17:15 - 17:25

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	164	27	1176		303	0.541	161	110	0.7	1.1	25.570	D
2 - Little Common Road (A259)	702	117	348	16.48	1022	0.687	698	989	1.5	2.2	11.440	B
3 - Cooden Sea Road	502	84	729	8.73	605	0.830	490	316	1.9	4.0	29.754	D
4 - Barnhorn Road (A259)	1126	188	277		1225	0.919	1099	942	3.6	8.1	25.740	D
5 - Chestnut Walk	52	9	1235		133	0.393	51	141	0.3	0.6	44.041	E

17:25 - 17:35

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	171	29	1229		281	0.610	169	115	1.1	1.4	32.345	D
2 - Little Common Road (A259)	734	122	365	17.24	1012	0.725	732	1034	2.2	2.6	13.259	B
3 - Cooden Sea Road	525	88	765	9.13	583	0.901	513	332	4.0	6.2	44.878	E
4 - Barnhorn Road (A259)	1178	196	290		1218	0.967	1149	988	8.1	12.9	40.306	E
5 - Chestnut Walk	55	9	1291		110	0.500	53	147	0.6	0.9	63.504	F

17:35 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	164	27	1206		290	0.564	164	113	1.4	1.4	29.416	D
2 - Little Common Road (A259)	702	117	356	16.48	1017	0.690	703	1014	2.6	2.4	12.053	B
3 - Cooden Sea Road	502	84	736	8.73	601	0.836	504	323	6.2	5.9	40.574	E
4 - Barnhorn Road (A259)	1126	188	284		1221	0.922	1126	956	12.9	12.9	40.686	E
5 - Chestnut Walk	52	9	1266		120	0.436	53	144	0.9	0.8	55.361	F

17:45 - 17:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	143	24	1106		331	0.432	147	103	1.4	0.8	20.327	C
2 - Little Common Road (A259)	613	102	323	14.40	1037	0.591	618	929	2.4	1.6	9.104	A
3 - Cooden Sea Road	439	73	649	7.62	653	0.672	460	293	5.9	2.3	21.313	C
4 - Barnhorn Road (A259)	983	164	258		1234	0.797	1033	851	12.9	4.6	21.842	C
5 - Chestnut Walk	46	8	1161		164	0.278	48	130	0.8	0.4	32.567	D

17:55 - 18:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	114	19	860		432	0.265	117	80	0.8	0.4	11.820	B
2 - Little Common Road (A259)	490	82	254	11.50	1072	0.457	494	722	1.6	0.9	6.561	A
3 - Cooden Sea Road	350	58	518	6.09	733	0.478	358	230	2.3	1.0	10.293	B
4 - Barnhorn Road (A259)	785	131	202		1265	0.621	802	674	4.6	1.8	8.495	A
5 - Chestnut Walk	37	6	902		273	0.134	38	102	0.4	0.2	15.893	C

18:05 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	114	19	841		439	0.260	114	78	0.4	0.4	11.359	B
2 - Little Common Road (A259)	490	82	248	11.50	1071	0.457	490	707	0.9	0.9	6.475	A
3 - Cooden Sea Road	350	58	513	6.09	734	0.477	350	225	1.0	1.0	9.851	A
4 - Barnhorn Road (A259)	785	131	198		1267	0.620	785	666	1.8	1.8	7.898	A
5 - Chestnut Walk	37	6	883		281	0.130	37	100	0.2	0.2	15.183	C

Assessment Drawing No. 180300-003F - 2025 Assessment Flows, AM - Saturn Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D3 - 2025 Baseline Flows, AM - Saturn Peak	Demand Sets have different time segment lengths. Use caution if using Demand Set relationships.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Assessment Drawing No. 180300-003F	✓	✓	D3,D4,D5,D6,D7,D8,D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Little Common Roundabout	Standard Roundabout		1, 2, 3, 4, 5	29.73	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Pear Tree Lane	
2	Little Common Road (A259)	
3	Cooden Sea Road	
4	Barnhorn Road (A259)	
5	Chestnut Walk	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Pear Tree Lane	3.16	5.66	17.0	4.9	49.4	68.0	
2 - Little Common Road (A259)	3.62	7.00	13.4	24.5	48.0	38.3	
3 - Cooden Sea Road	3.42	7.84	12.3	28.1	49.4	34.2	
4 - Barnhorn Road (A259)	2.95	7.06	17.5	17.4	48.0	59.4	
5 - Chestnut Walk	2.95	5.21	1.4	8.0	34.4	60.4	

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
2 - Little Common Road (A259)	3.00	3.00	2.90	1.00	5.00	6.00	7.00
3 - Cooden Sea Road	5.00	3.00	2.90	1.00	5.00	6.00	7.00

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Percentage intercept adjustment (%)
1 - Pear Tree Lane	Percentage		74.00
2 - Little Common Road (A259)	Percentage		75.50
3 - Cooden Sea Road	Percentage		63.00
4 - Barnhorn Road (A259)	Percentage		96.00
5 - Chestnut Walk	Percentage		79.00

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Pear Tree Lane	0.407	782
2 - Little Common Road (A259)	0.598	1230
3 - Cooden Sea Road	0.603	1045
4 - Barnhorn Road (A259)	0.533	1372
5 - Chestnut Walk	0.420	652

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2025 Assessment Flows	AM - Saturn Peak	ONE HOUR	07:45	09:15	10	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Pear Tree Lane		ONE HOUR	✓	283	100.000
2 - Little Common Road (A259)		ONE HOUR	✓	750	100.000
3 - Cooden Sea Road		ONE HOUR	✓	438	100.000
4 - Barnhorn Road (A259)		ONE HOUR	✓	1041	100.000
5 - Chestnut Walk		ONE HOUR	✓	79	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Pear Tree Lane		
2 - Little Common Road (A259)	[ONEHOUR]	17.00
3 - Cooden Sea Road	[ONEHOUR]	9.00
4 - Barnhorn Road (A259)		
5 - Chestnut Walk		

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	15	152	116	0
	2 - Little Common Road (A259)	4	0	68	658	20
	3 - Cooden Sea Road	127	112	0	182	17
	4 - Barnhorn Road (A259)	51	757	201	0	32
	5 - Chestnut Walk	0	32	34	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	2	1	0	0
	2 - Little Common Road (A259)	6	0	5	3	3
	3 - Cooden Sea Road	9	2	0	10	7
	4 - Barnhorn Road (A259)	2	6	7	0	3
	5 - Chestnut Walk	0	2	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Pear Tree Lane	0.92	73.24	5.5	F	231	347
2 - Little Common Road (A259)	0.82	20.67	4.1	C	613	919
3 - Cooden Sea Road	0.80	31.12	3.6	D	358	537
4 - Barnhorn Road (A259)	0.86	20.49	5.7	C	850	1276
5 - Chestnut Walk	0.65	74.06	1.5	F	65	97

Main Results for each time segment

07:45 - 07:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	191	32	767		469	0.408	187	121	0.0	0.7	12.689	B
2 - Little Common Road (A259)	507	85	343	11.50	1012	0.501	501	612	0.0	1.0	7.196	A
3 - Cooden Sea Road	296	49	541	6.09	713	0.415	292	303	0.0	0.7	9.081	A
4 - Barnhorn Road (A259)	704	117	187		1273	0.553	696	646	0.0	1.3	6.532	A
5 - Chestnut Walk	53	9	837		301	0.178	52	46	0.0	0.2	14.819	B

07:55 - 08:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	191	32	777		465	0.411	191	123	0.7	0.7	13.206	B
2 - Little Common Road (A259)	507	85	349	11.50	1014	0.500	507	619	1.0	1.0	7.327	A
3 - Cooden Sea Road	296	49	548	6.09	711	0.416	296	308	0.7	0.8	9.310	A
4 - Barnhorn Road (A259)	704	117	189		1271	0.554	704	655	1.3	1.3	6.717	A
5 - Chestnut Walk	53	9	846		296	0.180	53	47	0.2	0.2	15.214	C

08:05 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	240	40	965		389	0.617	235	153	0.7	1.5	22.875	C
2 - Little Common Road (A259)	635	106	430	14.40	970	0.655	630	769	1.0	1.9	10.767	B
3 - Cooden Sea Road	371	62	680	7.62	635	0.585	367	380	0.8	1.4	14.235	B
4 - Barnhorn Road (A259)	882	147	235		1247	0.707	875	812	1.3	2.4	10.064	B
5 - Chestnut Walk	67	11	1052		210	0.318	66	58	0.2	0.5	25.321	D

