

Appendix L – Junction 5: Leeds Road / Challenge Way /
John Ormsby

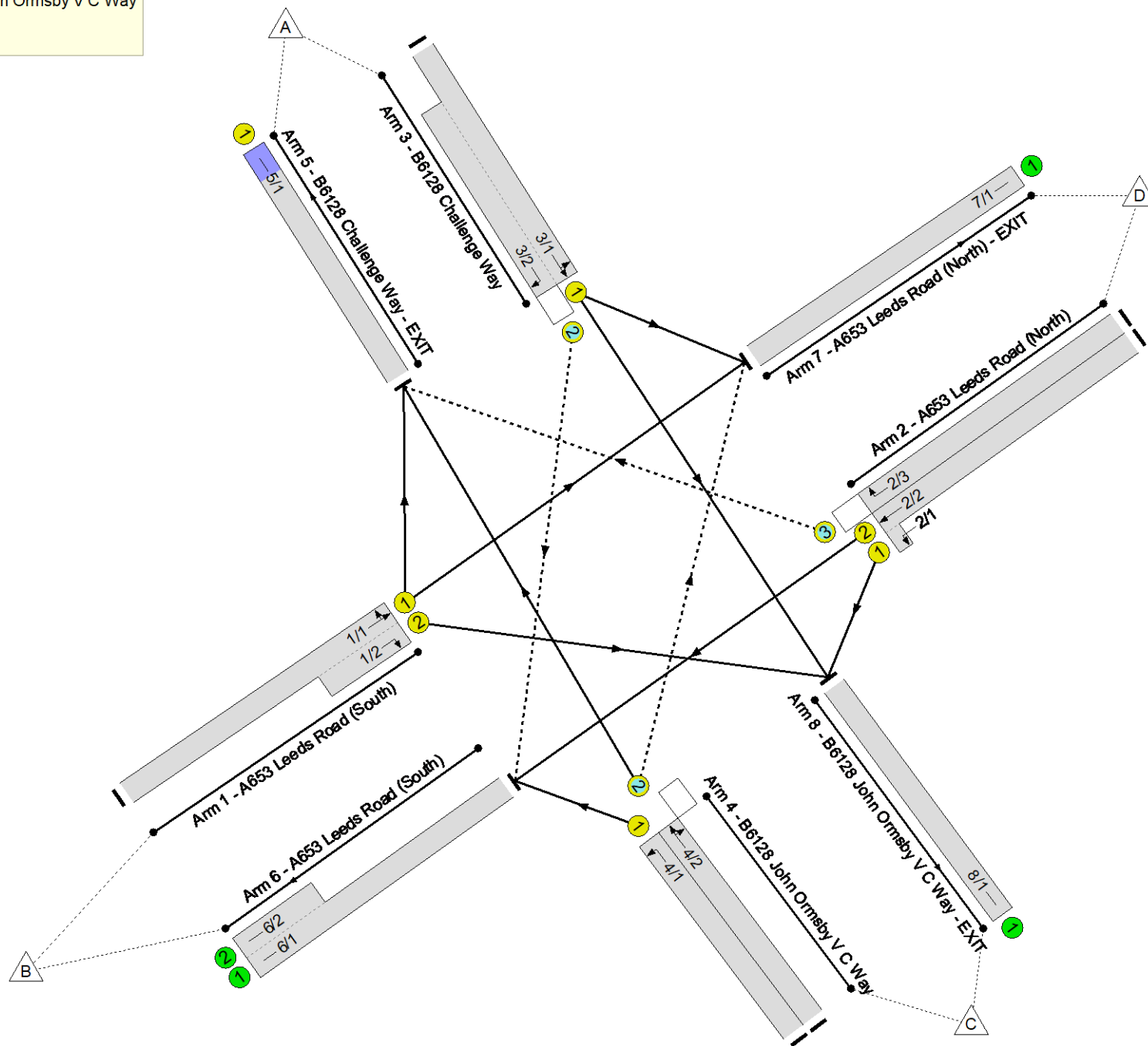
Full Input Data And Results**User and Project Details**

Project:	A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way
Title:	Land at Chidswell
Location:	A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way
Additional detail:	
File name:	Junc 5 A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby - Nov 2019_RevA.lsg3x
Company:	Pell Frischmann
Address:	
Linsig Version:	3, 2, 40, 0

Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way



Full Input Data And Results

Full Input Data And Results

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2019 Base AM	2019 Base AM	Network Control Plan 1	07:30 - 08:30	88	0.1	31.28
2	2019 Base PM	2019 Base PM	Network Control Plan 1	16:30 - 17:30	88	9.2	27.13
3	2024 DN AM	2024 DN AM	Network Control Plan 1	07:30 - 08:30	88	4.9	32.72
4	2024 DN PM	2024 DN PM	Network Control Plan 1	16:30 - 17:30	92	12.5	27.21
5	2030 DN AM	2030 DN AM	Network Control Plan 1	07:30 - 08:30	88	-2.8	42.77
6	2030 DN PM	2030 DN PM	Network Control Plan 1	16:30 - 17:30	92	3.2	30.06
7	2024 DS(A) AM	2024 DS(A) AM	Network Control Plan 1	07:30 - 08:30	88	-8.6	41.81
8	2024 DS(A) PM	2024 DS(A) PM	Network Control Plan 1	16:30 - 17:30	92	-8.2	35.84
9	2024 DS(A+B) AM	2024 DS(A+B) AM	Network Control Plan 1	07:30 - 08:30	88	-4.7	40.73
10	2024 DS(A+B) PM	2024 DS(A+B) PM	Network Control Plan 1	16:30 - 17:30	92	6.7	29.83
11	2030 DS(A) AM	2030 DS(A) AM	Network Control Plan 1	07:30 - 08:30	88	-6.8	53.07
12	2030 DS(A) PM	2030 DS(A) PM	Network Control Plan 1	16:30 - 17:30	92	-0.6	33.34
13	2030 DS(A+B) AM	2030 DS(A+B) AM	Network Control Plan 1	07:30 - 08:30	88	-27.0	222.05
14	2030 DS(A+B) PM	2030 DS(A+B) PM	Network Control Plan 1	16:30 - 17:30	92	-29.3	238.33

Full Input Data And Results

Network Results

Scenario 1: '2019 Base AM' (FG1: '2019 Base AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Full Phase	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Mean Max Queue (pcu)
Network: Land at Chidswell	-	-	N/A	-	-	-	-	-	-	-	89.9%	-	-	-
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-	-	-	-	-	-	89.9%	-	-	-
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	A B	15	55:28	928	2119:2117	2119	807+266	86.5 : 86.5%	928	928	20.9
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	C D	35:36	67	488	2092:1800	2092	771+6	62.8 : 62.8%	488	488	10.6
2/3	A653 Leeds Road (North) Right	O	N/A	C	35	67	87	1724	1724	327	26.6%	87	87	1.6
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	F	73	8	513	2022:1724	2022	551+19	89.9 : 89.9%	513	513	15.5
4/1	B6128 John Ormsby V C Way Left	U	N/A	E	73	8	259	2147	2147	586	44.2%	259	259	5.6
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	E	73	8	407	1985	1985	541	75.2%	407	407	10.5
5/1	B6128 Challenge Way - EXIT	U	N/A	N	36	14	481	1941	1941	1478	32.5%	481	481	0.4
6/1+6/2	A653 Leeds Road (South)	U	N/A	-	-	-	760	2400:1873	2400	2400+0	31.7 : 0.0%	760	760	0.2
C1		PRC for Signalled Lanes (%):		0.1		Total Delay for Signalled Lanes (pcuHr):		31.05		Cycle Time (s):		88		
		PRC Over All Lanes (%):		0.1		Total Delay Over All Lanes(pcuHr):		31.28						

Full Input Data And Results

Scenario 2: '2019 Base PM' (FG2: '2019 Base PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Full Phase	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Mean Max Queue (pcu)
Network: Land at Chidswell	-	-	N/A	-	-	-	-	-	-	-	82.4%	-	-	-
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-	-	-	-	-	-	82.4%	-	-	-
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	A B	15	52:27	727	2119:2117	2119	762+233	73.1 : 73.1%	727	727	13.9
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	C D	34:35	64	558	2092:1800	2092	729+1	76.4 : 76.4%	558	558	13.7
2/3	A653 Leeds Road (North) Right	O	N/A	C	34	64	40	1724	1724	405	9.9%	40	40	0.7
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	F	70	8	580	2022:1724	2022	612+92	82.4 : 82.4%	580	580	13.6
4/1	B6128 John Ormsby V C Way Left	U	N/A	E	70	8	411	2147	2147	659	62.4%	411	411	9.4
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	E	70	8	345	1985	1985	609	56.6%	345	345	7.6
5/1	B6128 Challenge Way - EXIT	U	N/A	N	35	14	395	1941	1941	1500	26.3%	395	395	0.6
6/1+6/2	A653 Leeds Road (South)	U	N/A	-	-	-	1044	2400:1873	2400	2400+0	43.5 : 0.0%	1044	1044	0.4
C1		PRC for Signalled Lanes (%):		9.2		Total Delay for Signalled Lanes (pcuHr):		26.75		Cycle Time (s):		88		
		PRC Over All Lanes (%):		9.2		Total Delay Over All Lanes(pcuHr):		27.13						

Full Input Data And Results

Scenario 3: '2024 DN AM' (FG3: '2024 DN AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Full Phase	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Mean Max Queue (pcu)
Network: Land at Chidswell	-	-	N/A	-	-	-	-	-	-	-	85.8%	-	-	-
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-	-	-	-	-	-	85.8%	-	-	-
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	A B	70	23:0	980	2119:2117	2119	858+302	84.5 : 84.5%	980	980	20.1
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	C D	7:8	35	573	2092:1800	2092	678+5	84.0 : 84.0%	573	573	15.4
2/3	A653 Leeds Road (North) Right	O	N/A	C	7	35	110	1724	1724	307	35.8%	110	110	2.2
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	F	41	63	531	2022:1724	2022	595+24	85.8 : 85.8%	531	531	14.4
4/1	B6128 John Ormsby V C Way Left	U	N/A	E	41	63	314	2147	2147	561	56.0%	314	314	7.3
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	E	41	63	419	1985	1985	586	71.4%	419	419	10.3
5/1	B6128 Challenge Way - EXIT	U	N/A	N	8	69	515	1941	1941	1368	37.7%	515	515	0.7
6/1+6/2	A653 Leeds Road (South)	U	N/A	-	-	-	904	2400:1873	2400	2400+0	37.7 : 0.0%	904	904	0.3
C1		PRC for Signalled Lanes (%):		4.9		Total Delay for Signalled Lanes (pcuHr):		32.42		Cycle Time (s):		88		
		PRC Over All Lanes (%):		4.9		Total Delay Over All Lanes(pcuHr):		32.72						

Full Input Data And Results

Scenario 4: '2024 DN PM' (FG4: '2024 DN PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Full Phase	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Mean Max Queue (pcu)
Network: Land at Chidswell	-	-	N/A	-	-	-	-	-	-	-	80.0%	-	-	-
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-	-	-	-	-	-	80.0%	-	-	-
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	A B	83	27:0	687	2119:2117	2119	679+230	75.4 : 76.1%	687	687	13.8
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	C D	7:8	39	581	2092:1800	2092	743+1	78.1 : 78.1%	581	581	15.0
2/3	A653 Leeds Road (North) Right	O	N/A	C	7	39	46	1724	1724	388	11.9%	46	46	0.8
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	F	45	76	672	2022:1724	2022	711+129	80.0 : 80.0%	672	672	14.6
4/1	B6128 John Ormsby V C Way Left	U	N/A	E	45	76	417	2147	2147	840	49.6%	417	417	8.5
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	E	45	76	347	1985	1985	755	46.0%	347	347	7.1
5/1	B6128 Challenge Way - EXIT	U	N/A	N	8	82	394	1941	1941	1582	24.9%	394	394	0.6
6/1+6/2	A653 Leeds Road (South)	U	N/A	-	-	-	1100	2400:1873	2400	2400+0	45.8 : 0.0%	1100	1100	0.4
C1		PRC for Signalled Lanes (%):		12.5		Total Delay for Signalled Lanes (pcuHr):		26.79		Cycle Time (s):		92		
		PRC Over All Lanes (%):		12.5		Total Delay Over All Lanes(pcuHr):		27.21						

Full Input Data And Results

Scenario 5: '2030 DN AM' (FG5: '2030 DN AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Full Phase	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Mean Max Queue (pcu)
Network: Land at Chidswell	-	-	N/A	-	-	-	-	-	-	-	92.5%	-	-	-
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-	-	-	-	-	-	92.5%	-	-	-
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	A B	70	24:0	1033	2119:2117	2119	828+304	91.3 : 91.3%	1033	1033	23.8
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	C D	7:8	36	653	2092:1800	2092	702+4	92.5 : 92.5%	653	653	20.4
2/3	A653 Leeds Road (North) Right	O	N/A	C	7	36	136	1724	1724	291	46.7%	136	136	3.1
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	F	42	63	549	2022:1724	2022	573+26	91.7 : 91.7%	549	549	17.0
4/1	B6128 John Ormsby V C Way Left	U	N/A	E	42	63	362	2147	2147	537	67.4%	362	362	9.0
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	E	42	63	425	1985	1985	564	75.4%	425	425	10.9
5/1	B6128 Challenge Way - EXIT	U	N/A	N	8	69	544	1941	1941	1368	39.8%	544	544	0.7
6/1+6/2	A653 Leeds Road (South)	U	N/A	-	-	-	1035	2400:1873	2400	2400+0	43.1 : 0.0%	1035	1035	0.4
C1		PRC for Signalled Lanes (%):		-2.8		Total Delay for Signalled Lanes (pcuHr):		42.39		Cycle Time (s):		88		
		PRC Over All Lanes (%):		-2.8		Total Delay Over All Lanes(pcuHr):		42.77						

Full Input Data And Results

Scenario 6: '2030 DN PM' (FG6: '2030 DN PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Full Phase	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Mean Max Queue (pcu)
Network: Land at Chidswell	-	-	N/A	-	-	-	-	-	-	-	87.2%	-	-	-
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-	-	-	-	-	-	87.2%	-	-	-
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	A B	83	25:0	612	2119:2117	2119	531+230	80.4 : 80.4%	612	612	11.8
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	C D	7:8	37	601	2092:1800	2092	697+1	86.0 : 86.0%	601	601	17.1
2/3	A653 Leeds Road (North) Right	O	N/A	C	7	37	51	1724	1724	427	11.9%	51	51	0.9
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	F	43	76	779	2022:1724	2022	743+150	87.2 : 87.2%	779	779	18.5
4/1	B6128 John Ormsby V C Way Left	U	N/A	E	43	76	390	2147	2147	887	44.0%	390	390	7.4
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	E	43	76	347	1985	1985	798	43.5%	347	347	6.7
5/1	B6128 Challenge Way - EXIT	U	N/A	N	8	82	387	1941	1941	1582	24.5%	387	387	0.4
6/1+6/2	A653 Leeds Road (South)	U	N/A	-	-	-	1121	2400:1873	2400	2400+0	46.7 : 0.0%	1121	1121	0.4
C1		PRC for Signalled Lanes (%):		3.2		Total Delay for Signalled Lanes (pcuHr):		29.62		Cycle Time (s):		92		
		PRC Over All Lanes (%):		3.2		Total Delay Over All Lanes(pcuHr):		30.06						

Full Input Data And Results

Scenario 7: '2024 DS(A) AM' (FG7: '2024 DS(A) AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Full Phase	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Mean Max Queue (pcu)
Network: Land at Chidswell	-	-	N/A	-	-	-	-	-	-	-	97.8%	-	-	-
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-	-	-	-	-	-	97.8%	-	-	-
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	A B	15	52:27	983	2119:2117	2119	745+261	97.8 : 97.8%	983	983	32.4
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	C D	34:35	64	584	2092:1800	2092	725+5	80.0 : 80.0%	584	584	14.8
2/3	A653 Leeds Road (North) Right	O	N/A	C	34	64	110	1724	1724	257	42.7%	110	110	2.2
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	F	70	8	531	2022:1724	2022	617+25	82.7 : 82.7%	531	531	13.8
4/1	B6128 John Ormsby V C Way Left	U	N/A	E	70	8	314	2147	2147	659	47.7%	314	314	6.6
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	E	70	8	419	1985	1985	609	68.8%	419	419	10.1
5/1	B6128 Challenge Way - EXIT	U	N/A	N	35	14	515	1941	1941	1500	34.3%	515	515	0.4
6/1+6/2	A653 Leeds Road (South)	U	N/A	-	-	-	915	2400:1873	2400	2400+0	38.1 : 0.0%	915	915	0.3
C1		PRC for Signalled Lanes (%):		-8.6		Total Delay for Signalled Lanes (pcuHr):		41.51		Cycle Time (s):		88		
		PRC Over All Lanes (%):		-8.6		Total Delay Over All Lanes(pcuHr):		41.81						

Full Input Data And Results

Scenario 8: '2024 DS(A) PM' (FG8: '2024 DS(A) PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Full Phase	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Mean Max Queue (pcu)
Network: Land at Chidswell	-	-	N/A	-	-	-	-	-	-	-	97.4%	-	-	-
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-	-	-	-	-	-	97.4%	-	-	-
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	A B	15	56:27	696	2119:2117	2119	751+252	69.4 : 69.4%	696	696	12.5
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	C D	34:35	68	587	2092:1800	2092	788+1	74.4 : 74.4%	587	587	14.3
2/3	A653 Leeds Road (North) Right	O	N/A	C	34	68	46	1724	1724	452	10.2%	46	46	0.8
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	F	74	8	672	2022:1724	2022	584+106	97.4 : 97.4%	672	672	23.6
4/1	B6128 John Ormsby V C Way Left	U	N/A	E	74	8	417	2147	2147	630	66.2%	417	417	10.2
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	E	74	8	347	1985	1985	583	59.6%	347	347	8.3
5/1	B6128 Challenge Way - EXIT	U	N/A	N	35	14	394	1941	1941	1519	25.9%	394	394	0.4
6/1+6/2	A653 Leeds Road (South)	U	N/A	-	-	-	1106	2400:1873	2400	2400+0	46.1 : 0.0%	1106	1106	0.4
C1		PRC for Signalled Lanes (%):		-8.2		Total Delay for Signalled Lanes (pcuHr):		35.42		Cycle Time (s):		92		
		PRC Over All Lanes (%):		-8.2		Total Delay Over All Lanes(pcuHr):		35.84						

