Lane Movements

Junction	Arm	Lane Level	Lane	Destination arm			
				A27 On-Slip	Emsworth Road (S)	A27 Off-Slip	untitled
1 - A27/ Emsworth Road	2 - Emsworth Road (S)	1 [Give-way line]	1	✓	✓		✓
	3 - A27 Off-Slip	1 [Give-way line]	1	✓	✓		✓
			2	✓	✓		✓
		2	1	✓	✓	✓	✓
	4 - untitled	1 [Give-way line]	1	✓	✓		✓

Lane Movements

Junction	Arm	Lane Level	Lane	Destination arm				
				A27 Off-Slip	Havant Road	Church Lane	A27 On-Slip	Emsworth Road
2 - A27/ Church Lane	1 - A27 Off-Slip	1 [Give-way line]	1		✓	✓	✓	✓
	2 - Havant Road	1 [Give-way line]	1		✓	✓	✓	✓
			2		✓	✓	✓	✓
		2	1	✓	✓	✓	✓	✓
	3 - Church Lane	1 [Give-way line]	1		✓	✓	✓	✓
	5 - Emsworth Road	1 [Give-way line]	1		✓	✓	✓	✓
			2		✓	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026 + Dev + Miti	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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27/ Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
2 - A27/ Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27/ Emsworth Road	1 - A27 On-Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1106	100.000
	4 - untitled		ONE HOUR	✓	639	100.000
2 - A27/ Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	78	100.000
	2 - Havant Road		ONE HOUR	✓	1352	100.000
	3 - Church Lane		ONE HOUR	✓	4	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				

Origin-Destination Data

1 - A27/ Emsworth Road

Demand (Veh/hr)

		To			
		1 - A27 On-Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - untitled
From	1 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	30	0	0	293
	3 - A27 Off-Slip	2	770	0	334
	4 - untitled	53	585	0	1

2 - A27/ Church Lane

Demand (Veh/hr)

		To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
From	1 - A27 Off-Slip	0	34	0	2	42
	2 - Havant Road	0	2	1	1107	242
	3 - Church Lane	0	0	0	3	1
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	943	4	400	1

Vehicle Mix

1 - A27/ Emsworth Road

Heavy Vehicle Percentages

		To			
		1 - A27 On-Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - untitled
From	1 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	5	0	0	2
	3 - A27 Off-Slip	50	4	0	3
	4 - untitled	4	3	0	0

2 - A27/ Church Lane

Heavy Vehicle Percentages

		To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
From	1 - A27 Off-Slip	0	0	0	0	0
	2 - Havant Road	0	0	0	3	2
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	2	0	2	0

Results

Results Summary for whole modelled period

Junction	Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27/ Emsworth Road	1 - A27 On-Slip					
	2 - Emsworth Road (S)	5.53	0.5	A	260	390
	3 - A27 Off-Slip	7.96	3.2	A	1016	1524
	4 - untitled	80.51	17.0	F	586	879
2 - A27/ Church Lane	1 - A27 Off-Slip	5.01	0.1	A	72	108
	2 - Havant Road	24.41	9.7	C	1237	1856
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	8.87	3.8	A	1238	1858

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		61				
	2 - Emsworth Road (S)	213	53	0.55	212	1035	0.0	0.3	4.638	A
	3 - A27 Off-Slip	844	211	213	845	0	0.0	1.2	5.076	A
	4 - untitled	487	122	610	486	448	0.0	1.3	8.582	A
2 - A27/ Church Lane	1 - A27 Off-Slip	60	15	1035	60	0	0.0	0.1	2.992	A
	2 - Havant Road	1019	255	348	1015	747	0.0	2.0	6.421	A
	3 - Church Lane	0	0	1360	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		1146				
	5 - Emsworth Road	1035	259	1	1034	213	0.0	1.6	5.373	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		73				
	2 - Emsworth Road (S)	257	64	1	256	1214	0.3	0.3	5.029	A
	3 - A27 Off-Slip	993	248	258	993	0	1.2	1.6	5.956	A
	4 - untitled	575	144	713	574	537	1.3	2.4	13.847	B
2 - A27/ Church Lane	1 - A27 Off-Slip	69	17	1214	69	0	0.1	0.1	3.893	A
	2 - Havant Road	1221	305	402	1220	881	2.0	3.1	9.110	A
	3 - Church Lane	0	0	1617	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		1359				
	5 - Emsworth Road	1214	303	2	1212	257	1.6	2.3	6.242	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		86				
	2 - Emsworth Road (S)	311	78	1	311	1467	0.3	0.5	5.365	A
	3 - A27 Off-Slip	1232	308	312	1231	0	1.6	2.7	7.905	A
	4 - untitled	702	175	889	665	653	2.4	12.6	45.111	E
2 - A27/ Church Lane	1 - A27 Off-Slip	86	22	1471	86	0	0.1	0.1	4.616	A
	2 - Havant Road	1484	371	487	1472	1069	3.1	9.6	19.708	C
	3 - Church Lane	0	0	1955	0	5	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		1641				
	5 - Emsworth Road	1467	367	2	1468	311	2.3	3.8	8.533	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		90				
	2 - Emsworth Road (S)	319	80	0.71	320	1472	0.5	0.5	5.532	A
	3 - A27 Off-Slip	1206	302	321	1198	0	2.7	3.2	7.956	A
	4 - untitled	706	176	870	692	648	12.6	17.0	80.512	F
2 - A27/ Church Lane	1 - A27 Off-Slip	89	22	1478	88	0	0.1	0.1	5.009	A
	2 - Havant Road	1490	372	495	1491	1071	9.6	9.7	24.412	C
	3 - Church Lane	0	0	1981	0	6	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		1660				
	5 - Emsworth Road	1472	368	2	1476	319	3.8	3.4	8.865	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		76				
	2 - Emsworth Road (S)	257	64	0.55	256	1229	0.5	0.4	5.096	A
	3 - A27 Off-Slip	991	248	256	991	0	3.2	1.8	6.198	A
	4 - untitled	569	142	719	587	529	17.0	3.7	43.944	E
2 - A27/ Church Lane	1 - A27 Off-Slip	69	17	1233	69	0	0.1	0.1	4.228	A
	2 - Havant Road	1210	303	408	1204	894	9.7	3.5	11.346	B
	3 - Church Lane	0	0	1608	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		1349				
	5 - Emsworth Road	1229	307	2	1231	257	3.4	2.2	7.054	A

09:00 - 09:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		62				
	2 - Emsworth Road (S)	206	51	0.91	206	1014	0.4	0.3	4.658	A
	3 - A27 Off-Slip	832	208	207	832	0	1.8	1.2	5.204	A
	4 - untitled	479	120	595	482	444	3.7	1.2	10.593	B
2 - A27/ Church Lane	1 - A27 Off-Slip	59	15	1011	59	0	0.1	0.0	3.485	A
	2 - Havant Road	997	249	343	997	728	3.5	1.8	6.617	A
	3 - Church Lane	0	0	1336	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		1129				
	5 - Emsworth Road	1014	254	2	1010	206	2.2	1.7	5.362	A

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		61			61	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	213	983	0.216	212	0.0	0.3	4.638	A
		Exit	1	1		1035			1035	0.0	0.0	0.000	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	421	933	0.452	421	0.0	0.6	5.076	A
				2	1,2,4	422	929	0.455	424	0.0	0.6	5.075	A
			2	1	(1,2,3,4)	844			844	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	487	868	0.561	486	0.0	1.3	8.582	A
		Exit	1	1		448			448	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	60	1131	0.053	60	0.0	0.1	2.992	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	510	876	0.582	508	0.0	1.0	6.446	A
				2	2,3,4,5	510	875	0.582	508	0.0	1.0	6.394	A
			2	1	(1,2,3,4,5)	1019			1019	0.0	0.0	0.001	A
		Exit	1	1		747			747	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	415	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		4			4	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		1146			1146	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	518	979	0.529	517	0.0	0.8	5.336	A
				2	2,3,4,5	517	979	0.528	517	0.0	0.8	5.410	A
		Exit	1	1		213			213	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		73			73	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	257	979	0.262	256	0.3	0.3	5.029	A
		Exit	1	1		1214			1214	0.0	0.0	0.000	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	498	913	0.546	499	0.6	0.8	5.943	A
				2	1,2,4	495	914	0.541	494	0.6	0.8	5.970	A
			2	1	(1,2,3,4)	993			993	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	575	815	0.705	574	1.3	2.4	13.847	B
		Exit	1	1		537			537	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	69	1007	0.069	69	0.1	0.1	3.893	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	606	857	0.708	605	1.0	1.5	9.159	A
				2	2,3,4,5	615	860	0.716	615	1.0	1.6	8.995	A
			2	1	(1,2,3,4,5)	1221			1221	0.0	0.0	0.033	A
		Exit	1	1		881			881	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	285	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		4			4	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		1359			1359	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	605	981	0.617	605	0.8	1.2	6.268	A
				2	2,3,4,5	608	980	0.620	607	0.8	1.2	6.216	A
		Exit	1	1		257			257	0.0	0.0	0.001	A

08:15 - 08:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		86			86	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	311	980	0.317	311	0.3	0.5	5.365	A
		Exit	1	1		1467			1467	0.0	0.0	0.002	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	617	893	0.691	617	0.8	1.3	7.876	A
				2	1,2,4	614	892	0.689	614	0.8	1.4	7.934	A
			2	1	(1,2,3,4)	1232			1232	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	702	714	0.982	665	2.4	12.6	45.111	E
		Exit	1	1		653			653	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	86	824	0.105	86	0.1	0.1	4.616	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	744	827	0.900	741	1.5	4.1	17.991	C
				2	2,3,4,5	734	826	0.888	731	1.6	4.0	17.470	C
			2	1	(1,2,3,4,5)	1484			1478	0.0	1.5	1.880	A
		Exit	1	1		1069			1069	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	113	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		5			5	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		1641			1641	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	730	976	0.748	731	1.2	1.8	8.598	A
				2	2,3,4,5	737	978	0.753	737	1.2	2.0	8.468	A
		Exit	1	1		311			311	0.0	0.0	0.000	A

08:30 - 08:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		90			90	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	319	979	0.325	320	0.5	0.5	5.532	A
		Exit	1	1		1472			1472	0.0	0.0	0.002	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	602	890	0.676	598	1.3	1.6	8.019	A
				2	1,2,4	604	890	0.679	600	1.4	1.6	7.893	A
			2	1	(1,2,3,4)	1206			1206	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	706	726	0.972	692	12.6	17.0	80.512	F
		Exit	1	1		648			648	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	89	821	0.108	88	0.1	0.1	5.009	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	745	822	0.906	748	4.1	4.2	21.240	C
				2	2,3,4,5	741	825	0.899	743	4.0	4.0	20.351	C
			2	1	(1,2,3,4,5)	1490			1486	1.5	1.4	3.622	A
		Exit	1	1		1071			1071	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	98	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		6			6	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		1660			1660	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	732	980	0.747	735	1.8	1.7	8.890	A
				2	2,3,4,5	740	979	0.756	740	2.0	1.7	8.841	A
		Exit	1	1		318			319	0.0	0.0	0.008	A

08:45 - 09:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		76			76	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	257	981	0.262	256	0.5	0.4	5.096	A
		Exit	1	1		1229			1229	0.0	0.0	0.000	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	496	915	0.542	495	1.6	0.9	6.212	A
				2	1,2,4	495	914	0.542	496	1.6	0.8	6.184	A
			2	1	(1,2,3,4)	991			991	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	569	811	0.701	587	17.0	3.7	43.944	E
		Exit	1	1		529			529	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	69	994	0.070	69	0.1	0.1	4.228	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	605	856	0.707	602	4.2	1.7	11.074	B
				2	2,3,4,5	605	853	0.709	603	4.0	1.7	11.084	B
			2	1	(1,2,3,4,5)	1210			1210	1.4	0.0	0.411	A
		Exit	1	1		894			894	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	285	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		4			4	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		1349			1349	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	614	978	0.628	616	1.7	1.1	7.102	A
				2	2,3,4,5	614	982	0.625	615	1.7	1.2	7.005	A
		Exit	1	1		257			257	0.0	0.0	0.000	A

09:00 - 09:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		62			62	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	206	980	0.210	206	0.4	0.3	4.658	A
		Exit	1	1		1014			1014	0.0	0.0	0.000	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	419	933	0.449	418	0.9	0.6	5.158	A
				2	1,2,4	413	932	0.443	414	0.8	0.6	5.251	A
			2	1	(1,2,3,4)	832			832	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	479	879	0.546	482	3.7	1.2	10.593	B
		Exit	1	1		444			444	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	59	1150	0.051	59	0.1	0.0	3.485	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	501	878	0.571	500	1.7	0.9	6.692	A
				2	2,3,4,5	496	878	0.566	497	1.7	0.8	6.543	A
			2	1	(1,2,3,4,5)	997			997	0.0	0.0	0.000	A
		Exit	1	1		728			728	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	428	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		3			3	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		1129			1129	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	509	980	0.520	506	1.1	0.9	5.361	A
				2	2,3,4,5	505	983	0.514	503	1.2	0.8	5.362	A
		Exit	1	1		206			206	0.0	0.0	0.000	A

