









			To		
		1	2	3	4
	1	0.000	139.000	398.000	47.000
From	2	247.000	0.000	722.000	865.000
	3	251.000	302.000	0.000	35.000
	4	32.000	426.000	150.000	0.000

#### Turning Proportions (Veh) - A44 / A4095 Rbt (for whole period)

			To		
		1	2	3	4
	1	0.00	0.24	0.68	0.08
From	2	0.13	0.00	0.39	0.47
	3	0.43	0.51	0.00	0.06
	4	0.05	0.70	0.25	0.00

# **Vehicle Mix**

#### Average PCU Per Vehicle - A44 / A4095 Rbt (for whole period)

			To		
		1	2	3	4
	1	1.000	1.034	1.028	1.023
From	2	1.036	1.000	1.012	1.031
	3	1.018	1.035	1.000	1.063
	4	1.103	1.064	1.007	1.000

#### Heavy Vehicle Percentages - A44 / A4095 Rbt (for whole period)

			To		
		1	2	3	4
	1	0.000	3.400	2.800	2.300
From	2	3.600	0.000	1.200	3.100
	3	1.800	3.500	0.000	6.300
	4	10.300	6.400	0.700	0.000



# **Results**

#### Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh- min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh- min/min)	Inclusive Total Queueing Delay (Veh-min)	Average Queueing Delay (s)
A4095 Upper Campsfield Road	0.62	9.00	1.59	А	535.89	803.83	90.31	6.74	1.00	90.32	6.74
A44 Woodstock Road	1.07	126.17	79.74	F	1682.92	2524.37	2142.83	50.93	23.81	2142.91	50.93
A4095 Bladon Road	0.53	6.22	1.11	А	539.56	809.34	68.27	5.06	0.76	68.27	5.06
A44 Oxford Road	0.43	4.06	0.75	А	557.91	836.87	48.60	3.48	0.54	48.61	3.48

#### Main Results for each time segment

Main results: (16:15-16:30)

Name	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A4095 Upper Campsfield Road	439.66	109.92	437.31	396.98	658.66	0.00	1179.69	657.24	0.373	0.00	0.59	4.833	A
A44 Woodstock Road	1380.74	345.18	1372.08	650.18	445.79	0.00	2006.28	1797.69	0.688	0.00	2.16	5.603	A
A4095 Bladon Road	442.68	110.67	440.82	950.75	867.12	0.00	1392.26	1251.20	0.318	0.00	0.46	3.778	А
A44 Oxford Road	457.73	114.43	456.26	708.57	599.37	0.00	1696.05	1257.13	0.270	0.00	0.37	2.899	A

Main results: (16:30-16:45)

Name	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A4095 Upper Campsfield Road	525.00	131.25	523.88	474.55	788.37	0.00	1122.00	657.24	0.468	0.59	0.87	6.008	A
A44 Woodstock Road	1648.73	412.18	1637.42	778.35	533.91	0.00	1955.65	1797.70	0.843	2.16	4.99	10.938	В
A4095 Bladon Road	528.60	132.15	527.76	1136.36	1034.97	0.00	1306.38	1251.20	0.405	0.46	0.67	4.619	А
A44 Oxford Road	546.58	136.64	546.05	845.86	716.86	0.00	1633.00	1257.13	0.335	0.37	0.50	3.310	А



#### Main results: (16:45-17:00)

Name	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A4095 Upper Campsfield Road	642.99	160.75	640.20	561.15	964.90	0.00	1043.49	657.24	0.616	0.87	1.57	8.865	А
A44 Woodstock Road	2019.28	504.82	1858.72	952.37	652.74	0.00	1887.38	1797.70	1.070	4.99	45.13	57.747	F
A4095 Bladon Road	647.40	161.85	645.73	1332.94	1178.51	0.00	1232.95	1251.20	0.525	0.67	1.09	6.113	А
A44 Oxford Road	669.42	167.36	668.43	966.61	857.62	0.00	1557.51	1257.13	0.430	0.50	0.75	4.045	А

