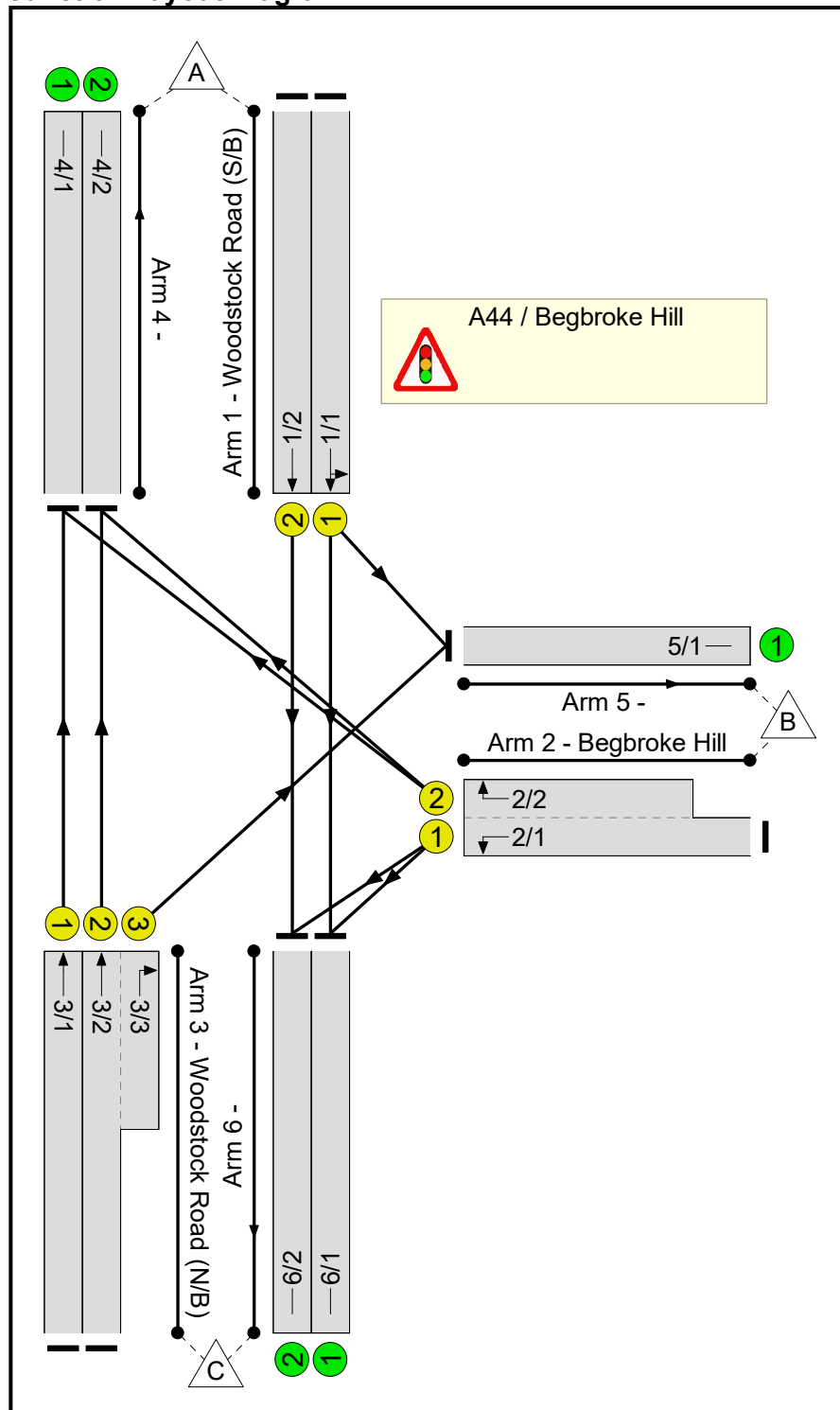


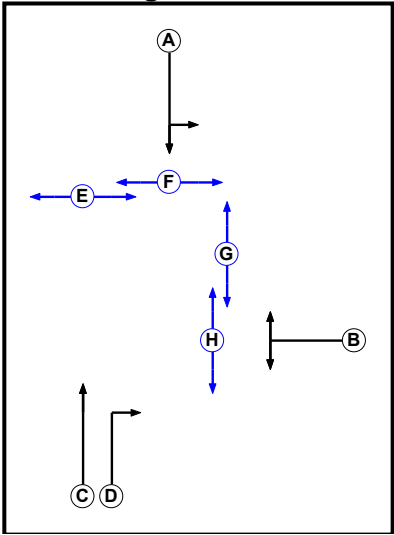
Appendix N

User and Project Details

Project:	Yarnton, Cherwell
Title:	A44 / Begbroke Hill - Signalised Junction
Design Layout Ref:	Existing Junction Layout
File name:	A44_Begbroke (Existing) v1.0.lsg3x
Author:	David Noyce
Company:	Vectos (South) Ltd
Address:	Network Building, 97 Tottenham Court Road, London W1T 4TP

Junction Layout Diagram

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		-9999	7
B	Traffic		-9999	7
C	Traffic		-9999	7
D	Traffic		-9999	7
E	Pedestrian		-9999	6
F	Pedestrian		-9999	6
G	Pedestrian		-9999	6
H	Pedestrian		-9999	6

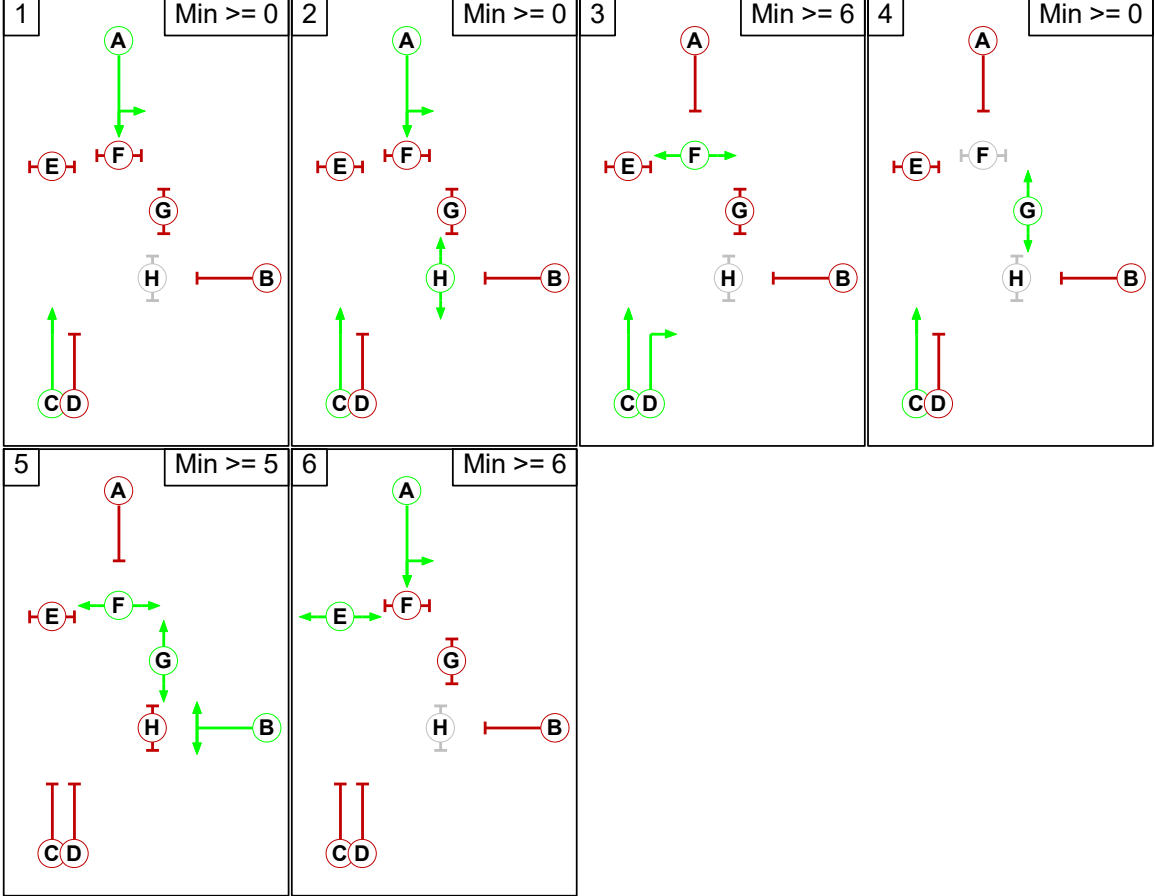
Intergreens

Terminating Phase		Starting Phase								
			A	B	C	D	E	F	G	H
		A		10	-	7	-	7	10	-
		B	5 <th></th> <td>6</td> <td>5</td> <td>9</td> <td>-</td> <td>-</td> <td>5</td>		6	5	9	-	-	5
		C	-	7		-	9	-	-	-
		D	6	5	-		-	-	9	-
		E	-	8	8	-		-	-	-
		F	8	-	-	-	-		-	-
		G	6	-	-	6	-	-		-
		H	-	10	-	-	-	-	-	

Stage Data

Stage No.	Phases in Stage
1	A C
2	A C H
3	C D F
4	C G
5	B F G
6	A E

Stage Diagrams



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Lane Input Data

Junction: A44 / Begbroke Hill												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Woodstock Road (S/B))	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 5 Left	16.50
											Arm 6 Ahead	Inf
1/2 (Woodstock Road (S/B))	U	A	2	3	60.0	Geom	-	3.65	0.00	N	Arm 6 Ahead	Inf
2/1 (Begbroke Hill)	U	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 6 Left	16.50
2/2 (Begbroke Hill)	U	B	2	3	9.0	Geom	-	3.65	0.00	N	Arm 4 Right	20.00
3/1 (Woodstock Road (N/B))	U	C	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Ahead	Inf
3/2 (Woodstock Road (N/B))	U	C	2	3	60.0	Geom	-	3.50	0.00	N	Arm 4 Ahead	Inf
3/3 (Woodstock Road (N/B))	U	D	2	3	7.0	Geom	-	3.50	0.00	N	Arm 5 Right	12.00

(FG3: 'Baseline, AM', Plan 2: 'Peds Every 2nd Cycle')

Desired Flow :

Origin	Destination				
		A	B	C	Tot.
	A	0	62	986	1048
	B	10	0	14	24
	C	1020	118	0	1138
	Tot.	1030	180	1000	2210

Stage	1	3	5	2	3	5	6
Duration	44	25	6	74	22	6	6
Change Point	0	52	84	99	181	210	225

[illegible]

(FG4: 'Baseline, PM', Plan 2: 'Peds Every 2nd Cycle')

Desired Flow :

Origin	Destination				
		A	B	C	Tot.
	A	0	2	1049	1051
	B	48	0	108	156
	C	1277	18	0	1295
	Tot.	1325	20	1157	2502

Stage	1	3	5	2	3	5	6
Duration	62	7	14	76	7	11	6
Change Point	0	70	84	107	191	205	225

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: A44 / Begbroke Hill - Signalised Junction	-	-	-	-	-	-	46.1%	-
A44 / Begbroke Hill	-	-	-	-	-	-	46.1%	-
1/1	Woodstock Road (S/B) Left Ahead	A	153	526	1979	1278	41.2%	9.0
1/2	Woodstock Road (S/B) Ahead	A	153	525	2120	1369	38.3%	8.8
2/1+2/2	Begbroke Hill Right Left	B	29	156	1815:1972	234+104	46.1 : 46.1%	3.8
3/1	Woodstock Road (N/B) Ahead	C	168	638	1965	1392	45.8%	11.4
3/2+3/3	Woodstock Road (N/B) Ahead Right	C D	168:14	657	2105:1871	1451+41	44.0 : 44.0%	11.1
C1 - F380		PRC for Signalised Lanes (%): PRC Over All Lanes (%):	95.4 95.4	Total Delay for Signalised Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		9.95 9.95	Cycle Time (s): 240	

(FG5: '2028 without Development, AM', Plan 2: 'Peds Every 2nd Cycle')

Desired Flow :

Origin	Destination				
		A	B	C	Tot.
	A	0	104	1065	1169
	B	69	0	153	222
	C	1137	206	0	1343
	Tot.	1206	310	1218	2734

Stage	1	3	5	2	3	5	6
Duration	40	29	15	48	36	9	6
Change Point	0	48	84	108	164	207	225

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: A44 / Begbroke Hill - Signalised Junction	-	-	-	-	-	-	68.6%	-
A44 / Begbroke Hill	-	-	-	-	-	-	68.6%	-
1/1	Woodstock Road (S/B) Left Ahead	A	103	585	1949	853	68.6%	16.8
1/2	Woodstock Road (S/B) Ahead	A	103	584	2120	928	63.0%	15.9
2/1+2/2	Begbroke Hill Right Left	B	28	222	1815:1972	226+102	67.8 : 67.8%	5.9
3/1	Woodstock Road (N/B) Ahead	C	169	568	1965	1400	40.6%	9.2
3/2+3/3	Woodstock Road (N/B) Ahead Right	C D	169:65	775	2105:1871	836+303	68.1 : 68.1%	10.6
C1 - F380								
PRC for Signalled Lanes (%):		31.2	Total Delay for Signalled Lanes (pcuHr):		20.31	Cycle Time (s): 240		
PRC Over All Lanes (%):		31.2	Total Delay Over All Lanes(pcuHr):		20.31			

(FG6: '2028 without Development, PM', Plan 2: 'Peds Every 2nd Cycle')

Desired Flow :

Origin	Destination				
		A	B	C	Tot.
	A	0	62	1171	1233
	B	94	0	218	312
	C	1369	170	0	1539
	Tot.	1463	232	1389	3084

Stage	1	3	5	2	3	5	6
Duration	54	14	26	39	31	13	6
Change Point	0	62	83	118	165	203	225

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: A44 / Begbroke Hill - Signalised Junction	-	-	-	-	-	-	69.2%	-
A44 / Begbroke Hill	-	-	-	-	-	-	69.2%	-
1/1	Woodstock Road (S/B) Left Ahead	A	108	617	1962	899	68.6%	17.7
1/2	Woodstock Road (S/B) Ahead	A	108	616	2120	972	63.4%	16.9
2/1+2/2	Begbroke Hill Right Left	B	43	312	1815:1972	316+136	69.1 : 69.1%	8.2
3/1	Woodstock Road (N/B) Ahead	C	154	684	1965	1277	53.6%	13.3
3/2+3/3	Woodstock Road (N/B) Ahead Right	C D	154:45	855	2105:1871	990+246	69.2 : 69.2%	15.8
C1 - F380	PRC for Signalised Lanes (%): PRC Over All Lanes (%):	30.1 30.1	Total Delay for Signalised Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		23.54 23.54	Cycle Time (s): 240		

(FG9: '2031 without Development, AM', Plan 2: 'Peds Every 2nd Cycle')

Desired Flow :

Origin	Destination				
		A	B	C	Tot.
	A	0	108	1072	1180
	B	85	0	193	278
	C	1164	217	0	1381
	Tot.	1249	325	1265	2839

Stage	1	3	5	2	3	5	6
Duration	37	27	19	46	36	12	6
Change Point	0	45	79	107	161	204	225

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: A44 / Begbroke Hill - Signalised Junction	-	-	-	-	-	-	72.7%	-
A44 / Begbroke Hill	-	-	-	-	-	-	72.7%	-
1/1	Woodstock Road (S/B) Left Ahead	A	98	590	1948	812	72.7%	17.9
1/2	Woodstock Road (S/B) Ahead	A	98	590	2120	883	66.8%	17.1
2/1+2/2	Begbroke Hill Right Left	B	35	278	1815:1972	270+119	71.5 : 71.5%	7.4
3/1	Woodstock Road (N/B) Ahead	C	162	582	1965	1343	43.3%	10.2
3/2+3/3	Woodstock Road (N/B) Ahead Right	C D	162:63	799	2105:1871	804+300	72.4 : 72.4%	12.4
C1 - F380		PRC for Signalised Lanes (%): PRC Over All Lanes (%):	23.8 23.8	Total Delay for Signalised Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		23.26 23.26	Cycle Time (s): 240	

(FG10: '2031 without Development, PM', Plan 2: 'Peds Every 2nd Cycle')

Desired Flow :

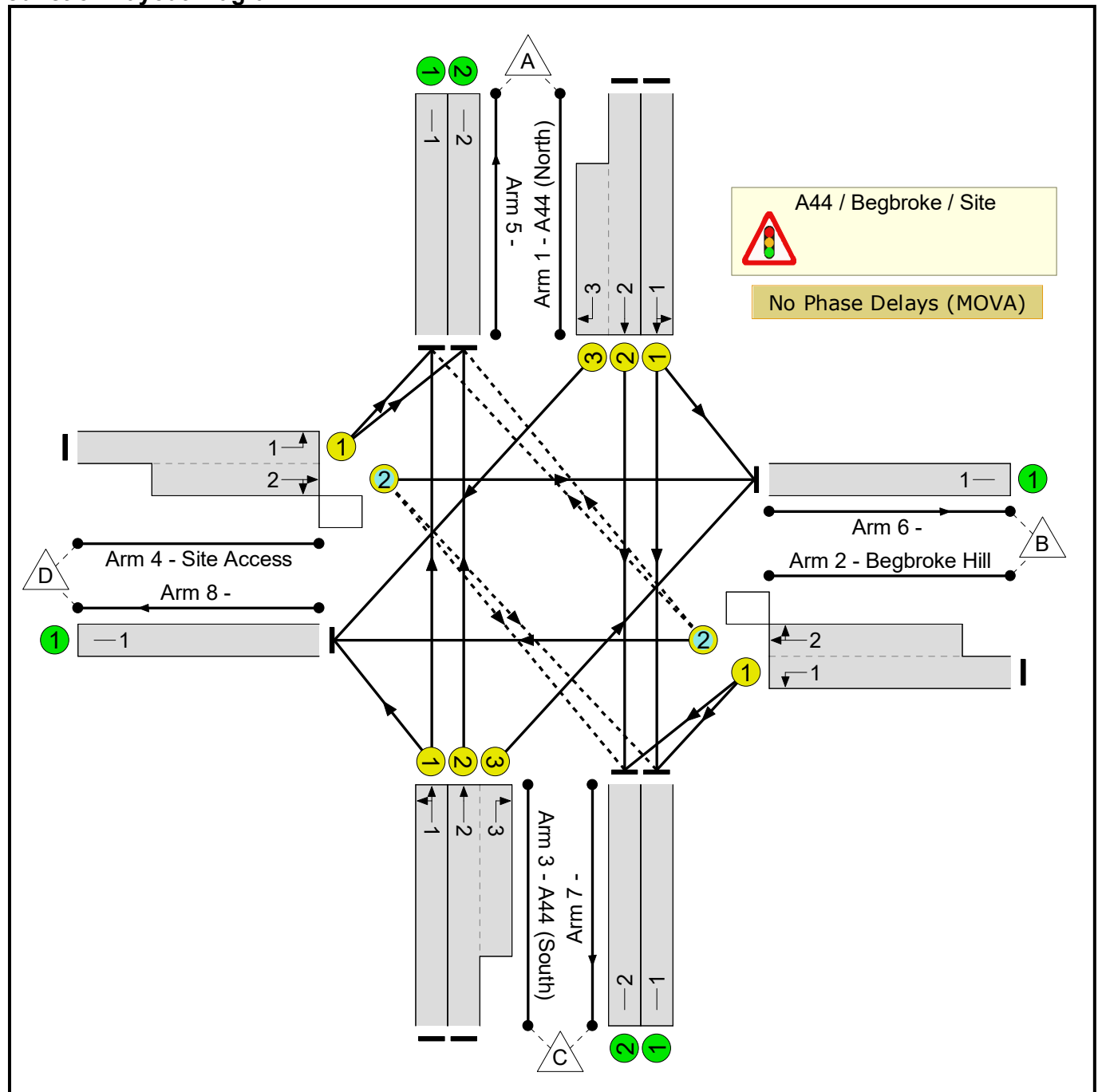
Origin	Destination				
		A	B	C	Tot.
	A	0	80	1201	1281
	B	102	0	237	339
	C	1382	214	0	1596
	Tot.	1484	294	1438	3216

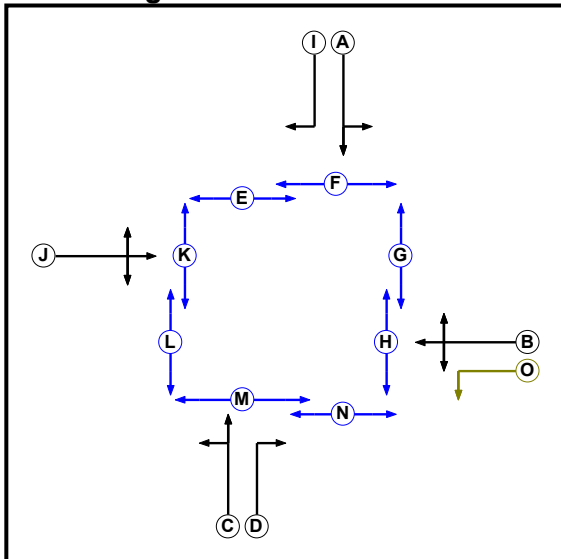
Stage	1	3	5	2	3	5	6
Duration	56	15	22	28	41	15	6
Change Point	0	64	86	117	153	201	225

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: A44 / Begbroke Hill - Signalised Junction	-	-	-	-	-	-	77.9%	-
A44 / Begbroke Hill	-	-	-	-	-	-	77.9%	-
1/1	Woodstock Road (S/B) Left Ahead	A	99	641	1958	824	77.8%	22.6
1/2	Woodstock Road (S/B) Ahead	A	99	640	2120	892	71.7%	21.3
2/1+2/2	Begbroke Hill Right Left	B	41	339	1815:1972	308+133	77.0 : 77.0%	9.7
3/1	Woodstock Road (N/B) Ahead	C	156	691	1965	1294	53.4%	14.0
3/2+3/3	Woodstock Road (N/B) Ahead Right	C D	156:56	905	2105:1871	887+275	77.9 : 77.9%	18.4
C1 - F380	PRC for Signalised Lanes (%): PRC Over All Lanes (%):	15.5 15.5	Total Delay for Signalised Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		28.54 28.54	Cycle Time (s): 240		

User and Project Details

Project:	Yarnton, Cherwell
Title:	A44 / Begbroke Hill / Site Access - Signalised Junction
Design Layout Ref:	Proposed Junction Layout - Drg. No: 162751/A/02 Rev A
File name:	A44_Begbroke (162751_A_02A) v2.1.lsg3x
Author:	David Noyce
Company:	Vectos (South) Ltd
Address:	Network Building, 97 Tottenham Court Road, London W1T 4TP

Junction Layout Diagram

Phase Diagram**Phase Input Data**

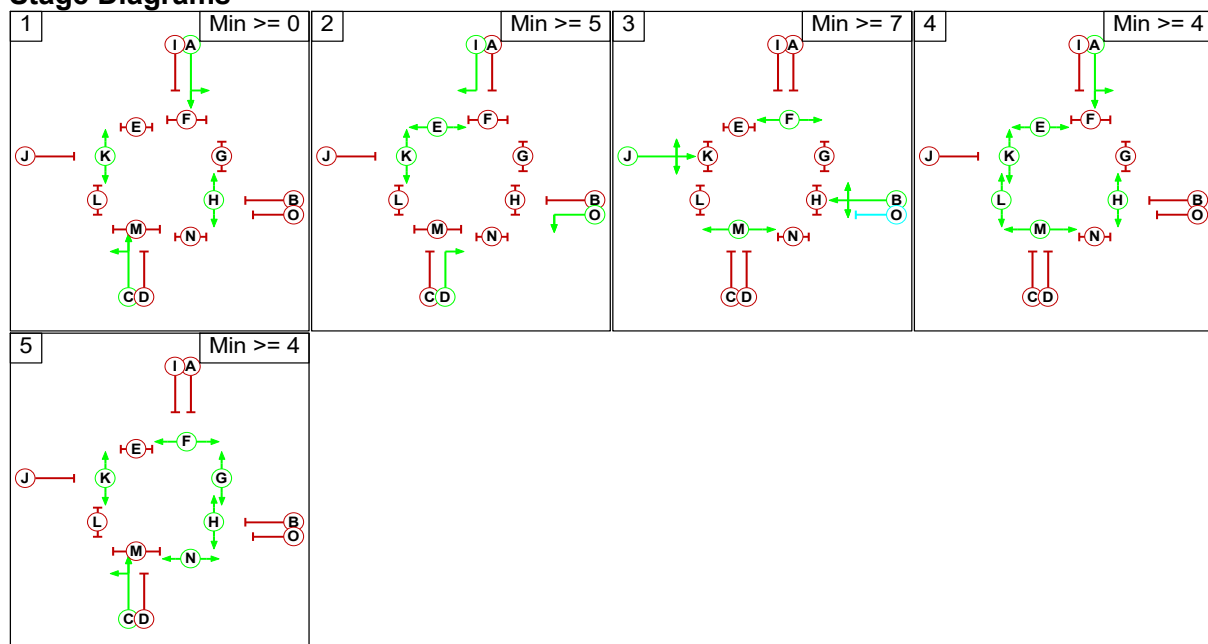
Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		-9999	7
B	Traffic		-9999	7
C	Traffic		-9999	7
D	Traffic		-9999	7
E	Pedestrian		-9999	6
F	Pedestrian		-9999	6
G	Pedestrian		-9999	6
H	Pedestrian		-9999	6
I	Traffic		-9999	7
J	Traffic		-9999	7
K	Pedestrian		-9999	6
L	Pedestrian		-9999	6
M	Pedestrian		-9999	6
N	Pedestrian		-9999	6
O	Filter	B	-9999	4

Intergreens

Terminating Phase	Starting Phase															
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
	A		10	-	7	-	7	10	-	-	7	-	-	-	13	10
	B	5		6	5	9	-	-	5	5	-	-	11	-	8	-
	C	-	7		-	9	-	-	-	7	9	-	10	7	-	-
	D	6	5	-		-	-	9	-	-	5	-	-	7	-	-
	E	-	10	10	-		-	-	-	-	10	-	-	-	-	-
	F	12	-	-	-	-		-	-	12	-	-	-	-	-	-
	G	6	-	-	6	-	-		-	-	6	-	-	-	-	-
	H	-	10	-	-	-	-	-		-	-	-	-	-	-	10
	I	-	5	7	-	-	7	-	-		6	-	11	-	-	-
	J	6	-	5	5	7	-	10	-	5		5	-	-	11	-
	K	-	-	-	-	-	-	-	-	-	9		-	-	-	-
	L	-	6	6	-	-	-	-	-	6	-	-		-	-	-
	M	-	-	13	13	-	-	-	-	-	-	-	-		-	-
	N	8	8	-	-	-	-	-	-	-	8	-	-	-		8
	O	-	-	-	-	-	-	-	5	-	-	-	-	-	8	

Stage Data

Stage No.	Phases in Stage
1	A C H K
2	D E I K O
3	B F J M
4	A E H K L M
5	C F G H K N

Stage Diagrams

Lane Input Data

Junction: A44 / Begbroke / Site												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A44 (North))	U	A	2	3	87.0	Geom	-	3.65	0.00	Y	Arm 6 Left	16.50
1/2 (A44 (North))	U	A	2	3	87.0	Geom	-	3.65	0.00	N	Arm 7 Ahead	Inf
1/3 (A44 (North))	U	I	2	3	8.0	Geom	-	3.50	0.00	Y	Arm 8 Right	18.00
2/1 (Begbroke Hill)	U	B O	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 7 Left	16.50
2/2 (Begbroke Hill)	O	B	2	3	9.0	Geom	-	3.65	0.00	N	Arm 5 Right	20.00
2/2 (Begbroke Hill)	O	B	2	3	9.0	Geom	-	3.65	0.00	N	Arm 8 Ahead	Inf
3/1 (A44 (South))	U	C	2	3	69.6	Geom	-	3.65	0.00	Y	Arm 5 Ahead	Inf
3/2 (A44 (South))	U	C	2	3	69.6	Geom	-	3.65	0.00	N	Arm 8 Left	16.50
3/2 (A44 (South))	U	C	2	3	69.6	Geom	-	3.65	0.00	N	Arm 5 Ahead	Inf
3/3 (A44 (South))	U	D	2	3	8.0	Geom	-	3.50	0.00	N	Arm 6 Right	12.00
4/1 (Site Access)	U	J	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Left	11.50
4/2 (Site Access)	O	J	2	3	7.8	Geom	-	3.00	0.00	N	Arm 6 Ahead	Inf
4/2 (Site Access)	O	J	2	3	7.8	Geom	-	3.00	0.00	N	Arm 7 Right	20.00

