

Junctions 9		
ARCADY 9 - Roundabout Module		
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Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	A1 - 2022 Do Minimum									
1 - Capesthorne Road (W)	D1	0.7	4.65	0.40	A	D2	0.5	4.09	0.33	A
2 - Poplars Avenue (N)		0.3	3.83	0.25	A		0.4	3.79	0.30	A
3 - Capesthorne Road (E)		0.7	6.04	0.40	A		0.8	6.60	0.45	A
4 - Poplars Avenue (S)		0.1	3.46	0.11	A		0.1	4.13	0.12	A
	A1 - 2022 Do Something									
1 - Capesthorne Road (W)	D3	0.7	4.69	0.41	A	D4	0.5	4.15	0.34	A
2 - Poplars Avenue (N)		0.5	4.45	0.35	A		0.5	3.90	0.32	A
3 - Capesthorne Road (E)		0.8	7.03	0.44	A		0.9	6.88	0.46	A
4 - Poplars Avenue (S)		0.1	3.49	0.11	A		0.1	4.22	0.13	A
	A1 - 2022 Do Something (FULL)									
1 - Capesthorne Road (W)	D5	0.9	5.61	0.49	A	D6	0.7	4.85	0.43	A
2 - Poplars Avenue (N)		0.8	5.32	0.44	A		1.0	5.40	0.51	A
3 - Capesthorne Road (E)		1.5	10.36	0.60	B		1.5	10.63	0.60	B
4 - Poplars Avenue (S)		0.2	4.26	0.14	A		0.2	5.44	0.19	A
	A1 - 2027 Do Minimum									
1 - Capesthorne Road (W)	D7	0.8	4.92	0.44	A	D8	0.6	4.21	0.36	A
2 - Poplars Avenue (N)		0.4	4.18	0.29	A		0.5	4.11	0.35	A
3 - Capesthorne Road (E)		0.8	6.73	0.45	A		0.9	7.17	0.47	A
4 - Poplars Avenue (S)		0.1	3.65	0.11	A		0.2	4.50	0.15	A
	A1 - 2027 Do Something									
1 - Capesthorne Road (W)	D9	1.0	5.72	0.51	A	D10	1.0	5.65	0.51	A
2 - Poplars Avenue (N)		0.8	5.58	0.45	A		1.2	5.93	0.54	A
3 - Capesthorne Road (E)		1.6	10.91	0.62	B		1.8	12.39	0.64	B
4 - Poplars Avenue (S)		0.2	4.40	0.14	A		0.3	6.29	0.26	A
	A1 - 2032 Do Minimum									
1 - Capesthorne Road (W)	D11	0.9	5.46	0.49	A	D12	0.7	4.62	0.41	A
2 - Poplars Avenue (N)		0.7	5.04	0.41	A		0.7	4.43	0.40	A
3 - Capesthorne Road (E)		1.0	8.27	0.51	A		1.0	7.86	0.50	A
4 - Poplars Avenue (S)		0.1	4.02	0.13	A		0.2	4.71	0.15	A
	A1 - 2032 Do Something (FULL)									

1 - Capesthorne Road (W)	D13	1.3	7.03	0.57	A	D14	1.1	5.83	0.52	A
2 - Poplars Avenue (N)		1.6	7.99	0.61	A		1.4	6.61	0.59	A
3 - Capesthorne Road (E)		3.6	21.98	0.79	C		2.0	14.07	0.68	B
4 - Poplars Avenue (S)		0.2	5.38	0.20	A		0.3	6.46	0.23	A

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

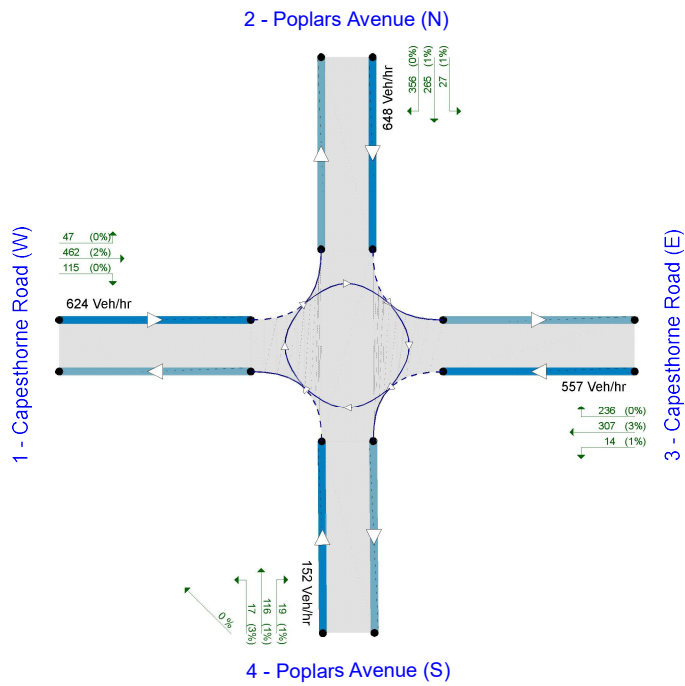
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	12/07/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	FRIELA
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022 Do Minimum	AM	ONE HOUR	07:45	09:15	15
D2	2022 Do Minimum	PM	ONE HOUR	16:45	18:15	15
D3	2022 Do Something	AM	ONE HOUR	07:45	09:15	15
D4	2022 Do Something	PM	ONE HOUR	16:45	18:15	15
D5	2022 Do Something (FULL)	AM	ONE HOUR	07:45	09:15	15
D6	2022 Do Something (FULL)	PM	ONE HOUR	16:45	18:15	15
D7	2027 Do Minimum	AM	ONE HOUR	07:45	09:15	15
D8	2027 Do Minimum	PM	ONE HOUR	16:45	18:15	15
D9	2027 Do Something	AM	ONE HOUR	07:45	09:15	15
D10	2027 Do Something	PM	ONE HOUR	16:45	18:15	15
D11	2032 Do Minimum	AM	ONE HOUR	07:45	09:15	15
D12	2032 Do Minimum	PM	ONE HOUR	16:45	18:15	15
D13	2032 Do Something (FULL)	AM	ONE HOUR	07:45	09:15	15
D14	2032 Do Something (FULL)	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	(Default Analysis Set)	100.000

