

Appendix I Washington Roundabout Detailed Junction Modelling Outputs

Junctions 10
ARCADY 10 - Roundabout Module
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Filename: Updated Mitigation Washington Rbt 071122 JH Ref.j10
Path: \\Cbh-vfil-001\cbh\Projects\330610699 - Horsham LP 2039\Working Docs\05 Junction Modelling\03 Washington Roundabout
Report generation date: 16/11/2022 17:23:10

- »2039 Baseline (Reference Case), AM
- »2039 Baseline (Reference Case), PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2039 Baseline (Reference Case)						
1 - A283 The Pike	7.1	35.23	0.88	16.3	91.81	1.00
2 - A24 London Road (S)	18.7	42.16	0.97	3.1	7.56	0.76
3 - A283 Storrington Road	5.2	21.76	0.83	5.5	20.65	0.85
4 - A24 London Road (N)	5.0	9.75	0.83	81.9	109.41	1.06

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

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

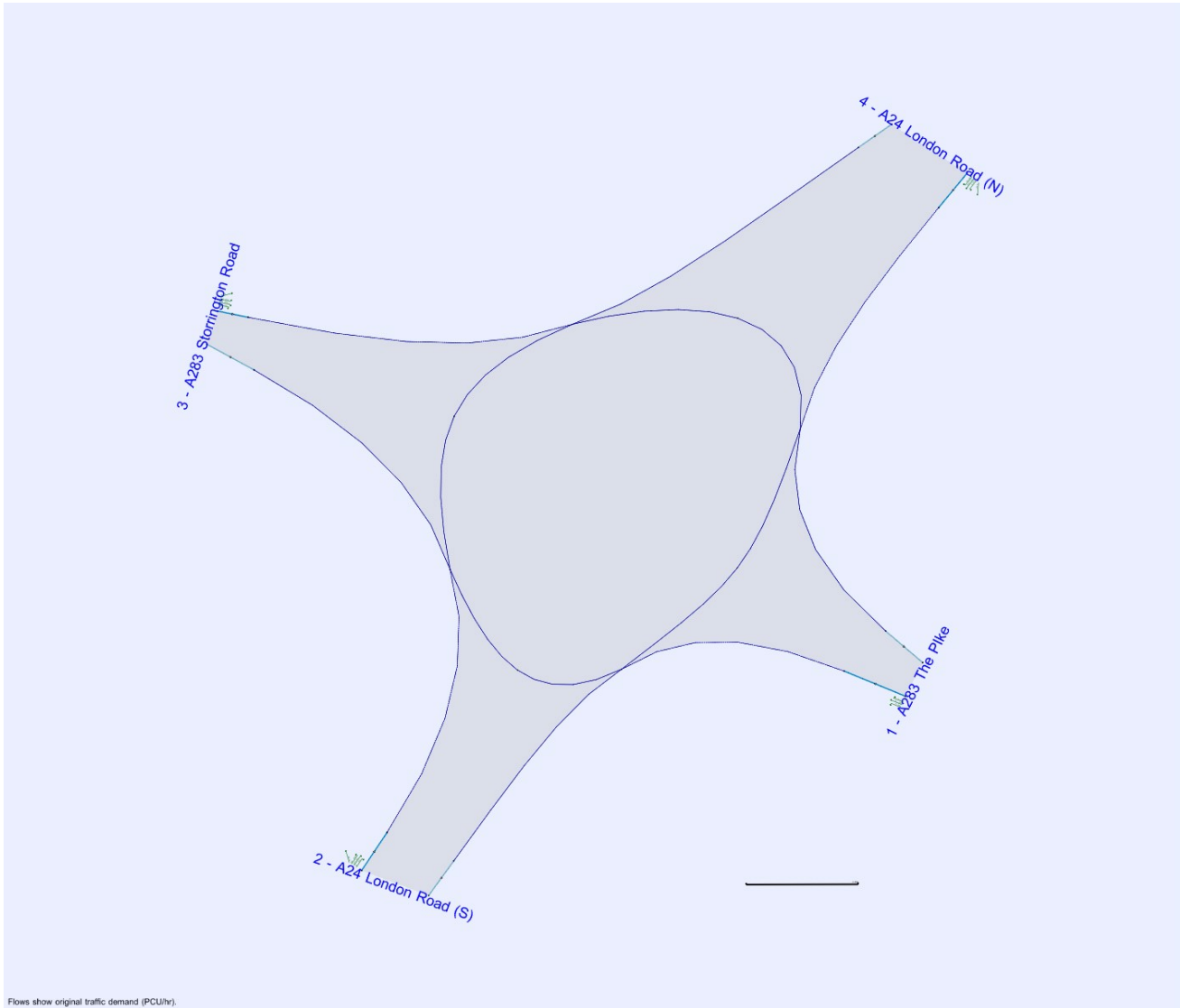
File summary

File Description

Title	
Location	
Site number	
Date	30/04/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\dansmith
Description	

Units

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



Flows show original traffic demand (PCU/hr).
The junction diagram reflects the last run of Junctions.