Give-Way Lane Input Data

Junction: A44 / Begbroke / Site											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Block Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in IG (PCU)
2/2 (Begbroke Hill)	5/1 (Right)	1440	0	4/1	1.09	All	2.00	2.00	0.50	2	2.00
				4/2	1.09	To 6/1 (Ahead)					
	5/2 (Right)	1440	0	4/1	1.09	All					
				4/2	1.09	To 6/1 (Ahead)					
4/2 (Site Access)	7/1 (Right)	1440	0	2/1	1.09	All	2.00	2.00	0.50	2	2.00
				2/2	1.09	To 8/1 (Ahead)					
				2/1	1.09	All					
	7/2 (Right)	1440	0	2/2	1.09	To 8/1 (Ahead)					

(FG1: '2028 With Development, AM', Plan 1: 'Peds Every 2nd Cycle')

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	104	1066	15	1185
	B	69	0	153	0	222
	C	1142	206	0	14	1362
	D	47	0	44	0	91
	Tot.	1258	310	1263	29	2860

Stage	1	2	3	4	1	2	3	5
Duration	42	20	9	5	41	20	9	4
Change Point	0	54	84	103	120	174	204	223

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: A44 / Begbroke Hill / Site Access - Signalised Junction	-	-	-	-	-	-	77.9%	-
A44 / Begbroke / Site	-	-	-	-	-	-	77.9%	-
1/1	A44 (North) Left Ahead	A	101	562	1947	836	67.3%	17.9
1/2+1/3	A44 (North) Ahead Right	A I	101:46	623	2120:1814	884+22	68.8 : 68.8%	19.8
2/1+2/2	Begbroke Hill Right Left Ahead	B	78:18	222	1815:1972	242+109	63.1 : 63.1%	4.5
3/1	A44 (South) Ahead Left	C	99	648	1976	832	77.9%	22.6
3/2+3/3	A44 (South) Ahead Right	C D	99:46	714	2120:1871	682+276	74.5 : 74.5%	20.0
4/1+4/2	Site Access Left Ahead Right	J	18	91	1694:1912	141+145	33.3 : 30.4%	1.7
C1 - F380								
PRC for Signalised Lanes (%):		15.5	Total Delay for Signalised Lanes (pcuHr):		31.11	Cycle Time (s): 240		
PRC Over All Lanes (%):		15.5	Total Delay Over All Lanes(pcuHr):		31.11			

(FG2: '2028 With Development, PM', Plan 1: 'Peds Every 2nd Cycle')

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	62	1174	29	1265
	B	94	0	218	0	312
	C	1371	170	0	58	1599
	D	14	0	27	0	41
	Tot.	1479	232	1419	87	3217

Stage	1	2	3	4	1	2	3	5
Duration	48	16	7	5	47	16	7	4
Change Point	0	60	86	103	120	180	206	223

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: A44 / Begbroke Hill / Site Access - Signalised Junction	-	-	-	-	-	-	83.4%	-
A44 / Begbroke / Site	-	-	-	-	-	-	83.4%	-
1/1	A44 (North) Left Ahead	A	113	600	1962	940	63.8%	17.9
1/2+1/3	A44 (North) Ahead Right	A I	113:38	665	2120:1814	970+44	65.6 : 65.6%	19.6
2/1+2/2	Begbroke Hill Right Left Ahead	B	66:14	312	1815:1972	277+119	78.8 : 78.8%	7.7
3/1	A44 (South) Ahead Left	C	111	772	1967	926	83.4%	27.7
3/2+3/3	A44 (South) Ahead Right	C D	111:38	827	2120:1871	821+212	80.1 : 80.1%	26.1
4/1+4/2	Site Access Left Ahead Right	J	14	41	1694:1912	62+120	22.5 : 22.5%	1.0
C1 - F380								
PRC for Signalled Lanes (%):		8.0	Total Delay for Signalled Lanes (pcuHr):		33.88	Cycle Time (s): 240		
PRC Over All Lanes (%):		8.0	Total Delay Over All Lanes(pcuHr):		33.88			

(FG3: '2031 With Development, AM', Plan 1: 'Peds Every 2nd Cycle')

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	108	1074	15	1197
	B	85	0	193	0	278
	C	1169	217	0	14	1400
	D	47	0	44	0	91
	Tot.	1301	325	1311	29	2966

Stage	1	2	3	4	1	2	3	5
Duration	42	20	9	5	41	20	9	4
Change Point	0	54	84	103	120	174	204	223

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: A44 / Begbroke Hill / Site Access - Signalised Junction	-	-	-	-	-	-	79.5%	-
A44 / Begbroke / Site	-	-	-	-	-	-	79.5%	-
1/1	A44 (North) Left Ahead	A	101	567	1946	835	67.9%	18.1
1/2+1/3	A44 (North) Ahead Right	A I	101:46	630	2120:1814	884+22	69.6 : 69.6%	20.0
2/1+2/2	Begbroke Hill Right Left Ahead	B	78:18	278	1815:1972	248+109	77.8 : 77.8%	6.4
3/1	A44 (South) Ahead Left	C	99	661	1976	832	79.5%	23.4
3/2+3/3	A44 (South) Ahead Right	C D	99:46	739	2120:1871	678+283	77.0 : 76.6%	21.3
4/1+4/2	Site Access Left Ahead Right	J	18	91	1694:1912	141+142	33.3 : 31.0%	1.7
C1 - F380								
PRC for Signalled Lanes (%):		13.2	Total Delay for Signalled Lanes (pcuHr):		33.62	Cycle Time (s): 240		
PRC Over All Lanes (%):		13.2	Total Delay Over All Lanes(pcuHr):		33.62			

(FG4: '2031 With Development, PM', Plan 1: 'Peds Every 2nd Cycle')

Desired Flow :

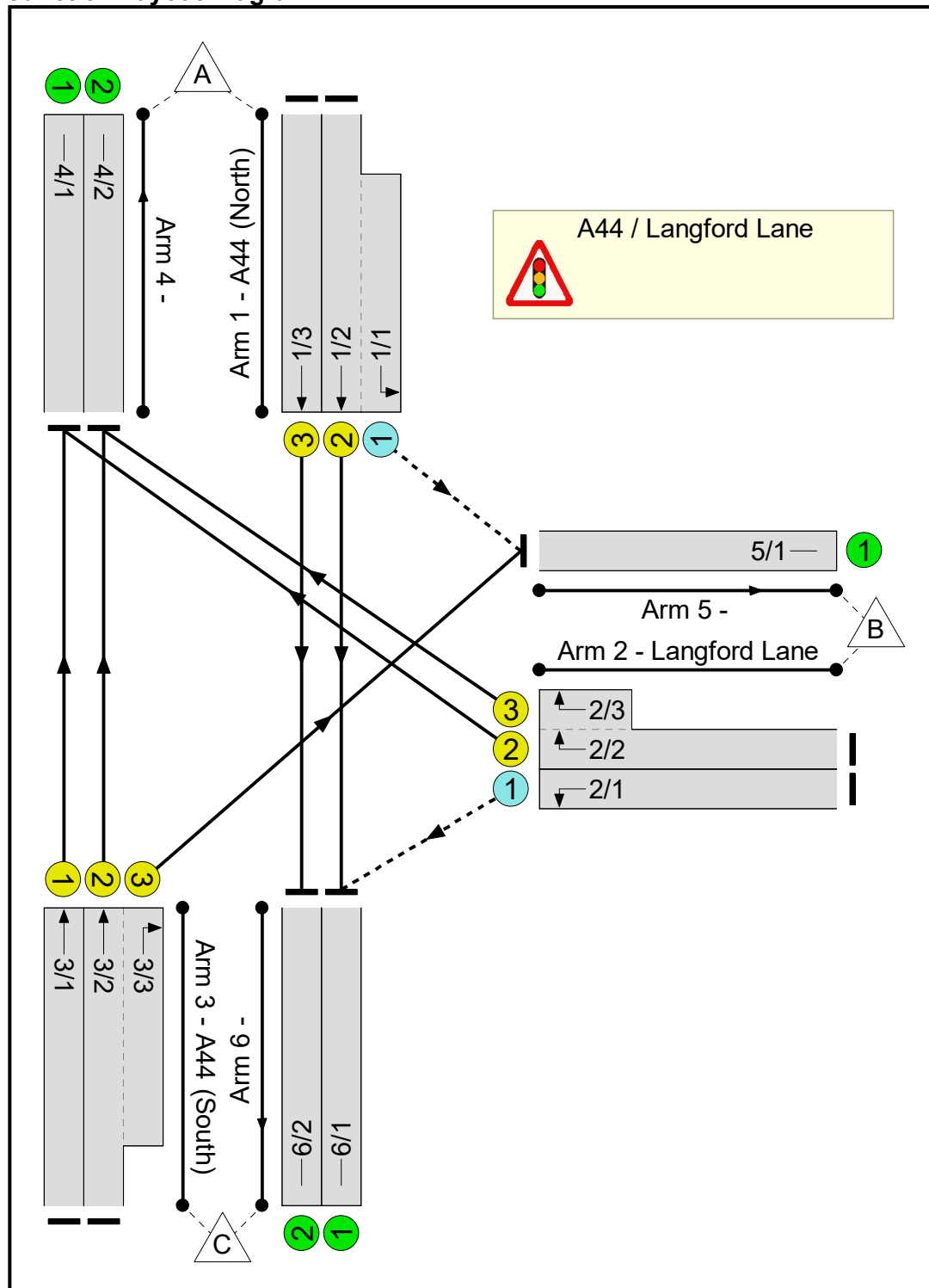
Origin	Destination					
		A	B	C	D	Tot.
	A	0	80	1204	29	1313
	B	102	0	237	0	339
	C	1383	214	0	58	1655
	D	14	0	27	0	41
	Tot.	1499	294	1468	87	3348

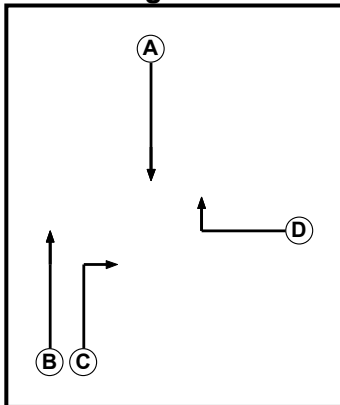
Stage	1	2	3	4	1	2	3	5
Duration	48	16	7	5	47	16	7	4
Change Point	0	60	86	103	120	180	206	223

[illegible]

User and Project Details

Project:	Yarnton, Cherwell
Title:	A44 / Langford Lane
Design Layout Ref:	Existing Junction Layout
File name:	A44_Langford Lane (Existing) v1.1.lsg3x
Author:	David Noyce
Company:	Vectos (South) Limited
Address:	Network Building, 97 Tottenham Court Road, London W1T 4TP

Junction Layout Diagram

Phase Diagram**Phase Input Data**

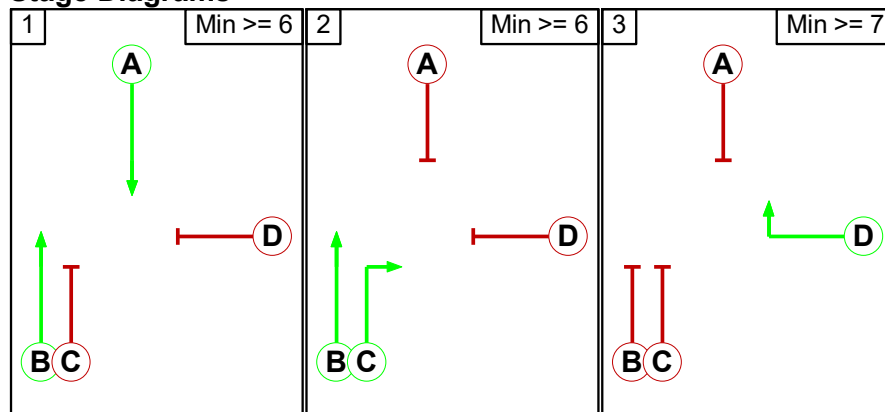
Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7

Intergreens

Starting Phase		A	B	C	D
Terminating Phase	A		-	8	8
	B	-		-	6
	C	7	-		7
	D	7	8	7	

Stage Data

Stage No.	Phases in Stage
1	A B
2	B C
3	D

Stage Diagrams

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	3	B	Losing	2	2

Lane Input Data

Junction: A44 / Langford Lane												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A44 (North))	O		2	3	12.2	User	1800	-	-	-	-	-
1/2 (A44 (North))	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 6 Ahead	Inf
1/3 (A44 (North))	U	A	2	3	60.0	Geom	-	3.65	0.00	N	Arm 6 Ahead	Inf
2/1 (Langford Lane)	O		2	3	60.0	User	1800	-	-	-	-	-
2/2 (Langford Lane)	U	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 4 Right	25.00
2/3 (Langford Lane)	U	D	2	3	3.5	Geom	-	3.00	0.00	N	Arm 4 Right	30.00
3/1 (A44 (South))	U	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 4 Ahead	Inf
3/2 (A44 (South))	U	B	2	3	60.0	Geom	-	3.65	0.00	N	Arm 4 Ahead	Inf
3/3 (A44 (South))	U	C	2	3	13.9	Geom	-	3.50	0.00	Y	Arm 5 Right	25.00

Give-Way Lane Input Data

Junction: A44 / Langford Lane											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Block Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in IG (PCU)
1/1 (A44 (North))	5/1 (Left)	715	0	3/3	0.22	All	-	-	-	-	-
2/1 (Langford Lane)	6/1 (Left)	715	0	1/2	0.22	All	-	-	-	-	-
				1/3	0.22	All	-	-	-	-	-

Scenario 1: 'Baseline, AM'

(FG3: 'Baseline, AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

Origin	Destination				
		A	B	C	Tot.
	A	0	450	892	1342
	B	142	0	210	352
	C	644	402	0	1046
	Tot.	786	852	1102	2740

Stage Timings

Stage	1	2	3
Duration	13	13	7
Change Point	0	21	42

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: A44 / Langford Lane	-	-	-	-	-	-	86.7%	-
A44 / Langford Lane	-	-	-	-	-	-	86.7%	-
1/2+1/1	A44 (North) Left Ahead	A -	14	896	1980:1800	530+627	84.1 : 71.8%	8.1
1/3	A44 (North) Ahead	A	14	446	2120	568	78.5%	8.1
2/1	Langford Lane Left	-	-	210	1800	555	37.8%	1.3
2/2+2/3	Langford Lane Right	D	7	142	1807:1957	245+253	28.5 : 28.5%	1.2
3/1	A44 (South) Ahead	B	34	322	1980	1238	26.0%	2.4
3/2+3/3	A44 (South) Ahead Right	B C	34:13	724	2120:1854	371+464	86.7 : 86.7%	9.0
C1	PRC for Signalled Lanes (%):		3.8	Total Delay for Signalled Lanes (pcuHr):		15.71	Cycle Time (s): 56	
	PRC Over All Lanes (%):		3.8	Total Delay Over All Lanes(pcuHr):		16.12		

Scenario 2: 'Baseline, PM'

(FG4: 'Baseline, PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

Origin	Destination				
		A	B	C	Tot.
	A	0	150	664	814
	B	372	0	391	763
	C	1107	218	0	1325
	Tot.	1479	368	1055	2902

Stage Timings

Stage	1	2	3
Duration	8	7	10
Change Point	0	16	31

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: A44 / Langford Lane	-	-	-	-	-	-	80.5%	-
A44 / Langford Lane	-	-	-	-	-	-	80.5%	-
1/2+1/1	A44 (North) Left Ahead	A -	9	482	1980:1800	412+186	80.5 : 80.5%	6.1
1/3	A44 (North) Ahead	A	9	332	2120	442	75.2%	5.6
2/1	Langford Lane Left	-	-	391	1800	596	65.6%	2.8
2/2+2/3	Langford Lane Right	D	10	372	1807:1957	403+97	74.5 : 74.5%	5.1
3/1	A44 (South) Ahead	B	23	554	1980	990	56.0%	5.7
3/2+3/3	A44 (South) Ahead Right	B C	23:7	771	2120:1854	1060+309	52.2 : 70.6%	5.6
C1	PRC for Signalled Lanes (%): 11.8 PRC Over All Lanes (%): 11.8		Total Delay for Signalled Lanes (pcuHr): 14.89 Total Delay Over All Lanes(pcuHr): 15.99		Cycle Time (s): 48			

Scenario 3: '2028 without Development, AM'

(FG5: '2028 without Development, AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

Origin	Destination				
		A	B	C	Tot.
	A	0	450	1001	1451
	B	142	0	222	364
	C	781	441	0	1222
	Tot.	923	891	1223	3037

Stage Timings

Stage	1	2	3
Duration	15	15	7
Change Point	0	23	46

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: A44 / Langford Lane	-	-	-	-	-	-	89.2%	-
A44 / Langford Lane	-	-	-	-	-	-	89.2%	-
1/2+1/1	A44 (North) Left Ahead	A -	16	950	1980:1800	561+534	89.1 : 84.2%	11.1
1/3	A44 (North) Ahead	A	16	501	2120	601	83.4%	10.2
2/1	Langford Lane Left	-	-	222	1800	535	41.5%	1.6
2/2+2/3	Langford Lane Right	D	7	142	1807:1957	229+236	30.6 : 30.6%	1.3
3/1	A44 (South) Ahead	B	38	391	1980	1287	30.4%	3.0
3/2+3/3	A44 (South) Ahead Right	B C	38:15	831	2120:1854	437+494	89.2 : 89.2%	10.8
C1	PRC for Signalled Lanes (%):		0.9	Total Delay for Signalled Lanes (pcuHr):		20.09	Cycle Time (s): 60	
	PRC Over All Lanes (%):		0.9	Total Delay Over All Lanes(pcuHr):		20.61		

Scenario 4: '2028 without Development, PM'

(FG6: '2028 without Development, PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

Origin	Destination				
		A	B	C	Tot.
	A	0	150	805	955
	B	372	0	433	805
	C	1225	238	0	1463
	Tot.	1597	388	1238	3223

Stage Timings

Stage	1	2	3
Duration	10	7	8
Change Point	0	18	33

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: A44 / Langford Lane	-	-	-	-	-	-	88.5%	-
A44 / Langford Lane	-	-	-	-	-	-	88.5%	-
1/2+1/1	A44 (North) Left Ahead	A -	11	552	1980:1800	495+185	81.2 : 81.2%	7.1
1/3	A44 (North) Ahead	A	11	403	2120	530	76.0%	6.5
2/1	Langford Lane Left	-	-	433	1800	569	76.1%	4.4
2/2+2/3	Langford Lane Right	D	8	372	1807:1957	339+81	88.5 : 88.5%	7.3
3/1	A44 (South) Ahead	B	25	613	1980	1073	57.2%	5.9
3/2+3/3	A44 (South) Ahead Right	B C	25:7	850	2120:1854	1138+309	53.8 : 77.0%	5.8
C1	PRC for Signalled Lanes (%):		1.6	Total Delay for Signalled Lanes (pcuHr):		17.79	Cycle Time (s): 48	
	PRC Over All Lanes (%):		1.6	Total Delay Over All Lanes(pcuHr):		19.65		

Scenario 5: '2028 with Development, AM'

(FG7: '2028 with Development, AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

Origin	Destination				
		A	B	C	Tot.
	A	0	450	1012	1462
	B	142	0	228	370
	C	816	459	0	1275
	Tot.	958	909	1240	3107

Stage Timings

Stage	1	2	3
Duration	17	17	7
Change Point	0	25	50

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: A44 / Langford Lane	-	-	-	-	-	-	88.0%	-
A44 / Langford Lane	-	-	-	-	-	-	88.0%	-
1/2+1/1	A44 (North) Left Ahead	A -	18	956	1980:1800	588+535	86.1 : 84.1%	11.2
1/3	A44 (North) Ahead	A	18	506	2120	629	80.4%	10.3
2/1	Langford Lane Left	-	-	228	1800	533	42.8%	1.8
2/2+2/3	Langford Lane Right	D	7	142	1807:1957	215+221	32.6 : 32.6%	1.4
3/1	A44 (South) Ahead	B	42	408	1980	1330	30.7%	3.2
3/2+3/3	A44 (South) Ahead Right	B C	42:17	867	2120:1854	464+521	88.0 : 88.0%	11.2
C1	PRC for Signalled Lanes (%):		2.2	Total Delay for Signalled Lanes (pcuHr):		19.51	Cycle Time (s): 64	
	PRC Over All Lanes (%):		2.2	Total Delay Over All Lanes(pcuHr):		20.07		

Scenario 6: '2028 with Development, PM'

(FG8: '2028 with Development, PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

Origin	Destination				
		A	B	C	Tot.
	A	0	150	822	972
	B	372	0	448	820
	C	1234	245	0	1479
	Tot.	1606	395	1270	3271

Stage Timings

Stage	1	2	3
Duration	10	7	8
Change Point	0	18	33

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: A44 / Langford Lane	-	-	-	-	-	-	88.5%	-
A44 / Langford Lane	-	-	-	-	-	-	88.5%	-
1/2+1/1	A44 (North) Left Ahead	A -	11	561	1980:1800	495+181	83.0 : 83.0%	7.5
1/3	A44 (North) Ahead	A	11	411	2120	530	77.5%	6.7
2/1	Langford Lane Left	-	-	448	1800	567	79.1%	5.1
2/2+2/3	Langford Lane Right	D	8	372	1807:1957	339+81	88.5 : 88.5%	7.3
3/1	A44 (South) Ahead	B	25	617	1980	1073	57.5%	6.0
3/2+3/3	A44 (South) Ahead Right	B C	25:7	862	2120:1854	1138+309	54.2 : 79.3%	6.0
C1	PRC for Signalled Lanes (%):		1.6	Total Delay for Signalled Lanes (pcuHr):		18.39	Cycle Time (s): 48	
	PRC Over All Lanes (%):		1.6	Total Delay Over All Lanes(pcuHr):		20.56		

Scenario 7: '2031 without Development, AM'

(FG9: '2031 without Development, AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

Origin	Destination				
		A	B	C	Tot.
	A	0	450	1010	1460
	B	142	0	226	368
	C	813	453	0	1266
	Tot.	955	903	1236	3094

Stage Timings

Stage	1	2	3
Duration	17	17	7
Change Point	0	25	50

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: A44 / Langford Lane	-	-	-	-	-	-	86.9%	-
A44 / Langford Lane	-	-	-	-	-	-	86.9%	-
1/2+1/1	A44 (North) Left Ahead	A -	18	955	1980:1800	588+536	85.9 : 84.0%	11.2
1/3	A44 (North) Ahead	A	18	505	2120	629	80.2%	10.2
2/1	Langford Lane Left	-	-	226	1800	534	42.3%	1.8
2/2+2/3	Langford Lane Right	D	7	142	1807:1957	215+221	32.6 : 32.6%	1.4
3/1	A44 (South) Ahead	B	42	407	1980	1330	30.6%	3.2
3/2+3/3	A44 (South) Ahead Right	B C	42:17	859	2120:1854	467+521	86.9 : 86.9%	10.7
C1	PRC for Signalled Lanes (%):		3.6	Total Delay for Signalled Lanes (pcuHr):		19.06	Cycle Time (s): 64	
	PRC Over All Lanes (%):		3.6	Total Delay Over All Lanes(pcuHr):		19.61		

Scenario 8: '2031 without Development, PM'

(FG10: '2031 without Development, PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

Origin	Destination				
		A	B	C	Tot.
	A	0	150	839	989
	B	372	0	445	817
	C	1240	243	0	1483
	Tot.	1612	393	1284	3289

Stage Timings

Stage	1	2	3
Duration	10	7	8
Change Point	0	18	33

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: A44 / Langford Lane	-	-	-	-	-	-	88.5%	-
A44 / Langford Lane	-	-	-	-	-	-	88.5%	-
1/2+1/1	A44 (North) Left Ahead	A -	11	569	1980:1800	495+177	84.6 : 84.6%	7.9
1/3	A44 (North) Ahead	A	11	420	2120	530	79.2%	7.0
2/1	Langford Lane Left	-	-	445	1800	565	78.8%	5.0
2/2+2/3	Langford Lane Right	D	8	372	1807:1957	339+81	88.5 : 88.5%	7.3
3/1	A44 (South) Ahead	B	25	620	1980	1073	57.8%	6.2
3/2+3/3	A44 (South) Ahead Right	B C	25:7	863	2120:1854	1138+309	54.5 : 78.6%	6.1
C1	PRC for Signalled Lanes (%):		1.6	Total Delay for Signalled Lanes (pcuHr):		18.94	Cycle Time (s): 48	
	PRC Over All Lanes (%):		1.6	Total Delay Over All Lanes(pcuHr):		21.09		

Scenario 9: '2031 with Development, AM'

(FG11: '2031 with Development, AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

Origin	Destination				
		A	B	C	Tot.
	A	0	450	1021	1471
	B	142	0	231	373
	C	849	471	0	1320
	Tot.	991	921	1252	3164

Stage Timings

Stage	1	2	3
Duration	19	19	7
Change Point	0	27	54

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: A44 / Langford Lane	-	-	-	-	-	-	86.4%	-
A44 / Langford Lane	-	-	-	-	-	-	86.4%	-
1/2+1/1	A44 (North) Left Ahead	A -	20	960	1980:1800	611+540	83.4 : 83.4%	11.4
1/3	A44 (North) Ahead	A	20	511	2120	655	78.1%	10.4
2/1	Langford Lane Left	-	-	231	1800	531	43.5%	2.0
2/2+2/3	Langford Lane Right	D	7	142	1807:1957	202+208	34.6 : 34.6%	1.5
3/1	A44 (South) Ahead	B	46	425	1980	1369	31.1%	3.3
3/2+3/3	A44 (South) Ahead Right	B C	46:19	895	2120:1854	491+545	86.4 : 86.4%	11.4
C1	PRC for Signalled Lanes (%):		4.2	Total Delay for Signalled Lanes (pcuHr):		19.01	Cycle Time (s): 68	
	PRC Over All Lanes (%):		4.2	Total Delay Over All Lanes(pcuHr):		19.60		

Scenario 10: '2031 with Development, PM'

(FG12: '2031 with Development, PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired**Desired Flow :**

Origin	Destination				
		A	B	C	Tot.
	A	0	150	857	1007
	B	372	0	461	833
	C	1249	251	0	1500
	Tot.	1621	401	1318	3340

Stage Timings

Stage	1	2	3
Duration	10	7	8
Change Point	0	18	33

Link Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Mean Max Queue (pcu)
Network: A44 / Langford Lane	-	-	-	-	-	-	88.5%	-
A44 / Langford Lane	-	-	-	-	-	-	88.5%	-
1/2+1/1	A44 (North) Left Ahead	A -	11	578	1980:1800	495+173	86.5 : 86.5%	8.3
1/3	A44 (North) Ahead	A	11	429	2120	530	80.9%	7.4
2/1	Langford Lane Left	-	-	461	1800	562	82.1%	5.9
2/2+2/3	Langford Lane Right	D	8	372	1807:1957	339+81	88.5 : 88.5%	7.3
3/1	A44 (South) Ahead	B	25	625	1980	1073	58.3%	6.3
3/2+3/3	A44 (South) Ahead Right	B C	25:7	875	2120:1854	1137+309	54.9 : 81.2%	6.1
C1	PRC for Signalled Lanes (%):		1.6	Total Delay for Signalled Lanes (pcuHr):		19.73	Cycle Time (s): 48	
	PRC Over All Lanes (%):		1.6	Total Delay Over All Lanes(pcuHr):		22.32		

Junctions 9			
PICADY 9 - Priority Intersection Module			
Version: 9.5.1.7462 © Copyright TRL Limited, 2019			
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Filename: J01-AT-Site Access-201001 (Flat).j9

Path: \\vectos.local\data\Projects\Projects\160000\162751 - Yarnton, Cherwell\AA-Planning Application\TOPIC FOLDERS\Modelling

Report generation date: 19/10/2020 13:25:05

- »2028 With Dev, AM
- »2028 With Dev, PM
- »2031 With Dev, AM
- »2031 With Dev, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	Junction LOS	Queue (Veh)	Delay (s)	RFC	Junction LOS
	2028 With Dev							
Stream B-C	0.1	5.41	0.07	A	0.0	5.28	0.04	A
Stream B-A	0.0	8.45	0.00		0.0	8.61	0.00	
Stream C-AB	0.0	5.18	0.03		0.2	6.05	0.11	
	2031 With Dev							
Stream B-C	0.1	5.41	0.07	A	0.0	5.28	0.04	A
Stream B-A	0.0	8.45	0.00		0.0	8.61	0.00	
Stream C-AB	0.0	5.18	0.03		0.2	6.05	0.11	

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. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	17/08/2018
Version	
Status	[no status]
Identifier	
Client	
Jobnumber	
Enumerator	VECTOS\ellen.axon
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2028 With Dev	AM	FLAT	07:45	09:15	90	15	✓
D6	2028 With Dev	PM	FLAT	16:45	18:15	90	15	✓
D7	2031 With Dev	AM	FLAT	07:45	09:15	90	15	✓
D8	2031 With Dev	PM	FLAT	16:45	18:15	90	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2028 With Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access/Rutten Lane	T-Junction	Two-way		0.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Rutten Lane (S)		Major
B	Site Access		Minor
C	Rutten Lane (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Rutten Lane (N)	6.15			120.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane plus flare	10.00	10.00	7.70	6.20	6.00	✓	3.00	33	26