(Default Analysis Set) - 2022 Do Minimum, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorpe Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	4.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Capesthorpe Road (W)	Eastbound
2	Poplars Avenue (N)	Southbound
3	Capesthorpe Road (E)	Westbound
4	Poplars Avenue (S)	Northbound

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 - Capesthorpe Road (W)	3.25	6.40	9.6	17.9	45.7	28.0	
2 - Poplars Avenue (N)	4.17	5.57	10.7	16.1	45.7	25.0	
3 - Capesthorpe Road (E)	2.59	4.89	9.9	14.3	45.7	13.0	
4 - Poplars Avenue (S)	3.94	4.93	5.3	11.6	45.7	10.0	

Bypass

Arm	Arm has bypass	Bypass utilisation (%)
1 - Capesthorpe Road (W)		
2 - Poplars Avenue (N)		
3 - Capesthorpe Road (E)		
4 - Poplars Avenue (S)	✓	0

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Capesthorne Road (W)	0.578	1454
2 - Poplars Avenue (N)	0.602	1570
3 - Capesthorne Road (E)	0.546	1231
4 - Poplars Avenue (S)	0.583	1429

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022 Do Minimum	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorne Road (W)		✓	470	100.000
2 - Poplars Avenue (N)		✓	278	100.000
3 - Capesthorne Road (E)		✓	357	100.000
4 - Poplars Avenue (S)		✓	115	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	22	352	96
	2 - Poplars Avenue (N)	35	0	18	225
	3 - Capesthorne Road (E)	242	101	0	14
	4 - Poplars Avenue (S)	7	95	13	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	0	3	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorne Road (E)	4	0	0	1
	4 - Poplars Avenue (S)	0	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorpe Road (W)	0.40	4.65	0.7	A
2 - Poplars Avenue (N)	0.25	3.83	0.3	A
3 - Capesthorpe Road (E)	0.40	6.04	0.7	A
4 - Poplars Avenue (S)	0.11	3.46	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	354	0	157	1333	0.266	352	0.4	3.668	A
2 - Poplars Avenue (N)	209	0	346	1344	0.156	209	0.2	3.169	A
3 - Capesthorpe Road (E)	269	0	267	1056	0.255	267	0.3	4.560	A
4 - Poplars Avenue (S)	87	0	283	1246	0.069	86	0.1	3.103	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	423	0	188	1315	0.321	422	0.5	4.030	A
2 - Poplars Avenue (N)	250	0	414	1302	0.192	250	0.2	3.419	A
3 - Capesthorpe Road (E)	321	0	320	1027	0.312	320	0.5	5.089	A
4 - Poplars Avenue (S)	103	0	339	1213	0.085	103	0.1	3.243	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	517	0	230	1291	0.401	517	0.7	4.643	A
2 - Poplars Avenue (N)	306	0	507	1246	0.246	306	0.3	3.830	A
3 - Capesthorpe Road (E)	393	0	391	989	0.397	392	0.7	6.023	A
4 - Poplars Avenue (S)	127	0	415	1168	0.108	127	0.1	3.456	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	517	0	230	1291	0.401	517	0.7	4.654	A
2 - Poplars Avenue (N)	306	0	508	1245	0.246	306	0.3	3.832	A
3 - Capesthorpe Road (E)	393	0	392	989	0.398	393	0.7	6.043	A
4 - Poplars Avenue (S)	127	0	416	1167	0.108	127	0.1	3.457	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	423	0	188	1315	0.321	423	0.5	4.041	A
2 - Poplars Avenue (N)	250	0	415	1302	0.192	250	0.2	3.427	A
3 - Capesthorpe Road (E)	321	0	321	1027	0.313	322	0.5	5.111	A
4 - Poplars Avenue (S)	103	0	341	1212	0.085	103	0.1	3.246	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	354	0	158	1332	0.266	354	0.4	3.682	A
2 - Poplars Avenue (N)	209	0	348	1343	0.156	210	0.2	3.178	A
3 - Capesthorpe Road (E)	269	0	268	1055	0.255	269	0.3	4.584	A
4 - Poplars Avenue (S)	87	0	285	1245	0.070	87	0.1	3.109	A

(Default Analysis Set) - 2022 Do Minimum, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorpe Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	4.79	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)
D2	2022 Do Minimum	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorpe Road (W)		✓	402	100.000
2 - Poplars Avenue (N)		✓	376	100.000
3 - Capesthorpe Road (E)		✓	403	100.000
4 - Poplars Avenue (S)		✓	111	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	135	249	18
	2 - Poplars Avenue (N)	280	0	24	72
	3 - Capesthorne Road (E)	358	16	0	29
	4 - Poplars Avenue (S)	4	91	16	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	6	3	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorne Road (E)	2	1	0	0
	4 - Poplars Avenue (S)	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorne Road (W)	0.33	4.09	0.5	A
2 - Poplars Avenue (N)	0.30	3.79	0.4	A
3 - Capesthorne Road (E)	0.45	6.60	0.8	A
4 - Poplars Avenue (S)	0.12	4.13	0.1	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	303	0	92	1348	0.225	301	0.3	3.438	A
2 - Poplars Avenue (N)	283	0	212	1425	0.199	282	0.2	3.146	A
3 - Capesthorne Road (E)	303	0	278	1059	0.286	302	0.4	4.743	A
4 - Poplars Avenue (S)	84	0	490	1129	0.074	83	0.1	3.441	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	361	0	110	1337	0.270	361	0.4	3.687	A
2 - Poplars Avenue (N)	338	0	254	1399	0.242	338	0.3	3.391	A
3 - Capesthorne Road (E)	362	0	332	1030	0.352	362	0.5	5.385	A
4 - Poplars Avenue (S)	100	0	587	1072	0.093	100	0.1	3.700	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	443	0	135	1324	0.334	442	0.5	4.081	A
2 - Poplars Avenue (N)	414	0	311	1364	0.303	414	0.4	3.783	A
3 - Capesthorpe Road (E)	444	0	407	989	0.449	443	0.8	6.571	A
4 - Poplars Avenue (S)	122	0	719	995	0.123	122	0.1	4.123	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	443	0	135	1323	0.334	443	0.5	4.086	A
2 - Poplars Avenue (N)	414	0	312	1364	0.303	414	0.4	3.787	A
3 - Capesthorpe Road (E)	444	0	407	989	0.449	444	0.8	6.601	A
4 - Poplars Avenue (S)	122	0	720	994	0.123	122	0.1	4.126	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	361	0	111	1337	0.270	362	0.4	3.691	A
2 - Poplars Avenue (N)	338	0	255	1399	0.242	338	0.3	3.397	A
3 - Capesthorpe Road (E)	362	0	333	1029	0.352	363	0.5	5.414	A
4 - Poplars Avenue (S)	100	0	589	1071	0.093	100	0.1	3.705	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	303	0	93	1347	0.225	303	0.3	3.446	A
2 - Poplars Avenue (N)	283	0	213	1424	0.199	283	0.2	3.157	A
3 - Capesthorpe Road (E)	303	0	279	1059	0.287	304	0.4	4.775	A
4 - Poplars Avenue (S)	84	0	493	1128	0.074	84	0.1	3.450	A