Analysis Options

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	2039 Baseline (Reference Case)	AM	ONE HOUR	07:45	09:15	15
D2	2039 Baseline (Reference Case)	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2039 Baseline (Reference Case), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A283 The Pike - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A283 Storrington Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	26.01	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	26.01	D

Arms

Arms

Arm	Name	Description	No give-way line
1	A283 The Pike		
2	A24 London Road (S)		
3	A283 Storrington Road		
4	A24 London Road (N)		

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)	Entry only	Exit only
1 - A283 The Pike	3.71	6.86	69.0	20.4	75.6	26.6		
2 - A24 London Road (S)	7.67	7.69	0.4	32.3	70.7	27.4		
3 - A283 Storrington Road	2.81	7.80	47.1	39.5	73.8	31.7		
4 - A24 London Road (N)	6.50	10.80	20.5	31.8	71.0	8.8		

Bypass

Arm	Arm has bypass	Bypass utilisation (%)
1 - A283 The Pike		
2 - A24 London Road (S)	✓	100
3 - A283 Storrington Road	✓	100
4 - A24 London Road (N)	✓	100

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A283 The Pike	0.530	1982
2 - A24 London Road (S)	0.617	2393
3 - A283 Storrington Road	0.543	2017
4 - A24 London Road (N)	0.726	3001

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	2039 Baseline (Reference Case)	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 (PCU/hr)	Scaling Factor (%)
1 - A283 The Pike		✓	706	100.000
2 - A24 London Road (S)		✓	1561	100.000
3 - A283 Storrington Road		✓	821	100.000
4 - A24 London Road (N)		✓	1735	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A283 The Pike	2 - A24 London Road (S)	3 - A283 Storrington Road	4 - A24 London Road (N)
From	1 - A283 The Pike	0	58	577	71
	2 - A24 London Road (S)	51	0	54	1456
	3 - A283 Storrington Road	674	147	0	0
	4 - A24 London Road (N)	0	1370	365	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A283 The Pike	2 - A24 London Road (S)	3 - A283 Storrington Road	4 - A24 London Road (N)
From	1 - A283 The Pike	15	15	15	15
	2 - A24 London Road (S)	0	0	0	0
	3 - A283 Storrington Road	12	12	12	12
	4 - A24 London Road (N)	8	8	8	8

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A283 The Pike	0.88	35.23	7.1	E
2 - A24 London Road (S)	0.97	42.16	18.7	E
3 - A283 Storrington Road	0.83	21.76	5.2	C
4 - A24 London Road (N)	0.83	9.75	5.0	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	532	0	1412	1234	0.431	528	0.9	5.837	A
2 - A24 London Road (S)	1175	41	759	1925	0.590	1129	1.4	4.494	A
3 - A283 Storrington Road	618	0	1182	1375	0.450	614	0.9	5.269	A
4 - A24 London Road (N)	1306	0	653	2527	0.517	1302	1.1	3.160	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	635	0	1688	1087	0.584	632	1.6	9.029	A
2 - A24 London Road (S)	1403	49	907	1833	0.739	1349	2.8	7.370	A
3 - A283 Storrington Road	738	0	1413	1249	0.591	735	1.6	7.801	A
4 - A24 London Road (N)	1560	0	781	2434	0.641	1557	1.9	4.416	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	777	0	2058	891	0.872	759	6.2	28.002	D
2 - A24 London Road (S)	1719	59	1096	1716	0.967	1613	14.2	27.368	D
3 - A283 Storrington Road	904	0	1690	1099	0.822	892	4.6	18.440	C
4 - A24 London Road (N)	1910	0	946	2314	0.825	1899	4.8	9.106	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	777	0	2071	885	0.879	774	7.1	35.226	E
2 - A24 London Road (S)	1719	59	1112	1706	0.972	1642	18.7	42.157	E
3 - A283 Storrington Road	904	0	1719	1083	0.835	902	5.2	21.765	C
4 - A24 London Road (N)	1910	0	957	2306	0.828	1909	5.0	9.752	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	635	0	1707	1078	0.589	656	1.7	10.307	B
2 - A24 London Road (S)	1403	49	933	1817	0.746	1417	3.0	10.383	B
3 - A283 Storrington Road	738	0	1483	1211	0.609	752	1.8	9.022	A
4 - A24 London Road (N)	1560	0	800	2421	0.644	1572	2.0	4.646	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	532	0	1421	1229	0.432	535	0.9	5.987	A
2 - A24 London Road (S)	1175	41	766	1920	0.591	1141	1.5	4.658	A
3 - A283 Storrington Road	618	0	1195	1368	0.452	622	0.9	5.425	A
4 - A24 London Road (N)	1306	0	660	2522	0.518	1309	1.2	3.214	A