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	500	0.090	0.229	0.144	0.327
B-C	769	0.117	0.296	-	-
C-B	643	0.248	0.248	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2028 With Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Rutten Lane (S)		FLAT	✓	181	100.000
B - Site Access		FLAT	✓	51	100.000
C - Rutten Lane (N)		FLAT	✓	193	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Rutten Lane (S)	B - Site Access	C - Rutten Lane (N)
From	A - Rutten Lane (S)	0	1	180
	B - Site Access	2	0	49
	C - Rutten Lane (N)	177	16	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Rutten Lane (S)	B - Site Access	C - Rutten Lane (N)
From	A - Rutten Lane (S)	0	0	0
	B - Site Access	0	0	0
	C - Rutten Lane (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.07	5.41	0.1	A	49	74
B-A	0.00	8.45	0.0	A	2	3
C-AB	0.03	5.18	0.0	A	21	32
C-A					172	258
A-B					1	2
A-C					180	270

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	12	714	0.069	49	0.0	0.1	5.406	A
B-A	2	0.50	428	0.005	2	0.0	0.0	8.448	A
C-AB	21	5	717	0.030	21	0.0	0.0	5.175	A
C-A	172	43			172				
A-B	1	0.25			1				
A-C	180	45			180				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	12	714	0.069	49	0.1	0.1	5.410	A
B-A	2	0.50	428	0.005	2	0.0	0.0	8.449	A
C-AB	21	5	717	0.030	21	0.0	0.0	5.176	A
C-A	172	43			172				
A-B	1	0.25			1				
A-C	180	45			180				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	12	714	0.069	49	0.1	0.1	5.410	A
B-A	2	0.50	428	0.005	2	0.0	0.0	8.449	A
C-AB	21	5	717	0.030	21	0.0	0.0	5.178	A
C-A	172	43			172				
A-B	1	0.25			1				
A-C	180	45			180				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	12	714	0.069	49	0.1	0.1	5.410	A
B-A	2	0.50	428	0.005	2	0.0	0.0	8.449	A
C-AB	21	5	717	0.030	21	0.0	0.0	5.178	A
C-A	172	43			172				
A-B	1	0.25			1				
A-C	180	45			180				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	12	714	0.069	49	0.1	0.1	5.410	A
B-A	2	0.50	428	0.005	2	0.0	0.0	8.449	A
C-AB	21	5	717	0.030	21	0.0	0.0	5.178	A
C-A	172	43			172				
A-B	1	0.25			1				
A-C	180	45			180				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	12	714	0.069	49	0.1	0.1	5.410	A
B-A	2	0.50	428	0.005	2	0.0	0.0	8.449	A
C-AB	21	5	717	0.030	21	0.0	0.0	5.176	A
C-A	172	43			172				
AB	1	0.25			1				
AC	180	45			180				

2028 With Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access/Rutten Lane	T-Junction	Two-way		1.53	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 period length (min)	Time segment length (min)	Run automatically
D6	2028 With Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Rutten Lane (S)		FLAT	✓	195	100.000
B - Site Access		FLAT	✓	30	100.000
C - Rutten Lane (N)		FLAT	✓	174	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Rutten Lane (S)	B - Site Access	C - Rutten Lane (N)
From	A - Rutten Lane (S)	0	2	193
	B - Site Access	1	0	29
	C - Rutten Lane (N)	112	62	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Rutten Lane (S)	B - Site Access	C - Rutten Lane (N)
From	A - Rutten Lane (S)	0	0	0
	B - Site Access	0	0	0
	C - Rutten Lane (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.04	5.28	0.0	A	29	44
B-A	0.00	8.61	0.0	A	1	2
C-AB	0.11	6.05	0.2	A	75	112
C-A					99	149
A-B					2	3
A-C					193	290

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	711	0.041	29	0.0	0.0	5.277	A
B-A	1	0.25	419	0.002	0.99	0.0	0.0	8.604	A
C-AB	74	19	670	0.111	74	0.0	0.2	6.033	A
C-A	100	25			100				
A-B	2	0.50			2				
A-C	193	48			193				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	711	0.041	29	0.0	0.0	5.279	A
B-A	1	0.25	419	0.002	1.00	0.0	0.0	8.608	A
C-AB	75	19	670	0.111	75	0.2	0.2	6.047	A
C-A	99	25			99				
A-B	2	0.50			2				
A-C	193	48			193				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	711	0.041	29	0.0	0.0	5.279	A
B-A	1	0.25	419	0.002	1	0.0	0.0	8.608	A
C-AB	75	19	670	0.111	75	0.2	0.2	6.047	A
C-A	99	25			99				
A-B	2	0.50			2				
A-C	193	48			193				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	711	0.041	29	0.0	0.0	5.279	A
B-A	1	0.25	419	0.002	1	0.0	0.0	8.608	A
C-AB	75	19	670	0.111	75	0.2	0.2	6.047	A
C-A	99	25			99				
A-B	2	0.50			2				
A-C	193	48			193				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	711	0.041	29	0.0	0.0	5.279	A
B-A	1	0.25	419	0.002	1	0.0	0.0	8.608	A
C-AB	75	19	670	0.111	75	0.2	0.2	6.045	A
C-A	99	25			99				
A-B	2	0.50			2				
A-C	193	48			193				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	711	0.041	29	0.0	0.0	5.279	A
B-A	1	0.25	419	0.002	1	0.0	0.0	8.608	A
C-AB	75	19	670	0.111	75	0.2	0.2	6.047	A
C-A	99	25			99				
A-B	2	0.50			2				
A-C	193	48			193				

2031 With Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access/Rutten Lane	T-Junction	Two-way		0.92	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 period length (min)	Time segment length (min)	Run automatically
D7	2031 With Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Rutten Lane (S)		FLAT	✓	181	100.000
B - Site Access		FLAT	✓	51	100.000
C - Rutten Lane (N)		FLAT	✓	193	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Rutten Lane (S)	B - Site Access	C - Rutten Lane (N)
From	A - Rutten Lane (S)	0	1	180
	B - Site Access	2	0	49
	C - Rutten Lane (N)	177	16	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Rutten Lane (S)	B - Site Access	C - Rutten Lane (N)
From	A - Rutten Lane (S)	0	0	0
	B - Site Access	0	0	0
	C - Rutten Lane (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.07	5.41	0.1	A	49	74
B-A	0.00	8.45	0.0	A	2	3
C-AB	0.03	5.18	0.0	A	21	32
C-A					172	258
A-B					1	2
A-C					180	270

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	12	714	0.069	49	0.0	0.1	5.406	A
B-A	2	0.50	428	0.005	2	0.0	0.0	8.448	A
C-AB	21	5	717	0.030	21	0.0	0.0	5.175	A
C-A	172	43			172				
A-B	1	0.25			1				
A-C	180	45			180				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	12	714	0.069	49	0.1	0.1	5.410	A
B-A	2	0.50	428	0.005	2	0.0	0.0	8.449	A
C-AB	21	5	717	0.030	21	0.0	0.0	5.176	A
C-A	172	43			172				
A-B	1	0.25			1				
A-C	180	45			180				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	12	714	0.069	49	0.1	0.1	5.410	A
B-A	2	0.50	428	0.005	2	0.0	0.0	8.449	A
C-AB	21	5	717	0.030	21	0.0	0.0	5.178	A
C-A	172	43			172				
A-B	1	0.25			1				
A-C	180	45			180				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	12	714	0.069	49	0.1	0.1	5.410	A
B-A	2	0.50	428	0.005	2	0.0	0.0	8.449	A
C-AB	21	5	717	0.030	21	0.0	0.0	5.178	A
C-A	172	43			172				
A-B	1	0.25			1				
A-C	180	45			180				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	12	714	0.069	49	0.1	0.1	5.410	A
B-A	2	0.50	428	0.005	2	0.0	0.0	8.449	A
C-AB	21	5	717	0.030	21	0.0	0.0	5.178	A
C-A	172	43			172				
A-B	1	0.25			1				
A-C	180	45			180				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	12	714	0.069	49	0.1	0.1	5.410	A
B-A	2	0.50	428	0.005	2	0.0	0.0	8.449	A
C-AB	21	5	717	0.030	21	0.0	0.0	5.176	A
C-A	172	43			172				
A-B	1	0.25			1				
A-C	180	45			180				

2031 With Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access/Rutten Lane	T-Junction	Two-way		1.53	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 period length (min)	Time segment length (min)	Run automatically
D8	2031 With Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Rutten Lane (S)		FLAT	✓	195	100.000
B - Site Access		FLAT	✓	30	100.000
C - Rutten Lane (N)		FLAT	✓	174	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Rutten Lane (S)	B - Site Access	C - Rutten Lane (N)
From	A - Rutten Lane (S)	0	2	193
	B - Site Access	1	0	29
	C - Rutten Lane (N)	112	62	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Rutten Lane (S)	B - Site Access	C - Rutten Lane (N)
From	A - Rutten Lane (S)	0	0	0
	B - Site Access	0	0	0
	C - Rutten Lane (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.04	5.28	0.0	A	29	44
B-A	0.00	8.61	0.0	A	1	2
C-AB	0.11	6.05	0.2	A	75	112
C-A					99	149
A-B					2	3
A-C					193	290

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	711	0.041	29	0.0	0.0	5.277	A
B-A	1	0.25	419	0.002	0.99	0.0	0.0	8.604	A
C-AB	74	19	670	0.111	74	0.0	0.2	6.033	A
C-A	100	25			100				
A-B	2	0.50			2				
A-C	193	48			193				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	711	0.041	29	0.0	0.0	5.279	A
B-A	1	0.25	419	0.002	1.00	0.0	0.0	8.608	A
C-AB	75	19	670	0.111	75	0.2	0.2	6.047	A
C-A	99	25			99				
A-B	2	0.50			2				
A-C	193	48			193				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	711	0.041	29	0.0	0.0	5.279	A
B-A	1	0.25	419	0.002	1	0.0	0.0	8.608	A
C-AB	75	19	670	0.111	75	0.2	0.2	6.047	A
C-A	99	25			99				
A-B	2	0.50			2				
A-C	193	48			193				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	711	0.041	29	0.0	0.0	5.279	A
B-A	1	0.25	419	0.002	1	0.0	0.0	8.608	A
C-AB	75	19	670	0.111	75	0.2	0.2	6.047	A
C-A	99	25			99				
A-B	2	0.50			2				
A-C	193	48			193				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	711	0.041	29	0.0	0.0	5.279	A
B-A	1	0.25	419	0.002	1	0.0	0.0	8.608	A
C-AB	75	19	670	0.111	75	0.2	0.2	6.045	A
C-A	99	25			99				
A-B	2	0.50			2				
A-C	193	48			193				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	711	0.041	29	0.0	0.0	5.279	A
B-A	1	0.25	419	0.002	1	0.0	0.0	8.608	A
C-AB	75	19	670	0.111	75	0.2	0.2	6.047	A
C-A	99	25			99				
A-B	2	0.50			2				
A-C	193	48			193				

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.5.1.7462 © Copyright TRL Limited, 2019	
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Filename: J03-AT-A44, A4095-201001 (Flat).j9

Path: \\vectors.local\data\Projects\Projects\160000\162751 - Yarnton, Cherwell\AA-Planning Application\TOPIC FOLDERS\Modelling

Report generation date: 19/10/2020 13:27:59

-
- »Baseline, AM
 - »Baseline, PM
 - »2028 Without Dev, AM
 - »2028 Without Dev, PM
 - »2028 With Dev, AM
 - »2028 With Dev, PM
 - »2031 Without Dev, AM
 - »2031 Without Dev, PM
 - »2031 With Dev, AM
 - »2031 With Dev, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	Junction LOS	Queue (Veh)	Delay (s)	RFC	Junction LOS
	Baseline							
A - A4095 Upper Campsfield Road	0.8	5.97	0.44	A	0.6	4.53	0.39	A
B - A44 South	0.6	2.60	0.36		2.2	5.50	0.69	
C - A4095 Bladon Road	2.8	12.63	0.74		1.8	10.77	0.64	
D - A44 North	2.3	9.39	0.69		0.7	4.63	0.42	
	2028 Without Dev							
A - A4095 Upper Campsfield Road	0.9	6.58	0.48	A	0.8	5.14	0.45	A
B - A44 South	0.7	2.86	0.42		2.9	6.60	0.74	
C - A4095 Bladon Road	3.7	16.69	0.79		2.1	12.74	0.68	
D - A44 North	3.3	12.68	0.77		0.9	5.16	0.48	
	2028 With Dev							
A - A4095 Upper Campsfield Road	0.9	6.69	0.49	B	0.8	5.24	0.46	A
B - A44 South	0.8	2.94	0.44		2.9	6.67	0.74	
C - A4095 Bladon Road	4.0	17.96	0.80		2.2	13.01	0.69	
D - A44 North	3.5	13.44	0.78		0.9	5.22	0.48	
	2031 Without Dev							
A - A4095 Upper Campsfield Road	0.9	6.65	0.48	B	0.9	5.34	0.47	A
B - A44 South	0.8	2.93	0.44		3.0	6.78	0.75	
C - A4095 Bladon Road	4.0	17.83	0.80		2.2	13.12	0.69	
D - A44 North	3.4	13.27	0.78		1.0	5.30	0.49	
	2031 With Dev							
A - A4095 Upper Campsfield Road	1.0	6.77	0.49	B	0.9	5.44	0.48	A
B - A44 South	0.8	3.02	0.45		3.0	6.85	0.75	
C - A4095 Bladon Road	4.3	19.24	0.81		2.3	13.41	0.70	
D - A44 North	3.7	14.04	0.79		1.0	5.36	0.49	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	07/09/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	VECTOS\Jack.Clarke-Williams
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	Baseline	AM	FLAT	07:45	09:15	90	15	✓
D2	Baseline	PM	FLAT	16:45	18:15	90	15	✓
D3	2028 Without Dev	AM	FLAT	07:45	09:15	90	15	✓
D4	2028 Without Dev	PM	FLAT	16:45	18:15	90	15	✓
D5	2028 With Dev	AM	FLAT	07:45	09:15	90	15	✓
D6	2028 With Dev	PM	FLAT	16:45	18:15	90	15	✓
D7	2031 Without Dev	AM	FLAT	07:45	09:15	90	15	✓
D8	2031 Without Dev	PM	FLAT	16:45	18:15	90	15	✓
D9	2031 With Dev	AM	FLAT	07:45	09:15	90	15	✓
D10	2031 With Dev	PM	FLAT	16:45	18:15	90	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Baseline, 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	A44/A4095	Standard Roundabout		A, B, C, D	7.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A4095 Upper Campsfield Road	
B	A44 South	
C	A4095 Bladon Road	
D	A44 North	

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
A - A4095 Upper Campsfield Road	3.23	8.20	17.5	19.9	80.0	30.4	
B - A44 South	7.27	8.12	6.6	14.0	80.0	11.8	
C - A4095 Bladon Road	2.87	7.19	6.4	28.0	80.0	7.5	
D - A44 North	3.52	7.00	18.1	38.3	80.0	30.9	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A4095 Upper Campsfield Road	0.481	1765
B - A44 South	0.597	2486
C - A4095 Bladon Road	0.449	1400
D - A44 North	0.485	1754

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 period length (min)	Time segment length (min)	Run automatically
D1	Baseline	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4095 Upper Campsfield Road		FLAT	✓	477	100.000
B - A44 South		FLAT	✓	778	100.000
C - A4095 Bladon Road		FLAT	✓	805	100.000
D - A44 North		FLAT	✓	868	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
From	A - A4095 Upper Campsfield Road	0	165	273	39
	B - A44 South	183	1	181	413
	C - A4095 Bladon Road	253	516	3	33
	D - A44 North	60	661	147	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
From	A - A4095 Upper Campsfield Road	0	2	4	1
	B - A44 South	3	0	1	2
	C - A4095 Bladon Road	3	1	0	2
	D - A44 North	0	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4095 Upper Campsfield Road	0.44	5.97	0.8	A	477	715
B - A44 South	0.36	2.60	0.6	A	778	1167
C - A4095 Bladon Road	0.74	12.63	2.8	B	805	1207
D - A44 North	0.69	9.39	2.3	A	868	1302

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	477	119	1313	1087	0.439	474	492	0.0	0.8	5.840	A
B - A44 South	778	195	458	2162	0.360	776	1328	0.0	0.6	2.592	A
C - A4095 Bladon Road	805	201	634	1091	0.738	794	600	0.0	2.7	11.761	B
D - A44 North	868	217	945	1256	0.691	859	483	0.0	2.2	8.887	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	477	119	1328	1080	0.442	477	496	0.8	0.8	5.966	A
B - A44 South	778	195	462	2160	0.360	778	1343	0.6	0.6	2.605	A
C - A4095 Bladon Road	805	201	636	1090	0.739	805	604	2.7	2.8	12.595	B
D - A44 North	868	217	956	1251	0.694	868	485	2.2	2.2	9.374	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	477	119	1328	1080	0.442	477	496	0.8	0.8	5.967	A
B - A44 South	778	195	462	2160	0.360	778	1343	0.6	0.6	2.605	A
C - A4095 Bladon Road	805	201	636	1090	0.739	805	604	2.8	2.8	12.620	B
D - A44 North	868	217	956	1251	0.694	868	485	2.2	2.2	9.389	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	477	119	1328	1080	0.442	477	496	0.8	0.8	5.967	A
B - A44 South	778	195	462	2160	0.360	778	1343	0.6	0.6	2.605	A
C - A4095 Bladon Road	805	201	636	1090	0.739	805	604	2.8	2.8	12.627	B
D - A44 North	868	217	956	1251	0.694	868	485	2.2	2.2	9.393	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	477	119	1328	1080	0.442	477	496	0.8	0.8	5.967	A
B - A44 South	778	195	462	2160	0.360	778	1343	0.6	0.6	2.605	A
C - A4095 Bladon Road	805	201	636	1090	0.739	805	604	2.8	2.8	12.632	B
D - A44 North	868	217	956	1251	0.694	868	485	2.2	2.2	9.393	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	477	119	1328	1080	0.442	477	496	0.8	0.8	5.967	A
B - A44 South	778	195	462	2160	0.360	778	1343	0.6	0.6	2.605	A
C - A4095 Bladon Road	805	201	636	1090	0.739	805	604	2.8	2.8	12.634	B
D - A44 North	868	217	956	1251	0.694	868	485	2.2	2.3	9.395	A

Baseline, 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	A44/A4095	Standard Roundabout		A, B, C, D	6.19	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 period length (min)	Time segment length (min)	Run automatically
D2	Baseline	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4095 Upper Campsfield Road		FLAT	✓	509	100.000
B - A44 South		FLAT	✓	1444	100.000
C - A4095 Bladon Road		FLAT	✓	599	100.000
D - A44 North		FLAT	✓	569	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
	A - A4095 Upper Campsfield Road	0	92	357	60
	B - A44 South	222	0	522	700
	C - A4095 Bladon Road	197	345	2	55
	D - A44 North	60	358	151	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
	A - A4095 Upper Campsfield Road	0	2	4	1
	B - A44 South	3	0	1	2
	C - A4095 Bladon Road	3	1	0	2
	D - A44 North	0	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4095 Upper Campsfield Road	0.39	4.53	0.6	A	509	763
B - A44 South	0.69	5.50	2.2	A	1444	2166
C - A4095 Bladon Road	0.64	10.77	1.8	B	599	899
D - A44 North	0.42	4.63	0.7	A	569	853

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	509	127	849	1306	0.390	506	475	0.0	0.6	4.488	A
B - A44 South	1444	361	567	2100	0.688	1435	789	0.0	2.2	5.347	A
C - A4095 Bladon Road	599	150	976	936	0.640	592	1026	0.0	1.7	10.280	B
D - A44 North	569	142	758	1350	0.422	566	810	0.0	0.7	4.578	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	509	127	856	1303	0.391	509	479	0.6	0.6	4.534	A
B - A44 South	1444	361	570	2099	0.688	1444	795	2.2	2.2	5.496	A
C - A4095 Bladon Road	599	150	982	933	0.642	599	1032	1.7	1.8	10.762	B
D - A44 North	569	142	766	1346	0.423	569	815	0.7	0.7	4.632	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	509	127	856	1303	0.391	509	479	0.6	0.6	4.534	A
B - A44 South	1444	361	570	2099	0.688	1444	795	2.2	2.2	5.499	A
C - A4095 Bladon Road	599	150	982	933	0.642	599	1032	1.8	1.8	10.764	B
D - A44 North	569	142	766	1346	0.423	569	815	0.7	0.7	4.633	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	509	127	856	1303	0.391	509	479	0.6	0.6	4.534	A
B - A44 South	1444	361	570	2099	0.688	1444	795	2.2	2.2	5.499	A
C - A4095 Bladon Road	599	150	982	933	0.642	599	1032	1.8	1.8	10.766	B
D - A44 North	569	142	766	1346	0.423	569	815	0.7	0.7	4.633	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	509	127	856	1303	0.391	509	479	0.6	0.6	4.534	A
B - A44 South	1444	361	570	2099	0.688	1444	795	2.2	2.2	5.499	A
C - A4095 Bladon Road	599	150	982	933	0.642	599	1032	1.8	1.8	10.768	B
D - A44 North	569	142	766	1346	0.423	569	815	0.7	0.7	4.633	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	509	127	856	1303	0.391	509	479	0.6	0.6	4.534	A
B - A44 South	1444	361	570	2099	0.688	1444	795	2.2	2.2	5.499	A
C - A4095 Bladon Road	599	150	982	933	0.642	599	1032	1.8	1.8	10.768	B
D - A44 North	569	142	766	1346	0.423	569	815	0.7	0.7	4.633	A

2028 Without Dev, 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	A44/A4095	Standard Roundabout		A, B, C, D	9.92	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 period length (min)	Time segment length (min)	Run automatically
D3	2028 Without Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4095 Upper Campsfield Road		FLAT	✓	499	100.000
B - A44 South		FLAT	✓	916	100.000
C - A4095 Bladon Road		FLAT	✓	819	100.000
D - A44 North		FLAT	✓	941	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
	A - A4095 Upper Campsfield Road	0	187	273	39
	B - A44 South	244	1	189	482
	C - A4095 Bladon Road	253	530	3	33
	D - A44 North	60	734	147	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
	A - A4095 Upper Campsfield Road	0	1	4	1
	B - A44 South	2	0	1	1
	C - A4095 Bladon Road	3	1	0	2
	D - A44 North	0	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4095 Upper Campsfield Road	0.48	6.58	0.9	A	499	749
B - A44 South	0.42	2.86	0.7	A	916	1374
C - A4095 Bladon Road	0.79	16.69	3.7	C	819	1229
D - A44 North	0.77	12.68	3.3	B	941	1412

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	499	125	1394	1056	0.473	495	551	0.0	0.9	6.385	A
B - A44 South	916	229	458	2178	0.421	913	1432	0.0	0.7	2.841	A
C - A4095 Bladon Road	819	205	763	1035	0.791	805	607	0.0	3.5	14.841	B
D - A44 North	941	235	1017	1231	0.764	929	552	0.0	3.1	11.469	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	499	125	1414	1047	0.477	499	557	0.9	0.9	6.573	A
B - A44 South	916	229	462	2175	0.421	916	1451	0.7	0.7	2.857	A
C - A4095 Bladon Road	819	205	766	1034	0.792	818	612	3.5	3.6	16.559	C
D - A44 North	941	235	1030	1225	0.768	940	554	3.1	3.2	12.602	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	499	125	1415	1046	0.477	499	557	0.9	0.9	6.577	A
B - A44 South	916	229	462	2175	0.421	916	1452	0.7	0.7	2.858	A
C - A4095 Bladon Road	819	205	766	1034	0.792	819	612	3.6	3.7	16.636	C
D - A44 North	941	235	1031	1225	0.768	941	554	3.2	3.2	12.652	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	499	125	1415	1046	0.477	499	557	0.9	0.9	6.578	A
B - A44 South	916	229	462	2175	0.421	916	1452	0.7	0.7	2.858	A
C - A4095 Bladon Road	819	205	766	1034	0.792	819	612	3.7	3.7	16.664	C
D - A44 North	941	235	1031	1225	0.768	941	554	3.2	3.3	12.667	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	499	125	1415	1046	0.477	499	557	0.9	0.9	6.578	A
B - A44 South	916	229	462	2175	0.421	916	1452	0.7	0.7	2.858	A
C - A4095 Bladon Road	819	205	766	1034	0.792	819	612	3.7	3.7	16.678	C
D - A44 North	941	235	1031	1225	0.768	941	554	3.3	3.3	12.675	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	499	125	1415	1046	0.477	499	557	0.9	0.9	6.578	A
B - A44 South	916	229	462	2175	0.421	916	1452	0.7	0.7	2.858	A
C - A4095 Bladon Road	819	205	766	1034	0.792	819	612	3.7	3.7	16.687	C
D - A44 North	941	235	1031	1225	0.768	941	554	3.3	3.3	12.678	B

2028 Without Dev, 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	A44/A4095	Standard Roundabout		A, B, C, D	7.18	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 period length (min)	Time segment length (min)	Run automatically
D4	2028 Without Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4095 Upper Campsfield Road		FLAT	✓	574	100.000
B - A44 South		FLAT	✓	1563	100.000
C - A4095 Bladon Road		FLAT	✓	606	100.000
D - A44 North		FLAT	✓	637	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
	A - A4095 Upper Campsfield Road	0	157	357	60
	B - A44 South	254	0	534	775
	C - A4095 Bladon Road	197	352	2	55
	D - A44 North	60	426	151	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
	A - A4095 Upper Campsfield Road	0	1	4	1
	B - A44 South	3	0	1	1
	C - A4095 Bladon Road	3	1	0	2
	D - A44 North	0	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4095 Upper Campsfield Road	0.45	5.14	0.8	A	574	861
B - A44 South	0.74	6.60	2.9	A	1563	2345
C - A4095 Bladon Road	0.68	12.74	2.1	B	606	909
D - A44 North	0.48	5.16	0.9	A	637	955

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	574	143	923	1278	0.449	571	506	0.0	0.8	5.068	A
B - A44 South	1563	391	567	2110	0.741	1552	927	0.0	2.8	6.328	A
C - A4095 Bladon Road	606	151	1081	892	0.679	598	1037	0.0	2.0	11.940	B
D - A44 North	637	159	796	1339	0.476	633	883	0.0	0.9	5.077	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	574	143	931	1274	0.451	574	511	0.8	0.8	5.141	A
B - A44 South	1563	391	570	2108	0.741	1563	935	2.8	2.8	6.593	A
C - A4095 Bladon Road	606	151	1089	888	0.682	606	1044	2.0	2.1	12.707	B
D - A44 North	637	159	805	1335	0.477	637	890	0.9	0.9	5.159	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	574	143	931	1274	0.451	574	511	0.8	0.8	5.141	A
B - A44 South	1563	391	570	2108	0.741	1563	935	2.8	2.8	6.598	A
C - A4095 Bladon Road	606	151	1089	888	0.682	606	1044	2.1	2.1	12.729	B
D - A44 North	637	159	805	1335	0.477	637	890	0.9	0.9	5.160	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	574	143	931	1274	0.451	574	511	0.8	0.8	5.141	A
B - A44 South	1563	391	570	2108	0.741	1563	935	2.8	2.8	6.601	A
C - A4095 Bladon Road	606	151	1089	888	0.682	606	1044	2.1	2.1	12.734	B
D - A44 North	637	159	805	1335	0.477	637	890	0.9	0.9	5.160	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	574	143	931	1274	0.451	574	511	0.8	0.8	5.141	A
B - A44 South	1563	391	570	2108	0.741	1563	935	2.8	2.9	6.601	A
C - A4095 Bladon Road	606	151	1089	888	0.682	606	1044	2.1	2.1	12.737	B
D - A44 North	637	159	805	1335	0.477	637	890	0.9	0.9	5.160	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	574	143	931	1274	0.451	574	511	0.8	0.8	5.141	A
B - A44 South	1563	391	570	2108	0.741	1563	935	2.9	2.9	6.601	A
C - A4095 Bladon Road	606	151	1089	888	0.682	606	1044	2.1	2.1	12.739	B
D - A44 North	637	159	805	1335	0.477	637	890	0.9	0.9	5.160	A

2028 With Dev, 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	A44/A4095	Standard Roundabout		A, B, C, D	10.43	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 period length (min)	Time segment length (min)	Run automatically
D5	2028 With Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4095 Upper Campsfield Road		FLAT	✓	507	100.000
B - A44 South		FLAT	✓	952	100.000
C - A4095 Bladon Road		FLAT	✓	820	100.000
D - A44 North		FLAT	✓	943	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
	A - A4095 Upper Campsfield Road	0	195	273	39
	B - A44 South	272	1	193	486
	C - A4095 Bladon Road	253	531	3	33
	D - A44 North	60	736	147	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
	A - A4095 Upper Campsfield Road	0	1	4	1
	B - A44 South	2	0	1	1
	C - A4095 Bladon Road	3	1	0	2
	D - A44 North	0	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4095 Upper Campsfield Road	0.49	6.69	0.9	A	507	761
B - A44 South	0.44	2.94	0.8	A	952	1428
C - A4095 Bladon Road	0.80	17.96	4.0	C	820	1230
D - A44 North	0.78	13.44	3.5	B	943	1414