2026 + Dev + Mitigation - 2026 + Dev + Miti, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - 2026 + Dev + Mitigation [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Linked junction	2 - A27/ Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27/ Emsworth Road	Standard Roundabout	1,2,3,4	64.09	F
2	A27/ Church Lane	Standard Roundabout	1,2,3,4,5	9.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2026 + Dev + Miti	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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27/ Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
2 - A27/ Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27/ Emsworth Road	1 - A27 On-Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1585	100.000
	4 - untitled		ONE HOUR	✓	534	100.000
2 - A27/ Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	137	100.000
	2 - Havant Road		ONE HOUR	✓	918	100.000
	3 - Church Lane		ONE HOUR	✓	0	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				

Origin-Destination Data

1 - A27/ Emsworth Road

Demand (Veh/hr)

		To			
		1 - A27 On-Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - untitled
From	1 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	36	0	0	287
	3 - A27 Off-Slip	10	1101	0	474
	4 - untitled	77	456	0	1

2 - A27/ Church Lane

Demand (Veh/hr)

		To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
From	1 - A27 Off-Slip	0	48	0	0	89
	2 - Havant Road	0	2	2	705	209
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	1311	2	248	1

Vehicle Mix

1 - A27/ Emsworth Road

Heavy Vehicle Percentages

		To			
		1 - A27 On-Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - untitled
From	1 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	4	0	0	2
	3 - A27 Off-Slip	0	1	0	1
	4 - untitled	0	2	0	0

2 - A27/ Church Lane

Heavy Vehicle Percentages

		To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
From	1 - A27 Off-Slip	0	3	0	0	4
	2 - Havant Road	0	0	0	2	3
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	1	0	1	0

Results

Results Summary for whole modelled period

Junction	Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27/ Emsworth Road	1 - A27 On-Slip					
	2 - Emsworth Road (S)	5.73	0.5	A	274	410
	3 - A27 Off-Slip	40.68	21.2	E	1462	2192
	4 - untitled	166.95	30.4	F	488	732
2 - A27/ Church Lane	1 - A27 Off-Slip	6.67	0.3	A	126	189
	2 - Havant Road	6.63	1.9	A	843	1264
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	11.36	4.9	B	1422	2133

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		88				
	2 - Emsworth Road (S)	224	56	0.51	224	1183	0.0	0.3	4.872	A
	3 - A27 Off-Slip	1203	301	225	1204	0	0.0	2.2	6.599	A
	4 - untitled	404	101	868	404	561	0.0	1.1	8.982	A
2 - A27/ Church Lane	1 - A27 Off-Slip	105	26	1185	105	0	0.0	0.1	3.584	A
	2 - Havant Road	687	172	258	689	1033	0.0	0.8	4.744	A
	3 - Church Lane	0	0	943	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		718				
	5 - Emsworth Road	1183	296	1	1184	224	0.0	2.0	5.880	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		110				
	2 - Emsworth Road (S)	268	67	1	269	1404	0.3	0.4	5.235	A
	3 - A27 Off-Slip	1426	356	270	1426	0	2.2	3.8	9.434	A
	4 - untitled	476	119	1033	483	664	1.1	2.5	18.862	C
2 - A27/ Church Lane	1 - A27 Off-Slip	126	31	1402	126	0	0.1	0.2	4.829	A
	2 - Havant Road	823	206	310	824	1218	0.8	1.3	5.478	A
	3 - Church Lane	0	0	1130	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		860				
	5 - Emsworth Road	1404	351	2	1400	268	2.0	3.2	7.426	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		126				
	2 - Emsworth Road (S)	326	82	1	327	1648	0.4	0.5	5.730	A
	3 - A27 Off-Slip	1756	439	328	1709	0	3.8	17.6	27.054	D
	4 - untitled	587	147	1238	536	799	2.5	18.2	77.251	F
2 - A27/ Church Lane	1 - A27 Off-Slip	151	38	1651	152	0	0.2	0.2	5.972	A
	2 - Havant Road	1004	251	364	1005	1439	1.3	1.8	6.518	A
	3 - Church Lane	0	0	1365	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		1037				
	5 - Emsworth Road	1648	412	2	1649	326	3.2	4.9	10.356	B

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		125				
	2 - Emsworth Road (S)	329	82	1	330	1661	0.5	0.5	5.533	A
	3 - A27 Off-Slip	1750	438	331	1736	0	17.6	21.2	40.680	E
	4 - untitled	583	146	1250	536	817	18.2	30.4	166.949	F
2 - A27/ Church Lane	1 - A27 Off-Slip	153	38	1674	152	0	0.2	0.3	6.665	A
	2 - Havant Road	1015	254	370	1013	1457	1.8	1.9	6.630	A
	3 - Church Lane	0	0	1378	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		1047				
	5 - Emsworth Road	1661	415	2	1672	329	4.9	4.9	11.364	B

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		122				
	2 - Emsworth Road (S)	272	68	0.90	272	1460	0.5	0.5	5.363	A
	3 - A27 Off-Slip	1439	360	273	1440	0	21.2	4.3	17.325	C
	4 - untitled	477	119	1037	546	676	30.4	10.9	128.543	F
2 - A27/ Church Lane	1 - A27 Off-Slip	124	31	1474	124	0	0.3	0.2	5.691	A
	2 - Havant Road	838	210	319	838	1278	1.9	1.3	5.511	A
	3 - Church Lane	0	0	1153	0	5	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		879				
	5 - Emsworth Road	1460	365	2	1472	272	4.9	2.9	9.445	A

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		93				
	2 - Emsworth Road (S)	222	55	0.47	222	1176	0.5	0.3	4.893	A
	3 - A27 Off-Slip	1195	299	223	1195	0	4.3	2.3	6.903	A
	4 - untitled	403	101	860	409	557	10.9	1.1	23.391	C
2 - A27/ Church Lane	1 - A27 Off-Slip	99	25	1178	99	0	0.2	0.1	4.337	A
	2 - Havant Road	689	172	259	688	1019	1.3	1.0	4.909	A
	3 - Church Lane	0	0	944	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		720				
	5 - Emsworth Road	1176	294	2	1176	222	2.9	2.1	6.305	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		88			88	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	224	962	0.233	224	0.0	0.3	4.872	A
		Exit	1	1		1183			1183	0.0	0.0	0.000	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	601	952	0.632	601	0.0	1.1	6.640	A
				2	1,2,4	602	950	0.633	603	0.0	1.1	6.559	A
			2	1	(1,2,3,4)	1203			1203	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	404	752	0.537	404	0.0	1.1	8.982	A
		Exit	1	1		561			561	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	105	1006	0.105	105	0.0	0.1	3.584	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	341	912	0.374	342	0.0	0.4	4.735	A
				2	2,3,4,5	345	918	0.377	347	0.0	0.4	4.753	A
			2	1	(1,2,3,4,5)	687			687	0.0	0.0	0.000	A
		Exit	1	1		1033			1033	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	633	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		3			3	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		718			718	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	592	1003	0.590	593	0.0	1.0	5.871	A
				2	2,3,4,5	591	1004	0.588	591	0.0	1.0	5.889	A
		Exit	1	1		224			224	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		110			110	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	268	964	0.278	269	0.3	0.4	5.235	A
		Exit	1	1		1404			1404	0.0	0.0	0.000	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	712	935	0.762	712	1.1	1.9	9.434	A
				2	1,2,4	714	935	0.763	714	1.1	1.9	9.434	A
			2	1	(1,2,3,4)	1426			1426	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	476	661	0.720	483	1.1	2.5	18.862	C
		Exit	1	1		664			664	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	126	866	0.145	126	0.1	0.2	4.829	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	413	898	0.460	413	0.4	0.6	5.497	A
				2	2,3,4,5	411	896	0.458	410	0.4	0.6	5.460	A
			2	1	(1,2,3,4,5)	823			823	0.0	0.0	0.000	A
		Exit	1	1		1218			1218	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	538	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		4			4	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		860			860	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	707	1002	0.706	705	1.0	1.6	7.411	A
				2	2,3,4,5	697	1002	0.696	695	1.0	1.6	7.442	A
		Exit	1	1		268			268	0.0	0.0	0.001	A

17:15 - 17:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		126			126	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	326	963	0.338	327	0.4	0.5	5.730	A
		Exit	1	1		1648			1648	0.0	0.0	0.005	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	878	913	0.962	856	1.9	8.8	27.032	D
				2	1,2,4	877	912	0.961	854	1.9	8.9	27.077	D
			2	1	(1,2,3,4)	1756			1756	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	587	551	1.065	536	2.5	18.2	77.251	F
		Exit	1	1		799			799	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	151	703	0.215	152	0.2	0.2	5.972	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	500	875	0.572	501	0.6	0.9	6.517	A
				2	2,3,4,5	503	878	0.574	504	0.6	0.9	6.519	A
			2	1	(1,2,3,4,5)	1004			1004	0.0	0.0	0.000	A
		Exit	1	1		1439			1439	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	418	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		4			4	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		1037			1037	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	821	1002	0.819	821	1.6	2.4	10.387	B
				2	2,3,4,5	827	1002	0.825	828	1.6	2.4	10.325	B
		Exit	1	1		326			326	0.0	0.0	0.019	A

17:30 - 17:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		125			125	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	329	961	0.342	330	0.5	0.5	5.533	A
		Exit	1	1		1660			1661	0.0	0.0	0.008	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	871	913	0.954	863	8.8	10.7	40.692	E
				2	1,2,4	880	912	0.966	874	8.9	10.5	40.668	E
			2	1	(1,2,3,4)	1750			1750	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	583	546	1.068	536	18.2	30.4	166.949	F
		Exit	1	1		817			817	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	153	686	0.222	152	0.2	0.3	6.665	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	512	873	0.586	511	0.9	0.9	6.626	A
				2	2,3,4,5	503	873	0.577	502	0.9	1.0	6.633	A
			2	1	(1,2,3,4,5)	1015			1015	0.0	0.0	0.000	A
		Exit	1	1		1457			1457	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	410	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		4			4	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		1047			1047	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	824	1003	0.821	831	2.4	2.4	11.392	B
				2	2,3,4,5	837	1004	0.833	841	2.4	2.5	11.336	B
		Exit	1	1		329			329	0.0	0.0	0.002	A

17:45 - 18:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		122			122	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	272	964	0.282	272	0.5	0.5	5.363	A
		Exit	1	1		1460			1460	0.0	0.0	0.003	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	720	934	0.771	719	10.7	2.2	17.327	C
				2	1,2,4	720	933	0.771	721	10.5	2.1	17.322	C
			2	1	(1,2,3,4)	1439			1439	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	477	662	0.721	546	30.4	10.9	128.543	F
		Exit	1	1		676			676	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	124	814	0.152	124	0.3	0.2	5.691	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	420	895	0.469	420	0.9	0.6	5.521	A
				2	2,3,4,5	418	891	0.469	418	1.0	0.7	5.501	A
			2	1	(1,2,3,4,5)	838			838	0.0	0.0	0.000	A
		Exit	1	1		1278			1278	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	526	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		5			5	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		879			879	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	731	1004	0.728	737	2.4	1.4	9.428	A
				2	2,3,4,5	729	1002	0.728	735	2.5	1.4	9.462	A
		Exit	1	1		272			272	0.0	0.0	0.015	A

18:00 - 18:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		93			93	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	222	967	0.229	222	0.5	0.3	4.893	A
		Exit	1	1		1176			1176	0.0	0.0	0.000	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	595	951	0.626	595	2.2	1.2	6.876	A
				2	1,2,4	600	951	0.631	600	2.1	1.1	6.930	A
			2	1	(1,2,3,4)	1195			1195	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	403	757	0.532	409	10.9	1.1	23.391	C
		Exit	1	1		557			557	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	99	1015	0.098	99	0.2	0.1	4.337	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	341	915	0.372	340	0.6	0.5	4.915	A
				2	2,3,4,5	348	916	0.380	348	0.7	0.5	4.904	A
			2	1	(1,2,3,4,5)	689			689	0.0	0.0	0.000	A
		Exit	1	1		1019			1019	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	633	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		3			3	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		720			720	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	585	1003	0.584	586	1.4	1.0	6.253	A
				2	2,3,4,5	591	1002	0.589	591	1.4	1.0	6.358	A
		Exit	1	1		222			222	0.0	0.0	0.001	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.1.4646 []
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Filename: 2026 Base using entry lane analysis.j9
Path: Z:\Projects\040-049\041 Barratt Homes\041.0025 Warblington Meadows, Havant\Reports\MODELLING\Modelling January 2017\A27 Roundabouts\2026 Baseline
Report generation date: 11/01/2017 15:16:50