2039 Baseline (Reference Case), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A283 The Pike - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A283 Storrington Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	57.63	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	57.63	F

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	2039 Baseline (Reference Case)	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 (PCU/hr)	Scaling Factor (%)
1 - A283 The Pike		✓	586	100.000
2 - A24 London Road (S)		✓	1674	100.000
3 - A283 Storrington Road		✓	1293	100.000
4 - A24 London Road (N)		✓	2155	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A283 The Pike	2 - A24 London Road (S)	3 - A283 Storrington Road	4 - A24 London Road (N)
From	1 - A283 The Pike	0	75	511	0
	2 - A24 London Road (S)	41	0	291	1342
	3 - A283 Storrington Road	655	264	0	374
	4 - A24 London Road (N)	0	2062	93	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1 - A283 The Pike	2 - A24 London Road (S)	3 - A283 Storrington Road	4 - A24 London Road (N)
From 1 - A283 The Pike	3	3	3	3
2 - A24 London Road (S)	0	0	0	0
3 - A283 Storrington Road	5	5	0	5
4 - A24 London Road (N)	3	3	3	3

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A283 The Pike	1.00	91.81	16.3	F
2 - A24 London Road (S)	0.76	7.56	3.1	A
3 - A283 Storrington Road	0.85	20.65	5.5	C
4 - A24 London Road (N)	1.06	109.41	81.9	F

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	441	0	1812	1022	0.432	438	0.8	6.321	A
2 - A24 London Road (S)	1260	219	452	2114	0.493	1037	1.0	3.331	A
3 - A283 Storrington Road	973	282	1037	1453	0.476	688	0.9	4.916	A
4 - A24 London Road (N)	1622	0	719	2479	0.654	1615	1.9	4.252	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	527	0	2164	835	0.631	523	1.7	11.737	B
2 - A24 London Road (S)	1505	262	539	2060	0.604	1241	1.5	4.386	A
3 - A283 Storrington Road	1162	336	1241	1343	0.615	823	1.6	7.239	A
4 - A24 London Road (N)	1937	0	860	2377	0.815	1928	4.3	8.086	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	645	0	2493	661	0.976	609	10.8	52.361	F
2 - A24 London Road (S)	1843	320	626	2006	0.759	1517	3.0	7.261	A
3 - A283 Storrington Road	1424	412	1517	1193	0.848	998	5.2	18.176	C
4 - A24 London Road (N)	2373	0	1043	2244	1.057	2207	45.8	49.412	E

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	645	0	2519	648	0.996	623	16.3	91.811	F
2 - A24 London Road (S)	1843	320	640	1998	0.762	1522	3.1	7.557	A
3 - A283 Storrington Road	1424	412	1522	1190	0.850	1010	5.5	20.651	C
4 - A24 London Road (N)	2373	0	1056	2235	1.062	2228	81.9	109.409	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	527	0	2485	665	0.792	574	4.5	49.996	E
2 - A24 London Road (S)	1505	262	597	2024	0.614	1249	1.6	4.681	A
3 - A283 Storrington Road	1162	336	1249	1338	0.617	841	1.7	7.831	A
4 - A24 London Road (N)	1937	0	878	2364	0.820	2243	5.4	57.487	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	441	0	1836	1009	0.437	456	0.8	6.879	A
2 - A24 London Road (S)	1260	219	468	2104	0.495	1044	1.0	3.403	A
3 - A283 Storrington Road	973	282	1044	1450	0.477	695	1.0	5.025	A
4 - A24 London Road (N)	1622	0	726	2474	0.656	1636	2.0	4.494	A

