Appendix J – Junction 3: Leeds Road / Heybeck Lane (Combined)

Junction 3 – Single

Full Input Data And Results

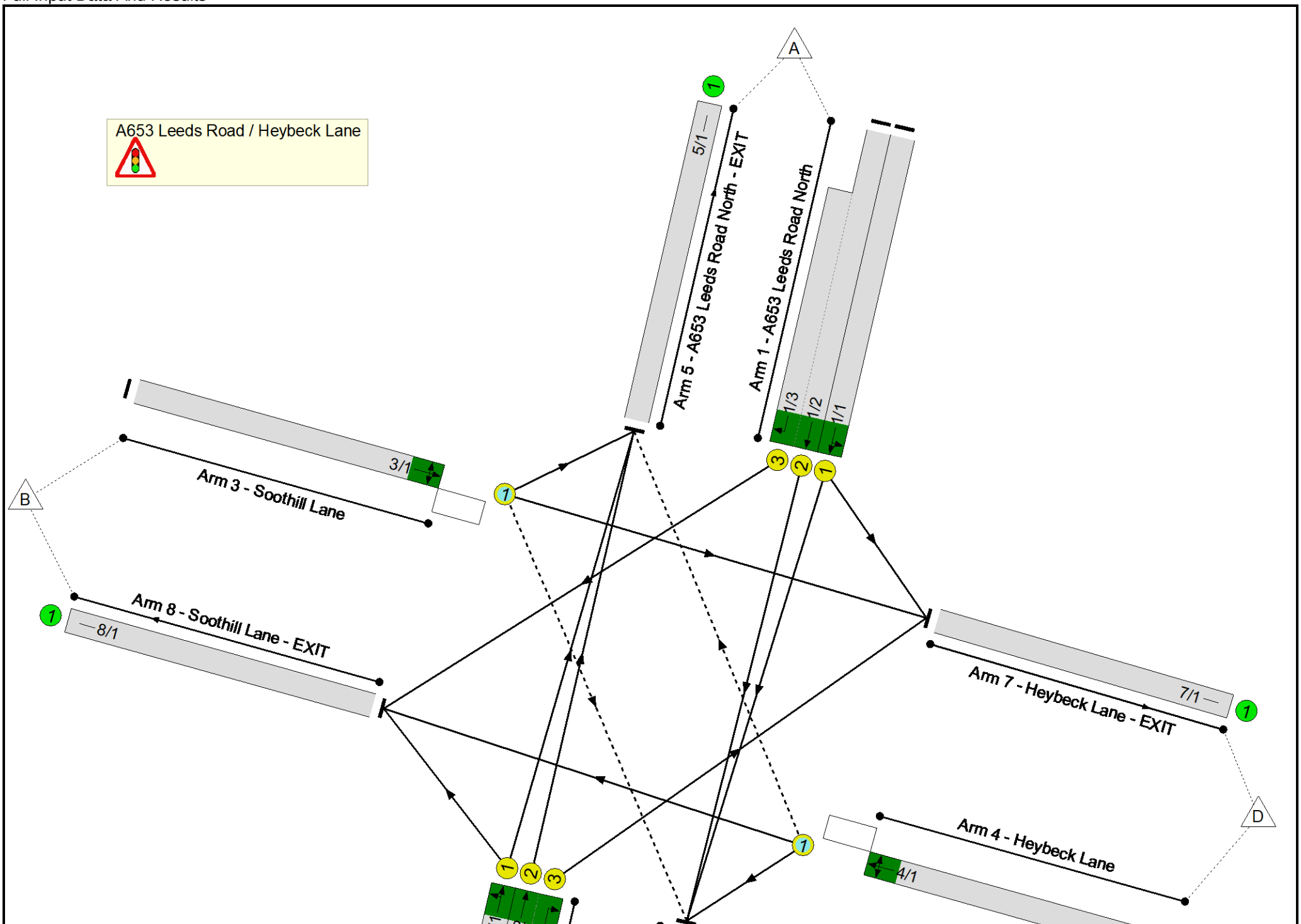
User and Project Details

Project:	**Land at Chidswell**
Title:	**A653 Leeds Road / Heybeck Lane**
Location:	A653 Leeds Road / Heybeck Lane
Additional detail:	
File name:	Junc 3 A653 Leeds Road - Heybeck Lane - Soothill Lane DN and DS(A) only - Nov 2019.lsg3x
Company:	Pell Frischmann
Address:	London
Linsig Version:	3, 2, 40, 0

Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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	No all peds stage	07:30 - 08:30	103	-4.6	35.26
2	2019 Base PM	2019 Base PM	No all peds stage	16:30 - 17:30	91	8.9	26.67
3	2024 DN AM	2024 DN AM	No all peds stage	07:30 - 08:30	103	21.9	30.42
4	2024 DN PM	2024 DN PM	No all peds stage	16:30 - 17:30	91	30.8	24.56
5	2030 DN AM	2030 DN AM	No all peds stage	07:30 - 08:30	103	15.7	36.30
6	2030 DN PM	2030 DN PM	No all peds stage	16:30 - 17:30	91	21.3	26.99
7	2024 DS(A) AM	2024 DS(A) AM	No all peds stage	07:30 - 08:30	103	21.8	31.35
8	2024 DS(A) PM	2024 DS(A) PM	No all peds stage	16:30 - 17:30	91	27.9	25.43
9	2030 DS(A) AM	2030 DS(A) AM	No all peds stage	07:30 - 08:30	103	15.6	38.93
10	2030 DS(A) PM	2030 DS(A) PM	No all peds stage	16:30 - 17:30	91	16.7	28.75

Full Input Data And Results

Network Results

Scenario 1: '2019 Base AM' (FG1: '2019 Base AM', Plan 1: 'No all peds stage')

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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**94.1%**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**94.1%**	**-**	**-**	**-**
1/1	A653 Leeds Road North Ahead Left	U	N/A	B	14	52	607	2082	2082	788	77.0%	607	607	16.8
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	B D	14:42	52	225	2143:2130	2143	123+227	64.2 : 64.2%	225	225	4.9
2/1	A653 Leeds Road South Ahead Left	U	N/A	A	98	36	600	2160	2160	881	68.1%	600	600	15.1
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	A C	98	36:3	706	2197:2170	2197	831+149	72.1 : 72.1%	706	706	15.1
3/1	Soothill Lane Left Right Ahead	O	N/A	E	60	87	510	1993	1993	542	94.1%	510	510	20.0
4/1	Heybeck Lane Right Left Ahead	O	N/A	F	59	87	266	2194	2194	618	43.1%	266	266	6.6

C1 PRC for Signalled Lanes (%): -4.6 Total Delay for Signalled Lanes (pcuHr): 35.26 Cycle Time (s): 103
PRC Over All Lanes (%): -4.6 Total Delay Over All Lanes(pcuHr): 35.26

Full Input Data And Results

Scenario 2: '2019 Base PM' (FG2: '2019 Base PM', Plan 1: 'No all peds stage')

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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**82.6%**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**82.6%**	**-**	**-**	**-**
1/1	A653 Leeds Road North Ahead Left	U	N/A	B	8	42	522	2082	2082	801	65.2%	522	522	11.7
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	B D	8:26	42	680	2143:2130	2143	764+332	62.0 : 62.0%	680	680	10.2
2/1	A653 Leeds Road South Ahead Left	U	N/A	A	81	20	418	2160	2160	736	56.8%	418	418	9.2
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	A C	81	20:88	568	2197:2170	2197	705+191	62.1 : 68.1%	568	568	9.9
3/1	Soothill Lane Left Right Ahead	O	N/A	E	50	70	380	1993	1993	460	82.6%	380	380	11.3
4/1	Heybeck Lane Right Left Ahead	O	N/A	F	49	70	218	2194	2194	530	41.1%	218	218	5.0

C1	PRC for Signalled Lanes (%):	8.9	Total Delay for Signalled Lanes (pcuHr):	26.67	Cycle Time (s): 91
	PRC Over All Lanes (%):	8.9	Total Delay Over All Lanes(pcuHr):	26.67	

Full Input Data And Results

Scenario 3: '2024 DN AM' (FG3: '2024 DN AM', Plan 1: 'No all peds stage')

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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**73.9%**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**73.9%**	**-**	**-**	**-**
1/1	A653 Leeds Road North Ahead Left	U	N/A	B	11	47	474	2082	2082	809	58.6%	474	474	11.4
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	B D	11:40	47	567	2143:2130	2143	749+227	53.3 : 73.9%	567	567	9.2
2/1	A653 Leeds Road South Ahead Left	U	N/A	A	96	34	650	2160	2160	944	68.9%	650	650	15.9
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	A C	96	34:0	792	2197:2170	2197	868+221	73.7 : 68.6%	792	792	15.7
3/1	Soothill Lane Left Right Ahead	O	N/A	E	55	85	483	1993	1993	658	73.4%	483	483	13.6
4/1	Heybeck Lane Right Left Ahead	O	N/A	F	54	85	335	2194	2194	746	44.9%	335	335	7.9

C1	PRC for Signalled Lanes (%):	21.9	Total Delay for Signalled Lanes (pcuHr):	30.42	Cycle Time (s): 103
	PRC Over All Lanes (%):	21.9	Total Delay Over All Lanes(pcuHr):	30.42	