#### Main results: (17:00-17:15)

Name	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A4095 Upper Campsfield Road	642.99	160.75	642.91	564.87	966.64	0.00	1042.72	657.24	0.617	1.57	1.59	8.998	A
A44 Woodstock Road	2019.28	504.82	1880.86	954.51	655.04	0.00	1886.05	1797.70	1.071	45.13	79.74	126.167	F
A4095 Bladon Road	647.40	161.85	647.33	1343.75	1192.15	0.00	1225.97	1251.20	0.528	1.09	1.11	6.221	А
A44 Oxford Road	669.42	167.36	669.40	977.37	862.11	0.00	1555.10	1257.13	0.430	0.75	0.75	4.064	A

#### Main results: (17:15-17:30)

Name	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A4095 Upper Campsfield Road	525.00	131.25	527.78	515.17	790.88	0.00	1120.89	657.24	0.468	1.59	0.89	6.097	А
A44 Woodstock Road	1648.73	412.18	1931.60	781.41	537.25	0.00	1953.73	1797.70	0.844	79.74	9.02	87.938	F
A4095 Bladon Road	528.60	132.15	529.92	1255.19	1213.65	0.00	1214.93	1251.20	0.435	1.11	0.78	5.265	A
A44 Oxford Road	546.58	136.64	547.52	985.05	758.53	0.00	1610.52	1257.13	0.339	0.75	0.52	3.391	А

#### Main results: (17:30-17:45)

Name	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A4095 Upper Campsfield Road	439.66	109.92	440.83	403.20	662.18	0.00	1178.13	657.24	0.373	0.89	0.60	4.891	A
A44 Woodstock Road	1380.74	345.18	1407.78	654.03	448.98	0.00	2004.44	1797.69	0.689	9.02	2.26	6.299	A
A4095 Bladon Road	442.68	110.67	443.89	967.71	889.05	0.00	1381.04	1251.20	0.321	0.78	0.47	3.846	A
A44 Oxford Road	457.73	114.43	458.31	725.88	607.06	0.00	1691.91	1257.13	0.271	0.52	0.37	2.919	A



#### Queueing Delay Results for each time segment

Queueing Delay results: (16:15-16:30)

Name	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A4095 Upper Campsfield Road	8.56	0.57	4.833	А	А
A44 Woodstock Road	30.68	2.05	5.603	А	A
A4095 Bladon Road	6.78	0.45	3.778	А	A
A44 Oxford Road	5.41	0.36	2.899	Α	A

#### Queueing Delay results: (16:30-16:45)

Name	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A4095 Upper Campsfield Road	12.65	0.84	6.008	А	А
A44 Woodstock Road	67.29	4.49	10.938	В	В
A4095 Bladon Road	9.88	0.66	4.619	A	A
A44 Oxford Road	7.38	0.49	3.310	Α	A

#### Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A4095 Upper Campsfield Road	22.29	1.49	8.865	А	А
A44 Woodstock Road	398.83	26.59	57.747	F	E
A4095 Bladon Road	15.80	1.05	6.113	А	Α
A44 Oxford Road	10.97	0.73	4.045	A	A

#### Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A4095 Upper Campsfield Road	23.69	1.58	8.998	А	А
A44 Woodstock Road	938.05	62.54	126.167	F	F
A4095 Bladon Road	16,54	1.10	6.221	A	A
A44 Oxford Road	11.26	0.75	4.064	A	A

#### Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A4095 Upper Campsfield Road	13.89	0.93	6.097	A	А
A44 Woodstock Road	669.43	44.63	87.938	F	F
A4095 Bladon Road	12.00	0.80	5.265	Α	Α
A44 Oxford Road	7.90	0.53	3.391	Α	A

#### Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A4095 Upper Campsfield Road	9.24	0.62	4.891	А	А
A44 Woodstock Road	38.56	2.57	6.299	Α	Α
A4095 Bladon Road	7.28	0.49	3.846	Α	Α
A44 Oxford Road	5.67	0.38	2.919	A	A



# (Default Analysis Set) - 2025 Base + Sensitivity Development, AM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Geometry	A44 Oxford Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

#### **Analysis Set Details**

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		~				100.000	100.000	

#### **Demand Set Details**

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2025 Base + Sensitivity Development, AM	2025 Base + Sensitivity Development	AM		ONE HOUR	07:30	09:00	90	15				~		

## **Junction Network**

#### **Junctions**

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
A44 / A4095 Rbt	Roundabout	1,2,3,4				26.56	D