Junctions 10
ARCADY 10 - Roundabout Module
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Filename: Updated Mitigation Washington Rbt 071122 JH Mit.j10
Path: \\Cbh-vfil-001\cbh\Projects\330610699 - Horsham LP 2039\Working Docs\05 Junction Modelling\03 Washington Roundabout
Report generation date: 16/11/2022 17:29:56

- »2039 LP Mitigation, AM
- »2039 LP Mitigation, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2039 LP Mitigation						
1 - A283 The Pike	3.3	16.93	0.75	2.9	34.51	0.76
2 - A24 London Road (S)	1.4	3.07	0.58	1.1	2.42	0.53
3 - A283 Storrington Road	1.0	4.03	0.48	1.2	4.25	0.54
4 - A24 London Road (N)	2.3	4.09	0.68	28.2	37.22	0.98

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

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

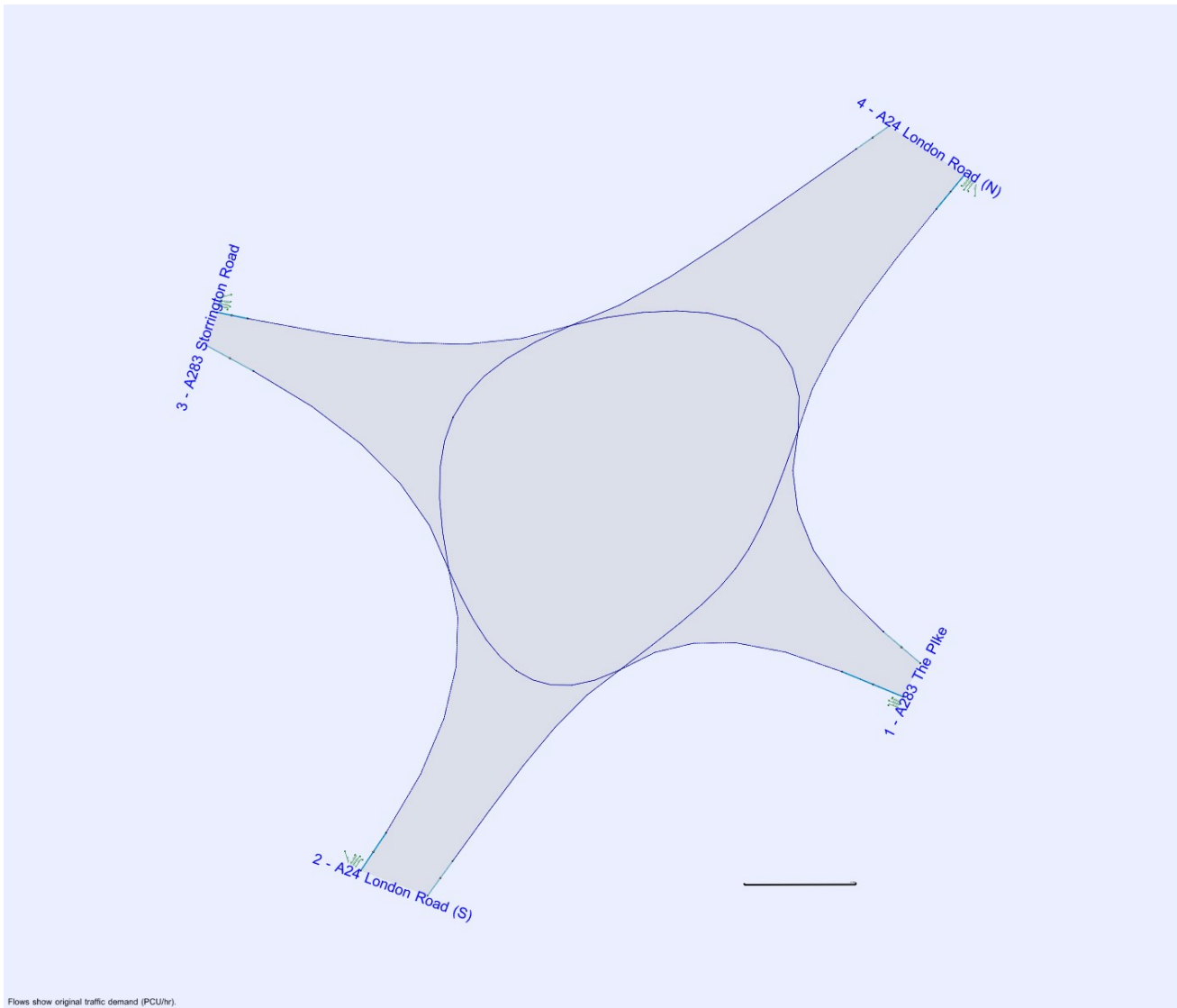
File summary

File Description

Title	
Location	
Site number	
Date	30/04/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\dansmith
Description	

Units

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



Flows show original traffic demand (PCU/hr).
The junction diagram reflects the last run of Junctions.

