.55	F	524.71	F	-41 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	20.8	63.40	0.99	F			
3 - A259 - Goring Street	7.2	16.31	0.89	C			
4 - A259 Littlehampton Road	413.4	1020.89	1.50	F			
2033 Base + Dev							
1 - A2700 Titnore Lane	154.2	2019.37	1.66	F	652.16	F	-43 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	26.4	75.97	1.01	F			
3 - A259 - Goring Street	23.4	45.95	0.99	E			
4 - A259 Littlehampton Road	506.1	1292.64	1.62	F			

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. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	18122 - A259 / A2032 / A2700
Location	
Site number	18-122
Date	18/01/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	18-122
Enumerator	Milestone4-PC\Milestone4 - Newer
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Base	AM	ONE HOUR	07:45	09:15	15	✓
D3	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D5	2033 Base	AM	ONE HOUR	07:45	09:15	15	✓
D9	2033 Base + Dev	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

2018 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A2700 Titnore Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A2032 Littlehampton Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A259 - Goring Street - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	85.18	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-24	1 - A2700 Titnore Lane

Arms

Arms

Arm	Name	Description
1	A2700 Titnore Lane	
2	A2032 Littlehampton Road	
3	A259 - Goring Street	
4	A259 Littlehampton Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A2700 Titnore Lane	3.87	6.30	38.7	20.0	60.0	6.3	
2 - A2032 Littlehampton Road	7.06	10.50	88.4	20.0	60.0	14.6	
3 - A259 - Goring Street	6.33	10.50	35.6	28.0	60.0	6.1	
4 - A259 Littlehampton Road	7.30	7.90	2.5	23.0	60.0	7.6	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A2700 Titnore Lane	0.619	1933
2 - A2032 Littlehampton Road	0.836	3230
3 - A259 - Goring Street	0.827	3112
4 - A259 Littlehampton Road	0.719	2509

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - A2700 Titnore Lane	Percentage		36.00
2 - A2032 Littlehampton Road	Percentage		51.00
3 - A259 - Goring Street	Percentage		84.60
4 - A259 Littlehampton Road	Percentage		77.75

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	299	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	895	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1125	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1407	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	56	216	27
	2 - A2032 Littlehampton Road	87	0	168	640
	3 - A259 - Goring Street	297	371	0	457
	4 - A259 Littlehampton Road	60	727	610	10

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	5	4	7
	2 - A2032 Littlehampton Road	6	0	1	3
	3 - A259 - Goring Street	1	1	0	2
	4 - A259 Littlehampton Road	5	2	1	60

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.19	374.63	30.9	F	274	412
2 - A2032 Littlehampton Road	0.80	14.28	3.8	B	821	1232
3 - A259 - Goring Street	0.62	4.75	1.6	A	1032	1548
4 - A259 Littlehampton Road	1.07	131.57	62.9	F	1291	1937

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	225	56	1285	387	0.582	220	333	0.0	1.3	20.940	C
2 - A2032 Littlehampton Road	674	168	642	1328	0.508	670	863	0.0	1.0	5.439	A
3 - A259 - Goring Street	847	212	571	2185	0.388	844	740	0.0	0.6	2.680	A
4 - A259 Littlehampton Road	1059	265	567	1596	0.664	1052	849	0.0	1.9	6.527	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	269	67	1535	333	0.807	261	398	1.3	3.3	45.460	E
2 - A2032 Littlehampton Road	805	201	765	1275	0.631	802	1030	1.0	1.7	7.562	A
3 - A259 - Goring Street	1011	253	684	2104	0.481	1010	883	0.6	0.9	3.287	A
4 - A259 Littlehampton Road	1265	316	678	1534	0.825	1255	1016	1.9	4.4	12.501	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	329	82	1769	282	1.167	273	482	3.3	17.4	165.651	F
2 - A2032 Littlehampton Road	985	246	848	1240	0.795	978	1193	1.7	3.6	13.331	B
3 - A259 - Goring Street	1239	310	829	2000	0.619	1236	997	0.9	1.6	4.691	A
4 - A259 Littlehampton Road	1549	387	829	1450	1.069	1422	1236	4.4	36.2	62.193	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	329	82	1789	278	1.186	276	484	17.4	30.9	338.220	F
2 - A2032 Littlehampton Road	985	246	860	1235	0.798	985	1205	3.6	3.8	14.279	B
3 - A259 - Goring Street	1239	310	835	1996	0.621	1239	1009	1.6	1.6	4.753	A
4 - A259 Littlehampton Road	1549	387	831	1448	1.070	1443	1242	36.2	62.9	131.566	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	269	67	1762	283	0.948	277	410	30.9	28.7	374.628	F
2 - A2032 Littlehampton Road	805	201	882	1226	0.657	812	1157	3.8	2.0	8.848	A
3 - A259 - Goring Street	1011	253	695	2096	0.483	1014	999	1.6	0.9	3.338	A
4 - A259 Littlehampton Road	1265	316	681	1532	0.826	1491	1028	62.9	6.3	84.285	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	225	56	1310	382	0.590	333	336	28.7	1.7	128.849	F
2 - A2032 Littlehampton Road	674	168	745	1283	0.525	677	898	2.0	1.1	5.975	A
3 - A259 - Goring Street	847	212	588	2173	0.390	848	835	0.9	0.6	2.718	A
4 - A259 Littlehampton Road	1059	265	569	1594	0.665	1077	867	6.3	2.0	7.182	A

2024 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A2700 Titnore Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A2032 Littlehampton Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A259 - Goring Street - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	371.58	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-37	1 - A2700 Titnore Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	361	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	1036	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1430	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1627	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	62	254	45
	2 - A2032 Littlehampton Road	99	0	204	733
	3 - A259 - Goring Street	367	443	90	530
	4 - A259 Littlehampton Road	76	842	697	12

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	5	4	5
	2 - A2032 Littlehampton Road	5	0	1	3
	3 - A259 - Goring Street	1	1	0	2
	4 - A259 Littlehampton Road	4	2	1	58

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.47	1272.14	95.0	F	331	497
2 - A2032 Littlehampton Road	0.93	36.03	10.7	E	951	1426
3 - A259 - Goring Street	0.82	10.52	4.5	B	1312	1968
4 - A259 Littlehampton Road	1.38	697.53	284.4	F	1493	2239

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	272	68	1551	330	0.824	258	406	0.0	3.6	43.730	E
2 - A2032 Littlehampton Road	780	195	807	1260	0.619	774	1002	0.0	1.6	7.317	A
3 - A259 - Goring Street	1077	269	662	2123	0.507	1072	919	0.0	1.0	3.416	A
4 - A259 Littlehampton Road	1225	306	749	1496	0.819	1208	986	0.0	4.2	11.908	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	325	81	1788	279	1.165	270	482	3.6	17.3	168.404	F
2 - A2032 Littlehampton Road	931	233	903	1219	0.764	925	1155	1.6	3.1	12.013	B
3 - A259 - Goring Street	1286	321	787	2033	0.632	1283	1041	1.0	1.7	4.779	A
4 - A259 Littlehampton Road	1463	366	896	1414	1.034	1374	1174	4.2	26.4	51.339	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	397	99	1827	270	1.469	270	569	17.3	49.2	467.604	F
2 - A2032 Littlehampton Road	1141	285	890	1225	0.931	1116	1206	3.1	9.3	28.133	D
3 - A259 - Goring Street	1574	394	939	1925	0.818	1564	1067	1.7	4.2	9.719	A
4 - A259 Littlehampton Road	1791	448	1091	1306	1.372	1305	1412	26.4	148.0	248.066	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	397	99	1827	270	1.470	270	573	49.2	81.0	886.384	F
2 - A2032 Littlehampton Road	1141	285	890	1225	0.931	1135	1207	9.3	10.7	36.029	E
3 - A259 - Goring Street	1574	394	955	1914	0.823	1574	1070	4.2	4.5	10.523	B
4 - A259 Littlehampton Road	1791	448	1099	1301	1.376	1301	1430	148.0	270.6	566.593	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	325	81	1825	271	1.199	271	490	81.0	94.5	1184.698	F
2 - A2032 Littlehampton Road	931	233	919	1212	0.768	960	1176	10.7	3.5	15.664	C
3 - A259 - Goring Street	1286	321	815	2013	0.639	1296	1064	4.5	1.8	5.095	A
4 - A259 Littlehampton Road	1463	366	908	1408	1.039	1407	1204	270.6	284.4	697.534	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	272	68	1820	271	1.001	270	422	94.5	95.0	1272.140	F
2 - A2032 Littlehampton Road	780	195	940	1203	0.648	786	1151	3.5	1.9	8.762	A
3 - A259 - Goring Street	1077	269	676	2112	0.510	1080	1050	1.8	1.0	3.496	A
4 - A259 Littlehampton Road	1225	306	755	1492	0.821	1487	1001	284.4	218.9	609.608	F

2024 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A2700 Titnore Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A2032 Littlehampton Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A259 - Goring Street - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	457.34	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-40	1 - A2700 Titnore Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	383	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	1069	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1610	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1636	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	62	276	45
	2 - A2032 Littlehampton Road	99	0	237	733
	3 - A259 - Goring Street	429	536	90	555
	4 - A259 Littlehampton Road	76	842	706	12

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	0	4	5
	2 - A2032 Littlehampton Road	5	0	1	3
	3 - A259 - Goring Street	0	0	0	2
	4 - A259 Littlehampton Road	4	0	1	58

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.56	1606.49	122.1	F	351	527
2 - A2032 Littlehampton Road	0.95	43.82	13.5	E	981	1471
3 - A259 - Goring Street	0.92	21.10	9.8	C	1477	2216
4 - A259 Littlehampton Road	1.47	884.41	356.8	F	1501	2252

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	288	72	1624	320	0.900	268	452	0.0	5.1	56.220	F
2 - A2032 Littlehampton Road	805	201	824	1253	0.642	798	1069	0.0	1.8	7.790	A
3 - A259 - Goring Street	1212	303	661	2136	0.567	1207	960	0.0	1.3	3.851	A
4 - A259 Littlehampton Road	1232	308	865	1450	0.849	1211	1003	0.0	5.1	14.068	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	344	86	1833	275	1.251	270	535	5.1	23.7	220.597	F
2 - A2032 Littlehampton Road	961	240	892	1224	0.785	954	1211	1.8	3.4	13.015	B
3 - A259 - Goring Street	1447	362	784	2048	0.707	1443	1062	1.3	2.4	5.912	A
4 - A259 Littlehampton Road	1471	368	1034	1356	1.085	1334	1193	5.1	39.3	71.602	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	422	105	1857	270	1.561	270	629	23.7	61.6	590.931	F
2 - A2032 Littlehampton Road	1177	294	866	1236	0.953	1146	1261	3.4	11.2	32.217	D
3 - A259 - Goring Street	1773	443	933	1942	0.913	1748	1079	2.4	8.6	16.771	C
4 - A259 Littlehampton Road	1801	450	1251	1235	1.458	1235	1429	39.3	180.9	328.354	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	422	105	1857	270	1.561	270	636	61.6	99.5	1090.595	F
2 - A2032 Littlehampton Road	1177	294	864	1237	0.952	1168	1264	11.2	13.5	43.818	E
3 - A259 - Goring Street	1773	443	950	1929	0.919	1768	1082	8.6	9.8	21.103	C
4 - A259 Littlehampton Road	1801	450	1267	1227	1.468	1227	1451	180.9	324.5	716.651	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	344	86	1853	271	1.271	271	548	99.5	117.9	1460.614	F
2 - A2032 Littlehampton Road	961	240	898	1222	0.787	999	1226	13.5	4.0	18.447	C
3 - A259 - Goring Street	1447	362	819	2023	0.716	1476	1078	9.8	2.6	6.919	A
4 - A259 Littlehampton Road	1471	368	1060	1342	1.096	1342	1236	324.5	356.8	884.406	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	288	72	1848	272	1.061	272	467	117.9	122.1	1606.492	F
2 - A2032 Littlehampton Road	805	201	928	1209	0.666	812	1191	4.0	2.0	9.247	A
3 - A259 - Goring Street	1212	303	675	2126	0.570	1217	1066	2.6	1.3	3.981	A
4 - A259 Littlehampton Road	1232	308	873	1446	0.852	1442	1019	356.8	304.3	825.740	F

2033 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A2700 Titnore Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A2032 Littlehampton Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A259 - Goring Street - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	524.71	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-41	1 - A2700 Titnore Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2033 Base	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	382	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	1100	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1516	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1727	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	66	269	47
	2 - A2032 Littlehampton Road	106	0	216	778
	3 - A259 - Goring Street	388	469	96	563
	4 - A259 Littlehampton Road	80	894	740	13

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	5	4	4
	2 - A2032 Littlehampton Road	6	0	1	3
	3 - A259 - Goring Street	1	1	0	2
	4 - A259 Littlehampton Road	4	2	1	54

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.55	1601.32	121.6	F	351	526
2 - A2032 Littlehampton Road	0.99	63.40	20.8	F	1009	1514
3 - A259 - Goring Street	0.89	16.31	7.2	C	1391	2087
4 - A259 Littlehampton Road	1.50	1020.89	413.4	F	1585	2377

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	288	72	1639	311	0.923	265	429	0.0	5.7	61.549	F
2 - A2032 Littlehampton Road	828	207	847	1242	0.667	820	1057	0.0	1.9	8.393	A
3 - A259 - Goring Street	1141	285	701	2094	0.545	1137	966	0.0	1.2	3.740	A
4 - A259 Littlehampton Road	1300	325	794	1471	0.884	1274	1044	0.0	6.5	16.603	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	343	86	1813	274	1.255	269	506	5.7	24.3	229.091	F
2 - A2032 Littlehampton Road	989	247	906	1217	0.813	981	1176	1.9	4.0	14.731	B
3 - A259 - Goring Street	1363	341	832	2001	0.681	1359	1055	1.2	2.1	5.576	A
4 - A259 Littlehampton Road	1553	388	949	1384	1.121	1370	1242	6.5	52.1	88.387	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	421	105	1829	271	1.555	270	594	24.3	61.9	595.945	F
2 - A2032 Littlehampton Road	1211	303	883	1227	0.987	1165	1216	4.0	15.6	41.032	E
3 - A259 - Goring Street	1669	417	979	1896	0.880	1652	1069	2.1	6.5	13.812	B
4 - A259 Littlehampton Road	1901	475	1150	1272	1.494	1272	1480	52.1	209.5	376.806	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	421	105	1828	271	1.554	271	600	61.9	99.4	1089.834	F
2 - A2032 Littlehampton Road	1211	303	881	1228	0.987	1190	1218	15.6	20.8	63.400	F
3 - A259 - Goring Street	1669	417	999	1882	0.887	1666	1072	6.5	7.2	16.308	C
4 - A259 Littlehampton Road	1901	475	1162	1266	1.502	1266	1504	209.5	368.4	794.158	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	343	86	1824	271	1.266	271	519	99.4	117.5	1455.640	F
2 - A2032 Littlehampton Road	989	247	910	1215	0.814	1053	1185	20.8	4.8	28.109	D
3 - A259 - Goring Street	1363	341	890	1960	0.695	1382	1073	7.2	2.3	6.433	A
4 - A259 Littlehampton Road	1553	388	970	1372	1.131	1372	1302	368.4	413.4	1020.892	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	288	72	1822	271	1.059	271	442	117.5	121.6	1601.320	F
2 - A2032 Littlehampton Road	828	207	935	1205	0.687	838	1159	4.8	2.3	10.088	B
3 - A259 - Goring Street	1141	285	718	2082	0.548	1146	1055	2.3	1.2	3.862	A
4 - A259 Littlehampton Road	1300	325	801	1467	0.887	1463	1063	413.4	372.7	967.424	F

2033 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A2700 Titnore Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A2032 Littlehampton Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A259 - Goring Street - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	652.16	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-43	1 - A2700 Titnore Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2033 Base + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	404	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	1133	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1696	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1736	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	66	291	47
	2 - A2032 Littlehampton Road	106	0	249	778
	3 - A259 - Goring Street	450	562	96	588
	4 - A259 Littlehampton Road	80	894	749	13

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	5	4	4
	2 - A2032 Littlehampton Road	6	0	1	3
	3 - A259 - Goring Street	0	1	0	2
	4 - A259 Littlehampton Road	4	2	1	54

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.66	2019.37	154.2	F	371	556
2 - A2032 Littlehampton Road	1.01	75.97	26.4	F	1040	1559
3 - A259 - Goring Street	0.99	45.95	23.4	E	1556	2334
4 - A259 Littlehampton Road	1.62	1292.64	506.1	F	1593	2389

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	304	76	1705	297	1.023	268	475	0.0	9.1	86.638	F
2 - A2032 Littlehampton Road	853	213	854	1240	0.688	844	1119	0.0	2.1	8.926	A
3 - A259 - Goring Street	1277	319	700	2102	0.608	1271	998	0.0	1.5	4.302	A
4 - A259 Littlehampton Road	1307	327	909	1409	0.928	1270	1061	0.0	9.2	22.101	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	363	91	1833	270	1.347	267	557	9.1	33.0	310.929	F
2 - A2032 Littlehampton Road	1019	255	882	1228	0.830	1009	1218	2.1	4.4	15.830	C
3 - A259 - Goring Street	1525	381	828	2009	0.759	1519	1063	1.5	3.0	7.246	A
4 - A259 Littlehampton Road	1561	390	1087	1310	1.191	1304	1260	9.2	73.4	125.804	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	445	111	1843	268	1.662	267	647	33.0	77.4	763.646	F
2 - A2032 Littlehampton Road	1247	312	851	1241	1.005	1190	1260	4.4	18.7	46.257	E
3 - A259 - Goring Street	1867	467	969	1909	0.978	1812	1072	3.0	16.8	28.050	D
4 - A259 Littlehampton Road	1911	478	1295	1195	1.600	1195	1486	73.4	252.6	498.737	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	445	111	1843	268	1.662	268	657	77.4	121.7	1356.644	F
2 - A2032 Littlehampton Road	1247	312	847	1243	1.004	1217	1263	18.7	26.4	75.972	F
3 - A259 - Goring Street	1867	467	989	1895	0.986	1841	1075	16.8	23.4	45.952	E
4 - A259 Littlehampton Road	1911	478	1317	1183	1.615	1183	1514	252.6	434.6	1002.533	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	363	91	1838	268	1.353	268	587	121.7	145.4	1805.034	F
2 - A2032 Littlehampton Road	1019	255	875	1231	0.828	1102	1232	26.4	5.5	37.527	E
3 - A259 - Goring Street	1525	381	901	1958	0.779	1603	1076	23.4	3.7	12.343	B
4 - A259 Littlehampton Road	1561	390	1151	1275	1.224	1275	1354	434.6	506.1	1292.637	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	304	76	1834	269	1.130	269	486	145.4	154.2	2019.369	F
2 - A2032 Littlehampton Road	853	213	912	1215	0.702	865	1191	5.5	2.4	10.624	B
3 - A259 - Goring Street	1277	319	717	2089	0.611	1285	1061	3.7	1.6	4.525	A
4 - A259 Littlehampton Road	1307	327	921	1402	0.932	1400	1081	506.1	482.9	1271.982	F

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: 18122 - A259-A2032-A2700(WSP Mitigation-PM-Queues Calibrated).j9
Path: P:\18 Jobs\122 Land at Chatsmore Farm - Goring, West Sussex\Technical Assessments\ARCADY\18122 - A259 - A2032 - A2700 Roundabout
Report generation date: 03/06/2020 10:53:58

»2018 Base, PM
»2024 Base, PM
»2024 Base + Dev, PM
»2033 Base, PM
»2033 Base + Dev, PM

Summary of junction performance

	PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2018 Base							
1 - A2700 Titnore Lane	23.1	156.16	1.06	F	37.00	E	-12 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	2.7	8.79	0.74	A			
3 - A259 - Goring Street	1.6	5.09	0.62	A			
4 - A259 Littlehampton Road	17.6	42.40	0.97	E			
2024 Base							
1 - A2700 Titnore Lane	135.8	1062.55	1.58	F	177.58	F	-26 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	7.9	22.46	0.90	C			
3 - A259 - Goring Street	1.6	5.32	0.62	A			
4 - A259 Littlehampton Road	60.0	108.84	1.05	F			
2024 Base + Dev							
1 - A2700 Titnore Lane	212.5	1666.61	1.81	F	295.67	F	-33 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	19.7	51.58	0.98	F			
3 - A259 - Goring Street	2.2	6.58	0.69	A			
4 - A259 Littlehampton Road	103.5	181.68	1.11	F			
2033 Base							
1 - A2700 Titnore Lane	124.2	1005.34	1.39	F	337.00	F	-31 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	12.4	33.80	0.94	D			
3 - A259 - Goring Street	10.1	24.27	0.92	C			
4 - A259 Littlehampton Road	265.6	607.39	1.33	F			
2033 Base + Dev							
1 - A2700 Titnore Lane	191.0	1542.48	1.54	F	472.57	F	-35 % [1 - A2700 Titnore Lane]
2 - A2032 Littlehampton Road	27.0	64.62	1.00	F			
3 - A259 - Goring Street	22.4	47.81	0.98	E			
4 - A259 Littlehampton Road	345.1	790.63	1.41	F			