(Default Analysis Set) - 2022 Do Something, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorpe Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	5.16	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)
D3	2022 Do Something	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorne Road (W)		✓	482	100.000
2 - Poplars Avenue (N)		✓	392	100.000
3 - Capesthorne Road (E)		✓	370	100.000
4 - Poplars Avenue (S)		✓	115	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	22	360	100
	2 - Poplars Avenue (N)	36	0	19	337
	3 - Capesthorne Road (E)	251	105	0	14
	4 - Poplars Avenue (S)	7	95	13	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	0	2	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorne Road (E)	4	0	0	1
	4 - Poplars Avenue (S)	0	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorne Road (W)	0.41	4.69	0.7	A
2 - Poplars Avenue (N)	0.35	4.45	0.5	A
3 - Capesthorne Road (E)	0.44	7.03	0.8	A
4 - Poplars Avenue (S)	0.11	3.49	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	363	0	160	1341	0.271	361	0.4	3.671	A
2 - Poplars Avenue (N)	295	0	355	1340	0.220	294	0.3	3.438	A
3 - Capesthorne Road (E)	279	0	355	1009	0.276	277	0.4	4.911	A
4 - Poplars Avenue (S)	87	0	294	1240	0.070	86	0.1	3.120	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	433	0	191	1323	0.328	433	0.5	4.043	A
2 - Poplars Avenue (N)	352	0	425	1298	0.272	352	0.4	3.807	A
3 - Capesthorne Road (E)	333	0	425	971	0.343	332	0.5	5.629	A
4 - Poplars Avenue (S)	103	0	352	1206	0.086	103	0.1	3.265	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	531	0	234	1298	0.409	530	0.7	4.680	A
2 - Poplars Avenue (N)	432	0	520	1240	0.348	431	0.5	4.445	A
3 - Capesthorne Road (E)	407	0	520	920	0.443	406	0.8	6.994	A
4 - Poplars Avenue (S)	127	0	431	1159	0.109	127	0.1	3.486	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	531	0	235	1298	0.409	531	0.7	4.691	A
2 - Poplars Avenue (N)	432	0	521	1240	0.348	432	0.5	4.454	A
3 - Capesthorne Road (E)	407	0	521	920	0.443	407	0.8	7.027	A
4 - Poplars Avenue (S)	127	0	432	1158	0.109	127	0.1	3.488	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	433	0	192	1322	0.328	434	0.5	4.057	A
2 - Poplars Avenue (N)	352	0	426	1297	0.272	353	0.4	3.818	A
3 - Capesthorne Road (E)	333	0	426	970	0.343	334	0.5	5.665	A
4 - Poplars Avenue (S)	103	0	353	1205	0.086	103	0.1	3.271	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	363	0	161	1340	0.271	363	0.4	3.685	A
2 - Poplars Avenue (N)	295	0	357	1339	0.220	295	0.3	3.452	A
3 - Capesthorne Road (E)	279	0	357	1008	0.276	279	0.4	4.945	A
4 - Poplars Avenue (S)	87	0	296	1239	0.070	87	0.1	3.126	A

(Default Analysis Set) - 2022 Do Something, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorpe Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	4.92	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)
D4	2022 Do Something	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorpe Road (W)		✓	413	100.000
2 - Poplars Avenue (N)		✓	400	100.000
3 - Capesthorpe Road (E)		✓	409	100.000
4 - Poplars Avenue (S)		✓	113	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	143	250	20
	2 - Poplars Avenue (N)	302	0	24	74
	3 - Capesthorpe Road (E)	364	16	0	29
	4 - Poplars Avenue (S)	4	93	16	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	6	3	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorne Road (E)	2	1	0	0
	4 - Poplars Avenue (S)	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorne Road (W)	0.34	4.15	0.5	A
2 - Poplars Avenue (N)	0.32	3.90	0.5	A
3 - Capesthorne Road (E)	0.46	6.88	0.9	A
4 - Poplars Avenue (S)	0.13	4.22	0.1	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	311	0	94	1347	0.231	310	0.3	3.469	A
2 - Poplars Avenue (N)	301	0	214	1424	0.212	300	0.3	3.201	A
3 - Capesthorne Road (E)	308	0	297	1049	0.294	306	0.4	4.838	A
4 - Poplars Avenue (S)	85	0	511	1117	0.076	85	0.1	3.487	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	371	0	112	1336	0.278	371	0.4	3.729	A
2 - Poplars Avenue (N)	360	0	257	1398	0.257	359	0.3	3.466	A
3 - Capesthorne Road (E)	368	0	356	1017	0.362	367	0.6	5.535	A
4 - Poplars Avenue (S)	102	0	612	1058	0.096	101	0.1	3.764	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	455	0	137	1322	0.344	454	0.5	4.145	A
2 - Poplars Avenue (N)	440	0	315	1363	0.323	440	0.5	3.900	A
3 - Capesthorne Road (E)	450	0	435	974	0.462	449	0.8	6.847	A
4 - Poplars Avenue (S)	124	0	749	977	0.127	124	0.1	4.220	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	455	0	138	1322	0.344	455	0.5	4.150	A
2 - Poplars Avenue (N)	440	0	315	1362	0.323	440	0.5	3.904	A
3 - Capesthorpe Road (E)	450	0	436	973	0.463	450	0.9	6.880	A
4 - Poplars Avenue (S)	124	0	751	976	0.127	124	0.1	4.225	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	371	0	113	1336	0.278	372	0.4	3.737	A
2 - Poplars Avenue (N)	360	0	257	1397	0.257	360	0.3	3.471	A
3 - Capesthorpe Road (E)	368	0	357	1017	0.362	369	0.6	5.567	A
4 - Poplars Avenue (S)	102	0	615	1056	0.096	102	0.1	3.770	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	311	0	94	1346	0.231	311	0.3	3.481	A
2 - Poplars Avenue (N)	301	0	216	1423	0.212	301	0.3	3.209	A
3 - Capesthorpe Road (E)	308	0	298	1048	0.294	309	0.4	4.872	A
4 - Poplars Avenue (S)	85	0	514	1115	0.076	85	0.1	3.494	A