Full Input Data And Results

Scenario 9: '2024 DS(A+B) AM' (FG9: '2024 DS(A+B) AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Full Phase	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Mean Max Queue (pcu)
Network: Land at Chidswell	-	-	N/A	-	-	-	-	-	-	-	94.2%	-	-	-
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-	-	-	-	-	-	94.2%	-	-	-
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	A B	74	26:0	1012	2119:2117	2119	804+271	94.2 : 94.2%	1012	1012	28.0
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	C D	7:8	38	588	2092:1800	2092	748+5	78.0 : 78.0%	588	588	14.5
2/3	A653 Leeds Road (North) Right	O	N/A	C	7	38	110	1724	1724	280	39.3%	110	110	2.1
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	F	44	67	531	2022:1724	2022	551+23	92.5 : 92.5%	531	531	17.0
4/1	B6128 John Ormsby V C Way Left	U	N/A	E	44	67	314	2147	2147	586	53.6%	314	314	7.0
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	E	44	67	419	1985	1985	541	77.4%	419	419	11.1
5/1	B6128 Challenge Way - EXIT	U	N/A	N	8	73	515	1941	1941	1456	35.4%	515	515	0.4
6/1+6/2	A653 Leeds Road (South)	U	N/A	-	-	-	919	2400:1873	2400	2400+0	38.3 : 0.0%	919	919	0.3
C1		PRC for Signalled Lanes (%):		-4.7		Total Delay for Signalled Lanes (pcuHr):		40.42		Cycle Time (s):		88		
		PRC Over All Lanes (%):		-4.7		Total Delay Over All Lanes(pcuHr):		40.73						

Full Input Data And Results

Scenario 10: '2024 DS(A+B) PM' (FG10: '2024 DS(A+B) PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Full Phase	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Mean Max Queue (pcu)
Network: Land at Chidswell	-	-	N/A	-	-	-	-	-	-	-	84.3%	-	-	-
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-	-	-	-	-	-	84.3%	-	-	-
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	A B	83	27:0	699	2119:2117	2119	701+230	74.8 : 76.1%	699	699	14.2
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	C D	7:8	39	610	2092:1800	2092	743+1	82.0 : 82.0%	610	610	16.3
2/3	A653 Leeds Road (North) Right	O	N/A	C	7	39	46	1724	1724	377	12.2%	46	46	0.8
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	F	45	76	672	2022:1724	2022	675+122	84.3 : 84.3%	672	672	15.7
4/1	B6128 John Ormsby V C Way Left	U	N/A	E	45	76	417	2147	2147	747	55.8%	417	417	9.2
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	E	45	76	347	1985	1985	690	50.3%	347	347	7.4
5/1	B6128 Challenge Way - EXIT	U	N/A	N	8	82	394	1941	1941	1582	24.9%	394	394	0.4
6/1+6/2	A653 Leeds Road (South)	U	N/A	-	-	-	1129	2400:1873	2400	2400+0	47.0 : 0.0%	1129	1129	0.4
C1		PRC for Signalled Lanes (%):		6.7		Total Delay for Signalled Lanes (pcuHr):		29.38		Cycle Time (s):		92		
		PRC Over All Lanes (%):		6.7		Total Delay Over All Lanes(pcuHr):		29.83						

Full Input Data And Results

Scenario 11: '2030 DS(A) AM' (FG11: '2030 DS(A) AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Full Phase	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Mean Max Queue (pcu)
Network: Land at Chidswell	-	-	N/A	-	-	-	-	-	-	-	96.1%	-	-	-
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-	-	-	-	-	-	96.1%	-	-	-
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	A B	72	24:0	1039	2119:2117	2119	793+288	96.1 : 96.1%	1039	1039	30.8
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	C D	7:8	36	674	2092:1800	2092	702+4	95.4 : 95.4%	674	674	23.3
2/3	A653 Leeds Road (North) Right	O	N/A	C	7	36	136	1724	1724	267	50.9%	136	136	3.5
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	F	42	65	549	2022:1724	2022	551+25	95.2 : 95.2%	549	549	19.2
4/1	B6128 John Ormsby V C Way Left	U	N/A	E	42	65	362	2147	2147	586	61.8%	362	362	8.4
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	E	42	65	424	1985	1985	541	78.3%	424	424	11.3
5/1	B6128 Challenge Way - EXIT	U	N/A	N	8	71	543	1941	1941	1412	38.5%	543	543	0.4
6/1+6/2	A653 Leeds Road (South)	U	N/A	-	-	-	1056	2400:1873	2400	2400+0	44.0 : 0.0%	1056	1056	0.4
C1		PRC for Signalled Lanes (%):		-6.8		Total Delay for Signalled Lanes (pcuHr):		52.68		Cycle Time (s):		88		
		PRC Over All Lanes (%):		-6.8		Total Delay Over All Lanes(pcuHr):		53.07						

Full Input Data And Results

Scenario 12: '2030 DS(A) PM' (FG12: '2030 DS(A) PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Full Phase	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Mean Max Queue (pcu)
Network: Land at Chidswell	-	-	N/A	-	-	-	-	-	-	-	90.6%	-	-	-
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-	-	-	-	-	-	90.6%	-	-	-
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	A B	83	24:0	627	2119:2117	2119	550+230	80.4 : 80.4%	627	627	12.7
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	C D	7:8	36	612	2092:1800	2092	675+1	90.6 : 90.6%	612	612	19.2
2/3	A653 Leeds Road (North) Right	O	N/A	C	7	36	51	1724	1724	401	12.7%	51	51	1.0
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	F	42	76	779	2022:1724	2022	725+147	89.3 : 89.3%	779	779	19.4
4/1	B6128 John Ormsby V C Way Left	U	N/A	E	42	76	390	2147	2147	817	47.7%	390	390	7.9
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	E	42	76	347	1985	1985	755	46.0%	347	347	7.1
5/1	B6128 Challenge Way - EXIT	U	N/A	N	8	82	387	1941	1941	1582	24.5%	387	387	0.2
6/1+6/2	A653 Leeds Road (South)	U	N/A	-	-	-	1132	2400:1873	2400	2400+0	47.2 : 0.0%	1132	1132	0.4
C1		PRC for Signalled Lanes (%):		-0.6		Total Delay for Signalled Lanes (pcuHr):		32.89		Cycle Time (s):		92		
		PRC Over All Lanes (%):		-0.6		Total Delay Over All Lanes(pcuHr):		33.34						

Full Input Data And Results

Scenario 13: '2030 DS(A+B) AM' (FG13: '2030 DS(A+B) AM', Plan 1: 'Network Control Plan 1')

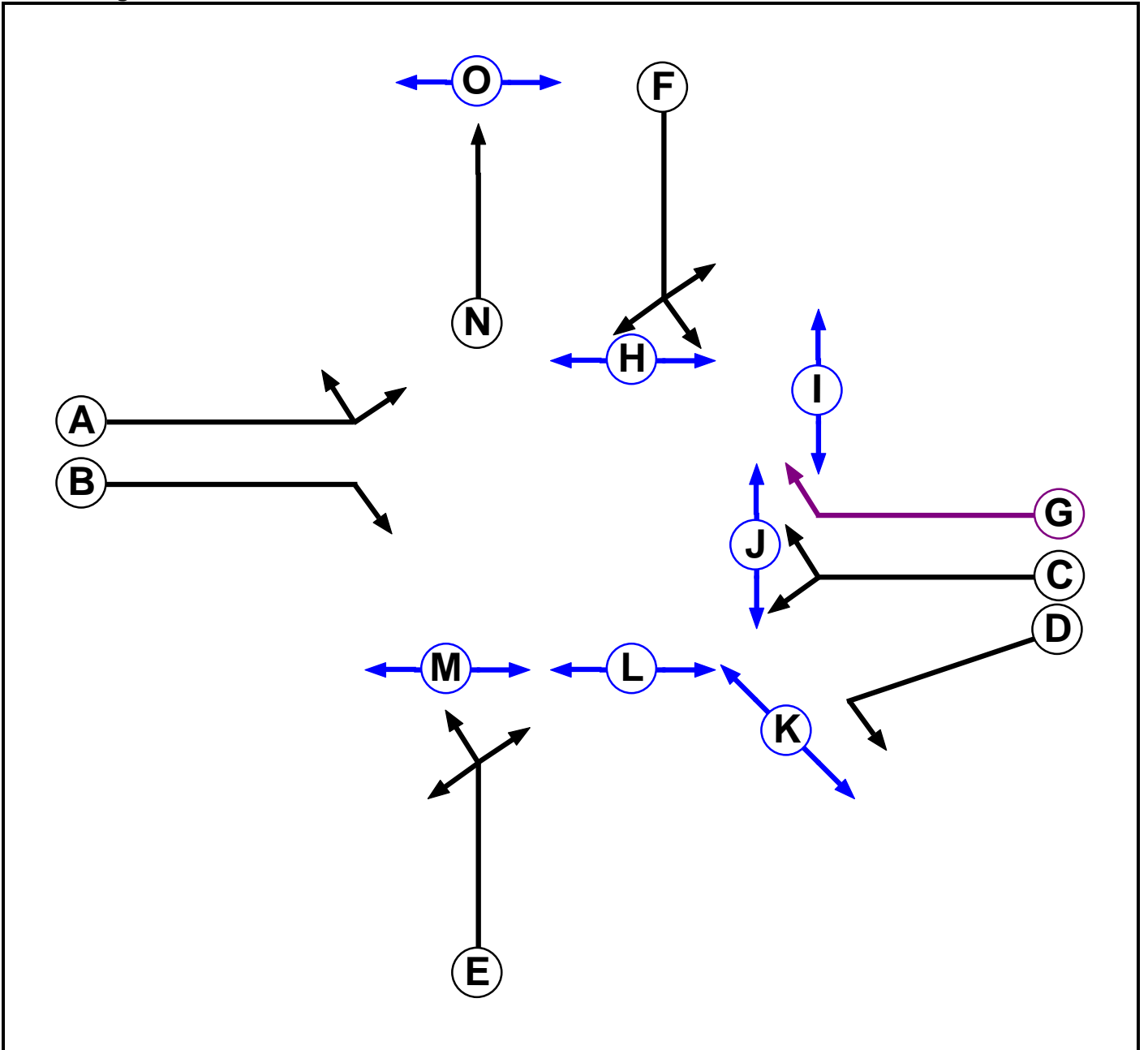
Item	Lane Description	Lane Type	Controller Stream	Full Phase	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Mean Max Queue (pcu)
Network: Land at Chidswell	-	-	N/A	-	-	-	-	-	-	-	114.3%	-	-	-
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-	-	-	-	-	-	114.3%	-	-	-
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	A B	75	25:0	1158	2119:2117	2119	742+271	114.3 : 114.3%	1158	1013	107.1
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	C D	7:8	40	908	2092:1800	2092	798+4	113.3 : 113.3%	908	801	82.4
2/3	A653 Leeds Road (North) Right	O	N/A	C	7	40	238	1724	1724	294	80.8%	238	238	7.5
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	F	46	68	602	2022:1724	2022	528+22	109.4 : 109.4%	602	551	47.2
4/1	B6128 John Ormsby V C Way Left	U	N/A	E	46	68	466	2147	2147	561	83.0%	466	466	13.1
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	E	46	68	493	1985	1985	519	95.0%	493	493	18.2
5/1	B6128 Challenge Way - EXIT	U	N/A	N	8	74	714	1941	1941	1478	48.2%	713	713	0.5
6/1+6/2	A653 Leeds Road (South)	U	N/A	-	-	-	1394	2400:1873	2400	2400+0	53.6 : 0.0%	1287	1287	0.6
C1		PRC for Signalled Lanes (%):		-27.0		Total Delay for Signalled Lanes (pcuHr):		221.47		Cycle Time (s):		88		
		PRC Over All Lanes (%):		-27.0		Total Delay Over All Lanes(pcuHr):		222.05						

Full Input Data And Results

Scenario 14: '2030 DS(A+B) PM' (FG14: '2030 DS(A+B) PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Controller Stream	Full Phase	Start Green (s)	End Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)	Mean Max Queue (pcu)
Network: Land at Chidswell	-	-	N/A	-	-	-	-	-	-	-	116.3%	-	-	-
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-	-	-	-	-	-	116.3%	-	-	-
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	A B	82	26:0	985	2119:2117	2119	617+241	114.8 : 114.8%	985	858	94.4
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	C D	7:8	38	824	2092:1800	2092	720+1	114.3 : 114.3%	824	721	79.0
2/3	A653 Leeds Road (North) Right	O	N/A	C	7	38	101	1724	1724	228	44.3%	101	101	2.2
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	F	44	75	918	2022:1724	2022	677+113	116.3 : 116.3%	918	789	95.0
4/1	B6128 John Ormsby V C Way Left	U	N/A	E	44	75	457	2147	2147	747	61.2%	457	457	10.4
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	E	44	75	394	1985	1985	690	57.1%	394	394	8.8
5/1	B6128 Challenge Way - EXIT	U	N/A	N	8	81	484	1941	1941	1561	31.0%	484	484	0.2
6/1+6/2	A653 Leeds Road (South)	U	N/A	-	-	-	1411	2400:1873	2400	2400+0	53.7 : 0.0%	1290	1290	0.6
C1		PRC for Signalled Lanes (%):		-29.3		Total Delay for Signalled Lanes (pcuHr):		237.75		Cycle Time (s):		92		
		PRC Over All Lanes (%):		-29.3		Total Delay Over All Lanes(pcuHr):		238.33						

Full Input Data And Results
Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	5
D	Traffic		7	5
E	Traffic		7	7
F	Traffic		7	7
G	Ind. Arrow	C	2	0
H	Pedestrian		5	5
I	Pedestrian		5	2
J	Pedestrian		5	5
K	Pedestrian		5	5
L	Pedestrian		5	2
M	Pedestrian		5	5
N	Traffic		7	1
O	Pedestrian		5	5

Full Input Data And Results

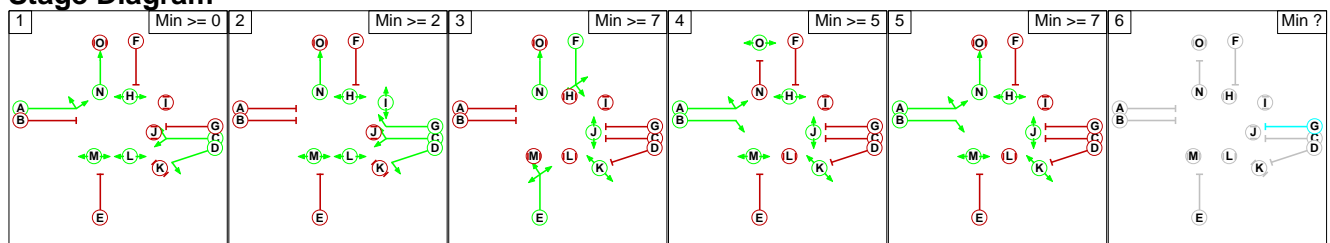
Phase Intergrens Matrix

	Starting Phase														
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
A	-	-	-	5	5	5	-	8	-	-	-	-	-	-	-
B	-	-	6	8	5	5	5	-	-	-	-	8	-	-	-
C	-	5	-	-	6	5	-	-	-	5	-	-	-	-	10
D	-	5	-	-	-	5	-	-	-	-	5	-	-	-	-
E	7	7	5	-	-	-	5	-	9	-	-	-	5	-	11
F	5	5	7	8	-	-	7	5	8	-	-	9	-	-	-
G	5	5	-	-	6	5	-	-	-	5	-	-	-	-	10
H	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-
I	5	-	-	-	5	5	-	-	-	-	-	-	-	-	-
J	-	-	7	-	-	-	7	-	-	-	-	-	-	-	-
K	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-
L	-	5	-	-	-	5	-	-	-	-	-	-	-	-	-
M	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-
N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
O	-	-	4	-	4	-	4	-	-	-	-	-	-	8	-

Phases in Stage

Stage No.	Phases in Stage
1	A C D H L M N
2	C D G H I L M N
3	E F J K N
4	A B H J K M O
5	A B H J K M N
6	

Stage Diagram



Full Input Data And Results

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	3	A	Losing	2	2
1	3	C	Losing	2	2
1	3	D	Losing	2	2
1	3	L	Losing	3	3
2	3	C	Losing	2	2
2	3	D	Losing	2	2
2	3	G	Losing	2	2
2	3	I	Losing	3	3
2	3	L	Losing	3	3
3	4	N	Losing	6	6
4	1	K	Losing	2	2
5	1	K	Losing	2	2

Prohibited Stage Change

		To Stage					
		1	2	3	4	5	6
From Stage	1	8	8	X	X	X	
	2	X	8	X	X	X	
	3	9	X	11	7	X	
	4	8	X	X	X	X	
	5	8	X	X	X	X	
	6	X	X	X	X	X	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way											
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-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/3 (A653 Leeds Road (North))	5/1 (Right)	1439	0	1/1	1.09	All	2.00	-	0.50	2	2.00
3/2 (B6128 Challenge Way)	6/1 (Right)	1439	0	4/2	1.09	To 5/1 (Ahead)	2.00	-	0.50	2	2.00
				4/1	1.09	All					
4/2 (B6128 John Ormsby V C Way)	7/1 (Right)	1439	0	3/1	1.09	To 7/1 (Left) To 8/1 (Ahead)	2.00	2.00	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way												
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 (A653 Leeds Road (South))	U	A	2	3	60.0	User	2119	-	-	-	-	-
1/2 (A653 Leeds Road (South))	U	B	2	3	6.0	User	2117	-	-	-	-	-
2/1 (A653 Leeds Road (North))	U	D	2	3	1.0	User	1800	-	-	-	-	-
2/2 (A653 Leeds Road (North))	U	C	2	3	60.0	User	2092	-	-	-	-	-
2/3 (A653 Leeds Road (North))	O	C G	2	3	7.0	Geom	-	3.25	0.00	Y	Arm 5 Right	12.00
3/1 (B6128 Challenge Way)	U	F	2	3	60.0	User	2022	-	-	-	-	-
3/2 (B6128 Challenge Way)	O	F	2	3	14.0	Geom	-	3.25	0.00	Y	Arm 6 Right	12.00
4/1 (B6128 John Ormsby V C Way)	U	E	2	3	60.0	User	2147	-	-	-	-	-
4/2 (B6128 John Ormsby V C Way)	O	E	2	3	60.0	User	1985	-	-	-	-	-
5/1 (B6128 Challenge Way - EXIT)	U	N	2	3	60.0	Geom	-	3.26	0.00	Y		
6/1 (A653 Leeds Road (South))	U		2	3	60.0	User	2400	-	-	-	-	-
6/2 (A653 Leeds Road (South))	U		2	3	6.0	Geom	-	2.58	0.00	Y		
7/1 (A653 Leeds Road (North) - EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (B6128 John Ormsby V C Way - EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2019 Base AM'	07:30	08:30	01:00	
2: '2019 Base PM'	16:30	17:30	01:00	
3: '2024 DN AM'	07:30	08:30	01:00	
4: '2024 DN PM'	16:30	17:30	01:00	
5: '2030 DN AM'	07:30	08:30	01:00	
6: '2030 DN PM'	16:30	17:30	01:00	
7: '2024 DS(A) AM'	07:30	08:30	01:00	
8: '2024 DS(A) PM'	16:30	17:30	01:00	
9: '2024 DS(A+B) AM'	07:30	08:30	01:00	
10: '2024 DS(A+B) PM'	16:30	17:30	01:00	
11: '2030 DS(A) AM'	07:30	08:30	01:00	
12: '2030 DS(A) PM'	16:30	17:30	01:00	
13: '2030 DS(A+B) AM'	07:30	08:30	01:00	
14: '2030 DS(A+B) PM'	16:30	17:30	01:00	

Full Input Data And Results

Scenario 1: '2019 Base AM' (FG1: '2019 Base AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	17	412	84	513
	B	12	0	230	686	928
	C	382	259	0	25	666
	D	87	484	4	0	575
	Tot.	481	760	646	795	2682