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. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	18122 - A259 / A2032 / A2700
Location	
Site number	18-122
Date	18/01/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	18-122
Enumerator	Milestone4-PC\Milestone4 - Newer
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2024 Base	PM	ONE HOUR	16:45	18:15	15	✓
D4	2024 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D5	2033 Base	PM	ONE HOUR	16:45	18:15	15	✓
D10	2033 Base + Dev	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

2018 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A2700 Titnore Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A2032 Littlehampton Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A259 - Goring Street - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	37.00	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-12	1 - A2700 Titnore Lane

Arms

Arms

Arm	Name	Description
1	A2700 Titnore Lane	
2	A2032 Littlehampton Road	
3	A259 - Goring Street	
4	A259 Littlehampton Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A2700 Titnore Lane	3.87	6.30	38.7	20.0	60.0	6.3	
2 - A2032 Littlehampton Road	7.06	10.50	88.4	20.0	60.0	14.6	
3 - A259 - Goring Street	6.33	10.50	35.6	28.0	60.0	6.1	
4 - A259 Littlehampton Road	7.30	7.90	2.5	23.0	60.0	7.6	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A2700 Titnore Lane	0.619	1933
2 - A2032 Littlehampton Road	0.836	3230
3 - A259 - Goring Street	0.827	3112
4 - A259 Littlehampton Road	0.719	2509

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

Arm Capacity Adjustments

Arm	Type	Reason	Percentage capacity adjustment (%)
1 - A2700 Titnore Lane	Percentage		55.75
2 - A2032 Littlehampton Road	Percentage		65.00
3 - A259 - Goring Street	Percentage		80.00
4 - A259 Littlehampton Road	Percentage		82.50

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	462	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	1036	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1043	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1424	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	89	325	48
	2 - A2032 Littlehampton Road	75	11	245	705
	3 - A259 - Goring Street	341	228	0	474
	4 - A259 Littlehampton Road	98	770	553	3

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	2	0	0
	2 - A2032 Littlehampton Road	0	0	0	1
	3 - A259 - Goring Street	1	1	0	1
	4 - A259 Littlehampton Road	3	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.06	156.16	23.1	F	424	636
2 - A2032 Littlehampton Road	0.74	8.79	2.7	A	951	1426
3 - A259 - Goring Street	0.62	5.09	1.6	A	957	1436
4 - A259 Littlehampton Road	0.97	42.40	17.6	E	1307	1960

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	348	87	1172	666	0.522	344	385	0.0	1.1	11.010	B
2 - A2032 Littlehampton Road	780	195	694	1709	0.456	777	822	0.0	0.8	3.849	A
3 - A259 - Goring Street	785	196	631	2048	0.383	783	839	0.0	0.6	2.841	A
4 - A259 Littlehampton Road	1072	268	491	1756	0.610	1066	922	0.0	1.5	5.171	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	415	104	1401	587	0.708	411	461	1.1	2.3	19.901	C
2 - A2032 Littlehampton Road	931	233	829	1635	0.570	929	983	0.8	1.3	5.089	A
3 - A259 - Goring Street	938	234	755	1966	0.477	936	1004	0.6	0.9	3.493	A
4 - A259 Littlehampton Road	1280	320	588	1699	0.754	1275	1103	1.5	2.9	8.372	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	509	127	1681	490	1.039	463	562	2.3	13.7	81.959	F
2 - A2032 Littlehampton Road	1141	285	968	1559	0.732	1135	1175	1.3	2.6	8.387	A
3 - A259 - Goring Street	1148	287	918	1858	0.618	1146	1186	0.9	1.6	5.032	A
4 - A259 Littlehampton Road	1568	392	719	1621	0.967	1523	1345	2.9	14.0	28.723	D

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	509	127	1710	480	1.060	471	565	13.7	23.1	156.162	F
2 - A2032 Littlehampton Road	1141	285	987	1549	0.736	1140	1194	2.6	2.7	8.787	A
3 - A259 - Goring Street	1148	287	923	1855	0.619	1148	1204	1.6	1.6	5.092	A
4 - A259 Littlehampton Road	1568	392	721	1620	0.968	1554	1350	14.0	17.6	42.399	E

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	415	104	1461	566	0.734	495	467	23.1	3.2	72.908	F
2 - A2032 Littlehampton Road	931	233	922	1585	0.588	936	1034	2.7	1.4	5.595	A
3 - A259 - Goring Street	938	234	769	1957	0.479	940	1089	1.6	0.9	3.550	A
4 - A259 Littlehampton Road	1280	320	591	1697	0.754	1338	1119	17.6	3.2	11.535	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	348	87	1184	662	0.525	356	388	3.2	1.1	12.067	B
2 - A2032 Littlehampton Road	780	195	709	1700	0.459	782	832	1.4	0.9	3.930	A
3 - A259 - Goring Street	785	196	637	2044	0.384	786	854	0.9	0.6	2.863	A
4 - A259 Littlehampton Road	1072	268	494	1755	0.611	1078	929	3.2	1.6	5.373	A

2024 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A2700 Titnore Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A2032 Littlehampton Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A259 - Goring Street - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	177.58	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-26	1 - A2700 Titnore Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	537	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	1211	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1001	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1633	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	97	378	62
	2 - A2032 Littlehampton Road	86	12	301	812
	3 - A259 - Goring Street	38	274	139	550
	4 - A259 Littlehampton Road	128	880	622	3

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	0	0	0
	2 - A2032 Littlehampton Road	0	0	0	1
	3 - A259 - Goring Street	1	0	1	1
	4 - A259 Littlehampton Road	2	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.58	1062.55	135.8	F	493	739
2 - A2032 Littlehampton Road	0.90	22.46	7.9	C	1111	1667
3 - A259 - Goring Street	0.62	5.32	1.6	A	919	1378
4 - A259 Littlehampton Road	1.05	108.84	60.0	F	1498	2248

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	404	101	1444	579	0.699	396	189	0.0	2.2	18.886	C
2 - A2032 Littlehampton Road	912	228	896	1601	0.569	906	944	0.0	1.3	5.145	A
3 - A259 - Goring Street	754	188	729	1989	0.379	751	1073	0.0	0.6	2.905	A
4 - A259 Littlehampton Road	1229	307	412	1822	0.675	1221	1068	0.0	2.0	5.913	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	483	121	1725	482	1.002	448	225	2.2	11.0	72.761	F
2 - A2032 Littlehampton Road	1089	272	1050	1518	0.717	1084	1123	1.3	2.5	8.207	A
3 - A259 - Goring Street	900	225	869	1896	0.475	899	1265	0.6	0.9	3.607	A
4 - A259 Littlehampton Road	1468	367	493	1774	0.827	1458	1275	2.0	4.5	11.060	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	591	148	2010	383	1.542	382	266	11.0	63.2	370.581	F
2 - A2032 Littlehampton Road	1333	333	1107	1487	0.897	1314	1285	2.5	7.2	19.037	C
3 - A259 - Goring Street	1102	276	1035	1786	0.617	1099	1386	0.9	1.6	5.222	A
4 - A259 Littlehampton Road	1798	449	602	1709	1.052	1674	1533	4.5	35.4	52.826	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	591	148	2034	375	1.577	375	270	63.2	117.3	840.595	F
2 - A2032 Littlehampton Road	1333	333	1111	1485	0.898	1331	1298	7.2	7.9	22.458	C
3 - A259 - Goring Street	1102	276	1046	1778	0.620	1102	1395	1.6	1.6	5.320	A
4 - A259 Littlehampton Road	1798	449	604	1708	1.053	1699	1544	35.4	60.0	108.838	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	483	121	1936	409	1.181	409	245	117.3	135.8	1062.545	F
2 - A2032 Littlehampton Road	1089	272	1105	1488	0.732	1109	1240	7.9	2.8	9.958	A
3 - A259 - Goring Street	900	225	883	1886	0.477	903	1330	1.6	0.9	3.669	A
4 - A259 Littlehampton Road	1468	367	496	1772	0.829	1685	1290	60.0	5.8	61.674	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	404	101	1467	571	0.708	567	191	135.8	95.2	735.473	F
2 - A2032 Littlehampton Road	912	228	1045	1521	0.600	917	988	2.8	1.5	6.013	A
3 - A259 - Goring Street	754	188	757	1970	0.382	755	1205	0.9	0.6	2.963	A
4 - A259 Littlehampton Road	1229	307	414	1821	0.675	1244	1097	5.8	2.1	6.392	A

2024 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A2700 Titnore Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A2032 Littlehampton Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A259 - Goring Street - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	295.67	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-33	1 - A2700 Titnore Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	591	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	1295	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1109	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1656	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	97	432	62
	2 - A2032 Littlehampton Road	86	12	385	812
	3 - A259 - Goring Street	75	329	139	566
	4 - A259 Littlehampton Road	128	880	645	3

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	0	4	5
	2 - A2032 Littlehampton Road	5	0	1	3
	3 - A259 - Goring Street	0	0	0	2
	4 - A259 Littlehampton Road	4	0	1	58

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.81	1666.61	212.5	F	542	813
2 - A2032 Littlehampton Road	0.98	51.58	19.7	F	1188	1782
3 - A259 - Goring Street	0.69	6.58	2.2	A	1018	1526
4 - A259 Littlehampton Road	1.11	181.68	103.5	F	1520	2279

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	445	111	1502	539	0.826	429	216	0.0	3.9	29.720	D
2 - A2032 Littlehampton Road	975	244	947	1535	0.635	968	984	0.0	1.7	6.282	A
3 - A259 - Goring Street	835	209	728	1971	0.424	832	1188	0.0	0.7	3.151	A
4 - A259 Littlehampton Road	1247	312	481	1769	0.705	1237	1079	0.0	2.3	6.661	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	531	133	1791	442	1.203	433	258	3.9	28.5	161.132	F
2 - A2032 Littlehampton Road	1164	291	1064	1472	0.791	1157	1161	1.7	3.6	11.150	B
3 - A259 - Goring Street	997	249	861	1881	0.530	995	1360	0.7	1.1	4.058	A
4 - A259 Littlehampton Road	1489	372	575	1713	0.869	1474	1281	2.3	5.9	14.283	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	651	163	2023	364	1.787	364	299	28.5	100.2	656.106	F
2 - A2032 Littlehampton Road	1426	356	1091	1459	0.978	1380	1295	3.6	15.1	33.930	D
3 - A259 - Goring Street	1221	305	1011	1780	0.686	1217	1460	1.1	2.1	6.347	A
4 - A259 Littlehampton Road	1823	456	700	1639	1.113	1622	1527	5.9	56.3	78.492	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	651	163	2036	360	1.809	360	302	100.2	173.0	1380.333	F
2 - A2032 Littlehampton Road	1426	356	1093	1458	0.978	1408	1303	15.1	19.7	51.585	F
3 - A259 - Goring Street	1221	305	1030	1767	0.691	1221	1471	2.1	2.2	6.584	A
4 - A259 Littlehampton Road	1823	456	704	1636	1.114	1634	1546	56.3	103.5	181.676	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	531	133	1995	373	1.423	373	280	173.0	212.5	1666.613	F
2 - A2032 Littlehampton Road	1164	291	1099	1454	0.801	1226	1269	19.7	4.3	19.295	C
3 - A259 - Goring Street	997	249	903	1852	0.538	1001	1422	2.2	1.2	4.250	A
4 - A259 Littlehampton Road	1489	372	583	1708	0.872	1692	1322	103.5	52.8	167.892	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	445	111	1698	473	0.941	470	234	212.5	206.1	1601.502	F
2 - A2032 Littlehampton Road	975	244	1065	1471	0.663	984	1104	4.3	2.0	7.529	A
3 - A259 - Goring Street	835	209	744	1960	0.426	837	1305	1.2	0.7	3.210	A
4 - A259 Littlehampton Road	1247	312	484	1767	0.706	1448	1096	52.8	2.5	20.922	C

2033 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A2700 Titnore Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A2032 Littlehampton Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A259 - Goring Street - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	337.00	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-31	1 - A2700 Titnore Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2033 Base	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	570	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	1285	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1453	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1733	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	104	401	65
	2 - A2032 Littlehampton Road	92	13	318	862
	3 - A259 - Goring Street	432	290	148	583
	4 - A259 Littlehampton Road	135	934	661	3

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	0	0	0
	2 - A2032 Littlehampton Road	0	0	0	1
	3 - A259 - Goring Street	1	0	1	1
	4 - A259 Littlehampton Road	2	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.39	1005.34	124.2	F	523	785
2 - A2032 Littlehampton Road	0.94	33.80	12.4	D	1179	1769
3 - A259 - Goring Street	0.92	24.27	10.1	C	1333	2000
4 - A259 Littlehampton Road	1.33	607.39	265.6	F	1590	2385

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	429	107	1527	550	0.780	417	493	0.0	3.1	25.071	D
2 - A2032 Littlehampton Road	967	242	946	1574	0.615	961	998	0.0	1.6	5.812	A
3 - A259 - Goring Street	1094	273	773	1958	0.559	1089	1134	0.0	1.3	4.118	A
4 - A259 Littlehampton Road	1305	326	731	1632	0.800	1290	1131	0.0	3.8	10.123	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	512	128	1776	464	1.104	448	585	3.1	19.2	110.900	F
2 - A2032 Littlehampton Road	1155	289	1069	1508	0.766	1149	1155	1.6	3.1	9.866	A
3 - A259 - Goring Street	1306	327	918	1862	0.702	1302	1300	1.3	2.3	6.381	A
4 - A259 Littlehampton Road	1558	389	873	1546	1.007	1488	1347	3.8	21.2	40.518	E

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	628	157	1813	451	1.391	450	679	19.2	63.6	347.394	F
2 - A2032 Littlehampton Road	1415	354	1079	1502	0.942	1385	1184	3.1	10.7	25.697	D
3 - A259 - Goring Street	1600	400	1096	1744	0.917	1574	1368	2.3	8.8	18.828	C
4 - A259 Littlehampton Road	1908	477	1056	1438	1.327	1436	1614	21.2	139.2	208.498	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	628	157	1813	451	1.391	451	686	63.6	107.7	699.004	F
2 - A2032 Littlehampton Road	1415	354	1079	1502	0.942	1408	1185	10.7	12.4	33.799	D
3 - A259 - Goring Street	1600	400	1113	1733	0.923	1594	1373	8.8	10.1	24.267	C
4 - A259 Littlehampton Road	1908	477	1070	1429	1.335	1429	1638	139.2	258.9	493.940	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	512	128	1827	447	1.147	446	602	107.7	124.2	949.651	F
2 - A2032 Littlehampton Road	1155	289	1088	1497	0.771	1191	1185	12.4	3.5	12.956	B
3 - A259 - Goring Street	1306	327	950	1841	0.709	1337	1329	10.1	2.5	7.549	A
4 - A259 Littlehampton Road	1558	389	898	1532	1.017	1531	1389	258.9	265.6	607.395	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	429	107	1836	443	0.968	440	523	124.2	121.5	1005.338	F
2 - A2032 Littlehampton Road	967	242	1093	1495	0.647	974	1183	3.5	1.9	7.001	A
3 - A259 - Goring Street	1094	273	786	1950	0.561	1099	1281	2.5	1.3	4.254	A
4 - A259 Littlehampton Road	1305	326	737	1627	0.802	1621	1147	265.6	186.4	502.456	F

2033 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A2700 Titnore Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A2032 Littlehampton Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A259 - Goring Street - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Goring Crossways	Standard Roundabout		1, 2, 3, 4	472.57	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-35	1 - A2700 Titnore Lane

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2033 Base + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A2700 Titnore Lane		ONE HOUR	✓	624	100.000
2 - A2032 Littlehampton Road		ONE HOUR	✓	1369	100.000
3 - A259 - Goring Street		ONE HOUR	✓	1561	100.000
4 - A259 Littlehampton Road		ONE HOUR	✓	1756	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	104	455	65
	2 - A2032 Littlehampton Road	92	13	402	862
	3 - A259 - Goring Street	469	345	148	599
	4 - A259 Littlehampton Road	135	934	684	3

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A2700 Titnore Lane	2 - A2032 Littlehampton Road	3 - A259 - Goring Street	4 - A259 Littlehampton Road
From	1 - A2700 Titnore Lane	0	1	0	0
	2 - A2032 Littlehampton Road	0	0	0	1
	3 - A259 - Goring Street	1	1	0	1
	4 - A259 Littlehampton Road	2	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A2700 Titnore Lane	1.54	1542.48	191.0	F	573	859
2 - A2032 Littlehampton Road	1.00	64.62	27.0	F	1256	1884
3 - A259 - Goring Street	0.98	47.81	22.4	E	1432	2149
4 - A259 Littlehampton Road	1.41	790.63	345.1	F	1611	2417

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	470	117	1582	527	0.891	447	520	0.0	5.6	38.179	E
2 - A2032 Littlehampton Road	1031	258	994	1550	0.665	1023	1036	0.0	1.9	6.740	A
3 - A259 - Goring Street	1175	294	771	1957	0.600	1169	1245	0.0	1.5	4.536	A
4 - A259 Littlehampton Road	1322	331	799	1582	0.836	1303	1142	0.0	4.7	12.223	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	561	140	1800	452	1.241	446	614	5.6	34.3	181.362	F
2 - A2032 Littlehampton Road	1231	308	1075	1506	0.817	1222	1171	1.9	4.2	12.303	B
3 - A259 - Goring Street	1403	351	912	1864	0.753	1397	1385	1.5	2.9	7.619	A
4 - A259 Littlehampton Road	1579	395	955	1489	1.060	1459	1355	4.7	34.6	59.531	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	687	172	1814	447	1.537	447	704	34.3	94.4	532.465	F
2 - A2032 Littlehampton Road	1507	377	1070	1508	0.999	1447	1190	4.2	19.3	39.326	E
3 - A259 - Goring Street	1719	430	1071	1759	0.977	1666	1446	2.9	16.1	29.241	D
4 - A259 Littlehampton Road	1933	483	1138	1380	1.401	1380	1599	34.6	173.0	278.052	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	687	172	1813	447	1.536	447	713	94.4	154.3	1016.811	F
2 - A2032 Littlehampton Road	1507	377	1069	1509	0.999	1477	1191	19.3	27.0	64.617	F
3 - A259 - Goring Street	1719	430	1092	1745	0.985	1694	1454	16.1	22.4	47.807	E
4 - A259 Littlehampton Road	1933	483	1157	1369	1.412	1369	1629	173.0	314.2	629.014	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	561	140	1822	444	1.263	444	645	154.3	183.6	1384.618	F
2 - A2032 Littlehampton Road	1231	308	1079	1503	0.819	1319	1187	27.0	5.0	26.322	D
3 - A259 - Goring Street	1403	351	980	1819	0.771	1479	1418	22.4	3.5	12.828	B
4 - A259 Littlehampton Road	1579	395	1012	1455	1.085	1455	1446	314.2	345.1	790.626	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - A2700 Titnore Lane	470	117	1834	440	1.067	440	546	183.6	191.0	1542.479	F
2 - A2032 Littlehampton Road	1031	258	1093	1496	0.689	1041	1180	5.0	2.3	8.103	A
3 - A259 - Goring Street	1175	294	784	1949	0.603	1183	1351	3.5	1.5	4.752	A
4 - A259 Littlehampton Road	1322	331	809	1576	0.839	1571	1158	345.1	282.9	719.819	F