08:15 - 08:25

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	274	46	1099		334	0.821	263	174	1.5	3.3	45.199	E
2 - Little Common Road (A259)	727	121	486	16.48	940	0.774	719	876	1.9	3.2	16.229	C
3 - Cooden Sea Road	425	71	774	8.73	578	0.735	418	431	1.4	2.6	23.080	C
4 - Barnhorn Road (A259)	1009	168	267		1230	0.821	998	925	2.4	4.3	15.697	C
5 - Chestnut Walk	77	13	1199		148	0.517	74	66	0.5	1.0	47.713	E

08:25 - 08:35

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	287	48	1153		312	0.920	274	182	3.3	5.5	73.235	F
2 - Little Common Road (A259)	761	127	507	17.24	927	0.821	755	919	3.2	4.1	20.670	C
3 - Cooden Sea Road	444	74	812	9.13	555	0.800	438	451	2.6	3.6	31.120	D
4 - Barnhorn Road (A259)	1056	176	280		1223	0.864	1048	970	4.3	5.7	20.487	C
5 - Chestnut Walk	80	13	1259		123	0.649	77	69	1.0	1.5	74.065	F

08:35 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	274	46	1117		327	0.840	274	177	5.5	5.5	70.833	F
2 - Little Common Road (A259)	727	121	501	16.48	931	0.781	728	890	4.1	3.9	18.628	C
3 - Cooden Sea Road	425	71	788	8.73	570	0.745	426	442	3.6	3.4	27.426	D
4 - Barnhorn Road (A259)	1009	168	272		1227	0.823	1012	941	5.7	5.3	18.096	C
5 - Chestnut Walk	77	13	1217		141	0.544	77	67	1.5	1.4	59.622	F

08:45 - 08:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	240	40	995		376	0.637	261	158	5.5	2.0	35.195	E
2 - Little Common Road (A259)	635	106	463	14.40	954	0.666	646	793	3.9	2.2	12.444	B
3 - Cooden Sea Road	371	62	706	7.62	619	0.599	381	403	3.4	1.7	16.875	C
4 - Barnhorn Road (A259)	882	147	243		1242	0.710	897	844	5.3	2.7	11.493	B
5 - Chestnut Walk	67	11	1081		198	0.338	72	60	1.4	0.6	30.230	D

08:55 - 09:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	191	32	788		461	0.415	199	125	2.0	0.7	14.183	B
2 - Little Common Road (A259)	507	85	359	11.50	1015	0.500	514	628	2.2	1.1	7.513	A
3 - Cooden Sea Road	296	49	558	6.09	708	0.418	302	315	1.7	0.8	9.632	A
4 - Barnhorn Road (A259)	704	117	193		1269	0.555	712	667	2.7	1.4	6.940	A
5 - Chestnut Walk	53	9	858		292	0.183	55	47	0.6	0.2	15.769	C

09:05 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	191	32	777		465	0.411	191	123	0.7	0.7	13.251	B
2 - Little Common Road (A259)	507	85	349	11.50	1014	0.500	507	620	1.1	1.0	7.334	A
3 - Cooden Sea Road	296	49	549	6.09	711	0.416	296	308	0.8	0.8	9.322	A
4 - Barnhorn Road (A259)	704	117	189		1271	0.554	704	655	1.4	1.3	6.728	A
5 - Chestnut Walk	53	9	847		296	0.180	53	47	0.2	0.2	15.236	C

Assessment Drawing No. 180300-003F - 2025 Assessment Flows, PM - Saturn Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D3 - 2025 Baseline Flows, AM - Saturn Peak	Demand Sets have different time segment lengths. Use caution if using Demand Set relationships.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Assessment Drawing No. 180300-003F	✓	✓	D3,D4,D5,D6,D7,D8,D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Little Common Roundabout	Standard Roundabout		1, 2, 3, 4, 5	38.49	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Pear Tree Lane	
2	Little Common Road (A259)	
3	Cooden Sea Road	
4	Barnhorn Road (A259)	
5	Chestnut Walk	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Pear Tree Lane	3.16	5.66	17.0	4.9	49.4	68.0	
2 - Little Common Road (A259)	3.62	7.00	13.4	24.5	48.0	38.3	
3 - Cooden Sea Road	3.42	7.84	12.3	28.1	49.4	34.2	
4 - Barnhorn Road (A259)	2.95	7.06	17.5	17.4	48.0	59.4	
5 - Chestnut Walk	2.95	5.21	1.4	8.0	34.4	60.4	

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
2 - Little Common Road (A259)	3.00	3.00	2.90	1.00	5.00	6.00	7.00
3 - Cooden Sea Road	5.00	3.00	2.90	1.00	5.00	6.00	7.00

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Percentage intercept adjustment (%)
1 - Pear Tree Lane	Percentage		74.00
2 - Little Common Road (A259)	Percentage		75.50
3 - Cooden Sea Road	Percentage		63.00
4 - Barnhorn Road (A259)	Percentage		96.00
5 - Chestnut Walk	Percentage		79.00

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Pear Tree Lane	0.407	782
2 - Little Common Road (A259)	0.598	1230
3 - Cooden Sea Road	0.603	1045
4 - Barnhorn Road (A259)	0.533	1372
5 - Chestnut Walk	0.420	652

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2025 Assessment Flows	PM - Saturn Peak	ONE HOUR	16:45	18:15	10	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Pear Tree Lane		ONE HOUR	✓	170	100.000
2 - Little Common Road (A259)		ONE HOUR	✓	736	100.000
3 - Cooden Sea Road		ONE HOUR	✓	521	100.000
4 - Barnhorn Road (A259)		ONE HOUR	✓	1179	100.000
5 - Chestnut Walk		ONE HOUR	✓	55	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Pear Tree Lane		
2 - Little Common Road (A259)	[ONEHOUR]	17.00
3 - Cooden Sea Road	[ONEHOUR]	9.00
4 - Barnhorn Road (A259)		
5 - Chestnut Walk		

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	15	114	41	0
	2 - Little Common Road (A259)	4	0	34	659	39
	3 - Cooden Sea Road	101	126	0	267	27
	4 - Barnhorn Road (A259)	12	907	177	0	83
	5 - Chestnut Walk	0	20	9	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	2	1	7	0
	2 - Little Common Road (A259)	17	0	1	5	1
	3 - Cooden Sea Road	2	2	0	8	0
	4 - Barnhorn Road (A259)	4	5	7	0	8
	5 - Chestnut Walk	0	1	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Pear Tree Lane	0.63	34.36	1.5	D	139	208
2 - Little Common Road (A259)	0.74	13.79	2.7	B	601	902
3 - Cooden Sea Road	0.92	48.66	6.8	E	426	638
4 - Barnhorn Road (A259)	0.98	48.48	15.1	E	963	1445
5 - Chestnut Walk	0.54	71.54	1.0	F	45	67

Main Results for each time segment

16:45 - 16:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	115	19	844		438	0.262	113	78	0.0	0.4	11.270	B
2 - Little Common Road (A259)	498	83	244	11.50	1069	0.466	492	712	0.0	0.9	6.476	A
3 - Cooden Sea Road	352	59	514	6.09	730	0.482	347	222	0.0	0.9	9.707	A
4 - Barnhorn Road (A259)	797	133	198		1267	0.629	787	663	0.0	1.7	7.758	A
5 - Chestnut Walk	37	6	885		280	0.133	36	99	0.0	0.2	15.167	C

16:55 - 17:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	115	19	855		433	0.265	115	79	0.4	0.4	11.579	B
2 - Little Common Road (A259)	498	83	248	11.50	1072	0.464	498	722	0.9	0.9	6.563	A
3 - Cooden Sea Road	352	59	520	6.09	730	0.483	352	226	0.9	1.0	10.001	B
4 - Barnhorn Road (A259)	797	133	201		1265	0.630	797	671	1.7	1.8	8.105	A
5 - Chestnut Walk	37	6	897		275	0.135	37	101	0.2	0.2	15.598	C

17:05 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	144	24	1057		351	0.410	142	98	0.4	0.7	17.493	C
2 - Little Common Road (A259)	623	104	307	14.40	1039	0.600	620	893	0.9	1.5	8.902	A
3 - Cooden Sea Road	441	74	647	7.62	655	0.674	435	279	1.0	2.0	16.729	C
4 - Barnhorn Road (A259)	999	166	248		1240	0.806	986	834	1.8	3.9	14.270	B
5 - Chestnut Walk	47	8	1109		186	0.250	46	125	0.2	0.3	26.246	D