#### **Junction Network Options**

Driving Side	Lighting			
Left	Normal/unknown			

### Arms

#### Arms

Name	Name	Description
A4095 Upper Campsfield Road	A4095 Upper Campsfield Road	
A44 Woodstock Road	A44 Woodstock Road	
A4095 Bladon Road	A4095 Bladon Road	
A44 Oxford Road	A44 Oxford Road	



#### **Capacity Options**

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A4095 Upper Campsfield Road	0.00	99999.00		0.00
A44 Woodstock Road	0.00	99999.00		0.00
A4095 Bladon Road	0.00	99999.00		0.00
A44 Oxford Road	0.00	99999.00		0.00

#### Roundabout Geometry

Name	V - Approach road half- width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A4095 Upper Campsfield Road	2.80	6.20	26.10	20.00	79.26	41.00	
A44 Woodstock Road	7.30	7.30	0.00	21.06	79.26	17.00	
A4095 Bladon Road	3.60	7.10	24.70	20.00	79.26	19.00	
A44 Oxford Road	3.60	7.30	55.70	28.90	79.26	19.00	

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

#### **Pedestrian Crossings**

Name	Crossing Type
A4095 Upper Campsfield Road	None
A44 Woodstock Road	None
A4095 Bladon Road	None
A44 Oxford Road	None

#### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A4095 Upper Campsfield Road		(calculated)	(calculated)	0.438	1515.365
A44 Woodstock Road		(calculated)	(calculated)	0.576	2317.123
A4095 Bladon Road		(calculated)	(calculated)	0.511	1889.934
A44 Oxford Road		(calculated)	(calculated)	0.548	2122.644

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

## **Traffic Flows**

#### **Demand Set Data Options**

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		~	~	HV Percentages	2.00				~	~

# **Entry Flows**

#### General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A4095 Upper Campsfield Road	ONE HOUR	~	591.00	100.000
A44 Woodstock Road	ONE HOUR	<b>✓</b>	906.00	100.000
A4095 Bladon Road	ONE HOUR	<b>✓</b>	1077.00	100.000
A44 Oxford Road	ONE HOUR	<b>✓</b>	1047.00	100.000



# **Turning Proportions**

Turning Counts or Proportions (Veh/hr) - A44 / A4095 Rbt (for whole period)

			To		
		1	2	3	4
	1	0.000	197.000	359.000	35.000
From	2	259.000	0.000	217.000	430.000
	3	436.000	611.000	0.000	30.000
	4	41.000	863.000	143.000	0.000

Turning Proportions (Veh) - A44 / A4095 Rbt (for whole period)

	To									
		1	2	3	4					
	1	0.00	0.33	0.61	0.06					
From	2	0.29	0.00	0.24	0.47					
	3	0.40	0.57	0.00	0.03					
	4	0.04	0.82	0.14	0.00					

## **Vehicle Mix**

Average PCU Per Vehicle - A44 / A4095 Rbt (for whole period)

			To		
		1	2	3	4
	1 1.00		1.048	1.055	1.100
From	2	1.109	1.000	1.101	1.116
	3	1.062	1.024	1.000	1.154
	4	1.057	1.028	1.057	1.000

Heavy Vehicle Percentages - A44 / A4095 Rbt (for whole period)

			To		
		1	2	3	4
	1	0.000	4.800	5.500	10.000
From	2	10.900	0.000	10.100	11.600
	3	6.200	2.400	0.000	15.400
	4	5.700	2.800	5.700	0.000



# Results

#### Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh- min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh- min/min)	Inclusive Total Queueing Delay (Veh-min)	Average Queueing Delay (s)
A4095 Upper Campsfield Road	0.96	67.93	11.76	F	542.31	813.47	351.38	25.92	3.90	351.41	25.92
A44 Woodstock Road	0.56	4.68	1.29	A	831.36	1247.04	79.46	3.82	0.88	79.47	3.82
A4095 Bladon Road	0.86	18.27	5.75	С	988.28	1482.42	250.08	10.12	2.78	250.11	10.12
A44 Oxford Road	0.92	31.67	9.50	D	960.74	1441.11	331.85	13.82	3.69	331.87	13.82

#### Main Results for each time segment

Main results: (07:30-07:45)