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	507	127	1396	1055	0.480	503	579	0.0	0.9	6.479	A
B - A44 South	952	238	458	2177	0.437	949	1442	0.0	0.8	2.923	A
C - A4095 Bladon Road	820	205	795	1021	0.803	805	611	0.0	3.7	15.732	C
D - A44 North	943	236	1045	1218	0.774	930	556	0.0	3.2	12.023	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	507	127	1417	1045	0.485	507	585	0.9	0.9	6.682	A
B - A44 South	952	238	462	2175	0.438	952	1462	0.8	0.8	2.942	A
C - A4095 Bladon Road	820	205	798	1020	0.804	819	616	3.7	3.9	17.785	C
D - A44 North	943	236	1059	1211	0.779	942	558	3.2	3.4	13.339	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	507	127	1418	1045	0.485	507	585	0.9	0.9	6.689	A
B - A44 South	952	238	462	2175	0.438	952	1463	0.8	0.8	2.943	A
C - A4095 Bladon Road	820	205	798	1020	0.804	820	616	3.9	4.0	17.891	C
D - A44 North	943	236	1060	1211	0.779	943	558	3.4	3.4	13.405	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	507	127	1418	1045	0.485	507	585	0.9	0.9	6.690	A
B - A44 South	952	238	462	2175	0.438	952	1463	0.8	0.8	2.943	A
C - A4095 Bladon Road	820	205	798	1020	0.804	820	616	4.0	4.0	17.928	C
D - A44 North	943	236	1060	1211	0.779	943	558	3.4	3.5	13.423	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	507	127	1418	1045	0.485	507	585	0.9	0.9	6.690	A
B - A44 South	952	238	462	2175	0.438	952	1463	0.8	0.8	2.943	A
C - A4095 Bladon Road	820	205	798	1020	0.804	820	616	4.0	4.0	17.947	C
D - A44 North	943	236	1060	1211	0.779	943	558	3.5	3.5	13.432	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	507	127	1418	1045	0.485	507	585	0.9	0.9	6.690	A
B - A44 South	952	238	462	2175	0.438	952	1463	0.8	0.8	2.943	A
C - A4095 Bladon Road	820	205	798	1020	0.804	820	616	4.0	4.0	17.959	C
D - A44 North	943	236	1060	1211	0.779	943	558	3.5	3.5	13.438	B

2028 With Dev, 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	A44/A4095	Standard Roundabout		A, B, C, D	7.29	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 period length (min)	Time segment length (min)	Run automatically
D6	2028 With Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4095 Upper Campsfield Road		FLAT	✓	583	100.000
B - A44 South		FLAT	✓	1572	100.000
C - A4095 Bladon Road		FLAT	✓	610	100.000
D - A44 North		FLAT	✓	642	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
	A - A4095 Upper Campsfield Road	0	166	357	60
	B - A44 South	259	0	536	777
	C - A4095 Bladon Road	197	356	2	55
	D - A44 North	60	431	151	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
	A - A4095 Upper Campsfield Road	0	1	4	1
	B - A44 South	2	0	1	1
	C - A4095 Bladon Road	3	1	0	2
	D - A44 North	0	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4095 Upper Campsfield Road	0.46	5.24	0.8	A	583	875
B - A44 South	0.74	6.67	2.9	A	1572	2358
C - A4095 Bladon Road	0.69	13.01	2.2	B	610	915
D - A44 North	0.48	5.22	0.9	A	642	963

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	583	146	932	1274	0.458	580	511	0.0	0.8	5.160	A
B - A44 South	1572	393	567	2114	0.744	1561	945	0.0	2.8	6.389	A
C - A4095 Bladon Road	610	152	1088	890	0.685	602	1039	0.0	2.1	12.163	B
D - A44 North	642	160	805	1336	0.481	638	885	0.0	0.9	5.134	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	583	146	940	1270	0.459	583	516	0.8	0.8	5.238	A
B - A44 South	1572	393	570	2112	0.744	1572	953	2.8	2.9	6.662	A
C - A4095 Bladon Road	610	152	1096	887	0.688	610	1046	2.1	2.2	12.977	B
D - A44 North	642	160	814	1331	0.482	642	892	0.9	0.9	5.221	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	583	146	940	1270	0.459	583	516	0.8	0.8	5.238	A
B - A44 South	1572	393	570	2112	0.744	1572	953	2.9	2.9	6.668	A
C - A4095 Bladon Road	610	152	1096	886	0.688	610	1046	2.2	2.2	13.001	B
D - A44 North	642	160	814	1331	0.482	642	892	0.9	0.9	5.221	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	583	146	940	1270	0.459	583	516	0.8	0.8	5.238	A
B - A44 South	1572	393	570	2112	0.744	1572	953	2.9	2.9	6.668	A
C - A4095 Bladon Road	610	152	1096	886	0.688	610	1046	2.2	2.2	13.009	B
D - A44 North	642	160	814	1331	0.482	642	892	0.9	0.9	5.221	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	583	146	940	1270	0.459	583	516	0.8	0.8	5.238	A
B - A44 South	1572	393	570	2112	0.744	1572	953	2.9	2.9	6.670	A
C - A4095 Bladon Road	610	152	1096	886	0.688	610	1046	2.2	2.2	13.012	B
D - A44 North	642	160	814	1331	0.482	642	892	0.9	0.9	5.221	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	583	146	940	1270	0.459	583	516	0.8	0.8	5.238	A
B - A44 South	1572	393	570	2112	0.744	1572	953	2.9	2.9	6.670	A
C - A4095 Bladon Road	610	152	1096	886	0.688	610	1046	2.2	2.2	13.015	B
D - A44 North	642	160	814	1331	0.482	642	892	0.9	0.9	5.222	A

2031 Without Dev, 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	A44/A4095	Standard Roundabout		A, B, C, D	10.35	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 period length (min)	Time segment length (min)	Run automatically
D7	2031 Without Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4095 Upper Campsfield Road		FLAT	✓	503	100.000
B - A44 South		FLAT	✓	949	100.000
C - A4095 Bladon Road		FLAT	✓	819	100.000
D - A44 North		FLAT	✓	945	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
	A - A4095 Upper Campsfield Road	0	191	273	39
	B - A44 South	262	1	191	495
	C - A4095 Bladon Road	253	530	3	33
	D - A44 North	60	738	147	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
	A - A4095 Upper Campsfield Road	0	1	4	1
	B - A44 South	2	0	1	1
	C - A4095 Bladon Road	3	1	0	2
	D - A44 North	0	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4095 Upper Campsfield Road	0.48	6.65	0.9	A	503	755
B - A44 South	0.44	2.93	0.8	A	949	1424
C - A4095 Bladon Road	0.80	17.83	4.0	C	819	1229
D - A44 North	0.78	13.27	3.4	B	945	1418

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	503	126	1397	1055	0.477	499	569	0.0	0.9	6.443	A
B - A44 South	949	237	458	2178	0.436	946	1439	0.0	0.8	2.915	A
C - A4095 Bladon Road	819	205	794	1022	0.802	804	609	0.0	3.7	15.643	C
D - A44 North	945	236	1034	1223	0.773	932	565	0.0	3.2	11.900	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	503	126	1418	1045	0.481	503	575	0.9	0.9	6.640	A
B - A44 South	949	237	462	2175	0.436	949	1459	0.8	0.8	2.935	A
C - A4095 Bladon Road	819	205	797	1020	0.803	818	614	3.7	3.9	17.659	C
D - A44 North	945	236	1048	1216	0.777	944	567	3.2	3.4	13.178	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	503	126	1419	1045	0.482	503	575	0.9	0.9	6.647	A
B - A44 South	949	237	462	2175	0.436	949	1460	0.8	0.8	2.935	A
C - A4095 Bladon Road	819	205	797	1020	0.803	819	614	3.9	3.9	17.761	C
D - A44 North	945	236	1049	1216	0.777	945	567	3.4	3.4	13.240	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	503	126	1419	1044	0.482	503	575	0.9	0.9	6.648	A
B - A44 South	949	237	462	2175	0.436	949	1460	0.8	0.8	2.935	A
C - A4095 Bladon Road	819	205	797	1020	0.803	819	614	3.9	4.0	17.798	C
D - A44 North	945	236	1049	1216	0.777	945	567	3.4	3.4	13.258	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	503	126	1419	1044	0.482	503	575	0.9	0.9	6.648	A
B - A44 South	949	237	462	2175	0.436	949	1460	0.8	0.8	2.935	A
C - A4095 Bladon Road	819	205	797	1020	0.803	819	614	4.0	4.0	17.817	C
D - A44 North	945	236	1049	1216	0.777	945	567	3.4	3.4	13.267	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	503	126	1419	1044	0.482	503	575	0.9	0.9	6.648	A
B - A44 South	949	237	462	2175	0.436	949	1460	0.8	0.8	2.935	A
C - A4095 Bladon Road	819	205	797	1020	0.803	819	614	4.0	4.0	17.827	C
D - A44 North	945	236	1049	1216	0.777	945	567	3.4	3.4	13.273	B

2031 Without Dev, 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	A44/A4095	Standard Roundabout		A, B, C, D	7.37	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 period length (min)	Time segment length (min)	Run automatically
D8	2031 Without Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4095 Upper Campsfield Road		FLAT	✓	593	100.000
B - A44 South		FLAT	✓	1577	100.000
C - A4095 Bladon Road		FLAT	✓	608	100.000
D - A44 North		FLAT	✓	651	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
	A - A4095 Upper Campsfield Road	0	176	357	60
	B - A44 South	262	0	534	781
	C - A4095 Bladon Road	197	354	2	55
	D - A44 North	60	440	151	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
	A - A4095 Upper Campsfield Road	0	1	4	1
	B - A44 South	3	0	1	1
	C - A4095 Bladon Road	3	1	0	2
	D - A44 North	0	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4095 Upper Campsfield Road	0.47	5.34	0.9	A	593	890
B - A44 South	0.75	6.78	3.0	A	1577	2366
C - A4095 Bladon Road	0.69	13.12	2.2	B	608	912
D - A44 North	0.49	5.30	1.0	A	651	976

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	593	148	939	1271	0.467	590	514	0.0	0.9	5.256	A
B - A44 South	1577	394	567	2110	0.747	1566	962	0.0	2.9	6.480	A
C - A4095 Bladon Road	608	152	1095	886	0.686	600	1037	0.0	2.1	12.252	B
D - A44 North	651	163	805	1334	0.488	647	889	0.0	0.9	5.213	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	593	148	947	1267	0.468	593	519	0.9	0.9	5.338	A
B - A44 South	1577	394	570	2108	0.748	1577	970	2.9	2.9	6.769	A
C - A4095 Bladon Road	608	152	1103	882	0.689	608	1044	2.1	2.2	13.086	B
D - A44 North	651	163	815	1330	0.490	651	896	0.9	1.0	5.304	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	593	148	947	1267	0.468	593	519	0.9	0.9	5.339	A
B - A44 South	1577	394	570	2108	0.748	1577	970	2.9	2.9	6.774	A
C - A4095 Bladon Road	608	152	1103	882	0.689	608	1044	2.2	2.2	13.111	B
D - A44 North	651	163	815	1330	0.490	651	896	1.0	1.0	5.305	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	593	148	947	1267	0.468	593	519	0.9	0.9	5.339	A
B - A44 South	1577	394	570	2108	0.748	1577	970	2.9	2.9	6.774	A
C - A4095 Bladon Road	608	152	1103	882	0.689	608	1044	2.2	2.2	13.119	B
D - A44 North	651	163	815	1330	0.490	651	896	1.0	1.0	5.305	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	593	148	947	1267	0.468	593	519	0.9	0.9	5.339	A
B - A44 South	1577	394	570	2108	0.748	1577	970	2.9	3.0	6.777	A
C - A4095 Bladon Road	608	152	1103	882	0.689	608	1044	2.2	2.2	13.122	B
D - A44 North	651	163	815	1329	0.490	651	896	1.0	1.0	5.305	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	593	148	947	1267	0.468	593	519	0.9	0.9	5.339	A
B - A44 South	1577	394	570	2108	0.748	1577	970	3.0	3.0	6.777	A
C - A4095 Bladon Road	608	152	1103	882	0.689	608	1044	2.2	2.2	13.124	B
D - A44 North	651	163	815	1329	0.490	651	896	1.0	1.0	5.305	A

2031 With Dev, 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	A44/A4095	Standard Roundabout		A, B, C, D	10.89	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 period length (min)	Time segment length (min)	Run automatically
D9	2031 With Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4095 Upper Campsfield Road		FLAT	✓	512	100.000
B - A44 South		FLAT	✓	984	100.000
C - A4095 Bladon Road		FLAT	✓	820	100.000
D - A44 North		FLAT	✓	946	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
	A - A4095 Upper Campsfield Road	0	200	273	39
	B - A44 South	290	1	195	498
	C - A4095 Bladon Road	253	531	3	33
	D - A44 North	60	739	147	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
	A - A4095 Upper Campsfield Road	0	1	4	1
	B - A44 South	2	0	1	1
	C - A4095 Bladon Road	3	1	0	2
	D - A44 North	0	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4095 Upper Campsfield Road	0.49	6.77	1.0	A	512	768
B - A44 South	0.45	3.02	0.8	A	984	1476
C - A4095 Bladon Road	0.81	19.24	4.3	C	820	1230
D - A44 North	0.79	14.04	3.7	B	946	1419

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	512	128	1398	1055	0.486	508	596	0.0	0.9	6.546	A
B - A44 South	984	246	458	2177	0.452	981	1449	0.0	0.8	3.001	A
C - A4095 Bladon Road	820	205	825	1008	0.814	804	613	0.0	4.0	16.596	C
D - A44 North	946	236	1062	1210	0.782	933	567	0.0	3.4	12.453	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	512	128	1420	1044	0.490	512	603	0.9	1.0	6.760	A
B - A44 South	984	246	462	2175	0.452	984	1470	0.8	0.8	3.022	A
C - A4095 Bladon Road	820	205	828	1006	0.815	819	618	4.0	4.2	19.009	C
D - A44 North	946	236	1077	1202	0.787	945	570	3.4	3.5	13.929	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	512	128	1421	1044	0.490	512	603	1.0	1.0	6.767	A
B - A44 South	984	246	462	2175	0.452	984	1471	0.8	0.8	3.022	A
C - A4095 Bladon Road	820	205	828	1006	0.815	820	618	4.2	4.2	19.147	C
D - A44 North	946	236	1078	1202	0.787	946	570	3.5	3.6	14.008	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	512	128	1421	1044	0.491	512	603	1.0	1.0	6.768	A
B - A44 South	984	246	462	2175	0.452	984	1471	0.8	0.8	3.022	A
C - A4095 Bladon Road	820	205	828	1006	0.815	820	618	4.2	4.3	19.198	C
D - A44 North	946	236	1078	1202	0.787	946	570	3.6	3.6	14.034	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	512	128	1421	1044	0.491	512	603	1.0	1.0	6.769	A
B - A44 South	984	246	462	2175	0.452	984	1471	0.8	0.8	3.022	A
C - A4095 Bladon Road	820	205	828	1006	0.815	820	618	4.3	4.3	19.225	C
D - A44 North	946	236	1078	1202	0.787	946	570	3.6	3.6	14.044	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	512	128	1421	1044	0.491	512	603	1.0	1.0	6.769	A
B - A44 South	984	246	462	2175	0.452	984	1471	0.8	0.8	3.022	A
C - A4095 Bladon Road	820	205	828	1006	0.815	820	618	4.3	4.3	19.240	C
D - A44 North	946	236	1078	1202	0.787	946	570	3.6	3.7	14.040	B

2031 With Dev, 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	A44/A4095	Standard Roundabout		A, B, C, D	7.48	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 period length (min)	Time segment length (min)	Run automatically
D10	2031 With Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4095 Upper Campsfield Road		FLAT	✓	602	100.000
B - A44 South		FLAT	✓	1586	100.000
C - A4095 Bladon Road		FLAT	✓	612	100.000
D - A44 North		FLAT	✓	655	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
From	A - A4095 Upper Campsfield Road	0	185	357	60
	B - A44 South	267	0	536	783
	C - A4095 Bladon Road	197	358	2	55
	D - A44 North	60	444	151	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A4095 Upper Campsfield Road	B - A44 South	C - A4095 Bladon Road	D - A44 North
From	A - A4095 Upper Campsfield Road	0	1	4	1
	B - A44 South	2	0	1	1
	C - A4095 Bladon Road	3	1	0	2
	D - A44 North	0	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4095 Upper Campsfield Road	0.48	5.44	0.9	A	602	903
B - A44 South	0.75	6.85	3.0	A	1586	2379
C - A4095 Bladon Road	0.70	13.41	2.3	B	612	918
D - A44 North	0.49	5.36	1.0	A	655	983

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	602	151	946	1268	0.475	598	519	0.0	0.9	5.352	A
B - A44 South	1586	397	567	2114	0.750	1574	978	0.0	2.9	6.542	A
C - A4095 Bladon Road	612	153	1102	884	0.692	603	1039	0.0	2.2	12.484	B
D - A44 North	655	164	814	1331	0.492	651	891	0.0	1.0	5.265	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	602	151	955	1264	0.476	602	524	0.9	0.9	5.439	A
B - A44 South	1586	397	570	2112	0.751	1586	987	2.9	3.0	6.841	A
C - A4095 Bladon Road	612	153	1110	880	0.695	612	1046	2.2	2.2	13.373	B
D - A44 North	655	164	824	1326	0.494	655	898	1.0	1.0	5.360	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	602	151	955	1264	0.476	602	524	0.9	0.9	5.439	A
B - A44 South	1586	397	570	2112	0.751	1586	987	3.0	3.0	6.846	A
C - A4095 Bladon Road	612	153	1110	880	0.695	612	1046	2.2	2.2	13.398	B
D - A44 North	655	164	824	1326	0.494	655	898	1.0	1.0	5.361	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	602	151	955	1264	0.476	602	524	0.9	0.9	5.439	A
B - A44 South	1586	397	570	2112	0.751	1586	987	3.0	3.0	6.846	A
C - A4095 Bladon Road	612	153	1110	880	0.695	612	1046	2.2	2.3	13.407	B
D - A44 North	655	164	824	1326	0.494	655	898	1.0	1.0	5.361	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	602	151	955	1264	0.476	602	524	0.9	0.9	5.440	A
B - A44 South	1586	397	570	2112	0.751	1586	987	3.0	3.0	6.849	A
C - A4095 Bladon Road	612	153	1110	880	0.695	612	1046	2.3	2.3	13.410	B
D - A44 North	655	164	824	1326	0.494	655	898	1.0	1.0	5.361	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4095 Upper Campsfield Road	602	151	955	1264	0.476	602	524	0.9	0.9	5.440	A
B - A44 South	1586	397	570	2112	0.751	1586	987	3.0	3.0	6.849	A
C - A4095 Bladon Road	612	153	1110	880	0.695	612	1046	2.3	2.3	13.412	B
D - A44 North	655	164	824	1326	0.494	655	898	1.0	1.0	5.361	A

Junctions 9							
ARCADY 9 - Roundabout Module							
Version: 9.5.1.7462 © Copyright TRL Limited, 2019							
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Filename: J05-AT-A44, Spring Hill Road-201001 (Flat).j9

Path: \\vectos.local\data\Projects\Projects\160000\162751 - Yarnton, Cherwell\AA-Planning Application\TOPIC FOLDERS\Modelling

Report generation date: 19/10/2020 13:31:08

- »Baseline, AM
- »Baseline, PM
- »2028 Without Dev, AM
- »2028 Without Dev, PM
- »2028 With Dev, AM
- »2028 With Dev, PM
- »2031 Without Dev, AM
- »2031 Without Dev, PM
- »2031 With Dev, AM
- »2031 With Dev, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	Junction LOS	Queue (Veh)	Delay (s)	RFC	Junction LOS
	Baseline							
A - A44 South	0.8	3.00	0.45	A	1.4	3.81	0.58	A
B - Spring Hill Road	0.0	5.81	0.03		0.2	8.95	0.14	
C - A44 North	1.1	3.78	0.53		1.0	3.65	0.50	
	2028 Without Dev							
A - A44 South	1.1	3.46	0.53	A	1.8	4.47	0.64	A
B - Spring Hill Road	0.0	6.90	0.04		0.2	11.25	0.17	
C - A44 North	1.4	4.23	0.58		1.4	4.37	0.59	
	2028 With Dev							
A - A44 South	1.2	3.64	0.55	A	1.8	4.56	0.65	A
B - Spring Hill Road	0.0	7.33	0.04		0.2	11.59	0.18	
C - A44 North	1.4	4.31	0.59		1.5	4.56	0.61	
	2031 Without Dev							
A - A44 South	1.2	3.61	0.55	A	1.8	4.59	0.65	A
B - Spring Hill Road	0.0	7.26	0.04		0.2	11.68	0.18	
C - A44 North	1.4	4.29	0.59		1.6	4.65	0.61	
	2031 With Dev							
A - A44 South	1.3	3.81	0.57	A	1.9	4.68	0.65	A
B - Spring Hill Road	0.0	7.73	0.04		0.2	12.05	0.18	
C - A44 North	1.5	4.38	0.60		1.7	4.85	0.63	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	07/09/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	VECTOS\Jack.Clarke-Williams
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	Baseline	AM	FLAT	07:45	09:15	90	15	✓
D2	Baseline	PM	FLAT	16:45	18:15	90	15	✓
D3	2028 Without Dev	AM	FLAT	07:45	09:15	90	15	✓
D4	2028 Without Dev	PM	FLAT	16:45	18:15	90	15	✓
D5	2028 With Dev	AM	FLAT	07:45	09:15	90	15	✓
D6	2028 With Dev	PM	FLAT	16:45	18:15	90	15	✓
D7	2031 Without Dev	AM	FLAT	07:45	09:15	90	15	✓
D8	2031 Without Dev	PM	FLAT	16:45	18:15	90	15	✓
D9	2031 With Dev	AM	FLAT	07:45	09:15	90	15	✓
D10	2031 With Dev	PM	FLAT	16:45	18:15	90	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Baseline, 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	A44/Spring Hill Road	Standard Roundabout		A, B, C	3.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A44 South	
B	Spring Hill Road	
C	A44 North	

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
A - A44 South	6.96	7.96	2.0	31.8	40.0	20.5	
B - Spring Hill Road	2.75	5.45	5.8	34.7	40.0	17.3	
C - A44 North	6.25	8.30	7.0	20.4	40.0	39.1	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A44 South	0.785	2341
B - Spring Hill Road	0.569	1238
C - A44 North	0.722	2147

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 period length (min)	Time segment length (min)	Run automatically
D1	Baseline	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	992	100.000
B - Spring Hill Road		FLAT	✓	21	100.000
C - A44 North		FLAT	✓	1073	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	29	26	937
	B - Spring Hill Road	9	0	12
	C - A44 North	986	41	46

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	0	0	4
	B - Spring Hill Road	0	0	0
	C - A44 North	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.45	3.00	0.8	A	992	1488
B - Spring Hill Road	0.03	5.81	0.0	A	21	32
C - A44 North	0.53	3.78	1.1	A	1073	1609

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	992	248	87	2190	0.453	989	1020	0.0	0.8	2.990	A
B - Spring Hill Road	21	5	1009	643	0.033	21	67	0.0	0.0	5.787	A
C - A44 North	1073	268	38	2026	0.530	1069	992	0.0	1.1	3.743	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	992	248	87	2190	0.453	992	1024	0.8	0.8	3.005	A
B - Spring Hill Road	21	5	1012	641	0.033	21	67	0.0	0.0	5.808	A
C - A44 North	1073	268	38	2026	0.530	1073	995	1.1	1.1	3.776	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	992	248	87	2190	0.453	992	1024	0.8	0.8	3.005	A
B - Spring Hill Road	21	5	1012	641	0.033	21	67	0.0	0.0	5.808	A
C - A44 North	1073	268	38	2026	0.530	1073	995	1.1	1.1	3.776	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	992	248	87	2190	0.453	992	1024	0.8	0.8	3.005	A
B - Spring Hill Road	21	5	1012	641	0.033	21	67	0.0	0.0	5.808	A
C - A44 North	1073	268	38	2026	0.530	1073	995	1.1	1.1	3.776	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	992	248	87	2190	0.453	992	1024	0.8	0.8	3.005	A
B - Spring Hill Road	21	5	1012	641	0.033	21	67	0.0	0.0	5.808	A
C - A44 North	1073	268	38	2026	0.530	1073	995	1.1	1.1	3.776	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	992	248	87	2190	0.453	992	1024	0.8	0.8	3.005	A
B - Spring Hill Road	21	5	1012	641	0.033	21	67	0.0	0.0	5.808	A
C - A44 North	1073	268	38	2026	0.530	1073	995	1.1	1.1	3.776	A

Baseline, 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	A44/Spring Hill Road	Standard Roundabout		A, B, C	3.88	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 period length (min)	Time segment length (min)	Run automatically
D2	Baseline	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	1284	100.000
B - Spring Hill Road		FLAT	✓	66	100.000
C - A44 North		FLAT	✓	999	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	61	11	1212
	B - Spring Hill Road	28	1	37
	C - A44 North	964	4	31

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	0	0	4
	B - Spring Hill Road	0	0	0
	C - A44 North	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.58	3.81	1.4	A	1284	1926
B - Spring Hill Road	0.14	8.95	0.2	A	66	99
C - A44 North	0.50	3.65	1.0	A	999	1498

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1284	321	36	2228	0.576	1279	1049	0.0	1.3	3.769	A
B - Spring Hill Road	66	17	1299	471	0.140	65	16	0.0	0.2	8.837	A
C - A44 North	999	250	89	1986	0.503	995	1274	0.0	1.0	3.617	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1284	321	36	2228	0.576	1284	1053	1.3	1.4	3.811	A
B - Spring Hill Road	66	17	1304	468	0.141	66	16	0.2	0.2	8.949	A
C - A44 North	999	250	90	1986	0.503	999	1280	1.0	1.0	3.647	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1284	321	36	2228	0.576	1284	1053	1.4	1.4	3.811	A
B - Spring Hill Road	66	17	1304	468	0.141	66	16	0.2	0.2	8.949	A
C - A44 North	999	250	90	1986	0.503	999	1280	1.0	1.0	3.647	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1284	321	36	2228	0.576	1284	1053	1.4	1.4	3.811	A
B - Spring Hill Road	66	17	1304	468	0.141	66	16	0.2	0.2	8.949	A
C - A44 North	999	250	90	1986	0.503	999	1280	1.0	1.0	3.647	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1284	321	36	2228	0.576	1284	1053	1.4	1.4	3.811	A
B - Spring Hill Road	66	17	1304	468	0.141	66	16	0.2	0.2	8.949	A
C - A44 North	999	250	90	1986	0.503	999	1280	1.0	1.0	3.647	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1284	321	36	2228	0.576	1284	1053	1.4	1.4	3.811	A
B - Spring Hill Road	66	17	1304	468	0.141	66	16	0.2	0.2	8.949	A
C - A44 North	999	250	90	1986	0.503	999	1280	1.0	1.0	3.647	A

2028 Without Dev, 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	A44/Spring Hill Road	Standard Roundabout		A, B, C	3.88	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 period length (min)	Time segment length (min)	Run automatically
D3	2028 Without Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	1168	100.000
B - Spring Hill Road		FLAT	✓	21	100.000
C - A44 North		FLAT	✓	1193	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	29	26	1113
	B - Spring Hill Road	9	0	12
	C - A44 North	1106	41	46

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	0	0	3
	B - Spring Hill Road	0	0	0
	C - A44 North	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.53	3.46	1.1	A	1168	1752
B - Spring Hill Road	0.04	6.90	0.0	A	21	32
C - A44 North	0.58	4.23	1.4	A	1193	1790

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1168	292	87	2209	0.529	1164	1139	0.0	1.1	3.428	A
B - Spring Hill Road	21	5	1183	546	0.039	21	67	0.0	0.0	6.859	A
C - A44 North	1193	298	38	2043	0.584	1187	1166	0.0	1.4	4.179	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1168	292	87	2209	0.529	1168	1144	1.1	1.1	3.456	A
B - Spring Hill Road	21	5	1188	543	0.039	21	67	0.0	0.0	6.897	A
C - A44 North	1193	298	38	2043	0.584	1193	1171	1.4	1.4	4.233	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1168	292	87	2209	0.529	1168	1144	1.1	1.1	3.456	A
B - Spring Hill Road	21	5	1188	543	0.039	21	67	0.0	0.0	6.897	A
C - A44 North	1193	298	38	2043	0.584	1193	1171	1.4	1.4	4.233	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1168	292	87	2209	0.529	1168	1144	1.1	1.1	3.456	A
B - Spring Hill Road	21	5	1188	543	0.039	21	67	0.0	0.0	6.897	A
C - A44 North	1193	298	38	2043	0.584	1193	1171	1.4	1.4	4.233	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1168	292	87	2209	0.529	1168	1144	1.1	1.1	3.456	A
B - Spring Hill Road	21	5	1188	543	0.039	21	67	0.0	0.0	6.897	A
C - A44 North	1193	298	38	2043	0.584	1193	1171	1.4	1.4	4.233	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1168	292	87	2209	0.529	1168	1144	1.1	1.1	3.456	A
B - Spring Hill Road	21	5	1188	543	0.039	21	67	0.0	0.0	6.897	A
C - A44 North	1193	298	38	2043	0.584	1193	1171	1.4	1.4	4.233	A