17:15 - 17:25

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	165	27	1193		296	0.557	162	110	0.7	1.2	26.906	D
2 - Little Common Road (A259)	714	119	347	16.48	1023	0.698	709	1007	1.5	2.3	11.815	B
3 - Cooden Sea Road	505	84	740	8.73	599	0.844	491	317	2.0	4.3	31.506	D
4 - Barnhorn Road (A259)	1143	191	281		1222	0.935	1112	950	3.9	9.1	28.230	D
5 - Chestnut Walk	53	9	1252		126	0.423	51	141	0.3	0.7	48.277	E

17:25 - 17:35

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	172	29	1244		275	0.627	170	115	1.2	1.5	34.356	D
2 - Little Common Road (A259)	747	124	364	17.24	1013	0.737	744	1051	2.3	2.7	13.787	B
3 - Cooden Sea Road	528	88	776	9.13	577	0.916	514	331	4.3	6.8	48.657	E
4 - Barnhorn Road (A259)	1196	199	294		1215	0.984	1160	996	9.1	15.1	45.699	E
5 - Chestnut Walk	56	9	1306		103	0.539	54	148	0.7	1.0	71.537	F

17:35 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	165	27	1227		282	0.585	165	114	1.5	1.5	31.749	D
2 - Little Common Road (A259)	714	119	356	16.48	1018	0.701	715	1036	2.7	2.6	12.520	B
3 - Cooden Sea Road	505	84	747	8.73	594	0.850	506	324	6.8	6.6	44.818	E
4 - Barnhorn Road (A259)	1143	191	289		1218	0.938	1143	964	15.1	15.1	48.476	E
5 - Chestnut Walk	53	9	1287		111	0.479	53	145	1.0	1.0	64.424	F

17:45 - 17:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	144	24	1135		319	0.451	148	105	1.5	0.9	21.934	C
2 - Little Common Road (A259)	623	104	325	14.40	1036	0.602	629	958	2.6	1.6	9.378	A
3 - Cooden Sea Road	441	74	659	7.62	647	0.682	466	295	6.6	2.5	22.994	C
4 - Barnhorn Road (A259)	999	166	264		1231	0.811	1058	861	15.1	5.2	26.081	D
5 - Chestnut Walk	47	8	1190		152	0.306	50	132	1.0	0.5	37.128	E

17:55 - 18:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	115	19	878		424	0.271	118	81	0.9	0.4	12.157	B
2 - Little Common Road (A259)	498	83	255	11.50	1072	0.464	502	740	1.6	0.9	6.662	A
3 - Cooden Sea Road	352	59	526	6.09	728	0.484	361	231	2.5	1.0	10.519	B
4 - Barnhorn Road (A259)	797	133	205		1263	0.631	817	681	5.2	1.9	8.873	A
5 - Chestnut Walk	37	6	920		266	0.140	39	103	0.5	0.2	16.508	C

18:05 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	115	19	856		433	0.265	115	79	0.4	0.4	11.603	B
2 - Little Common Road (A259)	498	83	248	11.50	1072	0.464	498	722	0.9	0.9	6.564	A
3 - Cooden Sea Road	352	59	520	6.09	730	0.483	352	226	1.0	1.0	10.016	B
4 - Barnhorn Road (A259)	797	133	201		1265	0.630	797	672	1.9	1.8	8.133	A
5 - Chestnut Walk	37	6	898		275	0.135	37	101	0.2	0.2	15.624	C

Assessment Drawing No. 180300-003F - 2031 Baseline Flows, AM - Saturn Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D3 - 2025 Baseline Flows, AM - Saturn Peak	Demand Sets have different time segment lengths. Use caution if using Demand Set relationships.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Assessment Drawing No. 180300-003F	✓	✓	D3,D4,D5,D6,D7,D8,D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Little Common Roundabout	Standard Roundabout		1, 2, 3, 4, 5	43.48	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Pear Tree Lane	
2	Little Common Road (A259)	
3	Cooden Sea Road	
4	Barnhorn Road (A259)	
5	Chestnut Walk	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Pear Tree Lane	3.16	5.66	17.0	4.9	49.4	68.0	
2 - Little Common Road (A259)	3.62	7.00	13.4	24.5	48.0	38.3	
3 - Cooden Sea Road	3.42	7.84	12.3	28.1	49.4	34.2	
4 - Barnhorn Road (A259)	2.95	7.06	17.5	17.4	48.0	59.4	
5 - Chestnut Walk	2.95	5.21	1.4	8.0	34.4	60.4	

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
2 - Little Common Road (A259)	3.00	3.00	2.90	1.00	5.00	6.00	7.00
3 - Cooden Sea Road	5.00	3.00	2.90	1.00	5.00	6.00	7.00

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Percentage intercept adjustment (%)
1 - Pear Tree Lane	Percentage		74.00
2 - Little Common Road (A259)	Percentage		75.50
3 - Cooden Sea Road	Percentage		63.00
4 - Barnhorn Road (A259)	Percentage		96.00
5 - Chestnut Walk	Percentage		79.00

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Pear Tree Lane	0.407	782
2 - Little Common Road (A259)	0.598	1230
3 - Cooden Sea Road	0.603	1045
4 - Barnhorn Road (A259)	0.533	1372
5 - Chestnut Walk	0.420	652

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 Baseline Flows	AM - Saturn Peak	ONE HOUR	07:45	09:15	10	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Pear Tree Lane		ONE HOUR	✓	300	100.000
2 - Little Common Road (A259)		ONE HOUR	✓	766	100.000
3 - Cooden Sea Road		ONE HOUR	✓	459	100.000
4 - Barnhorn Road (A259)		ONE HOUR	✓	1093	100.000
5 - Chestnut Walk		ONE HOUR	✓	83	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Pear Tree Lane		
2 - Little Common Road (A259)	[ONEHOUR]	17.00
3 - Cooden Sea Road	[ONEHOUR]	9.00
4 - Barnhorn Road (A259)		
5 - Chestnut Walk		

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	16	161	123	0
	2 - Little Common Road (A259)	3	0	68	675	20
	3 - Cooden Sea Road	134	116	0	191	18
	4 - Barnhorn Road (A259)	53	793	213	0	34
	5 - Chestnut Walk	0	33	36	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	2	1	0	0
	2 - Little Common Road (A259)	6	0	5	3	3
	3 - Cooden Sea Road	9	2	0	10	7
	4 - Barnhorn Road (A259)	2	6	7	0	3
	5 - Chestnut Walk	0	2	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Pear Tree Lane	1.04	137.55	10.6	F	245	368
2 - Little Common Road (A259)	0.85	23.52	4.8	C	626	939
3 - Cooden Sea Road	0.85	39.16	4.7	E	375	562
4 - Barnhorn Road (A259)	0.91	27.26	7.9	D	893	1339
5 - Chestnut Walk	0.83	125.00	2.6	F	68	102

Main Results for each time segment

07:45 - 07:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	203	34	804		454	0.447	198	127	0.0	0.8	13.920	B
2 - Little Common Road (A259)	518	86	363	11.50	1000	0.518	511	639	0.0	1.1	7.506	A
3 - Cooden Sea Road	310	52	557	6.09	704	0.441	305	318	0.0	0.8	9.587	A
4 - Barnhorn Road (A259)	739	123	194		1269	0.583	730	668	0.0	1.4	6.976	A
5 - Chestnut Walk	56	9	876		284	0.198	55	48	0.0	0.2	16.036	C

07:55 - 08:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	203	34	815		450	0.451	203	128	0.8	0.8	14.636	B
2 - Little Common Road (A259)	518	86	370	11.50	1002	0.517	518	648	1.1	1.1	7.664	A
3 - Cooden Sea Road	310	52	564	6.09	702	0.442	310	323	0.8	0.8	9.866	A
4 - Barnhorn Road (A259)	739	123	197		1267	0.583	739	678	1.4	1.5	7.212	A
5 - Chestnut Walk	56	9	887		279	0.201	56	49	0.2	0.3	16.558	C

08:05 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	254	42	1010		370	0.686	247	159	0.8	1.9	28.043	D
2 - Little Common Road (A259)	649	108	454	14.40	958	0.677	643	803	1.1	2.0	11.593	B
3 - Cooden Sea Road	389	65	699	7.62	623	0.624	384	398	0.8	1.7	15.830	C
4 - Barnhorn Road (A259)	926	154	243		1242	0.745	917	839	1.5	2.9	11.428	B
5 - Chestnut Walk	70	12	1100		190	0.370	68	60	0.3	0.6	30.033	D