Traffic Lane Flows

Lane	Scenario 1: 2019 Base AM
Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	
1/1 (with short)	928(In) 698(Out)
1/2 (short)	230
2/1 (short)	4
2/2 (with short)	488(In) 484(Out)
2/3	87
3/1 (with short)	513(In) 496(Out)
3/2 (short)	17
4/1	259
4/2	407
5/1	481
6/1 (with short)	760(In) 760(Out)
6/2 (short)	0
7/1	795
8/1	646

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2119	2119
1/2 (A653 Leeds Road (South) Lane 2)	This lane uses a directly entered Saturation Flow						2117	2117
2/1 (A653 Leeds Road (North) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
2/2 (A653 Leeds Road (North) Lane 2)	This lane uses a directly entered Saturation Flow						2092	2092
2/3 (A653 Leeds Road (North))	3.25	0.00	Y	Arm 5 Right	12.00	100.0 %	1724	1724
3/1 (B6128 Challenge Way Lane 1)	This lane uses a directly entered Saturation Flow						2022	2022
3/2 (B6128 Challenge Way)	3.25	0.00	Y	Arm 6 Right	12.00	100.0 %	1724	1724
4/1 (B6128 John Ormsby V C Way Lane 1)	This lane uses a directly entered Saturation Flow						2147	2147
4/2 (B6128 John Ormsby V C Way Lane 2)	This lane uses a directly entered Saturation Flow						1985	1985
5/1 (B6128 Challenge Way - EXIT)	3.26	0.00	Y				1941	1941
6/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2400	2400
6/2 (A653 Leeds Road (South))	2.58	0.00	Y				1873	1873
7/1 (A653 Leeds Road (North) - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B6128 John Ormsby V C Way - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2019 Base PM' (FG2: '2019 Base PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	76	364	140	580
	B	24	0	170	533	727
	C	331	411	0	14	756
	D	40	557	1	0	598
	Tot.	395	1044	535	687	2661

Traffic Lane Flows

Lane	Scenario 2: 2019 Base PM
Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	
1/1 (with short)	727(In) 557(Out)
1/2 (short)	170
2/1 (short)	1
2/2 (with short)	558(In) 557(Out)
2/3	40
3/1 (with short)	580(In) 504(Out)
3/2 (short)	76
4/1	411
4/2	345
5/1	395
6/1 (with short)	1044(In) 1044(Out)
6/2 (short)	0
7/1	687
8/1	535

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2119	2119
1/2 (A653 Leeds Road (South) Lane 2)	This lane uses a directly entered Saturation Flow						2117	2117
2/1 (A653 Leeds Road (North) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
2/2 (A653 Leeds Road (North) Lane 2)	This lane uses a directly entered Saturation Flow						2092	2092
2/3 (A653 Leeds Road (North))	3.25	0.00	Y	Arm 5 Right	12.00	100.0 %	1724	1724
3/1 (B6128 Challenge Way Lane 1)	This lane uses a directly entered Saturation Flow						2022	2022
3/2 (B6128 Challenge Way)	3.25	0.00	Y	Arm 6 Right	12.00	100.0 %	1724	1724
4/1 (B6128 John Ormsby V C Way Lane 1)	This lane uses a directly entered Saturation Flow						2147	2147
4/2 (B6128 John Ormsby V C Way Lane 2)	This lane uses a directly entered Saturation Flow						1985	1985
5/1 (B6128 Challenge Way - EXIT)	3.26	0.00	Y				1941	1941
6/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2400	2400
6/2 (A653 Leeds Road (South))	2.58	0.00	Y				1873	1873
7/1 (A653 Leeds Road (North) - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B6128 John Ormsby V C Way - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '2024 DN AM' (FG3: '2024 DN AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	21	409	101	531
	B	11	0	255	714	980
	C	394	314	0	25	733
	D	110	569	4	0	683
	Tot.	515	904	668	840	2927

Traffic Lane Flows

Lane	Scenario 3: 2024 DN AM
Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	
1/1 (with short)	980(In) 725(Out)
1/2 (short)	255
2/1 (short)	4
2/2 (with short)	573(In) 569(Out)
2/3	110
3/1 (with short)	531(In) 510(Out)
3/2 (short)	21
4/1	314
4/2	419
5/1	515
6/1 (with short)	904(In) 904(Out)
6/2 (short)	0
7/1	840
8/1	668

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2119	2119
1/2 (A653 Leeds Road (South) Lane 2)	This lane uses a directly entered Saturation Flow						2117	2117
2/1 (A653 Leeds Road (North) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
2/2 (A653 Leeds Road (North) Lane 2)	This lane uses a directly entered Saturation Flow						2092	2092
2/3 (A653 Leeds Road (North))	3.25	0.00	Y	Arm 5 Right	12.00	100.0 %	1724	1724
3/1 (B6128 Challenge Way Lane 1)	This lane uses a directly entered Saturation Flow						2022	2022
3/2 (B6128 Challenge Way)	3.25	0.00	Y	Arm 6 Right	12.00	100.0 %	1724	1724
4/1 (B6128 John Ormsby V C Way Lane 1)	This lane uses a directly entered Saturation Flow						2147	2147
4/2 (B6128 John Ormsby V C Way Lane 2)	This lane uses a directly entered Saturation Flow						1985	1985
5/1 (B6128 Challenge Way - EXIT)	3.26	0.00	Y				1941	1941
6/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2400	2400
6/2 (A653 Leeds Road (South))	2.58	0.00	Y				1873	1873
7/1 (A653 Leeds Road (North) - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B6128 John Ormsby V C Way - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '2024 DN PM' (FG4: '2024 DN PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	103	344	225	672
	B	15	0	175	497	687
	C	333	417	0	14	764
	D	46	580	1	0	627
	Tot.	394	1100	520	736	2750

Traffic Lane Flows

Lane	Scenario 4: 2024 DN PM
Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	
1/1 (with short)	687(In) 512(Out)
1/2 (short)	175
2/1 (short)	1
2/2 (with short)	581(In) 580(Out)
2/3	46
3/1 (with short)	672(In) 569(Out)
3/2 (short)	103
4/1	417
4/2	347
5/1	394
6/1 (with short)	1100(In) 1100(Out)
6/2 (short)	0
7/1	736
8/1	520

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2119	2119
1/2 (A653 Leeds Road (South) Lane 2)	This lane uses a directly entered Saturation Flow						2117	2117
2/1 (A653 Leeds Road (North) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
2/2 (A653 Leeds Road (North) Lane 2)	This lane uses a directly entered Saturation Flow						2092	2092
2/3 (A653 Leeds Road (North))	3.25	0.00	Y	Arm 5 Right	12.00	100.0 %	1724	1724
3/1 (B6128 Challenge Way Lane 1)	This lane uses a directly entered Saturation Flow						2022	2022
3/2 (B6128 Challenge Way)	3.25	0.00	Y	Arm 6 Right	12.00	100.0 %	1724	1724
4/1 (B6128 John Ormsby V C Way Lane 1)	This lane uses a directly entered Saturation Flow						2147	2147
4/2 (B6128 John Ormsby V C Way Lane 2)	This lane uses a directly entered Saturation Flow						1985	1985
5/1 (B6128 Challenge Way - EXIT)	3.26	0.00	Y				1941	1941
6/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2400	2400
6/2 (A653 Leeds Road (South))	2.58	0.00	Y				1873	1873
7/1 (A653 Leeds Road (North) - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B6128 John Ormsby V C Way - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: '2030 DN AM' (FG5: '2030 DN AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	24	406	119	549
	B	8	0	277	748	1033
	C	400	362	0	25	787
	D	136	649	4	0	789
	Tot.	544	1035	687	892	3158

Traffic Lane Flows

Lane	Scenario 5: 2030 DN AM
Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	
1/1 (with short)	1033(In) 756(Out)
1/2 (short)	277
2/1 (short)	4
2/2 (with short)	653(In) 649(Out)
2/3	136
3/1 (with short)	549(In) 525(Out)
3/2 (short)	24
4/1	362
4/2	425
5/1	544
6/1 (with short)	1035(In) 1035(Out)
6/2 (short)	0
7/1	892
8/1	687

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2119	2119
1/2 (A653 Leeds Road (South) Lane 2)	This lane uses a directly entered Saturation Flow						2117	2117
2/1 (A653 Leeds Road (North) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
2/2 (A653 Leeds Road (North) Lane 2)	This lane uses a directly entered Saturation Flow						2092	2092
2/3 (A653 Leeds Road (North))	3.25	0.00	Y	Arm 5 Right	12.00	100.0 %	1724	1724
3/1 (B6128 Challenge Way Lane 1)	This lane uses a directly entered Saturation Flow						2022	2022
3/2 (B6128 Challenge Way)	3.25	0.00	Y	Arm 6 Right	12.00	100.0 %	1724	1724
4/1 (B6128 John Ormsby V C Way Lane 1)	This lane uses a directly entered Saturation Flow						2147	2147
4/2 (B6128 John Ormsby V C Way Lane 2)	This lane uses a directly entered Saturation Flow						1985	1985
5/1 (B6128 Challenge Way - EXIT)	3.26	0.00	Y				1941	1941
6/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2400	2400
6/2 (A653 Leeds Road (South))	2.58	0.00	Y				1873	1873
7/1 (A653 Leeds Road (North) - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B6128 John Ormsby V C Way - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 6: '2030 DN PM' (FG6: '2030 DN PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	131	323	325	779
	B	3	0	185	424	612
	C	333	390	0	14	737
	D	51	600	1	0	652
	Tot.	387	1121	509	763	2780

Traffic Lane Flows

Lane	Scenario 6: 2030 DN PM
Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	
1/1 (with short)	612(In) 427(Out)
1/2 (short)	185
2/1 (short)	1
2/2 (with short)	601(In) 600(Out)
2/3	51
3/1 (with short)	779(In) 648(Out)
3/2 (short)	131
4/1	390
4/2	347
5/1	387
6/1 (with short)	1121(In) 1121(Out)
6/2 (short)	0
7/1	763
8/1	509

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2119	2119
1/2 (A653 Leeds Road (South) Lane 2)	This lane uses a directly entered Saturation Flow						2117	2117
2/1 (A653 Leeds Road (North) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
2/2 (A653 Leeds Road (North) Lane 2)	This lane uses a directly entered Saturation Flow						2092	2092
2/3 (A653 Leeds Road (North))	3.25	0.00	Y	Arm 5 Right	12.00	100.0 %	1724	1724
3/1 (B6128 Challenge Way Lane 1)	This lane uses a directly entered Saturation Flow						2022	2022
3/2 (B6128 Challenge Way)	3.25	0.00	Y	Arm 6 Right	12.00	100.0 %	1724	1724
4/1 (B6128 John Ormsby V C Way Lane 1)	This lane uses a directly entered Saturation Flow						2147	2147
4/2 (B6128 John Ormsby V C Way Lane 2)	This lane uses a directly entered Saturation Flow						1985	1985
5/1 (B6128 Challenge Way - EXIT)	3.26	0.00	Y				1941	1941
6/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2400	2400
6/2 (A653 Leeds Road (South))	2.58	0.00	Y				1873	1873
7/1 (A653 Leeds Road (North) - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B6128 John Ormsby V C Way - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 7: '2024 DS(A) AM' (FG7: '2024 DS(A) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	21	409	101	531
	B	11	0	255	717	983
	C	394	314	0	25	733
	D	110	580	4	0	694
	Tot.	515	915	668	843	2941

Traffic Lane Flows

Lane	Scenario 7: 2024 DS(A) AM
Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	
1/1 (with short)	983(In) 728(Out)
1/2 (short)	255
2/1 (short)	4
2/2 (with short)	584(In) 580(Out)
2/3	110
3/1 (with short)	531(In) 510(Out)
3/2 (short)	21
4/1	314
4/2	419
5/1	515
6/1 (with short)	915(In) 915(Out)
6/2 (short)	0
7/1	843
8/1	668

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2119	2119
1/2 (A653 Leeds Road (South) Lane 2)	This lane uses a directly entered Saturation Flow						2117	2117
2/1 (A653 Leeds Road (North) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
2/2 (A653 Leeds Road (North) Lane 2)	This lane uses a directly entered Saturation Flow						2092	2092
2/3 (A653 Leeds Road (North))	3.25	0.00	Y	Arm 5 Right	12.00	100.0 %	1724	1724
3/1 (B6128 Challenge Way Lane 1)	This lane uses a directly entered Saturation Flow						2022	2022
3/2 (B6128 Challenge Way)	3.25	0.00	Y	Arm 6 Right	12.00	100.0 %	1724	1724
4/1 (B6128 John Ormsby V C Way Lane 1)	This lane uses a directly entered Saturation Flow						2147	2147
4/2 (B6128 John Ormsby V C Way Lane 2)	This lane uses a directly entered Saturation Flow						1985	1985
5/1 (B6128 Challenge Way - EXIT)	3.26	0.00	Y				1941	1941
6/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2400	2400
6/2 (A653 Leeds Road (South))	2.58	0.00	Y				1873	1873
7/1 (A653 Leeds Road (North) - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B6128 John Ormsby V C Way - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 8: '2024 DS(A) PM' (FG8: '2024 DS(A) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	103	344	225	672
	B	15	0	175	506	696
	C	333	417	0	14	764
	D	46	586	1	0	633
	Tot.	394	1106	520	745	2765

Traffic Lane Flows

Lane	Scenario 8: 2024 DS(A) PM
Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	
1/1 (with short)	696(In) 521(Out)
1/2 (short)	175
2/1 (short)	1
2/2 (with short)	587(In) 586(Out)
2/3	46
3/1 (with short)	672(In) 569(Out)
3/2 (short)	103
4/1	417
4/2	347
5/1	394
6/1 (with short)	1106(In) 1106(Out)
6/2 (short)	0
7/1	745
8/1	520

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2119	2119
1/2 (A653 Leeds Road (South) Lane 2)	This lane uses a directly entered Saturation Flow						2117	2117
2/1 (A653 Leeds Road (North) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
2/2 (A653 Leeds Road (North) Lane 2)	This lane uses a directly entered Saturation Flow						2092	2092
2/3 (A653 Leeds Road (North))	3.25	0.00	Y	Arm 5 Right	12.00	100.0 %	1724	1724
3/1 (B6128 Challenge Way Lane 1)	This lane uses a directly entered Saturation Flow						2022	2022
3/2 (B6128 Challenge Way)	3.25	0.00	Y	Arm 6 Right	12.00	100.0 %	1724	1724
4/1 (B6128 John Ormsby V C Way Lane 1)	This lane uses a directly entered Saturation Flow						2147	2147
4/2 (B6128 John Ormsby V C Way Lane 2)	This lane uses a directly entered Saturation Flow						1985	1985
5/1 (B6128 Challenge Way - EXIT)	3.26	0.00	Y				1941	1941
6/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2400	2400
6/2 (A653 Leeds Road (South))	2.58	0.00	Y				1873	1873
7/1 (A653 Leeds Road (North) - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B6128 John Ormsby V C Way - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 9: '2024 DS(A+B) AM' (FG9: '2024 DS(A+B) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	21	409	101	531
	B	11	0	255	746	1012
	C	394	314	0	25	733
	D	110	584	4	0	698
	Tot.	515	919	668	872	2974

Traffic Lane Flows

Lane	Scenario 9: 2024 DS(A+B) AM
Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	
1/1 (with short)	1012(In) 757(Out)
1/2 (short)	255
2/1 (short)	4
2/2 (with short)	588(In) 584(Out)
2/3	110
3/1 (with short)	531(In) 510(Out)
3/2 (short)	21
4/1	314
4/2	419
5/1	515
6/1 (with short)	919(In) 919(Out)
6/2 (short)	0
7/1	872
8/1	668

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2119	2119
1/2 (A653 Leeds Road (South) Lane 2)	This lane uses a directly entered Saturation Flow						2117	2117
2/1 (A653 Leeds Road (North) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
2/2 (A653 Leeds Road (North) Lane 2)	This lane uses a directly entered Saturation Flow						2092	2092
2/3 (A653 Leeds Road (North))	3.25	0.00	Y	Arm 5 Right	12.00	100.0 %	1724	1724
3/1 (B6128 Challenge Way Lane 1)	This lane uses a directly entered Saturation Flow						2022	2022
3/2 (B6128 Challenge Way)	3.25	0.00	Y	Arm 6 Right	12.00	100.0 %	1724	1724
4/1 (B6128 John Ormsby V C Way Lane 1)	This lane uses a directly entered Saturation Flow						2147	2147
4/2 (B6128 John Ormsby V C Way Lane 2)	This lane uses a directly entered Saturation Flow						1985	1985
5/1 (B6128 Challenge Way - EXIT)	3.26	0.00	Y				1941	1941
6/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2400	2400
6/2 (A653 Leeds Road (South))	2.58	0.00	Y				1873	1873
7/1 (A653 Leeds Road (North) - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B6128 John Ormsby V C Way - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 10: '2024 DS(A+B) PM' (FG10: '2024 DS(A+B) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	103	344	225	672
	B	15	0	175	509	699
	C	333	417	0	14	764
	D	46	609	1	0	656
	Tot.	394	1129	520	748	2791

Traffic Lane Flows

Lane	Scenario 10: 2024 DS(A+B) PM
Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	
1/1 (with short)	699(In) 524(Out)
1/2 (short)	175
2/1 (short)	1
2/2 (with short)	610(In) 609(Out)
2/3	46
3/1 (with short)	672(In) 569(Out)
3/2 (short)	103
4/1	417
4/2	347
5/1	394
6/1 (with short)	1129(In) 1129(Out)
6/2 (short)	0
7/1	748
8/1	520

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2119	2119
1/2 (A653 Leeds Road (South) Lane 2)	This lane uses a directly entered Saturation Flow						2117	2117
2/1 (A653 Leeds Road (North) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
2/2 (A653 Leeds Road (North) Lane 2)	This lane uses a directly entered Saturation Flow						2092	2092
2/3 (A653 Leeds Road (North))	3.25	0.00	Y	Arm 5 Right	12.00	100.0 %	1724	1724
3/1 (B6128 Challenge Way Lane 1)	This lane uses a directly entered Saturation Flow						2022	2022
3/2 (B6128 Challenge Way)	3.25	0.00	Y	Arm 6 Right	12.00	100.0 %	1724	1724
4/1 (B6128 John Ormsby V C Way Lane 1)	This lane uses a directly entered Saturation Flow						2147	2147
4/2 (B6128 John Ormsby V C Way Lane 2)	This lane uses a directly entered Saturation Flow						1985	1985
5/1 (B6128 Challenge Way - EXIT)	3.26	0.00	Y				1941	1941
6/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2400	2400
6/2 (A653 Leeds Road (South))	2.58	0.00	Y				1873	1873
7/1 (A653 Leeds Road (North) - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B6128 John Ormsby V C Way - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 11: '2030 DS(A) AM' (FG11: '2030 DS(A) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	24	406	119	549
	B	8	0	277	754	1039
	C	399	362	0	25	786
	D	136	670	4	0	810
	Tot.	543	1056	687	898	3184