Full Input Data And Results

Scenario 4: '2024 DN PM' (FG4: '2024 DN PM', Plan 1: 'No all peds stage')

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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**68.8%**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**68.8%**	**-**	**-**	**-**
1/1	A653 Leeds Road North Ahead Left	U	N/A	B	11	45	598	2082	2082	869	68.8%	598	598	13.4
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	B D	11:34	45	752	2143:2130	2143	811+351	64.0 : 66.4%	752	752	10.9
2/1	A653 Leeds Road South Ahead Left	U	N/A	A	84	28	452	2160	2160	926	48.8%	452	452	8.6
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	A C	84	28:0	622	2197:2170	2197	852+262	56.0 : 55.3%	622	622	9.4
3/1	Soothill Lane Left Right Ahead	O	N/A	E	53	73	357	1993	1993	526	67.9%	357	357	9.1
4/1	Heybeck Lane Right Left Ahead	O	N/A	F	52	73	240	2194	2194	603	39.8%	240	240	5.3

C1	PRC for Signalled Lanes (%):	30.8	Total Delay for Signalled Lanes (pcuHr):	24.56	Cycle Time (s): 91
	PRC Over All Lanes (%):	30.8	Total Delay Over All Lanes(pcuHr):	24.56	

Full Input Data And Results

Scenario 5: '2030 DN AM' (FG5: '2030 DN AM', Plan 1: 'No all peds stage')

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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**77.8%**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**77.8%**	**-**	**-**	**-**
1/1	A653 Leeds Road North Ahead Left	U	N/A	B	11	48	563	2082	2082	829	67.9%	563	563	14.2
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	B D	11:40	48	719	2143:2130	2143	772+248	68.1 : 77.8%	719	719	13.2
2/1	A653 Leeds Road South Ahead Left	U	N/A	A	94	34	714	2160	2160	986	72.4%	714	714	17.8
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	A C	94	34:0	889	2197:2170	2197	886+274	77.6 : 73.4%	889	889	17.6
3/1	Soothill Lane Left Right Ahead	O	N/A	E	56	83	458	1993	1993	600	76.4%	458	458	13.4
4/1	Heybeck Lane Right Left Ahead	O	N/A	F	55	83	404	2194	2194	682	59.3%	404	404	10.5

C1 PRC for Signalled Lanes (%): 15.7 Total Delay for Signalled Lanes (pcuHr): 36.30 Cycle Time (s): 103
PRC Over All Lanes (%): 15.7 Total Delay Over All Lanes(pcuHr): 36.30

Full Input Data And Results

Scenario 6: '2030 DN PM' (FG6: '2030 DN PM', Plan 1: 'No all peds stage')

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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**74.2%**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**74.2%**	**-**	**-**	**-**
1/1	A653 Leeds Road North Ahead Left	U	N/A	B	11	47	640	2082	2082	915	69.9%	640	640	14.1
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	B D	11:35	47	898	2143:2130	2143	847+364	74.2 : 74.2%	898	898	14.0
2/1	A653 Leeds Road South Ahead Left	U	N/A	A	84	29	481	2160	2160	949	50.7%	481	481	9.2
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	A C	84	29:0	656	2197:2170	2197	871+262	57.9 : 57.9%	656	656	9.9
3/1	Soothill Lane Left Right Ahead	O	N/A	E	55	73	343	1993	1993	482	71.2%	343	343	9.1
4/1	Heybeck Lane Right Left Ahead	O	N/A	F	54	73	251	2194	2194	555	45.3%	251	251	5.7

C1 PRC for Signalled Lanes (%): 21.3 Total Delay for Signalled Lanes (pcuHr): 26.99 Cycle Time (s): 91
PRC Over All Lanes (%): 21.3 Total Delay Over All Lanes(pcuHr): 26.99

Full Input Data And Results

Scenario 7: '2024 DS(A) AM' (FG7: '2024 DS(A) AM', Plan 1: 'No all peds stage')

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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**73.9%**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**73.9%**	**-**	**-**	**-**
1/1	A653 Leeds Road North Ahead Left	U	N/A	B	11	47	480	2082	2082	809	59.4%	480	480	11.5
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	B D	11:40	47	567	2143:2130	2143	749+227	53.3 : 73.9%	567	567	9.2
2/1	A653 Leeds Road South Ahead Left	U	N/A	A	96	34	650	2160	2160	944	68.9%	650	650	15.9
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	A C	96	34:0	797	2197:2170	2197	866+232	73.9 : 67.7%	797	797	15.7
3/1	Soothill Lane Left Right Ahead	O	N/A	E	55	85	486	1993	1993	658	73.9%	486	486	13.7
4/1	Heybeck Lane Right Left Ahead	O	N/A	F	54	85	387	2194	2194	736	52.6%	387	387	9.4