08:15 - 08:25

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	291	48	1146		315	0.924	271	181	1.9	5.2	64.325	F
2 - Little Common Road (A259)	743	124	506	16.48	928	0.800	733	912	2.0	3.6	18.152	C
3 - Cooden Sea Road	445	74	792	8.73	567	0.785	435	447	1.7	3.3	27.444	D
4 - Barnhorn Road (A259)	1060	177	276		1225	0.865	1044	951	2.9	5.6	19.379	C
5 - Chestnut Walk	80	13	1251		126	0.636	75	69	0.6	1.4	67.038	F

08:25 - 08:35

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalise level of service
1 - Pear Tree Lane	304	51	1200		293	1.038	276	189	5.2	9.8	118.138	F
2 - Little Common Road (A259)	777	129	521	17.24	919	0.846	770	955	3.6	4.8	23.521	C
3 - Cooden Sea Road	466	78	828	9.13	545	0.854	457	463	3.3	4.7	39.162	E
4 - Barnhorn Road (A259)	1109	185	290		1218	0.911	1094	995	5.6	7.9	27.262	D
5 - Chestnut Walk	84	14	1312		101	0.835	77	72	1.4	2.6	124.995	F

08:35 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalise level of service
1 - Pear Tree Lane	291	48	1171		305	0.954	286	185	9.8	10.6	137.545	F
2 - Little Common Road (A259)	743	124	527	16.48	916	0.811	743	930	4.8	4.7	21.859	C
3 - Cooden Sea Road	445	74	808	8.73	557	0.799	446	462	4.7	4.6	35.618	E
4 - Barnhorn Road (A259)	1060	177	283		1221	0.868	1062	972	7.9	7.6	24.728	C
5 - Chestnut Walk	80	13	1275		117	0.690	81	70	2.6	2.5	107.547	F

08:45 - 08:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	254	42	1058		351	0.725	298	167	10.6	3.3	76.846	F
2 - Little Common Road (A259)	649	108	516	14.40	922	0.704	661	840	4.7	2.6	14.836	B
3 - Cooden Sea Road	389	65	738	7.62	600	0.648	404	439	4.6	2.1	20.960	C
4 - Barnhorn Road (A259)	926	154	255		1236	0.749	951	886	7.6	3.4	14.377	B
5 - Chestnut Walk	70	12	1144		172	0.410	81	63	2.5	0.8	44.224	E

08:55 - 09:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	203	34	830		444	0.457	218	131	3.3	0.9	16.961	C
2 - Little Common Road (A259)	518	86	388	11.50	999	0.519	527	660	2.6	1.1	8.013	A
3 - Cooden Sea Road	310	52	579	6.09	695	0.446	318	335	2.1	0.9	10.435	B
4 - Barnhorn Road (A259)	739	123	201		1265	0.584	750	696	3.4	1.5	7.566	A
5 - Chestnut Walk	56	9	902		273	0.206	59	50	0.8	0.3	17.524	C

09:05 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	203	34	815		450	0.451	203	129	0.9	0.8	14.718	B
2 - Little Common Road (A259)	518	86	370	11.50	1003	0.517	518	648	1.1	1.1	7.671	A
3 - Cooden Sea Road	310	52	565	6.09	702	0.442	311	323	0.9	0.9	9.885	A
4 - Barnhorn Road (A259)	739	123	197		1267	0.583	739	679	1.5	1.5	7.226	A
5 - Chestnut Walk	56	9	887		279	0.201	56	49	0.3	0.3	16.596	C

Assessment Drawing No. 180300-003F - 2031 Baseline Flows, PM - Saturn Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D3 - 2025 Baseline Flows, AM - Saturn Peak	Demand Sets have different time segment lengths. Use caution if using Demand Set relationships.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Assessment Drawing No. 180300-003F	✓	✓	D3,D4,D5,D6,D7,D8,D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Little Common Roundabout	Standard Roundabout		1, 2, 3, 4, 5	59.34	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Pear Tree Lane	
2	Little Common Road (A259)	
3	Cooden Sea Road	
4	Barnhorn Road (A259)	
5	Chestnut Walk	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Pear Tree Lane	3.16	5.66	17.0	4.9	49.4	68.0	
2 - Little Common Road (A259)	3.62	7.00	13.4	24.5	48.0	38.3	
3 - Cooden Sea Road	3.42	7.84	12.3	28.1	49.4	34.2	
4 - Barnhorn Road (A259)	2.95	7.06	17.5	17.4	48.0	59.4	
5 - Chestnut Walk	2.95	5.21	1.4	8.0	34.4	60.4	

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
2 - Little Common Road (A259)	3.00	3.00	2.90	1.00	5.00	6.00	7.00
3 - Cooden Sea Road	5.00	3.00	2.90	1.00	5.00	6.00	7.00

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Percentage intercept adjustment (%)
1 - Pear Tree Lane	Percentage		74.00
2 - Little Common Road (A259)	Percentage		75.50
3 - Cooden Sea Road	Percentage		63.00
4 - Barnhorn Road (A259)	Percentage		96.00
5 - Chestnut Walk	Percentage		79.00

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Pear Tree Lane	0.407	782
2 - Little Common Road (A259)	0.598	1230
3 - Cooden Sea Road	0.603	1045
4 - Barnhorn Road (A259)	0.533	1372
5 - Chestnut Walk	0.420	652

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2031 Baseline Flows	PM - Saturn Peak	ONE HOUR	16:45	18:15	10	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Pear Tree Lane		ONE HOUR	✓	179	100.000
2 - Little Common Road (A259)		ONE HOUR	✓	767	100.000
3 - Cooden Sea Road		ONE HOUR	✓	547	100.000
4 - Barnhorn Road (A259)		ONE HOUR	✓	1229	100.000
5 - Chestnut Walk		ONE HOUR	✓	57	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Pear Tree Lane		
2 - Little Common Road (A259)	[ONEHOUR]	17.00
3 - Cooden Sea Road	[ONEHOUR]	9.00
4 - Barnhorn Road (A259)		
5 - Chestnut Walk		

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	15	121	43	0
	2 - Little Common Road (A259)	3	0	34	689	41
	3 - Cooden Sea Road	107	130	0	282	28
	4 - Barnhorn Road (A259)	12	942	187	0	88
	5 - Chestnut Walk	0	20	9	28	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	2	1	7	0
	2 - Little Common Road (A259)	17	0	1	5	1
	3 - Cooden Sea Road	2	2	0	8	0
	4 - Barnhorn Road (A259)	4	5	7	0	8
	5 - Chestnut Walk	0	1	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Pear Tree Lane	0.68	40.86	1.9	E	146	219
2 - Little Common Road (A259)	0.78	16.07	3.3	C	627	940
3 - Cooden Sea Road	1.00	79.16	11.4	F	447	670
4 - Barnhorn Road (A259)	1.03	78.66	25.1	F	1004	1506
5 - Chestnut Walk	0.62	92.74	1.3	F	47	70

Main Results for each time segment

16:45 - 16:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	121	20	877		425	0.285	119	81	0.0	0.4	11.965	B
2 - Little Common Road (A259)	519	86	258	11.50	1061	0.489	513	737	0.0	1.0	6.796	A
3 - Cooden Sea Road	370	62	537	6.09	717	0.516	363	234	0.0	1.1	10.505	B
4 - Barnhorn Road (A259)	831	139	205		1263	0.658	819	695	0.0	2.0	8.365	A
5 - Chestnut Walk	39	6	920		265	0.145	38	105	0.0	0.2	16.233	C

16:55 - 17:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	121	20	890		419	0.289	121	82	0.4	0.4	12.356	B
2 - Little Common Road (A259)	519	86	262	11.50	1064	0.487	519	748	1.0	1.0	6.903	A
3 - Cooden Sea Road	370	62	544	6.09	716	0.516	370	237	1.1	1.1	10.891	B
4 - Barnhorn Road (A259)	831	139	209		1261	0.659	831	704	2.0	2.0	8.820	A
5 - Chestnut Walk	39	6	934		260	0.148	39	106	0.2	0.2	16.782	C

17:05 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	152	25	1096		335	0.452	149	102	0.4	0.8	19.580	C
2 - Little Common Road (A259)	650	108	323	14.40	1031	0.630	645	922	1.0	1.7	9.645	A
3 - Cooden Sea Road	463	77	676	7.62	637	0.727	455	293	1.1	2.5	19.840	C
4 - Barnhorn Road (A259)	1041	174	257		1235	0.843	1024	873	2.0	4.8	16.784	C
5 - Chestnut Walk	48	8	1150		169	0.286	47	131	0.2	0.4	30.225	D