»2026 Baseline - 2026, AM
»2026 Baseline - 2026, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2026 Baseline [Lane Simulation] - 2026							
Junction 1 - Arm 2	0.4	5.26		A	0.5	5.73		A
Junction 1 - Arm 3	3.1	8.51		A	24.1	44.17		E
Junction 1 - Arm 4	17.0	81.72		F	26.0	146.14		F
Junction 2 - Arm 1	0.1	4.90		A	0.3	6.37		A
Junction 2 - Arm 2	26.0	60.79		F	2.3	8.57		A
Junction 2 - Arm 3	0.0	0.00		A	0.0	0.00		A
Junction 2 - Arm 5	4.8	11.93		B	6.8	14.73		B

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

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

File summary

File Description

Title	2021 Baseline
Location	A27 Roundabouts, Havant
Site number	
Date	31/10/2016
Version	
Status	(new file)
Identifier	
Client	Barratts
Jobnumber	041.0039
Enumerator	Shannon
Description	

Units

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

Analysis Options

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

Lane Simulation options

Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Use crossings quick response	Last run random seed	Last run number of trials	Last run time taken (s)
1.00	100000	100000	-1	3	1	✓	882523366	279	136.38

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	2026	AM	ONE HOUR	07:45	09:15	15	✓
D2	2026	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	2026 Baseline	✓	✓	100.000	100.000

2026 Baseline - 2026, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - 2026 Baseline [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	Junction 2 - Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27/ Emsworth Road	Standard Roundabout	1,2,3,4	30.95	D
2	A27/ Church Lane	Standard Roundabout	1,2,3,4,5	35.20	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Name	Description
1	1	A27 On-Slip	
	2	Emsworth Road (S)	
	3	A27 Off-Slip	
	4	untitled	
2	1	A27 Off-Slip	
	2	Havant Road	
	3	Church Lane	
	4	A27 On-Slip	
	5	Emsworth Road	

Roundabout Geometry

Junction	Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	1							✓
	2	3.70	3.70	0.0	12.2	35.0	53.0	
	3	7.30	7.30	0.0	24.3	35.0	49.0	
	4	4.17	5.20	0.5	23.6	35.0	46.0	
2	1	6.08	6.08	0.0	19.0	40.0	27.1	
	2	3.69	6.74	42.0	13.0	40.0	26.5	
	3	3.14	6.18	4.0	12.0	40.0	46.0	
	4							✓
	5	5.06	7.40	12.0	15.0	40.0	48.9	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1	1		
	2	0.475	997
	3	0.712	2085
	4	0.544	1242
2	1	0.675	1856
	2	0.666	1841
	3	0.498	1112
	4		
	5	0.639	1808

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

Lane Simulation: Arm options

Junction	Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
1	1	Evenly split	10.00
	2	Evenly split	10.00
	3	Evenly split	10.00
	4	Evenly split	10.00
2	1	Evenly split	10.00
	2	Evenly split	10.00
	3	Evenly split	10.00
	4	Evenly split	10.00
	5	Evenly split	10.00

Lanes

Junction	Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
1	2	1 [Give-way line]	1	1,2,4	✓	7.00	0	99999
	3	1 [Give-way line]	1	1,2,4	✓	58.00	0	99999
			2	1,2,4	✓	58.00	0	99999
		2	1	(1,2,3,4)		Infinity		
	4	1 [Give-way line]	1	1,2,4		Infinity	0	99999
2	1	1 [Give-way line]	1	2,3,4,5		Infinity	0	99999
	2	1 [Give-way line]	1	2,3,4,5	✓	10.43	0	99999
			2	2,3,4,5	✓	9.57	0	99999
		2	1	(1,2,3,4,5)		Infinity		
	3	1 [Give-way line]	1	2,3,4,5		Infinity	0	99999
	5	1 [Give-way line]	1	2,3,4,5	✓	4.00	0	99999
			2	2,3,4,5	✓	4.00	0	99999
		2	1	(1,2,3,4,5)	✓	3.00		

Entry Lane slope and intercept

Junction	Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1	2	1 [Give-way line]	1	0.475	997
	3	1 [Give-way line]	1	0.356	1043
			2	0.356	1043
	4	1 [Give-way line]	1	0.544	1242
2	1	1 [Give-way line]	1	0.675	1856
	2	1 [Give-way line]	1	0.333	921
			2	0.333	921
	3	1 [Give-way line]	1	0.498	1112
	5	1 [Give-way line]	1	0.319	904
			2	0.319	904

Lane Movements

Junction	Arm	Lane Level	Lane	Destination arm			
				1	2	3	4
1	2	1 [Give-way line]	1	✓	✓		✓
	3	1 [Give-way line]	1	✓	✓		✓
			2	✓	✓		✓
		2	1	✓	✓	✓	✓
	4	1 [Give-way line]	1	✓	✓		✓

Lane Movements

Junction	Arm	Lane Level	Lane	Destination arm				
				1	2	3	4	5
2	1	1 [Give-way line]	1		✓	✓	✓	✓
	2	1 [Give-way line]	1		✓	✓	✓	✓
			2		✓	✓	✓	✓
		2	1	✓	✓	✓	✓	✓
	3	1 [Give-way line]	1		✓	✓	✓	✓
	5	1 [Give-way line]	1		✓	✓	✓	✓
			2		✓	✓	✓	✓
		2	1	✓	✓	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026	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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	5	Simple (vertical queueing)	Normal	0	100.00	
2	5	1	2	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	1097	100.000
	4		ONE HOUR	✓	632	100.000
2	1		ONE HOUR	✓	77	100.000
	2		ONE HOUR	✓	1312	100.000
	3		ONE HOUR	✓	4	100.000
	4					
	5	✓				

Origin-Destination Data

Junction 1

Demand (Veh/hr)

From \ To	1	2	3	4
1	Exit-only	Exit-only	Exit-only	Exit-only
2	26	0	0	257
3	2	761	0	334
4	53	578	0	1

Junction 2

Demand (Veh/hr)

From \ To	1	2	3	4	5
1	0	33	0	2	42
2	0	2	1	1074	235
3	0	0	0	3	1
4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
5	0	928	4	400	1

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

From \ To	1	2	3	4
1	Exit-only	Exit-only	Exit-only	Exit-only
2	5	0	0	2
3	50	4	0	3
4	4	3	0	0

Junction 2

Heavy Vehicle Percentages

From \ To	1	2	3	4	5
1	0	0	0	0	0
2	0	0	0	3	2
3	0	0	0	0	0
4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
5	0	2	0	2	0

Results

Results Summary for whole modelled period

Junction	Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1					
	2	5.26	0.4	A	252	378
	3	8.51	3.1	A	1011	1516
	4	81.72	17.0	F	576	864
2	1	4.90	0.1	A	69	103
	2	60.79	26.0	F	1201	1801
	3	0.00	0.0	A	0	0
	4					
	5	11.93	4.8	B	1223	1835

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1			0		61				
	2	207	52	0.86	207	1005	0.0	0.3	4.706	A
	3	833	208	208	833	0	0.0	1.2	5.075	A
	4	469	117	599	468	442	0.0	1.1	8.034	A
2	1	56	14	1008	56	0	0.0	0.0	3.011	A
	2	988	247	330	988	734	0.0	2.4	7.906	A
	3	0	0	1314	0	3	0.0	0.0	0.000	A
	4			0		1106				
	5	1005	251	2	1006	207	0.0	1.8	6.562	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1			0		72				
	2	247	62	0.65	247	1198	0.3	0.3	4.907	A
	3	989	247	248	987	0	1.2	1.7	5.899	A
	4	565	141	708	562	526	1.1	2.5	14.521	B
2	1	68	17	1199	69	0	0.0	0.1	3.768	A
	2	1187	297	404	1177	863	2.4	4.8	12.433	B
	3	0	0	1575	0	5	0.0	0.0	0.000	A
	4			0		1327				
	5	1198	299	2	1197	247	1.8	2.7	7.976	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1			0		85				
	2	299	75	1	300	1450	0.3	0.4	5.261	A
	3	1211	303	301	1209	0	1.7	3.0	8.149	A
	4	699	175	869	666	640	2.5	12.8	46.323	E
2	1	83	21	1451	83	0	0.1	0.1	4.592	A
	2	1441	360	485	1403	1050	4.8	20.7	37.854	E
	3	0	0	1883	0	5	0.0	0.0	0.000	A
	4			0		1582				
	5	1450	362	2	1449	299	2.7	4.8	11.221	B

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1			0		89				
	2	299	75	0.95	300	1457	0.4	0.4	5.243	A
	3	1214	303	301	1210	0	3.0	3.0	8.512	A
	4	692	173	867	679	644	12.8	16.9	81.723	F
2	1	83	21	1461	82	0	0.1	0.1	4.905	A
	2	1429	357	484	1419	1060	20.7	26.0	60.787	F
	3	0	0	1898	0	5	0.0	0.0	0.000	A
	4			0		1598				
	5	1457	364	2	1459	299	4.8	4.8	11.927	B

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1			0		75				
	2	253	63	0.95	253	1214	0.4	0.3	5.062	A
	3	987	247	254	990	0	3.0	1.5	6.247	A
	4	560	140	711	578	533	16.9	2.7	38.513	E
2	1	66	17	1221	67	0	0.1	0.1	4.124	A
	2	1175	294	414	1202	873	26.0	5.4	31.964	D
	3	0	0	1612	0	4	0.0	0.0	0.000	A
	4			0		1358				
	5	1214	303	2	1219	253	4.8	2.6	9.415	A

09:00 - 09:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1			0		58				
	2	207	52	0.90	207	1016	0.3	0.2	4.660	A
	3	833	208	208	835	0	1.5	1.1	5.171	A
	4	471	118	603	471	440	2.7	1.2	9.913	A
2	1	56	14	1018	56	0	0.1	0.1	3.439	A
	2	987	247	342	983	732	5.4	2.4	9.224	A
	3	0	0	1321	0	3	0.0	0.0	0.000	A
	4			0		1113				
	5	1016	254	1	1017	207	2.6	1.9	6.672	A

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	Exit	1	1		61			61	0.0	0.0	0.000	A
	2	Entry	1	1	1,2,4	207	979	0.211	207	0.0	0.3	4.706	A
		Exit	1	1		1006			1005	0.0	0.0	0.021	A
	3	Entry	1	1	1,2,4	415	934	0.445	415	0.0	0.6	5.074	A
				2	1,2,4	418	933	0.448	418	0.0	0.6	5.075	A
			2	1	(1,2,3,4)	833			833	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4	Entry	1	1	1,2,4	469	876	0.536	468	0.0	1.1	8.034	A
		Exit	1	1		442			442	0.0	0.0	0.000	A
2	1	Entry	1	1	2,3,4,5	56	1152	0.049	56	0.0	0.0	3.011	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2	Entry	1	1	2,3,4,5	493	786	0.628	493	0.0	1.2	7.883	A
				2	2,3,4,5	495	784	0.631	494	0.0	1.3	7.928	A
			2	1	(1,2,3,4,5)	988			988	0.0	0.0	0.000	A
		Exit	1	1		734			734	0.0	0.0	0.000	A
	3	Entry	1	1	2,3,4,5	0	439	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		3			3	0.0	0.0	0.000	A
	4	Exit	1	1		1106			1106	0.0	0.0	0.000	A
	5	Entry	1	1	2,3,4,5	501	875	0.573	502	0.0	0.9	6.522	A
				2	2,3,4,5	504	872	0.578	505	0.0	0.9	6.443	A
			2	1	(1,2,3,4,5)	1005			1005	0.0	0.0	0.079	A
		Exit	1	1		207			207	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	Exit	1	1		72			72	0.0	0.0	0.000	A
	2	Entry	1	1	1,2,4	247	981	0.252	247	0.3	0.3	4.907	A
		Exit	1	1		1198			1198	0.0	0.1	0.116	A
	3	Entry	1	1	1,2,4	497	917	0.543	496	0.6	0.9	5.858	A
				2	1,2,4	491	921	0.533	491	0.6	0.8	5.940	A
			2	1	(1,2,3,4)	989			989	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4	Entry	1	1	1,2,4	565	816	0.692	562	1.1	2.5	14.521	B
		Exit	1	1		526			526	0.0	0.0	0.000	A
2	1	Entry	1	1	2,3,4,5	68	1018	0.067	69	0.0	0.1	3.768	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2	Entry	1	1	2,3,4,5	587	761	0.772	583	1.2	2.4	12.490	B
				2	2,3,4,5	599	762	0.787	594	1.3	2.4	12.241	B
			2	1	(1,2,3,4,5)	1187			1187	0.0	0.0	0.066	A
		Exit	1	1		863			863	0.0	0.0	0.000	A
	3	Entry	1	1	2,3,4,5	0	306	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		5			5	0.0	0.0	0.000	A
	4	Exit	1	1		1327			1327	0.0	0.0	0.000	A
	5	Entry	1	1	2,3,4,5	600	873	0.688	600	0.9	1.3	7.708	A
				2	2,3,4,5	598	872	0.685	597	0.9	1.3	7.676	A
			2	1	(1,2,3,4,5)	1198			1198	0.0	0.1	0.282	A
		Exit	1	1		247			247	0.0	0.0	0.001	A