Appendix 16

Figure

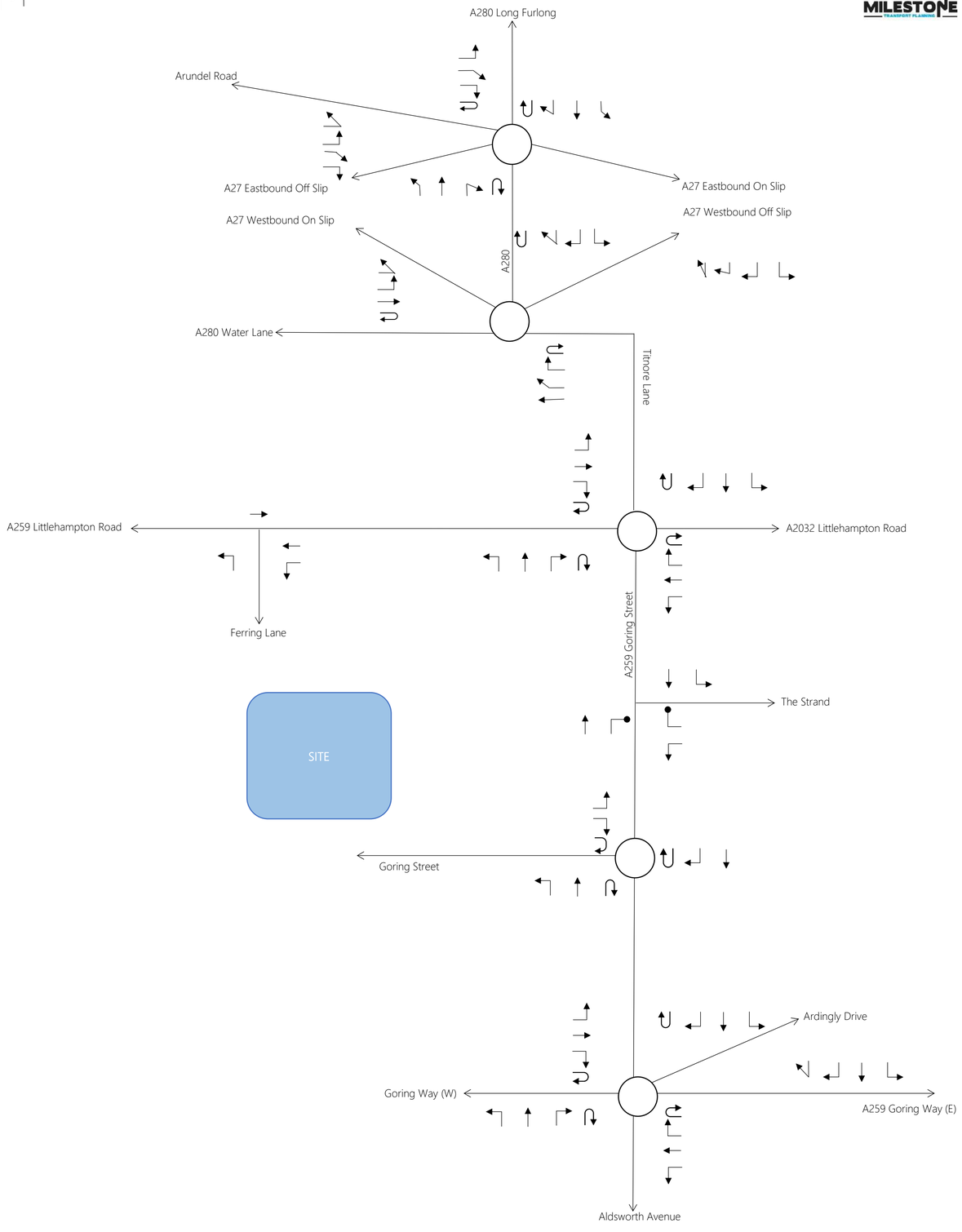

A280 Long Furlong
Arundel Road
A27 Eastbound Off Slip
A27 Eastbound On Slip
A27 Westbound On Slip
A27 Westbound Off Slip
A280
A280 Water Lane
Titnore Lane
A259 Littlehampton Road
A2032 Littlehampton Road
Ferring Lane
A259 Goring Street
The Strand
SITE
Goring Street
Ardingly Drive
Goring Way (W)
A259 Goring Way (E)
Aldsworth Avenue

Figure 1 2018 Surveyed Flows AM Peak (08:00-09:00)

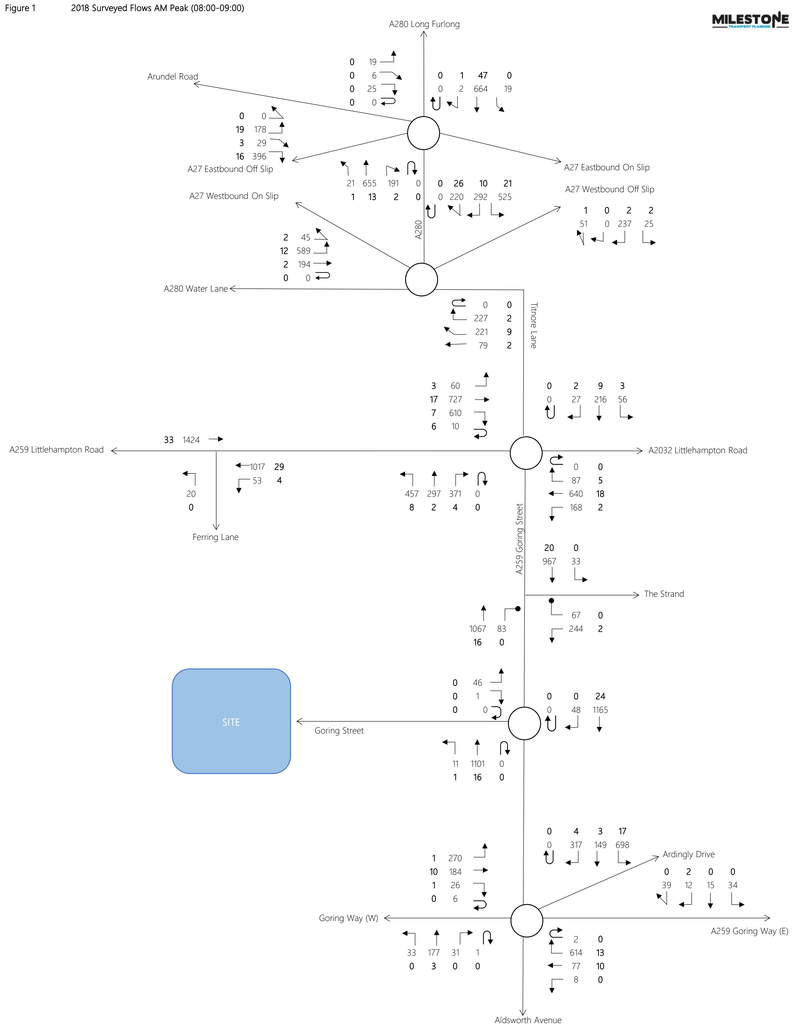


Figure 2 2018 Surveyed Flows PM Peak (17:00-18:00)

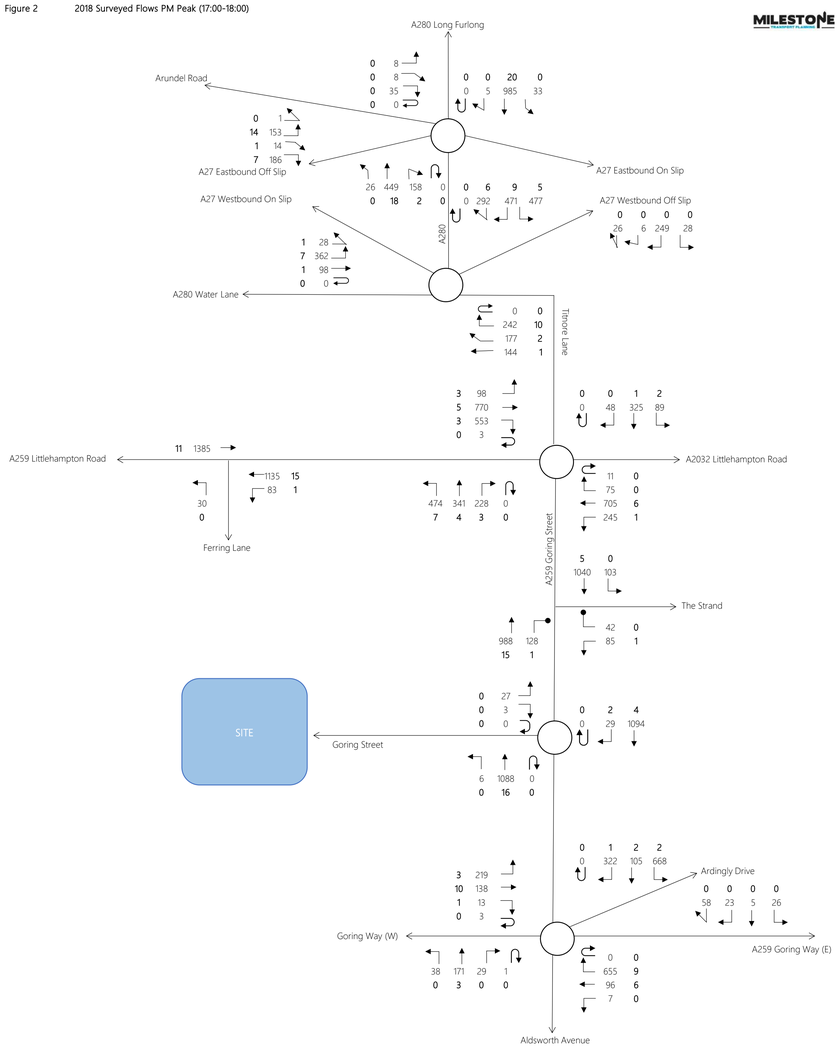


Figure 3 2024 Base Year Flows AM Peak (08:00 - 09:00)

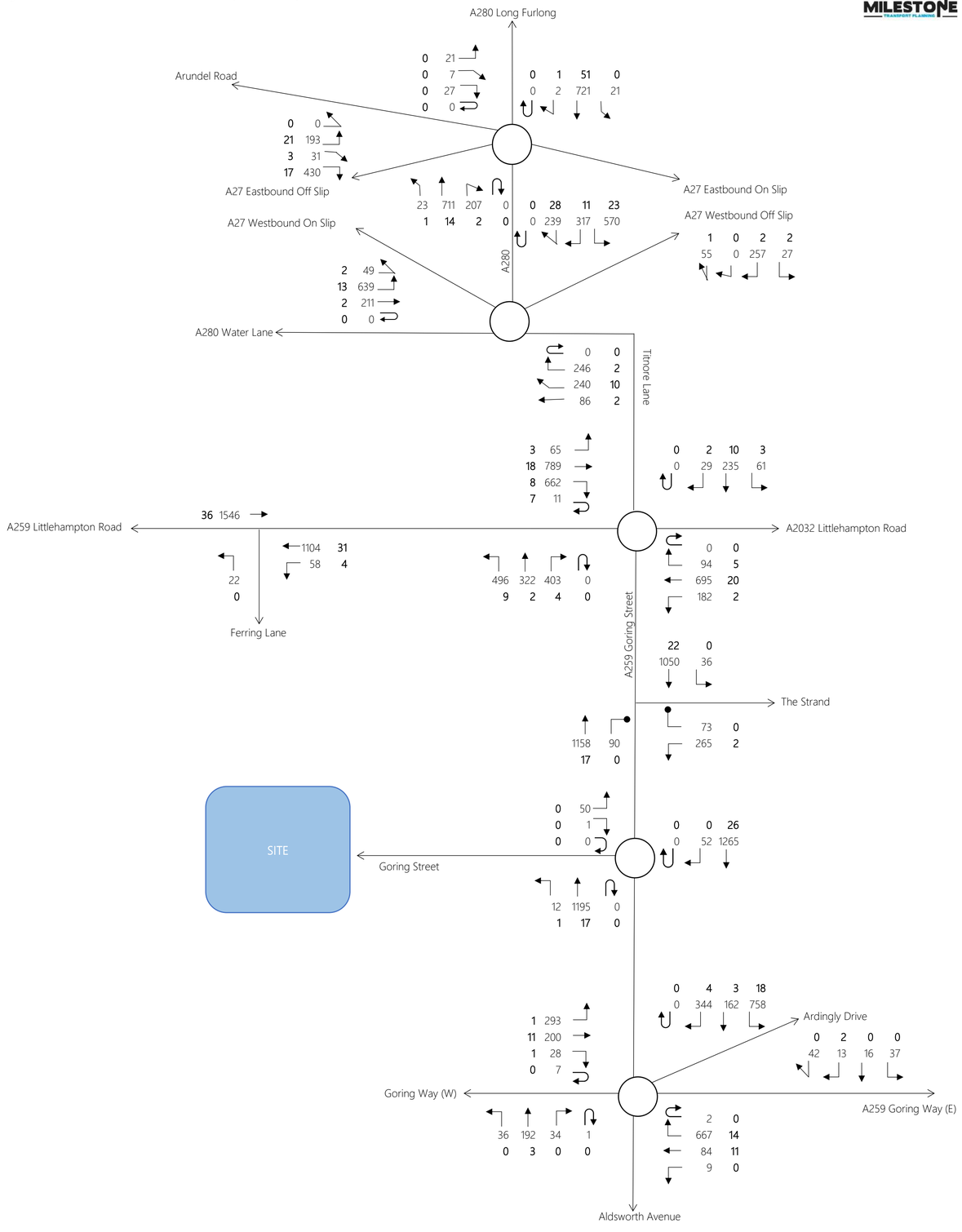


Figure 4 2024 Base Year Flows PM Peak (17:00 - 18:00)

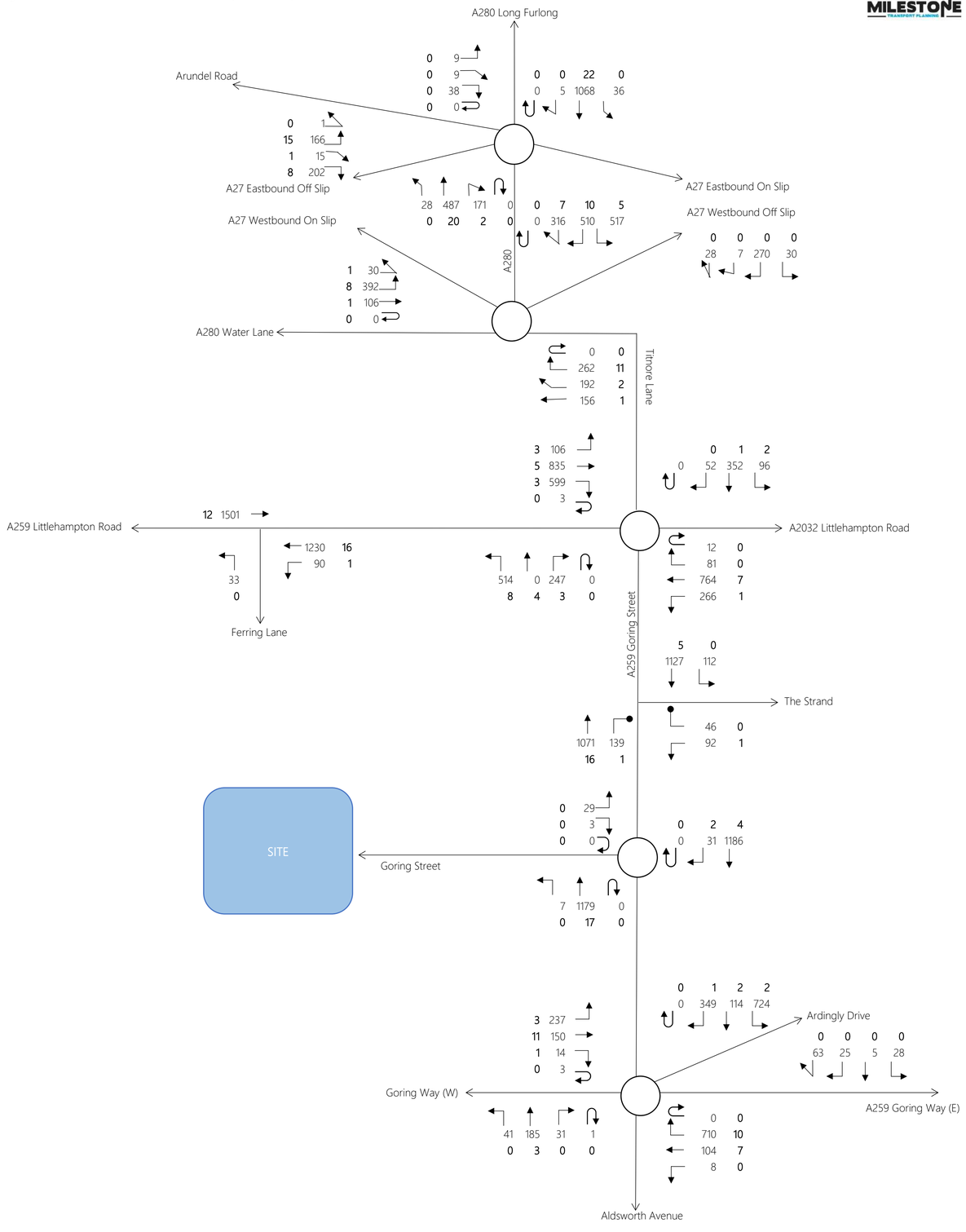


Figure 5 2033 Base Year Flows AM Peak (08:00 - 09:00)

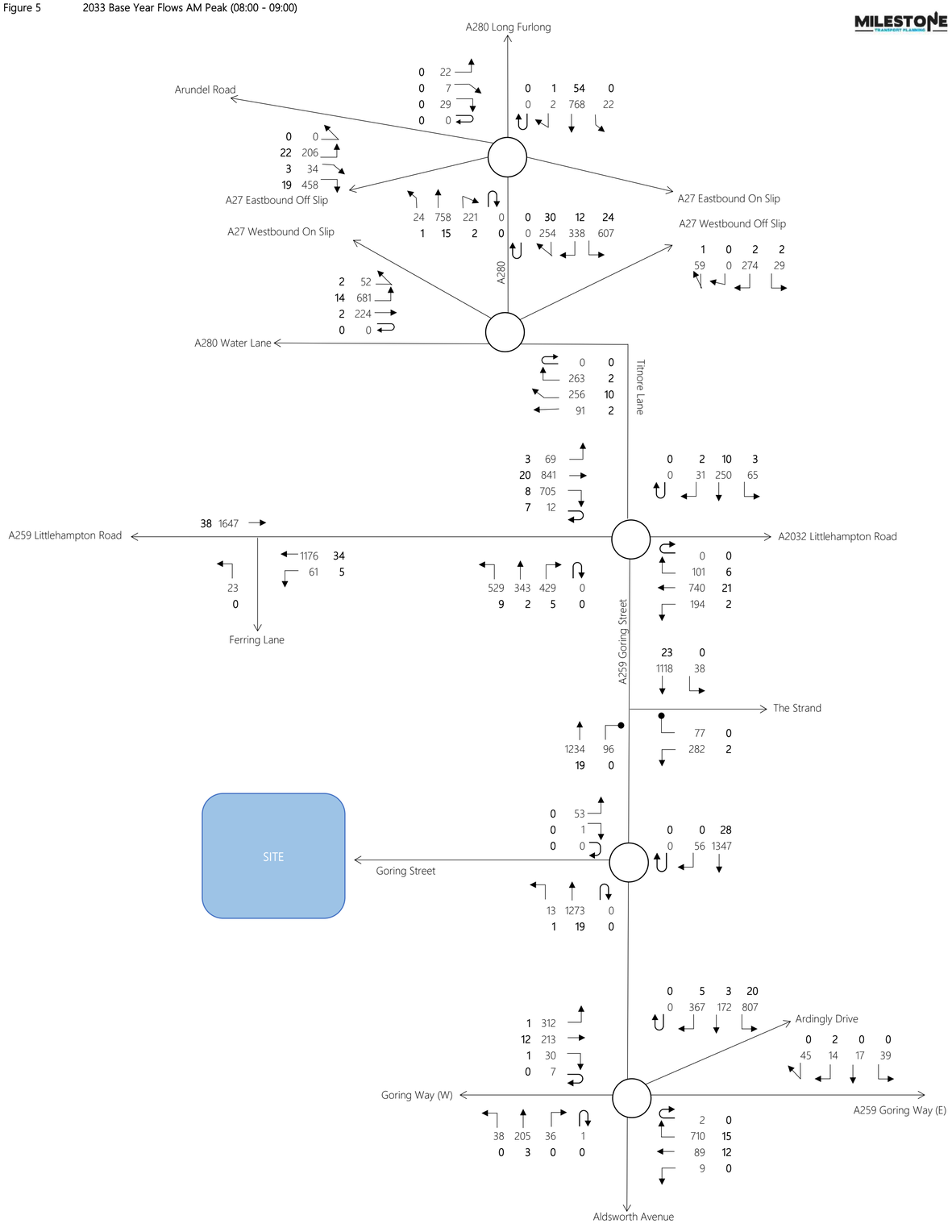


Figure 6 2033 Base Year Flows PM Peak (17:00 - 18:00)