C1 PRC for Signalled Lanes (%): 21.8 Total Delay for Signalled Lanes (pcuHr): 31.35 Cycle Time (s): 103
PRC Over All Lanes (%): 21.8 Total Delay Over All Lanes(pcuHr): 31.35

Full Input Data And Results

Scenario 8: '2024 DS(A) PM' (FG8: '2024 DS(A) PM', Plan 1: 'No all peds stage')

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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**70.4%**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**70.4%**	**-**	**-**	**-**
1/1	A653 Leeds Road North Ahead Left	U	N/A	B	11	45	558	2082	2082	869	64.2%	558	558	12.1
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	B D	11:34	45	808	2143:2130	2143	817+331	70.4 : 70.4%	808	808	12.7
2/1	A653 Leeds Road South Ahead Left	U	N/A	A	84	28	451	2160	2160	926	48.7%	451	451	8.6
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	A C	84	28:0	637	2197:2170	2197	846+262	56.5 : 60.6%	637	637	9.4
3/1	Soothill Lane Left Right Ahead	O	N/A	E	53	73	367	1993	1993	526	69.8%	367	367	9.5
4/1	Heybeck Lane Right Left Ahead	O	N/A	F	52	73	265	2194	2194	603	44.0%	265	265	5.9

C1 PRC for Signalled Lanes (%): 27.9 Total Delay for Signalled Lanes (pcuHr): 25.43 Cycle Time (s): 91
PRC Over All Lanes (%): 27.9 Total Delay Over All Lanes(pcuHr): 25.43

Full Input Data And Results

Scenario 9: '2030 DS(A) AM' (FG9: '2030 DS(A) AM', Plan 1: 'No all peds stage')

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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**77.8%**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**77.8%**	**-**	**-**	**-**
1/1	A653 Leeds Road North Ahead Left	U	N/A	B	11	48	577	2082	2082	829	69.6%	577	577	14.8
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	B D	11:40	48	716	2143:2130	2143	772+248	67.8 : 77.8%	716	716	13.1
2/1	A653 Leeds Road South Ahead Left	U	N/A	A	94	34	715	2160	2160	986	72.5%	715	715	17.8
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	A C	94	34:0	897	2197:2170	2197	883+274	77.8 : 76.7%	897	897	17.7
3/1	Soothill Lane Left Right Ahead	O	N/A	E	56	83	464	1993	1993	599	77.4%	464	464	13.7
4/1	Heybeck Lane Right Left Ahead	O	N/A	F	55	83	499	2194	2194	657	75.9%	499	499	14.2

C1 PRC for Signalled Lanes (%): 15.6 Total Delay for Signalled Lanes (pcuHr): 38.93 Cycle Time (s): 103
PRC Over All Lanes (%): 15.6 Total Delay Over All Lanes(pcuHr): 38.93