17:15 - 17:25

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	174	29	1224		283	0.613	170	113	0.8	1.4	31.449	D
2 - Little Common Road (A259)	744	124	364	16.48	1013	0.734	738	1030	1.7	2.7	13.381	B
3 - Cooden Sea Road	530	88	772	8.73	579	0.915	508	330	2.5	6.3	42.592	E
4 - Barnhorn Road (A259)	1192	199	288		1218	0.978	1144	991	4.8	12.7	36.463	E
5 - Chestnut Walk	55	9	1285		112	0.492	53	147	0.4	0.8	59.675	F

17:25 - 17:35

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	182	30	1268		265	0.684	179	117	1.4	1.9	40.865	E
2 - Little Common Road (A259)	778	130	380	17.24	1003	0.775	774	1067	2.7	3.3	16.066	C
3 - Cooden Sea Road	555	92	810	9.13	556	0.997	525	344	6.3	11.3	74.015	F
4 - Barnhorn Road (A259)	1247	208	299		1213	1.028	1184	1036	12.7	23.2	63.987	F
5 - Chestnut Walk	58	10	1330		93	0.618	55	153	0.8	1.3	90.164	F

17:35 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	174	29	1265		266	0.652	174	118	1.9	1.9	39.754	E
2 - Little Common Road (A259)	744	124	374	16.48	1007	0.739	745	1064	3.3	3.1	14.518	B
3 - Cooden Sea Road	530	88	781	8.73	574	0.924	530	339	11.3	11.4	79.162	F
4 - Barnhorn Road (A259)	1192	199	299		1212	0.983	1180	1011	23.2	25.1	78.664	F
5 - Chestnut Walk	55	9	1328		94	0.587	55	151	1.3	1.3	92.736	F

17:45 - 17:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	152	25	1223		284	0.535	155	114	1.9	1.3	29.596	D
2 - Little Common Road (A259)	650	108	349	14.40	1022	0.636	657	1029	3.1	1.9	10.529	B
3 - Cooden Sea Road	463	77	690	7.62	629	0.737	511	316	11.4	3.4	38.823	E
4 - Barnhorn Road (A259)	1041	174	285		1220	0.853	1143	916	25.1	8.0	51.302	F
5 - Chestnut Walk	48	8	1286		112	0.431	51	143	1.3	0.9	63.093	F

17:55 - 18:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	121	20	929		403	0.300	126	85	1.3	0.5	13.531	B
2 - Little Common Road (A259)	519	86	275	11.50	1062	0.488	524	781	1.9	1.0	7.068	A
3 - Cooden Sea Road	370	62	544	6.09	716	0.516	370	238	1.2	1.1	10.917	B
4 - Barnhorn Road (A259)	831	139	216		1257	0.661	866	719	8.0	2.1	10.511	B
5 - Chestnut Walk	39	6	972		244	0.158	43	110	0.9	0.2	18.831	C

18:05 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	121	20	890		419	0.289	121	83	0.5	0.4	12.397	B
2 - Little Common Road (A259)	519	86	263	11.50	1064	0.487	519	749	1.0	1.0	6.906	A
3 - Cooden Sea Road	370	62	544	6.09	716	0.516	370	238	1.2	1.1	10.917	B
4 - Barnhorn Road (A259)	831	139	209		1261	0.659	831	705	2.1	2.1	8.866	A
5 - Chestnut Walk	39	6	934		260	0.148	39	106	0.2	0.2	16.833	C

Assessment Drawing No. 180300-003F - 2031 Assessment Flows, AM - Saturn Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D3 - 2025 Baseline Flows, AM - Saturn Peak	Demand Sets have different time segment lengths. Use caution if using Demand Set relationships.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Assessment Drawing No. 180300-003F	✓	✓	D3,D4,D5,D6,D7,D8,D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Little Common Roundabout	Standard Roundabout		1, 2, 3, 4, 5	46.70	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Pear Tree Lane	
2	Little Common Road (A259)	
3	Cooden Sea Road	
4	Barnhorn Road (A259)	
5	Chestnut Walk	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Pear Tree Lane	3.16	5.66	17.0	4.9	49.4	68.0	
2 - Little Common Road (A259)	3.62	7.00	13.4	24.5	48.0	38.3	
3 - Cooden Sea Road	3.42	7.84	12.3	28.1	49.4	34.2	
4 - Barnhorn Road (A259)	2.95	7.06	17.5	17.4	48.0	59.4	
5 - Chestnut Walk	2.95	5.21	1.4	8.0	34.4	60.4	

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
2 - Little Common Road (A259)	3.00	3.00	2.90	1.00	5.00	6.00	7.00
3 - Cooden Sea Road	5.00	3.00	2.90	1.00	5.00	6.00	7.00

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Percentage intercept adjustment (%)
1 - Pear Tree Lane	Percentage		74.00
2 - Little Common Road (A259)	Percentage		75.50
3 - Cooden Sea Road	Percentage		63.00
4 - Barnhorn Road (A259)	Percentage		96.00
5 - Chestnut Walk	Percentage		79.00

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Pear Tree Lane	0.407	782
2 - Little Common Road (A259)	0.598	1230
3 - Cooden Sea Road	0.603	1045
4 - Barnhorn Road (A259)	0.533	1372
5 - Chestnut Walk	0.420	652

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2031 Assessment Flows	AM - Saturn Peak	ONE HOUR	07:45	09:15	10	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Pear Tree Lane		ONE HOUR	✓	300	100.000
2 - Little Common Road (A259)		ONE HOUR	✓	791	100.000
3 - Cooden Sea Road		ONE HOUR	✓	460	100.000
4 - Barnhorn Road (A259)		ONE HOUR	✓	1100	100.000
5 - Chestnut Walk		ONE HOUR	✓	84	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Pear Tree Lane		
2 - Little Common Road (A259)	[ONEHOUR]	17.00
3 - Cooden Sea Road	[ONEHOUR]	9.00
4 - Barnhorn Road (A259)		
5 - Chestnut Walk		

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	16	161	123	0
	2 - Little Common Road (A259)	4	0	71	695	21
	3 - Cooden Sea Road	134	117	0	191	18
	4 - Barnhorn Road (A259)	53	800	213	0	34
	5 - Chestnut Walk	0	34	36	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	2	1	0	0
	2 - Little Common Road (A259)	6	0	5	3	3
	3 - Cooden Sea Road	9	2	0	10	7
	4 - Barnhorn Road (A259)	2	6	7	0	3
	5 - Chestnut Walk	0	2	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Pear Tree Lane	1.05	145.80	11.2	F	245	368
2 - Little Common Road (A259)	0.87	26.91	5.6	D	646	969
3 - Cooden Sea Road	0.87	43.56	5.3	E	376	564
4 - Barnhorn Road (A259)	0.92	28.49	8.4	D	899	1348
5 - Chestnut Walk	0.87	134.84	2.9	F	69	103

Main Results for each time segment

07:45 - 07:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	203	34	810		452	0.449	198	127	0.0	0.8	14.038	B
2 - Little Common Road (A259)	535	89	363	11.50	1001	0.535	528	645	0.0	1.2	7.763	A
3 - Cooden Sea Road	311	52	571	6.09	696	0.447	306	320	0.0	0.8	9.803	A
4 - Barnhorn Road (A259)	744	124	196		1268	0.587	735	681	0.0	1.5	7.047	A
5 - Chestnut Walk	57	9	882		282	0.202	55	49	0.0	0.3	16.250	C

07:55 - 08:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	203	34	821		447	0.453	203	129	0.8	0.8	14.781	B
2 - Little Common Road (A259)	535	89	370	11.50	1003	0.533	535	654	1.2	1.2	7.927	A
3 - Cooden Sea Road	311	52	579	6.09	693	0.449	311	325	0.8	0.9	10.108	B
4 - Barnhorn Road (A259)	744	124	199		1266	0.587	744	692	1.5	1.5	7.292	A
5 - Chestnut Walk	57	9	893		277	0.205	57	49	0.3	0.3	16.798	C

08:05 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	254	42	1017		368	0.691	247	160	0.8	2.0	28.613	D
2 - Little Common Road (A259)	670	112	454	14.40	959	0.699	664	810	1.2	2.2	12.298	B
3 - Cooden Sea Road	390	65	717	7.62	612	0.636	384	401	0.9	1.8	16.571	C
4 - Barnhorn Road (A259)	932	155	246		1241	0.751	923	855	1.5	3.0	11.657	B
5 - Chestnut Walk	71	12	1107		187	0.381	69	61	0.3	0.6	30.957	D