(Default Analysis Set) - 2022 Do Something (FULL), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorpe Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	6.82	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)
D5	2022 Do Something (FULL)	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorne Road (W)		✓	551	100.000
2 - Poplars Avenue (N)		✓	476	100.000
3 - Capesthorne Road (E)		✓	476	100.000
4 - Poplars Avenue (S)		✓	127	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	24	408	119
	2 - Poplars Avenue (N)	199	0	25	252
	3 - Capesthorne Road (E)	289	174	0	13
	4 - Poplars Avenue (S)	9	105	13	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	0	2	0
	2 - Poplars Avenue (N)	0	0	1	1
	3 - Capesthorne Road (E)	3	0	0	1
	4 - Poplars Avenue (S)	6	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorne Road (W)	0.49	5.61	0.9	A
2 - Poplars Avenue (N)	0.44	5.32	0.8	A
3 - Capesthorne Road (E)	0.60	10.36	1.5	B
4 - Poplars Avenue (S)	0.14	4.26	0.2	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	415	0	219	1307	0.317	413	0.5	4.017	A
2 - Poplars Avenue (N)	358	0	405	1315	0.272	357	0.4	3.752	A
3 - Capesthorpe Road (E)	358	0	427	979	0.366	356	0.6	5.758	A
4 - Poplars Avenue (S)	96	0	496	1120	0.085	95	0.1	3.513	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	495	0	262	1283	0.386	495	0.6	4.565	A
2 - Poplars Avenue (N)	428	0	485	1267	0.338	427	0.5	4.286	A
3 - Capesthorpe Road (E)	428	0	512	934	0.458	427	0.8	7.090	A
4 - Poplars Avenue (S)	114	0	594	1063	0.107	114	0.1	3.794	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	607	0	320	1249	0.486	605	0.9	5.582	A
2 - Poplars Avenue (N)	524	0	593	1201	0.436	523	0.8	5.305	A
3 - Capesthorpe Road (E)	524	0	626	872	0.601	522	1.5	10.202	B
4 - Poplars Avenue (S)	140	0	726	986	0.142	140	0.2	4.253	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	607	0	321	1249	0.486	607	0.9	5.607	A
2 - Poplars Avenue (N)	524	0	595	1200	0.437	524	0.8	5.325	A
3 - Capesthorpe Road (E)	524	0	628	871	0.602	524	1.5	10.361	B
4 - Poplars Avenue (S)	140	0	729	984	0.142	140	0.2	4.263	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	495	0	264	1282	0.386	497	0.6	4.593	A
2 - Poplars Avenue (N)	428	0	487	1266	0.338	429	0.5	4.307	A
3 - Capesthorpe Road (E)	428	0	514	933	0.459	430	0.9	7.203	A
4 - Poplars Avenue (S)	114	0	598	1060	0.108	114	0.1	3.808	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	415	0	220	1306	0.318	415	0.5	4.043	A
2 - Poplars Avenue (N)	358	0	407	1314	0.273	359	0.4	3.774	A
3 - Capesthorpe Road (E)	358	0	430	978	0.367	359	0.6	5.832	A
4 - Poplars Avenue (S)	96	0	500	1117	0.086	96	0.1	3.525	A

(Default Analysis Set) - 2022 Do Something (FULL), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorne Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	6.63	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)
D6	2022 Do Something (FULL)	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorne Road (W)		✓	502	100.000
2 - Poplars Avenue (N)		✓	619	100.000
3 - Capesthorne Road (E)		✓	456	100.000
4 - Poplars Avenue (S)		✓	143	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	210	262	30
	2 - Poplars Avenue (N)	497	0	28	94
	3 - Capesthorne Road (E)	385	45	0	26
	4 - Poplars Avenue (S)	6	121	16	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	4	3	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorne Road (E)	2	0	0	0
	4 - Poplars Avenue (S)	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorne Road (W)	0.43	4.85	0.7	A
2 - Poplars Avenue (N)	0.51	5.40	1.0	A
3 - Capesthorne Road (E)	0.60	10.63	1.5	B
4 - Poplars Avenue (S)	0.19	5.44	0.2	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	378	0	136	1331	0.284	376	0.4	3.763	A
2 - Poplars Avenue (N)	466	0	231	1414	0.330	464	0.5	3.782	A
3 - Capesthorne Road (E)	343	0	466	959	0.358	341	0.6	5.808	A
4 - Poplars Avenue (S)	108	0	694	1010	0.107	107	0.1	3.985	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	451	0	163	1316	0.343	451	0.5	4.159	A
2 - Poplars Avenue (N)	556	0	277	1386	0.402	556	0.7	4.333	A
3 - Capesthorne Road (E)	410	0	558	909	0.451	409	0.8	7.186	A
4 - Poplars Avenue (S)	129	0	832	930	0.138	128	0.2	4.492	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	553	0	200	1295	0.427	552	0.7	4.835	A
2 - Poplars Avenue (N)	682	0	339	1348	0.506	680	1.0	5.380	A
3 - Capesthorne Road (E)	502	0	682	841	0.597	500	1.4	10.459	B
4 - Poplars Avenue (S)	157	0	1017	821	0.192	157	0.2	5.421	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	553	0	200	1295	0.427	553	0.7	4.848	A
2 - Poplars Avenue (N)	682	0	339	1348	0.506	682	1.0	5.404	A
3 - Capesthorpe Road (E)	502	0	684	840	0.597	502	1.5	10.629	B
4 - Poplars Avenue (S)	157	0	1021	819	0.192	157	0.2	5.441	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	451	0	164	1316	0.343	452	0.5	4.173	A
2 - Poplars Avenue (N)	556	0	277	1385	0.402	558	0.7	4.359	A
3 - Capesthorpe Road (E)	410	0	560	908	0.452	412	0.8	7.306	A
4 - Poplars Avenue (S)	129	0	837	927	0.139	129	0.2	4.514	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	378	0	137	1331	0.284	378	0.4	3.784	A
2 - Poplars Avenue (N)	466	0	232	1413	0.330	467	0.5	3.806	A
3 - Capesthorpe Road (E)	343	0	468	957	0.359	344	0.6	5.883	A
4 - Poplars Avenue (S)	108	0	699	1007	0.107	108	0.1	4.005	A