Traffic Lane Flows

Lane	Scenario 11: 2030 DS(A) AM
Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	
1/1 (with short)	1039(In) 762(Out)
1/2 (short)	277
2/1 (short)	4
2/2 (with short)	674(In) 670(Out)
2/3	136
3/1 (with short)	549(In) 525(Out)
3/2 (short)	24
4/1	362
4/2	424
5/1	543
6/1 (with short)	1056(In) 1056(Out)
6/2 (short)	0
7/1	898
8/1	687

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2119	2119
1/2 (A653 Leeds Road (South) Lane 2)	This lane uses a directly entered Saturation Flow						2117	2117
2/1 (A653 Leeds Road (North) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
2/2 (A653 Leeds Road (North) Lane 2)	This lane uses a directly entered Saturation Flow						2092	2092
2/3 (A653 Leeds Road (North))	3.25	0.00	Y	Arm 5 Right	12.00	100.0 %	1724	1724
3/1 (B6128 Challenge Way Lane 1)	This lane uses a directly entered Saturation Flow						2022	2022
3/2 (B6128 Challenge Way)	3.25	0.00	Y	Arm 6 Right	12.00	100.0 %	1724	1724
4/1 (B6128 John Ormsby V C Way Lane 1)	This lane uses a directly entered Saturation Flow						2147	2147
4/2 (B6128 John Ormsby V C Way Lane 2)	This lane uses a directly entered Saturation Flow						1985	1985
5/1 (B6128 Challenge Way - EXIT)	3.26	0.00	Y				1941	1941
6/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2400	2400
6/2 (A653 Leeds Road (South))	2.58	0.00	Y				1873	1873
7/1 (A653 Leeds Road (North) - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B6128 John Ormsby V C Way - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 12: '2030 DS(A) PM' (FG12: '2030 DS(A) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	131	323	325	779
	B	3	0	185	439	627
	C	333	390	0	14	737
	D	51	611	1	0	663
	Tot.	387	1132	509	778	2806

Traffic Lane Flows

Lane	Scenario 12: 2030 DS(A) PM
Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	
1/1 (with short)	627(In) 442(Out)
1/2 (short)	185
2/1 (short)	1
2/2 (with short)	612(In) 611(Out)
2/3	51
3/1 (with short)	779(In) 648(Out)
3/2 (short)	131
4/1	390
4/2	347
5/1	387
6/1 (with short)	1132(In) 1132(Out)
6/2 (short)	0
7/1	778
8/1	509

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2119	2119
1/2 (A653 Leeds Road (South) Lane 2)	This lane uses a directly entered Saturation Flow						2117	2117
2/1 (A653 Leeds Road (North) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
2/2 (A653 Leeds Road (North) Lane 2)	This lane uses a directly entered Saturation Flow						2092	2092
2/3 (A653 Leeds Road (North))	3.25	0.00	Y	Arm 5 Right	12.00	100.0 %	1724	1724
3/1 (B6128 Challenge Way Lane 1)	This lane uses a directly entered Saturation Flow						2022	2022
3/2 (B6128 Challenge Way)	3.25	0.00	Y	Arm 6 Right	12.00	100.0 %	1724	1724
4/1 (B6128 John Ormsby V C Way Lane 1)	This lane uses a directly entered Saturation Flow						2147	2147
4/2 (B6128 John Ormsby V C Way Lane 2)	This lane uses a directly entered Saturation Flow						1985	1985
5/1 (B6128 Challenge Way - EXIT)	3.26	0.00	Y				1941	1941
6/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2400	2400
6/2 (A653 Leeds Road (South))	2.58	0.00	Y				1873	1873
7/1 (A653 Leeds Road (North) - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B6128 John Ormsby V C Way - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 13: '2030 DS(A+B) AM' (FG13: '2030 DS(A+B) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	24	429	149	602
	B	8	0	310	840	1158
	C	468	466	0	25	959
	D	238	904	4	0	1146
	Tot.	714	1394	743	1014	3865

Traffic Lane Flows

Lane	Scenario 13: 2030 DS(A+B) AM
Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	
1/1 (with short)	1158(In) 848(Out)
1/2 (short)	310
2/1 (short)	4
2/2 (with short)	908(In) 904(Out)
2/3	238
3/1 (with short)	602(In) 578(Out)
3/2 (short)	24
4/1	466
4/2	493
5/1	714
6/1 (with short)	1394(In) 1394(Out)
6/2 (short)	0
7/1	1014
8/1	743

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2119	2119
1/2 (A653 Leeds Road (South) Lane 2)	This lane uses a directly entered Saturation Flow						2117	2117
2/1 (A653 Leeds Road (North) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
2/2 (A653 Leeds Road (North) Lane 2)	This lane uses a directly entered Saturation Flow						2092	2092
2/3 (A653 Leeds Road (North))	3.25	0.00	Y	Arm 5 Right	12.00	100.0 %	1724	1724
3/1 (B6128 Challenge Way Lane 1)	This lane uses a directly entered Saturation Flow						2022	2022
3/2 (B6128 Challenge Way)	3.25	0.00	Y	Arm 6 Right	12.00	100.0 %	1724	1724
4/1 (B6128 John Ormsby V C Way Lane 1)	This lane uses a directly entered Saturation Flow						2147	2147
4/2 (B6128 John Ormsby V C Way Lane 2)	This lane uses a directly entered Saturation Flow						1985	1985
5/1 (B6128 Challenge Way - EXIT)	3.26	0.00	Y				1941	1941
6/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2400	2400
6/2 (A653 Leeds Road (South))	2.58	0.00	Y				1873	1873
7/1 (A653 Leeds Road (North) - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B6128 John Ormsby V C Way - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 14: '2030 DS(A+B) PM' (FG14: '2030 DS(A+B) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	131	387	400	918
	B	3	0	277	705	985
	C	380	457	0	14	851
	D	101	823	1	0	925
	Tot.	484	1411	665	1119	3679

Traffic Lane Flows

Lane	Scenario 14: 2030 DS(A+B) PM
Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	
1/1 (with short)	985(In) 708(Out)
1/2 (short)	277
2/1 (short)	1
2/2 (with short)	824(In) 823(Out)
2/3	101
3/1 (with short)	918(In) 787(Out)
3/2 (short)	131
4/1	457
4/2	394
5/1	484
6/1 (with short)	1411(In) 1411(Out)
6/2 (short)	0
7/1	1119
8/1	665

Full Input Data And Results

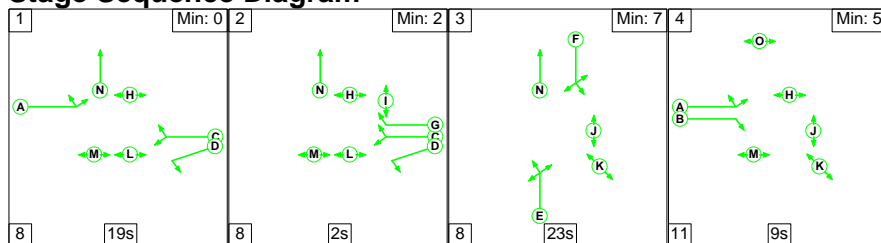
Lane Saturation Flows

Junction: A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2119	2119
1/2 (A653 Leeds Road (South) Lane 2)	This lane uses a directly entered Saturation Flow						2117	2117
2/1 (A653 Leeds Road (North) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
2/2 (A653 Leeds Road (North) Lane 2)	This lane uses a directly entered Saturation Flow						2092	2092
2/3 (A653 Leeds Road (North))	3.25	0.00	Y	Arm 5 Right	12.00	100.0 %	1724	1724
3/1 (B6128 Challenge Way Lane 1)	This lane uses a directly entered Saturation Flow						2022	2022
3/2 (B6128 Challenge Way)	3.25	0.00	Y	Arm 6 Right	12.00	100.0 %	1724	1724
4/1 (B6128 John Ormsby V C Way Lane 1)	This lane uses a directly entered Saturation Flow						2147	2147
4/2 (B6128 John Ormsby V C Way Lane 2)	This lane uses a directly entered Saturation Flow						1985	1985
5/1 (B6128 Challenge Way - EXIT)	3.26	0.00	Y				1941	1941
6/1 (A653 Leeds Road (South) Lane 1)	This lane uses a directly entered Saturation Flow						2400	2400
6/2 (A653 Leeds Road (South))	2.58	0.00	Y				1873	1873
7/1 (A653 Leeds Road (North) - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (B6128 John Ormsby V C Way - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 1: '2019 Base AM' (FG1: '2019 Base AM', Plan 1: 'Network Control Plan 1')

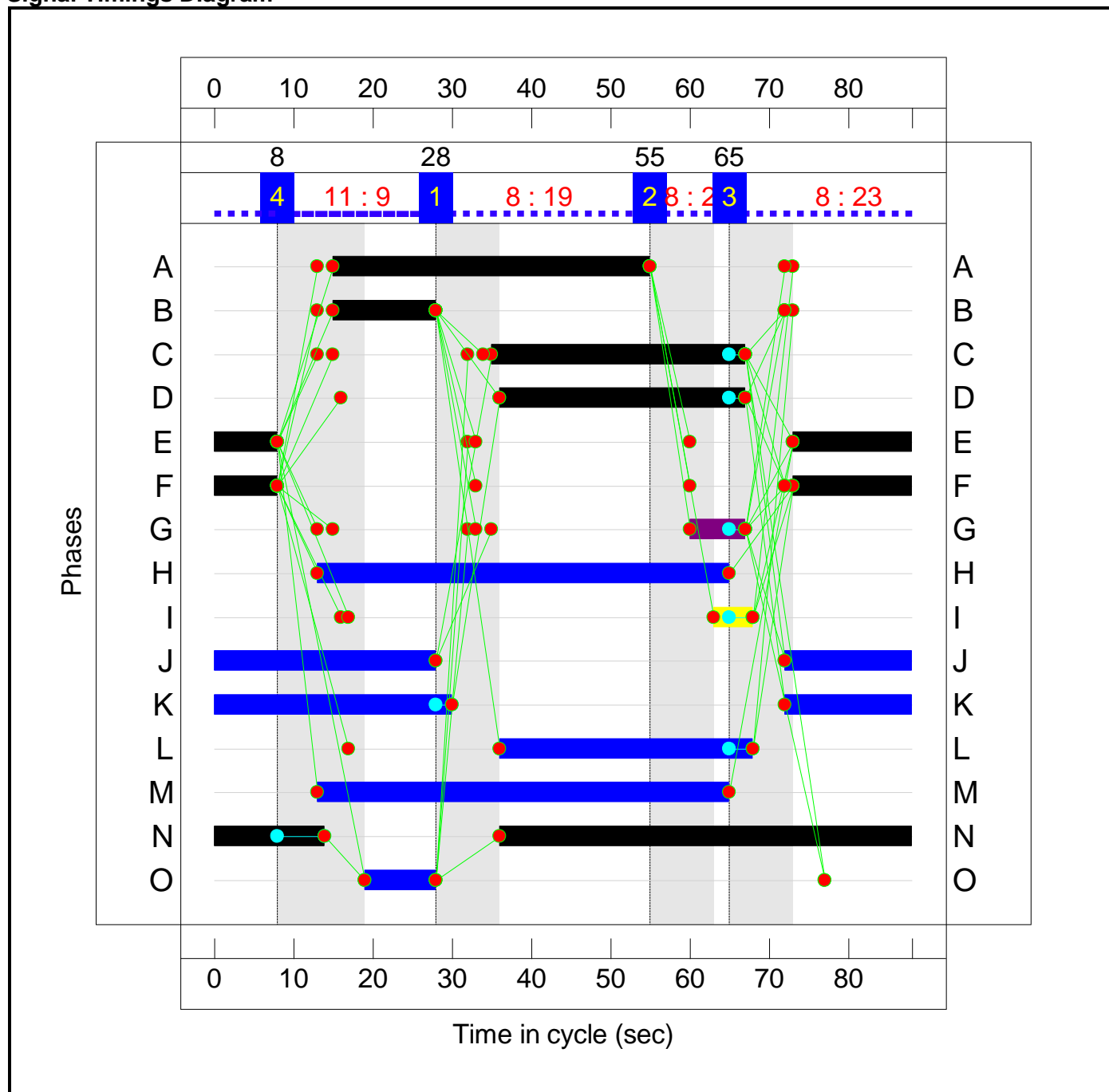
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	19	2	23	9
Change Point	28	55	65	8

Signal Timings Diagram



Full Input Data And Results

Full Input Data And Results

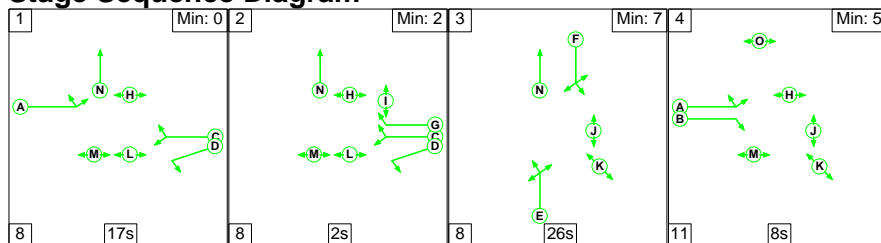
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Land at Chidswell	-	-	N/A	-	-		-	-	-	-	-	-	89.9%
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-		-	-	-	-	-	-	89.9%
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	N/A	A B		1	40:13	-	928	2119:2117	807+266	86.5 : 86.5%
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	N/A	C D		1	32:31	-	488	2092:1800	771+6	62.8 : 62.8%
2/3	A653 Leeds Road (North) Right	O	N/A	N/A	C	G	1	32	7	87	1724	327	26.6%
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	N/A	F		1	23	-	513	2022:1724	551+19	89.9 : 89.9%
4/1	B6128 John Ormsby V C Way Left	U	N/A	N/A	E		1	23	-	259	2147	586	44.2%
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	N/A	E		1	23	-	407	1985	541	75.2%
5/1	B6128 Challenge Way - EXIT	U	N/A	N/A	N		1	66	-	481	1941	1478	32.5%
6/1+6/2	A653 Leeds Road (South)	U	N/A	N/A	-		-	-	-	760	2400:1873	2400+0	31.7 : 0.0%
7/1	A653 Leeds Road (North) - EXIT	U	N/A	N/A	-		-	-	-	795	Inf	Inf	0.0%
8/1	B6128 John Ormsby V C Way - EXIT	U	N/A	N/A	-		-	-	-	646	Inf	Inf	0.0%

Full Input Data And Results

Scenario 2: '2019 Base PM' (FG2: '2019 Base PM', Plan 1: 'Network Control Plan 1')

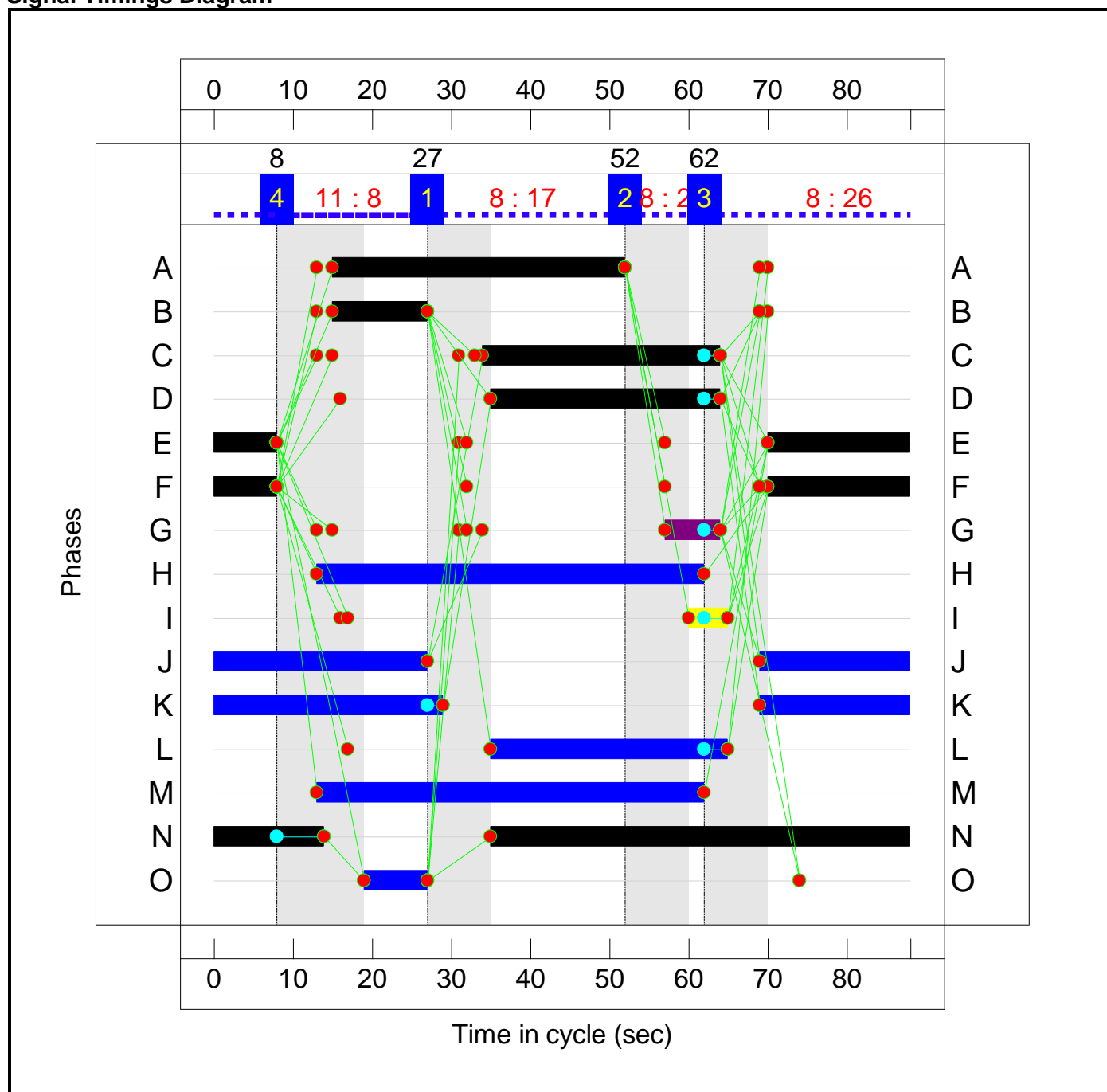
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	17	2	26	8
Change Point	27	52	62	8