Full Input Data And Results

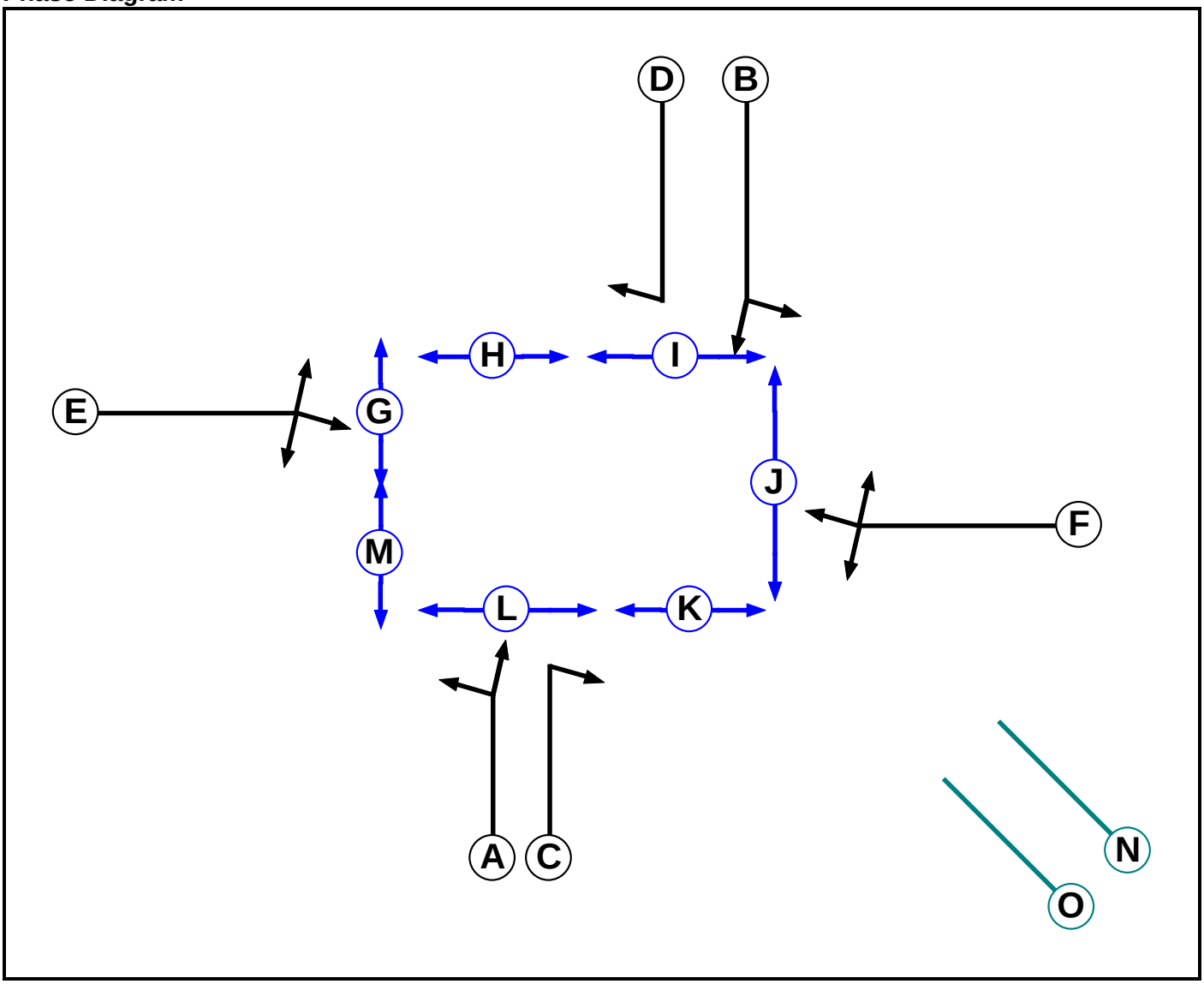
Scenario 10: '2030 DS(A) PM' (FG10: '2030 DS(A) PM', Plan 1: 'No all peds stage')

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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**77.1%**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**77.1%**	**-**	**-**	**-**
1/1	A653 Leeds Road North Ahead Left	U	N/A	B	11	47	643	2082	2082	915	70.3%	643	643	14.2
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	B D	11:36	47	925	2143:2130	2143	849+350	77.1 : 77.1%	925	925	14.9
2/1	A653 Leeds Road South Ahead Left	U	N/A	A	84	30	481	2160	2160	973	49.4%	481	481	9.0
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	A C	84	30:0	681	2197:2170	2197	878+262	57.4 : 67.5%	681	681	9.7
3/1	Soothill Lane Left Right Ahead	O	N/A	E	55	73	360	1993	1993	482	74.7%	360	360	9.8
4/1	Heybeck Lane Right Left Ahead	O	N/A	F	54	73	297	2194	2194	552	53.8%	297	297	7.0

C1	PRC for Signalled Lanes (%):	16.7	Total Delay for Signalled Lanes (pcuHr):	28.75	Cycle Time (s): 91
	PRC Over All Lanes (%):	16.7	Total Delay Over All Lanes(pcuHr):	28.75	

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	7
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Pedestrian		4	4
H	Pedestrian		5	5
I	Pedestrian		6	6
J	Pedestrian		8	8
K	Pedestrian		5	5
L	Pedestrian		6	6
M	Pedestrian		6	6
N	Dummy		3	3
O	Dummy		2	2