2028 Without Dev, 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	A44/Spring Hill Road	Standard Roundabout		A, B, C	4.59	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 period length (min)	Time segment length (min)	Run automatically
D4	2028 Without Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	1423	100.000
B - Spring Hill Road		FLAT	✓	66	100.000
C - A44 North		FLAT	✓	1181	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	61	11	1351
	B - Spring Hill Road	28	1	37
	C - A44 North	1146	4	31

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	0	0	4
	B - Spring Hill Road	0	0	0
	C - A44 North	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.64	4.47	1.8	A	1423	2134
B - Spring Hill Road	0.17	11.25	0.2	B	66	99
C - A44 North	0.59	4.37	1.4	A	1181	1772

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1423	356	36	2228	0.639	1416	1229	0.0	1.7	4.397	A
B - Spring Hill Road	66	17	1436	390	0.169	65	16	0.0	0.2	11.054	B
C - A44 North	1181	295	89	2004	0.589	1175	1412	0.0	1.4	4.314	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1423	356	36	2228	0.639	1423	1235	1.7	1.8	4.472	A
B - Spring Hill Road	66	17	1443	386	0.171	66	16	0.2	0.2	11.250	B
C - A44 North	1181	295	90	2004	0.589	1181	1419	1.4	1.4	4.374	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1423	356	36	2228	0.639	1423	1235	1.8	1.8	4.472	A
B - Spring Hill Road	66	17	1443	386	0.171	66	16	0.2	0.2	11.251	B
C - A44 North	1181	295	90	2004	0.589	1181	1419	1.4	1.4	4.374	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1423	356	36	2228	0.639	1423	1235	1.8	1.8	4.472	A
B - Spring Hill Road	66	17	1443	386	0.171	66	16	0.2	0.2	11.251	B
C - A44 North	1181	295	90	2004	0.589	1181	1419	1.4	1.4	4.374	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1423	356	36	2228	0.639	1423	1235	1.8	1.8	4.472	A
B - Spring Hill Road	66	17	1443	386	0.171	66	16	0.2	0.2	11.251	B
C - A44 North	1181	295	90	2004	0.589	1181	1419	1.4	1.4	4.374	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1423	356	36	2228	0.639	1423	1235	1.8	1.8	4.472	A
B - Spring Hill Road	66	17	1443	386	0.171	66	16	0.2	0.2	11.251	B
C - A44 North	1181	295	90	2004	0.589	1181	1419	1.4	1.4	4.374	A

2028 With Dev, 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	A44/Spring Hill Road	Standard Roundabout		A, B, C	4.01	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 period length (min)	Time segment length (min)	Run automatically
D5	2028 With Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	1221	100.000
B - Spring Hill Road		FLAT	✓	21	100.000
C - A44 North		FLAT	✓	1209	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	29	26	1166
	B - Spring Hill Road	9	0	12
	C - A44 North	1122	41	46

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	0	0	3
	B - Spring Hill Road	0	0	0
	C - A44 North	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.55	3.64	1.2	A	1221	1831
B - Spring Hill Road	0.04	7.33	0.0	A	21	32
C - A44 North	0.59	4.31	1.4	A	1209	1814

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1221	305	87	2209	0.553	1216	1154	0.0	1.2	3.607	A
B - Spring Hill Road	21	5	1236	515	0.041	21	67	0.0	0.0	7.288	A
C - A44 North	1209	302	38	2043	0.592	1203	1219	0.0	1.4	4.256	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1221	305	87	2209	0.553	1221	1160	1.2	1.2	3.642	A
B - Spring Hill Road	21	5	1241	512	0.041	21	67	0.0	0.0	7.334	A
C - A44 North	1209	302	38	2043	0.592	1209	1224	1.4	1.4	4.314	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1221	305	87	2209	0.553	1221	1160	1.2	1.2	3.642	A
B - Spring Hill Road	21	5	1241	512	0.041	21	67	0.0	0.0	7.334	A
C - A44 North	1209	302	38	2043	0.592	1209	1224	1.4	1.4	4.314	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1221	305	87	2209	0.553	1221	1160	1.2	1.2	3.642	A
B - Spring Hill Road	21	5	1241	512	0.041	21	67	0.0	0.0	7.334	A
C - A44 North	1209	302	38	2043	0.592	1209	1224	1.4	1.4	4.314	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1221	305	87	2209	0.553	1221	1160	1.2	1.2	3.642	A
B - Spring Hill Road	21	5	1241	512	0.041	21	67	0.0	0.0	7.334	A
C - A44 North	1209	302	38	2043	0.592	1209	1224	1.4	1.4	4.314	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1221	305	87	2209	0.553	1221	1160	1.2	1.2	3.642	A
B - Spring Hill Road	21	5	1241	512	0.041	21	67	0.0	0.0	7.334	A
C - A44 North	1209	302	38	2043	0.592	1209	1224	1.4	1.4	4.314	A

2028 With Dev, 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	A44/Spring Hill Road	Standard Roundabout		A, B, C	4.73	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 period length (min)	Time segment length (min)	Run automatically
D6	2028 With Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	1439	100.000
B - Spring Hill Road		FLAT	✓	66	100.000
C - A44 North		FLAT	✓	1214	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	61	11	1367
	B - Spring Hill Road	28	1	37
	C - A44 North	1179	4	31

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	0	0	4
	B - Spring Hill Road	0	0	0
	C - A44 North	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.65	4.56	1.8	A	1439	2158
B - Spring Hill Road	0.18	11.59	0.2	B	66	99
C - A44 North	0.61	4.56	1.5	A	1214	1821

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1439	360	36	2228	0.646	1432	1261	0.0	1.8	4.482	A
B - Spring Hill Road	66	17	1452	381	0.173	65	16	0.0	0.2	11.378	B
C - A44 North	1214	303	89	2004	0.606	1208	1428	0.0	1.5	4.487	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1439	360	36	2228	0.646	1439	1268	1.8	1.8	4.563	A
B - Spring Hill Road	66	17	1459	376	0.175	66	16	0.2	0.2	11.594	B
C - A44 North	1214	303	90	2004	0.606	1214	1435	1.5	1.5	4.558	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1439	360	36	2228	0.646	1439	1268	1.8	1.8	4.563	A
B - Spring Hill Road	66	17	1459	376	0.175	66	16	0.2	0.2	11.594	B
C - A44 North	1214	303	90	2004	0.606	1214	1435	1.5	1.5	4.558	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1439	360	36	2228	0.646	1439	1268	1.8	1.8	4.563	A
B - Spring Hill Road	66	17	1459	376	0.175	66	16	0.2	0.2	11.595	B
C - A44 North	1214	303	90	2004	0.606	1214	1435	1.5	1.5	4.558	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1439	360	36	2228	0.646	1439	1268	1.8	1.8	4.563	A
B - Spring Hill Road	66	17	1459	376	0.175	66	16	0.2	0.2	11.595	B
C - A44 North	1214	303	90	2004	0.606	1214	1435	1.5	1.5	4.558	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1439	360	36	2228	0.646	1439	1268	1.8	1.8	4.563	A
B - Spring Hill Road	66	17	1459	376	0.175	66	16	0.2	0.2	11.595	B
C - A44 North	1214	303	90	2004	0.606	1214	1435	1.5	1.5	4.558	A

2031 Without Dev, 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	A44/Spring Hill Road	Standard Roundabout		A, B, C	3.98	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 period length (min)	Time segment length (min)	Run automatically
D7	2031 Without Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	1212	100.000
B - Spring Hill Road		FLAT	✓	21	100.000
C - A44 North		FLAT	✓	1205	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	29	26	1157
	B - Spring Hill Road	9	0	12
	C - A44 North	1118	41	46

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	0	0	3
	B - Spring Hill Road	0	0	0
	C - A44 North	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.55	3.61	1.2	A	1212	1818
B - Spring Hill Road	0.04	7.26	0.0	A	21	32
C - A44 North	0.59	4.29	1.4	A	1205	1808

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1212	303	87	2209	0.549	1207	1151	0.0	1.2	3.574	A
B - Spring Hill Road	21	5	1227	520	0.040	21	67	0.0	0.0	7.211	A
C - A44 North	1205	301	38	2043	0.590	1199	1210	0.0	1.4	4.238	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1212	303	87	2209	0.549	1212	1156	1.2	1.2	3.609	A
B - Spring Hill Road	21	5	1232	517	0.041	21	67	0.0	0.0	7.256	A
C - A44 North	1205	301	38	2043	0.590	1205	1215	1.4	1.4	4.294	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1212	303	87	2209	0.549	1212	1156	1.2	1.2	3.609	A
B - Spring Hill Road	21	5	1232	517	0.041	21	67	0.0	0.0	7.256	A
C - A44 North	1205	301	38	2043	0.590	1205	1215	1.4	1.4	4.294	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1212	303	87	2209	0.549	1212	1156	1.2	1.2	3.609	A
B - Spring Hill Road	21	5	1232	517	0.041	21	67	0.0	0.0	7.256	A
C - A44 North	1205	301	38	2043	0.590	1205	1215	1.4	1.4	4.294	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1212	303	87	2209	0.549	1212	1156	1.2	1.2	3.609	A
B - Spring Hill Road	21	5	1232	517	0.041	21	67	0.0	0.0	7.256	A
C - A44 North	1205	301	38	2043	0.590	1205	1215	1.4	1.4	4.294	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1212	303	87	2209	0.549	1212	1156	1.2	1.2	3.609	A
B - Spring Hill Road	21	5	1232	517	0.041	21	67	0.0	0.0	7.256	A
C - A44 North	1205	301	38	2043	0.590	1205	1215	1.4	1.4	4.294	A

2031 Without Dev, 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	A44/Spring Hill Road	Standard Roundabout		A, B, C	4.78	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 period length (min)	Time segment length (min)	Run automatically
D8	2031 Without Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	1443	100.000
B - Spring Hill Road		FLAT	✓	66	100.000
C - A44 North		FLAT	✓	1229	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	61	11	1371
	B - Spring Hill Road	28	1	37
	C - A44 North	1194	4	31

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	0	0	4
	B - Spring Hill Road	0	0	0
	C - A44 North	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.65	4.59	1.8	A	1443	2165
B - Spring Hill Road	0.18	11.68	0.2	B	66	99
C - A44 North	0.61	4.65	1.6	A	1229	1844

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1443	361	36	2228	0.648	1436	1276	0.0	1.8	4.505	A
B - Spring Hill Road	66	17	1456	378	0.174	65	16	0.0	0.2	11.463	B
C - A44 North	1229	307	89	2004	0.613	1223	1431	0.0	1.6	4.571	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1443	361	36	2228	0.648	1443	1283	1.8	1.8	4.587	A
B - Spring Hill Road	66	17	1463	374	0.176	66	16	0.2	0.2	11.683	B
C - A44 North	1229	307	90	2004	0.613	1229	1439	1.6	1.6	4.646	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1443	361	36	2228	0.648	1443	1283	1.8	1.8	4.587	A
B - Spring Hill Road	66	17	1463	374	0.176	66	16	0.2	0.2	11.683	B
C - A44 North	1229	307	90	2004	0.613	1229	1439	1.6	1.6	4.646	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1443	361	36	2228	0.648	1443	1283	1.8	1.8	4.587	A
B - Spring Hill Road	66	17	1463	374	0.176	66	16	0.2	0.2	11.684	B
C - A44 North	1229	307	90	2004	0.613	1229	1439	1.6	1.6	4.646	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1443	361	36	2228	0.648	1443	1283	1.8	1.8	4.587	A
B - Spring Hill Road	66	17	1463	374	0.176	66	16	0.2	0.2	11.684	B
C - A44 North	1229	307	90	2004	0.613	1229	1439	1.6	1.6	4.646	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1443	361	36	2228	0.648	1443	1283	1.8	1.8	4.587	A
B - Spring Hill Road	66	17	1463	374	0.176	66	16	0.2	0.2	11.684	B
C - A44 North	1229	307	90	2004	0.613	1229	1439	1.6	1.6	4.646	A

2031 With Dev, 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	A44/Spring Hill Road	Standard Roundabout		A, B, C	4.12	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 period length (min)	Time segment length (min)	Run automatically
D9	2031 With Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	1264	100.000
B - Spring Hill Road		FLAT	✓	21	100.000
C - A44 North		FLAT	✓	1221	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	29	26	1209
	B - Spring Hill Road	9	0	12
	C - A44 North	1134	41	46

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	0	0	3
	B - Spring Hill Road	0	0	0
	C - A44 North	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.57	3.81	1.3	A	1264	1896
B - Spring Hill Road	0.04	7.73	0.0	A	21	32
C - A44 North	0.60	4.38	1.5	A	1221	1831

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1264	316	87	2209	0.572	1259	1166	0.0	1.3	3.765	A
B - Spring Hill Road	21	5	1279	490	0.043	21	67	0.0	0.0	7.675	A
C - A44 North	1221	305	38	2043	0.598	1215	1262	0.0	1.5	4.317	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1264	316	87	2209	0.572	1264	1172	1.3	1.3	3.808	A
B - Spring Hill Road	21	5	1284	487	0.043	21	67	0.0	0.0	7.732	A
C - A44 North	1221	305	38	2043	0.598	1221	1267	1.5	1.5	4.378	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1264	316	87	2209	0.572	1264	1172	1.3	1.3	3.808	A
B - Spring Hill Road	21	5	1284	487	0.043	21	67	0.0	0.0	7.732	A
C - A44 North	1221	305	38	2043	0.598	1221	1267	1.5	1.5	4.378	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1264	316	87	2209	0.572	1264	1172	1.3	1.3	3.808	A
B - Spring Hill Road	21	5	1284	487	0.043	21	67	0.0	0.0	7.732	A
C - A44 North	1221	305	38	2043	0.598	1221	1267	1.5	1.5	4.378	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1264	316	87	2209	0.572	1264	1172	1.3	1.3	3.808	A
B - Spring Hill Road	21	5	1284	487	0.043	21	67	0.0	0.0	7.732	A
C - A44 North	1221	305	38	2043	0.598	1221	1267	1.5	1.5	4.378	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1264	316	87	2209	0.572	1264	1172	1.3	1.3	3.808	A
B - Spring Hill Road	21	5	1284	487	0.043	21	67	0.0	0.0	7.732	A
C - A44 North	1221	305	38	2043	0.598	1221	1267	1.5	1.5	4.378	A

2031 With Dev, 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	A44/Spring Hill Road	Standard Roundabout		A, B, C	4.93	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 period length (min)	Time segment length (min)	Run automatically
D10	2031 With Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	1459	100.000
B - Spring Hill Road		FLAT	✓	66	100.000
C - A44 North		FLAT	✓	1261	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	61	11	1387
	B - Spring Hill Road	28	1	37
	C - A44 North	1226	4	31

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A44 South	B - Spring Hill Road	C - A44 North
From	A - A44 South	0	0	4
	B - Spring Hill Road	0	0	0
	C - A44 North	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.65	4.68	1.9	A	1459	2188
B - Spring Hill Road	0.18	12.05	0.2	B	66	99
C - A44 North	0.63	4.85	1.7	A	1261	1891

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1459	365	36	2228	0.655	1452	1308	0.0	1.9	4.594	A
B - Spring Hill Road	66	17	1471	369	0.179	65	16	0.0	0.2	11.811	B
C - A44 North	1261	315	89	2004	0.629	1254	1447	0.0	1.7	4.760	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1459	365	36	2228	0.655	1459	1315	1.9	1.9	4.682	A
B - Spring Hill Road	66	17	1479	365	0.181	66	16	0.2	0.2	12.053	B
C - A44 North	1261	315	90	2004	0.629	1261	1455	1.7	1.7	4.846	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1459	365	36	2228	0.655	1459	1315	1.9	1.9	4.682	A
B - Spring Hill Road	66	17	1479	365	0.181	66	16	0.2	0.2	12.054	B
C - A44 North	1261	315	90	2004	0.629	1261	1455	1.7	1.7	4.847	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1459	365	36	2228	0.655	1459	1315	1.9	1.9	4.682	A
B - Spring Hill Road	66	17	1479	365	0.181	66	16	0.2	0.2	12.054	B
C - A44 North	1261	315	90	2004	0.629	1261	1455	1.7	1.7	4.847	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1459	365	36	2228	0.655	1459	1315	1.9	1.9	4.682	A
B - Spring Hill Road	66	17	1479	365	0.181	66	16	0.2	0.2	12.054	B
C - A44 North	1261	315	90	2004	0.629	1261	1455	1.7	1.7	4.847	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1459	365	36	2228	0.655	1459	1315	1.9	1.9	4.682	A
B - Spring Hill Road	66	17	1479	365	0.181	66	16	0.2	0.2	12.054	B
C - A44 North	1261	315	90	2004	0.629	1261	1455	1.7	1.7	4.847	A

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.5.1.7462 © Copyright TRL Limited, 2019	
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Filename: J07-AT-A44, Rutten Lane, Sandy Lane-201001 (Flat).j9

Path: \\vectos.local\data\Projects\Projects\160000\162751 - Yarnton, Cherwell\AA-Planning Application\TOPIC FOLDERS\Modelling

Report generation date: 19/10/2020 13:35:00

-
- »Baseline, AM
 - »Baseline, PM
 - »2028 Without Dev, AM
 - »2028 Without Dev, PM
 - »2028 With Dev, AM
 - »2028 With Dev, PM
 - »2031 Without Dev, AM
 - »2031 Without Dev, PM
 - »2031 With Dev, AM
 - »2031 With Dev, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	Junction LOS	Queue (Veh)	Delay (s)	RFC	Junction LOS
	Baseline							
A - Sandy Lane	0.3	6.42	0.24	A	0.3	6.72	0.20	A
B - A44 South	1.4	4.86	0.58		1.9	5.78	0.66	
C - Rutten Lane	0.4	8.45	0.30		0.6	10.91	0.37	
D - A44 North	1.0	3.45	0.50		1.2	3.89	0.55	
	2028 Without Dev							
A - Sandy Lane	0.4	8.07	0.29	A	0.3	8.69	0.25	A
B - A44 South	2.3	6.55	0.69		3.7	9.12	0.79	
C - Rutten Lane	0.6	11.27	0.36		0.9	17.65	0.49	
D - A44 North	1.5	4.29	0.60		1.9	5.06	0.66	
	2028 With Dev							
A - Sandy Lane	0.5	9.03	0.31	A	0.4	9.38	0.26	B
B - A44 South	2.4	6.91	0.71		5.6	12.90	0.85	
C - Rutten Lane	0.9	13.69	0.47		1.5	25.03	0.61	
D - A44 North	1.7	4.72	0.63		2.1	5.44	0.68	
	2031 Without Dev							
A - Sandy Lane	0.4	8.56	0.30	A	0.4	9.27	0.26	A
B - A44 South	2.5	7.04	0.72		4.4	10.62	0.82	
C - Rutten Lane	0.6	12.04	0.38		1.1	20.72	0.53	
D - A44 North	1.6	4.55	0.62		2.1	5.43	0.68	
	2031 With Dev							
A - Sandy Lane	0.5	9.67	0.33	A	0.4	10.07	0.28	B
B - A44 South	2.7	7.46	0.73		7.2	16.10	0.88	
C - Rutten Lane	0.9	14.85	0.49		1.9	31.67	0.66	
D - A44 North	1.9	5.04	0.65		2.3	5.86	0.70	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	07/09/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	VECTOS\Jack.Clarke-Williams
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	Baseline	AM	FLAT	07:45	09:15	90	15	✓
D2	Baseline	PM	FLAT	16:45	18:15	90	15	✓
D3	2028 Without Dev	AM	FLAT	07:45	09:15	90	15	✓
D4	2028 Without Dev	PM	FLAT	16:45	18:15	90	15	✓
D5	2028 With Dev	AM	FLAT	07:45	09:15	90	15	✓
D6	2028 With Dev	PM	FLAT	16:45	18:15	90	15	✓
D7	2031 Without Dev	AM	FLAT	07:45	09:15	90	15	✓
D8	2031 Without Dev	PM	FLAT	16:45	18:15	90	15	✓
D9	2031 With Dev	AM	FLAT	07:45	09:15	90	15	✓
D10	2031 With Dev	PM	FLAT	16:45	18:15	90	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Baseline, 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	A44/Rutten Lane/Sandy Lane	Standard Roundabout		A, B, C, D	4.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Sandy Lane	
B	A44 South	
C	Rutten Lane	
D	A44 North	

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
A - Sandy Lane	2.23	8.99	10.8	8.8	49.0	23.4	
B - A44 South	6.35	6.65	2.3	40.8	49.0	34.8	
C - Rutten Lane	2.90	4.94	6.0	11.1	49.0	11.9	
D - A44 North	6.32	9.68	5.9	15.3	49.0	23.9	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - Sandy Lane	0.526	1303
B - A44 South	0.673	2004
C - Rutten Lane	0.525	1202
D - A44 North	0.726	2287

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 period length (min)	Time segment length (min)	Run automatically
D1	Baseline	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sandy Lane		FLAT	✓	181	100.000
B - A44 South		FLAT	✓	1040	100.000
C - Rutten Lane		FLAT	✓	180	100.000
D - A44 North		FLAT	✓	1029	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
From	A - Sandy Lane	0	50	58	73
	B - A44 South	53	9	15	963
	C - Rutten Lane	61	55	0	64
	D - A44 North	69	856	104	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
From	A - Sandy Lane	0	0	0	0
	B - A44 South	0	0	0	4
	C - Rutten Lane	0	0	0	0
	D - A44 North	0	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sandy Lane	0.24	6.42	0.3	A	181	272
B - A44 South	0.58	4.86	1.4	A	1040	1560
C - Rutten Lane	0.30	8.45	0.4	A	180	270
D - A44 North	0.50	3.45	1.0	A	1029	1544

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1020	744	0.243	180	182	0.0	0.3	6.364	A
B - A44 South	1040	260	234	1781	0.584	1034	966	0.0	1.4	4.786	A
C - Rutten Lane	180	45	1092	609	0.296	178	176	0.0	0.4	8.327	A
D - A44 North	1029	257	177	2073	0.496	1025	1094	0.0	1.0	3.424	A

08:00 - 08:15

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1024	742	0.244	181	183	0.3	0.3	6.417	A
B - A44 South	1040	260	235	1780	0.584	1040	970	1.4	1.4	4.862	A
C - Rutten Lane	180	45	1098	606	0.297	180	177	0.4	0.4	8.453	A
D - A44 North	1029	257	178	2072	0.497	1029	1100	1.0	1.0	3.451	A

08:15 - 08:30

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1024	742	0.244	181	183	0.3	0.3	6.417	A
B - A44 South	1040	260	235	1780	0.584	1040	970	1.4	1.4	4.862	A
C - Rutten Lane	180	45	1098	606	0.297	180	177	0.4	0.4	8.453	A
D - A44 North	1029	257	178	2072	0.497	1029	1100	1.0	1.0	3.451	A

08:30 - 08:45

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1024	742	0.244	181	183	0.3	0.3	6.417	A
B - A44 South	1040	260	235	1780	0.584	1040	970	1.4	1.4	4.862	A
C - Rutten Lane	180	45	1098	606	0.297	180	177	0.4	0.4	8.453	A
D - A44 North	1029	257	178	2072	0.497	1029	1100	1.0	1.0	3.451	A

08:45 - 09:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1024	742	0.244	181	183	0.3	0.3	6.417	A
B - A44 South	1040	260	235	1780	0.584	1040	970	1.4	1.4	4.862	A
C - Rutten Lane	180	45	1098	606	0.297	180	177	0.4	0.4	8.453	A
D - A44 North	1029	257	178	2072	0.497	1029	1100	1.0	1.0	3.451	A

09:00 - 09:15

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1024	742	0.244	181	183	0.3	0.3	6.417	A
B - A44 South	1040	260	235	1780	0.584	1040	970	1.4	1.4	4.862	A
C - Rutten Lane	180	45	1098	606	0.297	180	177	0.4	0.4	8.454	A
D - A44 North	1029	257	178	2072	0.497	1029	1100	1.0	1.0	3.451	A

Baseline, 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	A44/Rutten Lane/Sandy Lane	Standard Roundabout		A, B, C, D	5.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	Baseline	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sandy Lane		FLAT	✓	138	100.000
B - A44 South		FLAT	✓	1214	100.000
C - Rutten Lane		FLAT	✓	193	100.000
D - A44 North		FLAT	✓	1132	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
	A - Sandy Lane	0	52	39	47
	B - A44 South	56	4	12	1142
	C - Rutten Lane	69	58	0	66
	D - A44 North	49	1022	61	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
	A - Sandy Lane	0	0	0	0
	B - A44 South	0	0	0	4
	C - Rutten Lane	0	0	0	0
	D - A44 North	0	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sandy Lane	0.20	6.72	0.3	A	138	207
B - A44 South	0.66	5.78	1.9	A	1214	1821
C - Rutten Lane	0.37	10.91	0.6	B	193	290
D - A44 North	0.55	3.89	1.2	A	1132	1698

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1140	677	0.204	137	173	0.0	0.3	6.657	A
B - A44 South	1214	303	146	1837	0.661	1206	1131	0.0	1.9	5.643	A
C - Rutten Lane	193	48	1241	527	0.366	191	111	0.0	0.6	10.632	B
D - A44 North	1132	283	185	2060	0.550	1127	1247	0.0	1.2	3.840	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1145	674	0.205	138	174	0.3	0.3	6.717	A
B - A44 South	1214	303	147	1836	0.661	1214	1136	1.9	1.9	5.781	A
C - Rutten Lane	193	48	1249	523	0.369	193	112	0.6	0.6	10.908	B
D - A44 North	1132	283	187	2058	0.550	1132	1255	1.2	1.2	3.885	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1145	674	0.205	138	174	0.3	0.3	6.717	A
B - A44 South	1214	303	147	1836	0.661	1214	1136	1.9	1.9	5.783	A
C - Rutten Lane	193	48	1249	523	0.369	193	112	0.6	0.6	10.913	B
D - A44 North	1132	283	187	2058	0.550	1132	1255	1.2	1.2	3.885	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1145	674	0.205	138	174	0.3	0.3	6.717	A
B - A44 South	1214	303	147	1836	0.661	1214	1136	1.9	1.9	5.783	A
C - Rutten Lane	193	48	1249	523	0.369	193	112	0.6	0.6	10.914	B
D - A44 North	1132	283	187	2058	0.550	1132	1255	1.2	1.2	3.885	A

17:45 - 18:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1145	674	0.205	138	174	0.3	0.3	6.717	A
B - A44 South	1214	303	147	1836	0.661	1214	1136	1.9	1.9	5.783	A
C - Rutten Lane	193	48	1249	523	0.369	193	112	0.6	0.6	10.914	B
D - A44 North	1132	283	187	2058	0.550	1132	1255	1.2	1.2	3.885	A

18:00 - 18:15

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1145	674	0.205	138	174	0.3	0.3	6.717	A
B - A44 South	1214	303	147	1836	0.661	1214	1136	1.9	1.9	5.783	A
C - Rutten Lane	193	48	1249	523	0.369	193	112	0.6	0.6	10.914	B
D - A44 North	1132	283	187	2058	0.550	1132	1255	1.2	1.2	3.885	A

2028 Without Dev, 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	A44/Rutten Lane/Sandy Lane	Standard Roundabout		A, B, C, D	5.94	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 period length (min)	Time segment length (min)	Run automatically
D3	2028 Without Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sandy Lane		FLAT	✓	181	100.000
B - A44 South		FLAT	✓	1246	100.000
C - Rutten Lane		FLAT	✓	180	100.000
D - A44 North		FLAT	✓	1247	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
	A - Sandy Lane	0	50	58	73
	B - A44 South	53	9	15	1169
	C - Rutten Lane	61	55	0	64
	D - A44 North	69	1074	104	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
	A - Sandy Lane	0	0	0	0
	B - A44 South	0	0	0	3
	C - Rutten Lane	0	0	0	0
	D - A44 North	0	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sandy Lane	0.29	8.07	0.4	A	181	272
B - A44 South	0.69	6.55	2.3	A	1246	1869
C - Rutten Lane	0.36	11.27	0.6	B	180	270
D - A44 North	0.60	4.29	1.5	A	1247	1871