08:15 - 08:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	Exit	1	1		85			85	0.0	0.0	0.000	A
	2	Entry	1	1	1,2,4	299	979	0.305	300	0.3	0.4	5.261	A
		Exit	1	1		1449			1450	0.1	0.4	0.792	A
	3	Entry	1	1	1,2,4	605	898	0.674	604	0.9	1.5	8.156	A
				2	1,2,4	606	899	0.674	605	0.8	1.5	8.142	A
			2	1	(1,2,3,4)	1211			1211	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4	Entry	1	1	1,2,4	699	725	0.964	666	2.5	12.8	46.323	E
		Exit	1	1		640			640	0.0	0.0	0.000	A
2	1	Entry	1	1	2,3,4,5	83	839	0.099	83	0.1	0.1	4.592	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2	Entry	1	1	2,3,4,5	701	732	0.957	697	2.4	6.7	28.613	D
				2	2,3,4,5	712	734	0.968	706	2.4	6.3	27.108	D
			2	1	(1,2,3,4,5)	1441			1413	0.0	7.6	9.662	A
		Exit	1	1		1050			1050	0.0	0.0	0.000	A
	3	Entry	1	1	2,3,4,5	0	147	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		5			5	0.0	0.0	0.000	A
	4	Exit	1	1		1582			1582	0.0	0.0	0.000	A
	5	Entry	1	1	2,3,4,5	724	869	0.833	724	1.3	2.1	10.056	B
				2	2,3,4,5	725	873	0.831	725	1.3	2.1	10.184	B
			2	1	(1,2,3,4,5)	1450			1450	0.1	0.5	1.096	A
		Exit	1	1		299			299	0.0	0.0	0.001	A

08:30 - 08:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	Exit	1	1		89			89	0.0	0.0	0.000	A
	2	Entry	1	1	1,2,4	299	979	0.305	300	0.4	0.4	5.243	A
		Exit	1	1		1456			1457	0.4	0.4	1.063	A
	3	Entry	1	1	1,2,4	608	898	0.678	607	1.5	1.4	8.504	A
				2	1,2,4	605	900	0.672	603	1.5	1.5	8.521	A
			2	1	(1,2,3,4)	1214			1214	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4	Entry	1	1	1,2,4	692	731	0.948	679	12.8	16.9	81.723	F
		Exit	1	1		644			644	0.0	0.0	0.000	A
2	1	Entry	1	1	2,3,4,5	83	836	0.099	82	0.1	0.1	4.905	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2	Entry	1	1	2,3,4,5	710	734	0.967	710	6.7	7.1	35.697	E
				2	2,3,4,5	707	736	0.960	709	6.3	6.5	33.007	D
			2	1	(1,2,3,4,5)	1429			1417	7.6	12.4	26.269	D
		Exit	1	1		1060			1060	0.0	0.0	0.000	A
	3	Entry	1	1	2,3,4,5	0	142	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		5			5	0.0	0.0	0.000	A
	4	Exit	1	1		1598			1598	0.0	0.0	0.000	A
	5	Entry	1	1	2,3,4,5	727	873	0.833	728	2.1	2.1	10.582	B
				2	2,3,4,5	731	875	0.835	731	2.1	2.1	10.569	B
			2	1	(1,2,3,4,5)	1457			1457	0.5	0.5	1.351	A
		Exit	1	1		299			299	0.0	0.0	0.000	A

08:45 - 09:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	Exit	1	1		75			75	0.0	0.0	0.000	A
	2	Entry	1	1	1,2,4	253	979	0.258	253	0.4	0.3	5.062	A
		Exit	1	1		1213			1214	0.4	0.0	0.452	A
	3	Entry	1	1	1,2,4	490	915	0.535	491	1.4	0.8	6.280	A
				2	1,2,4	498	916	0.542	499	1.5	0.7	6.215	A
			2	1	(1,2,3,4)	987			987	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4	Entry	1	1	1,2,4	560	818	0.685	578	16.9	2.7	38.513	E
		Exit	1	1		533			533	0.0	0.0	0.000	A
2	1	Entry	1	1	2,3,4,5	66	1004	0.066	67	0.1	0.1	4.124	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2	Entry	1	1	2,3,4,5	599	758	0.790	606	7.1	2.4	22.441	C
				2	2,3,4,5	592	759	0.780	596	6.5	2.4	21.410	C
			2	1	(1,2,3,4,5)	1175			1190	12.4	0.6	10.969	B
		Exit	1	1		873			873	0.0	0.0	0.000	A
	3	Entry	1	1	2,3,4,5	0	286	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		4			4	0.0	0.0	0.000	A
	4	Exit	1	1		1358			1358	0.0	0.0	0.000	A
	5	Entry	1	1	2,3,4,5	608	875	0.695	611	2.1	1.3	8.767	A
				2	2,3,4,5	607	874	0.695	609	2.1	1.3	8.764	A
			2	1	(1,2,3,4,5)	1214			1215	0.5	0.1	0.658	A
		Exit	1	1		253			253	0.0	0.0	0.001	A

09:00 - 09:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	Exit	1	1		58			58	0.0	0.0	0.000	A
	2	Entry	1	1	1,2,4	207	981	0.211	207	0.3	0.2	4.660	A
		Exit	1	1		1016			1016	0.0	0.0	0.026	A
	3	Entry	1	1	1,2,4	417	930	0.448	418	0.8	0.5	5.172	A
				2	1,2,4	417	929	0.448	417	0.7	0.6	5.170	A
			2	1	(1,2,3,4)	833			833	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4	Entry	1	1	1,2,4	471	870	0.541	471	2.7	1.2	9.913	A
		Exit	1	1		440			440	0.0	0.0	0.000	A
2	1	Entry	1	1	2,3,4,5	56	1142	0.049	56	0.1	0.1	3.439	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2	Entry	1	1	2,3,4,5	494	780	0.633	490	2.4	1.2	9.030	A
				2	2,3,4,5	494	780	0.633	492	2.4	1.2	9.056	A
			2	1	(1,2,3,4,5)	987			987	0.6	0.0	0.248	A
		Exit	1	1		732			732	0.0	0.0	0.000	A
	3	Entry	1	1	2,3,4,5	0	434	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		3			3	0.0	0.0	0.000	A
	4	Exit	1	1		1113			1113	0.0	0.0	0.000	A
	5	Entry	1	1	2,3,4,5	507	868	0.584	507	1.3	0.9	6.573	A
				2	2,3,4,5	509	872	0.584	510	1.3	1.0	6.572	A
			2	1	(1,2,3,4,5)	1016			1016	0.1	0.0	0.105	A
		Exit	1	1		207			207	0.0	0.0	0.000	A

2026 Baseline - 2026, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - 2026 Baseline [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Geometry	Junction 2 - Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27/ Emsworth Road	Standard Roundabout	1,2,3,4	61.75	F
2	A27/ Church Lane	Standard Roundabout	1,2,3,4,5	12.10	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2026	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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	2	2	5	Simple (vertical queueing)	Normal	0	100.00	
2	5	1	2	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1					
	2	✓				
	3		ONE HOUR	✓	1559	100.000
	4		ONE HOUR	✓	524	100.000
2	1		ONE HOUR	✓	136	100.000
	2		ONE HOUR	✓	898	100.000
	3		ONE HOUR	✓	0	100.000
	4					
	5	✓				

Origin-Destination Data

Junction 1

Demand (Veh/hr)

From \ To	1	2	3	4
1	Exit-only	Exit-only	Exit-only	Exit-only
2	34	0	0	269
3	10	1075	0	474
4	77	446	0	1

Junction 2

Demand (Veh/hr)

From \ To	1	2	3	4	5
1	0	47	0	0	89
2	0	2	2	690	204
3	0	0	0	0	0
4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
5	0	1276	2	248	1

Vehicle Mix

Junction 1

Heavy Vehicle Percentages

From \ To	1	2	3	4
1	Exit-only	Exit-only	Exit-only	Exit-only
2	4	0	0	2
3	0	1	0	1
4	0	2	0	0

Junction 2

Heavy Vehicle Percentages

From \ To	1	2	3	4	5
1	0	3	0	0	4
2	0	0	0	2	3
3	0	0	0	0	0
4	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
5	0	1	0	1	0

Results

Results Summary for whole modelled period

Junction	Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1					
	2	5.73	0.5	A	270	405
	3	44.17	24.1	E	1430	2145
	4	146.14	26.0	F	478	717
2	1	6.37	0.3	A	124	186
	2	8.57	2.3	A	825	1238
	3	0.00	0.0	A	0	0
	4					
	5	14.73	6.8	B	1389	2084

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1			0		92				
	2	224	56	0.62	224	1146	0.0	0.3	4.889	A
	3	1165	291	225	1165	0	0.0	2.1	6.312	A
	4	404	101	836	403	554	0.0	1.1	8.888	A
2	1	103	26	1145	104	0	0.0	0.1	3.536	A
	2	682	170	254	681	995	0.0	1.0	5.407	A
	3	0	0	932	0	3	0.0	0.0	0.000	A
	4			0		707				
	5	1146	287	1	1144	224	0.0	2.5	7.208	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1			0		106				
	2	269	67	0.70	268	1363	0.3	0.4	5.226	A
	3	1398	350	269	1395	0	2.1	3.9	9.517	A
	4	470	118	1000	469	664	1.1	2.6	17.256	C
2	1	121	30	1364	122	0	0.1	0.2	4.570	A
	2	815	204	302	815	1184	1.0	1.5	6.395	A
	3	0	0	1113	0	4	0.0	0.0	0.000	A
	4			0		843				
	5	1363	341	2	1362	269	2.5	3.8	9.625	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1			0		124				
	2	325	81	1	326	1616	0.4	0.5	5.728	A
	3	1723	431	327	1687	0	3.9	16.6	25.318	D
	4	570	142	1214	530	801	2.6	15.4	68.190	F
2	1	151	38	1619	152	0	0.2	0.2	5.941	A
	2	989	247	365	988	1405	1.5	2.3	7.973	A
	3	0	0	1348	0	5	0.0	0.0	0.000	A
	4			0		1021				
	5	1616	404	3	1616	325	3.8	6.2	13.468	B

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1			0		124				
	2	319	80	0.97	319	1621	0.5	0.5	5.630	A
	3	1721	430	320	1694	0	16.6	24.1	44.165	E
	4	567	142	1212	531	801	15.4	26.0	146.138	F
2	1	149	37	1619	149	0	0.2	0.3	6.375	A
	2	992	248	366	991	1401	2.3	2.3	8.567	A
	3	0	0	1353	0	4	0.0	0.0	0.000	A
	4			0		1032				
	5	1621	405	2	1617	319	6.2	6.8	14.734	B

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1			0		115				
	2	264	66	0.77	264	1436	0.5	0.4	5.159	A
	3	1402	350	265	1410	0	24.1	4.3	20.697	C
	4	464	116	1019	530	656	26.0	9.3	113.311	F
2	1	117	29	1444	117	0	0.3	0.2	5.638	A
	2	810	202	309	810	1251	2.3	1.4	6.536	A
	3	0	0	1116	0	3	0.0	0.0	0.000	A
	4			0		850				
	5	1436	359	2	1442	264	6.8	4.3	12.329	B