Signal Timings Diagram



Full Input Data And Results

Full Input Data And Results

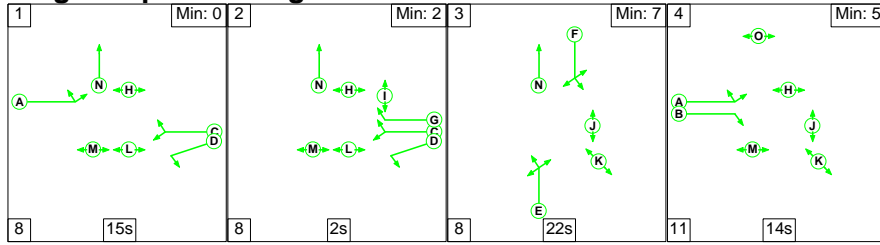
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Land at Chidswell	-	-	N/A	-	-		-	-	-	-	-	-	82.4%
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-		-	-	-	-	-	-	82.4%
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	N/A	A B		1	37:12	-	727	2119:2117	762+233	73.1 : 73.1%
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	N/A	C D		1	30:29	-	558	2092:1800	729+1	76.4 : 76.4%
2/3	A653 Leeds Road (North) Right	O	N/A	N/A	C	G	1	30	7	40	1724	405	9.9%
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	N/A	F		1	26	-	580	2022:1724	612+92	82.4 : 82.4%
4/1	B6128 John Ormsby V C Way Left	U	N/A	N/A	E		1	26	-	411	2147	659	62.4%
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	N/A	E		1	26	-	345	1985	609	56.6%
5/1	B6128 Challenge Way - EXIT	U	N/A	N/A	N		1	67	-	395	1941	1500	26.3%
6/1+6/2	A653 Leeds Road (South)	U	N/A	N/A	-		-	-	-	1044	2400:1873	2400+0	43.5 : 0.0%
7/1	A653 Leeds Road (North) - EXIT	U	N/A	N/A	-		-	-	-	687	Inf	Inf	0.0%
8/1	B6128 John Ormsby V C Way - EXIT	U	N/A	N/A	-		-	-	-	535	Inf	Inf	0.0%

Full Input Data And Results

Scenario 3: '2024 DN AM' (FG3: '2024 DN AM', Plan 1: 'Network Control Plan 1')

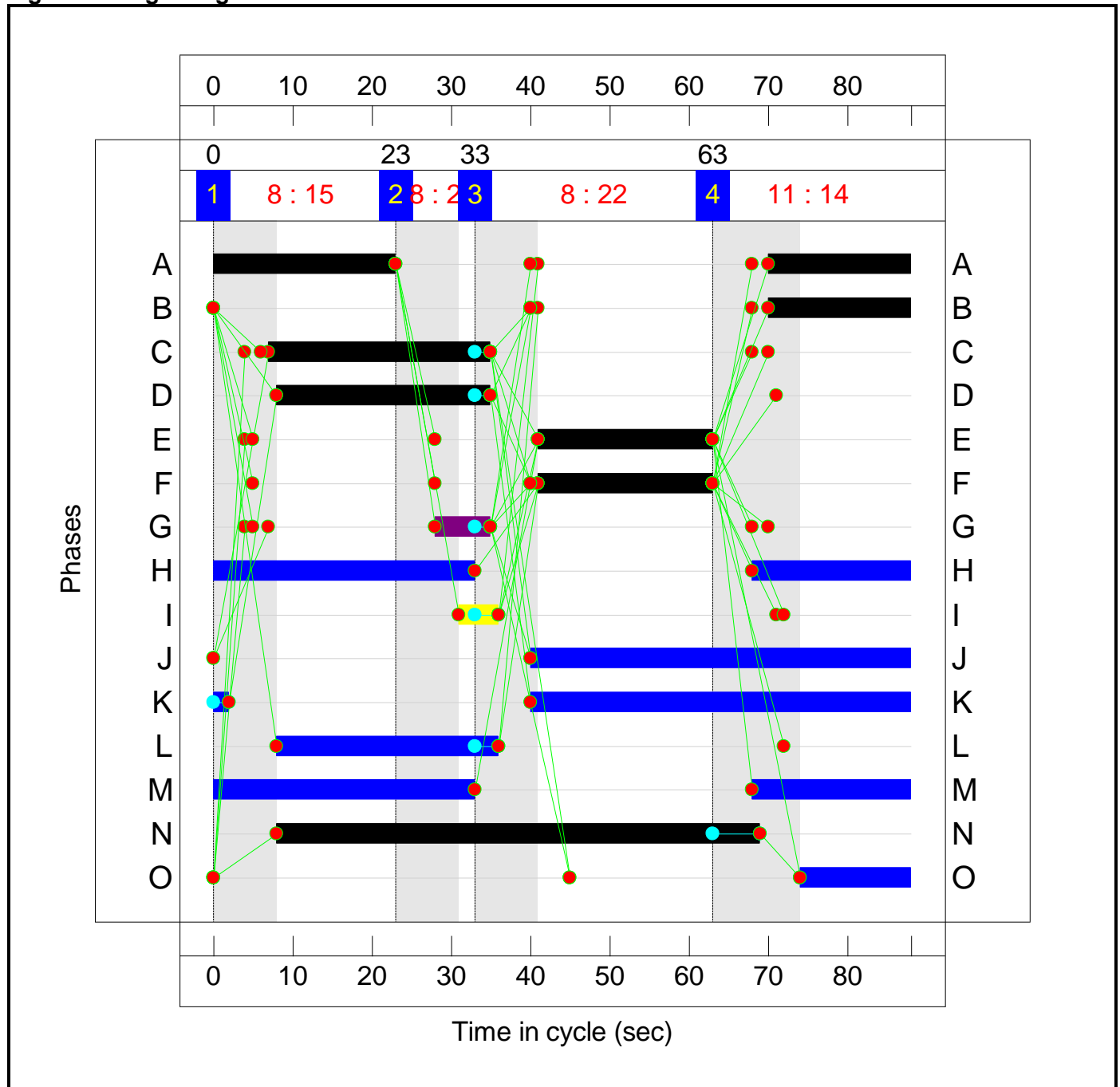
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	15	2	22	14
Change Point	0	23	33	63

Signal Timings Diagram



Full Input Data And Results

Full Input Data And Results

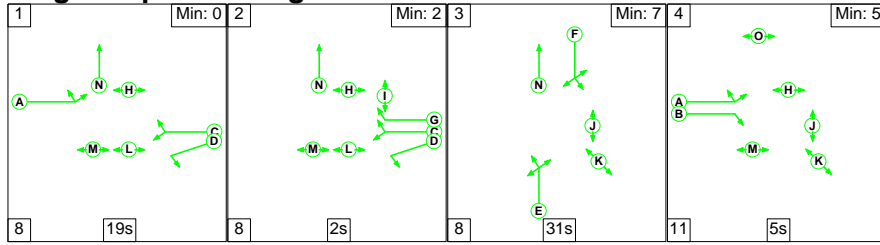
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Land at Chidswell	-	-	N/A	-	-		-	-	-	-	-	-	85.8%
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-		-	-	-	-	-	-	85.8%
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	N/A	A B		1	41:18	-	980	2119:2117	858+302	84.5 : 84.5%
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	N/A	C D		1	28:27	-	573	2092:1800	678+5	84.0 : 84.0%
2/3	A653 Leeds Road (North) Right	O	N/A	N/A	C	G	1	28	7	110	1724	307	35.8%
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	N/A	F		1	22	-	531	2022:1724	595+24	85.8 : 85.8%
4/1	B6128 John Ormsby V C Way Left	U	N/A	N/A	E		1	22	-	314	2147	561	56.0%
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	N/A	E		1	22	-	419	1985	586	71.4%
5/1	B6128 Challenge Way - EXIT	U	N/A	N/A	N		1	61	-	515	1941	1368	37.7%
6/1+6/2	A653 Leeds Road (South)	U	N/A	N/A	-		-	-	-	904	2400:1873	2400+0	37.7 : 0.0%
7/1	A653 Leeds Road (North) - EXIT	U	N/A	N/A	-		-	-	-	840	Inf	Inf	0.0%
8/1	B6128 John Ormsby V C Way - EXIT	U	N/A	N/A	-		-	-	-	668	Inf	Inf	0.0%

Full Input Data And Results

Scenario 4: '2024 DN PM' (FG4: '2024 DN PM', Plan 1: 'Network Control Plan 1')

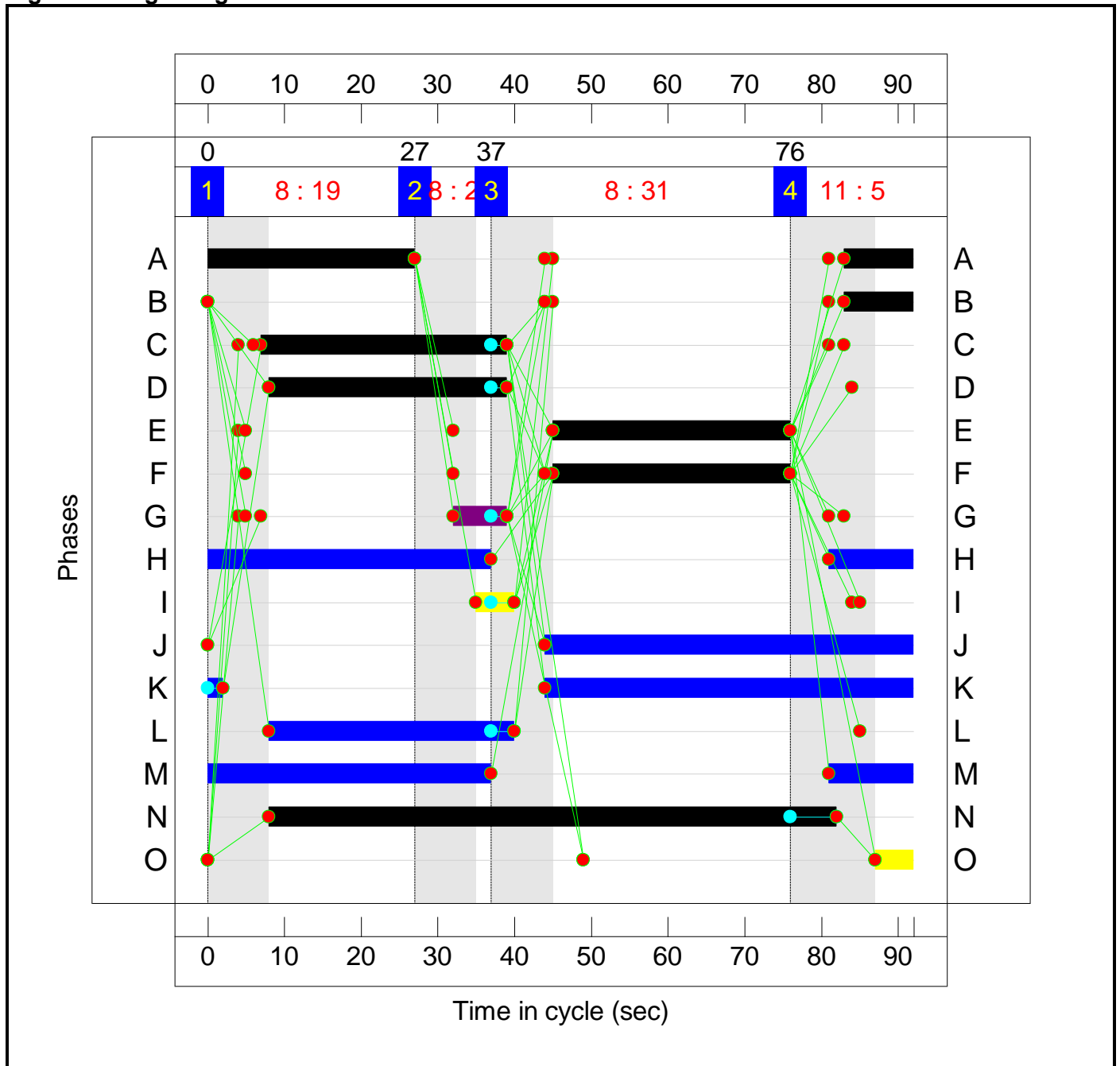
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	19	2	31	5
Change Point	0	27	37	76

Signal Timings Diagram



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Land at Chidswell	-	-	N/A	-	-		-	-	-	-	-	-	80.0%
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-		-	-	-	-	-	-	80.0%
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	N/A	A B		1	36:9	-	687	2119:2117	679+230	75.4 : 76.1%
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	N/A	C D		1	32:31	-	581	2092:1800	743+1	78.1 : 78.1%
2/3	A653 Leeds Road (North) Right	O	N/A	N/A	C	G	1	32	7	46	1724	388	11.9%
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	N/A	F		1	31	-	672	2022:1724	711+129	80.0 : 80.0%
4/1	B6128 John Ormsby V C Way Left	U	N/A	N/A	E		1	31	-	417	2147	840	49.6%
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	N/A	E		1	31	-	347	1985	755	46.0%
5/1	B6128 Challenge Way - EXIT	U	N/A	N/A	N		1	74	-	394	1941	1582	24.9%
6/1+6/2	A653 Leeds Road (South)	U	N/A	N/A	-		-	-	-	1100	2400:1873	2400+0	45.8 : 0.0%
7/1	A653 Leeds Road (North) - EXIT	U	N/A	N/A	-		-	-	-	736	Inf	Inf	0.0%
8/1	B6128 John Ormsby V C Way - EXIT	U	N/A	N/A	-		-	-	-	520	Inf	Inf	0.0%

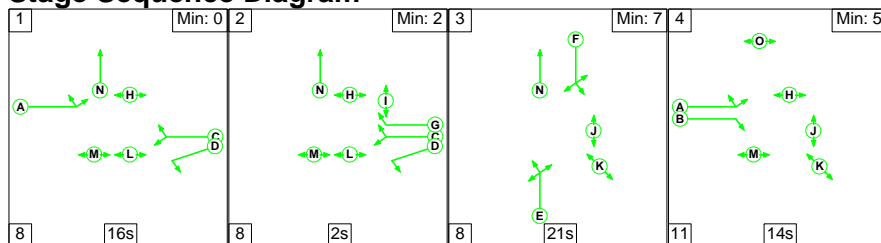
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Land at Chidswell	-	-	157	5	1	19.9	6.8	0.5	27.2	-	-	-	-
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	157	5	1	19.9	6.8	0.5	27.2	-	-	-	-
1/1+1/2	687	687	-	-	-	6.2	1.5	-	7.7	40.4	12.3	1.5	13.8
2/2+2/1	581	581	-	-	-	4.3	1.7	-	6.0	37.2	13.2	1.7	15.0
2/3	46	46	40	5	1	0.2	0.1	0.1	0.4	28.8	0.8	0.1	0.8
3/1+3/2	672	672	103	0	0	4.6	2.0	0.4	7.0	37.5	12.6	2.0	14.6
4/1	417	417	-	-	-	2.5	0.5	-	2.9	25.4	8.0	0.5	8.5
4/2	347	347	14	0	0	2.1	0.4	0.1	2.5	26.4	6.7	0.4	7.1
5/1	394	394	-	-	-	0.1	0.2	-	0.2	2.0	0.4	0.2	0.6
6/1+6/2	1100	1100	-	-	-	0.0	0.4	-	0.4	1.4	0.0	0.4	0.4
7/1	736	736	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	520	520	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		12.5	Total Delay for Signalled Lanes (pcuHr):		26.79	Cycle Time (s): 92				
			PRC Over All Lanes (%):		12.5	Total Delay Over All Lanes(pcuHr):		27.21					

Full Input Data And Results

Scenario 5: '2030 DN AM' (FG5: '2030 DN AM', Plan 1: 'Network Control Plan 1')

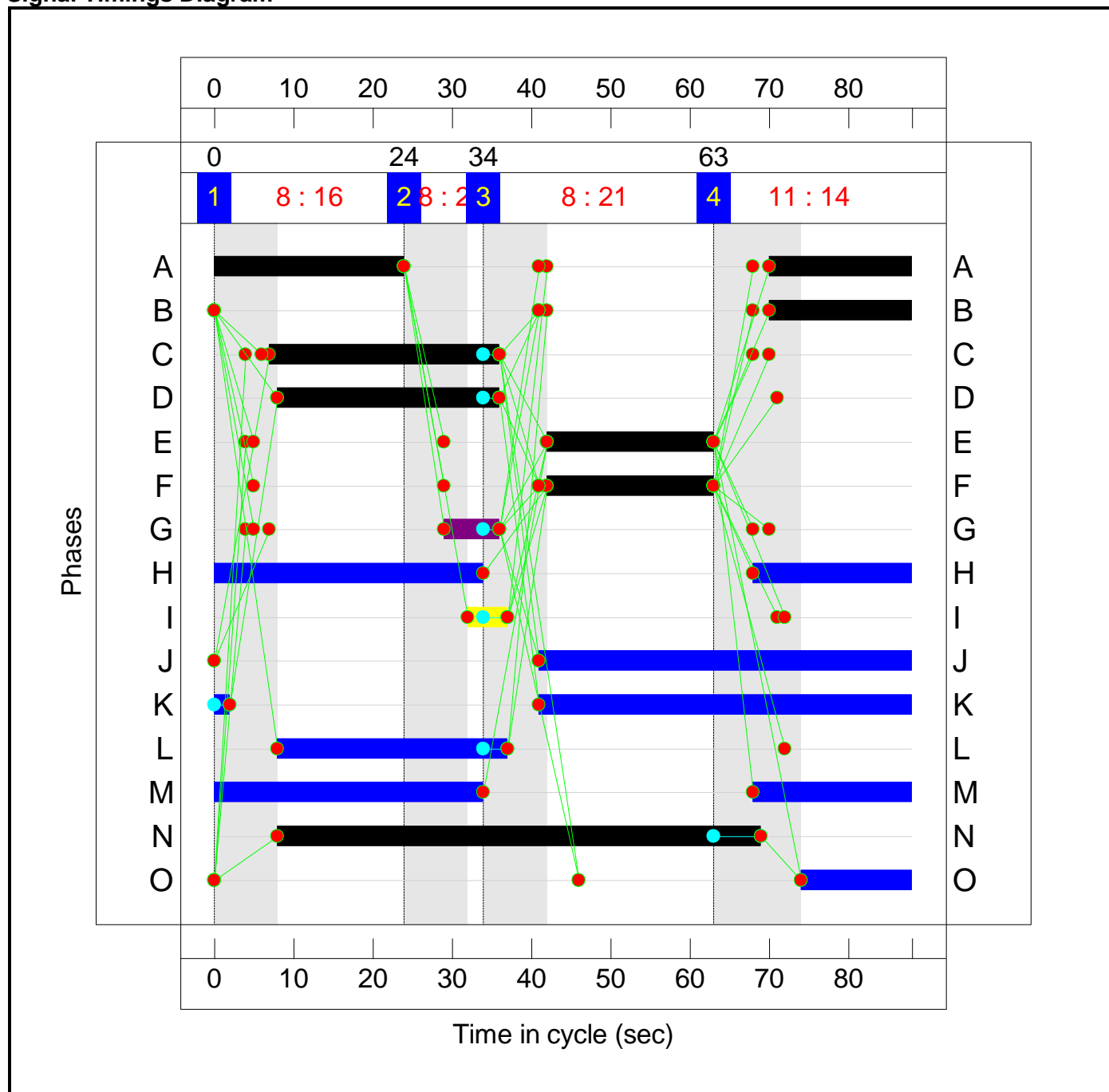
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	16	2	21	14
Change Point	0	24	34	63