Analysis Options

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)
D5	2039 LP Mitigation	AM	ONE HOUR	07:45	09:15	15
D6	2039 LP Mitigation	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2039 LP Mitigation, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A283 The Pike - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A24 London Road (S) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A283 Storrington Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A24 London Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.24	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.24	A

Arms

Arms

Arm	Name	Description	No give-way line
1	A283 The Pike		
2	A24 London Road (S)		
3	A283 Storrington Road		
4	A24 London Road (N)		

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)	Entry only	Exit only
1 - A283 The Pike	3.71	7.70	39.0	23.0	75.6	16.0		
2 - A24 London Road (S)	7.60	11.40	91.0	48.0	75.0	8.0		
3 - A283 Storrington Road	3.00	11.60	74.0	50.0	83.0	8.0		
4 - A24 London Road (N)	7.10	13.10	46.5	33.8	78.0	10.0		

Bypass

Arm	Arm has bypass	Bypass utilisation (%)
1 - A283 The Pike		
2 - A24 London Road (S)	✓	100
3 - A283 Storrington Road	✓	100
4 - A24 London Road (N)	✓	100

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A283 The Pike	0.564	2146
2 - A24 London Road (S)	0.808	3666
3 - A283 Storrington Road	0.693	3105
4 - A24 London Road (N)	0.801	3745

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)
D5	2039 LP Mitigation	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 (PCU/hr)	Scaling Factor (%)
1 - A283 The Pike		✓	653	100.000
2 - A24 London Road (S)		✓	1880	100.000
3 - A283 Storrington Road		✓	1218	100.000
4 - A24 London Road (N)		✓	1819	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A283 The Pike	2 - A24 London Road (S)	3 - A283 Storrington Road	4 - A24 London Road (N)
From	1 - A283 The Pike	0	38	555	60
	2 - A24 London Road (S)	47	0	407	1426
	3 - A283 Storrington Road	762	88	0	368
	4 - A24 London Road (N)	0	1453	366	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A283 The Pike	2 - A24 London Road (S)	3 - A283 Storrington Road	4 - A24 London Road (N)
From	1 - A283 The Pike	15	15	15	15
	2 - A24 London Road (S)	0	0	0	0
	3 - A283 Storrington Road	12	12	12	12
	4 - A24 London Road (N)	8	8	8	8

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A283 The Pike	0.75	16.93	3.3	C
2 - A24 London Road (S)	0.58	3.07	1.4	A
3 - A283 Storrington Road	0.48	4.03	1.0	A
4 - A24 London Road (N)	0.68	4.09	2.3	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	492	0	1432	1338	0.367	489	0.7	4.861	A
2 - A24 London Road (S)	1415	306	735	3072	0.361	1107	0.6	1.829	A
3 - A283 Storrington Road	917	277	1152	2307	0.277	638	0.4	2.413	A
4 - A24 London Road (N)	1369	0	674	3206	0.427	1366	0.8	2.110	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	587	0	1713	1180	0.498	585	1.1	6.940	A
2 - A24 London Road (S)	1690	366	880	2956	0.448	1323	0.8	2.204	A
3 - A283 Storrington Road	1095	331	1377	2151	0.355	763	0.6	2.903	A
4 - A24 London Road (N)	1635	0	806	3100	0.528	1634	1.2	2.649	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	719	0	2095	964	0.746	711	3.2	15.862	C
2 - A24 London Road (S)	2070	448	1072	2801	0.579	1620	1.4	3.043	A
3 - A283 Storrington Road	1341	405	1685	1938	0.483	934	1.0	4.010	A
4 - A24 London Road (N)	2003	0	986	2956	0.678	1999	2.2	4.044	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	719	0	2100	962	0.748	718	3.3	16.930	C
2 - A24 London Road (S)	2070	448	1080	2794	0.580	1622	1.4	3.069	A
3 - A283 Storrington Road	1341	405	1688	1936	0.483	936	1.0	4.031	A
4 - A24 London Road (N)	2003	0	988	2954	0.678	2003	2.3	4.085	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	587	0	1719	1177	0.499	595	1.2	7.224	A
2 - A24 London Road (S)	1690	366	891	2947	0.449	1326	0.8	2.224	A
3 - A283 Storrington Road	1095	331	1381	2148	0.356	766	0.6	2.921	A
4 - A24 London Road (N)	1635	0	808	3098	0.528	1639	1.2	2.674	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	492	0	1437	1335	0.368	494	0.7	4.931	A
2 - A24 London Road (S)	1415	306	741	3068	0.361	1110	0.6	1.841	A
3 - A283 Storrington Road	917	277	1155	2305	0.278	641	0.4	2.425	A
4 - A24 London Road (N)	1369	0	676	3204	0.427	1371	0.8	2.123	A