Name	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A4095 Upper Campsfield Road	444.94	111.23	441.24	551.43	1210.63	0.00	918.59	689.02	0.484	0.00	0.92	7.486	A
A44 Woodstock Road	682.08	170.52	679.79	1250.64	401.23	0.00	1866.59	1745.61	0.365	0.00	0.57	3.029	А
4095 Bladon Road	810.83	202.71	806.28	537.92	543.10	0.00	1516.22	1066.62	0.535	0.00	1.14	5.039	A
A44 Oxford Road	788.23	197.06	783.90	371.23	978.15	0.00	1507.81	1188.88	0.523	0.00	1.08	4.943	A

Main results: (07:45-08:00)

Name	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A4095 Upper Campsfield Road	531.30	132.82	527.83	659.95	1448.32	0.00	817.02	689.02	0.650	0.92	1.79	12.301	В
A44 Woodstock Road	814.47	203.62	813.56	1496.21	479.94	0.00	1823.40	1745.61	0.447	0.57	0.80	3.561	A
A4095 Bladon Road	968.21	242.05	965.02	643.54	649.96	0.00	1458.02	1066.62	0.664	1.14	1.93	7.254	A
A44 Oxford Road	941.23	235.31	937.56	444.27	1170.71	0.00	1400.16	1188.88	0.672	1.08	2.00	7.721	A



#### Main results: (08:00-08:15)

Name	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A4095 Upper Campsfield Road	650.70	162.68	623.28	803.20	1748.81	0.00	688.63	689.06	0.945	1.79	8.65	43.673	E
A44 Woodstock Road	997.52	249.38	995.65	1802.48	569.60	0.00	1774.21	1745.60	0.562	0.80	1.27	4.612	A
A4095 Bladon Road	1185.80	296.45	1171.84	771.17	794.09	0.00	1379.52	1066.62	0.860	1.93	5.42	16.338	С
A44 Oxford Road	1152.76	288.19	1128.18	542.10	1423.83	0.00	1258.60	1188.88	0.916	2.00	8.15	24.115	С

#### Main results: (08:15-08:30)

Name	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A4095 Upper Campsfield Road	650.70	162.68	638.26	809.58	1774.40	0.00	677.68	689.06	0.960	8.65	11.76	67.931	F
A44 Woodstock Road	997.52	249.38	997.46	1830.45	582.22	0.00	1767.29	1745.60	0.564	1.27	1.29	4.676	A
A4095 Bladon Road	1185.80	296.45	1184.48	783.32	796.35	0.00	1378.29	1066.62	0.860	5.42	5.75	18.269	С
A44 Oxford Road	1152.76	288.19	1147.36	544.20	1436.63	0.00	1251.51	1188.88	0.921	8.15	9.50	31.672	D

#### Main results: (08:30-08:45)

Name	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A4095 Upper Campsfield Road	531.30	132.82	570.01	669.34	1490.31	0.00	799.06	689.02	0.665	11.76	2.08	18.184	С
A44 Woodstock Road	814.47	203.62	816.31	1547.75	512.57	0.00	1805.49	1745.61	0.451	1.29	0.83	3.645	А
A4095 Bladon Road	968.21	242.05	983.08	674.33	654.55	0.00	1455.54	1066.62	0.665	5.75	2.03	7.848	А
A44 Oxford Road	941.23	235.31	970.59	448.57	1189.05	0.00	1390.01	1188.88	0.677	9.50	2.16	9.157	А

#### Main results: (08:45-09:00)

Name	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A4095 Upper Campsfield Road	444.94	111.23	449.39	555.95	1223.33	0.00	913.16	689.02	0.487	2.08	0.97	7.836	А
A44 Woodstock Road	682.08	170.52	683.07	1264.90	407.82	0.00	1862.97	1745.61	0.366	0.83	0.58	3.052	A
A4095 Bladon Road	810.83	202.71	814.30	544.81	546.08	0.00	1514.60	1066.62	0.535	2.03	1.17	5.165	А
A44 Oxford Road	788.23	197.06	792.40	373.49	986.89	0.00	1502.95	1188.88	0.524	2.16	1.12	5.095	A



#### Queueing Delay Results for each time segment

Queueing Delay results: (07:30-07:45)