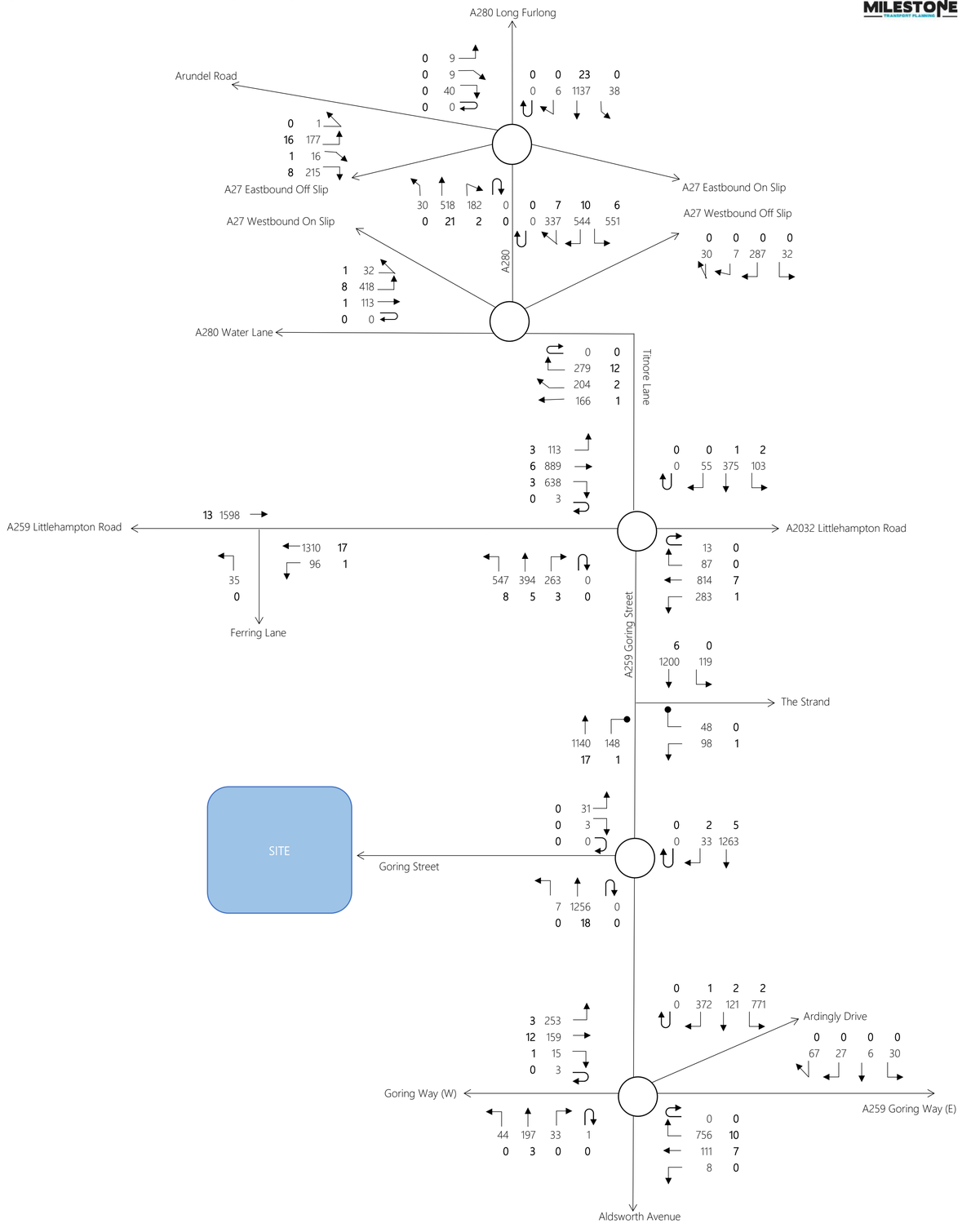


Figure 7 Committed Development Flows AM Peak (08:00 - 09:00)

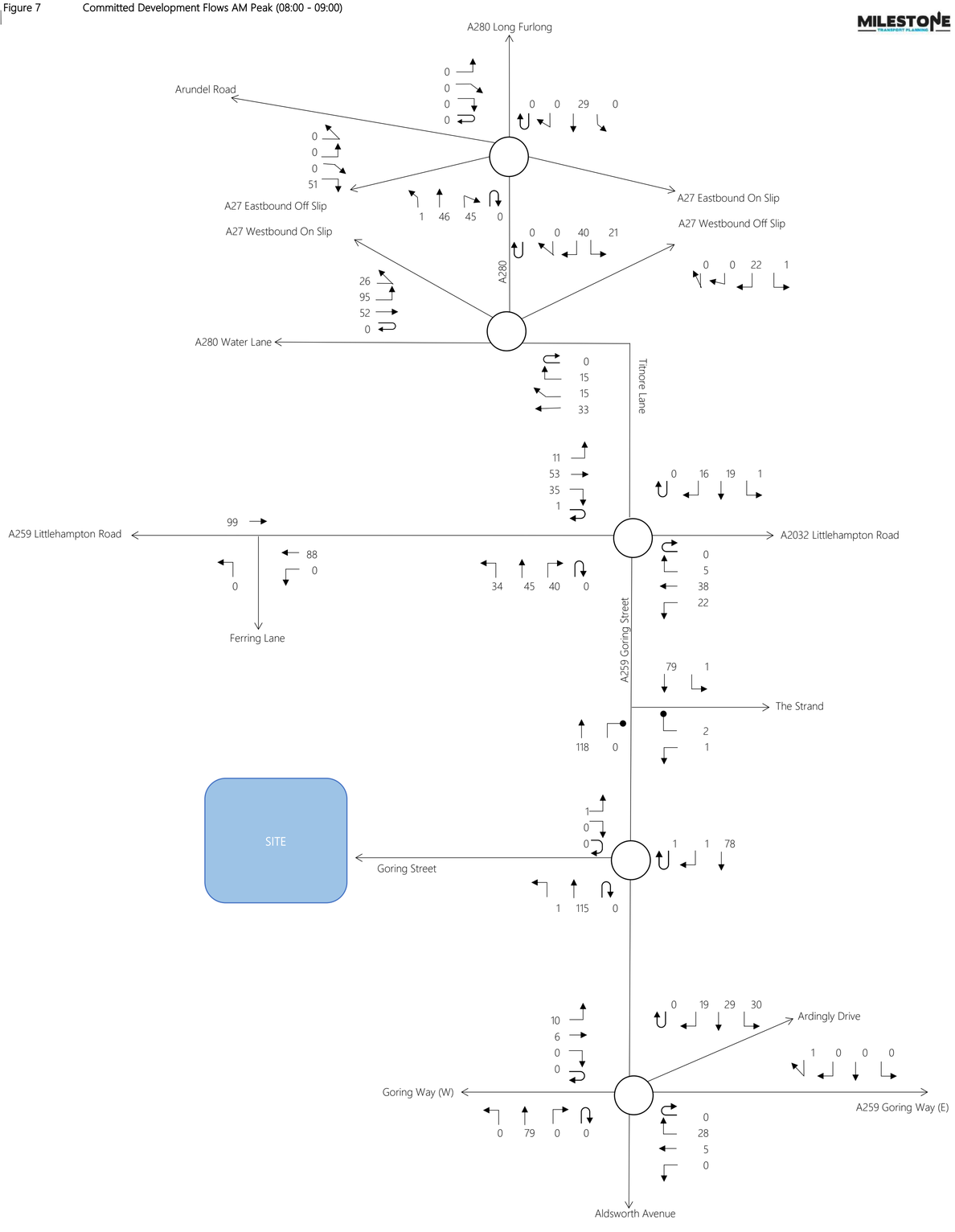


Figure 8 Committed Development Flows PM Peak (17:00 - 18:00)

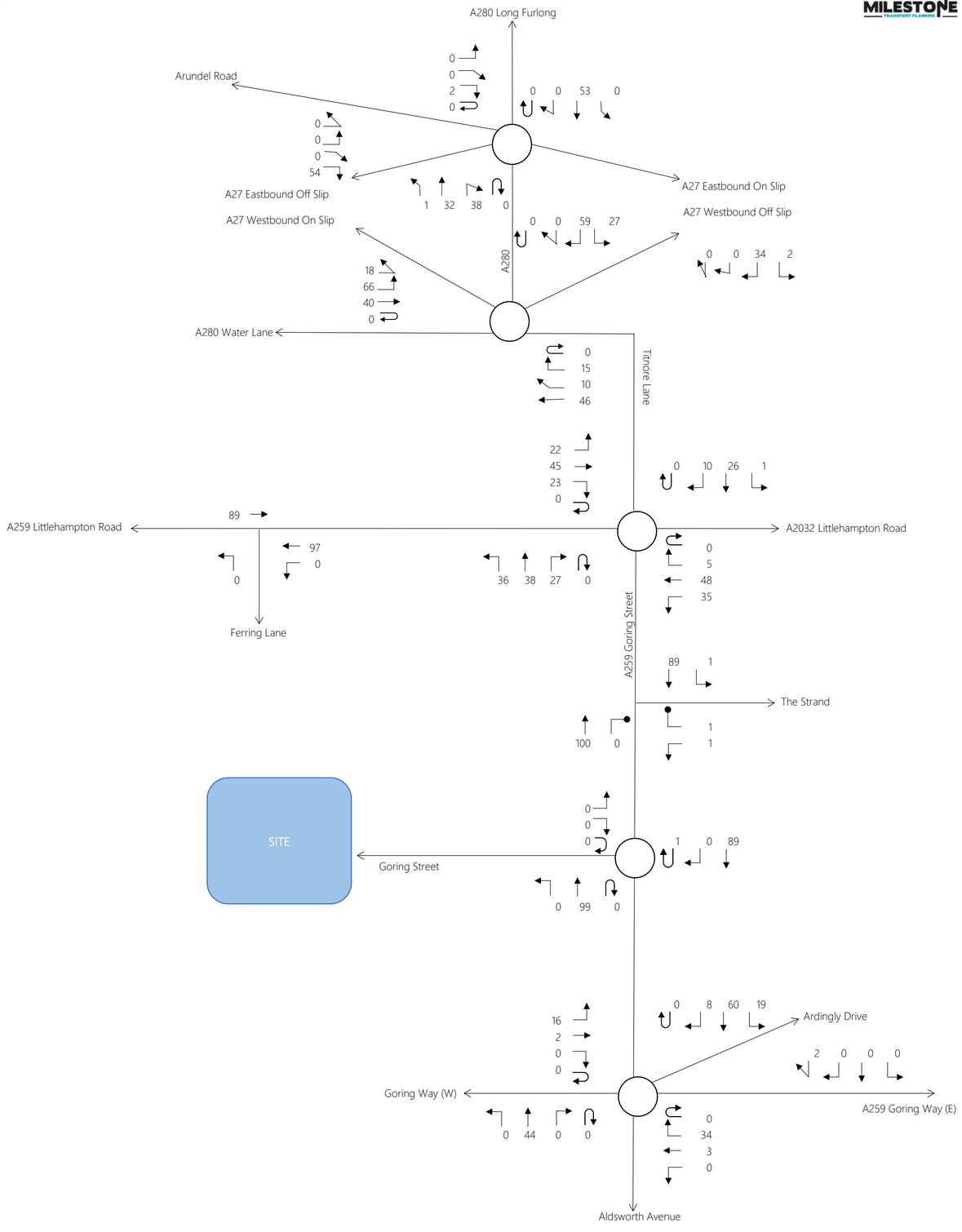


Figure 9 2024 Base + Committed Development Flows AM Peak (08:00 - 09:00)

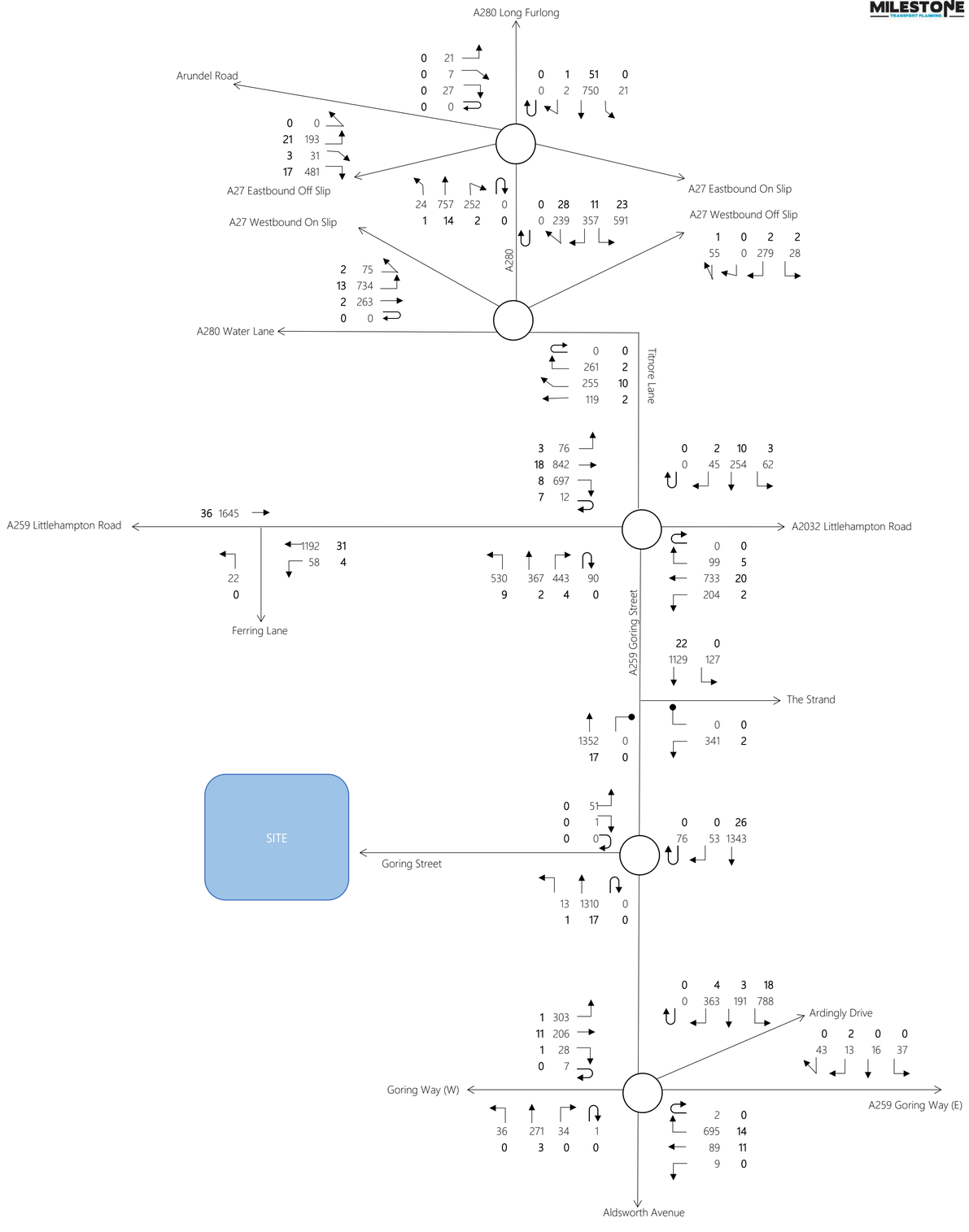


Figure 10 2024 Base + Committed Development Flows PM Peak (17:00 - 18:00)

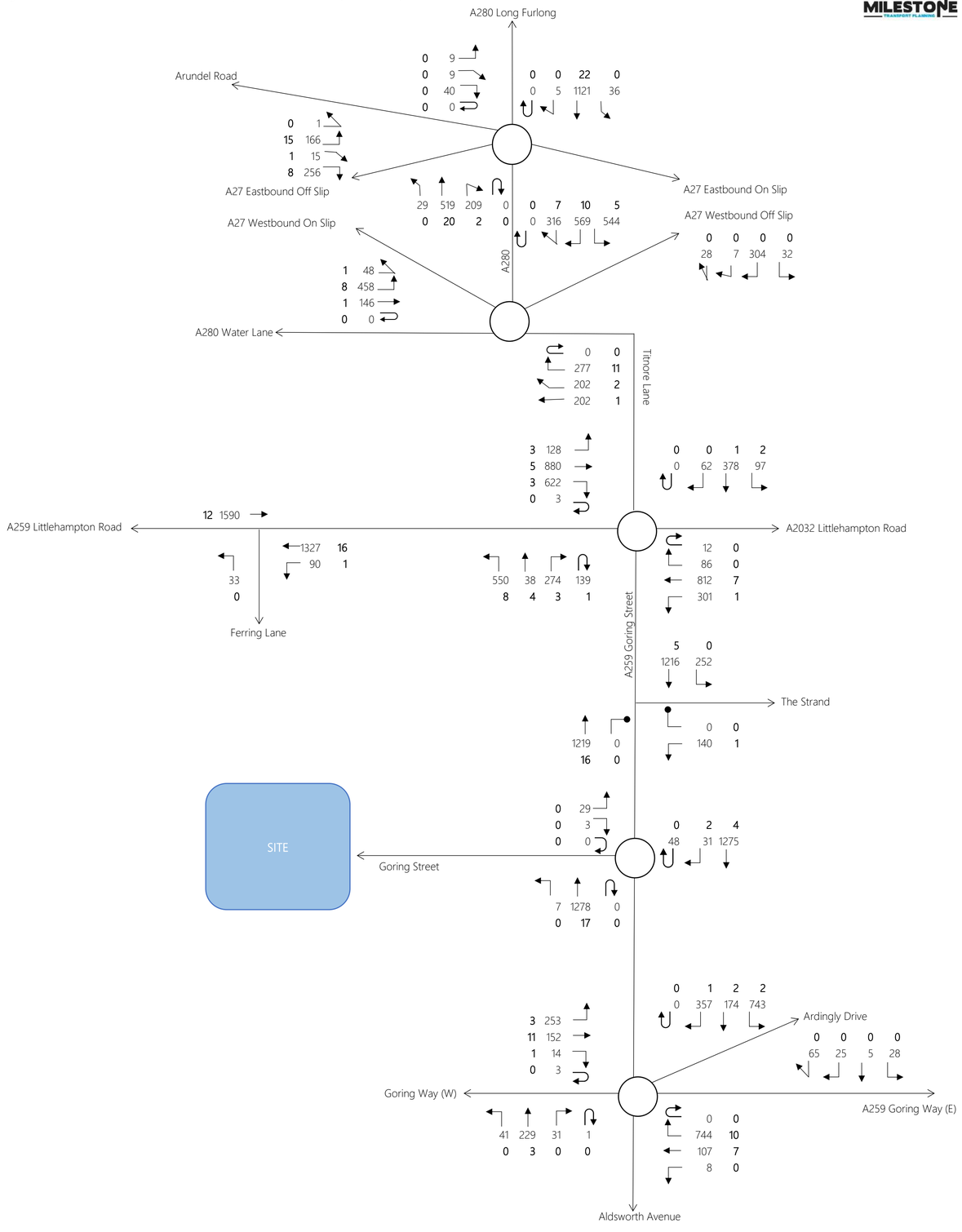


Figure 11 2033 Base + Committed Development Flows AM Peak (08:00 - 09:00)