Signal Timings Diagram



Full Input Data And Results

Full Input Data And Results

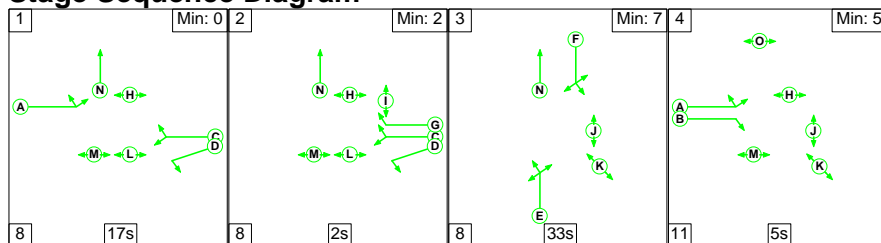
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Land at Chidswell	-	-	N/A	-	-		-	-	-	-	-	-	92.5%
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-		-	-	-	-	-	-	92.5%
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	N/A	A B		1	42:18	-	1033	2119:2117	828+304	91.3 : 91.3%
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	N/A	C D		1	29:28	-	653	2092:1800	702+4	92.5 : 92.5%
2/3	A653 Leeds Road (North) Right	O	N/A	N/A	C	G	1	29	7	136	1724	291	46.7%
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	N/A	F		1	21	-	549	2022:1724	573+26	91.7 : 91.7%
4/1	B6128 John Ormsby V C Way Left	U	N/A	N/A	E		1	21	-	362	2147	537	67.4%
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	N/A	E		1	21	-	425	1985	564	75.4%
5/1	B6128 Challenge Way - EXIT	U	N/A	N/A	N		1	61	-	544	1941	1368	39.8%
6/1+6/2	A653 Leeds Road (South)	U	N/A	N/A	-		-	-	-	1035	2400:1873	2400+0	43.1 : 0.0%
7/1	A653 Leeds Road (North) - EXIT	U	N/A	N/A	-		-	-	-	892	Inf	Inf	0.0%
8/1	B6128 John Ormsby V C Way - EXIT	U	N/A	N/A	-		-	-	-	687	Inf	Inf	0.0%

Full Input Data And Results

Scenario 6: '2030 DN PM' (FG6: '2030 DN PM', Plan 1: 'Network Control Plan 1')

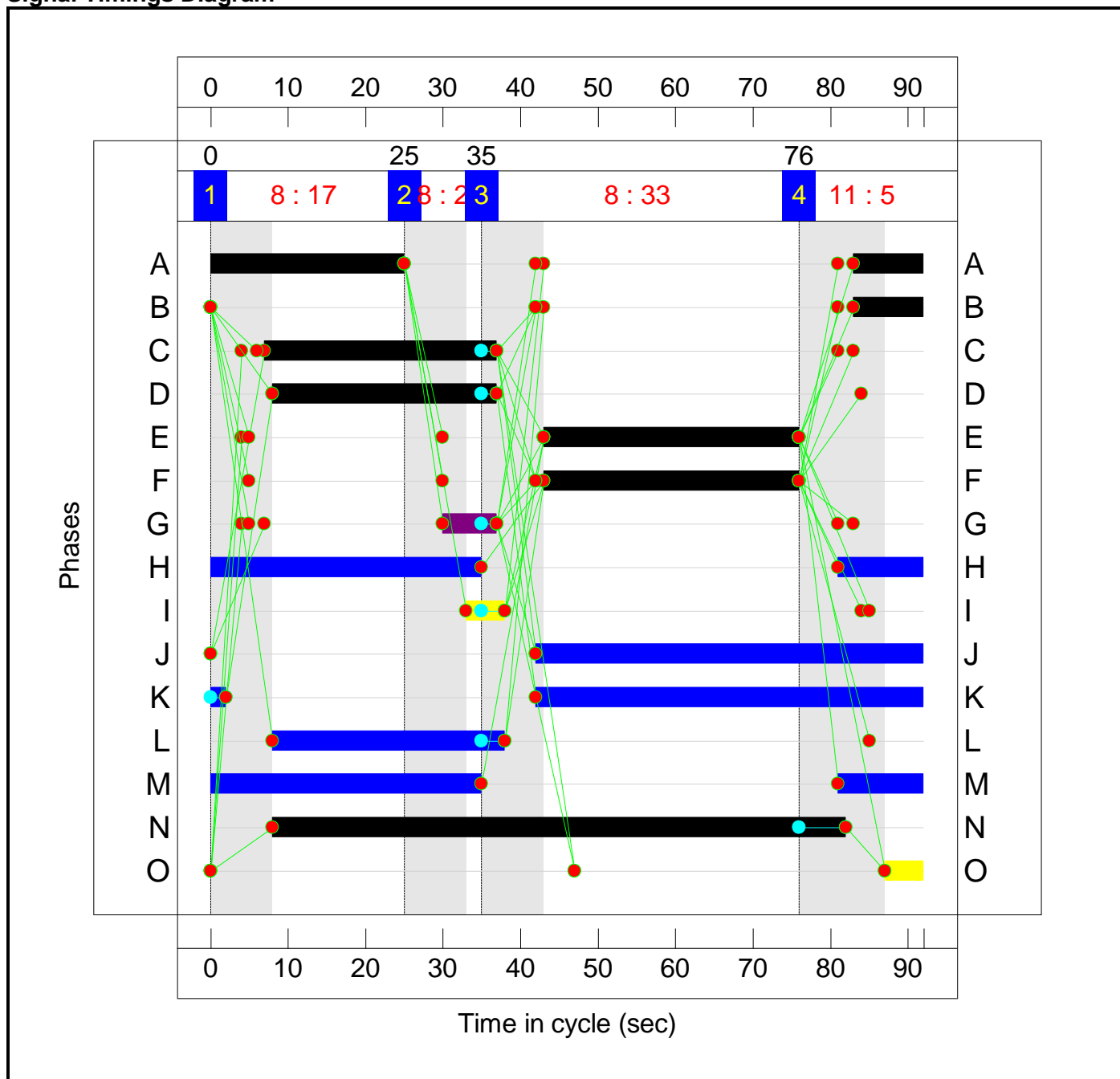
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	17	2	33	5
Change Point	0	25	35	76

Signal Timings Diagram



Full Input Data And Results

Full Input Data And Results

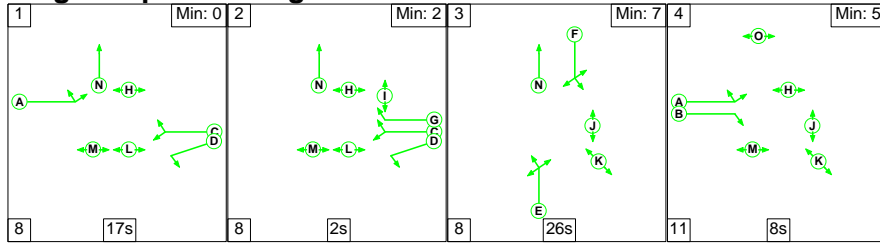
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Land at Chidswell	-	-	N/A	-	-		-	-	-	-	-	-	87.2%
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-		-	-	-	-	-	-	87.2%
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	N/A	A B		1	34:9	-	612	2119:2117	531+230	80.4 : 80.4%
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	N/A	C D		1	30:29	-	601	2092:1800	697+1	86.0 : 86.0%
2/3	A653 Leeds Road (North) Right	O	N/A	N/A	C	G	1	30	7	51	1724	427	11.9%
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	N/A	F		1	33	-	779	2022:1724	743+150	87.2 : 87.2%
4/1	B6128 John Ormsby V C Way Left	U	N/A	N/A	E		1	33	-	390	2147	887	44.0%
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	N/A	E		1	33	-	347	1985	798	43.5%
5/1	B6128 Challenge Way - EXIT	U	N/A	N/A	N		1	74	-	387	1941	1582	24.5%
6/1+6/2	A653 Leeds Road (South)	U	N/A	N/A	-		-	-	-	1121	2400:1873	2400+0	46.7 : 0.0%
7/1	A653 Leeds Road (North) - EXIT	U	N/A	N/A	-		-	-	-	763	Inf	Inf	0.0%
8/1	B6128 John Ormsby V C Way - EXIT	U	N/A	N/A	-		-	-	-	509	Inf	Inf	0.0%

Full Input Data And Results

Scenario 7: '2024 DS(A) AM' (FG7: '2024 DS(A) AM', Plan 1: 'Network Control Plan 1')

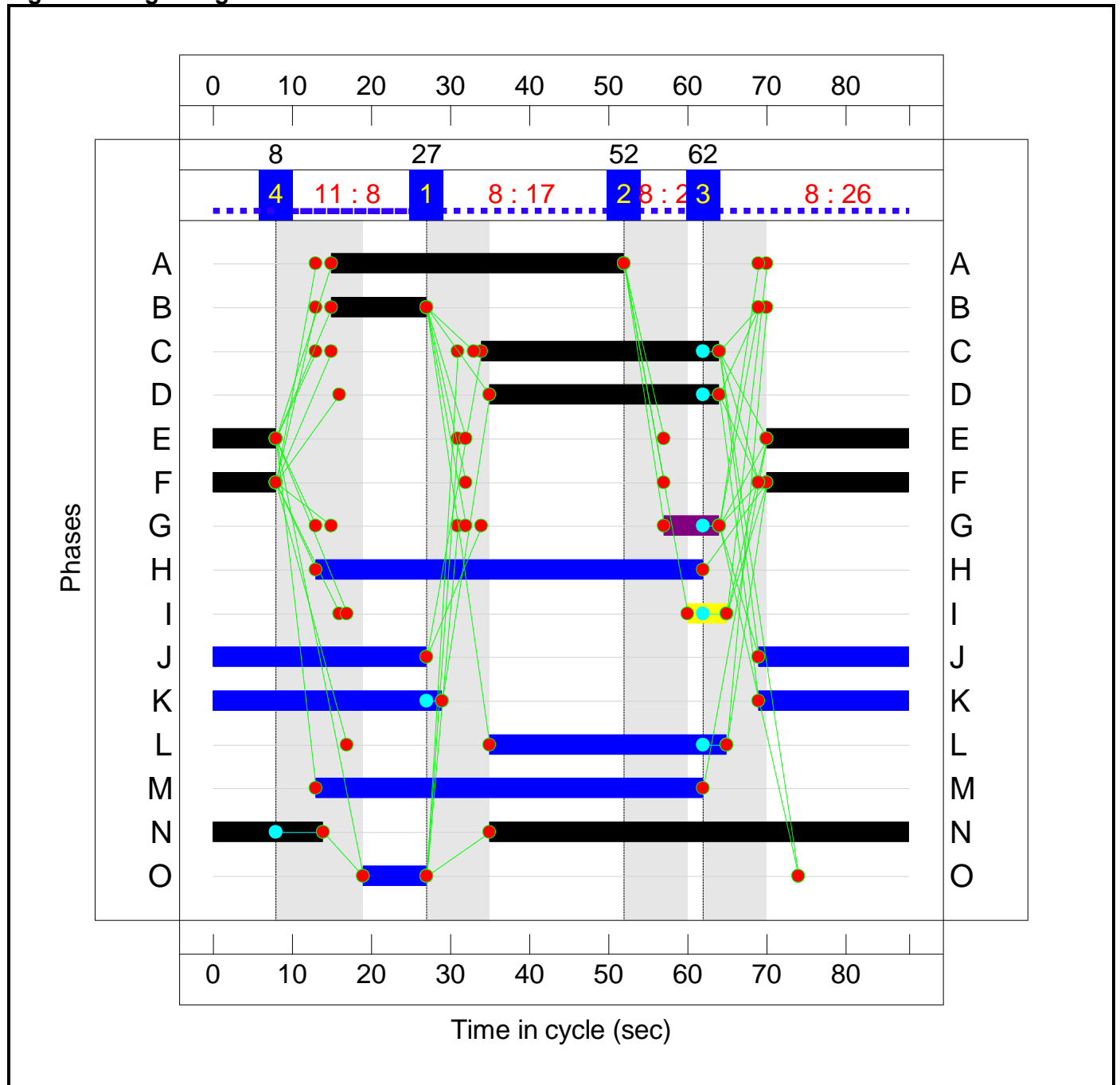
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	17	2	26	8
Change Point	27	52	62	8

Signal Timings Diagram



Full Input Data And Results

Full Input Data And Results

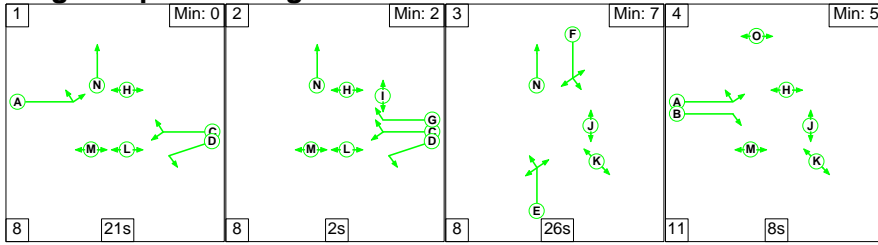
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Land at Chidswell	-	-	N/A	-	-		-	-	-	-	-	-	97.8%
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-		-	-	-	-	-	-	97.8%
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	N/A	A B		1	37:12	-	983	2119:2117	745+261	97.8 : 97.8%
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	N/A	C D		1	30:29	-	584	2092:1800	725+5	80.0 : 80.0%
2/3	A653 Leeds Road (North) Right	O	N/A	N/A	C	G	1	30	7	110	1724	257	42.7%
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	N/A	F		1	26	-	531	2022:1724	617+25	82.7 : 82.7%
4/1	B6128 John Ormsby V C Way Left	U	N/A	N/A	E		1	26	-	314	2147	659	47.7%
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	N/A	E		1	26	-	419	1985	609	68.8%
5/1	B6128 Challenge Way - EXIT	U	N/A	N/A	N		1	67	-	515	1941	1500	34.3%
6/1+6/2	A653 Leeds Road (South)	U	N/A	N/A	-		-	-	-	915	2400:1873	2400+0	38.1 : 0.0%
7/1	A653 Leeds Road (North) - EXIT	U	N/A	N/A	-		-	-	-	843	Inf	Inf	0.0%
8/1	B6128 John Ormsby V C Way - EXIT	U	N/A	N/A	-		-	-	-	668	Inf	Inf	0.0%

Full Input Data And Results

Scenario 8: '2024 DS(A) PM' (FG8: '2024 DS(A) PM', Plan 1: 'Network Control Plan 1')

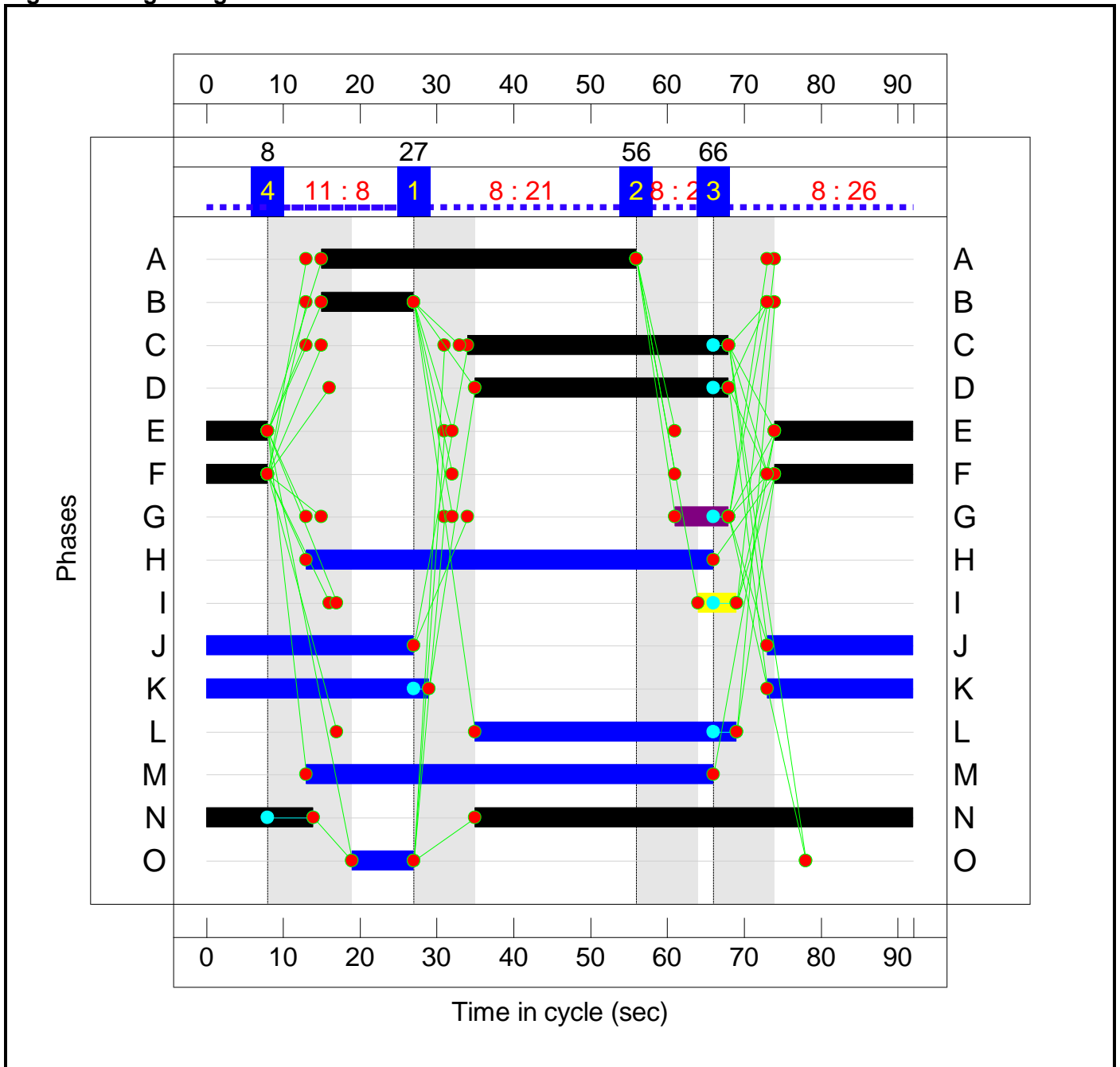
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	21	2	26	8
Change Point	27	56	66	8

Signal Timings Diagram



Full Input Data And Results

Full Input Data And Results

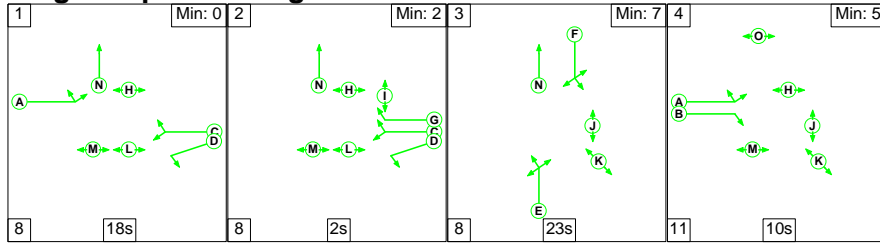
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Land at Chidswell	-	-	N/A	-	-		-	-	-	-	-	-	97.4%
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-		-	-	-	-	-	-	97.4%
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	N/A	A B		1	41:12	-	696	2119:2117	751+252	69.4 : 69.4%
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	N/A	C D		1	34:33	-	587	2092:1800	788+1	74.4 : 74.4%
2/3	A653 Leeds Road (North) Right	O	N/A	N/A	C	G	1	34	7	46	1724	452	10.2%
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	N/A	F		1	26	-	672	2022:1724	584+106	97.4 : 97.4%
4/1	B6128 John Ormsby V C Way Left	U	N/A	N/A	E		1	26	-	417	2147	630	66.2%
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	N/A	E		1	26	-	347	1985	583	59.6%
5/1	B6128 Challenge Way - EXIT	U	N/A	N/A	N		1	71	-	394	1941	1519	25.9%
6/1+6/2	A653 Leeds Road (South)	U	N/A	N/A	-		-	-	-	1106	2400:1873	2400+0	46.1 : 0.0%
7/1	A653 Leeds Road (North) - EXIT	U	N/A	N/A	-		-	-	-	745	Inf	Inf	0.0%
8/1	B6128 John Ormsby V C Way - EXIT	U	N/A	N/A	-		-	-	-	520	Inf	Inf	0.0%