Full Input Data And Results

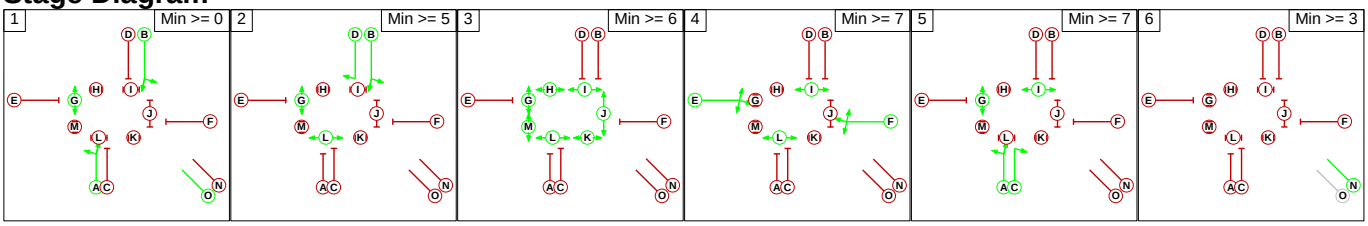
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
A		-	-	6	7	6	-	10	-	-	-	6	9	3	-
B	-		6	-	6	7	-	-	6	9	10	-	-	3	-
C	-	8		6	6	9	-	-	-	12	10	6	-	3	8
D	8	-	6		8	7	-	10	6	-	-	-	13	3	8
E	5	6	5	5		-	5	8	-	8	10	-	-	3	-
F	6	5	5	5	-		-	9	-	5	8	-	9	3	-
G	-	-	-	-	6	-		-	-	-	-	-	-	3	-
H	8	-	-	8	8	8	-		-	-	-	-	-	3	-
I	-	11	-	11	-	-	-	-		-	-	-	-	3	-
J	-	13	13	-	13	13	-	-	-		-	-	-	3	-
K	-	7	7	-	7	7	-	-	-	-		-	-	3	-
L	11	-	11	-	-	-	-	-	-	-	-		-	3	-
M	7	-	-	7	-	7	-	-	-	-	-	-		3	-
N	2	2	2	2	2	2	2	2	2	2	2	2	2		-
O	-	-	2	2	-	-	-	2	2	-	2	2	-	-	

Phases in Stage

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

Stage Diagram



Full Input Data And Results

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
6	1	A	Gaining relative	3	5
6	1	B	Gaining relative	3	5
6	2	B	Gaining relative	3	5
6	2	D	Gaining relative	3	5
6	4	E	Gaining relative	3	5
6	4	F	Gaining relative	3	5
6	5	A	Gaining relative	3	5
6	5	C	Gaining relative	3	5

Prohibited Stage Change

		To Stage					
		1	2	3	4	5	6
From Stage	1		6	10	7	6	3
	2	11		13	8	11	3
	3	13	13		13	13	3
	4	11	11	10		11	3
	5	11	11	12	9		3
	6	5	5	2	5	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A653 Leeds Road / Heybeck 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-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
3/1 (Soothill Lane)	6/1 (Right)	1439	0	4/1	1.09	To 6/1 (Left) To 8/1 (Ahead)	3.00	3.00	0.50	3	3.00
4/1 (Heybeck Lane)	5/1 (Right)	1439	0	3/1	1.09	To 5/1 (Left) To 7/1 (Ahead)	3.00	3.00	0.50	3	3.00

Full Input Data And Results

Lane Input Data

Junction: A653 Leeds Road / Heybeck 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 (A653 Leeds Road North)	U	B	2	3	60.0	User	2082	-	-	-	-	-
1/2 (A653 Leeds Road North)	U	B	2	3	60.0	User	2143	-	-	-	-	-
1/3 (A653 Leeds Road North)	U	D	2	3	16.0	User	2130	-	-	-	-	-
2/1 (A653 Leeds Road South)	U	A	2	3	60.0	User	2160	-	-	-	-	-
2/2 (A653 Leeds Road South)	U	A	2	3	60.0	User	2197	-	-	-	-	-
2/3 (A653 Leeds Road South)	U	C	2	3	15.0	User	2170	-	-	-	-	-
3/1 (Soothill Lane)	O	E	2	3	60.0	User	1993	-	-	-	-	-
4/1 (Heybeck Lane)	O	F	2	3	60.0	User	2194	-	-	-	-	-
5/1 (A653 Leeds Road North - EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A653 Leeds Road South - EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Heybeck Lane - EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (Soothill Lane - 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: '2030 DS(A) AM'	07:30	08:30	01:00	
10: '2030 DS(A) PM'	16:30	17:30	01:00	

Full Input Data And Results

Scenario 1: '2019 Base AM' (FG1: '2019 Base AM', Plan 1: 'No all peds stage')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	146	666	20	832
	B	250	0	55	205	510
	C	1124	75	0	107	1306
	D	15	114	137	0	266
	Tot.	1389	335	858	332	2914

Traffic Lane Flows

Lane	Scenario 1: 2019 Base AM
Junction: A653 Leeds Road / Heybeck Lane	
1/1	607
1/2 (with short)	225(In) 79(Out)
1/3 (short)	146
2/1	600
2/2 (with short)	706(In) 599(Out)
2/3 (short)	107
3/1	510
4/1	266
5/1	1389
6/1	858
7/1	332
8/1	335