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1			0		91				
	2	221	55	0.70	221	1153	0.4	0.3	4.867	A
	3	1174	293	222	1177	0	4.3	1.9	6.966	A
	4	394	99	844	401	555	9.3	1.1	20.471	C
2	1	102	25	1154	102	0	0.2	0.1	4.278	A
	2	665	166	259	667	997	1.4	1.0	5.713	A
	3	0	0	922	0	3	0.0	0.0	0.000	A
	4			0		700				
	5	1153	288	1	1153	221	4.3	2.4	7.807	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	Exit	1	1		92			92	0.0	0.0	0.000	A
	2	Entry	1	1	1,2,4	224	963	0.233	224	0.0	0.3	4.889	A
		Exit	1	1		1147			1146	0.0	0.0	0.052	A
	3	Entry	1	1	1,2,4	587	951	0.617	587	0.0	1.1	6.270	A
				2	1,2,4	578	952	0.607	578	0.0	1.1	6.354	A
			2	1	(1,2,3,4)	1165			1165	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4	Entry	1	1	1,2,4	404	770	0.524	403	0.0	1.1	8.888	A
		Exit	1	1		554			554	0.0	0.0	0.000	A
2	1	Entry	1	1	2,3,4,5	103	1034	0.100	104	0.0	0.1	3.536	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2	Entry	1	1	2,3,4,5	342	815	0.419	340	0.0	0.5	5.455	A
				2	2,3,4,5	340	817	0.417	341	0.0	0.5	5.359	A
			2	1	(1,2,3,4,5)	682			682	0.0	0.0	0.000	A
		Exit	1	1		995			995	0.0	0.0	0.000	A
	3	Entry	1	1	2,3,4,5	0	638	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		3			3	0.0	0.0	0.000	A
	4	Exit	1	1		707			707	0.0	0.0	0.000	A
	5	Entry	1	1	2,3,4,5	572	893	0.640	571	0.0	1.2	7.079	A
				2	2,3,4,5	574	894	0.642	573	0.0	1.2	7.018	A
			2	1	(1,2,3,4,5)	1146			1146	0.0	0.1	0.158	A
		Exit	1	1		224			224	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	Exit	1	1		106			106	0.0	0.0	0.000	A
	2	Entry	1	1	1,2,4	269	965	0.278	268	0.3	0.4	5.226	A
		Exit	1	1		1362			1363	0.0	0.1	0.427	A
	3	Entry	1	1	1,2,4	698	934	0.748	697	1.1	1.9	9.500	A
				2	1,2,4	700	934	0.749	698	1.1	2.0	9.534	A
			2	1	(1,2,3,4)	1398			1398	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4	Entry	1	1	1,2,4	470	681	0.691	469	1.1	2.6	17.256	C
		Exit	1	1		664			664	0.0	0.0	0.000	A
2	1	Entry	1	1	2,3,4,5	121	893	0.136	122	0.1	0.2	4.570	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2	Entry	1	1	2,3,4,5	404	800	0.505	404	0.5	0.7	6.383	A
				2	2,3,4,5	411	801	0.513	411	0.5	0.8	6.408	A
			2	1	(1,2,3,4,5)	815			815	0.0	0.0	0.000	A
		Exit	1	1		1184			1184	0.0	0.0	0.000	A
	3	Entry	1	1	2,3,4,5	0	546	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		4			4	0.0	0.0	0.000	A
	4	Exit	1	1		843			843	0.0	0.0	0.000	A
	5	Entry	1	1	2,3,4,5	680	893	0.761	678	1.2	1.8	8.956	A
				2	2,3,4,5	685	891	0.769	684	1.2	1.8	8.964	A
			2	1	(1,2,3,4,5)	1363			1364	0.1	0.2	0.662	A
		Exit	1	1		269			269	0.0	0.0	0.004	A

17:15 - 17:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	Exit	1	1		124			124	0.0	0.0	0.000	A
	2	Entry	1	1	1,2,4	325	964	0.337	326	0.4	0.5	5.728	A
		Exit	1	1		1619			1616	0.1	0.9	1.577	A
	3	Entry	1	1	1,2,4	865	914	0.946	847	1.9	8.3	25.358	D
				2	1,2,4	858	913	0.940	841	2.0	8.3	25.278	D
			2	1	(1,2,3,4)	1723			1723	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4	Entry	1	1	1,2,4	570	565	1.009	530	2.6	15.4	68.190	F
		Exit	1	1		801			801	0.0	0.0	0.000	A
2	1	Entry	1	1	2,3,4,5	151	722	0.210	152	0.2	0.2	5.941	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2	Entry	1	1	2,3,4,5	497	778	0.638	496	0.7	1.1	7.935	A
				2	2,3,4,5	492	779	0.632	491	0.8	1.2	8.011	A
			2	1	(1,2,3,4,5)	989			989	0.0	0.0	0.000	A
		Exit	1	1		1405			1405	0.0	0.0	0.000	A
	3	Entry	1	1	2,3,4,5	0	426	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		5			5	0.0	0.0	0.000	A
	4	Exit	1	1		1021			1021	0.0	0.0	0.000	A
	5	Entry	1	1	2,3,4,5	803	892	0.900	803	1.8	2.6	11.648	B
				2	2,3,4,5	813	893	0.911	813	1.8	2.6	11.597	B
			2	1	(1,2,3,4,5)	1616			1616	0.2	1.0	1.835	A
		Exit	1	1		325			325	0.0	0.0	0.008	A

17:30 - 17:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	Exit	1	1		124			124	0.0	0.0	0.000	A
	2	Entry	1	1	1,2,4	319	962	0.332	319	0.5	0.5	5.630	A
		Exit	1	1		1618			1621	0.9	1.0	2.217	A
	3	Entry	1	1	1,2,4	856	914	0.936	843	8.3	12.1	44.272	E
				2	1,2,4	865	915	0.945	851	8.3	12.0	44.058	E
			2	1	(1,2,3,4)	1721			1721	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4	Entry	1	1	1,2,4	567	565	1.004	531	15.4	26.0	146.138	F
		Exit	1	1		801			801	0.0	0.0	0.000	A
2	1	Entry	1	1	2,3,4,5	149	719	0.207	149	0.2	0.3	6.375	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2	Entry	1	1	2,3,4,5	497	778	0.640	497	1.1	1.1	8.536	A
				2	2,3,4,5	494	779	0.635	494	1.2	1.1	8.572	A
			2	1	(1,2,3,4,5)	992			992	0.0	0.0	0.011	A
		Exit	1	1		1401			1401	0.0	0.0	0.000	A
	3	Entry	1	1	2,3,4,5	0	423	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		4			4	0.0	0.0	0.000	A
	4	Exit	1	1		1032			1032	0.0	0.0	0.000	A
	5	Entry	1	1	2,3,4,5	811	891	0.910	808	2.6	2.9	12.399	B
				2	2,3,4,5	809	893	0.906	808	2.6	2.7	12.386	B
			2	1	(1,2,3,4,5)	1621			1620	1.0	1.1	2.343	A
		Exit	1	1		319			319	0.0	0.0	0.003	A

17:45 - 18:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	Exit	1	1		115			115	0.0	0.0	0.000	A
	2	Entry	1	1	1,2,4	264	968	0.273	264	0.5	0.4	5.159	A
		Exit	1	1		1433			1436	1.0	0.2	1.331	A
	3	Entry	1	1	1,2,4	700	935	0.748	704	12.1	2.1	20.592	C
				2	1,2,4	702	937	0.750	706	12.0	2.2	20.803	C
			2	1	(1,2,3,4)	1402			1402	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4	Entry	1	1	1,2,4	464	670	0.694	530	26.0	9.3	113.311	F
		Exit	1	1		656			656	0.0	0.0	0.000	A
2	1	Entry	1	1	2,3,4,5	117	839	0.139	117	0.3	0.2	5.638	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2	Entry	1	1	2,3,4,5	405	798	0.508	405	1.1	0.7	6.543	A
				2	2,3,4,5	405	798	0.507	405	1.1	0.7	6.532	A
			2	1	(1,2,3,4,5)	810			810	0.0	0.0	0.001	A
		Exit	1	1		1251			1251	0.0	0.0	0.000	A
	3	Entry	1	1	2,3,4,5	0	545	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		3			3	0.0	0.0	0.000	A
	4	Exit	1	1		850			850	0.0	0.0	0.000	A
	5	Entry	1	1	2,3,4,5	721	891	0.809	722	2.9	2.0	10.759	B
				2	2,3,4,5	717	892	0.805	720	2.7	2.0	10.838	B
			2	1	(1,2,3,4,5)	1436			1439	1.1	0.3	1.540	A
		Exit	1	1		264			264	0.0	0.0	0.003	A

18:00 - 18:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	Exit	1	1		91			91	0.0	0.0	0.000	A
	2	Entry	1	1	1,2,4	221	971	0.228	221	0.4	0.3	4.867	A
		Exit	1	1		1153			1153	0.2	0.0	0.156	A
	3	Entry	1	1	1,2,4	588	952	0.617	589	2.1	1.0	6.938	A
				2	1,2,4	586	952	0.616	588	2.2	0.9	6.995	A
			2	1	(1,2,3,4)	1174			1174	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4	Entry	1	1	1,2,4	394	765	0.515	401	9.3	1.1	20.471	C
		Exit	1	1		555			555	0.0	0.0	0.000	A
2	1	Entry	1	1	2,3,4,5	102	1035	0.098	102	0.2	0.1	4.278	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2	Entry	1	1	2,3,4,5	332	818	0.406	332	0.7	0.6	5.740	A
				2	2,3,4,5	333	814	0.409	334	0.7	0.5	5.685	A
			2	1	(1,2,3,4,5)	665			665	0.0	0.0	0.000	A
		Exit	1	1		997			997	0.0	0.0	0.000	A
	3	Entry	1	1	2,3,4,5	0	644	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		3			3	0.0	0.0	0.000	A
	4	Exit	1	1		700			700	0.0	0.0	0.000	A
	5	Entry	1	1	2,3,4,5	578	892	0.648	578	2.0	1.2	7.479	A
				2	2,3,4,5	575	892	0.644	575	2.0	1.1	7.552	A
			2	1	(1,2,3,4,5)	1153			1153	0.3	0.0	0.300	A
		Exit	1	1		221			221	0.0	0.0	0.000	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.1.4646 []
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Filename: 2021 Base + Dev + Mitigation using entry lane analysis.j9
Path: Z:\Projects\040-049\041 Barratt Homes\041.0025 Warblington Meadows, Havant\Reports\MODELLING\Modelling January 2017\A27 Roundabouts\2021 with dev + miti
Report generation date: 10/02/2017 11:29:48

»2021 + Dev + Mitigation - 2021 + Dev + Miti, AM
»2021 + Dev + Mitigation - 2021 + Dev + Miti, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2021 + Dev + Mitigation [Lane Simulation] - 2021 + Dev + Miti							
1 - A27/ Emsworth Road - 2 - Emsworth Road (S)	0.4	5.34		A	0.5	5.57		A
1 - A27/ Emsworth Road - 3 - A27 Off-Slip	2.4	7.27		A	9.6	20.04		C
1 - A27/ Emsworth Road - 4 - untitled	7.2	38.00		E	12.3	72.98		F
2 - A27/ Church Lane - 1 - A27 Off-Slip	0.1	4.61		A	0.2	6.13		A
2 - A27/ Church Lane - 2 - Havant Road	6.5	16.42		C	1.7	6.13		A
2 - A27/ Church Lane - 3 - Church Lane	0.0	0.00		A	0.0	0.00		A
2 - A27/ Church Lane - 5 - Emsworth Road	3.2	8.03		A	4.6	9.93		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. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	2021 + Dev + Mtigation
Location	A27 Roundabouts, Havant
Site number	
Date	31/10/2016
Version	
Status	(new file)
Identifier	
Client	Barratts
Jobnumber	041.0039
Enumerator	Shannon
Description	

Units

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

Analysis Options

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

Lane Simulation options

Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Use crossings quick response	Last run random seed	Last run number of trials	Last run time taken (s)
1.00	100000	100000	-1	3	1	✓	883473852	485	184.20

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	2021 + Dev + Miti	AM	ONE HOUR	07:45	09:15	15	✓
D2	2021 + Dev + Miti	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	2021 + Dev + Mitigation	✓	✓	100.000	100.000

2021 + Dev + Mitigation - 2021 + Dev + Miti, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - 2021 + Dev + Mitigation [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Linked junction	2 - A27/ Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27/ Emsworth Road	Standard Roundabout	1,2,3,4	16.66	C
2	A27/ Church Lane	Standard Roundabout	1,2,3,4,5	12.00	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Name	Description
1 - A27/ Emsworth Road	1	A27 On-Slip	
	2	Emsworth Road (S)	
	3	A27 Off-Slip	
	4	untitled	
2 - A27/ Church Lane	1	A27 Off-Slip	
	2	Havant Road	
	3	Church Lane	
	4	A27 On-Slip	
	5	Emsworth Road	

Roundabout Geometry

Junction	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 - A27/ Emsworth Road	1 - A27 On-Slip							✓
	2 - Emsworth Road (S)	3.70	3.70	0.0	12.2	35.0	53.0	
	3 - A27 Off-Slip	7.30	7.30	0.0	24.3	35.0	49.0	
	4 - untitled	4.17	5.20	0.5	23.6	35.0	46.0	
2 - A27/ Church Lane	1 - A27 Off-Slip	6.08	6.08	0.0	19.0	40.0	27.1	
	2 - Havant Road	6.00	7.00	24.0	13.0	40.0	26.5	
	3 - Church Lane	3.14	6.18	4.0	12.0	40.0	46.0	
	4 - A27 On-Slip							✓
	5 - Emsworth Road	6.00	8.00	12.0	15.0	40.0	48.9	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1 - A27/ Emsworth Road	1 - A27 On-Slip		
	2 - Emsworth Road (S)	0.475	997
	3 - A27 Off-Slip	0.712	2085
	4 - untitled	0.544	1242
2 - A27/ Church Lane	1 - A27 Off-Slip	0.675	1856
	2 - Havant Road	0.709	2056
	3 - Church Lane	0.498	1112
	4 - A27 On-Slip		
	5 - Emsworth Road	0.683	2032