Name	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A4095 Upper Campsfield Road	13.19	0.88	7.486	А	А
A44 Woodstock Road	8.40	0.56	3.029	Α	Α
A4095 Bladon Road	16.37	1.09	5.039	А	А
A44 Oxford Road	15.63	1.04	4.943	A	A

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A4095 Upper Campsfield Road	25.06	1.67	12.301	В	В
A44 Woodstock Road	11.79	0.79	3.561	Α	A
A4095 Bladon Road	27.59	1.84	7.254	A	A
A44 Oxford Road	28.42	1.89	7.721	Α	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A4095 Upper Campsfield Road	95.56	6.37	43.673	E	D
A44 Woodstock Road	18.48	1.23	4.612	Α	A
A4095 Bladon Road	70.29	4.69	16.338	C	В
A44 Oxford Road	97.37	6.49	24.115	С	С

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A4095 Upper Campsfield Road	155.60	10.37	67.931	F	E
A44 Woodstock Road	19.21	1.28	4.676	А	Α
A4095 Bladon Road	84.30	5.62	18.269	C	В
A44 Oxford Road	134.04	8.94	31.672	D	С

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A4095 Upper Campsfield Road	46.74	3.12	18.184	С	В
A44 Woodstock Road	12.72	0.85	3.645	А	A
A4095 Bladon Road	33.41	2.23	7.848	Α	Α
A44 Oxford Road	39.04	2.60	9.157	A	A

Queueing Delay results: (08:45-09:00)

Name	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A4095 Upper Campsfield Road	15.24	1.02	7.836	А	А
A44 Woodstock Road	8.87	0.59	3.052	A	А
A4095 Bladon Road	18.13	1.21	5.165	Α	A
A44 Oxford Road	17.36	1.16	5.095	A	A



# (Default Analysis Set) - 2025 Base + Sensitivity Development, PM

#### **Data Errors and Warnings**

Severity	Area	Item	Description
Warning	Geometry	A44 Oxford Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

#### **Analysis Set Details**

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		~		2,33.0		100.000	100.000	

#### **Demand Set Details**

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2025 Base + Sensitivity Development, PM	2025 Base + Sensitivity Development	PM		ONE HOUR	16:15	17:45	90	15			~		

## **Junction Network**

#### Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
A44 / A4095 Rbt	Roundabout	1,2,3,4				139.57	F

#### **Junction Network Options**

Driving Side	Lighting
Left	Normal/unknown

### Arms

#### Arms

Name	Name	Description
A4095 Upper Campsfield Road	A4095 Upper Campsfield Road	· ·
A44 Woodstock Road	A44 Woodstock Road	
A4095 Bladon Road	A4095 Bladon Road	
A44 Oxford Road	A44 Oxford Road	



#### **Capacity Options**

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A4095 Upper Campsfield Road	0.00	99999.00		0.00
A44 Woodstock Road	0.00	99999.00		0.00
A4095 Bladon Road	0.00	99999.00		0.00
A44 Oxford Road	0.00	99999.00		0.00

#### Roundabout Geometry

Name	V - Approach road half- width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A4095 Upper Campsfield Road	2.80	6.20	26.10	20.00	79.26	41.00	
A44 Woodstock Road	7.30	7.30	0.00	21.06	79.26	17.00	
A4095 Bladon Road	3.60	7.10	24.70	20.00	79.26	19.00	
A44 Oxford Road	3.60	7.30	55.70	28.90	79.26	19.00	

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

#### **Pedestrian Crossings**

Name	Crossing Type
A4095 Upper Campsfield Road	None
A44 Woodstock Road	None
A4095 Bladon Road	None
A44 Oxford Road	None

#### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A4095 Upper Campsfield Road		(calculated)	(calculated)	0.438	1515.365
A44 Woodstock Road		(calculated)	(calculated)	0.576	2317.123
A4095 Bladon Road		(calculated)	(calculated)	0.511	1889.934
A44 Oxford Road		(calculated)	(calculated)	0.548	2122.644

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

## **Traffic Flows**

#### **Demand Set Data Options**

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		~	<b>✓</b>	HV Percentages	2.00				~	~