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1236	631	0.287	179	182	0.0	0.4	7.953	A
B - A44 South	1246	311	233	1797	0.693	1237	1182	0.0	2.2	6.340	A
C - Rutten Lane	180	45	1295	505	0.357	178	176	0.0	0.5	10.947	B
D - A44 North	1247	312	176	2087	0.597	1241	1296	0.0	1.5	4.226	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1242	627	0.289	181	183	0.4	0.4	8.068	A
B - A44 South	1246	311	235	1796	0.694	1246	1188	2.2	2.2	6.547	A
C - Rutten Lane	180	45	1304	500	0.360	180	177	0.5	0.6	11.259	B
D - A44 North	1247	312	178	2086	0.598	1247	1306	1.5	1.5	4.290	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1242	627	0.289	181	183	0.4	0.4	8.068	A
B - A44 South	1246	311	235	1796	0.694	1246	1188	2.2	2.2	6.548	A
C - Rutten Lane	180	45	1304	500	0.360	180	177	0.6	0.6	11.265	B
D - A44 North	1247	312	178	2086	0.598	1247	1306	1.5	1.5	4.290	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1242	627	0.289	181	183	0.4	0.4	8.068	A
B - A44 South	1246	311	235	1796	0.694	1246	1188	2.2	2.3	6.548	A
C - Rutten Lane	180	45	1304	500	0.360	180	177	0.6	0.6	11.265	B
D - A44 North	1247	312	178	2086	0.598	1247	1306	1.5	1.5	4.290	A

08:45 - 09:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1242	627	0.289	181	183	0.4	0.4	8.069	A
B - A44 South	1246	311	235	1796	0.694	1246	1188	2.3	2.3	6.548	A
C - Rutten Lane	180	45	1304	500	0.360	180	177	0.6	0.6	11.265	B
D - A44 North	1247	312	178	2086	0.598	1247	1306	1.5	1.5	4.290	A

09:00 - 09:15

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1242	627	0.289	181	183	0.4	0.4	8.069	A
B - A44 South	1246	311	235	1796	0.694	1246	1188	2.3	2.3	6.548	A
C - Rutten Lane	180	45	1304	500	0.360	180	177	0.6	0.6	11.265	B
D - A44 North	1247	312	178	2086	0.598	1247	1306	1.5	1.5	4.290	A

2028 Without Dev, 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	A44/Rutten Lane/Sandy Lane	Standard Roundabout		A, B, C, D	7.84	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 period length (min)	Time segment length (min)	Run automatically
D4	2028 Without Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sandy Lane		FLAT	✓	138	100.000
B - A44 South		FLAT	✓	1458	100.000
C - Rutten Lane		FLAT	✓	193	100.000
D - A44 North		FLAT	✓	1364	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
	A - Sandy Lane	0	52	39	47
	B - A44 South	56	4	12	1386
	C - Rutten Lane	69	58	0	66
	D - A44 North	49	1254	61	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
	A - Sandy Lane	0	0	0	0
	B - A44 South	0	0	0	3
	C - Rutten Lane	0	0	0	0
	D - A44 North	0	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sandy Lane	0.25	8.69	0.3	A	138	207
B - A44 South	0.79	9.12	3.7	A	1458	2187
C - Rutten Lane	0.49	17.65	0.9	C	193	290
D - A44 North	0.66	5.06	1.9	A	1364	2046

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1369	557	0.248	137	172	0.0	0.3	8.541	A
B - A44 South	1458	364	146	1853	0.787	1444	1359	0.0	3.5	8.521	A
C - Rutten Lane	193	48	1479	405	0.477	189	111	0.0	0.9	16.473	C
D - A44 North	1364	341	184	2077	0.657	1356	1484	0.0	1.9	4.945	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1377	552	0.250	138	174	0.3	0.3	8.686	A
B - A44 South	1458	364	147	1853	0.787	1458	1368	3.5	3.6	9.095	A
C - Rutten Lane	193	48	1493	397	0.486	193	112	0.9	0.9	17.595	C
D - A44 North	1364	341	187	2075	0.657	1364	1499	1.9	1.9	5.061	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1377	552	0.250	138	174	0.3	0.3	8.687	A
B - A44 South	1458	364	147	1853	0.787	1458	1368	3.6	3.6	9.108	A
C - Rutten Lane	193	48	1493	397	0.486	193	112	0.9	0.9	17.632	C
D - A44 North	1364	341	187	2075	0.657	1364	1499	1.9	1.9	5.062	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1377	552	0.250	138	174	0.3	0.3	8.687	A
B - A44 South	1458	364	147	1853	0.787	1458	1368	3.6	3.7	9.113	A
C - Rutten Lane	193	48	1493	397	0.486	193	112	0.9	0.9	17.640	C
D - A44 North	1364	341	187	2075	0.657	1364	1499	1.9	1.9	5.062	A

17:45 - 18:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1377	552	0.250	138	174	0.3	0.3	8.687	A
B - A44 South	1458	364	147	1853	0.787	1458	1368	3.7	3.7	9.115	A
C - Rutten Lane	193	48	1493	397	0.486	193	112	0.9	0.9	17.645	C
D - A44 North	1364	341	187	2075	0.657	1364	1499	1.9	1.9	5.062	A

18:00 - 18:15

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1377	552	0.250	138	174	0.3	0.3	8.687	A
B - A44 South	1458	364	147	1853	0.787	1458	1368	3.7	3.7	9.117	A
C - Rutten Lane	193	48	1493	397	0.486	193	112	0.9	0.9	17.645	C
D - A44 North	1364	341	187	2075	0.657	1364	1499	1.9	1.9	5.062	A

2028 With Dev, 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	A44/Rutten Lane/Sandy Lane	Standard Roundabout		A, B, C, D	6.59	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 period length (min)	Time segment length (min)	Run automatically
D5	2028 With Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sandy Lane		FLAT	✓	181	100.000
B - A44 South		FLAT	✓	1274	100.000
C - Rutten Lane		FLAT	✓	229	100.000
D - A44 North		FLAT	✓	1292	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
	A - Sandy Lane	0	50	58	73
	B - A44 South	53	9	29	1183
	C - Rutten Lane	61	99	0	69
	D - A44 North	69	1117	106	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
	A - Sandy Lane	0	0	0	0
	B - A44 South	0	0	0	3
	C - Rutten Lane	0	0	0	0
	D - A44 North	0	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sandy Lane	0.31	9.03	0.5	A	181	272
B - A44 South	0.71	6.91	2.4	A	1274	1911
C - Rutten Lane	0.47	13.69	0.9	B	229	344
D - A44 North	0.63	4.72	1.7	A	1292	1938

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1323	584	0.310	179	181	0.0	0.4	8.860	A
B - A44 South	1274	318	235	1796	0.709	1264	1267	0.0	2.4	6.660	A
C - Rutten Lane	229	57	1308	497	0.460	226	192	0.0	0.8	13.099	B
D - A44 North	1292	323	219	2057	0.628	1285	1314	0.0	1.7	4.627	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1331	579	0.312	181	183	0.4	0.5	9.032	A
B - A44 South	1274	318	237	1795	0.710	1274	1275	2.4	2.4	6.905	A
C - Rutten Lane	229	57	1318	492	0.465	229	193	0.8	0.9	13.671	B
D - A44 North	1292	323	222	2055	0.629	1292	1325	1.7	1.7	4.718	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1331	579	0.312	181	183	0.5	0.5	9.034	A
B - A44 South	1274	318	237	1795	0.710	1274	1275	2.4	2.4	6.908	A
C - Rutten Lane	229	57	1318	492	0.465	229	193	0.9	0.9	13.682	B
D - A44 North	1292	323	222	2055	0.629	1292	1325	1.7	1.7	4.718	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1331	579	0.312	181	183	0.5	0.5	9.035	A
B - A44 South	1274	318	237	1795	0.710	1274	1275	2.4	2.4	6.910	A
C - Rutten Lane	229	57	1318	492	0.465	229	193	0.9	0.9	13.685	B
D - A44 North	1292	323	222	2055	0.629	1292	1325	1.7	1.7	4.718	A

08:45 - 09:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1331	579	0.312	181	183	0.5	0.5	9.035	A
B - A44 South	1274	318	237	1795	0.710	1274	1275	2.4	2.4	6.910	A
C - Rutten Lane	229	57	1318	492	0.465	229	193	0.9	0.9	13.686	B
D - A44 North	1292	323	222	2055	0.629	1292	1325	1.7	1.7	4.718	A

09:00 - 09:15

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1331	579	0.312	181	183	0.5	0.5	9.035	A
B - A44 South	1274	318	237	1795	0.710	1274	1275	2.4	2.4	6.910	A
C - Rutten Lane	229	57	1318	492	0.465	229	193	0.9	0.9	13.689	B
D - A44 North	1292	323	222	2055	0.629	1292	1325	1.7	1.7	4.718	A

2028 With Dev, 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	A44/Rutten Lane/Sandy Lane	Standard Roundabout		A, B, C, D	10.39	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 period length (min)	Time segment length (min)	Run automatically
D6	2028 With Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sandy Lane		FLAT	✓	138	100.000
B - A44 South		FLAT	✓	1574	100.000
C - Rutten Lane		FLAT	✓	222	100.000
D - A44 North		FLAT	✓	1394	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
	A - Sandy Lane	0	52	39	47
	B - A44 South	56	4	70	1444
	C - Rutten Lane	69	85	0	68
	D - A44 North	49	1281	64	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
	A - Sandy Lane	0	0	0	0
	B - A44 South	0	0	0	3
	C - Rutten Lane	0	0	0	0
	D - A44 North	0	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sandy Lane	0.26	9.38	0.4	A	138	207
B - A44 South	0.85	12.90	5.6	B	1574	2361
C - Rutten Lane	0.61	25.03	1.5	D	222	333
D - A44 North	0.68	5.44	2.1	A	1394	2091

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1424	527	0.262	137	171	0.0	0.3	9.180	A
B - A44 South	1574	394	149	1853	0.849	1553	1412	0.0	5.2	11.324	B
C - Rutten Lane	222	56	1531	377	0.590	217	171	0.0	1.4	21.845	C
D - A44 North	1394	348	209	2059	0.677	1386	1538	0.0	2.1	5.283	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1434	522	0.264	138	174	0.3	0.4	9.373	A
B - A44 South	1574	394	150	1852	0.850	1573	1422	5.2	5.4	12.781	B
C - Rutten Lane	222	56	1550	366	0.606	222	173	1.4	1.5	24.765	C
D - A44 North	1394	348	214	2056	0.678	1394	1558	2.1	2.1	5.432	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1434	522	0.264	138	174	0.4	0.4	9.378	A
B - A44 South	1574	394	150	1852	0.850	1574	1422	5.4	5.5	12.849	B
C - Rutten Lane	222	56	1551	366	0.607	222	173	1.5	1.5	24.955	C
D - A44 North	1394	348	214	2056	0.678	1394	1559	2.1	2.1	5.435	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1434	522	0.264	138	174	0.4	0.4	9.378	A
B - A44 South	1574	394	150	1852	0.850	1574	1422	5.5	5.5	12.875	B
C - Rutten Lane	222	56	1551	366	0.607	222	173	1.5	1.5	25.000	D
D - A44 North	1394	348	214	2056	0.678	1394	1559	2.1	2.1	5.436	A

17:45 - 18:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1434	522	0.264	138	174	0.4	0.4	9.378	A
B - A44 South	1574	394	150	1852	0.850	1574	1422	5.5	5.5	12.887	B
C - Rutten Lane	222	56	1551	366	0.607	222	173	1.5	1.5	25.024	D
D - A44 North	1394	348	214	2056	0.678	1394	1559	2.1	2.1	5.436	A

18:00 - 18:15

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1434	522	0.264	138	174	0.4	0.4	9.379	A
B - A44 South	1574	394	150	1852	0.850	1574	1422	5.5	5.6	12.897	B
C - Rutten Lane	222	56	1551	366	0.607	222	173	1.5	1.5	25.035	D
D - A44 North	1394	348	214	2056	0.678	1394	1559	2.1	2.1	5.436	A

2031 Without Dev, 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	A44/Rutten Lane/Sandy Lane	Standard Roundabout		A, B, C, D	6.32	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 period length (min)	Time segment length (min)	Run automatically
D7	2031 Without Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sandy Lane		FLAT	✓	181	100.000
B - A44 South		FLAT	✓	1284	100.000
C - Rutten Lane		FLAT	✓	180	100.000
D - A44 North		FLAT	✓	1294	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
	A - Sandy Lane	0	50	58	73
	B - A44 South	53	9	15	1207
	C - Rutten Lane	61	55	0	64
	D - A44 North	69	1121	104	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
	A - Sandy Lane	0	0	0	0
	B - A44 South	0	0	0	3
	C - Rutten Lane	0	0	0	0
	D - A44 North	0	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sandy Lane	0.30	8.56	0.4	A	181	272
B - A44 South	0.72	7.04	2.5	A	1284	1926
C - Rutten Lane	0.38	12.04	0.6	B	180	270
D - A44 North	0.62	4.55	1.6	A	1294	1941

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1282	605	0.299	179	181	0.0	0.4	8.422	A
B - A44 South	1284	321	233	1797	0.715	1274	1228	0.0	2.4	6.771	A
C - Rutten Lane	180	45	1332	485	0.371	178	176	0.0	0.6	11.646	B
D - A44 North	1294	324	176	2087	0.620	1288	1333	0.0	1.6	4.468	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1289	601	0.301	181	183	0.4	0.4	8.561	A
B - A44 South	1284	321	235	1796	0.715	1284	1235	2.4	2.5	7.030	A
C - Rutten Lane	180	45	1342	479	0.376	180	177	0.6	0.6	12.031	B
D - A44 North	1294	324	178	2086	0.620	1294	1344	1.6	1.6	4.547	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1289	601	0.301	181	183	0.4	0.4	8.562	A
B - A44 South	1284	321	235	1796	0.715	1284	1235	2.5	2.5	7.033	A
C - Rutten Lane	180	45	1342	479	0.376	180	177	0.6	0.6	12.036	B
D - A44 North	1294	324	178	2086	0.620	1294	1344	1.6	1.6	4.547	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1289	601	0.301	181	183	0.4	0.4	8.562	A
B - A44 South	1284	321	235	1796	0.715	1284	1235	2.5	2.5	7.036	A
C - Rutten Lane	180	45	1342	479	0.376	180	177	0.6	0.6	12.039	B
D - A44 North	1294	324	178	2086	0.620	1294	1344	1.6	1.6	4.547	A

08:45 - 09:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1289	601	0.301	181	183	0.4	0.4	8.562	A
B - A44 South	1284	321	235	1796	0.715	1284	1235	2.5	2.5	7.036	A
C - Rutten Lane	180	45	1342	479	0.376	180	177	0.6	0.6	12.039	B
D - A44 North	1294	324	178	2086	0.620	1294	1344	1.6	1.6	4.547	A

09:00 - 09:15

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1289	601	0.301	181	183	0.4	0.4	8.562	A
B - A44 South	1284	321	235	1796	0.715	1284	1235	2.5	2.5	7.036	A
C - Rutten Lane	180	45	1342	479	0.376	180	177	0.6	0.6	12.039	B
D - A44 North	1294	324	178	2086	0.620	1294	1344	1.6	1.6	4.547	A

2031 Without Dev, 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	A44/Rutten Lane/Sandy Lane	Standard Roundabout		A, B, C, D	8.88	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 period length (min)	Time segment length (min)	Run automatically
D8	2031 Without Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sandy Lane		FLAT	✓	138	100.000
B - A44 South		FLAT	✓	1514	100.000
C - Rutten Lane		FLAT	✓	193	100.000
D - A44 North		FLAT	✓	1412	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
	A - Sandy Lane	0	52	39	47
	B - A44 South	56	4	12	1442
	C - Rutten Lane	69	58	0	66
	D - A44 North	49	1302	61	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
	A - Sandy Lane	0	0	0	0
	B - A44 South	0	0	0	3
	C - Rutten Lane	0	0	0	0
	D - A44 North	0	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sandy Lane	0.26	9.27	0.4	A	138	207
B - A44 South	0.82	10.62	4.4	B	1514	2271
C - Rutten Lane	0.53	20.72	1.1	C	193	290
D - A44 North	0.68	5.43	2.1	A	1412	2118

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1416	531	0.260	137	172	0.0	0.3	9.093	A
B - A44 South	1514	379	146	1853	0.817	1497	1407	0.0	4.2	9.697	A
C - Rutten Lane	193	48	1532	376	0.513	189	111	0.0	1.0	18.878	C
D - A44 North	1412	353	184	2077	0.680	1404	1537	0.0	2.1	5.282	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1425	526	0.262	138	174	0.3	0.4	9.273	A
B - A44 South	1514	379	147	1853	0.817	1513	1416	4.2	4.3	10.575	B
C - Rutten Lane	193	48	1548	367	0.526	193	112	1.0	1.1	20.609	C
D - A44 North	1412	353	187	2075	0.681	1412	1554	2.1	2.1	5.427	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1425	526	0.262	138	174	0.4	0.4	9.274	A
B - A44 South	1514	379	147	1853	0.817	1514	1416	4.3	4.4	10.604	B
C - Rutten Lane	193	48	1549	367	0.526	193	112	1.1	1.1	20.686	C
D - A44 North	1412	353	187	2075	0.681	1412	1555	2.1	2.1	5.430	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1425	526	0.262	138	174	0.4	0.4	9.275	A
B - A44 South	1514	379	147	1853	0.817	1514	1416	4.4	4.4	10.613	B
C - Rutten Lane	193	48	1549	367	0.526	193	112	1.1	1.1	20.704	C
D - A44 North	1412	353	187	2075	0.681	1412	1555	2.1	2.1	5.430	A

17:45 - 18:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1425	526	0.262	138	174	0.4	0.4	9.275	A
B - A44 South	1514	379	147	1853	0.817	1514	1416	4.4	4.4	10.619	B
C - Rutten Lane	193	48	1549	367	0.526	193	112	1.1	1.1	20.712	C
D - A44 North	1412	353	187	2075	0.681	1412	1555	2.1	2.1	5.430	A

18:00 - 18:15

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1425	526	0.262	138	174	0.4	0.4	9.275	A
B - A44 South	1514	379	147	1853	0.817	1514	1416	4.4	4.4	10.621	B
C - Rutten Lane	193	48	1549	367	0.526	193	112	1.1	1.1	20.715	C
D - A44 North	1412	353	187	2075	0.681	1412	1555	2.1	2.1	5.430	A

2031 With Dev, 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	A44/Rutten Lane/Sandy Lane	Standard Roundabout		A, B, C, D	7.06	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 period length (min)	Time segment length (min)	Run automatically
D9	2031 With Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sandy Lane		FLAT	✓	181	100.000
B - A44 South		FLAT	✓	1312	100.000
C - Rutten Lane		FLAT	✓	229	100.000
D - A44 North		FLAT	✓	1340	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
	A - Sandy Lane	0	50	58	73
	B - A44 South	53	9	29	1221
	C - Rutten Lane	61	99	0	69
	D - A44 North	69	1165	106	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
	A - Sandy Lane	0	0	0	0
	B - A44 South	0	0	0	3
	C - Rutten Lane	0	0	0	0
	D - A44 North	0	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sandy Lane	0.33	9.67	0.5	A	181	272
B - A44 South	0.73	7.46	2.7	A	1312	1968
C - Rutten Lane	0.49	14.85	0.9	B	229	344
D - A44 North	0.65	5.04	1.9	A	1340	2010

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1370	558	0.324	179	181	0.0	0.5	9.459	A
B - A44 South	1312	328	235	1796	0.731	1301	1314	0.0	2.6	7.137	A
C - Rutten Lane	229	57	1345	477	0.480	225	192	0.0	0.9	14.099	B
D - A44 North	1340	335	219	2057	0.652	1333	1351	0.0	1.8	4.925	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1379	553	0.327	181	183	0.5	0.5	9.668	A
B - A44 South	1312	328	237	1795	0.731	1312	1323	2.6	2.7	7.447	A
C - Rutten Lane	229	57	1356	472	0.486	229	193	0.9	0.9	14.822	B
D - A44 North	1340	335	222	2055	0.652	1340	1363	1.8	1.9	5.037	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1379	553	0.327	181	183	0.5	0.5	9.671	A
B - A44 South	1312	328	237	1795	0.731	1312	1323	2.7	2.7	7.453	A
C - Rutten Lane	229	57	1356	471	0.486	229	193	0.9	0.9	14.838	B
D - A44 North	1340	335	222	2054	0.652	1340	1363	1.9	1.9	5.038	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1379	553	0.327	181	183	0.5	0.5	9.672	A
B - A44 South	1312	328	237	1795	0.731	1312	1323	2.7	2.7	7.453	A
C - Rutten Lane	229	57	1356	471	0.486	229	193	0.9	0.9	14.845	B
D - A44 North	1340	335	222	2054	0.652	1340	1363	1.9	1.9	5.038	A

08:45 - 09:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1379	553	0.327	181	183	0.5	0.5	9.672	A
B - A44 South	1312	328	237	1795	0.731	1312	1323	2.7	2.7	7.456	A
C - Rutten Lane	229	57	1356	471	0.486	229	193	0.9	0.9	14.845	B
D - A44 North	1340	335	222	2054	0.652	1340	1363	1.9	1.9	5.038	A

09:00 - 09:15

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	181	45	1379	553	0.327	181	183	0.5	0.5	9.672	A
B - A44 South	1312	328	237	1795	0.731	1312	1323	2.7	2.7	7.456	A
C - Rutten Lane	229	57	1356	471	0.486	229	193	0.9	0.9	14.845	B
D - A44 North	1340	335	222	2054	0.652	1340	1363	1.9	1.9	5.038	A

2031 With Dev, 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	A44/Rutten Lane/Sandy Lane	Standard Roundabout		A, B, C, D	12.51	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 period length (min)	Time segment length (min)	Run automatically
D10	2031 With Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sandy Lane		FLAT	✓	138	100.000
B - A44 South		FLAT	✓	1630	100.000
C - Rutten Lane		FLAT	✓	222	100.000
D - A44 North		FLAT	✓	1442	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
From	A - Sandy Lane	0	52	39	47
	B - A44 South	56	4	70	1500
	C - Rutten Lane	69	85	0	68
	D - A44 North	49	1329	64	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - Sandy Lane	B - A44 South	C - Rutten Lane	D - A44 North
From	A - Sandy Lane	0	0	0	0
	B - A44 South	0	0	0	3
	C - Rutten Lane	0	0	0	0
	D - A44 North	0	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - Sandy Lane	0.28	10.07	0.4	B	138	207
B - A44 South	0.88	16.10	7.2	C	1630	2445
C - Rutten Lane	0.66	31.67	1.9	D	222	333
D - A44 North	0.70	5.86	2.3	A	1442	2163

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1471	502	0.275	137	171	0.0	0.4	9.818	A
B - A44 South	1630	407	149	1853	0.880	1604	1458	0.0	6.4	13.330	B
C - Rutten Lane	222	56	1582	349	0.636	216	171	0.0	1.6	25.900	D
D - A44 North	1442	360	209	2060	0.700	1433	1589	0.0	2.3	5.663	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1482	496	0.278	138	174	0.4	0.4	10.059	B
B - A44 South	1630	407	150	1852	0.880	1628	1470	6.4	6.8	15.802	C
C - Rutten Lane	222	56	1605	336	0.660	221	173	1.6	1.8	30.945	D
D - A44 North	1442	360	213	2056	0.701	1442	1613	2.3	2.3	5.856	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1482	496	0.278	138	174	0.4	0.4	10.065	B
B - A44 South	1630	407	150	1852	0.880	1629	1470	6.8	7.0	15.977	C
C - Rutten Lane	222	56	1606	336	0.661	222	173	1.8	1.9	31.436	D
D - A44 North	1442	360	214	2056	0.701	1442	1614	2.3	2.3	5.862	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1482	496	0.278	138	174	0.4	0.4	10.066	B
B - A44 South	1630	407	150	1852	0.880	1630	1470	7.0	7.1	16.044	C
C - Rutten Lane	222	56	1607	335	0.662	222	173	1.9	1.9	31.569	D
D - A44 North	1442	360	214	2056	0.701	1442	1615	2.3	2.3	5.862	A

17:45 - 18:00

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1482	496	0.278	138	174	0.4	0.4	10.067	B
B - A44 South	1630	407	150	1852	0.880	1630	1470	7.1	7.1	16.080	C
C - Rutten Lane	222	56	1607	335	0.662	222	173	1.9	1.9	31.628	D
D - A44 North	1442	360	214	2056	0.701	1442	1615	2.3	2.3	5.862	A

18:00 - 18:15

Am	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - Sandy Lane	138	35	1482	496	0.278	138	174	0.4	0.4	10.067	B
B - A44 South	1630	407	150	1852	0.880	1630	1470	7.1	7.2	16.101	C
C - Rutten Lane	222	56	1607	335	0.662	222	173	1.9	1.9	31.667	D
D - A44 North	1442	360	214	2056	0.701	1442	1615	2.3	2.3	5.862	A

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.5.1.7462 © Copyright TRL Limited, 2019	
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Filename: J09-AT-A44, Cassington Road-201001 (Flat).j9

Path: \\vectos.local\data\Projects\Projects\160000\162751 - Yarnton, Cherwell\AA-Planning Application\TOPIC FOLDERS\Modelling

Report generation date: 19/10/2020 13:41:02

-
- »Baseline, AM
 - »Baseline, PM
 - »2028 Without Dev, AM
 - »2028 Without Dev, PM
 - »2028 With Dev, AM
 - »2028 With Dev, PM
 - »2031 Without Dev, AM
 - »2031 Without Dev, PM
 - »2031 With Dev, AM
 - »2031 With Dev, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Junction LOS
	Baseline											
A - A44 South	D1	1.4	4.39	0.58	A	A	D2	2.9	7.34	0.75	A	A
B - Cassington Road		0.6	6.27	0.37	A			0.7	8.41	0.42	A	
C - A44 North		1.0	3.52	0.49	A			1.2	3.96	0.55	A	
4 - Car Park		0.0	0.00	0.00	A			0.0	14.57	0.04	B	
	2028 Without Dev											
A - A44 South	D3	2.0	5.54	0.67	A	A	D4	11.9	24.64	0.93	C	C
B - Cassington Road		0.7	7.76	0.42	A			1.5	17.02	0.60	C	
C - A44 North		1.8	5.00	0.65	A			1.9	5.14	0.66	A	
4 - Car Park		0.0	0.00	0.00	A			0.1	24.30	0.06	C	
	2028 With Dev											
A - A44 South	D5	2.1	5.80	0.68	A	A	D6	37.3	72.48	0.99	F	E
B - Cassington Road		0.8	8.07	0.43	A			2.1	24.89	0.69	C	
C - A44 North		2.2	5.68	0.69	A			2.2	5.66	0.69	A	
4 - Car Park		0.0	0.00	0.00	A			0.1	28.91	0.07	D	
	2031 Without Dev											
A - A44 South	D7	2.2	5.85	0.68	A	A	D8	27.4	54.35	0.97	F	D
B - Cassington Road		0.8	8.13	0.43	A			2.0	22.89	0.67	C	
C - A44 North		2.2	5.64	0.69	A			2.2	5.61	0.68	A	
4 - Car Park		0.0	0.00	0.00	A			0.1	28.54	0.07	D	
	2031 With Dev											
A - A44 South	D9	2.3	6.14	0.70	A	A	D10	121.7	214.99	1.03	F	F
B - Cassington Road		0.8	8.46	0.44	A			2.6	29.85	0.72	D	
C - A44 North		2.7	6.55	0.73	A			2.4	6.12	0.71	A	
4 - Car Park		0.0	0.00	0.00	A			0.1	35.17	0.09	E	

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. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	07/09/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	VECTOS\Jack.Clarke-Williams
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	Baseline	AM	FLAT	07:45	09:15	90	15	✓
D2	Baseline	PM	FLAT	16:45	18:15	90	15	✓
D3	2028 Without Dev	AM	FLAT	07:45	09:15	90	15	✓
D4	2028 Without Dev	PM	FLAT	16:45	18:15	90	15	✓
D5	2028 With Dev	AM	FLAT	07:45	09:15	90	15	✓
D6	2028 With Dev	PM	FLAT	16:45	18:15	90	15	✓
D7	2031 Without Dev	AM	FLAT	07:45	09:15	90	15	✓
D8	2031 Without Dev	PM	FLAT	16:45	18:15	90	15	✓
D9	2031 With Dev	AM	FLAT	07:45	09:15	90	15	✓
D10	2031 With Dev	PM	FLAT	16:45	18:15	90	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A44 South - 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	A44/Cassington Road	Standard Roundabout		A, B, C, 4	4.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A44 South	
B	Cassington Road	
C	A44 North	
4	Car Park	

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
A - A44 South	4.04	6.92	63.9	47.0	38.0	28.2	
B - Cassington Road	3.98	5.60	13.0	9.8	38.0	24.5	
C - A44 North	7.88	7.88	0.0	28.9	38.0	44.2	
4 - Car Park	3.00	4.90	1.5	4.5	38.0	30.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A44 South	0.728	2055
B - Cassington Road	0.598	1508
C - A44 North	0.758	2306
4 - Car Park	0.424	851