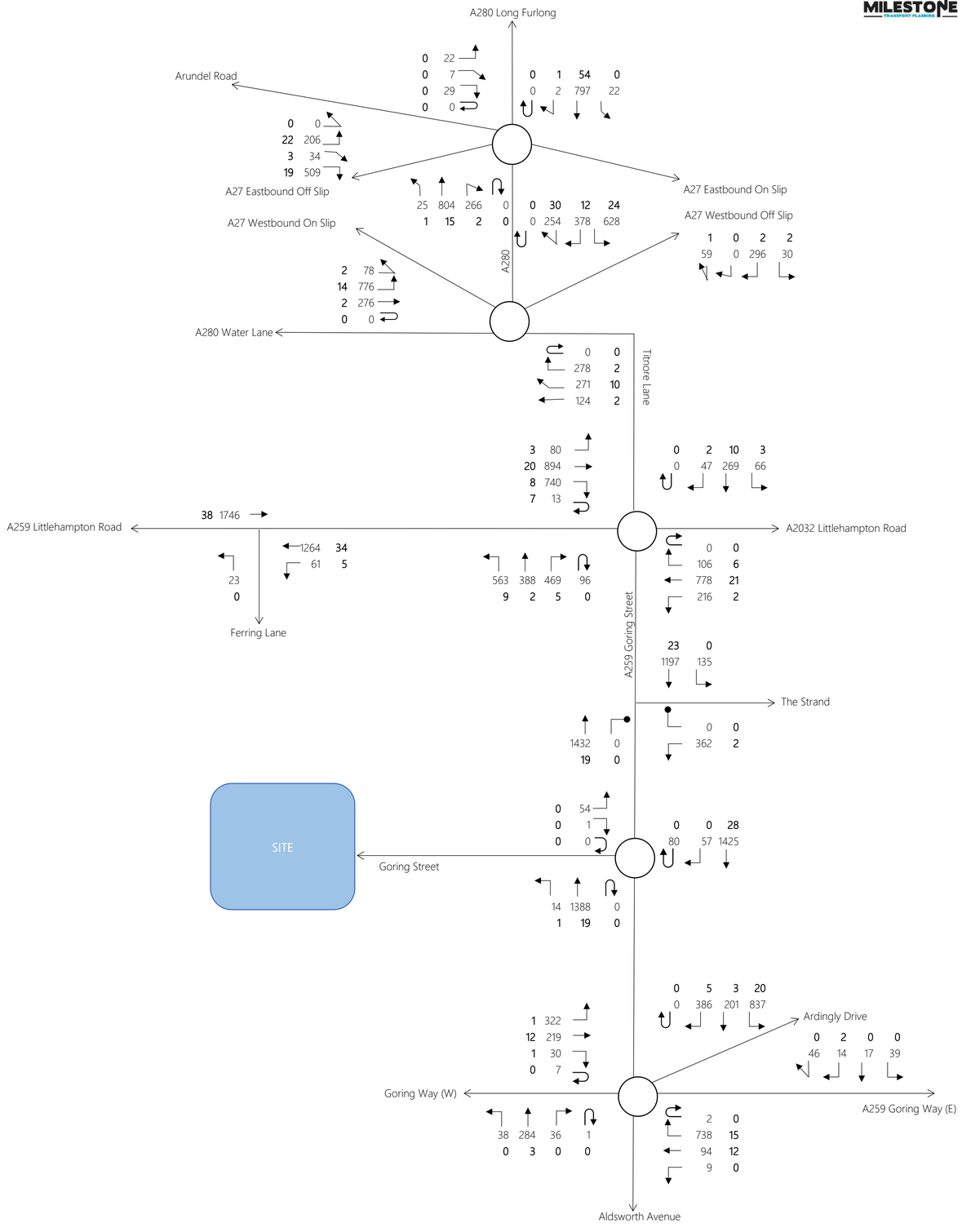


Figure 12 2033 Base + Committed Development Flows PM Peak (17:00 - 18:00)

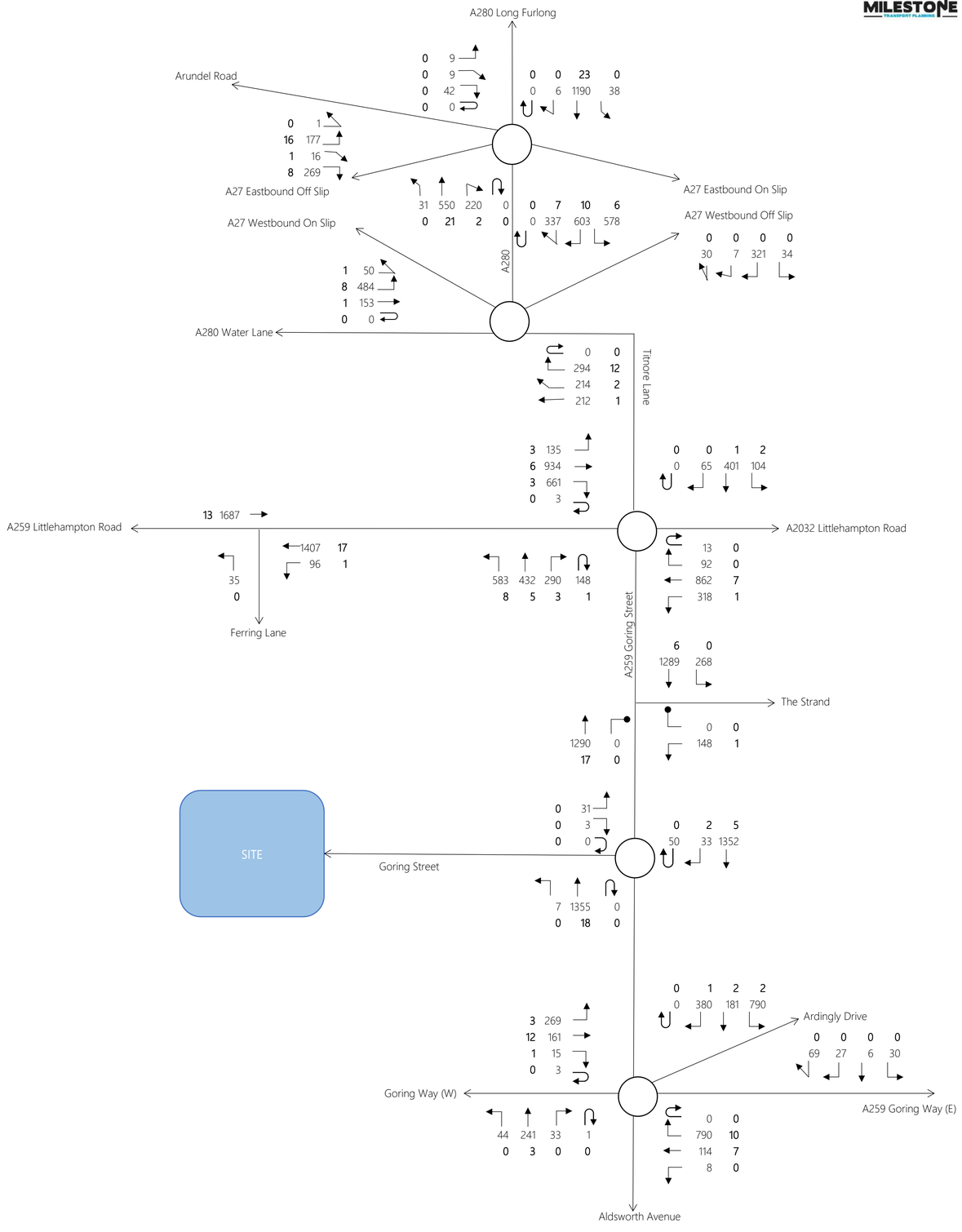


Figure 13 Development Distribution

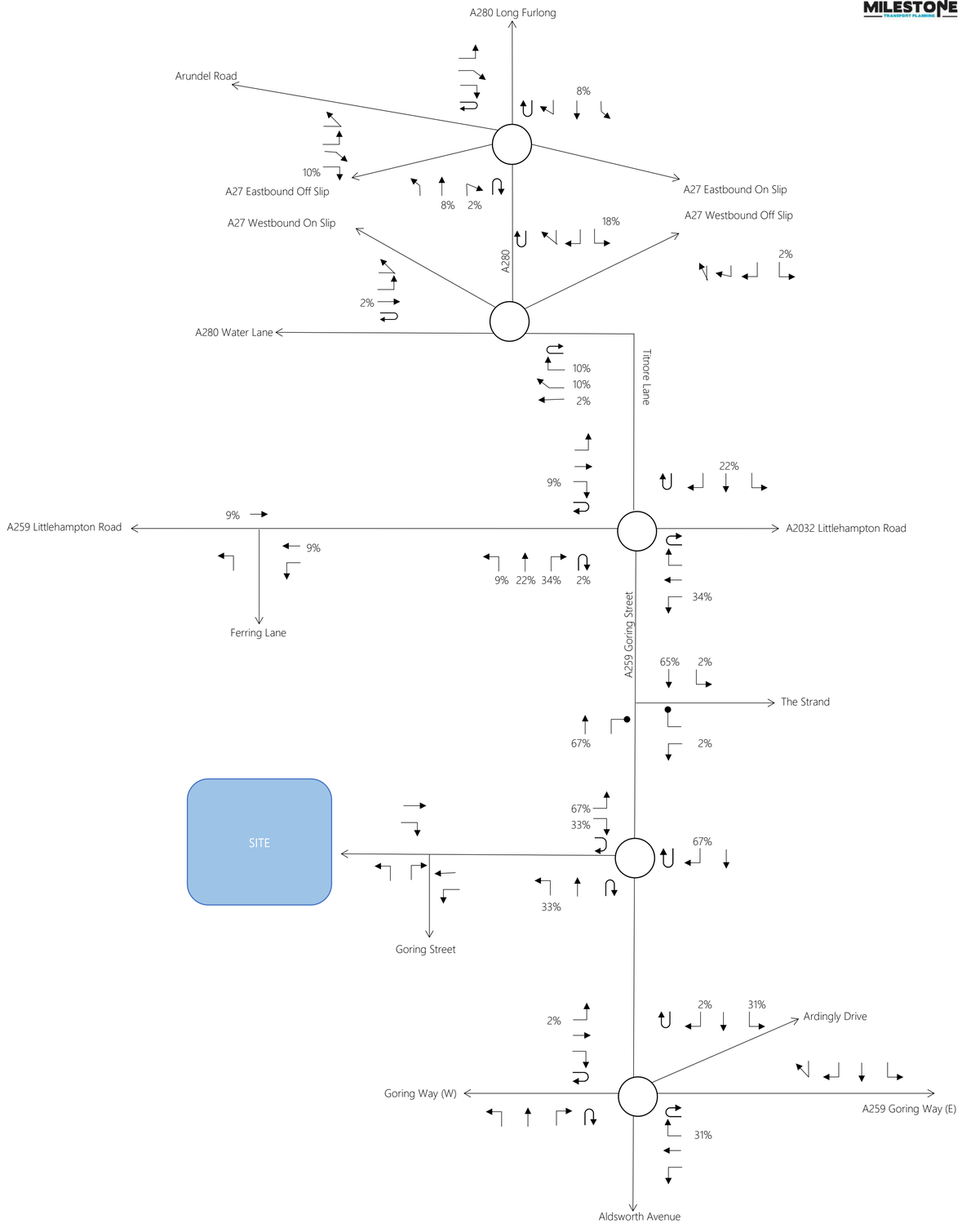


Figure 14 Residential Development Flows AM Peak (08:00 - 09:00)

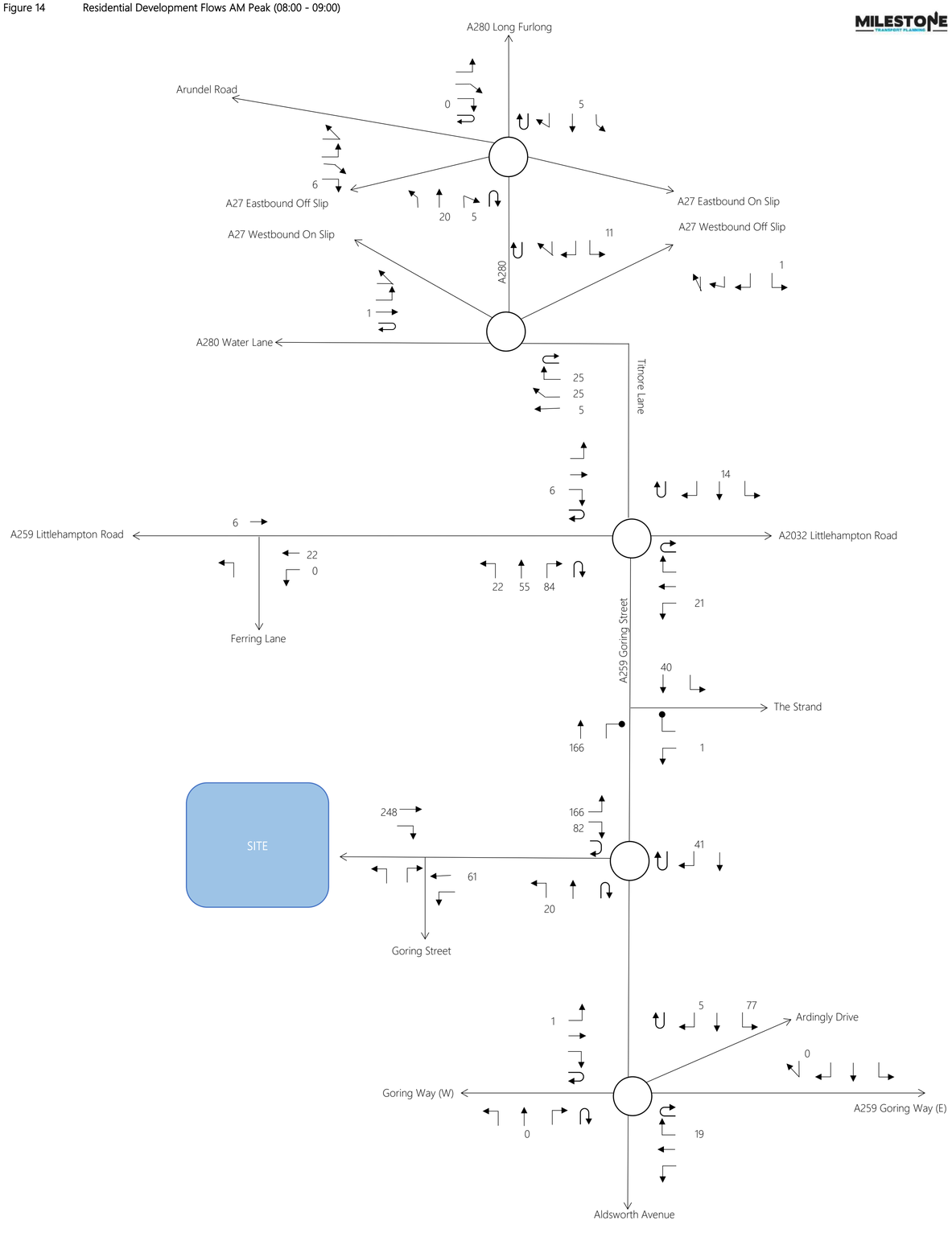


Figure 15 Residential Development Flows PM Peak (17:00 - 18:00)

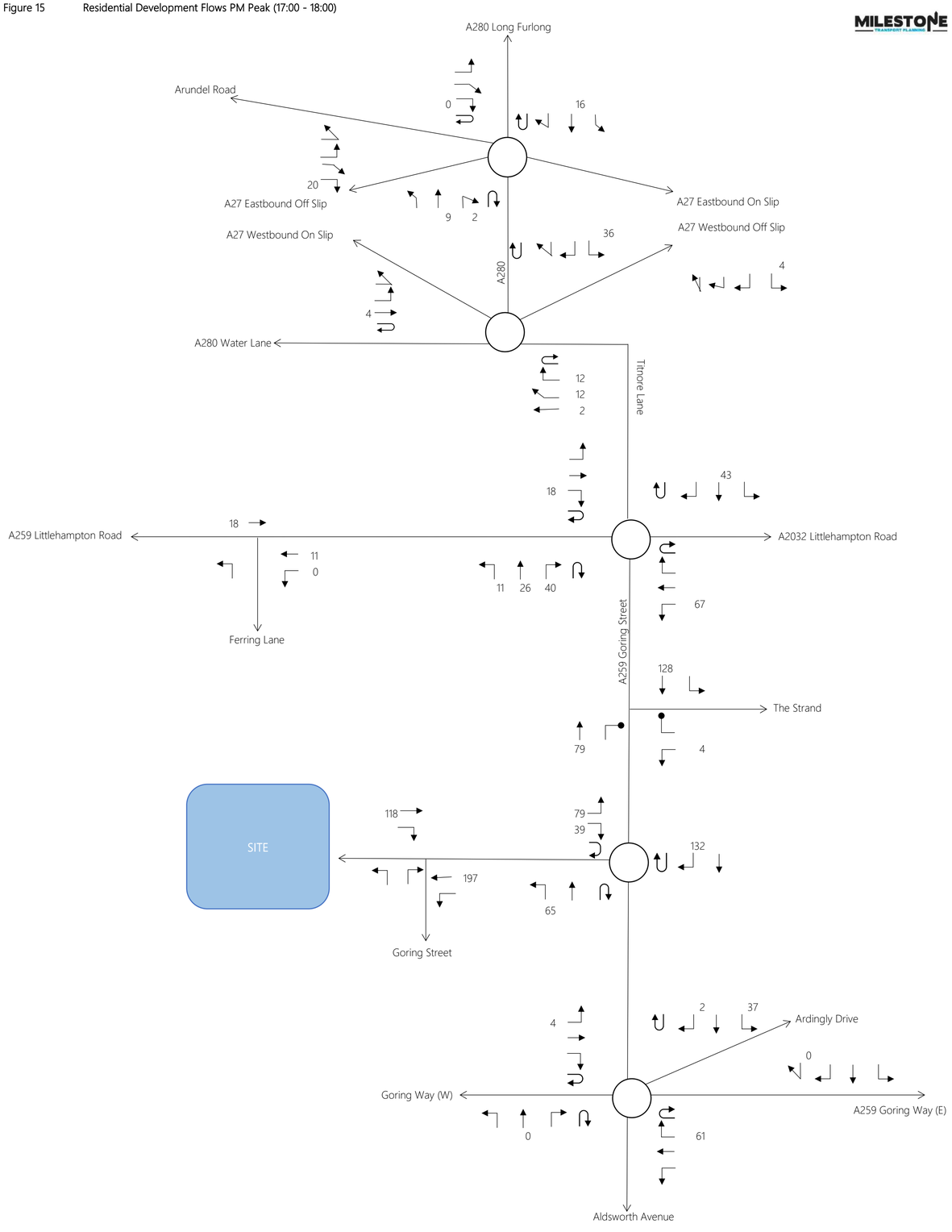


Figure 16 Retail Development Flows AM Peak (08:00 - 09:00)

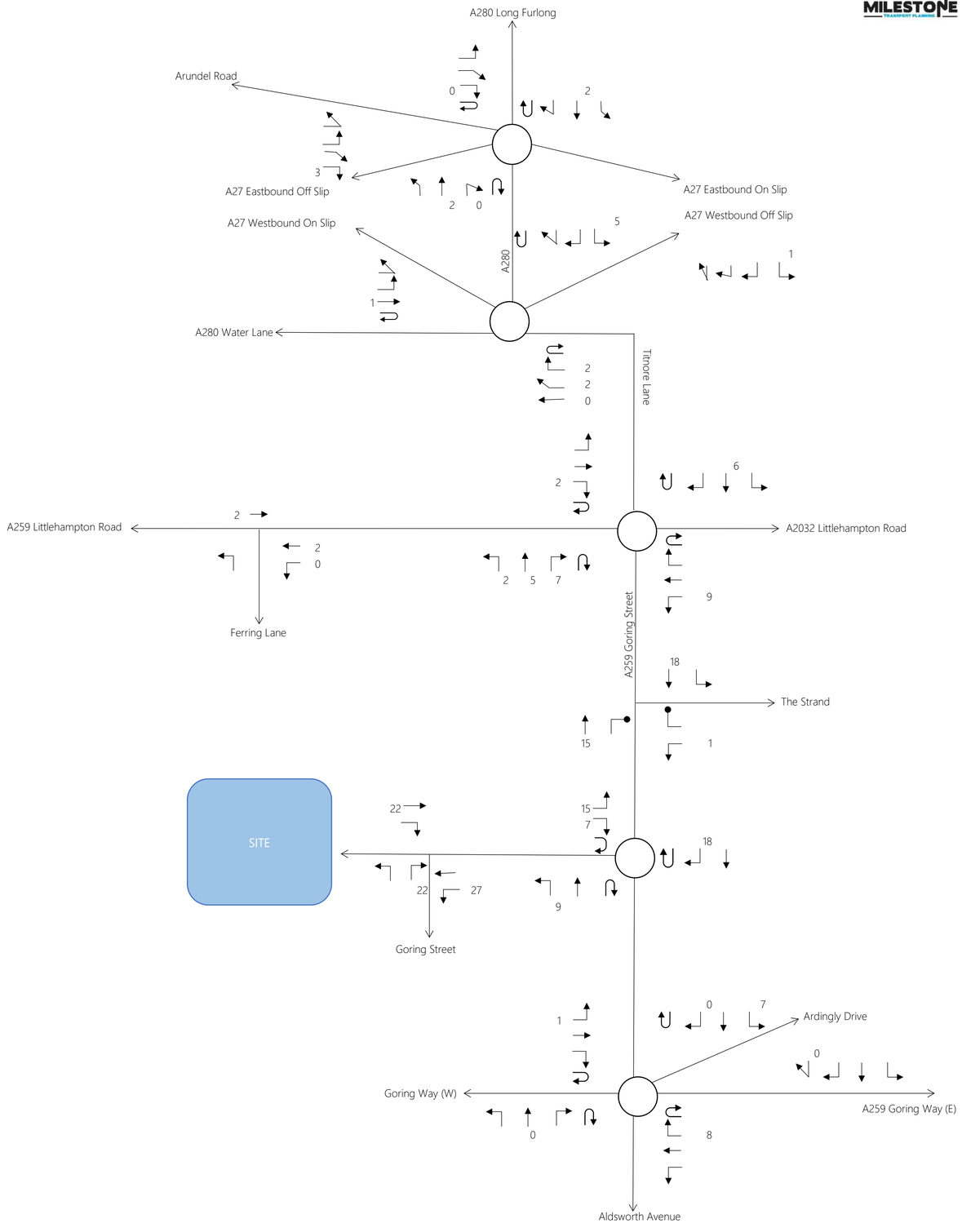


Figure 17 Retail Development Flows PM Peak (17:00 - 18:00)