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road / Heybeck Lane								
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 North Lane 1)	This lane uses a directly entered Saturation Flow						2082	2082
1/2 (A653 Leeds Road North Lane 2)	This lane uses a directly entered Saturation Flow						2143	2143
1/3 (A653 Leeds Road North Lane 3)	This lane uses a directly entered Saturation Flow						2130	2130
2/1 (A653 Leeds Road South Lane 1)	This lane uses a directly entered Saturation Flow						2160	2160
2/2 (A653 Leeds Road South Lane 2)	This lane uses a directly entered Saturation Flow						2197	2197
2/3 (A653 Leeds Road South Lane 3)	This lane uses a directly entered Saturation Flow						2170	2170
3/1 (Soothill Lane Lane 1)	This lane uses a directly entered Saturation Flow						1993	1993
4/1 (Heybeck Lane Lane 1)	This lane uses a directly entered Saturation Flow						2194	2194
5/1 (A653 Leeds Road North - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A653 Leeds Road South - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Heybeck Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Soothill Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2019 Base PM' (FG2: '2019 Base PM', Plan 1: 'No all peds stage')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	206	967	29	1202
	B	202	0	31	147	380
	C	766	90	0	130	986
	D	18	107	93	0	218
	Tot.	986	403	1091	306	2786

Traffic Lane Flows

Lane	Scenario 2: 2019 Base PM
Junction: A653 Leeds Road / Heybeck Lane	
1/1	522
1/2 (with short)	680(In) 474(Out)
1/3 (short)	206
2/1	418
2/2 (with short)	568(In) 438(Out)
2/3 (short)	130
3/1	380
4/1	218
5/1	986
6/1	1091
7/1	306
8/1	403

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road / Heybeck Lane								
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 North Lane 1)	This lane uses a directly entered Saturation Flow						2082	2082
1/2 (A653 Leeds Road North Lane 2)	This lane uses a directly entered Saturation Flow						2143	2143
1/3 (A653 Leeds Road North Lane 3)	This lane uses a directly entered Saturation Flow						2130	2130
2/1 (A653 Leeds Road South Lane 1)	This lane uses a directly entered Saturation Flow						2160	2160
2/2 (A653 Leeds Road South Lane 2)	This lane uses a directly entered Saturation Flow						2197	2197
2/3 (A653 Leeds Road South Lane 3)	This lane uses a directly entered Saturation Flow						2170	2170
3/1 (Soothill Lane Lane 1)	This lane uses a directly entered Saturation Flow						1993	1993
4/1 (Heybeck Lane Lane 1)	This lane uses a directly entered Saturation Flow						2194	2194
5/1 (A653 Leeds Road North - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A653 Leeds Road South - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Heybeck Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Soothill Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '2024 DN AM' (FG3: '2024 DN AM', Plan 1: 'No all peds stage')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	168	829	44	1041
	B	206	0	58	219	483
	C	1203	87	0	152	1442
	D	18	129	188	0	335
	Tot.	1427	384	1075	415	3301

Traffic Lane Flows

Lane	Scenario 3: 2024 DN AM
Junction: A653 Leeds Road / Heybeck Lane	
1/1	474
1/2 (with short)	567(In) 399(Out)
1/3 (short)	168
2/1	650
2/2 (with short)	792(In) 640(Out)
2/3 (short)	152
3/1	483
4/1	335
5/1	1427
6/1	1075
7/1	415
8/1	384

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road / Heybeck Lane								
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 North Lane 1)	This lane uses a directly entered Saturation Flow						2082	2082
1/2 (A653 Leeds Road North Lane 2)	This lane uses a directly entered Saturation Flow						2143	2143
1/3 (A653 Leeds Road North Lane 3)	This lane uses a directly entered Saturation Flow						2130	2130
2/1 (A653 Leeds Road South Lane 1)	This lane uses a directly entered Saturation Flow						2160	2160
2/2 (A653 Leeds Road South Lane 2)	This lane uses a directly entered Saturation Flow						2197	2197
2/3 (A653 Leeds Road South Lane 3)	This lane uses a directly entered Saturation Flow						2170	2170
3/1 (Soothill Lane Lane 1)	This lane uses a directly entered Saturation Flow						1993	1993
4/1 (Heybeck Lane Lane 1)	This lane uses a directly entered Saturation Flow						2194	2194
5/1 (A653 Leeds Road North - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A653 Leeds Road South - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Heybeck Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Soothill Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '2024 DN PM' (FG4: '2024 DN PM', Plan 1: 'No all peds stage')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	233	1052	65	1350
	B	181	0	33	143	357
	C	828	101	0	145	1074
	D	19	109	112	0	240
	Tot.	1028	443	1197	353	3021

Traffic Lane Flows

Lane	Scenario 4: 2024 DN PM
Junction: A653 Leeds Road / Heybeck Lane	
1/1	598
1/2 (with short)	752(In) 519(Out)
1/3 (short)	233
2/1	452
2/2 (with short)	622(In) 477(Out)
2/3 (short)	145
3/1	357
4/1	240
5/1	1028
6/1	1197
7/1	353
8/1	443