# **Entry Flows**

#### **General Flows Data**

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A4095 Upper Campsfield Road	ONE HOUR	<b>✓</b>	622.00	100.000
A44 Woodstock Road	ONE HOUR	<b>✓</b>	1968.00	100.000
A4095 Bladon Road	ONE HOUR	<b>✓</b>	627.00	100.000
A44 Oxford Road	ONE HOUR	<b>✓</b>	647.00	100.000



# **Turning Proportions**

Turning Counts or Proportions (Veh/hr) - A44 / A4095 Rbt (for whole period)

		То									
		1	2	3	4						
	1	0.000	148.000	423.000	51.000						
From	2	265.000	0.000	775.000	928.000						
	3	267.000	322.000	0.000	38.000						
	4	34.000	453.000	160.000	0.000						

Turning Proportions (Veh) - A44 / A4095 Rbt (for whole period)

	То							
		1	2	3	4			
	1	0.00	0.24	0.68	0.08			
From	2	0.13	0.00	0.39	0.47			
	3	0.43	0.51	0.00	0.06			
	4	0.05	0.70	0.25	0.00			

## **Vehicle Mix**

Average PCU Per Vehicle - A44 / A4095 Rbt (for whole period)

			To		
		1	2	3	4
	1	1.000	1.035	1.028	1.023
From	2	1.035	1.000	1.012	1.030
	3	1.018	1.036	1.000	1.063
	4	1.103	1.066	1.007	1.000

Heavy Vehicle Percentages - A44 / A4095 Rbt (for whole period)

		То										
		1	2	3	4							
	1	0.000	3.500	2.800	2.300							
From	2	3.500	0.000	1.200	3.000							
	3	1.800	3.600	0.000	6.300							
	4	10.300	6.600	0.700	0.000							



## **Results**

#### Results Summary for whole modelled period

Name	Max RFC	Max Delay (5)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh- min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh- min/min)	Inclusive Total Queueing Delay (Veh- min)	Inclusive Average Queueing Delay (s)
A4095 Upper Campsfield Road	0.68	10.92	2.04	В	570.76	856.13	110.11	7.72	1.22	110.12	7.72
A44 Woodstock Road	1.16	268.80	162.86	F	1805.88	2708.82	5845.22	129.47	64.95	5845.47	129.48
A4095 Bladon Road	0.56	6.67	1.27	Α	575.35	863.02	79.76	5.55	0.89	79.77	5.55
A44 Oxford Road	0.46	4.38	0.86	А	593.70	890.55	55.19	3.72	0.61	55.20	3.72

#### Main Results for each time segment

Main results: (16:15-16:30)

Name	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A4095 Upper Campsfield Road	468.27	117.07	465.59	423.61	701.28	0.00	1160.09	656.57	0.404	0.00	0.67	5.164	А
A44 Woodstock Road	1481.62	370.41	1470.32	692.01	474.86	0.00	1990.76	1798.73	0.744	0.00	2.83	6.779	A
A4095 Bladon Road	472.04	118.01	469.93	1015.69	929.48	0.00	1360.06	1250.38	0.347	0.00	0.53	4.032	А
A44 Oxford Road	487.10	121.77	485.46	759.97	639.43	0.00	1672.36	1256.38	0.291	0.00	0.41	3.029	A

Main results: (16:30-16:45)

Name	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A4095 Upper Campsfield Road	559.16	139.79	557.76	505.21	839.42	0.00	1098.60	656.57	0.509	0.67	1.02	6.638	A
A44 Woodstock Road	1769.20	442.30	1745.96	828.45	568.73	0.00	1936.80	1798.73	0.913	2.83	8.63	17.097	С
A4095 Bladon Road	563.66	140.92	562.62	1210.55	1104.13	0.00	1270.83	1250.38	0.444	0.53	0.79	5.076	А
A44 Oxford Road	581.64	145.41	581.02	903.13	763.62	0.00	1605.80	1256.38	0.362	0.41	0.56	3.511	A



#### Main results: (16:45-17:00)

Name	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A4095 Upper Campsfield Road	684.83	171.21	680.90	580.34	1027.38	0.00	1014.92	656.57	0.675	1.02	2.00	10.654	В
A44 Woodstock Road	2166.82	541.70	1855.06	1013.53	694.76	0.00	1864.35	1798.72	1.162	8.63	86.58	100.290	F
A4095 Bladon Road	690.34	172.59	688.48	1369.45	1180.35	0.00	1231.91	1250.38	0.560	0.79	1.25	6.602	А
A44 Oxford Road	712.36	178.09	711.19	972.30	896.54	0.00	1534.64	1256.38	0.464	0.56	0.86	4.365	А