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

Lane Simulation: Arm options

Junction	Arm	Lane capacity source	Traffic Considering Secondary Lanes (%)
1 - A27/ Emsworth Road	1 - A27 On-Slip	Evenly split	10.00
	2 - Emsworth Road (S)	Evenly split	10.00
	3 - A27 Off-Slip	Evenly split	10.00
	4 - untitled	Evenly split	10.00
2 - A27/ Church Lane	1 - A27 Off-Slip	Evenly split	10.00
	2 - Havant Road	Evenly split	10.00
	3 - Church Lane	Evenly split	10.00
	4 - A27 On-Slip	Evenly split	10.00
	5 - Emsworth Road	Evenly split	10.00

Lanes

Junction	Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)
1 - A27/ Emsworth Road	2 - Emsworth Road (S)	1 [Give-way line]	1	1,2,4	✓	7.00	0	99999
	3 - A27 Off-Slip	1 [Give-way line]	1	1,2,4	✓	58.00	0	99999
			2	1,2,4	✓	58.00	0	99999
		2	1	(1,2,3,4)		Infinity		
	4 - untitled	1 [Give-way line]	1	1,2,4		Infinity	0	99999
2 - A27/ Church Lane	1 - A27 Off-Slip	1 [Give-way line]	1	2,3,4,5		Infinity	0	99999
	2 - Havant Road	1 [Give-way line]	1	2,3,4,5	✓	10.43	0	99999
			2	2,3,4,5	✓	9.57	0	99999
		2	1	(1,2,3,4,5)		Infinity		
	3 - Church Lane	1 [Give-way line]	1	2,3,4,5		Infinity	0	99999
	5 - Emsworth Road	1 [Give-way line]	1	2,3,4,5	✓	13.00	0	99999
			2	2,3,4,5	✓	13.00	0	99999

Entry Lane slope and intercept

Junction	Arm	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - A27/ Emsworth Road	2 - Emsworth Road (S)	1 [Give-way line]	1	0.475	997
	3 - A27 Off-Slip	1 [Give-way line]	1	0.356	1043
			2	0.356	1043
	4 - untitled	1 [Give-way line]	1	0.544	1242
2 - A27/ Church Lane	1 - A27 Off-Slip	1 [Give-way line]	1	0.675	1856
	2 - Havant Road	1 [Give-way line]	1	0.354	1028
			2	0.354	1028
	3 - Church Lane	1 [Give-way line]	1	0.498	1112
	5 - Emsworth Road	1 [Give-way line]	1	0.342	1016
			2	0.342	1016

Lane Movements

Junction	Arm	Lane Level	Lane	Destination arm			
				A27 On-Slip	Emsworth Road (S)	A27 Off-Slip	untitled
1 - A27/ Emsworth Road	2 - Emsworth Road (S)	1 [Give-way line]	1	✓	✓		✓
	3 - A27 Off-Slip	1 [Give-way line]	1	✓	✓		✓
			2	✓	✓		✓
		2	1	✓	✓	✓	✓
	4 - untitled	1 [Give-way line]	1	✓	✓		✓

Lane Movements

Junction	Arm	Lane Level	Lane	Destination arm				
				A27 Off-Slip	Havant Road	Church Lane	A27 On-Slip	Emsworth Road
2 - A27/ Church Lane	1 - A27 Off-Slip	1 [Give-way line]	1		✓	✓	✓	✓
	2 - Havant Road	1 [Give-way line]	1		✓	✓	✓	✓
			2		✓	✓	✓	✓
		2	1	✓	✓	✓	✓	✓
	3 - Church Lane	1 [Give-way line]	1		✓	✓	✓	✓
	5 - Emsworth Road	1 [Give-way line]	1		✓	✓	✓	✓
			2		✓	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021 + Dev + Miti	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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27/ Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
2 - A27/ Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27/ Emsworth Road	1 - A27 On-Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1036	100.000
	4 - untitled		ONE HOUR	✓	601	100.000
2 - A27/ Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	73	100.000
	2 - Havant Road		ONE HOUR	✓	1268	100.000
	3 - Church Lane		ONE HOUR	✓	4	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				

Origin-Destination Data

1 - A27/ Emsworth Road

Demand (Veh/hr)

From \ To	1 - A27 On-Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - untitled
1 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
2 - Emsworth Road (S)	28	0	0	277
3 - A27 Off-Slip	2	721	0	313
4 - untitled	52	548	0	1

2 - A27/ Church Lane

Demand (Veh/hr)

From \ To	1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
1 - A27 Off-Slip	0	32	0	2	39
2 - Havant Road	0	2	1	1038	227
3 - Church Lane	0	0	0	3	1
4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
5 - Emsworth Road	0	884	4	374	1

Vehicle Mix

1 - A27/ Emsworth Road

Heavy Vehicle Percentages

From \ To	1 - A27 On-Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - untitled
1 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
2 - Emsworth Road (S)	5	0	0	2
3 - A27 Off-Slip	50	4	0	3
4 - untitled	4	3	0	0

2 - A27/ Church Lane

Heavy Vehicle Percentages

From \ To	1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
1 - A27 Off-Slip	0	0	0	0	0
2 - Havant Road	0	0	0	3	2
3 - Church Lane	0	0	0	0	0
4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
5 - Emsworth Road	0	2	0	2	0

Results

Results Summary for whole modelled period

Junction	Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27/ Emsworth Road	1 - A27 On-Slip					
	2 - Emsworth Road (S)	5.34	0.4	A	246	369
	3 - A27 Off-Slip	7.27	2.4	A	950	1425
	4 - untitled	38.00	7.2	E	550	825
2 - A27/ Church Lane	1 - A27 Off-Slip	4.61	0.1	A	68	101
	2 - Havant Road	16.42	6.5	C	1164	1746
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	8.03	3.2	A	1162	1744

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		59				
	2 - Emsworth Road (S)	202	50	0.67	202	956	0.0	0.3	4.693	A
	3 - A27 Off-Slip	778	195	202	780	0	0.0	1.0	4.893	A
	4 - untitled	451	113	564	451	419	0.0	1.1	7.447	A
2 - A27/ Church Lane	1 - A27 Off-Slip	55	14	957	55	0	0.0	0.1	2.931	A
	2 - Havant Road	953	238	318	951	693	0.0	1.8	5.963	A
	3 - Church Lane	0	0	1266	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		1063				
	5 - Emsworth Road	956	239	2	955	202	0.0	1.3	5.090	A

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		69				
	2 - Emsworth Road (S)	238	60	0.79	238	1140	0.3	0.3	4.801	A
	3 - A27 Off-Slip	937	234	238	937	0	1.0	1.4	5.662	A
	4 - untitled	536	134	672	538	503	1.1	2.0	12.188	B
2 - A27/ Church Lane	1 - A27 Off-Slip	66	16	1143	65	0	0.1	0.1	3.641	A
	2 - Havant Road	1132	283	381	1137	827	1.8	2.4	7.911	A
	3 - Church Lane	0	0	1514	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		1274				
	5 - Emsworth Road	1140	285	2	1141	238	1.3	1.9	5.949	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		87				
	2 - Emsworth Road (S)	295	74	0.96	296	1388	0.3	0.4	5.342	A
	3 - A27 Off-Slip	1137	284	297	1137	0	1.4	2.4	7.222	A
	4 - untitled	661	165	823	653	611	2.0	7.2	30.863	D
2 - A27/ Church Lane	1 - A27 Off-Slip	81	20	1389	81	0	0.1	0.1	4.293	A
	2 - Havant Road	1396	349	467	1395	1003	2.4	6.2	14.216	B
	3 - Church Lane	0	0	1857	0	5	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		1560				
	5 - Emsworth Road	1388	347	2	1387	295	1.9	3.0	7.827	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		85				
	2 - Emsworth Road (S)	296	74	1	296	1392	0.4	0.4	5.248	A
	3 - A27 Off-Slip	1141	285	297	1141	0	2.4	2.3	7.268	A
	4 - untitled	653	163	824	654	614	7.2	6.8	38.003	E
2 - A27/ Church Lane	1 - A27 Off-Slip	82	21	1393	83	0	0.1	0.1	4.615	A
	2 - Havant Road	1397	349	461	1403	1014	6.2	6.5	16.420	C
	3 - Church Lane	0	0	1858	0	6	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		1560				
	5 - Emsworth Road	1392	348	2	1391	296	3.0	3.1	8.027	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		70				
	2 - Emsworth Road (S)	241	60	1	241	1143	0.4	0.3	4.925	A
	3 - A27 Off-Slip	930	232	242	931	0	2.3	1.4	5.688	A
	4 - untitled	544	136	670	545	504	6.8	2.0	17.638	C
2 - A27/ Church Lane	1 - A27 Off-Slip	68	17	1145	68	0	0.1	0.1	3.895	A
	2 - Havant Road	1147	287	383	1142	830	6.5	2.7	8.943	A
	3 - Church Lane	0	0	1521	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		1278				
	5 - Emsworth Road	1143	286	2	1143	241	3.1	1.9	6.324	A

09:00 - 09:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		58				
	2 - Emsworth Road (S)	202	51	0.62	202	955	0.3	0.3	4.601	A
	3 - A27 Off-Slip	776	194	203	779	0	1.4	1.0	4.974	A
	4 - untitled	453	113	561	452	421	2.0	1.1	8.620	A
2 - A27/ Church Lane	1 - A27 Off-Slip	54	13	957	54	0	0.1	0.0	3.270	A
	2 - Havant Road	959	240	316	960	695	2.7	1.6	6.217	A
	3 - Church Lane	0	0	1272	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		1068				
	5 - Emsworth Road	955	239	2	956	202	1.9	1.3	5.171	A

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		59			59	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	202	976	0.207	202	0.0	0.3	4.693	A
		Exit	1	1		956			956	0.0	0.0	0.000	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	389	934	0.417	390	0.0	0.5	4.895	A
				2	1,2,4	389	935	0.416	390	0.0	0.5	4.892	A
			2	1	(1,2,3,4)	778			778	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	451	896	0.504	451	0.0	1.1	7.447	A
		Exit	1	1		419			419	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	55	1188	0.046	55	0.0	0.1	2.931	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	477	887	0.538	476	0.0	0.9	5.969	A
				2	2,3,4,5	475	887	0.536	475	0.0	0.8	5.956	A
			2	1	(1,2,3,4,5)	953			953	0.0	0.0	0.000	A
		Exit	1	1		693			693	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	464	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		4			4	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		1063			1063	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	479	981	0.489	478	0.0	0.7	5.062	A
				2	2,3,4,5	477	982	0.485	477	0.0	0.7	5.118	A
		Exit	1	1		202			202	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		69			69	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	238	979	0.243	238	0.3	0.3	4.801	A
		Exit	1	1		1140			1140	0.0	0.0	0.000	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	469	919	0.510	469	0.5	0.7	5.663	A
				2	1,2,4	468	921	0.508	468	0.5	0.7	5.662	A
			2	1	(1,2,3,4)	937			937	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	536	835	0.642	538	1.1	2.0	12.188	B
		Exit	1	1		503			503	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	66	1056	0.062	65	0.1	0.1	3.641	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	568	865	0.657	570	0.9	1.2	7.930	A
				2	2,3,4,5	564	864	0.653	567	0.8	1.2	7.870	A
			2	1	(1,2,3,4,5)	1132			1132	0.0	0.0	0.010	A
		Exit	1	1		827			827	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	336	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		4			4	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		1274			1274	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	570	979	0.582	570	0.7	1.0	5.964	A
				2	2,3,4,5	570	980	0.583	572	0.7	0.9	5.934	A
		Exit	1	1		238			238	0.0	0.0	0.000	A

08:15 - 08:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		87			87	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	295	978	0.302	296	0.3	0.4	5.342	A
		Exit	1	1		1388			1388	0.0	0.0	0.001	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	569	903	0.630	568	0.7	1.2	7.189	A
				2	1,2,4	568	900	0.631	569	0.7	1.2	7.256	A
			2	1	(1,2,3,4)	1137			1137	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	661	753	0.878	653	2.0	7.2	30.863	D
		Exit	1	1		611			611	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	81	885	0.092	81	0.1	0.1	4.293	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	700	833	0.840	700	1.2	2.9	13.731	B
				2	2,3,4,5	695	834	0.834	695	1.2	2.9	13.574	B
			2	1	(1,2,3,4,5)	1396			1395	0.0	0.4	0.534	A
		Exit	1	1		1003			1003	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	162	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		5			5	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		1560			1560	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	694	980	0.708	693	1.0	1.5	7.816	A
				2	2,3,4,5	694	982	0.707	694	0.9	1.5	7.838	A
		Exit	1	1		295			295	0.0	0.0	0.006	A

08:30 - 08:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		85			85	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	296	977	0.303	296	0.4	0.4	5.248	A
		Exit	1	1		1392			1392	0.0	0.0	0.000	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	572	902	0.635	573	1.2	1.1	7.260	A
				2	1,2,4	569	901	0.632	568	1.2	1.2	7.277	A
			2	1	(1,2,3,4)	1141			1141	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	653	752	0.868	654	7.2	6.8	38.003	E
		Exit	1	1		614			614	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	82	882	0.093	83	0.1	0.1	4.615	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	694	834	0.832	695	2.9	3.1	15.674	C
				2	2,3,4,5	707	837	0.844	707	2.9	3.1	15.275	C
			2	1	(1,2,3,4,5)	1397			1400	0.4	0.2	0.957	A
		Exit	1	1		1014			1014	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	160	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		6			6	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		1560			1560	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	696	979	0.710	695	1.5	1.6	8.009	A
				2	2,3,4,5	696	981	0.709	696	1.5	1.5	8.046	A
		Exit	1	1		296			296	0.0	0.0	0.002	A