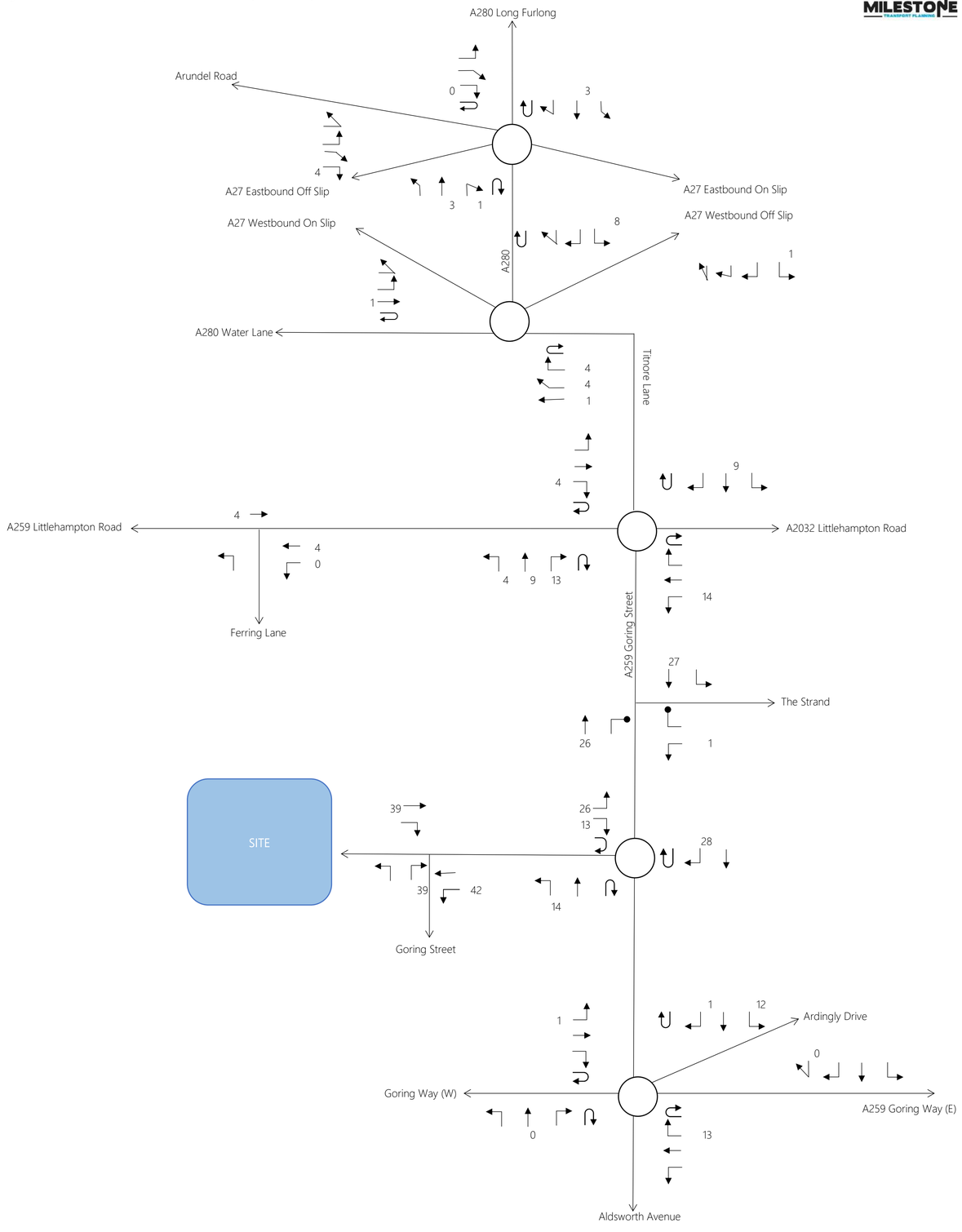


Figure 18 Creche Development Flows AM Peak (08:00 - 09:00)

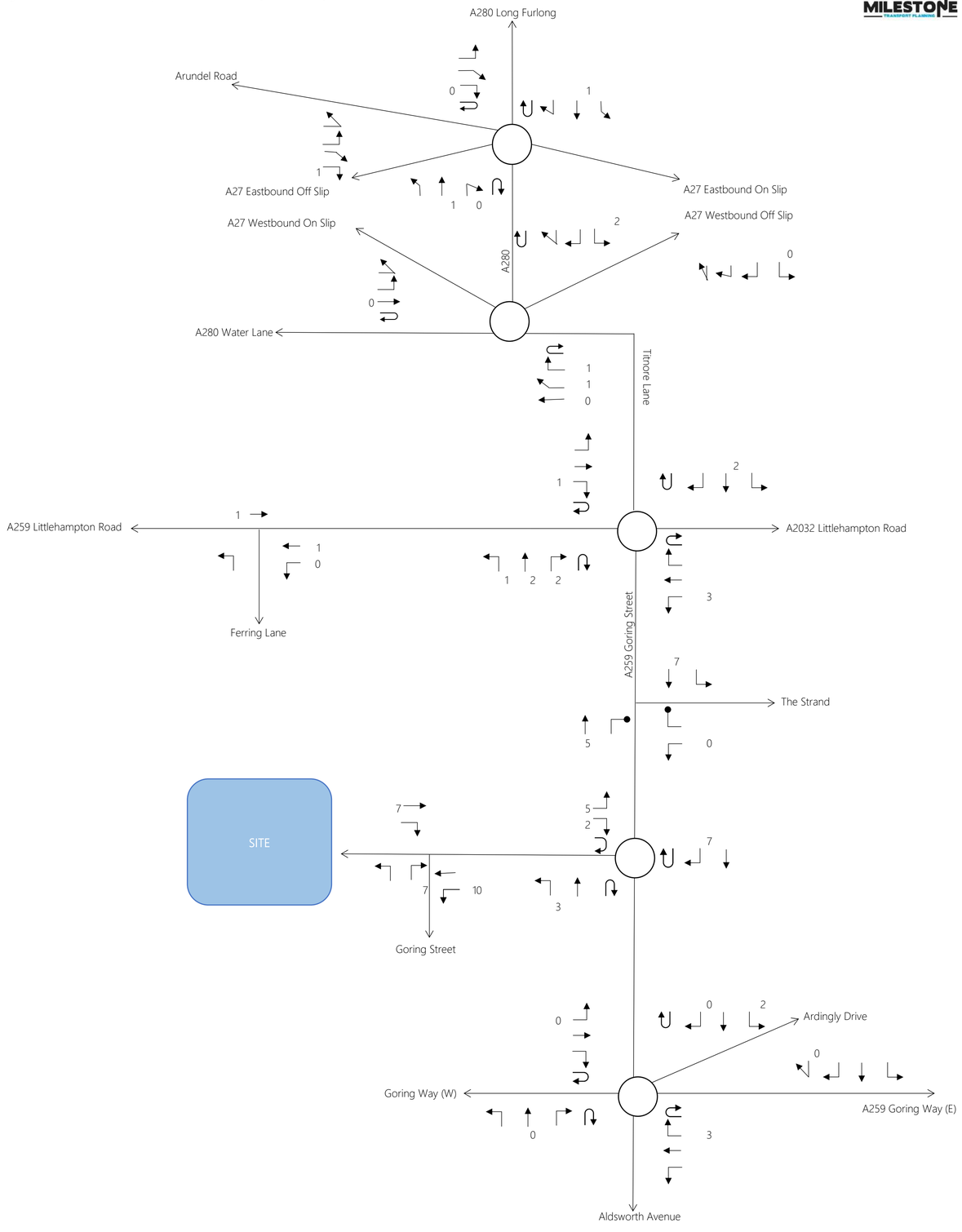


Figure 19 Creche Development Flows PM Peak (08:00 - 09:00)

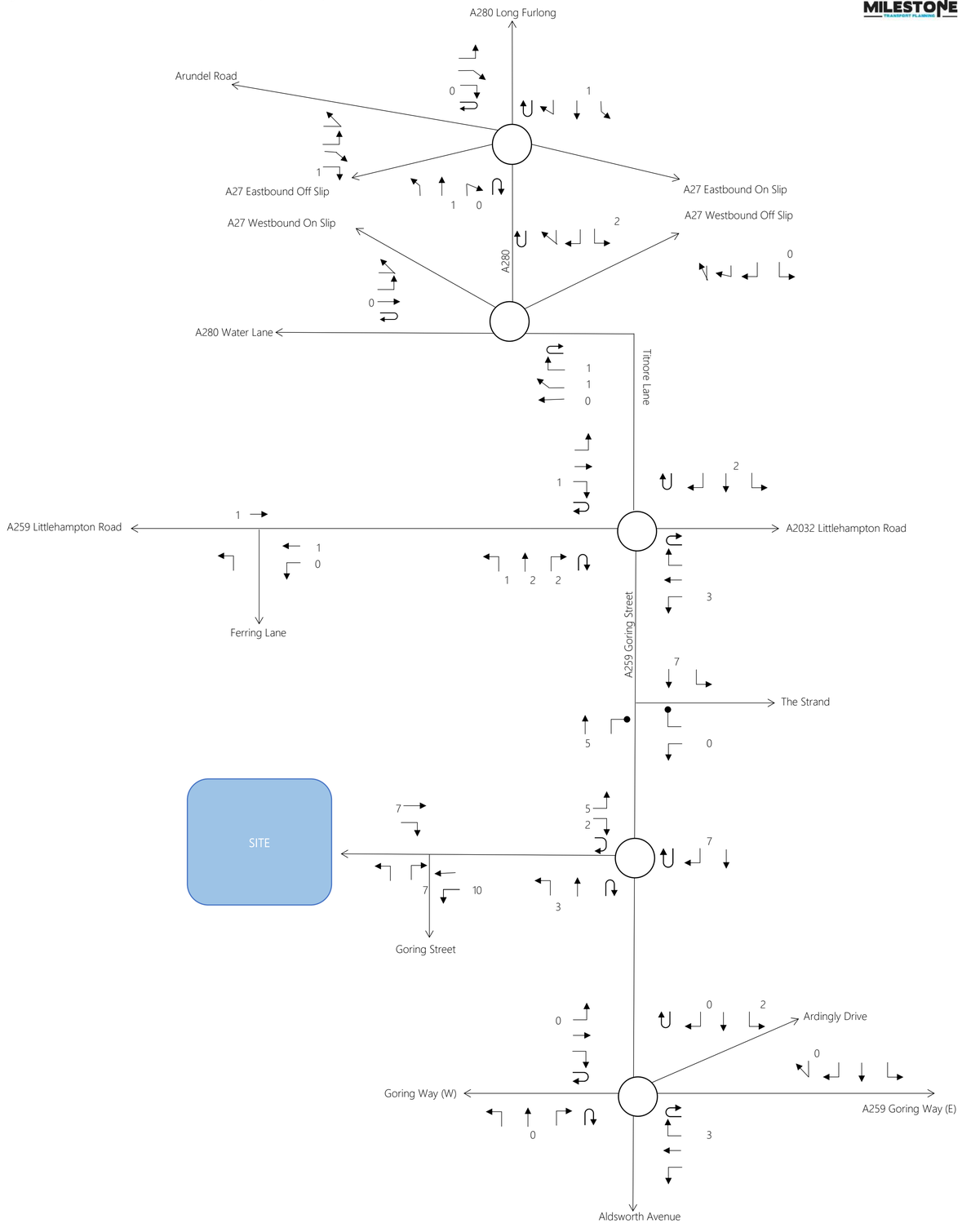


Figure 20 Total Development Flows AM Peak (08:00 - 09:00)

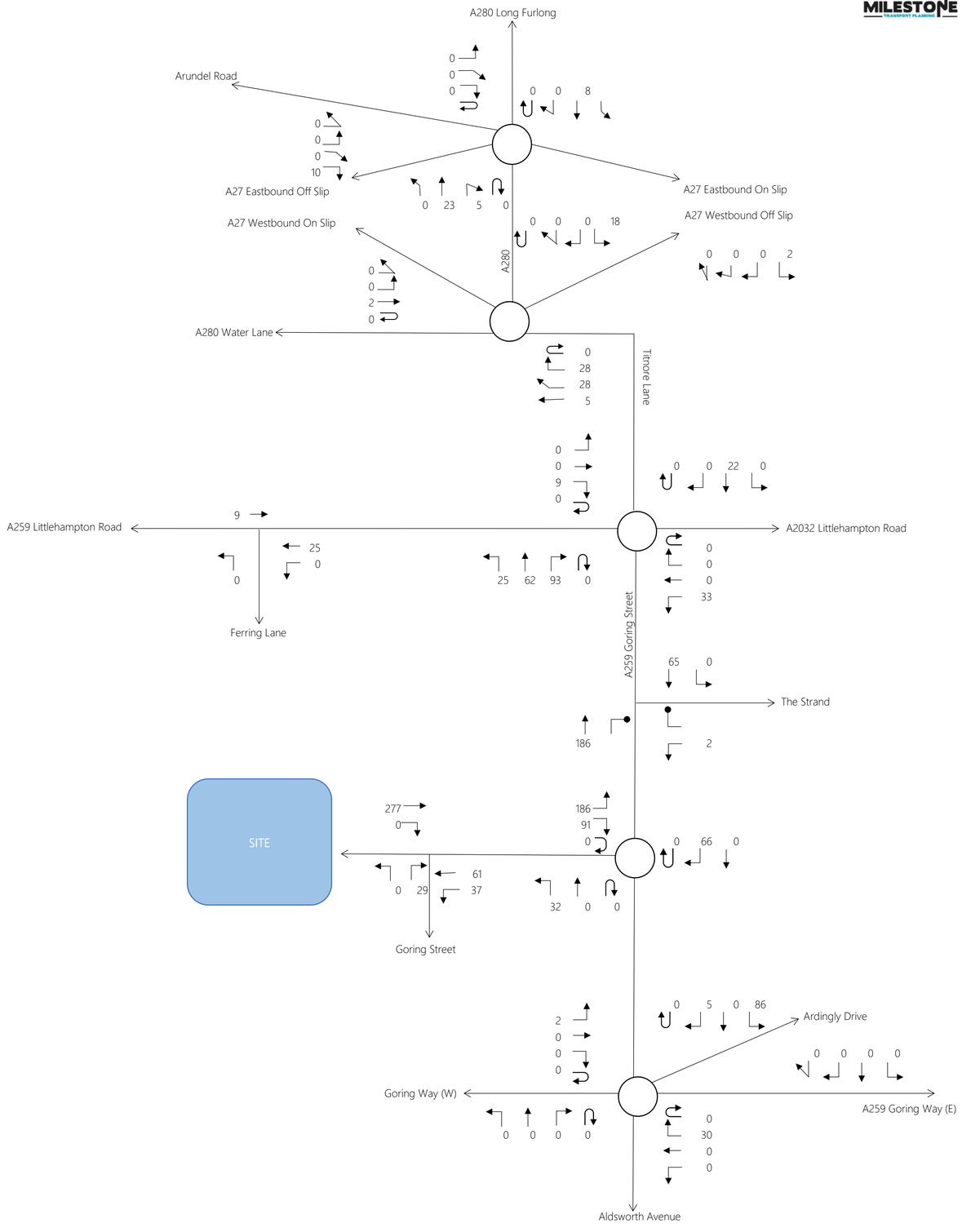


Figure 21 Total Development Flows PM Peak (17:00 - 18:00)

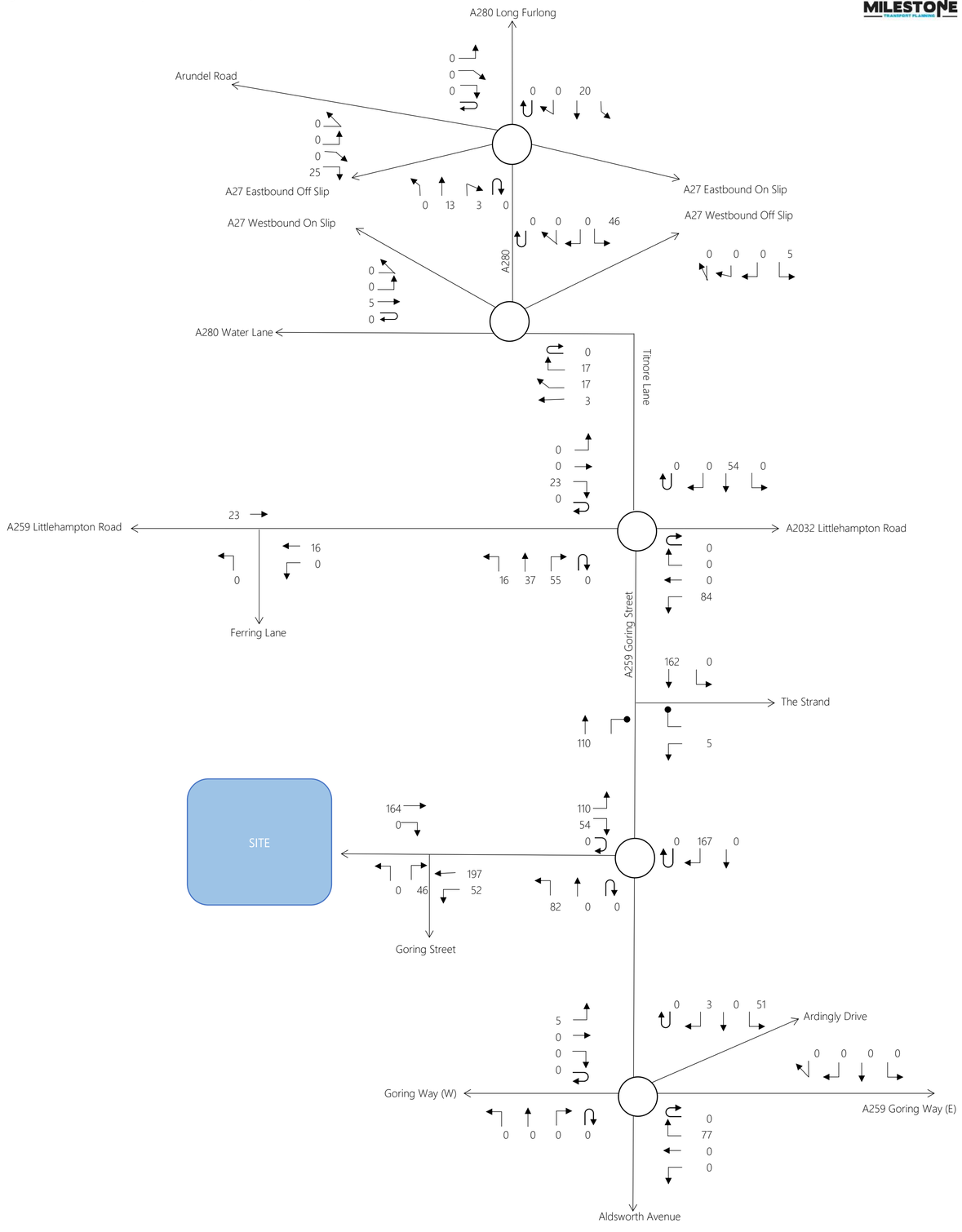


Figure 22 2024 Base + Development Flows AM Peak (08:00 - 09:00)