Full Input Data And Results

Scenario 9: '2024 DS(A+B) AM' (FG9: '2024 DS(A+B) AM', Plan 1: 'Network Control Plan 1')

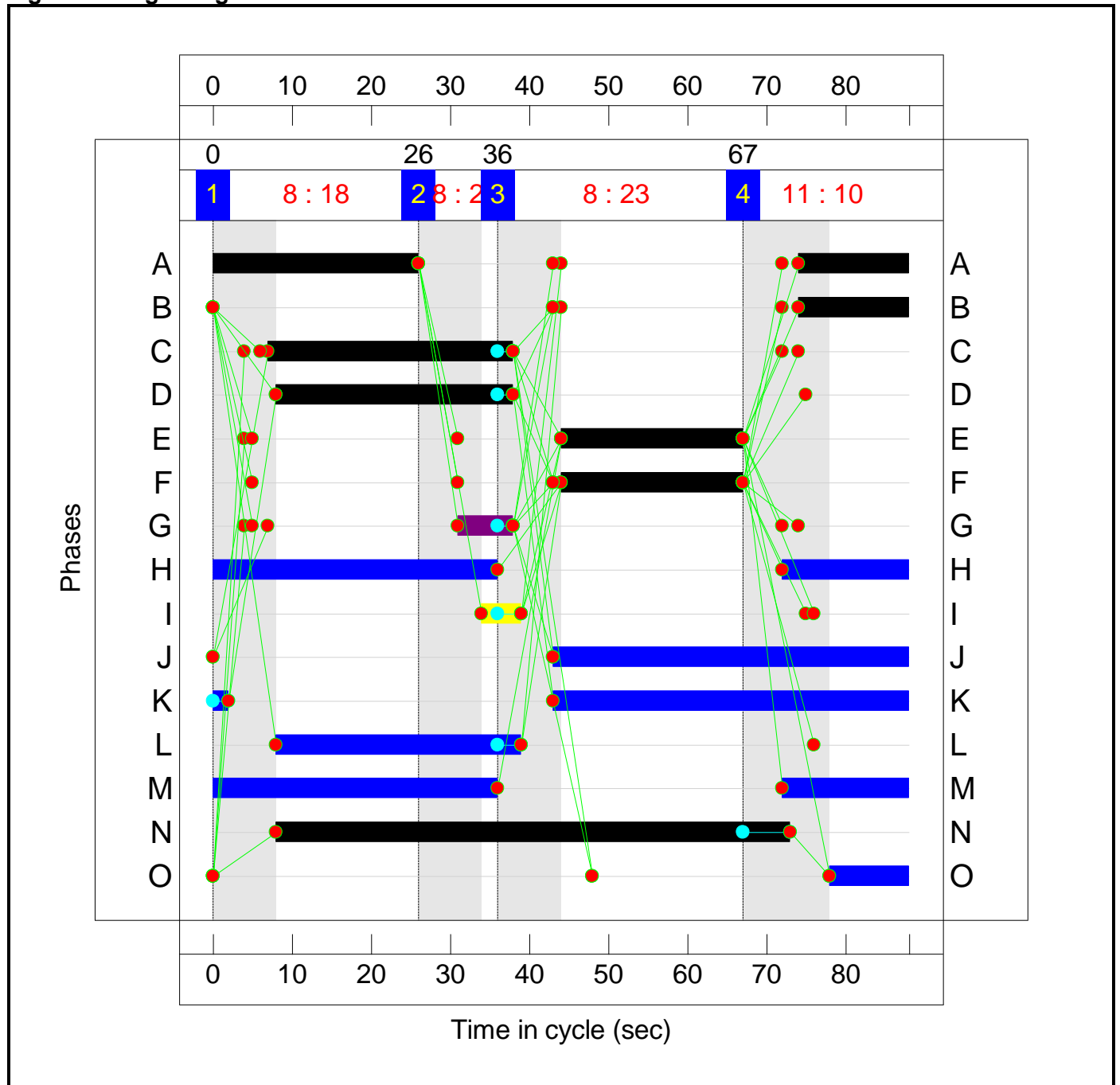
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	18	2	23	10
Change Point	0	26	36	67

Signal Timings Diagram



Full Input Data And Results

Full Input Data And Results

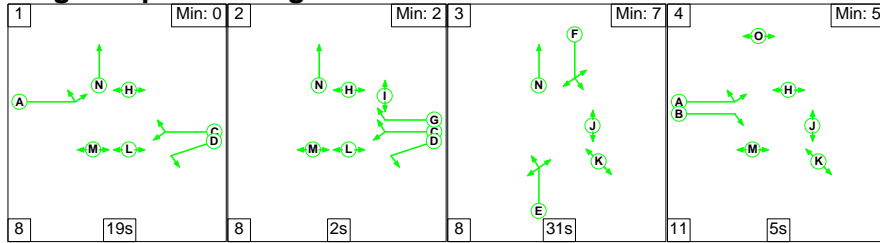
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Land at Chidswell	-	-	N/A	-	-		-	-	-	-	-	-	94.2%
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-		-	-	-	-	-	-	94.2%
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	N/A	A B		1	40:14	-	1012	2119:2117	804+271	94.2 : 94.2%
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	N/A	C D		1	31:30	-	588	2092:1800	748+5	78.0 : 78.0%
2/3	A653 Leeds Road (North) Right	O	N/A	N/A	C	G	1	31	7	110	1724	280	39.3%
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	N/A	F		1	23	-	531	2022:1724	551+23	92.5 : 92.5%
4/1	B6128 John Ormsby V C Way Left	U	N/A	N/A	E		1	23	-	314	2147	586	53.6%
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	N/A	E		1	23	-	419	1985	541	77.4%
5/1	B6128 Challenge Way - EXIT	U	N/A	N/A	N		1	65	-	515	1941	1456	35.4%
6/1+6/2	A653 Leeds Road (South)	U	N/A	N/A	-		-	-	-	919	2400:1873	2400+0	38.3 : 0.0%
7/1	A653 Leeds Road (North) - EXIT	U	N/A	N/A	-		-	-	-	872	Inf	Inf	0.0%
8/1	B6128 John Ormsby V C Way - EXIT	U	N/A	N/A	-		-	-	-	668	Inf	Inf	0.0%

Full Input Data And Results

Scenario 10: '2024 DS(A+B) PM' (FG10: '2024 DS(A+B) PM', Plan 1: 'Network Control Plan 1')

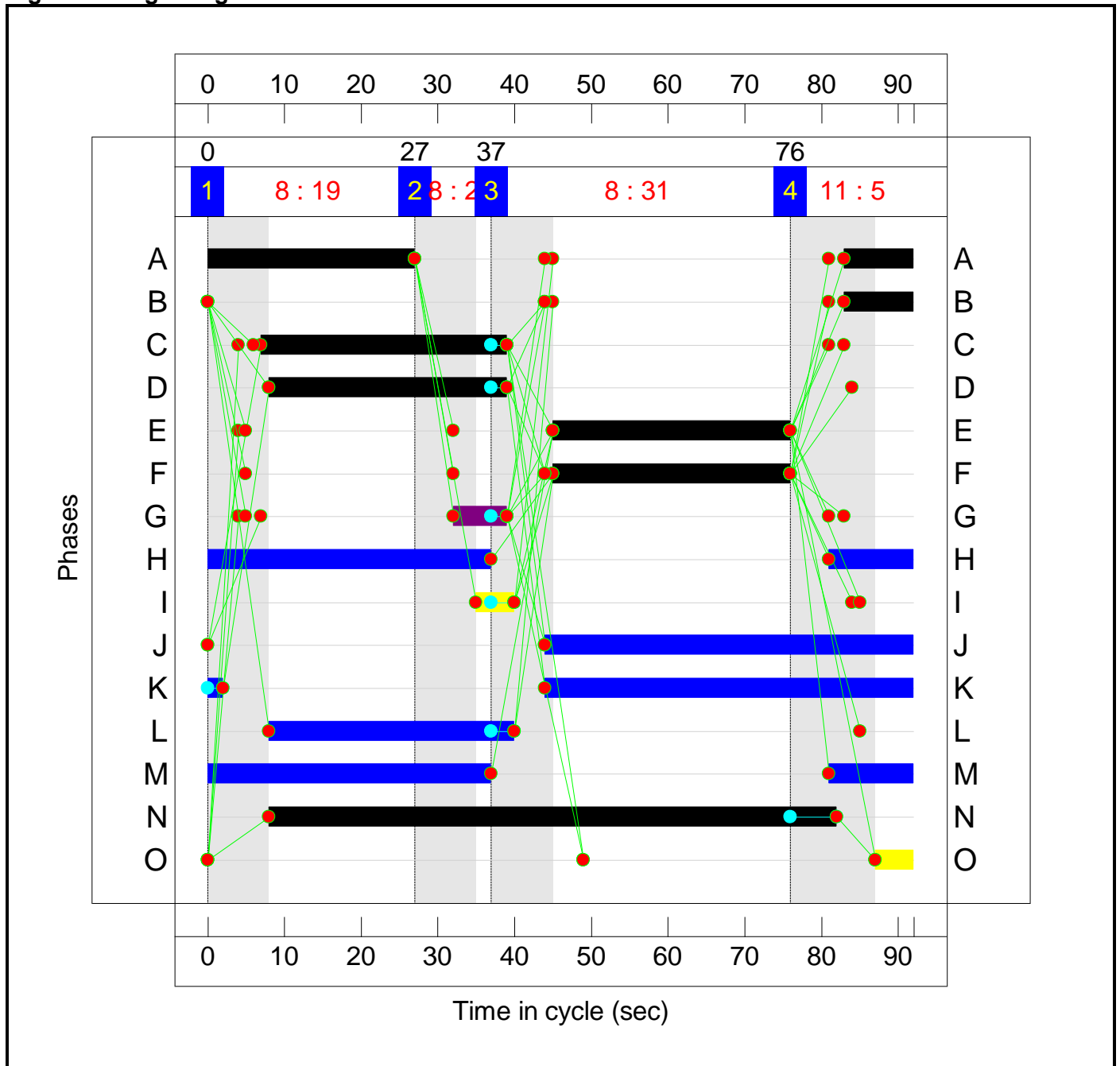
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	19	2	31	5
Change Point	0	27	37	76

Signal Timings Diagram



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Land at Chidswell	-	-	N/A	-	-		-	-	-	-	-	-	84.3%
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-		-	-	-	-	-	-	84.3%
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	N/A	A B		1	36:9	-	699	2119:2117	701+230	74.8 : 76.1%
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	N/A	C D		1	32:31	-	610	2092:1800	743+1	82.0 : 82.0%
2/3	A653 Leeds Road (North) Right	O	N/A	N/A	C	G	1	32	7	46	1724	377	12.2%
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	N/A	F		1	31	-	672	2022:1724	675+122	84.3 : 84.3%
4/1	B6128 John Ormsby V C Way Left	U	N/A	N/A	E		1	31	-	417	2147	747	55.8%
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	N/A	E		1	31	-	347	1985	690	50.3%
5/1	B6128 Challenge Way - EXIT	U	N/A	N/A	N		1	74	-	394	1941	1582	24.9%
6/1+6/2	A653 Leeds Road (South)	U	N/A	N/A	-		-	-	-	1129	2400:1873	2400+0	47.0 : 0.0%
7/1	A653 Leeds Road (North) - EXIT	U	N/A	N/A	-		-	-	-	748	Inf	Inf	0.0%
8/1	B6128 John Ormsby V C Way - EXIT	U	N/A	N/A	-		-	-	-	520	Inf	Inf	0.0%

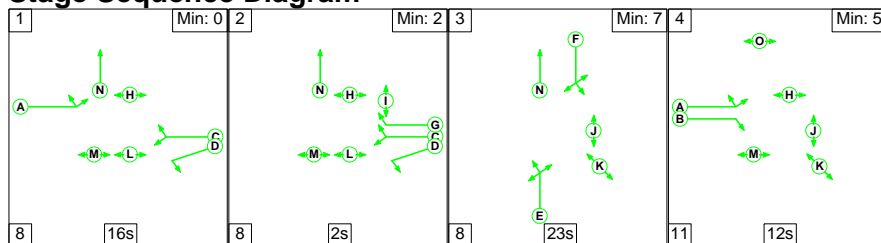
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Land at Chidswell	-	-	157	5	1	21.2	8.1	0.6	29.8	-	-	-	-
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	157	5	1	21.2	8.1	0.6	29.8	-	-	-	-
1/1+1/2	699	699	-	-	-	6.3	1.5	-	7.8	40.3	12.8	1.5	14.2
2/2+2/1	610	610	-	-	-	4.6	2.2	-	6.8	40.0	14.1	2.2	16.3
2/3	46	46	40	5	1	0.2	0.1	0.1	0.4	29.7	0.8	0.1	0.8
3/1+3/2	672	672	103	0	0	4.9	2.6	0.4	7.9	42.5	13.1	2.6	15.7
4/1	417	417	-	-	-	2.8	0.6	-	3.4	29.7	8.6	0.6	9.2
4/2	347	347	14	0	0	2.3	0.5	0.1	2.8	29.6	6.9	0.5	7.4
5/1	394	394	-	-	-	0.0	0.2	-	0.2	1.7	0.2	0.2	0.4
6/1+6/2	1129	1129	-	-	-	0.0	0.4	-	0.4	1.4	0.0	0.4	0.4
7/1	748	748	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	520	520	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): 6.7 Total Delay for Signalled Lanes (pcuHr): 29.38 Cycle Time (s): 92</p> <p> PRC Over All Lanes (%): 6.7 Total Delay Over All Lanes(pcuHr): 29.83</p>													

Full Input Data And Results

Scenario 11: '2030 DS(A) AM' (FG11: '2030 DS(A) AM', Plan 1: 'Network Control Plan 1')

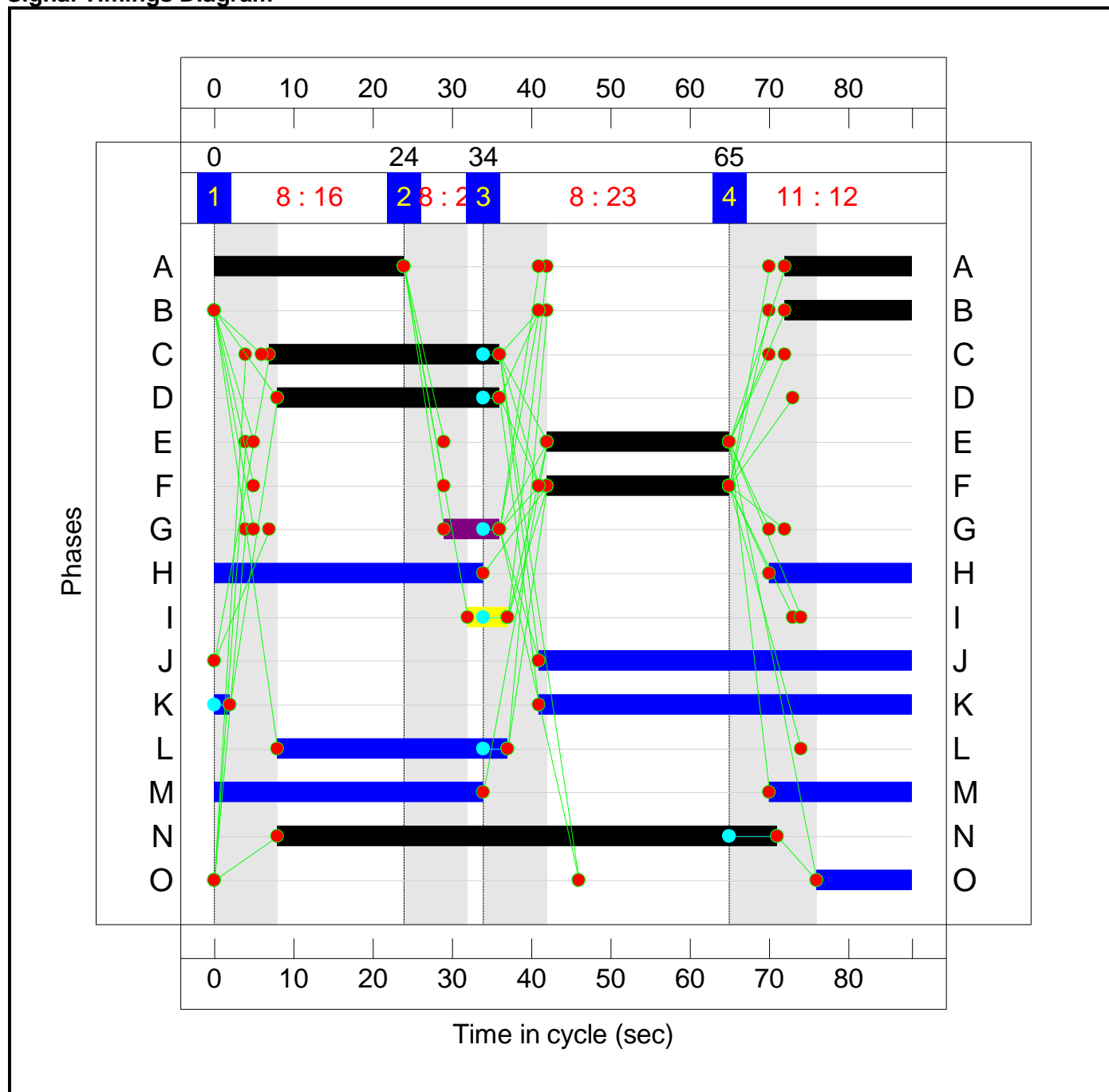
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	16	2	23	12
Change Point	0	24	34	65