(Default Analysis Set) - 2027 Do Minimum, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorpe Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	5.16	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)
D7	2027 Do Minimum	AM	ONE HOUR	07:45	09:15	15

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

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorne Road (W)		✓	512	100.000
2 - Poplars Avenue (N)		✓	326	100.000
3 - Capesthorne Road (E)		✓	390	100.000
4 - Poplars Avenue (S)		✓	115	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	23	387	102
	2 - Poplars Avenue (N)	83	0	20	223
	3 - Capesthorne Road (E)	267	109	0	14
	4 - Poplars Avenue (S)	7	95	13	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	0	2	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorne Road (E)	3	0	0	1
	4 - Poplars Avenue (S)	7	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorne Road (W)	0.44	4.92	0.8	A
2 - Poplars Avenue (N)	0.29	4.18	0.4	A
3 - Capesthorne Road (E)	0.45	6.73	0.8	A
4 - Poplars Avenue (S)	0.11	3.65	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	385	0	163	1339	0.288	384	0.4	3.762	A
2 - Poplars Avenue (N)	245	0	376	1327	0.185	245	0.2	3.322	A
3 - Capesthorpe Road (E)	294	0	306	1041	0.282	292	0.4	4.794	A
4 - Poplars Avenue (S)	87	0	344	1207	0.072	86	0.1	3.213	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	460	0	195	1320	0.349	460	0.5	4.179	A
2 - Poplars Avenue (N)	293	0	451	1282	0.229	293	0.3	3.639	A
3 - Capesthorpe Road (E)	351	0	366	1009	0.348	350	0.5	5.460	A
4 - Poplars Avenue (S)	103	0	412	1167	0.089	103	0.1	3.384	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	564	0	239	1295	0.435	563	0.8	4.907	A
2 - Poplars Avenue (N)	359	0	552	1221	0.294	358	0.4	4.173	A
3 - Capesthorpe Road (E)	429	0	449	965	0.445	428	0.8	6.699	A
4 - Poplars Avenue (S)	127	0	504	1113	0.114	126	0.1	3.649	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	564	0	239	1295	0.435	564	0.8	4.920	A
2 - Poplars Avenue (N)	359	0	553	1220	0.294	359	0.4	4.179	A
3 - Capesthorpe Road (E)	429	0	449	964	0.445	429	0.8	6.730	A
4 - Poplars Avenue (S)	127	0	505	1112	0.114	127	0.1	3.652	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	460	0	195	1320	0.349	461	0.5	4.197	A
2 - Poplars Avenue (N)	293	0	452	1281	0.229	294	0.3	3.646	A
3 - Capesthorpe Road (E)	351	0	367	1008	0.348	352	0.5	5.490	A
4 - Poplars Avenue (S)	103	0	414	1166	0.089	104	0.1	3.388	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	385	0	164	1338	0.288	386	0.4	3.781	A
2 - Poplars Avenue (N)	245	0	378	1326	0.185	246	0.2	3.333	A
3 - Capesthorpe Road (E)	294	0	308	1041	0.282	294	0.4	4.826	A
4 - Poplars Avenue (S)	87	0	346	1205	0.072	87	0.1	3.220	A

(Default Analysis Set) - 2027 Do Minimum, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorne Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	5.07	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)
D8	2027 Do Minimum	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorne Road (W)		✓	438	100.000
2 - Poplars Avenue (N)		✓	434	100.000
3 - Capesthorne Road (E)		✓	410	100.000
4 - Poplars Avenue (S)		✓	131	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	156	262	20
	2 - Poplars Avenue (N)	350	0	25	59
	3 - Capesthorne Road (E)	366	16	0	28
	4 - Poplars Avenue (S)	4	110	17	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	0	3	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorne Road (E)	2	1	0	0
	4 - Poplars Avenue (S)	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorne Road (W)	0.36	4.21	0.6	A
2 - Poplars Avenue (N)	0.35	4.11	0.5	A
3 - Capesthorne Road (E)	0.47	7.17	0.9	A
4 - Poplars Avenue (S)	0.15	4.50	0.2	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	330	0	107	1367	0.241	328	0.3	3.462	A
2 - Poplars Avenue (N)	327	0	224	1418	0.230	326	0.3	3.293	A
3 - Capesthorne Road (E)	309	0	322	1035	0.298	307	0.4	4.933	A
4 - Poplars Avenue (S)	99	0	549	1095	0.090	98	0.1	3.609	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	394	0	128	1355	0.291	393	0.4	3.746	A
2 - Poplars Avenue (N)	390	0	269	1391	0.281	390	0.4	3.597	A
3 - Capesthorne Road (E)	369	0	385	1001	0.368	368	0.6	5.682	A
4 - Poplars Avenue (S)	118	0	657	1031	0.114	118	0.1	3.940	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	482	0	157	1338	0.360	482	0.6	4.201	A
2 - Poplars Avenue (N)	478	0	329	1354	0.353	477	0.5	4.104	A
3 - Capesthorne Road (E)	451	0	472	954	0.473	450	0.9	7.127	A
4 - Poplars Avenue (S)	144	0	804	945	0.153	144	0.2	4.493	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	482	0	157	1338	0.360	482	0.6	4.207	A
2 - Poplars Avenue (N)	478	0	329	1354	0.353	478	0.5	4.110	A
3 - Capesthorne Road (E)	451	0	472	954	0.473	451	0.9	7.165	A
4 - Poplars Avenue (S)	144	0	806	944	0.153	144	0.2	4.500	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	394	0	129	1354	0.291	394	0.4	3.751	A
2 - Poplars Avenue (N)	390	0	269	1390	0.281	391	0.4	3.603	A
3 - Capesthorne Road (E)	369	0	386	1000	0.368	370	0.6	5.721	A
4 - Poplars Avenue (S)	118	0	660	1030	0.114	118	0.1	3.949	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	330	0	108	1366	0.241	330	0.3	3.474	A
2 - Poplars Avenue (N)	327	0	225	1417	0.231	327	0.3	3.305	A
3 - Capesthorne Road (E)	309	0	323	1034	0.298	309	0.4	4.968	A
4 - Poplars Avenue (S)	99	0	552	1093	0.090	99	0.1	3.622	A