08:45 - 09:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		70			70	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	241	980	0.246	241	0.4	0.3	4.925	A
		Exit	1	1		1143			1143	0.0	0.0	0.000	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	463	921	0.503	463	1.1	0.7	5.710	A
				2	1,2,4	467	920	0.508	468	1.2	0.7	5.666	A
			2	1	(1,2,3,4)	930			930	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	544	837	0.649	545	6.8	2.0	17.638	C
		Exit	1	1		504			504	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	68	1056	0.065	68	0.1	0.1	3.895	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	572	864	0.662	570	3.1	1.4	8.956	A
				2	2,3,4,5	575	863	0.666	573	3.1	1.3	8.876	A
			2	1	(1,2,3,4,5)	1147			1147	0.2	0.0	0.052	A
		Exit	1	1		830			830	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	333	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		4			4	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		1278			1278	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	571	980	0.582	570	1.6	0.9	6.354	A
				2	2,3,4,5	572	981	0.583	572	1.5	0.9	6.296	A
		Exit	1	1		241			241	0.0	0.0	0.000	A

09:00 - 09:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		58			58	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	202	977	0.207	202	0.3	0.3	4.601	A
		Exit	1	1		955			955	0.0	0.0	0.000	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	388	935	0.416	390	0.7	0.5	4.972	A
				2	1,2,4	388	933	0.416	389	0.7	0.5	4.975	A
			2	1	(1,2,3,4)	776			776	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	453	898	0.505	452	2.0	1.1	8.620	A
		Exit	1	1		421			421	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	54	1187	0.045	54	0.1	0.0	3.270	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	482	888	0.543	482	1.4	0.8	6.193	A
				2	2,3,4,5	478	886	0.539	478	1.3	0.8	6.242	A
			2	1	(1,2,3,4,5)	959			959	0.0	0.0	0.000	A
		Exit	1	1		695			695	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	460	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		4			4	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		1068			1068	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	477	981	0.487	477	0.9	0.7	5.181	A
				2	2,3,4,5	478	982	0.487	479	0.9	0.6	5.161	A
		Exit	1	1		202			202	0.0	0.0	0.000	A

2021 + Dev + Mitigation - 2021 + Dev + Miti, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - 2021 + Dev + Mitigation [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Linked junction	2 - A27/ Church Lane - 5 - Emsworth Road	Linked arm: Junction 2 Arm 5 has more than one lane at its upstream end. It is recommended that the upstream lane level for a linked arm should have only one lane (if necessary add a dummy lane level to do this)

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	A27/ Emsworth Road	Standard Roundabout	1,2,3,4	29.88	D
2	A27/ Church Lane	Standard Roundabout	1,2,3,4,5	8.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2021 + Dev + Miti	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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1 - A27/ Emsworth Road	2 - Emsworth Road (S)	2	5	Simple (vertical queueing)	Normal	0	100.00	
2 - A27/ Church Lane	5 - Emsworth Road	1	2	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27/ Emsworth Road	1 - A27 On-Slip					
	2 - Emsworth Road (S)	✓				
	3 - A27 Off-Slip		ONE HOUR	✓	1479	100.000
	4 - untitled		ONE HOUR	✓	499	100.000
2 - A27/ Church Lane	1 - A27 Off-Slip		ONE HOUR	✓	128	100.000
	2 - Havant Road		ONE HOUR	✓	857	100.000
	3 - Church Lane		ONE HOUR	✓	0	100.000
	4 - A27 On-Slip					
	5 - Emsworth Road	✓				

Origin-Destination Data

1 - A27/ Emsworth Road

Demand (Veh/hr)

		To			
		1 - A27 On-Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - untitled
From	1 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	34	0	0	269
	3 - A27 Off-Slip	9	1028	0	442
	4 - untitled	72	426	0	1

2 - A27/ Church Lane

Demand (Veh/hr)

		To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
From	1 - A27 Off-Slip	0	45	0	0	83
	2 - Havant Road	0	2	2	658	195
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	1224	2	231	1

Vehicle Mix

1 - A27/ Emsworth Road

Heavy Vehicle Percentages

		To			
		1 - A27 On-Slip	2 - Emsworth Road (S)	3 - A27 Off-Slip	4 - untitled
From	1 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only
	2 - Emsworth Road (S)	4	0	0	2
	3 - A27 Off-Slip	0	1	0	1
	4 - untitled	0	2	0	0

2 - A27/ Church Lane

Heavy Vehicle Percentages

		To				
		1 - A27 Off-Slip	2 - Havant Road	3 - Church Lane	4 - A27 On-Slip	5 - Emsworth Road
From	1 - A27 Off-Slip	0	3	0	0	4
	2 - Havant Road	0	0	0	2	3
	3 - Church Lane	0	0	0	0	0
	4 - A27 On-Slip	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	5 - Emsworth Road	0	1	0	1	0

Results

Results Summary for whole modelled period

Junction	Arm	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - A27/ Emsworth Road	1 - A27 On-Slip					
	2 - Emsworth Road (S)	5.57	0.5	A	257	385
	3 - A27 Off-Slip	20.04	9.6	C	1354	2031
	4 - untitled	72.98	12.3	F	454	681
2 - A27/ Church Lane	1 - A27 Off-Slip	6.13	0.2	A	118	177
	2 - Havant Road	6.13	1.7	A	787	1180
	3 - Church Lane	0.00	0.0	A	0	0
	4 - A27 On-Slip					
	5 - Emsworth Road	9.93	4.6	A	1325	1987

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		83				
	2 - Emsworth Road (S)	214	54	0.71	214	1092	0.0	0.3	4.730	A
	3 - A27 Off-Slip	1107	277	215	1109	0	0.0	1.7	5.929	A
	4 - untitled	375	94	799	376	524	0.0	0.8	7.828	A
2 - A27/ Church Lane	1 - A27 Off-Slip	97	24	1091	97	0	0.0	0.1	3.364	A
	2 - Havant Road	654	163	237	652	951	0.0	0.9	4.588	A
	3 - Church Lane	0	0	886	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		670				
	5 - Emsworth Road	1092	273	2	1090	214	0.0	1.8	5.460	A

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		96				
	2 - Emsworth Road (S)	255	64	0.89	255	1305	0.3	0.4	5.170	A
	3 - A27 Off-Slip	1328	332	255	1329	0	1.7	2.8	8.168	A
	4 - untitled	438	110	961	441	624	0.8	1.7	13.798	B
2 - A27/ Church Lane	1 - A27 Off-Slip	117	29	1310	117	0	0.1	0.1	4.230	A
	2 - Havant Road	766	191	286	766	1140	0.9	1.1	5.108	A
	3 - Church Lane	0	0	1048	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		791				
	5 - Emsworth Road	1305	326	2	1308	255	1.8	2.3	6.626	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		120				
	2 - Emsworth Road (S)	309	77	0.82	308	1580	0.4	0.5	5.432	A
	3 - A27 Off-Slip	1627	407	309	1618	0	2.8	9.1	16.878	C
	4 - untitled	550	137	1165	536	762	1.7	8.7	42.109	E
2 - A27/ Church Lane	1 - A27 Off-Slip	144	36	1586	144	0	0.1	0.2	5.644	A
	2 - Havant Road	946	236	351	947	1380	1.1	1.5	6.029	A
	3 - Church Lane	0	0	1294	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		983				
	5 - Emsworth Road	1580	395	2	1584	309	2.3	4.2	9.583	A

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		118				
	2 - Emsworth Road (S)	305	76	1	306	1595	0.5	0.4	5.568	A
	3 - A27 Off-Slip	1633	408	307	1623	0	9.1	9.5	20.042	C
	4 - untitled	548	137	1175	539	755	8.7	12.2	72.985	F
2 - A27/ Church Lane	1 - A27 Off-Slip	140	35	1596	140	0	0.2	0.2	6.128	A
	2 - Havant Road	945	236	344	943	1392	1.5	1.6	6.134	A
	3 - Church Lane	0	0	1283	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		975				
	5 - Emsworth Road	1595	399	2	1594	305	4.2	4.6	9.925	A

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		102				
	2 - Emsworth Road (S)	248	62	0.75	247	1298	0.4	0.4	4.980	A
	3 - A27 Off-Slip	1324	331	248	1326	0	9.5	3.0	9.538	A
	4 - untitled	443	111	951	449	622	12.2	1.9	34.788	D
2 - A27/ Church Lane	1 - A27 Off-Slip	115	29	1304	114	0	0.2	0.1	4.835	A
	2 - Havant Road	768	192	285	768	1133	1.6	1.1	5.280	A
	3 - Church Lane	0	0	1049	0	4	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		799				
	5 - Emsworth Road	1298	324	2	1301	248	4.6	2.4	7.476	A

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip			0		84				
	2 - Emsworth Road (S)	208	52	0.78	208	1079	0.4	0.3	4.790	A
	3 - A27 Off-Slip	1104	276	209	1104	0	3.0	2.0	6.347	A
	4 - untitled	368	92	794	369	519	1.9	0.9	9.562	A
2 - A27/ Church Lane	1 - A27 Off-Slip	95	24	1082	95	0	0.1	0.1	3.768	A
	2 - Havant Road	643	161	235	641	943	1.1	1.0	4.697	A
	3 - Church Lane	0	0	872	0	3	0.0	0.0	0.000	A
	4 - A27 On-Slip			0		662				
	5 - Emsworth Road	1079	270	2	1080	208	2.4	1.5	5.483	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		83			83	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	214	961	0.223	214	0.0	0.3	4.730	A
		Exit	1	1		1092			1092	0.0	0.0	0.000	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	557	954	0.584	558	0.0	0.9	5.947	A
				2	1,2,4	550	953	0.577	551	0.0	0.8	5.912	A
			2	1	(1,2,3,4)	1107			1107	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	375	788	0.475	376	0.0	0.8	7.828	A
		Exit	1	1		524			524	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	97	1070	0.091	97	0.0	0.1	3.364	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	325	921	0.353	325	0.0	0.4	4.577	A
				2	2,3,4,5	329	920	0.358	328	0.0	0.5	4.600	A
			2	1	(1,2,3,4,5)	654			654	0.0	0.0	0.000	A
		Exit	1	1		951			951	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	661	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		3			3	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		670			670	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	545	1002	0.544	544	0.0	0.9	5.450	A
				2	2,3,4,5	547	1002	0.545	546	0.0	0.9	5.471	A
		Exit	1	1		214			214	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		96			96	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	255	962	0.266	255	0.3	0.4	5.170	A
		Exit	1	1		1305			1305	0.0	0.0	0.000	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	664	939	0.707	665	0.9	1.4	8.202	A
				2	1,2,4	664	939	0.707	664	0.8	1.4	8.135	A
			2	1	(1,2,3,4)	1328			1328	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	438	700	0.626	441	0.8	1.7	13.798	B
		Exit	1	1		624			624	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	117	926	0.126	117	0.1	0.1	4.230	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	382	905	0.422	382	0.4	0.6	5.145	A
				2	2,3,4,5	383	903	0.424	383	0.5	0.5	5.072	A
			2	1	(1,2,3,4,5)	766			766	0.0	0.0	0.000	A
		Exit	1	1		1140			1140	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	579	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		4			4	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		791			791	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	652	1001	0.652	653	0.9	1.2	6.607	A
				2	2,3,4,5	653	1002	0.651	655	0.9	1.1	6.646	A
		Exit	1	1		255			255	0.0	0.0	0.000	A

17:15 - 17:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		120			120	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	309	966	0.320	308	0.4	0.5	5.432	A
		Exit	1	1		1580			1580	0.0	0.0	0.003	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	818	920	0.889	813	1.4	4.5	16.852	C
				2	1,2,4	809	920	0.879	804	1.4	4.6	16.905	C
			2	1	(1,2,3,4)	1627			1627	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	550	591	0.930	536	1.7	8.7	42.109	E
		Exit	1	1		762			762	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	144	745	0.193	144	0.1	0.2	5.644	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	469	882	0.531	470	0.6	0.7	6.059	A
				2	2,3,4,5	477	883	0.540	477	0.5	0.8	5.999	A
			2	1	(1,2,3,4,5)	946			946	0.0	0.0	0.000	A
		Exit	1	1		1380			1380	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	455	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		4			4	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		983			983	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	792	1003	0.790	794	1.2	2.1	9.597	A
				2	2,3,4,5	787	1002	0.786	789	1.1	2.1	9.568	A
		Exit	1	1		309			309	0.0	0.0	0.005	A