08:15 - 08:25

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	291	48	1153		312	0.932	271	181	2.0	5.4	66.428	F
2 - Little Common Road (A259)	767	128	505	16.48	929	0.826	755	919	2.2	4.2	20.098	C
3 - Cooden Sea Road	446	74	811	8.73	556	0.803	435	449	1.8	3.6	29.636	D
4 - Barnhorn Road (A259)	1067	178	278		1224	0.872	1050	968	3.0	5.8	20.020	C
5 - Chestnut Walk	81	14	1258		123	0.660	76	70	0.6	1.5	71.157	F

08:25 - 08:35

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalise level of service
1 - Pear Tree Lane	304	51	1206		290	1.048	275	190	5.4	10.2	123.018	F
2 - Little Common Road (A259)	802	134	519	17.24	920	0.872	793	962	4.2	5.6	26.914	D
3 - Cooden Sea Road	467	78	848	9.13	534	0.875	456	465	3.6	5.3	43.562	E
4 - Barnhorn Road (A259)	1116	186	292		1216	0.917	1100	1012	5.8	8.4	28.492	D
5 - Chestnut Walk	85	14	1319		98	0.870	77	73	1.5	2.9	134.841	F

08:35 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalise level of service
1 - Pear Tree Lane	291	48	1179		301	0.965	285	185	10.2	11.2	145.799	F
2 - Little Common Road (A259)	767	128	525	16.48	917	0.837	767	939	5.6	5.6	25.302	D
3 - Cooden Sea Road	446	74	829	8.73	545	0.819	447	464	5.3	5.2	40.386	E
4 - Barnhorn Road (A259)	1067	178	285		1220	0.874	1068	990	8.4	8.1	26.079	D
5 - Chestnut Walk	81	14	1283		113	0.720	82	71	2.9	2.9	121.330	F

08:45 - 08:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	254	42	1070		346	0.735	300	168	11.2	3.6	84.848	F
2 - Little Common Road (A259)	670	112	519	14.40	920	0.728	686	851	5.6	3.0	16.718	C
3 - Cooden Sea Road	390	65	761	7.62	586	0.665	407	444	5.2	2.3	23.246	C
4 - Barnhorn Road (A259)	932	155	260		1234	0.755	959	908	8.1	3.5	15.008	C
5 - Chestnut Walk	71	12	1155		167	0.426	83	64	2.9	0.8	48.574	E

08:55 - 09:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	203	34	837		441	0.460	219	132	3.6	0.9	17.417	C
2 - Little Common Road (A259)	535	89	390	11.50	998	0.536	545	667	3.0	1.2	8.395	A
3 - Cooden Sea Road	311	52	596	6.09	685	0.454	319	339	2.3	0.9	10.806	B
4 - Barnhorn Road (A259)	744	124	204		1263	0.589	756	712	3.5	1.6	7.673	A
5 - Chestnut Walk	57	9	909		270	0.210	60	50	0.8	0.3	17.888	C

09:05 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	203	34	821		447	0.454	203	129	0.9	0.9	14.867	B
2 - Little Common Road (A259)	535	89	370	11.50	1003	0.533	535	654	1.2	1.2	7.938	A
3 - Cooden Sea Road	311	52	580	6.09	693	0.449	311	325	0.9	0.9	10.128	B
4 - Barnhorn Road (A259)	744	124	199		1266	0.588	744	692	1.6	1.5	7.310	A
5 - Chestnut Walk	57	9	894		277	0.205	57	49	0.3	0.3	16.839	C

Assessment Drawing No. 180300-003F - 2031 Assessment Flows, PM - Saturn Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D3 - 2025 Baseline Flows, AM - Saturn Peak	Demand Sets have different time segment lengths. Use caution if using Demand Set relationships.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Assessment Drawing No. 180300-003F	✓	✓	D3,D4,D5,D6,D7,D8,D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Little Common Roundabout	Standard Roundabout		1, 2, 3, 4, 5	67.85	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Pear Tree Lane	
2	Little Common Road (A259)	
3	Cooden Sea Road	
4	Barnhorn Road (A259)	
5	Chestnut Walk	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Pear Tree Lane	3.16	5.66	17.0	4.9	49.4	68.0	
2 - Little Common Road (A259)	3.62	7.00	13.4	24.5	48.0	38.3	
3 - Cooden Sea Road	3.42	7.84	12.3	28.1	49.4	34.2	
4 - Barnhorn Road (A259)	2.95	7.06	17.5	17.4	48.0	59.4	
5 - Chestnut Walk	2.95	5.21	1.4	8.0	34.4	60.4	

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
2 - Little Common Road (A259)	3.00	3.00	2.90	1.00	5.00	6.00	7.00
3 - Cooden Sea Road	5.00	3.00	2.90	1.00	5.00	6.00	7.00

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Percentage intercept adjustment (%)
1 - Pear Tree Lane	Percentage		74.00
2 - Little Common Road (A259)	Percentage		75.50
3 - Cooden Sea Road	Percentage		63.00
4 - Barnhorn Road (A259)	Percentage		96.00
5 - Chestnut Walk	Percentage		79.00

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Pear Tree Lane	0.407	782
2 - Little Common Road (A259)	0.598	1230
3 - Cooden Sea Road	0.603	1045
4 - Barnhorn Road (A259)	0.533	1372
5 - Chestnut Walk	0.420	652

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2031 Assessment Flows	PM - Saturn Peak	ONE HOUR	16:45	18:15	10	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Pear Tree Lane		ONE HOUR	✓	180	100.000
2 - Little Common Road (A259)		ONE HOUR	✓	778	100.000
3 - Cooden Sea Road		ONE HOUR	✓	549	100.000
4 - Barnhorn Road (A259)		ONE HOUR	✓	1247	100.000
5 - Chestnut Walk		ONE HOUR	✓	58	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Pear Tree Lane		
2 - Little Common Road (A259)	[ONEHOUR]	17.00
3 - Cooden Sea Road	[ONEHOUR]	9.00
4 - Barnhorn Road (A259)		
5 - Chestnut Walk		

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	16	121	43	0
	2 - Little Common Road (A259)	4	0	35	698	41
	3 - Cooden Sea Road	107	132	0	282	28
	4 - Barnhorn Road (A259)	12	960	187	0	88
	5 - Chestnut Walk	0	21	9	28	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	2	1	7	0
	2 - Little Common Road (A259)	17	0	1	5	1
	3 - Cooden Sea Road	2	2	0	8	0
	4 - Barnhorn Road (A259)	4	5	7	0	8
	5 - Chestnut Walk	0	1	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Pear Tree Lane	0.70	42.85	2.0	E	147	221
2 - Little Common Road (A259)	0.79	16.73	3.5	C	636	953
3 - Cooden Sea Road	1.01	88.00	12.6	F	448	673
4 - Barnhorn Road (A259)	1.04	92.70	30.3	F	1019	1528
5 - Chestnut Walk	0.65	106.23	1.5	F	47	71

Main Results for each time segment

16:45 - 16:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	122	20	890		419	0.290	119	82	0.0	0.4	12.208	B
2 - Little Common Road (A259)	526	88	258	11.50	1062	0.496	520	752	0.0	1.0	6.883	A
3 - Cooden Sea Road	371	62	544	6.09	713	0.521	365	234	0.0	1.1	10.654	B
4 - Barnhorn Road (A259)	843	141	207		1261	0.668	831	701	0.0	2.0	8.597	A
5 - Chestnut Walk	39	7	934		260	0.151	38	105	0.0	0.2	16.687	C

16:55 - 17:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	122	20	904		414	0.294	122	83	0.4	0.4	12.633	B
2 - Little Common Road (A259)	526	88	262	11.50	1065	0.494	526	763	1.0	1.0	6.996	A
3 - Cooden Sea Road	371	62	550	6.09	712	0.521	371	238	1.1	1.1	11.056	B
4 - Barnhorn Road (A259)	843	141	211		1260	0.669	843	711	2.0	2.1	9.097	A
5 - Chestnut Walk	39	7	948		254	0.154	39	106	0.2	0.2	17.294	C