(Default Analysis Set) - 2027 Do Something, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorne Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	7.08	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)
D9	2027 Do Something	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorne Road (W)		✓	586	100.000
2 - Poplars Avenue (N)		✓	484	100.000
3 - Capesthorne Road (E)		✓	482	100.000
4 - Poplars Avenue (S)		✓	125	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	25	437	124
	2 - Poplars Avenue (N)	237	0	23	224
	3 - Capesthorne Road (E)	334	135	0	13
	4 - Poplars Avenue (S)	10	102	13	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	0	2	0
	2 - Poplars Avenue (N)	0	0	1	1
	3 - Capesthorne Road (E)	3	0	0	1
	4 - Poplars Avenue (S)	5	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorne Road (W)	0.51	5.72	1.0	A
2 - Poplars Avenue (N)	0.45	5.58	0.8	A
3 - Capesthorne Road (E)	0.62	10.91	1.6	B
4 - Poplars Avenue (S)	0.14	4.40	0.2	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	441	0	187	1325	0.333	439	0.5	4.054	A
2 - Poplars Avenue (N)	364	0	430	1301	0.280	363	0.4	3.832	A
3 - Capesthorpe Road (E)	363	0	439	971	0.374	361	0.6	5.878	A
4 - Poplars Avenue (S)	94	0	528	1101	0.086	94	0.1	3.575	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	527	0	224	1304	0.404	526	0.7	4.624	A
2 - Poplars Avenue (N)	435	0	515	1249	0.348	435	0.5	4.417	A
3 - Capesthorpe Road (E)	433	0	525	924	0.469	432	0.9	7.301	A
4 - Poplars Avenue (S)	112	0	633	1040	0.108	112	0.1	3.882	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	645	0	274	1275	0.506	644	1.0	5.688	A
2 - Poplars Avenue (N)	533	0	631	1179	0.452	532	0.8	5.552	A
3 - Capesthorpe Road (E)	531	0	643	861	0.616	528	1.6	10.715	B
4 - Poplars Avenue (S)	138	0	774	958	0.144	137	0.2	4.388	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	645	0	275	1275	0.506	645	1.0	5.717	A
2 - Poplars Avenue (N)	533	0	632	1178	0.452	533	0.8	5.579	A
3 - Capesthorpe Road (E)	531	0	644	860	0.617	531	1.6	10.907	B
4 - Poplars Avenue (S)	138	0	777	956	0.144	138	0.2	4.399	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	527	0	226	1303	0.404	528	0.7	4.652	A
2 - Poplars Avenue (N)	435	0	517	1248	0.349	436	0.5	4.441	A
3 - Capesthorpe Road (E)	433	0	527	923	0.469	436	0.9	7.434	A
4 - Poplars Avenue (S)	112	0	638	1037	0.108	113	0.1	3.895	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	441	0	189	1324	0.333	442	0.5	4.082	A
2 - Poplars Avenue (N)	364	0	433	1299	0.280	365	0.4	3.855	A
3 - Capesthorpe Road (E)	363	0	441	969	0.374	364	0.6	5.961	A
4 - Poplars Avenue (S)	94	0	533	1098	0.086	94	0.1	3.588	A

(Default Analysis Set) - 2027 Do Something, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorne Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	7.49	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)
D10	2027 Do Something	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorne Road (W)		✓	603	100.000
2 - Poplars Avenue (N)		✓	644	100.000
3 - Capesthorne Road (E)		✓	475	100.000
4 - Poplars Avenue (S)		✓	180	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	262	293	48
	2 - Poplars Avenue (N)	552	0	27	65
	3 - Capesthorne Road (E)	432	18	0	25
	4 - Poplars Avenue (S)	7	156	17	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	3	2	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorne Road (E)	2	1	0	0
	4 - Poplars Avenue (S)	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorne Road (W)	0.51	5.65	1.0	A
2 - Poplars Avenue (N)	0.54	5.93	1.2	A
3 - Capesthorne Road (E)	0.64	12.39	1.8	B
4 - Poplars Avenue (S)	0.26	6.29	0.3	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	454	0	143	1340	0.339	452	0.5	4.046	A
2 - Poplars Avenue (N)	485	0	268	1392	0.348	483	0.5	3.949	A
3 - Capesthorne Road (E)	358	0	498	939	0.381	355	0.6	6.138	A
4 - Poplars Avenue (S)	136	0	750	977	0.139	135	0.2	4.273	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	542	0	171	1324	0.410	541	0.7	4.598	A
2 - Poplars Avenue (N)	579	0	321	1360	0.426	578	0.7	4.598	A
3 - Capesthorne Road (E)	427	0	597	886	0.482	426	0.9	7.800	A
4 - Poplars Avenue (S)	162	0	899	890	0.182	162	0.2	4.943	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	664	0	210	1302	0.510	663	1.0	5.619	A
2 - Poplars Avenue (N)	709	0	393	1317	0.539	707	1.2	5.892	A
3 - Capesthorne Road (E)	523	0	730	814	0.643	520	1.7	12.102	B
4 - Poplars Avenue (S)	198	0	1099	773	0.257	198	0.3	6.256	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	664	0	210	1301	0.510	664	1.0	5.646	A
2 - Poplars Avenue (N)	709	0	394	1316	0.539	709	1.2	5.929	A
3 - Capesthorpe Road (E)	523	0	732	813	0.643	523	1.8	12.392	B
4 - Poplars Avenue (S)	198	0	1103	770	0.257	198	0.3	6.294	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	542	0	172	1323	0.410	543	0.7	4.624	A
2 - Poplars Avenue (N)	579	0	323	1359	0.426	581	0.7	4.631	A
3 - Capesthorpe Road (E)	427	0	600	885	0.483	430	0.9	7.977	A
4 - Poplars Avenue (S)	162	0	905	886	0.183	162	0.2	4.977	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	454	0	144	1339	0.339	455	0.5	4.073	A
2 - Poplars Avenue (N)	485	0	270	1391	0.348	486	0.5	3.978	A
3 - Capesthorpe Road (E)	358	0	502	938	0.381	359	0.6	6.232	A
4 - Poplars Avenue (S)	136	0	756	973	0.139	136	0.2	4.301	A