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 period length (min)	Time segment length (min)	Run automatically
D1	Baseline	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	1116	100.000
B - Cassington Road		FLAT	✓	331	100.000
C - A44 North		FLAT	✓	988	100.000
4 - Car Park		FLAT	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
From	A - A44 South	5	185	926	0
	B - Cassington Road	261	0	70	0
	C - A44 North	912	48	28	0
	4 - Car Park	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
From	A - A44 South	0	0	4	0
	B - Cassington Road	1	0	0	0
	C - A44 North	5	0	0	0
	4 - Car Park	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.58	4.39	1.4	A	1116	1674
B - Cassington Road	0.37	6.27	0.6	A	331	496
C - A44 North	0.49	3.52	1.0	A	988	1482
4 - Car Park	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1116	279	76	1936	0.577	1111	1173	0.0	1.3	4.336	A
B - Cassington Road	331	83	954	908	0.365	329	232	0.0	0.6	6.194	A
C - A44 North	988	247	264	2011	0.491	984	1019	0.0	1.0	3.493	A
4 - Car Park	0	0	1248	301	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1116	279	76	1936	0.577	1116	1178	1.3	1.4	4.392	A
B - Cassington Road	331	83	959	905	0.366	331	233	0.6	0.6	6.271	A
C - A44 North	988	247	266	2010	0.492	988	1024	1.0	1.0	3.522	A
4 - Car Park	0	0	1254	298	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1116	279	76	1936	0.577	1116	1178	1.4	1.4	4.392	A
B - Cassington Road	331	83	959	905	0.366	331	233	0.6	0.6	6.271	A
C - A44 North	988	247	266	2010	0.492	988	1024	1.0	1.0	3.522	A
4 - Car Park	0	0	1254	298	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1116	279	76	1936	0.577	1116	1178	1.4	1.4	4.392	A
B - Cassington Road	331	83	959	905	0.366	331	233	0.6	0.6	6.271	A
C - A44 North	988	247	266	2010	0.492	988	1024	1.0	1.0	3.522	A
4 - Car Park	0	0	1254	298	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1116	279	76	1936	0.577	1116	1178	1.4	1.4	4.392	A
B - Cassington Road	331	83	959	905	0.366	331	233	0.6	0.6	6.271	A
C - A44 North	988	247	266	2010	0.492	988	1024	1.0	1.0	3.522	A
4 - Car Park	0	0	1254	298	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1116	279	76	1936	0.577	1116	1178	1.4	1.4	4.392	A
B - Cassington Road	331	83	959	905	0.366	331	233	0.6	0.6	6.271	A
C - A44 North	988	247	266	2010	0.492	988	1024	1.0	1.0	3.522	A
4 - Car Park	0	0	1254	298	0.000	0	0	0.0	0.0	0.000	A

Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A44 South - 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	A44/Cassington Road	Standard Roundabout		A, B, C, 4	6.16	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 period length (min)	Time segment length (min)	Run automatically
D2	Baseline	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	1441	100.000
B - Cassington Road		FLAT	✓	309	100.000
C - A44 North		FLAT	✓	1103	100.000
4 - Car Park		FLAT	✓	10	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
From	A - A44 South	3	247	1181	10
	B - Cassington Road	248	0	59	2
	C - A44 North	1018	44	33	8
	4 - Car Park	4	1	5	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
	A - A44 South	0	0	4	0
	B - Cassington Road	1	0	0	0
	C - A44 North	5	0	0	0
	4 - Car Park	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.75	7.34	2.9	A	1441	2162
B - Cassington Road	0.42	8.41	0.7	A	309	463
C - A44 North	0.55	3.96	1.2	A	1103	1654
4 - Car Park	0.04	14.57	0.0	B	10	15

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1441	360	83	1932	0.746	1430	1266	0.0	2.8	7.021	A
B - Cassington Road	309	77	1222	743	0.416	306	290	0.0	0.7	8.195	A
C - A44 North	1103	276	261	2014	0.548	1098	1268	0.0	1.2	3.912	A
4 - Car Park	10	3	1339	260	0.038	10	20	0.0	0.0	14.377	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1441	360	83	1931	0.746	1441	1273	2.8	2.9	7.332	A
B - Cassington Road	309	77	1232	737	0.419	309	292	0.7	0.7	8.410	A
C - A44 North	1103	276	263	2012	0.548	1103	1278	1.2	1.2	3.960	A
4 - Car Park	10	3	1346	257	0.039	10	20	0.0	0.0	14.572	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1441	360	83	1931	0.746	1441	1273	2.9	2.9	7.338	A
B - Cassington Road	309	77	1232	737	0.419	309	292	0.7	0.7	8.413	A
C - A44 North	1103	276	263	2012	0.548	1103	1278	1.2	1.2	3.960	A
4 - Car Park	10	3	1346	257	0.039	10	20	0.0	0.0	14.574	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1441	360	83	1931	0.746	1441	1273	2.9	2.9	7.338	A
B - Cassington Road	309	77	1232	737	0.419	309	292	0.7	0.7	8.414	A
C - A44 North	1103	276	263	2012	0.548	1103	1278	1.2	1.2	3.960	A
4 - Car Park	10	3	1346	257	0.039	10	20	0.0	0.0	14.574	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1441	360	83	1931	0.746	1441	1273	2.9	2.9	7.340	A
B - Cassington Road	309	77	1232	737	0.419	309	292	0.7	0.7	8.414	A
C - A44 North	1103	276	263	2012	0.548	1103	1278	1.2	1.2	3.960	A
4 - Car Park	10	3	1346	257	0.039	10	20	0.0	0.0	14.574	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1441	360	83	1931	0.746	1441	1273	2.9	2.9	7.340	A
B - Cassington Road	309	77	1232	737	0.419	309	292	0.7	0.7	8.414	A
C - A44 North	1103	276	263	2012	0.548	1103	1278	1.2	1.2	3.960	A
4 - Car Park	10	3	1346	257	0.039	10	20	0.0	0.0	14.574	B

2028 Without Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A44 South - 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	A44/Cassington Road	Standard Roundabout		A, B, C, 4	5.55	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 period length (min)	Time segment length (min)	Run automatically
D3	2028 Without Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	1297	100.000
B - Cassington Road		FLAT	✓	336	100.000
C - A44 North		FLAT	✓	1325	100.000
4 - Car Park		FLAT	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
From	A - A44 South	5	185	1107	0
	B - Cassington Road	261	0	75	0
	C - A44 North	1244	53	28	0
	4 - Car Park	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
From	A - A44 South	0	0	3	0
	B - Cassington Road	1	0	0	0
	C - A44 North	3	0	0	0
	4 - Car Park	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.67	5.54	2.0	A	1297	1945
B - Cassington Road	0.42	7.76	0.7	A	336	504
C - A44 North	0.65	5.00	1.8	A	1325	1987
4 - Car Park	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1297	324	81	1947	0.666	1289	1501	0.0	2.0	5.413	A
B - Cassington Road	336	84	1133	804	0.418	333	237	0.0	0.7	7.599	A
C - A44 North	1325	331	264	2046	0.647	1318	1203	0.0	1.8	4.893	A
4 - Car Park	0	0	1582	163	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1297	324	81	1946	0.666	1297	1510	2.0	2.0	5.541	A
B - Cassington Road	336	84	1140	800	0.420	336	238	0.7	0.7	7.757	A
C - A44 North	1325	331	266	2045	0.648	1325	1210	1.8	1.8	5.000	A
4 - Car Park	0	0	1591	159	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1297	324	81	1946	0.666	1297	1510	2.0	2.0	5.544	A
B - Cassington Road	336	84	1140	800	0.420	336	238	0.7	0.7	7.759	A
C - A44 North	1325	331	266	2045	0.648	1325	1210	1.8	1.8	5.000	A
4 - Car Park	0	0	1591	159	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1297	324	81	1946	0.666	1297	1510	2.0	2.0	5.544	A
B - Cassington Road	336	84	1140	800	0.420	336	238	0.7	0.7	7.759	A
C - A44 North	1325	331	266	2045	0.648	1325	1210	1.8	1.8	5.000	A
4 - Car Park	0	0	1591	159	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1297	324	81	1946	0.666	1297	1510	2.0	2.0	5.544	A
B - Cassington Road	336	84	1140	800	0.420	336	238	0.7	0.7	7.759	A
C - A44 North	1325	331	266	2045	0.648	1325	1210	1.8	1.8	5.000	A
4 - Car Park	0	0	1591	159	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1297	324	81	1946	0.666	1297	1510	2.0	2.0	5.544	A
B - Cassington Road	336	84	1140	800	0.420	336	238	0.7	0.7	7.759	A
C - A44 North	1325	331	266	2045	0.648	1325	1210	1.8	1.8	5.000	A
4 - Car Park	0	0	1591	159	0.000	0	0	0.0	0.0	0.000	A

2028 Without Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A44 South - 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	A44/Cassington Road	Standard Roundabout		A, B, C, 4	16.39	C

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 period length (min)	Time segment length (min)	Run automatically
D4	2028 Without Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	1799	100.000
B - Cassington Road		FLAT	✓	314	100.000
C - A44 North		FLAT	✓	1329	100.000
4 - Car Park		FLAT	✓	10	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
From	A - A44 South	3	247	1539	10
	B - Cassington Road	248	0	64	2
	C - A44 North	1247	49	33	0
	4 - Car Park	4	1	5	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
From	A - A44 South	0	0	3	0
	B - Cassington Road	1	0	0	0
	C - A44 North	4	0	0	0
	4 - Car Park	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.93	24.64	11.9	C	1799	2699
B - Cassington Road	0.60	17.02	1.5	C	314	471
C - A44 North	0.66	5.14	1.9	A	1329	1994
4 - Car Park	0.06	24.30	0.1	C	10	15

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1799	450	87	1942	0.927	1760	1491	0.0	9.7	17.228	C
B - Cassington Road	314	78	1556	546	0.575	309	291	0.0	1.3	14.886	B
C - A44 North	1329	332	259	2032	0.654	1322	1606	0.0	1.9	5.017	A
4 - Car Park	10	3	1568	163	0.061	10	12	0.0	0.1	23.422	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1799	450	88	1941	0.927	1794	1502	9.7	10.8	23.065	C
B - Cassington Road	314	78	1586	528	0.595	314	296	1.3	1.4	16.761	C
C - A44 North	1329	332	263	2029	0.655	1329	1637	1.9	1.9	5.140	A
4 - Car Park	10	3	1580	158	0.063	10	12	0.1	0.1	24.260	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1799	450	88	1941	0.927	1797	1502	10.8	11.3	23.904	C
B - Cassington Road	314	78	1588	526	0.597	314	297	1.4	1.4	16.930	C
C - A44 North	1329	332	263	2029	0.655	1329	1639	1.9	1.9	5.144	A
4 - Car Park	10	3	1580	158	0.063	10	12	0.1	0.1	24.291	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1799	450	88	1941	0.927	1798	1502	11.3	11.6	24.283	C
B - Cassington Road	314	78	1589	526	0.597	314	297	1.4	1.5	16.980	C
C - A44 North	1329	332	263	2029	0.655	1329	1640	1.9	1.9	5.144	A
4 - Car Park	10	3	1580	158	0.063	10	12	0.1	0.1	24.295	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1799	450	88	1941	0.927	1798	1502	11.6	11.8	24.500	C
B - Cassington Road	314	78	1589	526	0.597	314	297	1.5	1.5	17.004	C
C - A44 North	1329	332	263	2029	0.655	1329	1640	1.9	1.9	5.144	A
4 - Car Park	10	3	1580	158	0.063	10	12	0.1	0.1	24.296	C

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1799	450	88	1941	0.927	1798	1502	11.8	11.9	24.641	C
B - Cassington Road	314	78	1590	525	0.598	314	297	1.5	1.5	17.016	C
C - A44 North	1329	332	263	2029	0.655	1329	1641	1.9	1.9	5.145	A
4 - Car Park	10	3	1580	158	0.063	10	12	0.1	0.1	24.297	C

2028 With Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A44 South - 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	A44/Cassington Road	Standard Roundabout		A, B, C, 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 period length (min)	Time segment length (min)	Run automatically
D5	2028 With Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	1325	100.000
B - Cassington Road		FLAT	✓	337	100.000
C - A44 North		FLAT	✓	1411	100.000
4 - Car Park		FLAT	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
From	A - A44 South	5	185	1135	0
	B - Cassington Road	261	0	76	0
	C - A44 North	1330	53	28	0
	4 - Car Park	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
From	A - A44 South	0	0	3	0
	B - Cassington Road	1	0	0	0
	C - A44 North	3	0	0	0
	4 - Car Park	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.68	5.80	2.1	A	1325	1987
B - Cassington Road	0.43	8.07	0.8	A	337	506
C - A44 North	0.69	5.68	2.2	A	1411	2116
4 - Car Park	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1325	331	81	1946	0.681	1317	1585	0.0	2.1	5.645	A
B - Cassington Road	337	84	1161	787	0.428	334	237	0.0	0.7	7.892	A
C - A44 North	1411	353	264	2046	0.690	1402	1231	0.0	2.2	5.517	A
4 - Car Park	0	0	1666	126	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1325	331	81	1946	0.681	1325	1596	2.1	2.1	5.793	A
B - Cassington Road	337	84	1168	783	0.430	337	238	0.7	0.7	8.072	A
C - A44 North	1411	353	266	2045	0.690	1411	1239	2.2	2.2	5.678	A
4 - Car Park	0	0	1677	121	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1325	331	81	1946	0.681	1325	1596	2.1	2.1	5.795	A
B - Cassington Road	337	84	1168	783	0.430	337	238	0.7	0.8	8.074	A
C - A44 North	1411	353	266	2045	0.690	1411	1239	2.2	2.2	5.681	A
4 - Car Park	0	0	1677	121	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1325	331	81	1946	0.681	1325	1596	2.1	2.1	5.795	A
B - Cassington Road	337	84	1168	783	0.430	337	238	0.8	0.8	8.074	A
C - A44 North	1411	353	266	2045	0.690	1411	1239	2.2	2.2	5.681	A
4 - Car Park	0	0	1677	121	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1325	331	81	1946	0.681	1325	1596	2.1	2.1	5.795	A
B - Cassington Road	337	84	1168	783	0.430	337	238	0.8	0.8	8.074	A
C - A44 North	1411	353	266	2045	0.690	1411	1239	2.2	2.2	5.681	A
4 - Car Park	0	0	1677	121	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1325	331	81	1946	0.681	1325	1596	2.1	2.1	5.795	A
B - Cassington Road	337	84	1168	783	0.430	337	238	0.8	0.8	8.074	A
C - A44 North	1411	353	266	2045	0.690	1411	1239	2.2	2.2	5.681	A
4 - Car Park	0	0	1677	121	0.000	0	0	0.0	0.0	0.000	A

2028 With Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A44 South - 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	A44/Cassington Road	Standard Roundabout		A, B, C, 4	42.49	E

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 period length (min)	Time segment length (min)	Run automatically
D6	2028 With Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	1915	100.000
B - Cassington Road		FLAT	✓	315	100.000
C - A44 North		FLAT	✓	1393	100.000
4 - Car Park		FLAT	✓	9	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
From	A - A44 South	3	247	1655	10
	B - Cassington Road	248	0	65	2
	C - A44 North	1302	50	33	8
	4 - Car Park	4	0	5	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
From	A - A44 South	0	0	3	0
	B - Cassington Road	1	0	0	0
	C - A44 North	4	0	0	0
	4 - Car Park	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.99	72.48	37.3	F	1915	2872
B - Cassington Road	0.69	24.89	2.1	C	315	473
C - A44 North	0.69	5.66	2.2	A	1393	2089
4 - Car Park	0.07	28.91	0.1	D	9	14

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1915	479	87	1941	0.987	1841	1544	0.0	18.4	26.860	D
B - Cassington Road	315	79	1641	494	0.638	308	287	0.0	1.7	18.812	C
C - A44 North	1393	348	257	2033	0.685	1384	1693	0.0	2.1	5.480	A
4 - Car Park	9	2	1622	139	0.065	9	20	0.0	0.1	27.479	D

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1915	479	88	1941	0.987	1890	1556	18.4	24.8	47.613	E
B - Cassington Road	315	79	1684	468	0.673	314	294	1.7	1.9	23.151	C
C - A44 North	1393	348	262	2030	0.686	1393	1736	2.1	2.2	5.651	A
4 - Car Park	9	2	1635	134	0.067	9	20	0.1	0.1	28.811	D

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1915	479	88	1941	0.987	1898	1557	24.8	29.1	56.568	F
B - Cassington Road	315	79	1691	463	0.680	315	295	1.9	2.0	24.051	C
C - A44 North	1393	348	263	2029	0.686	1393	1743	2.2	2.2	5.658	A
4 - Car Park	9	2	1636	134	0.067	9	20	0.1	0.1	28.887	D

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1915	479	88	1941	0.987	1902	1557	29.1	32.4	63.059	F
B - Cassington Road	315	79	1694	461	0.683	315	295	2.0	2.1	24.464	C
C - A44 North	1393	348	263	2029	0.687	1393	1747	2.2	2.2	5.659	A
4 - Car Park	9	2	1636	134	0.067	9	20	0.1	0.1	28.905	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1915	479	88	1941	0.987	1904	1557	32.4	35.1	68.207	F
B - Cassington Road	315	79	1697	460	0.685	315	296	2.1	2.1	24.717	C
C - A44 North	1393	348	263	2029	0.687	1393	1749	2.2	2.2	5.659	A
4 - Car Park	9	2	1636	134	0.067	9	20	0.1	0.1	28.911	D

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1915	479	88	1941	0.987	1906	1557	35.1	37.3	72.479	F
B - Cassington Road	315	79	1698	459	0.686	315	296	2.1	2.1	24.893	C
C - A44 North	1393	348	263	2029	0.687	1393	1750	2.2	2.2	5.659	A
4 - Car Park	9	2	1636	133	0.067	9	20	0.1	0.1	28.915	D

2031 Without Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A44 South - 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	A44/Cassington Road	Standard Roundabout		A, B, C, 4	6.00	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 period length (min)	Time segment length (min)	Run automatically
D7	2031 Without Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	1330	100.000
B - Cassington Road		FLAT	✓	337	100.000
C - A44 North		FLAT	✓	1407	100.000
4 - Car Park		FLAT	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
From	A - A44 South	5	185	1140	0
	B - Cassington Road	261	0	76	0
	C - A44 North	1325	54	28	0
	4 - Car Park	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
From	A - A44 South	0	0	3	0
	B - Cassington Road	1	0	0	0
	C - A44 North	3	0	0	0
	4 - Car Park	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.68	5.85	2.2	A	1330	1995
B - Cassington Road	0.43	8.13	0.8	A	337	506
C - A44 North	0.69	5.64	2.2	A	1407	2111
4 - Car Park	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1330	333	81	1946	0.684	1322	1581	0.0	2.1	5.693	A
B - Cassington Road	337	84	1166	784	0.430	334	237	0.0	0.7	7.942	A
C - A44 North	1407	352	264	2046	0.688	1398	1236	0.0	2.2	5.484	A
4 - Car Park	0	0	1662	128	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1330	333	82	1945	0.684	1330	1591	2.1	2.1	5.847	A
B - Cassington Road	337	84	1173	780	0.432	337	239	0.7	0.8	8.127	A
C - A44 North	1407	352	266	2045	0.688	1407	1244	2.2	2.2	5.642	A
4 - Car Park	0	0	1673	123	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1330	333	82	1945	0.684	1330	1591	2.1	2.1	5.849	A
B - Cassington Road	337	84	1173	780	0.432	337	239	0.8	0.8	8.130	A
C - A44 North	1407	352	266	2045	0.688	1407	1244	2.2	2.2	5.645	A
4 - Car Park	0	0	1673	123	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1330	333	82	1945	0.684	1330	1591	2.1	2.2	5.849	A
B - Cassington Road	337	84	1173	780	0.432	337	239	0.8	0.8	8.130	A
C - A44 North	1407	352	266	2045	0.688	1407	1244	2.2	2.2	5.645	A
4 - Car Park	0	0	1673	123	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1330	333	82	1945	0.684	1330	1591	2.2	2.2	5.849	A
B - Cassington Road	337	84	1173	780	0.432	337	239	0.8	0.8	8.130	A
C - A44 North	1407	352	266	2045	0.688	1407	1244	2.2	2.2	5.645	A
4 - Car Park	0	0	1673	123	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1330	333	82	1945	0.684	1330	1591	2.2	2.2	5.849	A
B - Cassington Road	337	84	1173	780	0.432	337	239	0.8	0.8	8.130	A
C - A44 North	1407	352	266	2045	0.688	1407	1244	2.2	2.2	5.645	A
4 - Car Park	0	0	1673	123	0.000	0	0	0.0	0.0	0.000	A

2031 Without Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A44 South - 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	A44/Cassington Road	Standard Roundabout		A, B, C, 4	32.66	D

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 period length (min)	Time segment length (min)	Run automatically
D8	2031 Without Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	1890	100.000
B - Cassington Road		FLAT	✓	315	100.000
C - A44 North		FLAT	✓	1387	100.000
4 - Car Park		FLAT	✓	10	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
From	A - A44 South	3	247	1630	10
	B - Cassington Road	248	0	65	2
	C - A44 North	1296	50	33	8
	4 - Car Park	4	1	5	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
From	A - A44 South	0	0	3	0
	B - Cassington Road	1	0	0	0
	C - A44 North	4	0	0	0
	4 - Car Park	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.97	54.35	27.4	F	1890	2835
B - Cassington Road	0.67	22.89	2.0	C	315	473
C - A44 North	0.68	5.61	2.2	A	1387	2080
4 - Car Park	0.07	28.54	0.1	D	10	15

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1890	473	88	1941	0.974	1826	1538	0.0	16.0	24.375	C
B - Cassington Road	315	79	1625	504	0.625	309	289	0.0	1.6	17.933	C
C - A44 North	1387	347	258	2033	0.682	1379	1676	0.0	2.1	5.435	A
4 - Car Park	10	3	1617	142	0.070	10	20	0.0	0.1	27.166	D

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1890	473	89	1940	0.974	1872	1550	16.0	20.3	40.479	E
B - Cassington Road	315	79	1666	479	0.658	314	296	1.6	1.8	21.654	C
C - A44 North	1387	347	262	2030	0.683	1387	1718	2.1	2.1	5.599	A
4 - Car Park	10	3	1629	136	0.073	10	20	0.1	0.1	28.450	D

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1890	473	89	1940	0.974	1879	1551	20.3	23.0	46.092	E
B - Cassington Road	315	79	1672	475	0.663	315	297	1.8	1.9	22.332	C
C - A44 North	1387	347	263	2029	0.684	1387	1724	2.1	2.1	5.605	A
4 - Car Park	10	3	1630	136	0.073	10	20	0.1	0.1	28.516	D

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1890	473	89	1940	0.974	1883	1551	23.0	24.9	49.714	E
B - Cassington Road	315	79	1675	474	0.665	315	297	1.9	1.9	22.617	C
C - A44 North	1387	347	263	2029	0.684	1387	1727	2.1	2.1	5.606	A
4 - Car Park	10	3	1630	136	0.073	10	20	0.1	0.1	28.532	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1890	473	89	1940	0.974	1884	1551	24.9	26.3	52.334	F
B - Cassington Road	315	79	1676	473	0.667	315	297	1.9	2.0	22.780	C
C - A44 North	1387	347	263	2029	0.684	1387	1728	2.1	2.2	5.606	A
4 - Car Park	10	3	1630	136	0.073	10	20	0.1	0.1	28.537	D

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1890	473	89	1940	0.974	1886	1551	26.3	27.4	54.350	F
B - Cassington Road	315	79	1677	472	0.667	315	297	2.0	2.0	22.885	C
C - A44 North	1387	347	263	2029	0.684	1387	1729	2.2	2.2	5.606	A
4 - Car Park	10	3	1630	136	0.073	10	20	0.1	0.1	28.540	D

2031 With Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A44 South - 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	A44/Cassington Road	Standard Roundabout		A, B, C, 4	6.57	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 period length (min)	Time segment length (min)	Run automatically
D9	2031 With Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	1358	100.000
B - Cassington Road		FLAT	✓	337	100.000
C - A44 North		FLAT	✓	1495	100.000
4 - Car Park		FLAT	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
From	A - A44 South	5	185	1168	0
	B - Cassington Road	261	0	76	0
	C - A44 North	1412	55	28	0
	4 - Car Park	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
From	A - A44 South	0	0	3	0
	B - Cassington Road	1	0	0	0
	C - A44 North	3	0	0	0
	4 - Car Park	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	0.70	6.14	2.3	A	1358	2037
B - Cassington Road	0.44	8.46	0.8	A	337	506
C - A44 North	0.73	6.55	2.7	A	1495	2243
4 - Car Park	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1358	340	82	1945	0.698	1349	1666	0.0	2.3	5.953	A
B - Cassington Road	337	84	1193	768	0.439	334	238	0.0	0.8	8.245	A
C - A44 North	1495	374	264	2046	0.731	1484	1263	0.0	2.6	6.294	A
4 - Car Park	0	0	1748	90	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1358	340	83	1944	0.698	1358	1678	2.3	2.3	6.135	A
B - Cassington Road	337	84	1201	763	0.442	337	240	0.8	0.8	8.451	A
C - A44 North	1495	374	266	2045	0.731	1495	1272	2.6	2.7	6.545	A
4 - Car Park	0	0	1761	85	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1358	340	83	1944	0.698	1358	1678	2.3	2.3	6.137	A
B - Cassington Road	337	84	1201	763	0.442	337	240	0.8	0.8	8.456	A
C - A44 North	1495	374	266	2044	0.731	1495	1272	2.7	2.7	6.548	A
4 - Car Park	0	0	1761	85	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1358	340	83	1944	0.698	1358	1678	2.3	2.3	6.137	A
B - Cassington Road	337	84	1201	763	0.442	337	240	0.8	0.8	8.457	A
C - A44 North	1495	374	266	2044	0.731	1495	1272	2.7	2.7	6.551	A
4 - Car Park	0	0	1761	85	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1358	340	83	1944	0.698	1358	1678	2.3	2.3	6.137	A
B - Cassington Road	337	84	1201	763	0.442	337	240	0.8	0.8	8.457	A
C - A44 North	1495	374	266	2044	0.731	1495	1272	2.7	2.7	6.551	A
4 - Car Park	0	0	1761	85	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	1358	340	83	1944	0.698	1358	1678	2.3	2.3	6.137	A
B - Cassington Road	337	84	1201	763	0.442	337	240	0.8	0.8	8.457	A
C - A44 North	1495	374	266	2044	0.731	1495	1272	2.7	2.7	6.551	A
4 - Car Park	0	0	1761	85	0.000	0	0	0.0	0.0	0.000	A

2031 With Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A44 South - 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	A44/Cassington Road	Standard Roundabout		A, B, C, 4	118.87	F

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 period length (min)	Time segment length (min)	Run automatically
D10	2031 With Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A44 South		FLAT	✓	2005	100.000
B - Cassington Road		FLAT	✓	316	100.000
C - A44 North		FLAT	✓	1441	100.000
4 - Car Park		FLAT	✓	10	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
From	A - A44 South	3	247	1745	10
	B - Cassington Road	248	0	66	2
	C - A44 North	1350	50	33	8
	4 - Car Park	4	1	5	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		A - A44 South	B - Cassington Road	C - A44 North	4 - Car Park
	A - A44 South	0	0	3	0
	B - Cassington Road	1	0	0	0
	C - A44 North	4	0	0	0
	4 - Car Park	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A44 South	1.03	214.99	121.7	F	2005	3007
B - Cassington Road	0.72	29.85	2.6	D	316	474
C - A44 North	0.71	6.12	2.4	A	1441	2162
4 - Car Park	0.09	35.17	0.1	E	10	15

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	2005	501	88	1940	1.033	1880	1590	0.0	31.2	38.550	E
B - Cassington Road	316	79	1686	466	0.677	308	282	0.0	1.9	21.807	C
C - A44 North	1441	360	256	2034	0.709	1431	1738	0.0	2.4	5.888	A
4 - Car Park	10	3	1668	119	0.084	10	19	0.0	0.1	32.780	D

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	2005	501	89	1940	1.034	1925	1604	31.2	51.2	84.853	F
B - Cassington Road	316	79	1726	442	0.715	314	288	1.9	2.3	27.763	D
C - A44 North	1441	360	261	2030	0.710	1441	1779	2.4	2.4	6.106	A
4 - Car Park	10	3	1683	113	0.089	10	20	0.1	0.1	34.960	D

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	2005	501	89	1940	1.034	1931	1604	51.2	69.5	118.993	F
B - Cassington Road	316	79	1732	439	0.720	316	289	2.3	2.4	28.956	D
C - A44 North	1441	360	262	2029	0.710	1441	1785	2.4	2.4	6.115	A
4 - Car Park	10	3	1683	113	0.089	10	20	0.1	0.1	35.111	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	2005	501	89	1940	1.034	1934	1605	69.5	87.2	151.594	F
B - Cassington Road	316	79	1734	437	0.723	316	289	2.4	2.5	29.432	D
C - A44 North	1441	360	262	2029	0.710	1441	1787	2.4	2.4	6.119	A
4 - Car Park	10	3	1684	112	0.089	10	20	0.1	0.1	35.146	E