17:30 - 17:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		118			118	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	305	965	0.316	306	0.5	0.4	5.568	A
		Exit	1	1		1595			1595	0.0	0.0	0.002	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	811	920	0.882	806	4.5	4.8	20.017	C
				2	1,2,4	822	920	0.893	817	4.6	4.8	20.067	C
			2	1	(1,2,3,4)	1633			1633	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	548	584	0.938	539	8.7	12.2	72.985	F
		Exit	1	1		755			755	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	140	735	0.190	140	0.2	0.2	6.128	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	473	884	0.536	473	0.7	0.8	6.125	A
				2	2,3,4,5	471	883	0.534	470	0.8	0.8	6.143	A
			2	1	(1,2,3,4,5)	945			945	0.0	0.0	0.000	A
		Exit	1	1		1392			1392	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	459	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		4			4	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		975			975	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	791	1002	0.790	791	2.1	2.3	9.972	A
				2	2,3,4,5	803	1000	0.803	803	2.1	2.3	9.879	A
		Exit	1	1		305			305	0.0	0.0	0.008	A

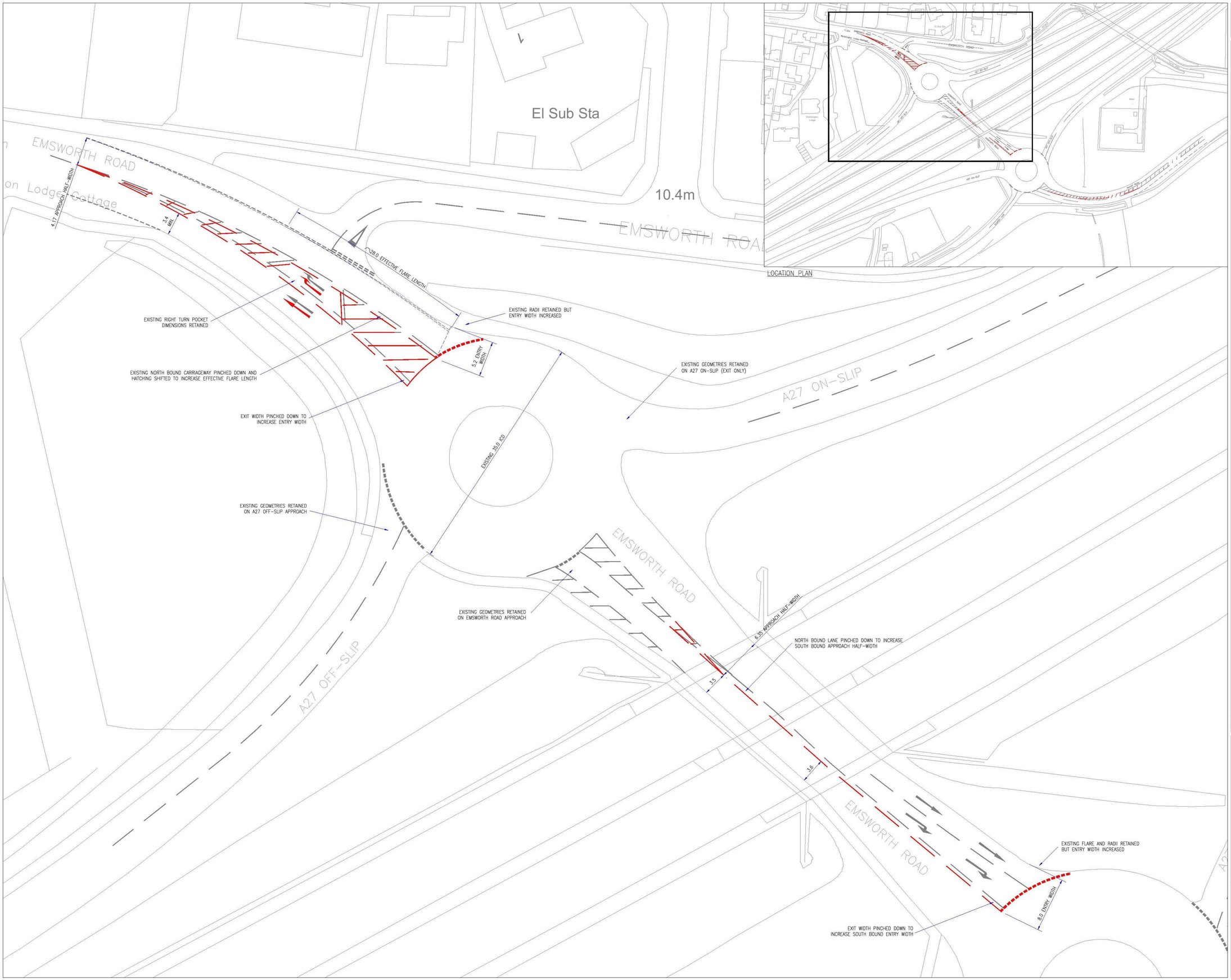
17:45 - 18:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		102			102	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	248	961	0.258	247	0.4	0.4	4.980	A
		Exit	1	1		1298			1298	0.0	0.0	0.001	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	659	942	0.699	660	4.8	1.5	9.595	A
				2	1,2,4	665	942	0.706	666	4.8	1.5	9.481	A
			2	1	(1,2,3,4)	1324			1324	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	443	708	0.626	449	12.2	1.9	34.788	D
		Exit	1	1		622			622	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	115	930	0.123	114	0.2	0.1	4.835	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	388	904	0.429	388	0.8	0.6	5.248	A
				2	2,3,4,5	380	904	0.420	380	0.8	0.5	5.313	A
			2	1	(1,2,3,4,5)	768			768	0.0	0.0	0.000	A
		Exit	1	1		1133			1133	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	578	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		4			4	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		799			799	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	646	1003	0.644	647	2.3	1.2	7.517	A
				2	2,3,4,5	652	1003	0.650	654	2.3	1.2	7.434	A
		Exit	1	1		248			248	0.0	0.0	0.006	A

18:00 - 18:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - A27/ Emsworth Road	1 - A27 On-Slip	Exit	1	1		84			84	0.0	0.0	0.000	A
	2 - Emsworth Road (S)	Entry	1	1	1,2,4	208	966	0.216	208	0.4	0.3	4.790	A
		Exit	1	1		1079			1079	0.0	0.0	0.000	A
	3 - A27 Off-Slip	Entry	1	1	1,2,4	558	958	0.582	558	1.5	1.0	6.352	A
				2	1,2,4	546	957	0.571	547	1.5	1.0	6.342	A
			2	1	(1,2,3,4)	1104			1104	0.0	0.0	0.000	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	4 - untitled	Entry	1	1	1,2,4	368	792	0.465	369	1.9	0.9	9.562	A
		Exit	1	1		519			519	0.0	0.0	0.000	A
2 - A27/ Church Lane	1 - A27 Off-Slip	Entry	1	1	2,3,4,5	95	1080	0.088	95	0.1	0.1	3.768	A
		Exit	1	1		0			0	0.0	0.0	0.000	A
	2 - Havant Road	Entry	1	1	2,3,4,5	321	923	0.348	320	0.6	0.5	4.740	A
				2	2,3,4,5	321	920	0.349	321	0.5	0.5	4.654	A
			2	1	(1,2,3,4,5)	643			643	0.0	0.0	0.000	A
		Exit	1	1		943			943	0.0	0.0	0.000	A
	3 - Church Lane	Entry	1	1	2,3,4,5	0	668	0.000	0	0.0	0.0	0.000	A
		Exit	1	1		3			3	0.0	0.0	0.000	A
	4 - A27 On-Slip	Exit	1	1		662			662	0.0	0.0	0.000	A
	5 - Emsworth Road	Entry	1	1	2,3,4,5	541	1003	0.539	542	1.2	0.8	5.457	A
				2	2,3,4,5	538	1004	0.536	539	1.2	0.8	5.510	A
		Exit	1	1		208			208	0.0	0.0	0.000	A

Appendix K



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NORTH

Rev	Description	Date	By	Chkd
-	-	--.--.--	--	--

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Client: BARRATT HOMES

Project Name: LAND AT HAVANT ROAD, EMSWORTH

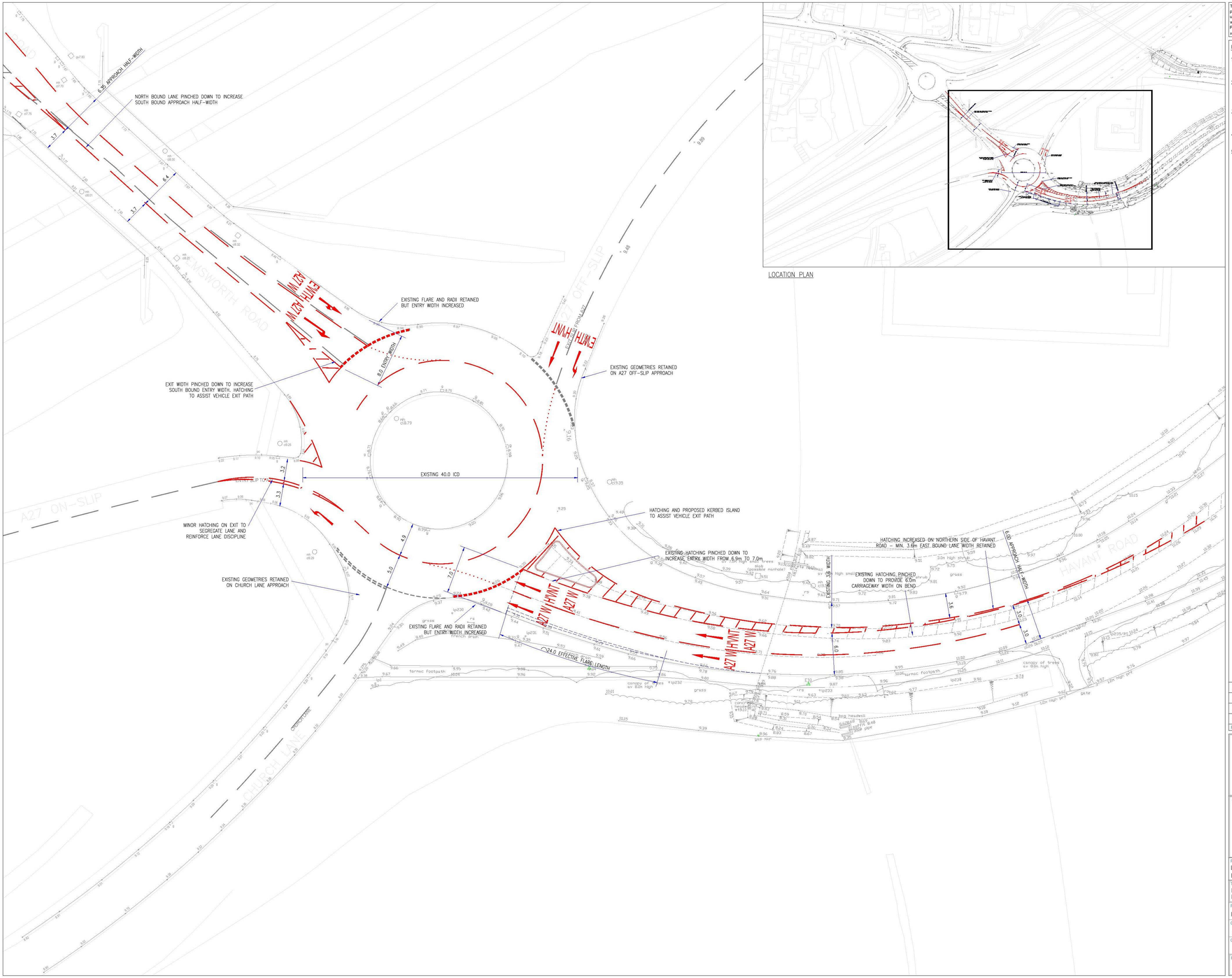
Title: EMSWORTH ROAD / A27 ROUNDABOUT - MITIGATION PROPOSALS

Project Phase: PRELIMINARY

Checked By	Checked Date	Drawn By	Drawn Date
BW	19.07.16	CL	15.07.16

Client Drawing No.	Scale
-	1:250 (AT A1 SIZE)

PBA Drawing No.	Revision
041.0025.005	-



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NORTH

Rev	Description	Date	By	Chkd
D	REVISED GEOMETRIES AND MARKINGS	07.11.16	CL	BW
C	TOPOGRAPHICAL SURVEY ADDED	07.10.16	CL	BW
B	REVISED ENTRY WIDTH ON HAVANT RD	30.09.16	CL	BW
A	ADDITIONAL RD MARKINGS	22.09.16	CL	BW

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Client

BARRATT HOMES

Project Name
LAND AT HAVANT ROAD, EMSWORTH

Title
HAVANT ROAD / CHURCH LANE / A27 ROUNDABOUT - MITIGATION PROPOSALS

Project Phase
PRELIMINARY

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041.0025.004	D