(Default Analysis Set) - 2032 Do Minimum, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorpe Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	5.99	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)
D11	2032 Do Minimum	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorpe Road (W)		✓	571	100.000
2 - Poplars Avenue (N)		✓	442	100.000
3 - Capesthorpe Road (E)		✓	417	100.000
4 - Poplars Avenue (S)		✓	120	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	45	419	107
	2 - Poplars Avenue (N)	196	0	21	225
	3 - Capesthorpe Road (E)	285	118	0	14
	4 - Poplars Avenue (S)	8	98	14	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Capesthorpe Road (W)	2 - Poplars Avenue (N)	3 - Capesthorpe Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorpe Road (W)	0	0	2	0
	2 - Poplars Avenue (N)	0	0	1	1
	3 - Capesthorpe Road (E)	3	0	0	1
	4 - Poplars Avenue (S)	0	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorpe Road (W)	0.49	5.46	0.9	A
2 - Poplars Avenue (N)	0.41	5.04	0.7	A
3 - Capesthorpe Road (E)	0.51	8.27	1.0	A
4 - Poplars Avenue (S)	0.13	4.02	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	430	0	172	1334	0.322	428	0.5	3.966	A
2 - Poplars Avenue (N)	333	0	405	1316	0.253	331	0.3	3.653	A
3 - Capesthorpe Road (E)	314	0	396	994	0.316	312	0.5	5.268	A
4 - Poplars Avenue (S)	90	0	449	1151	0.078	90	0.1	3.391	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	513	0	206	1314	0.391	513	0.6	4.486	A
2 - Poplars Avenue (N)	397	0	485	1267	0.314	397	0.5	4.136	A
3 - Capesthorpe Road (E)	375	0	474	952	0.394	374	0.6	6.225	A
4 - Poplars Avenue (S)	108	0	538	1099	0.098	108	0.1	3.629	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	629	0	253	1288	0.488	627	0.9	5.440	A
2 - Poplars Avenue (N)	487	0	593	1201	0.405	486	0.7	5.028	A
3 - Capesthorpe Road (E)	459	0	580	895	0.513	458	1.0	8.205	A
4 - Poplars Avenue (S)	132	0	658	1029	0.128	132	0.1	4.012	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	629	0	253	1288	0.488	629	0.9	5.462	A
2 - Poplars Avenue (N)	487	0	595	1200	0.405	487	0.7	5.045	A
3 - Capesthorpe Road (E)	459	0	581	894	0.513	459	1.0	8.273	A
4 - Poplars Avenue (S)	132	0	659	1028	0.129	132	0.1	4.017	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	513	0	207	1314	0.391	515	0.6	4.511	A
2 - Poplars Avenue (N)	397	0	487	1266	0.314	398	0.5	4.154	A
3 - Capesthorpe Road (E)	375	0	476	951	0.394	376	0.7	6.283	A
4 - Poplars Avenue (S)	108	0	540	1098	0.098	108	0.1	3.639	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	430	0	173	1333	0.322	431	0.5	3.990	A
2 - Poplars Avenue (N)	333	0	407	1314	0.253	333	0.3	3.671	A
3 - Capesthorpe Road (E)	314	0	398	993	0.316	315	0.5	5.316	A
4 - Poplars Avenue (S)	90	0	452	1150	0.079	90	0.1	3.398	A

(Default Analysis Set) - 2032 Do Minimum, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorne Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	5.46	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)
D12	2032 Do Minimum	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorne Road (W)		✓	501	100.000
2 - Poplars Avenue (N)		✓	484	100.000
3 - Capesthorne Road (E)		✓	423	100.000
4 - Poplars Avenue (S)		✓	122	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	204	276	21
	2 - Poplars Avenue (N)	407	0	26	51
	3 - Capesthorne Road (E)	380	17	0	26
	4 - Poplars Avenue (S)	4	100	18	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	4	2	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorne Road (E)	2	1	0	0
	4 - Poplars Avenue (S)	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorne Road (W)	0.41	4.62	0.7	A
2 - Poplars Avenue (N)	0.40	4.43	0.7	A
3 - Capesthorne Road (E)	0.50	7.86	1.0	A
4 - Poplars Avenue (S)	0.15	4.71	0.2	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	377	0	101	1358	0.278	376	0.4	3.662	A
2 - Poplars Avenue (N)	364	0	236	1412	0.258	363	0.3	3.428	A
3 - Capesthorne Road (E)	318	0	359	1015	0.314	317	0.5	5.142	A
4 - Poplars Avenue (S)	92	0	602	1064	0.086	91	0.1	3.703	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	450	0	121	1346	0.335	450	0.5	4.015	A
2 - Poplars Avenue (N)	435	0	283	1383	0.315	435	0.5	3.792	A
3 - Capesthorne Road (E)	380	0	430	976	0.389	380	0.6	6.023	A
4 - Poplars Avenue (S)	110	0	722	994	0.110	110	0.1	4.071	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	552	0	148	1331	0.414	551	0.7	4.610	A
2 - Poplars Avenue (N)	533	0	346	1345	0.396	532	0.7	4.426	A
3 - Capesthorne Road (E)	466	0	527	924	0.504	464	1.0	7.802	A
4 - Poplars Avenue (S)	134	0	883	899	0.149	134	0.2	4.704	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	552	0	149	1331	0.415	552	0.7	4.620	A
2 - Poplars Avenue (N)	533	0	347	1345	0.396	533	0.7	4.435	A
3 - Capesthorne Road (E)	466	0	527	924	0.504	466	1.0	7.856	A
4 - Poplars Avenue (S)	134	0	885	898	0.150	134	0.2	4.714	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	450	0	122	1346	0.335	451	0.5	4.027	A
2 - Poplars Avenue (N)	435	0	284	1383	0.315	436	0.5	3.806	A
3 - Capesthorne Road (E)	380	0	431	976	0.390	382	0.6	6.076	A
4 - Poplars Avenue (S)	110	0	725	992	0.111	110	0.1	4.083	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	377	0	102	1357	0.278	378	0.4	3.675	A
2 - Poplars Avenue (N)	364	0	237	1411	0.258	365	0.3	3.444	A
3 - Capesthorne Road (E)	318	0	361	1014	0.314	319	0.5	5.187	A
4 - Poplars Avenue (S)	92	0	606	1061	0.087	92	0.1	3.712	A