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	2005	501	89	1940	1.034	1936	1605	87.2	104.6	183.494	F
B - Cassington Road	316	79	1735	436	0.724	316	289	2.5	2.5	29.693	D
C - A44 North	1441	360	262	2029	0.710	1441	1789	2.4	2.4	6.120	A
4 - Car Park	10	3	1684	112	0.089	10	20	0.1	0.1	35.161	E

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A44 South	2005	501	89	1940	1.034	1937	1605	104.6	121.7	214.986	F
B - Cassington Road	316	79	1736	436	0.725	316	290	2.5	2.6	29.855	D
C - A44 North	1441	360	262	2029	0.710	1441	1789	2.4	2.4	6.120	A
4 - Car Park	10	3	1684	112	0.089	10	20	0.1	0.1	35.166	E

Junctions 9			
ARCADY 9 - Roundabout Module			
Version: 9.5.1.7462 © Copyright TRL Limited, 2019			
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Filename: J10-AT-A44, Frieze Way-201001 (Flat).j9

Path: \\vectos.local\data\Projects\Projects\160000\162751 - Yarnton, Cherwell\AA-Planning Application\TOPIC FOLDERS\Modelling

Report generation date: 19/10/2020 13:44:34

- »Baseline, AM
- »Baseline, PM
- »2028 Without Dev, AM
- »2028 Without Dev, PM
- »2028 With Dev, AM
- »2028 With Dev, PM
- »2031 Without Dev, AM
- »2031 Without Dev, PM
- »2031 With Dev, AM
- »2031 With Dev, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	Junction LOS	Queue (Veh)	Delay (s)	RFC	Junction LOS
	Baseline							
A - A4260 Frieze Way	0.4	2.90	0.27	A	0.8	4.05	0.44	A
B - A44 South	0.8	2.26	0.44		1.5	3.47	0.60	
C - A44 North	1.1	3.41	0.53		1.9	5.26	0.66	
	2028 Without Dev							
A - A4260 Frieze Way	0.7	4.26	0.43	A	1.2	5.56	0.55	A
B - A44 South	1.0	2.55	0.50		3.4	6.18	0.77	
C - A44 North	2.1	4.97	0.68		4.3	9.89	0.81	
	2028 With Dev							
A - A4260 Frieze Way	0.8	4.61	0.45	A	1.3	5.92	0.57	A
B - A44 South	1.0	2.60	0.51		4.5	7.72	0.82	
C - A44 North	2.5	5.64	0.72		4.9	11.10	0.83	
	2031 Without Dev							
A - A4260 Frieze Way	0.9	4.75	0.46	A	1.4	6.03	0.58	A
B - A44 South	1.1	2.62	0.51		4.4	7.57	0.82	
C - A44 North	2.5	5.63	0.71		5.3	11.93	0.84	
	2031 With Dev							
A - A4260 Frieze Way	1.0	5.20	0.49	A	1.5	6.44	0.59	B
B - A44 South	1.1	2.67	0.52		6.0	9.98	0.86	
C - A44 North	3.0	6.51	0.75		6.2	13.68	0.86	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	Yarnton, Cherwell
Location	A44 / A4260 Frieze Way Roundabout
Site number	
Date	01/10/2020
Version	
Status	Existing Junction Layout
Identifier	
Client	
Jobnumber	
Enumerator	David Noyce
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	Baseline	AM	FLAT	07:45	09:15	90	15	✓
D2	Baseline	PM	FLAT	16:45	18:15	90	15	✓
D3	2028 Without Dev	AM	FLAT	07:45	09:15	90	15	✓
D4	2028 Without Dev	PM	FLAT	16:45	18:15	90	15	✓
D5	2028 With Dev	AM	FLAT	07:45	09:15	90	15	✓
D6	2028 With Dev	PM	FLAT	16:45	18:15	90	15	✓
D7	2031 Without Dev	AM	FLAT	07:45	09:15	90	15	✓
D8	2031 Without Dev	PM	FLAT	16:45	18:15	90	15	✓
D9	2031 With Dev	AM	FLAT	07:45	09:15	90	15	✓
D10	2031 With Dev	PM	FLAT	16:45	18:15	90	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Baseline, 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	A44/Frieze Way	Standard Roundabout		A, B, C	2.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A4260 Frieze Way	
B	A44 South	
C	A44 North	

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
A - A4260 Frieze Way	7.30	8.12	8.3	35.0	44.0	15.0	
B - A44 South	7.30	10.50	20.6	21.0	44.0	11.0	
C - A44 North	3.65	11.60	25.6	56.0	44.0	11.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A4260 Frieze Way	0.825	2576
B - A44 South	0.917	3055
C - A44 North	0.825	2539

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 period length (min)	Time segment length (min)	Run automatically
D1	Baseline	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4260 Frieze Way		FLAT	✓	467	100.000
B - A44 South		FLAT	✓	1267	100.000
C - A44 North		FLAT	✓	1184	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
From	A - A4260 Frieze Way	2	361	104
	B - A44 South	257	7	1003
	C - A44 North	199	983	2

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
From	A - A4260 Frieze Way	0	1	1
	B - A44 South	1	0	4
	C - A44 North	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4260 Frieze Way	0.27	2.90	0.4	A	467	700
B - A44 South	0.44	2.26	0.8	A	1267	1901
C - A44 North	0.53	3.41	1.1	A	1184	1776

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	467	117	988	1712	0.273	466	457	0.0	0.4	2.885	A
B - A44 South	1267	317	108	2859	0.443	1264	1346	0.0	0.8	2.252	A
C - A44 North	1184	296	265	2240	0.528	1180	1106	0.0	1.1	3.380	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	467	117	992	1708	0.273	467	458	0.4	0.4	2.899	A
B - A44 South	1267	317	108	2858	0.443	1267	1351	0.8	0.8	2.261	A
C - A44 North	1184	296	266	2240	0.529	1184	1109	1.1	1.1	3.408	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	467	117	992	1708	0.273	467	458	0.4	0.4	2.899	A
B - A44 South	1267	317	108	2858	0.443	1267	1351	0.8	0.8	2.261	A
C - A44 North	1184	296	266	2240	0.529	1184	1109	1.1	1.1	3.408	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	467	117	992	1708	0.273	467	458	0.4	0.4	2.899	A
B - A44 South	1267	317	108	2858	0.443	1267	1351	0.8	0.8	2.261	A
C - A44 North	1184	296	266	2240	0.529	1184	1109	1.1	1.1	3.408	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	467	117	992	1708	0.273	467	458	0.4	0.4	2.899	A
B - A44 South	1267	317	108	2858	0.443	1267	1351	0.8	0.8	2.261	A
C - A44 North	1184	296	266	2240	0.529	1184	1109	1.1	1.1	3.408	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	467	117	992	1708	0.273	467	458	0.4	0.4	2.899	A
B - A44 South	1267	317	108	2858	0.443	1267	1351	0.8	0.8	2.261	A
C - A44 North	1184	296	266	2240	0.529	1184	1109	1.1	1.1	3.408	A

Baseline, 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	A44/Frieze Way	Standard Roundabout		A, B, C	4.25	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 period length (min)	Time segment length (min)	Run automatically
D2	Baseline	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4260 Frieze Way		FLAT	✓	691	100.000
B - A44 South		FLAT	✓	1576	100.000
C - A44 North		FLAT	✓	1337	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
From	A - A4260 Frieze Way	12	304	375
	B - A44 South	513	12	1051
	C - A44 North	205	1127	5

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
From	A - A4260 Frieze Way	0	1	1
	B - A44 South	1	0	4
	C - A44 North	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4260 Frieze Way	0.44	4.05	0.8	A	691	1036
B - A44 South	0.60	3.47	1.5	A	1576	2364
C - A44 North	0.66	5.26	1.9	A	1337	2006

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	691	173	1137	1585	0.436	688	727	0.0	0.8	3.998	A
B - A44 South	1576	394	390	2615	0.603	1570	1435	0.0	1.5	3.425	A
C - A44 North	1337	334	535	2023	0.661	1329	1425	0.0	1.9	5.136	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	691	173	1144	1580	0.437	691	730	0.8	0.8	4.049	A
B - A44 South	1576	394	392	2614	0.603	1576	1443	1.5	1.5	3.468	A
C - A44 North	1337	334	537	2021	0.662	1337	1431	1.9	1.9	5.259	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	691	173	1144	1580	0.437	691	730	0.8	0.8	4.049	A
B - A44 South	1576	394	392	2614	0.603	1576	1443	1.5	1.5	3.468	A
C - A44 North	1337	334	537	2021	0.662	1337	1431	1.9	1.9	5.261	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	691	173	1144	1580	0.437	691	730	0.8	0.8	4.049	A
B - A44 South	1576	394	392	2614	0.603	1576	1443	1.5	1.5	3.468	A
C - A44 North	1337	334	537	2021	0.662	1337	1431	1.9	1.9	5.261	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	691	173	1144	1580	0.437	691	730	0.8	0.8	4.049	A
B - A44 South	1576	394	392	2614	0.603	1576	1443	1.5	1.5	3.468	A
C - A44 North	1337	334	537	2021	0.662	1337	1431	1.9	1.9	5.261	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	691	173	1144	1580	0.437	691	730	0.8	0.8	4.049	A
B - A44 South	1576	394	392	2614	0.603	1576	1443	1.5	1.5	3.468	A
C - A44 North	1337	334	537	2021	0.662	1337	1431	1.9	1.9	5.261	A

2028 Without Dev, 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	A44/Frieze Way	Standard Roundabout		A, B, C	3.88	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 period length (min)	Time segment length (min)	Run automatically
D3	2028 Without Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4260 Frieze Way		FLAT	✓	628	100.000
B - A44 South		FLAT	✓	1422	100.000
C - A44 North		FLAT	✓	1515	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
From	A - A4260 Frieze Way	2	468	158
	B - A44 South	284	7	1131
	C - A44 North	240	1273	2

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
From	A - A4260 Frieze Way	0	1	1
	B - A44 South	1	0	3
	C - A44 North	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4260 Frieze Way	0.43	4.26	0.7	A	628	942
B - A44 South	0.50	2.55	1.0	A	1422	2133
C - A44 North	0.68	4.97	2.1	A	1515	2272

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	628	157	1275	1478	0.425	625	524	0.0	0.7	4.204	A
B - A44 South	1422	355	161	2832	0.502	1418	1739	0.0	1.0	2.538	A
C - A44 North	1515	379	292	2240	0.676	1507	1287	0.0	2.1	4.860	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	628	157	1282	1473	0.426	628	526	0.7	0.7	4.262	A
B - A44 South	1422	355	162	2831	0.502	1422	1748	1.0	1.0	2.553	A
C - A44 North	1515	379	293	2239	0.677	1515	1291	2.1	2.1	4.969	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	628	157	1282	1473	0.426	628	526	0.7	0.7	4.262	A
B - A44 South	1422	355	162	2831	0.502	1422	1748	1.0	1.0	2.553	A
C - A44 North	1515	379	293	2239	0.677	1515	1291	2.1	2.1	4.971	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	628	157	1282	1473	0.426	628	526	0.7	0.7	4.262	A
B - A44 South	1422	355	162	2831	0.502	1422	1748	1.0	1.0	2.553	A
C - A44 North	1515	379	293	2239	0.677	1515	1291	2.1	2.1	4.971	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	628	157	1282	1473	0.426	628	526	0.7	0.7	4.262	A
B - A44 South	1422	355	162	2831	0.502	1422	1748	1.0	1.0	2.553	A
C - A44 North	1515	379	293	2239	0.677	1515	1291	2.1	2.1	4.971	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	628	157	1282	1473	0.426	628	526	0.7	0.7	4.262	A
B - A44 South	1422	355	162	2831	0.502	1422	1748	1.0	1.0	2.553	A
C - A44 North	1515	379	293	2239	0.677	1515	1291	2.1	2.1	4.971	A

2028 Without Dev, 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	A44/Frieze Way	Standard Roundabout		A, B, C	7.42	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 period length (min)	Time segment length (min)	Run automatically
D4	2028 Without Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4260 Frieze Way		FLAT	✓	791	100.000
B - A44 South		FLAT	✓	2000	100.000
C - A44 North		FLAT	✓	1566	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
From	A - A4260 Frieze Way	12	351	428
	B - A44 South	632	12	1356
	C - A44 North	267	1294	5

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
From	A - A4260 Frieze Way	0	1	1
	B - A44 South	1	0	3
	C - A44 North	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4260 Frieze Way	0.55	5.56	1.2	A	791	1186
B - A44 South	0.77	6.18	3.4	A	2000	3000
C - A44 North	0.81	9.89	4.3	A	1566	2349

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	791	198	1297	1449	0.546	786	904	0.0	1.2	5.392	A
B - A44 South	2000	500	442	2584	0.774	1987	1641	0.0	3.3	5.899	A
C - A44 North	1566	392	652	1933	0.810	1550	1777	0.0	4.0	9.049	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	791	198	1311	1438	0.550	791	911	1.2	1.2	5.558	A
B - A44 South	2000	500	445	2582	0.775	2000	1657	3.3	3.4	6.177	A
C - A44 North	1566	392	656	1930	0.812	1565	1789	4.0	4.2	9.852	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	791	198	1311	1438	0.550	791	911	1.2	1.2	5.562	A
B - A44 South	2000	500	445	2582	0.775	2000	1657	3.4	3.4	6.182	A
C - A44 North	1566	392	656	1929	0.812	1566	1789	4.2	4.2	9.881	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	791	198	1311	1438	0.550	791	911	1.2	1.2	5.563	A
B - A44 South	2000	500	445	2582	0.775	2000	1657	3.4	3.4	6.182	A
C - A44 North	1566	392	656	1929	0.812	1566	1789	4.2	4.2	9.889	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	791	198	1311	1438	0.550	791	911	1.2	1.2	5.563	A
B - A44 South	2000	500	445	2582	0.775	2000	1657	3.4	3.4	6.185	A
C - A44 North	1566	392	656	1929	0.812	1566	1789	4.2	4.3	9.893	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	791	198	1311	1438	0.550	791	911	1.2	1.2	5.563	A
B - A44 South	2000	500	445	2582	0.775	2000	1657	3.4	3.4	6.185	A
C - A44 North	1566	392	656	1929	0.812	1566	1789	4.3	4.3	9.895	A

2028 With Dev, 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	A44/Frieze Way	Standard Roundabout		A, B, C	4.27	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 period length (min)	Time segment length (min)	Run automatically
D5	2028 With Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4260 Frieze Way		FLAT	✓	632	100.000
B - A44 South		FLAT	✓	1446	100.000
C - A44 North		FLAT	✓	1601	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
From	A - A4260 Frieze Way	2	468	162
	B - A44 South	284	7	1155
	C - A44 North	254	1345	2

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
From	A - A4260 Frieze Way	0	1	1
	B - A44 South	1	0	3
	C - A44 North	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4260 Frieze Way	0.45	4.61	0.8	A	632	948
B - A44 South	0.51	2.60	1.0	A	1446	2169
C - A44 North	0.72	5.64	2.5	A	1601	2402

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	632	158	1346	1419	0.445	629	538	0.0	0.8	4.538	A
B - A44 South	1446	361	165	2828	0.511	1442	1809	0.0	1.0	2.589	A
C - A44 North	1601	400	292	2240	0.715	1591	1315	0.0	2.5	5.472	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	632	158	1354	1412	0.448	632	540	0.8	0.8	4.614	A
B - A44 South	1446	361	166	2828	0.511	1446	1820	1.0	1.0	2.604	A
C - A44 North	1601	400	293	2239	0.715	1601	1319	2.5	2.5	5.639	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	632	158	1354	1412	0.448	632	540	0.8	0.8	4.614	A
B - A44 South	1446	361	166	2828	0.511	1446	1820	1.0	1.0	2.604	A
C - A44 North	1601	400	293	2239	0.715	1601	1319	2.5	2.5	5.641	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	632	158	1354	1412	0.448	632	540	0.8	0.8	4.614	A
B - A44 South	1446	361	166	2828	0.511	1446	1820	1.0	1.0	2.604	A
C - A44 North	1601	400	293	2239	0.715	1601	1319	2.5	2.5	5.641	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	632	158	1354	1412	0.448	632	540	0.8	0.8	4.614	A
B - A44 South	1446	361	166	2828	0.511	1446	1820	1.0	1.0	2.604	A
C - A44 North	1601	400	293	2239	0.715	1601	1319	2.5	2.5	5.641	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	632	158	1354	1412	0.448	632	540	0.8	0.8	4.615	A
B - A44 South	1446	361	166	2828	0.511	1446	1820	1.0	1.0	2.604	A
C - A44 North	1601	400	293	2239	0.715	1601	1319	2.5	2.5	5.641	A

2028 With Dev, 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	A44/Frieze Way	Standard Roundabout		A, B, C	8.62	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 period length (min)	Time segment length (min)	Run automatically
D6	2028 With Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4260 Frieze Way		FLAT	✓	798	100.000
B - A44 South		FLAT	✓	2109	100.000
C - A44 North		FLAT	✓	1621	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
	A - A4260 Frieze Way	12	351	435
	B - A44 South	632	12	1465
	C - A44 North	271	1345	5

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
	A - A4260 Frieze Way	0	1	1
	B - A44 South	1	0	3
	C - A44 North	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4260 Frieze Way	0.57	5.92	1.3	A	798	1197
B - A44 South	0.82	7.72	4.5	A	2109	3163
C - A44 North	0.83	11.10	4.9	B	1621	2432

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	798	199	1347	1419	0.563	793	907	0.0	1.3	5.709	A
B - A44 South	2109	527	449	2577	0.818	2092	1690	0.0	4.3	7.177	A
C - A44 North	1621	405	651	1949	0.832	1603	1890	0.0	4.6	9.916	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	798	199	1361	1406	0.568	798	915	1.3	1.3	5.916	A
B - A44 South	2109	527	452	2575	0.819	2109	1707	4.3	4.4	7.701	A
C - A44 North	1621	405	656	1945	0.833	1620	1905	4.6	4.8	11.024	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	798	199	1362	1406	0.568	798	915	1.3	1.3	5.922	A
B - A44 South	2109	527	452	2575	0.819	2109	1708	4.4	4.5	7.716	A
C - A44 North	1621	405	656	1945	0.833	1621	1905	4.8	4.9	11.072	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	798	199	1362	1406	0.568	798	915	1.3	1.3	5.923	A
B - A44 South	2109	527	452	2575	0.819	2109	1708	4.5	4.5	7.720	A
C - A44 North	1621	405	656	1945	0.834	1621	1905	4.9	4.9	11.088	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	798	199	1362	1406	0.568	798	915	1.3	1.3	5.923	A
B - A44 South	2109	527	452	2575	0.819	2109	1708	4.5	4.5	7.722	A
C - A44 North	1621	405	656	1945	0.834	1621	1905	4.9	4.9	11.095	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	798	199	1362	1406	0.568	798	915	1.3	1.3	5.923	A
B - A44 South	2109	527	452	2575	0.819	2109	1708	4.5	4.5	7.723	A
C - A44 North	1621	405	656	1945	0.834	1621	1905	4.9	4.9	11.099	B

2031 Without Dev, 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	A44/Frieze Way	Standard Roundabout		A, B, C	4.29	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 period length (min)	Time segment length (min)	Run automatically
D7	2031 Without Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4260 Frieze Way		FLAT	✓	656	100.000
B - A44 South		FLAT	✓	1445	100.000
C - A44 North		FLAT	✓	1596	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
From	A - A4260 Frieze Way	2	483	171
	B - A44 South	288	7	1150
	C - A44 North	252	1342	2

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
From	A - A4260 Frieze Way	0	1	1
	B - A44 South	1	0	3
	C - A44 North	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4260 Frieze Way	0.46	4.75	0.9	A	656	984
B - A44 South	0.51	2.62	1.1	A	1445	2167
C - A44 North	0.71	5.63	2.5	A	1596	2394

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	656	164	1343	1421	0.462	653	540	0.0	0.8	4.662	A
B - A44 South	1445	361	174	2821	0.512	1441	1821	0.0	1.0	2.602	A
C - A44 North	1596	399	296	2236	0.714	1586	1319	0.0	2.4	5.458	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	656	164	1351	1415	0.464	656	542	0.8	0.9	4.745	A
B - A44 South	1445	361	175	2820	0.512	1445	1832	1.0	1.0	2.618	A
C - A44 North	1596	399	297	2236	0.714	1596	1323	2.4	2.5	5.624	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	656	164	1351	1415	0.464	656	542	0.9	0.9	4.745	A
B - A44 South	1445	361	175	2820	0.512	1445	1832	1.0	1.0	2.618	A
C - A44 North	1596	399	297	2236	0.714	1596	1323	2.5	2.5	5.626	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	656	164	1351	1415	0.464	656	542	0.9	0.9	4.745	A
B - A44 South	1445	361	175	2820	0.512	1445	1832	1.0	1.0	2.618	A
C - A44 North	1596	399	297	2236	0.714	1596	1323	2.5	2.5	5.626	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	656	164	1351	1415	0.464	656	542	0.9	0.9	4.745	A
B - A44 South	1445	361	175	2820	0.512	1445	1832	1.0	1.0	2.618	A
C - A44 North	1596	399	297	2236	0.714	1596	1323	2.5	2.5	5.626	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	656	164	1351	1415	0.464	656	542	0.9	0.9	4.745	A
B - A44 South	1445	361	175	2820	0.512	1445	1832	1.0	1.1	2.618	A
C - A44 North	1596	399	297	2236	0.714	1596	1323	2.5	2.5	5.626	A

2031 Without Dev, 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	A44/Frieze Way	Standard Roundabout		A, B, C	8.87	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 period length (min)	Time segment length (min)	Run automatically
D8	2031 Without Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4260 Frieze Way		FLAT	✓	813	100.000
B - A44 South		FLAT	✓	2093	100.000
C - A44 North		FLAT	✓	1615	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
From	A - A4260 Frieze Way	12	358	443
	B - A44 South	649	12	1432
	C - A44 North	283	1327	5

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
From	A - A4260 Frieze Way	0	1	1
	B - A44 South	1	0	3
	C - A44 North	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4260 Frieze Way	0.58	6.03	1.4	A	813	1220
B - A44 South	0.82	7.57	4.4	A	2093	3139
C - A44 North	0.84	11.93	5.3	B	1615	2422

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	813	203	1328	1424	0.571	808	935	0.0	1.3	5.797	A
B - A44 South	2093	523	457	2571	0.814	2076	1678	0.0	4.2	7.056	A
C - A44 North	1615	404	668	1920	0.841	1595	1866	0.0	4.9	10.518	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	813	203	1343	1411	0.576	813	944	1.3	1.3	6.021	A
B - A44 South	2093	523	460	2568	0.815	2093	1696	4.2	4.3	7.551	A
C - A44 North	1615	404	673	1916	0.843	1614	1880	4.9	5.1	11.830	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	813	203	1344	1410	0.577	813	944	1.3	1.4	6.028	A
B - A44 South	2093	523	460	2568	0.815	2093	1697	4.3	4.3	7.564	A
C - A44 North	1615	404	673	1916	0.843	1615	1880	5.1	5.2	11.894	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	813	203	1344	1410	0.577	813	944	1.4	1.4	6.029	A
B - A44 South	2093	523	460	2568	0.815	2093	1697	4.3	4.4	7.570	A
C - A44 North	1615	404	673	1916	0.843	1615	1880	5.2	5.2	11.915	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	813	203	1344	1410	0.577	813	944	1.4	1.4	6.029	A
B - A44 South	2093	523	460	2568	0.815	2093	1697	4.4	4.4	7.569	A
C - A44 North	1615	404	673	1916	0.843	1615	1880	5.2	5.3	11.925	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	813	203	1344	1410	0.577	813	944	1.4	1.4	6.029	A
B - A44 South	2093	523	460	2568	0.815	2093	1697	4.4	4.4	7.573	A
C - A44 North	1615	404	673	1916	0.843	1615	1880	5.3	5.3	11.932	B

2031 With Dev, 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	A44/Frieze Way	Standard Roundabout		A, B, C	4.80	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 period length (min)	Time segment length (min)	Run automatically
D9	2031 With Dev	AM	FLAT	07:45	09:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4260 Frieze Way		FLAT	✓	661	100.000
B - A44 South		FLAT	✓	1469	100.000
C - A44 North		FLAT	✓	1683	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
From	A - A4260 Frieze Way	2	483	176
	B - A44 South	288	7	1174
	C - A44 North	266	1415	2

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
From	A - A4260 Frieze Way	0	1	1
	B - A44 South	1	0	3
	C - A44 North	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4260 Frieze Way	0.49	5.20	1.0	A	661	991
B - A44 South	0.52	2.67	1.1	A	1469	2203
C - A44 North	0.75	6.51	3.0	A	1683	2525

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	661	165	1414	1362	0.485	657	553	0.0	0.9	5.086	A
B - A44 South	1469	367	179	2816	0.522	1465	1892	0.0	1.1	2.655	A
C - A44 North	1683	421	296	2236	0.753	1671	1348	0.0	3.0	6.244	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	661	165	1424	1353	0.488	661	556	0.9	0.9	5.199	A
B - A44 South	1469	367	180	2815	0.522	1469	1905	1.1	1.1	2.673	A
C - A44 North	1683	421	297	2236	0.753	1683	1352	3.0	3.0	6.504	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	661	165	1424	1353	0.488	661	556	0.9	1.0	5.200	A
B - A44 South	1469	367	180	2815	0.522	1469	1905	1.1	1.1	2.674	A
C - A44 North	1683	421	297	2236	0.753	1683	1352	3.0	3.0	6.509	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	661	165	1424	1353	0.488	661	556	1.0	1.0	5.200	A
B - A44 South	1469	367	180	2815	0.522	1469	1905	1.1	1.1	2.674	A
C - A44 North	1683	421	297	2236	0.753	1683	1352	3.0	3.0	6.509	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	661	165	1424	1353	0.489	661	556	1.0	1.0	5.200	A
B - A44 South	1469	367	180	2815	0.522	1469	1905	1.1	1.1	2.674	A
C - A44 North	1683	421	297	2236	0.753	1683	1352	3.0	3.0	6.512	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	661	165	1424	1353	0.489	661	556	1.0	1.0	5.200	A
B - A44 South	1469	367	180	2815	0.522	1469	1905	1.1	1.1	2.674	A
C - A44 North	1683	421	297	2236	0.753	1683	1352	3.0	3.0	6.512	A

2031 With Dev, 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	A44/Frieze Way	Standard Roundabout		A, B, C	10.69	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 period length (min)	Time segment length (min)	Run automatically
D10	2031 With Dev	PM	FLAT	16:45	18:15	90	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A4260 Frieze Way		FLAT	✓	820	100.000
B - A44 South		FLAT	✓	2201	100.000
C - A44 North		FLAT	✓	1669	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
From	A - A4260 Frieze Way	12	358	450
	B - A44 South	649	12	1540
	C - A44 North	287	1377	5

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A4260 Frieze Way	B - A44 South	C - A44 North
From	A - A4260 Frieze Way	0	1	1
	B - A44 South	1	0	3
	C - A44 North	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A4260 Frieze Way	0.59	6.44	1.5	A	820	1230
B - A44 South	0.86	9.98	6.0	A	2201	3301
C - A44 North	0.86	13.68	6.2	B	1669	2504

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	820	205	1375	1395	0.588	814	937	0.0	1.4	6.147	A
B - A44 South	2201	550	464	2564	0.858	2178	1726	0.0	5.7	8.879	A
C - A44 North	1669	417	666	1937	0.862	1646	1976	0.0	5.7	11.618	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	820	205	1393	1380	0.594	820	947	1.4	1.4	6.426	A
B - A44 South	2201	550	467	2561	0.859	2200	1746	5.7	5.9	9.910	A
C - A44 North	1669	417	673	1931	0.864	1668	1994	5.7	6.0	13.484	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	820	205	1394	1379	0.595	820	948	1.4	1.5	6.438	A
B - A44 South	2201	550	467	2561	0.859	2201	1747	5.9	6.0	9.955	A
C - A44 North	1669	417	673	1931	0.864	1669	1995	6.0	6.1	13.604	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	820	205	1394	1379	0.595	820	948	1.5	1.5	6.440	A
B - A44 South	2201	550	467	2561	0.859	2201	1747	6.0	6.0	9.971	A
C - A44 North	1669	417	673	1931	0.864	1669	1995	6.1	6.2	13.643	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	820	205	1394	1379	0.595	820	948	1.5	1.5	6.441	A
B - A44 South	2201	550	467	2561	0.859	2201	1747	6.0	6.0	9.979	A
C - A44 North	1669	417	673	1931	0.864	1669	1995	6.2	6.2	13.666	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A4260 Frieze Way	820	205	1394	1379	0.595	820	948	1.5	1.5	6.441	A
B - A44 South	2201	550	467	2561	0.859	2201	1747	6.0	6.0	9.982	A
C - A44 North	1669	417	673	1931	0.864	1669	1995	6.2	6.2	13.677	B