#### Main results: (17:00-17:15)

Name	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A4095 Upper Campsfield Road	684.83	171.21	684.68	582.07	1029.41	0.00	1014.02	656.57	0.675	2.00	2.04	10.918	В
A44 Woodstock Road	2166.82	541.70	1861.69	1016.17	697.92	0.00	1862.53	1798.72	1.163	86.58	162.86	244.508	F
A4095 Bladon Road	690.34	172.59	690.29	1374.92	1184.69	0.00	1229.70	1250.38	0.561	1.25	1.27	6.673	A
A44 Oxford Road	712.36	178.09	712.34	975.84	899.13	0.00	1533.25	1256.38	0.465	0.86	0.86	4.385	A

#### Main results: (17:15-17:30)

Name	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A4095 Upper Campsfield Road	559.16	139.79	563.11	530.18	842.43	0.00	1097.26	656.57	0.510	2.04	1.05	6.790	A
A44 Woodstock Road	1769.20	442.30	1922.39	832.30	573.24	0.00	1934.20	1798.73	0.915	162.86	124.56	268.798	F
A4095 Bladon Road	563.66	140.92	565.24	1284.11	1211.52	0.00	1215.95	1250.38	0.464	1.27	0.87	5.547	A
A44 Oxford Road	581.64	145.41	582.78	986.92	789.84	0.00	1591.68	1256.38	0.365	0.86	0.58	3.574	A

#### Main results: (17:30-17:45)

Name	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A4095 Upper Campsfield Road	468.27	117.07	469.75	491.42	704.96	0.00	1158.46	656.57	0.404	1.05	0.68	5.239	A
A44 Woodstock Road	1481.62	370.41	1963.53	696.12	478.58	0.00	1988.62	1798.73	0.745	124.56	4.08	119.394	F
A4095 Bladon Road	472.04	118.01	472.94	1213.30	1228.80	0.00	1207.09	1250.38	0.391	0.87	0.65	4.911	A
A44 Oxford Road	487.10	121.77	487.71	993.07	708.68	0.00	1635.08	1256.38	0.298	0.58	0.43	3.141	A



#### Queueing Delay Results for each time segment

Queueing Delay results: (16:15-16:30)

Name	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A4095 Upper Campsfield Road	9.72	0.65	5.164	А	А
A44 Woodstock Road	39.41	2.63	6.779	Α	Α
A4095 Bladon Road	7.71	0.51	4.032	Α	Α
A44 Oxford Road	6.01	0.40	3.029	A	A

#### Queueing Delay results: (16:30-16:45)

Name	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A4095 Upper Campsfield Road	14.81	0.99	6.638	A	Α
A44 Woodstock Road	107.58	7.17	17.097	C	В
A4095 Bladon Road	11.53	0.77	5.076	Α	Α
A44 Oxford Road	8.32	0.55	3.511	А	A

#### Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A4095 Upper Campsfield Road	28.10	1.87	10.654	В	В
A44 Woodstock Road	723.73	48.25	100.290	F	F
A4095 Bladon Road	18.12	1.21	6.602	Α	A
A44 Oxford Road	12.56	0.84	4.365	A	A

#### Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A4095 Upper Campsfield Road	30.40	2.03	10.918	В	В
A44 Woodstock Road	1871.05	124.74	244.508	F	F
A4095 Bladon Road	18.95	1.26	6.673	А	A
A44 Oxford Road	12.93	0.86	4.385	A	A

#### Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A4095 Upper Campsfield Road	16.52	1.10	6.790	А	А
A44 Woodstock Road	2155.61	143.71	268.798	F	F
A4095 Bladon Road	13.51	0.90	5.547	A	A
A44 Oxford Road	8.87	0.59	3.574	А	А

#### Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A4095 Upper Campsfield Road	10.57	0.70	5.239	А	А
A44 Woodstock Road	947.84	63.19	119.394	F	F
A4095 Bladon Road	9.95	0.66	4.911	A	A
A44 Oxford Road	6.50	0.43	3.141	A	A