(Default Analysis Set) - 2032 Do Something (FULL), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorne Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	11.44	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)
D13	2032 Do Something (FULL)	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorne Road (W)		✓	624	100.000
2 - Poplars Avenue (N)		✓	648	100.000
3 - Capesthorne Road (E)		✓	557	100.000
4 - Poplars Avenue (S)		✓	152	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	47	462	115
	2 - Poplars Avenue (N)	356	0	27	265
	3 - Capesthorne Road (E)	307	236	0	14
	4 - Poplars Avenue (S)	17	116	19	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	0	2	0
	2 - Poplars Avenue (N)	0	0	1	1
	3 - Capesthorne Road (E)	3	0	0	1
	4 - Poplars Avenue (S)	3	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorne Road (W)	0.57	7.03	1.3	A
2 - Poplars Avenue (N)	0.61	7.99	1.6	A
3 - Capesthorne Road (E)	0.79	21.98	3.6	C
4 - Poplars Avenue (S)	0.20	5.38	0.2	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	470	0	277	1274	0.369	467	0.6	4.452	A
2 - Poplars Avenue (N)	488	0	446	1292	0.378	485	0.6	4.452	A
3 - Capesthorpe Road (E)	419	0	551	914	0.459	416	0.8	7.182	A
4 - Poplars Avenue (S)	114	0	672	1020	0.112	114	0.1	3.969	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	561	0	332	1242	0.452	560	0.8	5.267	A
2 - Poplars Avenue (N)	583	0	535	1238	0.471	581	0.9	5.476	A
3 - Capesthorpe Road (E)	501	0	660	855	0.585	499	1.4	10.030	B
4 - Poplars Avenue (S)	137	0	805	943	0.145	136	0.2	4.462	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	687	0	405	1201	0.572	685	1.3	6.949	A
2 - Poplars Avenue (N)	713	0	654	1165	0.612	711	1.5	7.877	A
3 - Capesthorpe Road (E)	613	0	807	776	0.790	605	3.4	20.163	C
4 - Poplars Avenue (S)	167	0	980	841	0.199	167	0.2	5.337	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	687	0	408	1199	0.573	687	1.3	7.025	A
2 - Poplars Avenue (N)	713	0	656	1164	0.613	713	1.6	7.985	A
3 - Capesthorpe Road (E)	613	0	810	775	0.792	613	3.6	21.976	C
4 - Poplars Avenue (S)	167	0	989	836	0.200	167	0.2	5.381	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	561	0	337	1240	0.453	563	0.8	5.334	A
2 - Poplars Avenue (N)	583	0	538	1236	0.471	585	0.9	5.554	A
3 - Capesthorpe Road (E)	501	0	665	853	0.587	509	1.5	10.717	B
4 - Poplars Avenue (S)	137	0	818	936	0.146	137	0.2	4.510	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	470	0	280	1272	0.369	471	0.6	4.499	A
2 - Poplars Avenue (N)	488	0	450	1290	0.378	489	0.6	4.502	A
3 - Capesthorpe Road (E)	419	0	555	912	0.460	422	0.9	7.381	A
4 - Poplars Avenue (S)	114	0	680	1016	0.113	115	0.1	3.995	A

(Default Analysis Set) - 2032 Do Something (FULL), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Capesthorne Road/Poplars Avenue RBT	Standard Roundabout		1, 2, 3, 4	8.19	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)
D14	2032 Do Something (FULL)	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Capesthorne Road (W)		✓	612	100.000
2 - Poplars Avenue (N)		✓	711	100.000
3 - Capesthorne Road (E)		✓	482	100.000
4 - Poplars Avenue (S)		✓	153	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	289	290	33
	2 - Poplars Avenue (N)	615	0	31	65
	3 - Capesthorne Road (E)	399	59	0	24
	4 - Poplars Avenue (S)	6	129	18	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Capesthorne Road (W)	2 - Poplars Avenue (N)	3 - Capesthorne Road (E)	4 - Poplars Avenue (S)
From	1 - Capesthorne Road (W)	0	3	2	0
	2 - Poplars Avenue (N)	1	0	1	1
	3 - Capesthorne Road (E)	2	0	0	0
	4 - Poplars Avenue (S)	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1 - Capesthorne Road (W)	0.52	5.83	1.1	A
2 - Poplars Avenue (N)	0.59	6.61	1.4	A
3 - Capesthorne Road (E)	0.68	14.07	2.0	B
4 - Poplars Avenue (S)	0.23	6.46	0.3	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	461	0	154	1332	0.346	459	0.5	4.110	A
2 - Poplars Avenue (N)	535	0	256	1400	0.382	533	0.6	4.140	A
3 - Capesthorne Road (E)	363	0	534	922	0.394	360	0.6	6.383	A
4 - Poplars Avenue (S)	115	0	803	946	0.122	115	0.1	4.325	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	550	0	185	1315	0.418	549	0.7	4.696	A
2 - Poplars Avenue (N)	639	0	306	1369	0.467	638	0.9	4.916	A
3 - Capesthorne Road (E)	433	0	640	864	0.501	432	1.0	8.295	A
4 - Poplars Avenue (S)	138	0	962	853	0.161	137	0.2	5.027	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorne Road (W)	674	0	226	1292	0.522	672	1.1	5.797	A
2 - Poplars Avenue (N)	783	0	375	1328	0.590	781	1.4	6.553	A
3 - Capesthorne Road (E)	531	0	783	787	0.674	527	2.0	13.626	B
4 - Poplars Avenue (S)	168	0	1176	728	0.231	168	0.3	6.420	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	674	0	227	1291	0.522	674	1.1	5.829	A
2 - Poplars Avenue (N)	783	0	375	1327	0.590	783	1.4	6.610	A
3 - Capesthorpe Road (E)	531	0	785	786	0.675	530	2.0	14.070	B
4 - Poplars Avenue (S)	168	0	1181	725	0.232	168	0.3	6.464	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	550	0	186	1314	0.419	552	0.7	4.729	A
2 - Poplars Avenue (N)	639	0	307	1369	0.467	641	0.9	4.964	A
3 - Capesthorpe Road (E)	433	0	643	863	0.502	437	1.0	8.540	A
4 - Poplars Avenue (S)	138	0	970	849	0.162	138	0.2	5.067	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Bypass demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Capesthorpe Road (W)	461	0	155	1332	0.346	462	0.5	4.141	A
2 - Poplars Avenue (N)	535	0	257	1399	0.383	536	0.6	4.177	A
3 - Capesthorpe Road (E)	363	0	538	920	0.395	364	0.7	6.499	A
4 - Poplars Avenue (S)	115	0	810	942	0.122	115	0.1	4.355	A