2039 LP Mitigation, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A283 The Pike - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A24 London Road (S) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A283 Storrington Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A24 London Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	18.88	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	18.88	C

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	2039 LP Mitigation	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 (PCU/hr)	Scaling Factor (%)
1 - A283 The Pike		✓	288	100.000
2 - A24 London Road (S)		✓	1880	100.000
3 - A283 Storrington Road		✓	1391	100.000
4 - A24 London Road (N)		✓	2552	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A283 The Pike	2 - A24 London Road (S)	3 - A283 Storrington Road	4 - A24 London Road (N)
From	1 - A283 The Pike	0	41	247	0
	2 - A24 London Road (S)	53	0	359	1468
	3 - A283 Storrington Road	705	253	0	433
	4 - A24 London Road (N)	0	2224	328	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - A283 The Pike	2 - A24 London Road (S)	3 - A283 Storrington Road	4 - A24 London Road (N)
From	1 - A283 The Pike	3	3	3	3
	2 - A24 London Road (S)	0	0	0	0
	3 - A283 Storrington Road	5	5	0	5
	4 - A24 London Road (N)	3	3	3	3

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A283 The Pike	0.76	34.51	2.9	D
2 - A24 London Road (S)	0.53	2.42	1.1	A
3 - A283 Storrington Road	0.54	4.25	1.2	A
4 - A24 London Road (N)	0.98	37.22	28.2	E

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	217	0	2105	959	0.226	216	0.3	4.981	A
2 - A24 London Road (S)	1415	270	431	3318	0.345	1143	0.5	1.653	A
3 - A283 Storrington Road	1047	326	1143	2313	0.312	719	0.5	2.368	A
4 - A24 London Road (N)	1921	0	759	3137	0.612	1915	1.6	3.017	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	259	0	2515	727	0.356	258	0.6	7.881	A
2 - A24 London Road (S)	1690	323	515	3250	0.421	1367	0.7	1.910	A
3 - A283 Storrington Road	1250	389	1367	2158	0.399	860	0.7	2.910	A
4 - A24 London Road (N)	2294	0	908	3018	0.760	2288	3.2	5.036	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	317	0	3014	446	0.711	310	2.3	26.147	D
2 - A24 London Road (S)	2070	395	618	3168	0.529	1673	1.1	2.407	A
3 - A283 Storrington Road	1532	477	1673	1946	0.542	1053	1.2	4.220	A
4 - A24 London Road (N)	2810	0	1111	2855	0.984	2736	21.6	23.256	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	317	0	3062	419	0.757	315	2.9	34.505	D
2 - A24 London Road (S)	2070	395	628	3159	0.530	1675	1.1	2.424	A
3 - A283 Storrington Road	1532	477	1675	1945	0.542	1055	1.2	4.245	A
4 - A24 London Road (N)	2810	0	1113	2854	0.985	2783	28.2	37.221	E

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	259	0	2622	667	0.388	268	0.7	9.479	A
2 - A24 London Road (S)	1690	323	537	3232	0.423	1369	0.7	1.933	A
3 - A283 Storrington Road	1250	389	1369	2157	0.399	863	0.7	2.928	A
4 - A24 London Road (N)	2294	0	911	3016	0.761	2394	3.4	6.947	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Bypass demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A283 The Pike	217	0	2119	951	0.228	218	0.3	5.070	A
2 - A24 London Road (S)	1415	270	435	3315	0.345	1146	0.5	1.659	A
3 - A283 Storrington Road	1047	326	1146	2311	0.312	722	0.5	2.381	A
4 - A24 London Road (N)	1921	0	762	3135	0.613	1928	1.6	3.089	A