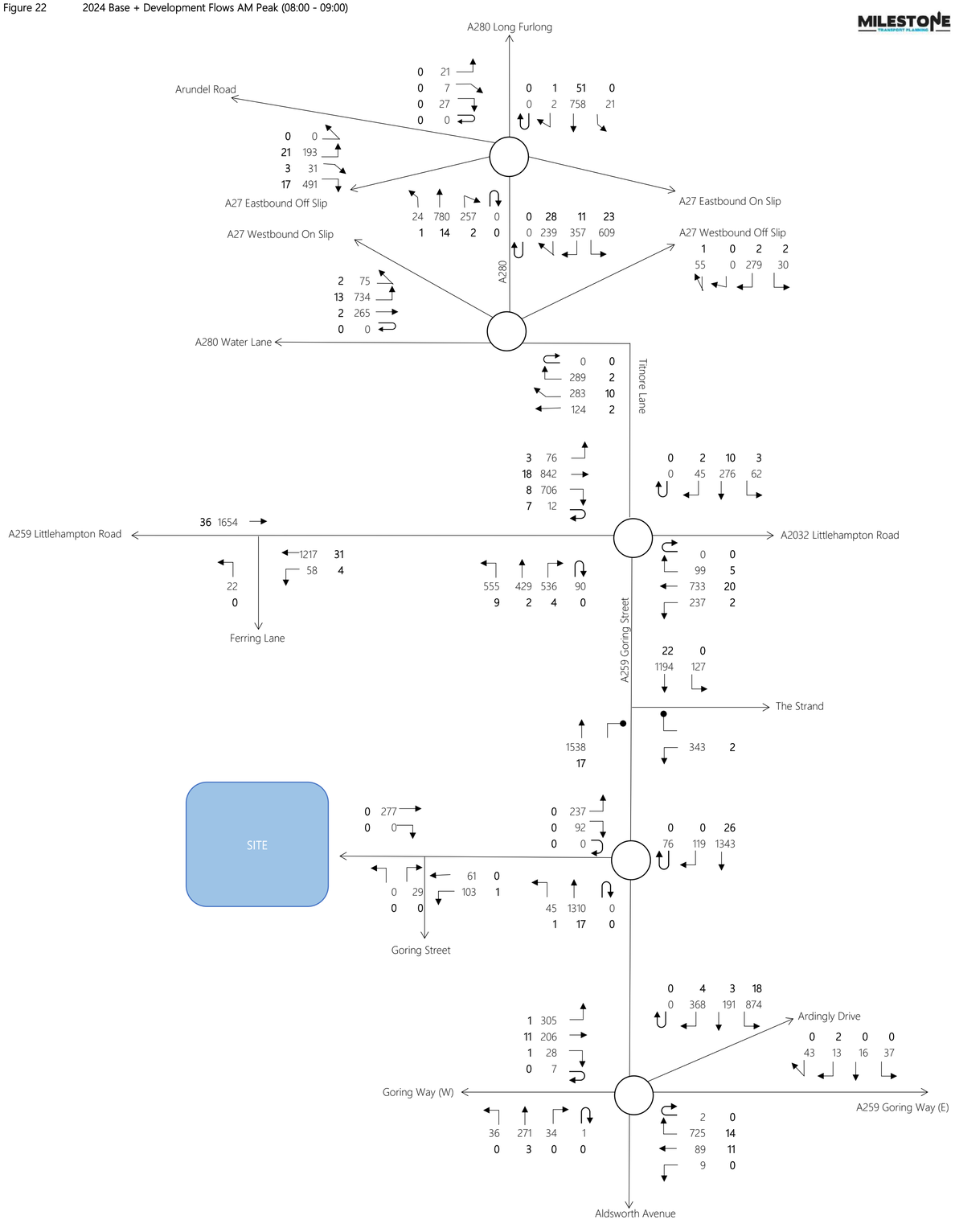


Figure 23 2024 Base + Development Flows PM Peak (17:00 - 18:00)

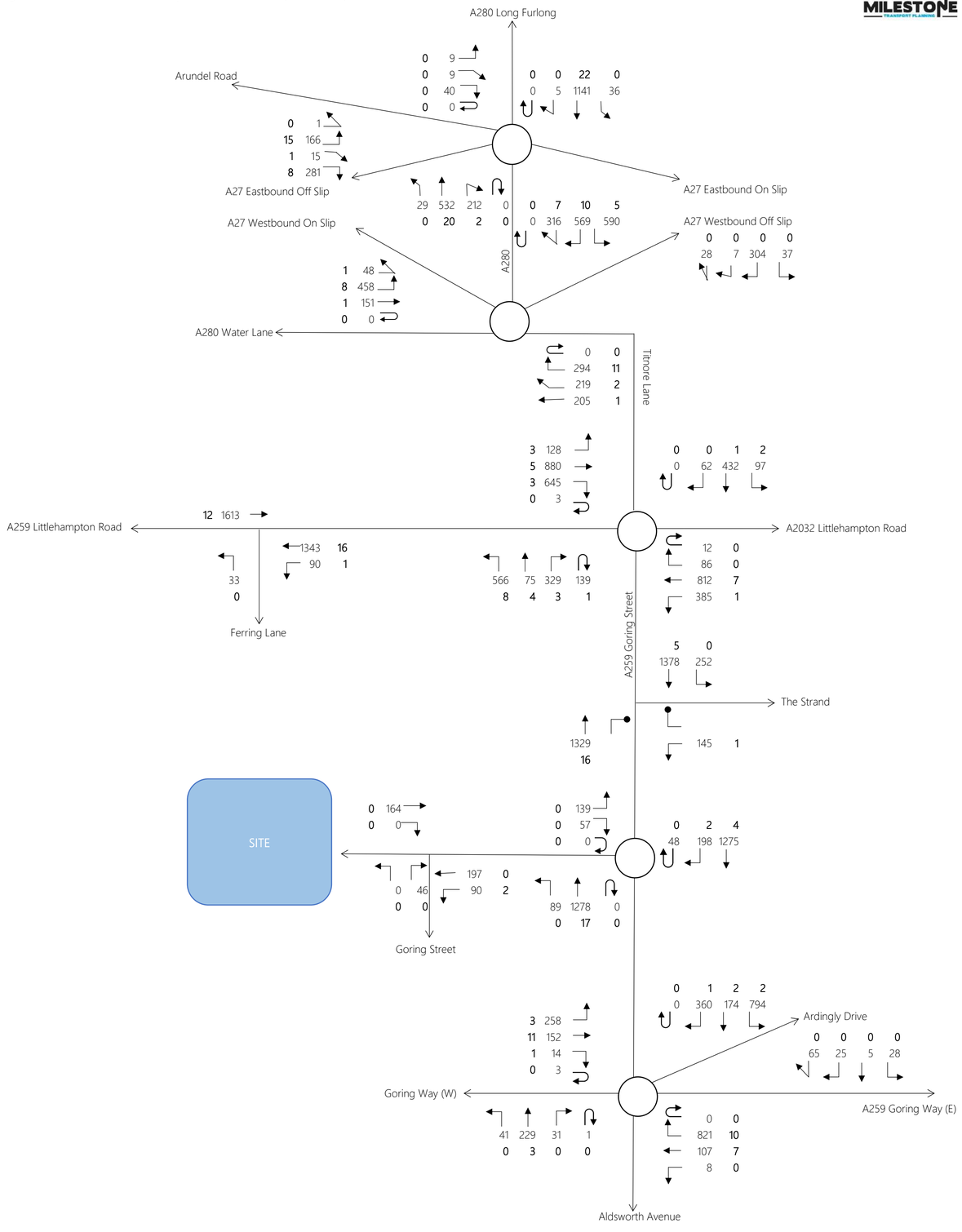


Figure 24 2033 Base + Development Flows AM Peak

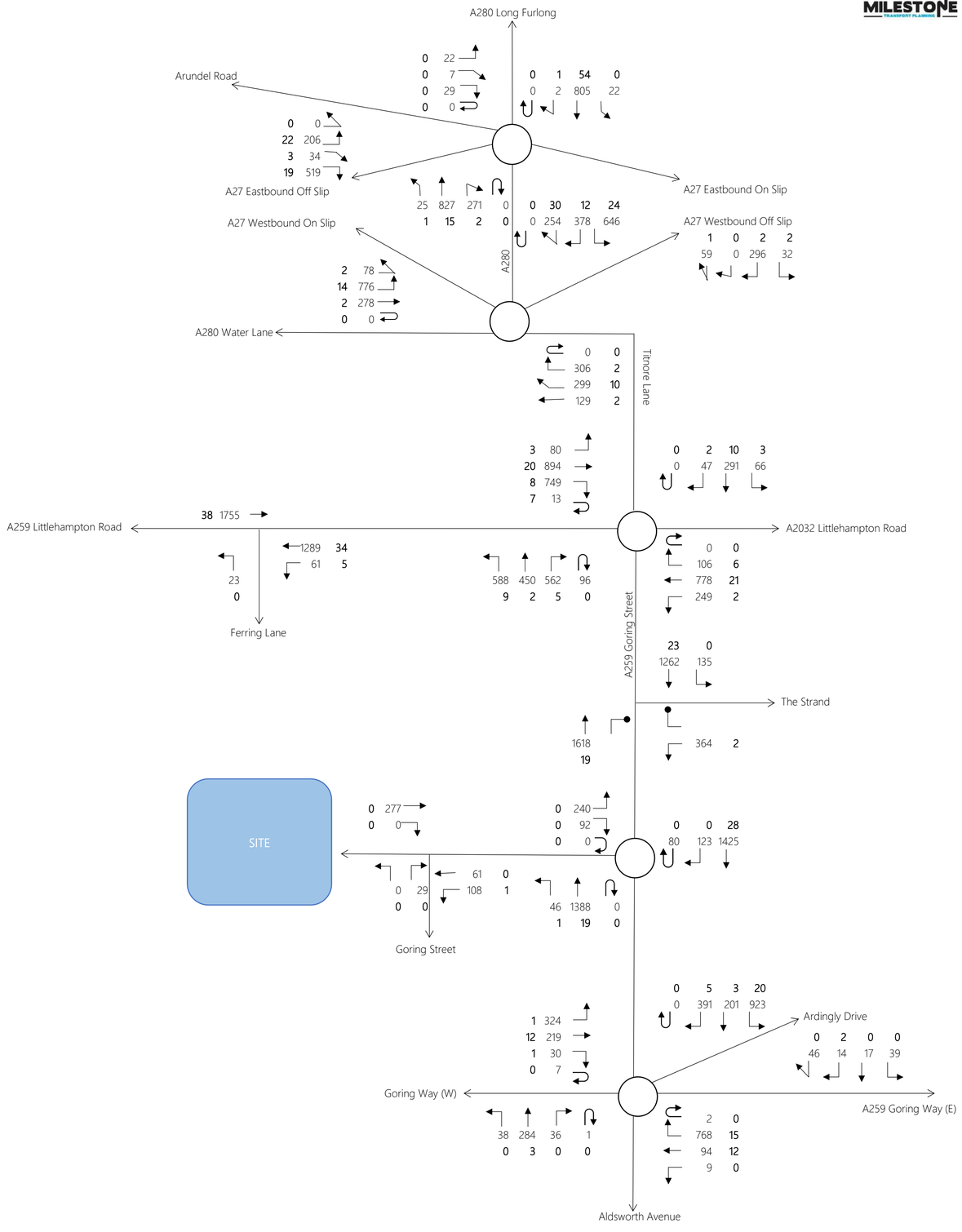
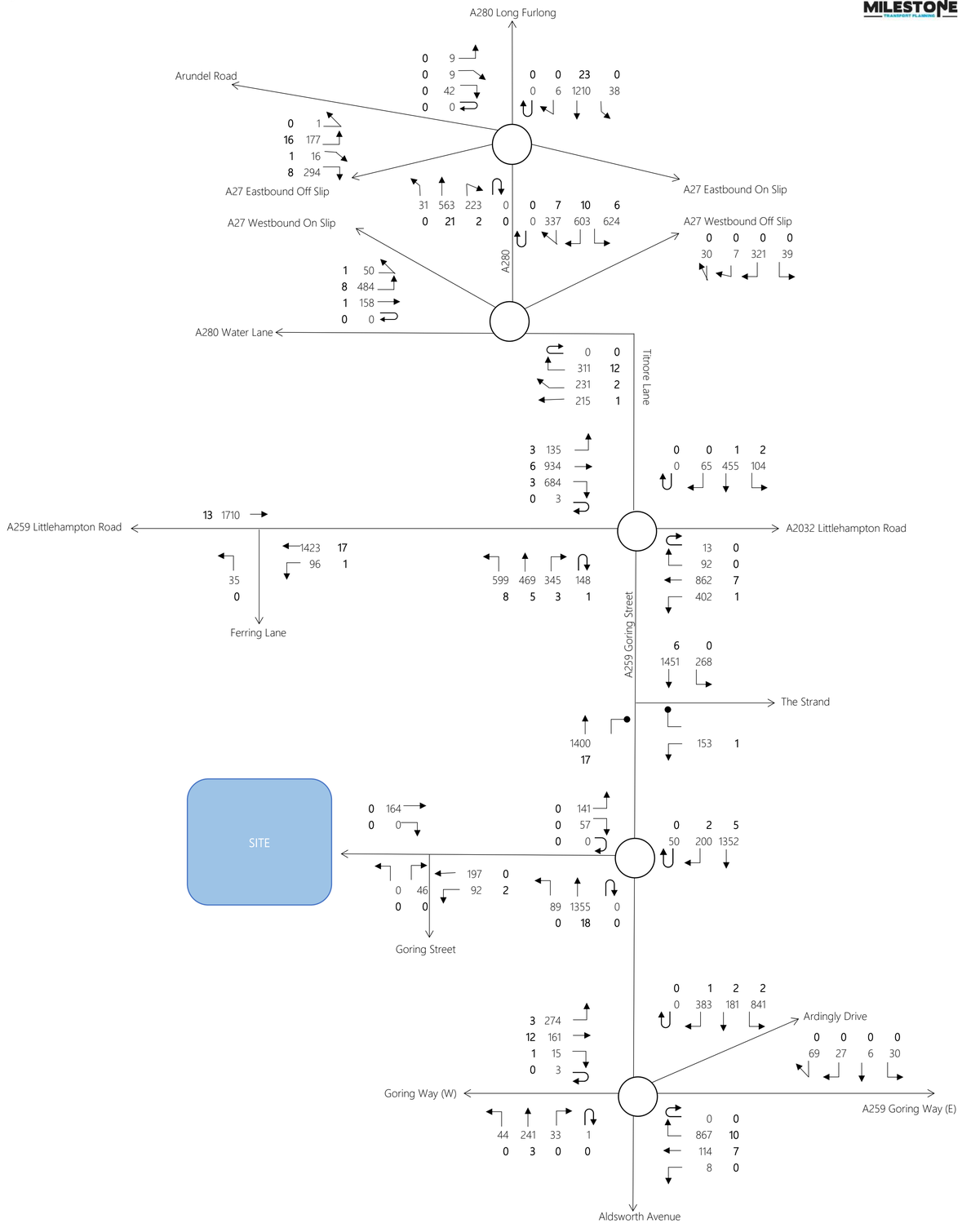


Figure 25 2033 Base + Development Flows PM Peak



Appendix 17

Worthing Borough Council

WORTHING LOCAL PLAN

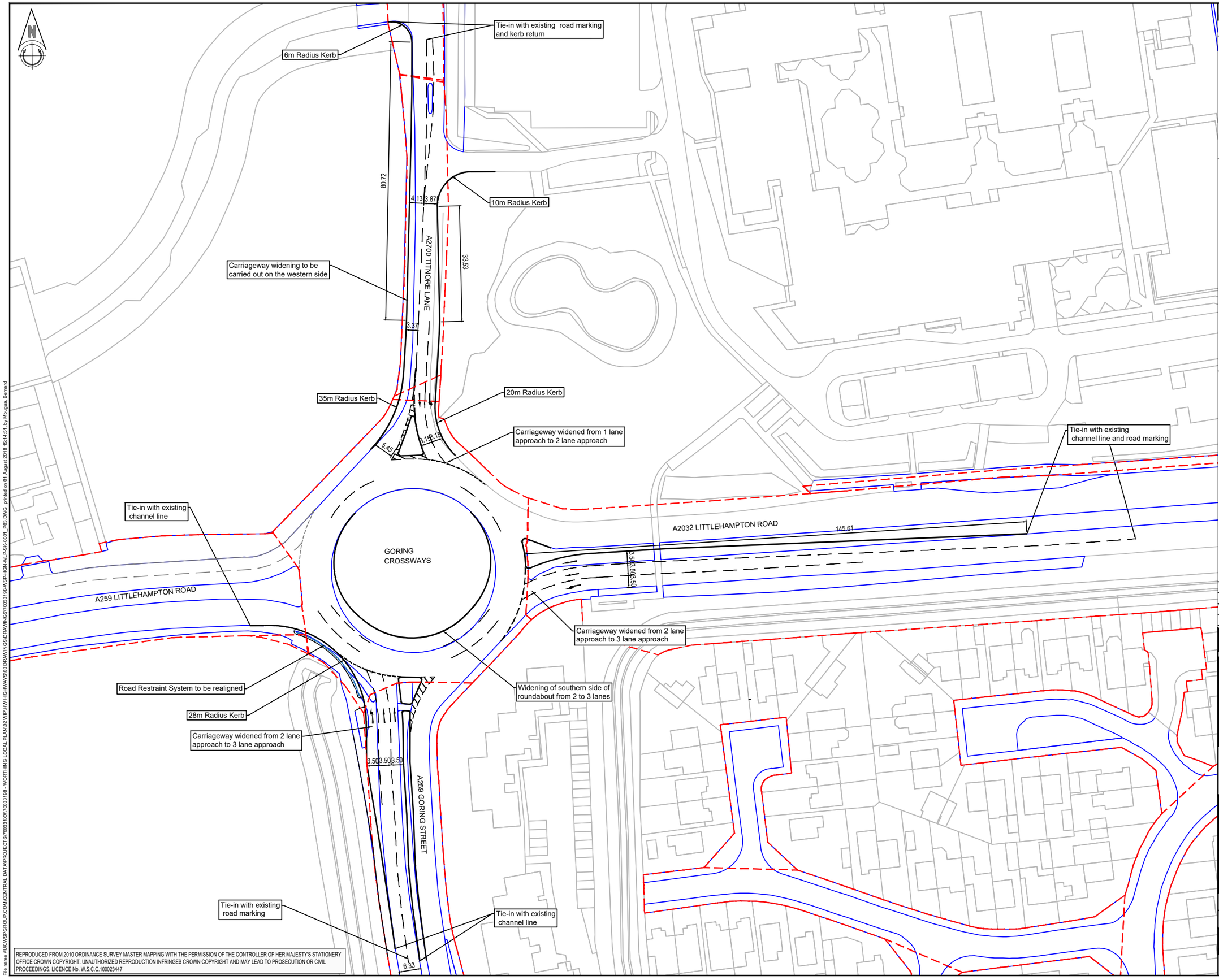
Transport Assessment

70033198
AUGUST 2018

CONFIDENTIAL

Appendix F

CONCEPT SCHEME DRAWINGS



DO NOT SCALE

NOTES:
1. ALL DIMENTIONS ARE IN METERS UNLESS NOTED OTHERWISE.

KEYPLAN:

KEY:

- HIGHWAY BOUNDARY
- EXISTING CHANNEL LINES
- DESIGN
- ROAD RESTRAINT / VRS

R	DATE	BY	DESCRIPTION	CHK	APP
P03	31/07/2018	BM	THIRD ISSUE	RS	RS
P02	16/03/2018	NG	SECOND ISSUE	DR	DB
P01	27/02/2018	NG	FIRST ISSUE	RG	DR

DRAWING STATUS: WORK IN PROGRESS

wsp
4th Floor, 6 Devonshire Square, London, EC2M 4YE, UK
T+ 44 (0) 207 337 1700, F+ 44 (0) 207 337 1701
wsp.com

CLIENT: WORTHING BOROUGH COUNCIL

SITE/PROJECT: WORTHING LOCAL PLAN TRANSPORT STUDY

TITLE: APPENDIX F- CONCEPT SCHEME DRAWING A259/ A2032 GORING CROSSWAYS

SCALE @ A1:	CHECKED:		APPROVED:
1:200	RG		DR
PROJECT NO:	DESIGNED:	DRAWN:	DATE:
70033198	NK	NK	31 July 2018

DRAWING No: 70033198-WSP-HGN-WLP-SK-0001 REV: P03

2 London Square
Cross Lanes
Guildford, Surrey
GU1 1UN

wsp.com

Drawings

INDICATIVE

A259 / The Strand
Converted to left in
/ left out junction

New Toucan Crossing

Access to
Development Site

Goring Street closed
to provide improved
pedestrian / cycle
access

New Goring Street Link

Goring Street
narrowed to provide
improved pedestrian
/ cycle access to
Goring Station

Proposed Station / Local
Neighbourhood Centre Car
Park

Station Cycle parking

Provision of uncontrolled
pedestrian crossing.