17:05 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	152	25	1112		329	0.464	150	102	0.4	0.8	20.335	C
2 - Little Common Road (A259)	659	110	323	14.40	1032	0.638	654	939	1.0	1.8	9.851	A
3 - Cooden Sea Road	465	78	684	7.62	632	0.735	456	293	1.1	2.6	20.471	C
4 - Barnhorn Road (A259)	1056	176	260		1234	0.856	1037	880	2.1	5.2	17.832	C
5 - Chestnut Walk	49	8	1166		162	0.303	48	131	0.2	0.4	32.083	D

17:15 - 17:25

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	175	29	1236		278	0.628	170	114	0.8	1.5	33.008	D
2 - Little Common Road (A259)	754	126	362	16.48	1014	0.744	748	1045	1.8	2.8	13.825	B
3 - Cooden Sea Road	532	89	781	8.73	574	0.928	508	329	2.6	6.7	44.983	E
4 - Barnhorn Road (A259)	1209	202	290		1217	0.993	1154	998	5.2	14.4	39.970	E
5 - Chestnut Walk	56	9	1297		107	0.525	53	147	0.4	0.9	65.365	F

17:25 - 17:35

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	183	30	1276		262	0.697	180	117	1.5	2.0	42.854	E
2 - Little Common Road (A259)	789	132	378	17.24	1005	0.785	785	1078	2.8	3.5	16.726	C
3 - Cooden Sea Road	557	93	820	9.13	551	1.012	523	343	6.7	12.4	79.800	F
4 - Barnhorn Road (A259)	1265	211	300		1212	1.043	1190	1043	14.4	26.9	72.059	F
5 - Chestnut Walk	59	10	1338		90	0.653	56	152	0.9	1.4	99.312	F

17:35 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalise level of service
1 - Pear Tree Lane	175	29	1277		262	0.667	175	119	2.0	2.0	42.206	E
2 - Little Common Road (A259)	754	126	373	16.48	1008	0.749	756	1078	3.5	3.3	15.098	C
3 - Cooden Sea Road	532	89	790	8.73	568	0.937	531	338	12.4	12.6	88.005	F
4 - Barnhorn Road (A259)	1209	202	302		1211	0.998	1189	1019	26.9	30.3	92.698	F
5 - Chestnut Walk	56	9	1340		89	0.630	56	151	1.4	1.5	106.233	F

17:45 - 17:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	152	25	1257		270	0.566	156	116	2.0	1.5	33.372	D
2 - Little Common Road (A259)	659	110	351	14.40	1021	0.646	667	1062	3.3	2.0	10.865	B
3 - Cooden Sea Road	465	78	699	7.62	624	0.746	519	319	12.6	3.6	43.872	E
4 - Barnhorn Road (A259)	1056	176	291		1217	0.868	1176	926	30.3	10.3	67.056	F
5 - Chestnut Walk	49	8	1322		97	0.509	51	145	1.5	1.2	84.448	F

17:55 - 18:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	122	20	958		391	0.311	128	86	1.5	0.5	14.272	B
2 - Little Common Road (A259)	526	88	279	11.50	1060	0.496	532	807	2.0	1.1	7.197	A
3 - Cooden Sea Road	371	62	560	6.09	707	0.525	386	250	3.6	1.2	12.235	B
4 - Barnhorn Road (A259)	843	141	218		1256	0.672	892	728	10.3	2.3	11.698	B
5 - Chestnut Walk	39	7	999		232	0.169	45	111	1.2	0.2	20.459	C

18:05 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	122	20	905		413	0.295	122	83	0.5	0.4	12.680	B
2 - Little Common Road (A259)	526	88	263	11.50	1065	0.494	526	764	1.1	1.0	7.002	A
3 - Cooden Sea Road	371	62	551	6.09	713	0.521	371	238	1.2	1.2	11.085	B
4 - Barnhorn Road (A259)	843	141	211		1260	0.669	844	711	2.3	2.2	9.154	A
5 - Chestnut Walk	39	7	949		254	0.155	39	106	0.2	0.2	17.356	C

Assessment Drawing No. 180300-003F - 2025 Assessment Flows - Sensitivity, AM - Saturn Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D3 - 2025 Baseline Flows, AM - Saturn Peak	Demand Sets have different time segment lengths. Use caution if using Demand Set relationships.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Assessment Drawing No. 180300-003F	✓	✓	D3,D4,D5,D6,D7,D8,D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Little Common Roundabout	Standard Roundabout		1, 2, 3, 4, 5	30.20	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Pear Tree Lane	
2	Little Common Road (A259)	
3	Cooden Sea Road	
4	Barnhorn Road (A259)	
5	Chestnut Walk	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Pear Tree Lane	3.16	5.66	17.0	4.9	49.4	68.0	
2 - Little Common Road (A259)	3.62	7.00	13.4	24.5	48.0	38.3	
3 - Cooden Sea Road	3.42	7.84	12.3	28.1	49.4	34.2	
4 - Barnhorn Road (A259)	2.95	7.06	17.5	17.4	48.0	59.4	
5 - Chestnut Walk	2.95	5.21	1.4	8.0	34.4	60.4	

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
2 - Little Common Road (A259)	3.00	3.00	2.90	1.00	5.00	6.00	7.00
3 - Cooden Sea Road	5.00	3.00	2.90	1.00	5.00	6.00	7.00

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Percentage intercept adjustment (%)
1 - Pear Tree Lane	Percentage		74.00
2 - Little Common Road (A259)	Percentage		75.50
3 - Cooden Sea Road	Percentage		63.00
4 - Barnhorn Road (A259)	Percentage		96.00
5 - Chestnut Walk	Percentage		79.00

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Pear Tree Lane	0.407	782
2 - Little Common Road (A259)	0.598	1230
3 - Cooden Sea Road	0.603	1045
4 - Barnhorn Road (A259)	0.533	1372
5 - Chestnut Walk	0.420	652

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2025 Assessment Flows - Sensitivity	AM - Saturn Peak	ONE HOUR	07:45	09:15	10	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Pear Tree Lane		ONE HOUR	✓	284	100.000
2 - Little Common Road (A259)		ONE HOUR	✓	754	100.000
3 - Cooden Sea Road		ONE HOUR	✓	438	100.000
4 - Barnhorn Road (A259)		ONE HOUR	✓	1043	100.000
5 - Chestnut Walk		ONE HOUR	✓	79	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Pear Tree Lane		
2 - Little Common Road (A259)	[ONEHOUR]	17.00
3 - Cooden Sea Road	[ONEHOUR]	9.00
4 - Barnhorn Road (A259)		
5 - Chestnut Walk		

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	16	152	116	0
	2 - Little Common Road (A259)	4	0	68	662	20
	3 - Cooden Sea Road	127	112	0	182	17
	4 - Barnhorn Road (A259)	51	759	201	0	32
	5 - Chestnut Walk	0	32	34	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	2	1	0	0
	2 - Little Common Road (A259)	6	0	5	3	3
	3 - Cooden Sea Road	9	2	0	10	7
	4 - Barnhorn Road (A259)	2	6	7	0	3
	5 - Chestnut Walk	0	2	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Pear Tree Lane	0.93	74.83	5.7	F	232	348
2 - Little Common Road (A259)	0.82	21.06	4.2	C	616	924
3 - Cooden Sea Road	0.80	31.61	3.7	D	358	537
4 - Barnhorn Road (A259)	0.87	20.67	5.7	C	852	1278
5 - Chestnut Walk	0.65	75.03	1.5	F	65	97

Main Results for each time segment

07:45 - 07:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	192	32	769		469	0.410	188	121	0.0	0.7	12.742	B
2 - Little Common Road (A259)	510	85	343	11.50	1012	0.504	504	614	0.0	1.0	7.231	A
3 - Cooden Sea Road	296	49	544	6.09	712	0.416	292	303	0.0	0.7	9.113	A
4 - Barnhorn Road (A259)	705	118	187		1273	0.554	698	649	0.0	1.3	6.545	A
5 - Chestnut Walk	53	9	838		300	0.178	52	46	0.0	0.2	14.852	B

07:55 - 08:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	192	32	778		465	0.413	192	123	0.7	0.7	13.266	B
2 - Little Common Road (A259)	510	85	349	11.50	1014	0.503	510	621	1.0	1.0	7.365	A
3 - Cooden Sea Road	296	49	551	6.09	710	0.417	296	308	0.7	0.8	9.346	A
4 - Barnhorn Road (A259)	705	118	189		1271	0.555	705	658	1.3	1.3	6.733	A
5 - Chestnut Walk	53	9	848		296	0.181	53	47	0.2	0.2	15.250	C