Signal Timings Diagram



Full Input Data And Results

Full Input Data And Results

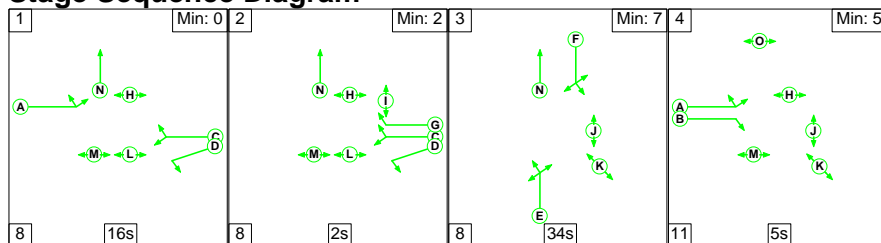
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Land at Chidswell	-	-	N/A	-	-		-	-	-	-	-	-	96.1%
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-		-	-	-	-	-	-	96.1%
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	N/A	A B		1	40:16	-	1039	2119:2117	793+288	96.1 : 96.1%
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	N/A	C D		1	29:28	-	674	2092:1800	702+4	95.4 : 95.4%
2/3	A653 Leeds Road (North) Right	O	N/A	N/A	C	G	1	29	7	136	1724	267	50.9%
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	N/A	F		1	23	-	549	2022:1724	551+25	95.2 : 95.2%
4/1	B6128 John Ormsby V C Way Left	U	N/A	N/A	E		1	23	-	362	2147	586	61.8%
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	N/A	E		1	23	-	424	1985	541	78.3%
5/1	B6128 Challenge Way - EXIT	U	N/A	N/A	N		1	63	-	543	1941	1412	38.5%
6/1+6/2	A653 Leeds Road (South)	U	N/A	N/A	-		-	-	-	1056	2400:1873	2400+0	44.0 : 0.0%
7/1	A653 Leeds Road (North) - EXIT	U	N/A	N/A	-		-	-	-	898	Inf	Inf	0.0%
8/1	B6128 John Ormsby V C Way - EXIT	U	N/A	N/A	-		-	-	-	687	Inf	Inf	0.0%

Full Input Data And Results

Scenario 12: '2030 DS(A) PM' (FG12: '2030 DS(A) PM', Plan 1: 'Network Control Plan 1')

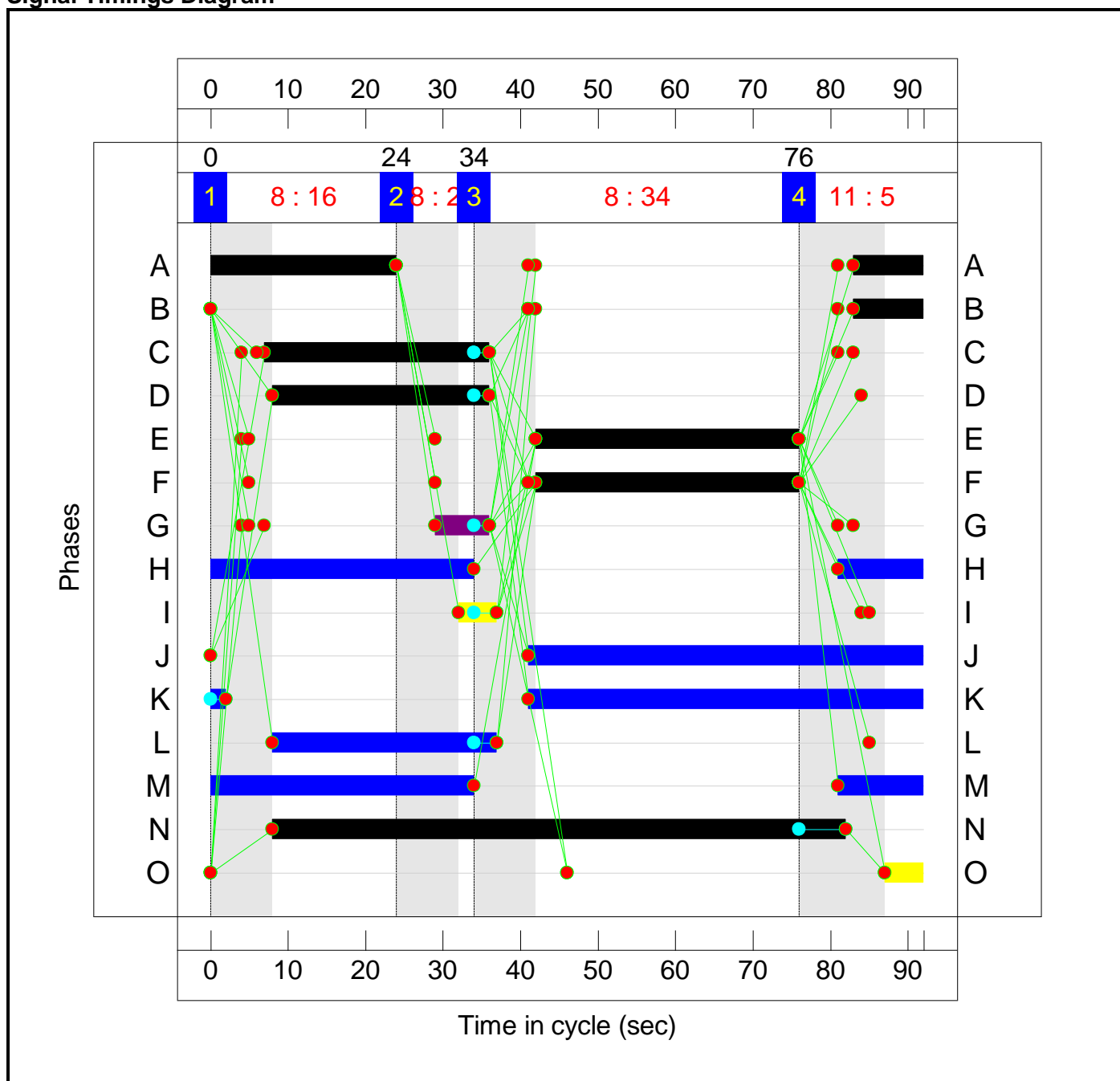
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	16	2	34	5
Change Point	0	24	34	76

Signal Timings Diagram



Full Input Data And Results

Full Input Data And Results

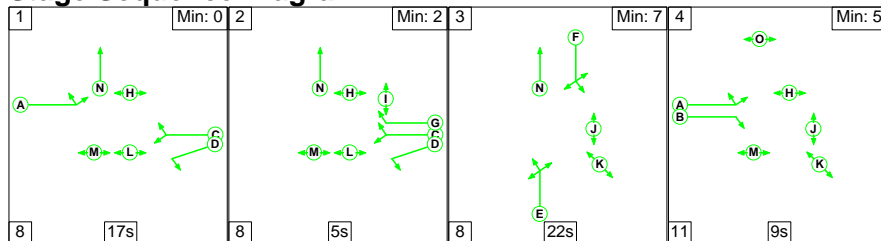
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Land at Chidswell	-	-	N/A	-	-		-	-	-	-	-	-	90.6%
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-		-	-	-	-	-	-	90.6%
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	N/A	A B		1	33:9	-	627	2119:2117	550+230	80.4 : 80.4%
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	N/A	C D		1	29:28	-	612	2092:1800	675+1	90.6 : 90.6%
2/3	A653 Leeds Road (North) Right	O	N/A	N/A	C	G	1	29	7	51	1724	401	12.7%
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	N/A	F		1	34	-	779	2022:1724	725+147	89.3 : 89.3%
4/1	B6128 John Ormsby V C Way Left	U	N/A	N/A	E		1	34	-	390	2147	817	47.7%
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	N/A	E		1	34	-	347	1985	755	46.0%
5/1	B6128 Challenge Way - EXIT	U	N/A	N/A	N		1	74	-	387	1941	1582	24.5%
6/1+6/2	A653 Leeds Road (South)	U	N/A	N/A	-		-	-	-	1132	2400:1873	2400+0	47.2 : 0.0%
7/1	A653 Leeds Road (North) - EXIT	U	N/A	N/A	-		-	-	-	778	Inf	Inf	0.0%
8/1	B6128 John Ormsby V C Way - EXIT	U	N/A	N/A	-		-	-	-	509	Inf	Inf	0.0%

Full Input Data And Results

Scenario 13: '2030 DS(A+B) AM' (FG13: '2030 DS(A+B) AM', Plan 1: 'Network Control Plan 1')

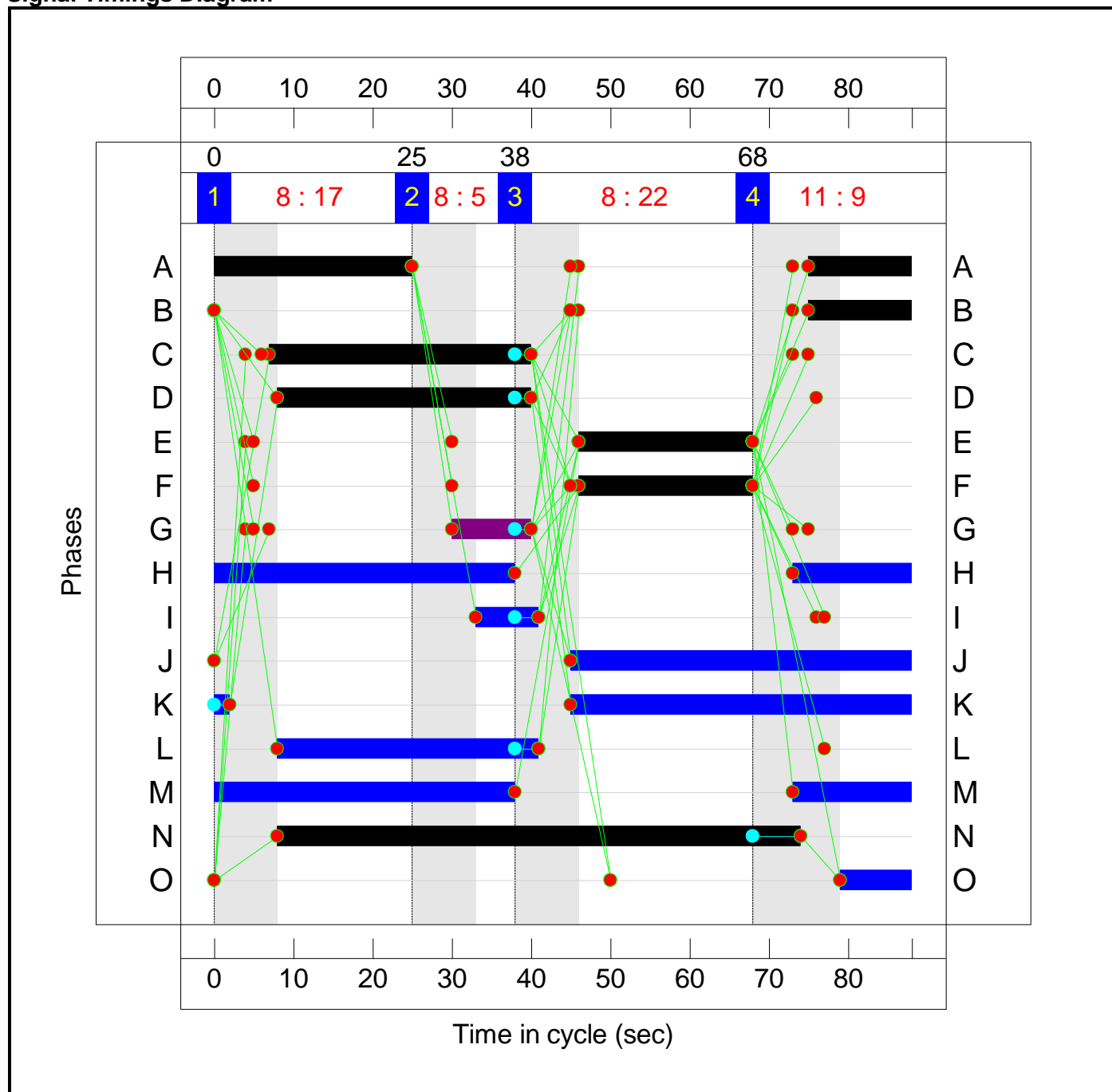
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	17	5	22	9
Change Point	0	25	38	68

Signal Timings Diagram



Full Input Data And Results

Full Input Data And Results

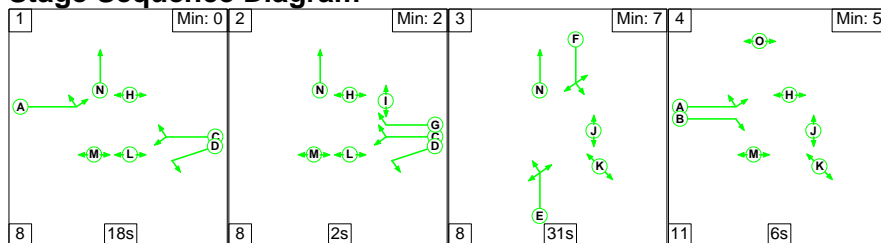
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Land at Chidswell	-	-	N/A	-	-		-	-	-	-	-	-	114.3%
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-		-	-	-	-	-	-	114.3%
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	N/A	A B		1	38:13	-	1158	2119:2117	742+271	114.3 : 114.3%
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	N/A	C D		1	33:32	-	908	2092:1800	798+4	113.3 : 113.3%
2/3	A653 Leeds Road (North) Right	O	N/A	N/A	C	G	1	33	10	238	1724	294	80.8%
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	N/A	F		1	22	-	602	2022:1724	528+22	109.4 : 109.4%
4/1	B6128 John Ormsby V C Way Left	U	N/A	N/A	E		1	22	-	466	2147	561	83.0%
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	N/A	E		1	22	-	493	1985	519	95.0%
5/1	B6128 Challenge Way - EXIT	U	N/A	N/A	N		1	66	-	714	1941	1478	48.2%
6/1+6/2	A653 Leeds Road (South)	U	N/A	N/A	-		-	-	-	1394	2400:1873	2400+0	53.6 : 0.0%
7/1	A653 Leeds Road (North) - EXIT	U	N/A	N/A	-		-	-	-	1014	Inf	Inf	0.0%
8/1	B6128 John Ormsby V C Way - EXIT	U	N/A	N/A	-		-	-	-	743	Inf	Inf	0.0%

Full Input Data And Results

Scenario 14: '2030 DS(A+B) PM' (FG14: '2030 DS(A+B) PM', Plan 1: 'Network Control Plan 1')

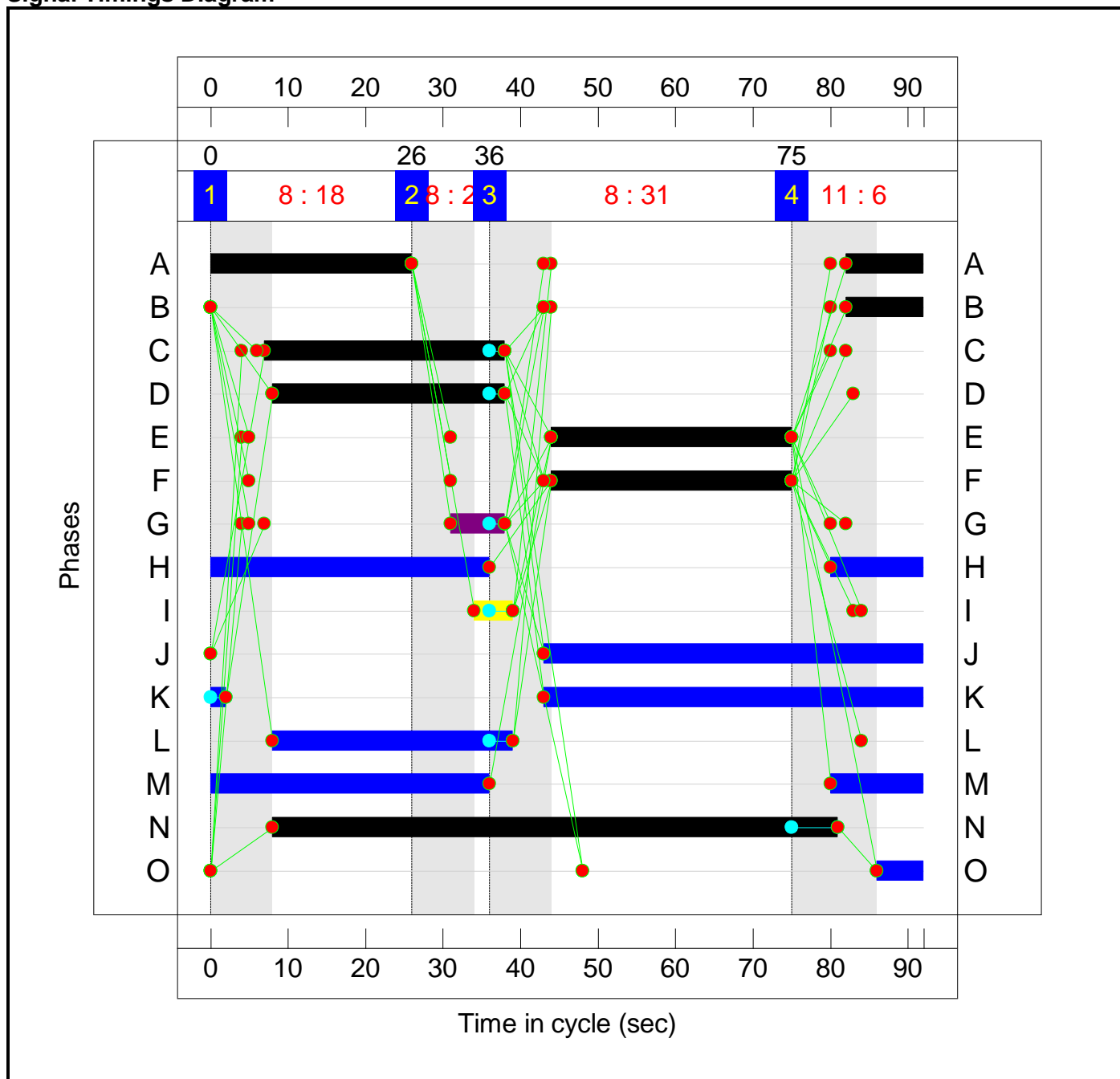
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	18	2	31	6
Change Point	0	26	36	75

Signal Timings Diagram



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Land at Chidswell	-	-	N/A	-	-		-	-	-	-	-	-	116.3%
A653 Leeds Road-B6128 Challenge Way-B6128 John Ormsby V C Way	-	-	N/A	-	-		-	-	-	-	-	-	116.3%
1/1+1/2	A653 Leeds Road (South) Left Ahead Right	U	N/A	N/A	A B		1	36:10	-	985	2119:2117	617+241	114.8 : 114.8%
2/2+2/1	A653 Leeds Road (North) Ahead Left	U	N/A	N/A	C D		1	31:30	-	824	2092:1800	720+1	114.3 : 114.3%
2/3	A653 Leeds Road (North) Right	O	N/A	N/A	C	G	1	31	7	101	1724	228	44.3%
3/1+3/2	B6128 Challenge Way Right Left Ahead	U+O	N/A	N/A	F		1	31	-	918	2022:1724	677+113	116.3 : 116.3%
4/1	B6128 John Ormsby V C Way Left	U	N/A	N/A	E		1	31	-	457	2147	747	61.2%
4/2	B6128 John Ormsby V C Way Ahead Right	O	N/A	N/A	E		1	31	-	394	1985	690	57.1%
5/1	B6128 Challenge Way - EXIT	U	N/A	N/A	N		1	73	-	484	1941	1561	31.0%
6/1+6/2	A653 Leeds Road (South)	U	N/A	N/A	-		-	-	-	1411	2400:1873	2400+0	53.7 : 0.0%
7/1	A653 Leeds Road (North) - EXIT	U	N/A	N/A	-		-	-	-	1119	Inf	Inf	0.0%
8/1	B6128 John Ormsby V C Way - EXIT	U	N/A	N/A	-		-	-	-	665	Inf	Inf	0.0%