Station Motorcycle
parking

Disabled parking maintained
on Station forecourt

Notes

1. Do not scale from this drawing. All dimensions are in metres unless stated otherwise.

Drawing Revisions

Rev:	Drn:	Date:	Details	Chk:
-	IP	12/02/2019	First issue	TW
A	ZM	03/07/2020	Revised drawing	TW

Client
Persimmon Homes Ltd
(Thames Valley)

Project
Land North West of Goring Station, Goring by Sea

Title
Proposed Access Strategy

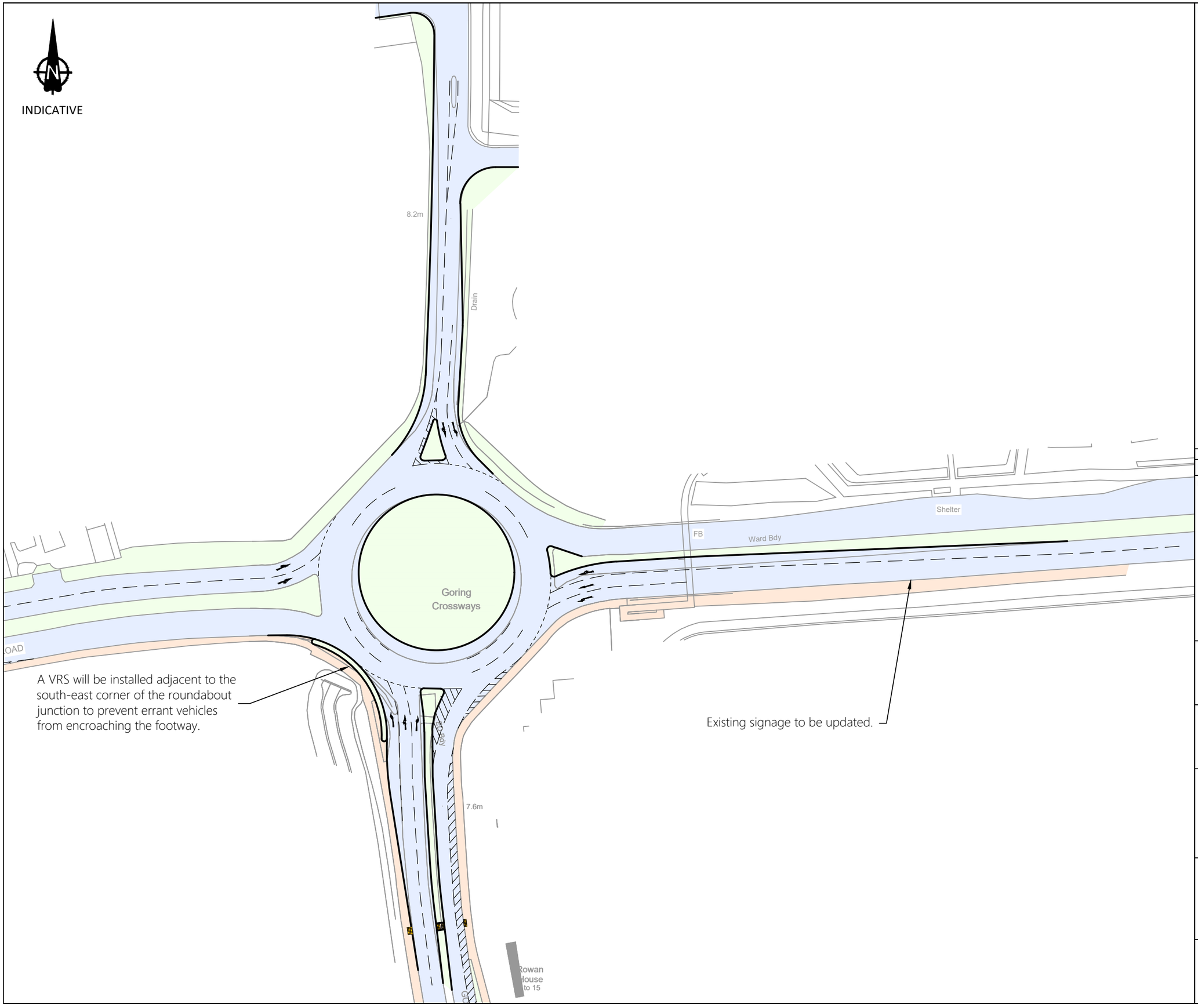
MILESTONE TRANSPORT PLANNING
7 Wey Court, Mary Road, Guildford, Surrey, GU1 4QU Tel: 01483 397888
Gateshead IBC, Mulgrave Terrace, Gateshead, NE8 1AN Tel: 0191 338 7220
web: www.milestonetp.co.uk

Drawing Number:
18122-001

Scale:
1,000 @ A3

Revision:
A

INDICATIVE



A VRS will be installed adjacent to the south-east corner of the roundabout junction to prevent errant vehicles from encroaching the footway.

Existing signage to be updated.

Notes

1. Do not scale from this drawing. All dimensions shown are in metres unless noted otherwise.

Drawing Revisions

Rev:	Drn:	Date:	Details	Chk:
-	ZM	02/04/2020	First issue	TW
A	ZM	03/07/2020	Revised drawing	TW

Client

Persimmon Homes Ltd (Thames Valley)

Project

Land at Chatsmore Farm, Goring by Sea

Title

Proposed Northern Roundabout Mitigation Measures

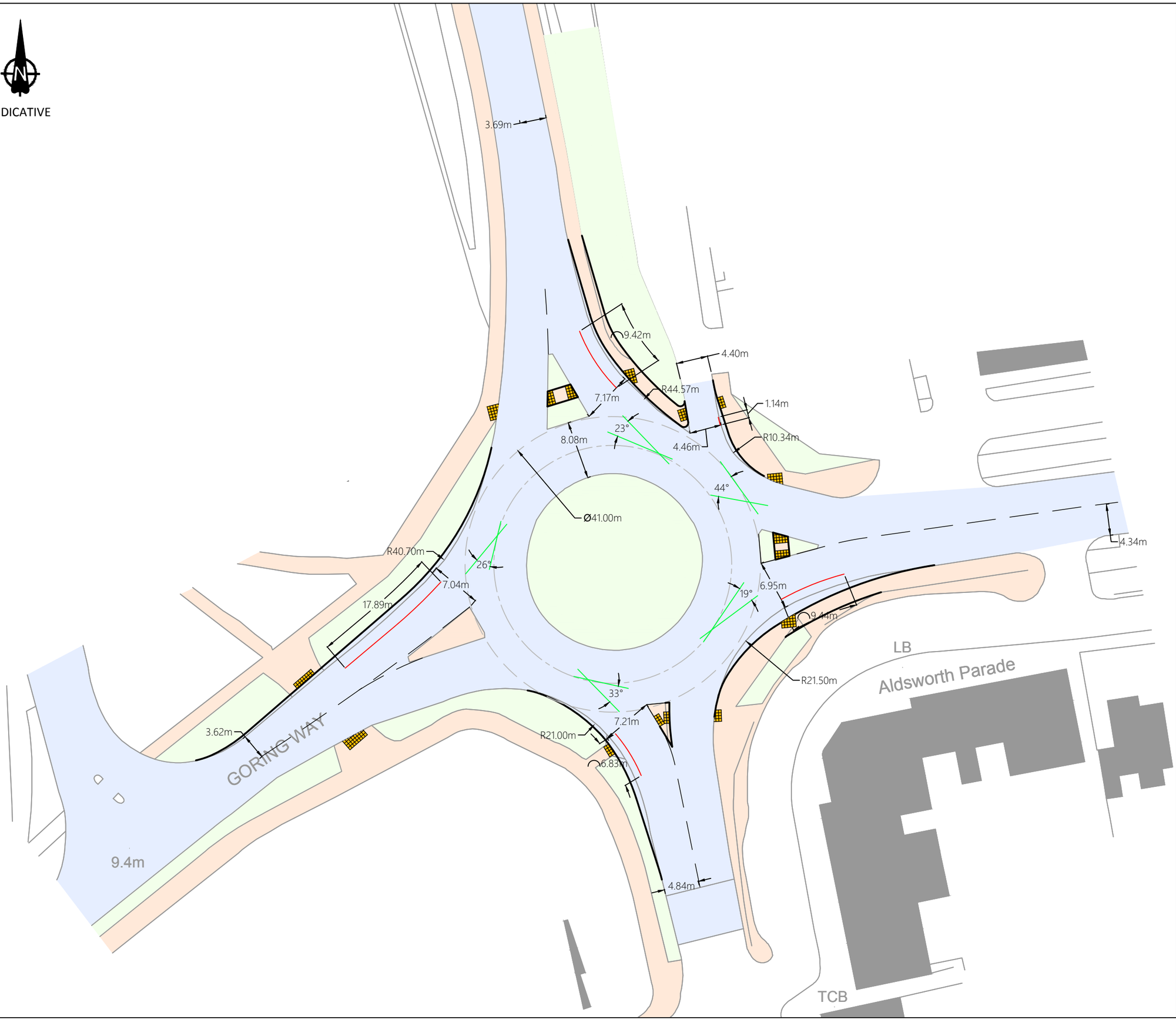
MILESTONE TRANSPORT PLANNING
Abbey House, 282 Farnborough Rd, Farnborough, Hants GU14 7NA
Tel: 01483 397888
Gateshead IBC, Mulgrave Terrace, Gateshead, NE8 1AN
Tel: 0191 338 7220
web: www.milestonetp.co.uk

Drawing Number: 18122-002

Scale: 1:1000 @ A3

Revision: A

INDICATIVE



Notes

1. Do not scale from this drawing. All dimensions shown are in metres unless noted otherwise.

Drawing Revisions

Rev:	Drn:	Date:	Details	Chk:
-	ZM	02/04/2020	First issue	TW
A	ZM	03/07/2020	Revised drawing	TW

Client

Persimmon Homes Ltd (Thames Valley)

Project

Land North West of Goring Station, Goring by Sea

Title

Proposed Southern Roundabout Mitigation Measures

MILESTONE TRANSPORT PLANNING
Abbey House, 282 Farnborough Rd, Farnborough, Hants GU14 7NA
Tel: 01483 397888
Gateshead IBC, Mulgrave Terrace, Gateshead, NE8 1AN
Tel: 0191 338 7220
web: www.milestonetp.co.uk

Drawing Number: 18122-003

Scale: 1:500 @ A3

Revision: A

INDICATIVE

FERRING LANE

5.8m

Visibility splay measuring 2.4m x 43m to the left (trailing traffic direction) edge of the carriageway, based on an anticipated 30-mph speed and MfS SSD.

Visibility splay measuring 2.4m x 43m to the right (leading traffic direction) edge of the carriageway, based on an anticipated 30-mph speed and MfS SSD.

R8.0

5.5

2.0

2.0

30

32

34

36

38

Notes

Drawing Revisions

Rev:	Drn:	Date:	Details	Chk:
-	-	-	-	-

Client

Persimmon Homes
Thames Valley

Project

Land at Chatsmore Farm,
Goring-by-Sea

Title

Proposed Access
Arrangements

MILESTONE TRANSPORT PLANNING
7 Wey Court, Mary Road, Guildford, Surrey, GU1 4QU Tel: 01483 397888
Gateshead IBC, Mulgrave Terrace, Gateshead, NE8 1AN Tel: 0191 338 7220
web: www.milestonetp.co.uk

Drawing Number:

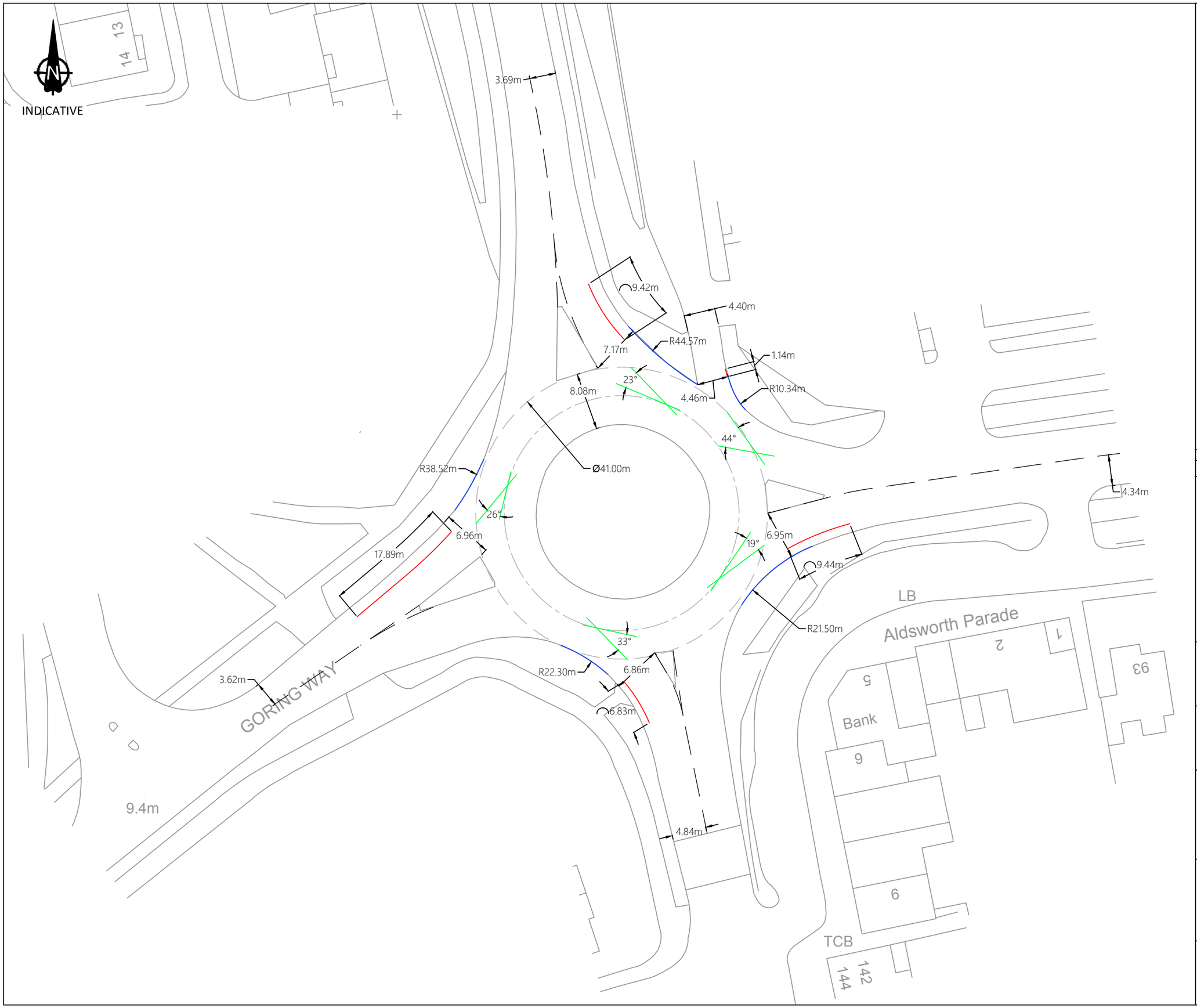
18122 / SK04

Scale:

1:250 @ A3

Revision:

-



Notes

1. Do not scale from this drawing. All dimensions shown are in metres unless noted otherwise.

Key

- Entry radius
- Effective flare length
- Entry angle

Drawing Revisions

Rev:	Drn:	Date:	Details	Chk:
-	PK	31/03/2020	First issue	TW

Client

Persimmon Homes Ltd (Thames Valley)

Project

Land North West of Goring Station, Goring by Sea

Title

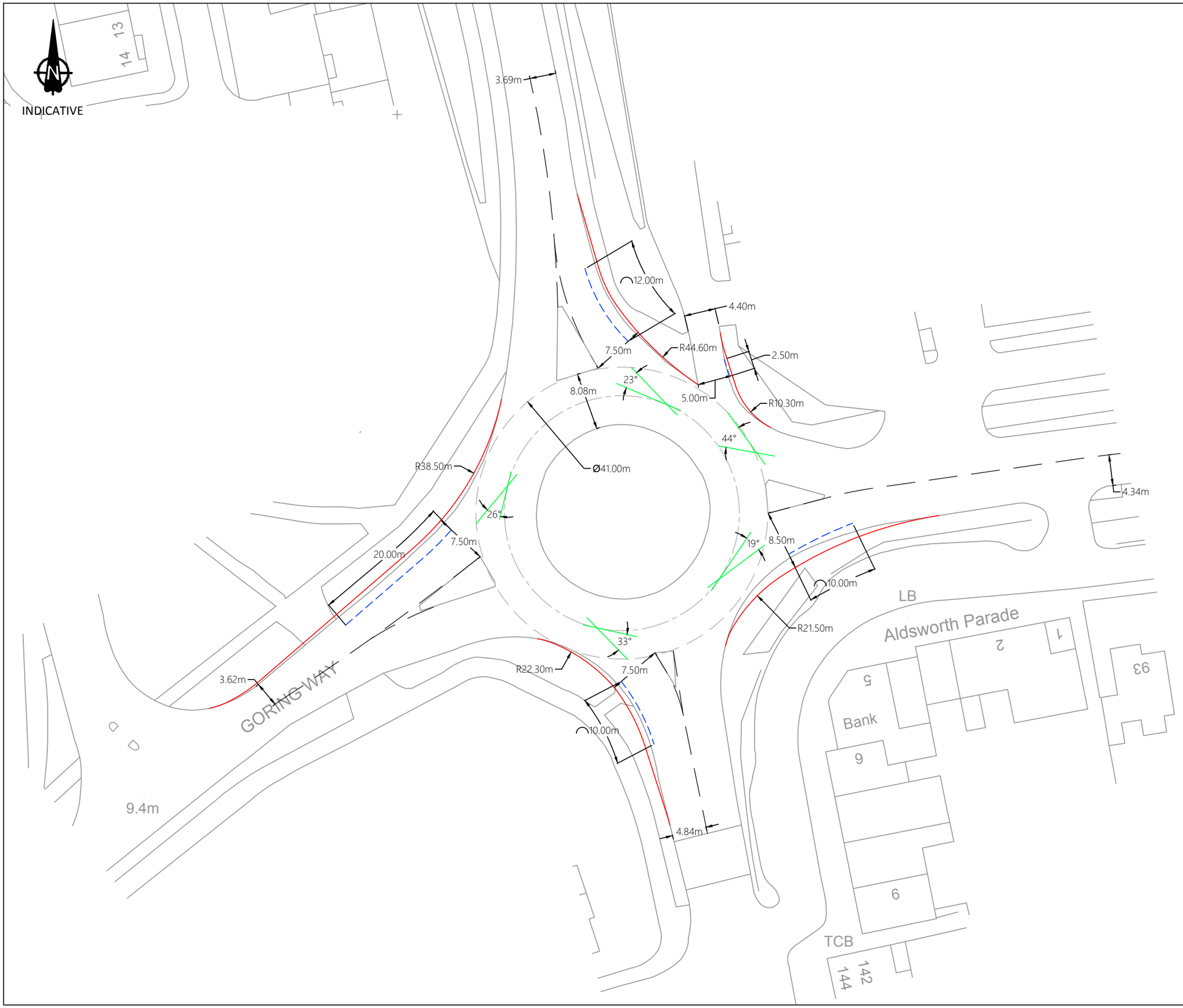
Existing Southern Roundabout Geometric Measurements

MILESTONE TRANSPORT PLANNING
Abbey House, 282 Farnborough Rd, Farnborough, Hants GU14 7NA
Tel: 01483 397888
Gateshead IBC, Mulgrave Terrace, Gateshead, NE8 1AN
Tel: 0191 338 7220
web: www.milestonetp.co.uk

Drawing Number: 18122-SK08

Scale: Scale @ A3

Revision: -



Notes

1. Do not scale from this drawing. All dimensions shown are in metres unless noted otherwise.

Key

- Proposed Kerb Alignment / Entry radius
- Effective flare length
- Entry angle

Drawing Revisions

Rev:	Drn:	Date:	Details	Chk:
-	PK	01/04/2020	First issue	TW

Client

Persimmon Homes Ltd (Thames Valley)

Project

Land North West of Goring Station, Goring by Sea

Title

Proposed Southern Roundabout Mitigation Measures

MILESTONE TRANSPORT PLANNING
Abbey House, 282 Farnborough Rd, Farnborough, Hants GU14 7NA
Tel: 01483 397888
Gateshead IBC, Mulgrave Terrace, Gateshead, NE8 1AN
Tel: 0191 338 7220
web: www.milestonetp.co.uk

Drawing Number:

18122/SK09

Scale:

Scale @ A3

Revision:

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