08:05 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	241	40	966		388	0.620	236	153	0.7	1.5	23.074	C
2 - Little Common Road (A259)	639	106	430	14.40	970	0.658	634	772	1.0	1.9	10.858	B
3 - Cooden Sea Road	371	62	683	7.62	633	0.586	367	380	0.8	1.4	14.333	B
4 - Barnhorn Road (A259)	883	147	235		1247	0.708	877	816	1.3	2.4	10.107	B
5 - Chestnut Walk	67	11	1053		210	0.319	66	58	0.2	0.5	25.436	D

08:15 - 08:25

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	275	46	1101		333	0.826	264	174	1.5	3.4	45.903	E
2 - Little Common Road (A259)	731	122	486	16.48	940	0.778	723	879	1.9	3.2	16.462	C
3 - Cooden Sea Road	425	71	778	8.73	576	0.738	417	431	1.4	2.7	23.348	C
4 - Barnhorn Road (A259)	1011	169	267		1230	0.822	1000	928	2.4	4.3	15.803	C
5 - Chestnut Walk	77	13	1201		148	0.519	74	66	0.5	1.0	48.128	E

08:25 - 08:35

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	288	48	1155		311	0.925	275	182	3.4	5.7	74.832	F
2 - Little Common Road (A259)	765	127	507	17.24	927	0.825	759	922	3.2	4.2	21.057	C
3 - Cooden Sea Road	444	74	815	9.13	553	0.803	438	451	2.7	3.7	31.608	D
4 - Barnhorn Road (A259)	1058	176	280		1223	0.865	1049	973	4.3	5.7	20.672	C
5 - Chestnut Walk	80	13	1260		123	0.653	77	69	1.0	1.5	75.034	F

08:35 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	275	46	1119		326	0.845	275	177	5.7	5.6	72.922	F
2 - Little Common Road (A259)	731	122	501	16.48	931	0.785	732	893	4.2	4.0	18.999	C
3 - Cooden Sea Road	425	71	792	8.73	567	0.748	426	442	3.7	3.5	27.886	D
4 - Barnhorn Road (A259)	1011	169	272		1227	0.824	1014	945	5.7	5.4	18.268	C
5 - Chestnut Walk	77	13	1219		140	0.547	77	67	1.5	1.4	60.427	F

08:45 - 08:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	241	40	997		376	0.640	262	158	5.6	2.0	36.083	E
2 - Little Common Road (A259)	639	106	464	14.40	953	0.670	650	796	4.0	2.2	12.628	B
3 - Cooden Sea Road	371	62	710	7.62	617	0.602	381	403	3.5	1.7	17.082	C
4 - Barnhorn Road (A259)	883	147	244		1242	0.711	899	848	5.4	2.8	11.570	B
5 - Chestnut Walk	67	11	1083		197	0.340	72	60	1.4	0.6	30.485	D

08:55 - 09:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	192	32	789		460	0.417	200	125	2.0	0.7	14.274	B
2 - Little Common Road (A259)	510	85	359	11.50	1015	0.502	517	630	2.2	1.1	7.557	A
3 - Cooden Sea Road	296	49	561	6.09	707	0.419	302	315	1.7	0.8	9.678	A
4 - Barnhorn Road (A259)	705	118	193		1269	0.556	714	670	2.8	1.4	6.959	A
5 - Chestnut Walk	53	9	859		291	0.184	55	47	0.6	0.2	15.812	C

09:05 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	192	32	778		465	0.413	192	123	0.7	0.7	13.314	B
2 - Little Common Road (A259)	510	85	349	11.50	1014	0.503	510	622	1.1	1.1	7.369	A
3 - Cooden Sea Road	296	49	551	6.09	710	0.417	296	308	0.8	0.8	9.357	A
4 - Barnhorn Road (A259)	705	118	189		1271	0.555	705	658	1.4	1.3	6.741	A
5 - Chestnut Walk	53	9	848		296	0.181	53	47	0.2	0.2	15.275	C

Assessment Drawing No. 180300-003F - 2025 Assessment Flows - Sensitivity, PM - Saturn Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Sets	D3 - 2025 Baseline Flows, AM - Saturn Peak	Demand Sets have different time segment lengths. Use caution if using Demand Set relationships.

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Assessment Drawing No. 180300-003F	✓	✓	D3,D4,D5,D6,D7,D8,D9,D10,D11,D12,D13,D14	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Little Common Roundabout	Standard Roundabout		1, 2, 3, 4, 5	39.59	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Pear Tree Lane	
2	Little Common Road (A259)	
3	Cooden Sea Road	
4	Barnhorn Road (A259)	
5	Chestnut Walk	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Pear Tree Lane	3.16	5.66	17.0	4.9	49.4	68.0	
2 - Little Common Road (A259)	3.62	7.00	13.4	24.5	48.0	38.3	
3 - Cooden Sea Road	3.42	7.84	12.3	28.1	49.4	34.2	
4 - Barnhorn Road (A259)	2.95	7.06	17.5	17.4	48.0	59.4	
5 - Chestnut Walk	2.95	5.21	1.4	8.0	34.4	60.4	

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
2 - Little Common Road (A259)	3.00	3.00	2.90	1.00	5.00	6.00	7.00
3 - Cooden Sea Road	5.00	3.00	2.90	1.00	5.00	6.00	7.00

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Percentage intercept adjustment (%)
1 - Pear Tree Lane	Percentage		74.00
2 - Little Common Road (A259)	Percentage		75.50
3 - Cooden Sea Road	Percentage		63.00
4 - Barnhorn Road (A259)	Percentage		96.00
5 - Chestnut Walk	Percentage		79.00

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Pear Tree Lane	0.407	782
2 - Little Common Road (A259)	0.598	1230
3 - Cooden Sea Road	0.603	1045
4 - Barnhorn Road (A259)	0.533	1372
5 - Chestnut Walk	0.420	652

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2025 Assessment Flows - Sensitivity	PM - Saturn Peak	ONE HOUR	16:45	18:15	10	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Pear Tree Lane		ONE HOUR	✓	170	100.000
2 - Little Common Road (A259)		ONE HOUR	✓	737	100.000
3 - Cooden Sea Road		ONE HOUR	✓	521	100.000
4 - Barnhorn Road (A259)		ONE HOUR	✓	1184	100.000
5 - Chestnut Walk		ONE HOUR	✓	55	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Pear Tree Lane		
2 - Little Common Road (A259)	[ONEHOUR]	17.00
3 - Cooden Sea Road	[ONEHOUR]	9.00
4 - Barnhorn Road (A259)		
5 - Chestnut Walk		

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	15	114	41	0
	2 - Little Common Road (A259)	4	0	34	660	39
	3 - Cooden Sea Road	101	126	0	267	27
	4 - Barnhorn Road (A259)	12	912	177	0	83
	5 - Chestnut Walk	0	20	9	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	2	1	7	0
	2 - Little Common Road (A259)	17	0	1	5	1
	3 - Cooden Sea Road	2	2	0	8	0
	4 - Barnhorn Road (A259)	4	5	7	0	8
	5 - Chestnut Walk	0	1	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Pear Tree Lane	0.63	34.75	1.6	D	139	208
2 - Little Common Road (A259)	0.74	13.83	2.8	B	602	903
3 - Cooden Sea Road	0.92	48.91	6.8	E	426	638
4 - Barnhorn Road (A259)	0.99	50.65	15.8	F	967	1451
5 - Chestnut Walk	0.55	73.23	1.0	F	45	67

Main Results for each time segment

16:45 - 16:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	115	19	847		437	0.263	113	78	0.0	0.4	11.316	B
2 - Little Common Road (A259)	498	83	244	11.50	1069	0.466	493	716	0.0	0.9	6.483	A
3 - Cooden Sea Road	352	59	515	6.09	730	0.483	347	222	0.0	0.9	9.717	A
4 - Barnhorn Road (A259)	801	133	198		1267	0.632	790	663	0.0	1.7	7.809	A
5 - Chestnut Walk	37	6	888		279	0.133	36	99	0.0	0.2	15.255	C

16:55 - 17:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	115	19	859		432	0.266	115	79	0.4	0.4	11.630	B
2 - Little Common Road (A259)	498	83	248	11.50	1072	0.465	498	725	0.9	0.9	6.571	A
3 - Cooden Sea Road	352	59	521	6.09	729	0.483	352	226	0.9	1.0	10.011	B
4 - Barnhorn Road (A259)	801	133	201		1265	0.633	800	672	1.7	1.8	8.164	A
5 - Chestnut Walk	37	6	900		274	0.136	37	101	0.2	0.2	15.691	C