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road / Heybeck Lane								
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 North Lane 1)	This lane uses a directly entered Saturation Flow						2082	2082
1/2 (A653 Leeds Road North Lane 2)	This lane uses a directly entered Saturation Flow						2143	2143
1/3 (A653 Leeds Road North Lane 3)	This lane uses a directly entered Saturation Flow						2130	2130
2/1 (A653 Leeds Road South Lane 1)	This lane uses a directly entered Saturation Flow						2160	2160
2/2 (A653 Leeds Road South Lane 2)	This lane uses a directly entered Saturation Flow						2197	2197
2/3 (A653 Leeds Road South Lane 3)	This lane uses a directly entered Saturation Flow						2170	2170
3/1 (Soothill Lane Lane 1)	This lane uses a directly entered Saturation Flow						1993	1993
4/1 (Heybeck Lane Lane 1)	This lane uses a directly entered Saturation Flow						2194	2194
5/1 (A653 Leeds Road North - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A653 Leeds Road South - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Heybeck Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Soothill Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: '2030 DN AM' (FG5: '2030 DN AM', Plan 1: 'No all peds stage')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	193	1016	73	1282
	B	187	0	59	212	458
	C	1299	103	0	201	1603
	D	21	139	244	0	404
	Tot.	1507	435	1319	486	3747

Traffic Lane Flows

Lane	Scenario 5: 2030 DN AM
Junction: A653 Leeds Road / Heybeck Lane	
1/1	563
1/2 (with short)	719(In) 526(Out)
1/3 (short)	193
2/1	714
2/2 (with short)	889(In) 688(Out)
2/3 (short)	201
3/1	458
4/1	404
5/1	1507
6/1	1319
7/1	486
8/1	435

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road / Heybeck Lane								
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 North Lane 1)	This lane uses a directly entered Saturation Flow						2082	2082
1/2 (A653 Leeds Road North Lane 2)	This lane uses a directly entered Saturation Flow						2143	2143
1/3 (A653 Leeds Road North Lane 3)	This lane uses a directly entered Saturation Flow						2130	2130
2/1 (A653 Leeds Road South Lane 1)	This lane uses a directly entered Saturation Flow						2160	2160
2/2 (A653 Leeds Road South Lane 2)	This lane uses a directly entered Saturation Flow						2197	2197
2/3 (A653 Leeds Road South Lane 3)	This lane uses a directly entered Saturation Flow						2170	2170
3/1 (Soothill Lane Lane 1)	This lane uses a directly entered Saturation Flow						1993	1993
4/1 (Heybeck Lane Lane 1)	This lane uses a directly entered Saturation Flow						2194	2194
5/1 (A653 Leeds Road North - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A653 Leeds Road South - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Heybeck Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Soothill Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 6: '2030 DN PM' (FG6: '2030 DN PM', Plan 1: 'No all peds stage')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	270	1159	109	1538
	B	175	0	39	129	343
	C	886	99	0	152	1137
	D	20	107	124	0	251
	Tot.	1081	476	1322	390	3269

Traffic Lane Flows

Lane	Scenario 6: 2030 DN PM
Junction: A653 Leeds Road / Heybeck Lane	
1/1	640
1/2 (with short)	898(In) 628(Out)
1/3 (short)	270
2/1	481
2/2 (with short)	656(In) 504(Out)
2/3 (short)	152
3/1	343
4/1	251
5/1	1081
6/1	1322
7/1	390
8/1	476

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road / Heybeck Lane								
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 North Lane 1)	This lane uses a directly entered Saturation Flow						2082	2082
1/2 (A653 Leeds Road North Lane 2)	This lane uses a directly entered Saturation Flow						2143	2143
1/3 (A653 Leeds Road North Lane 3)	This lane uses a directly entered Saturation Flow						2130	2130
2/1 (A653 Leeds Road South Lane 1)	This lane uses a directly entered Saturation Flow						2160	2160
2/2 (A653 Leeds Road South Lane 2)	This lane uses a directly entered Saturation Flow						2197	2197
2/3 (A653 Leeds Road South Lane 3)	This lane uses a directly entered Saturation Flow						2170	2170
3/1 (Soothill Lane Lane 1)	This lane uses a directly entered Saturation Flow						1993	1993
4/1 (Heybeck Lane Lane 1)	This lane uses a directly entered Saturation Flow						2194	2194
5/1 (A653 Leeds Road North - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A653 Leeds Road South - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Heybeck Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Soothill Lane - 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: 'No all peds stage')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	168	829	50	1047
	B	206	0	58	222	486
	C	1203	87	0	157	1447
	D	40	141	206	0	387
	Tot.	1449	396	1093	429	3367

Traffic Lane Flows

Lane	Scenario 7: 2024 DS(A) AM
Junction: A653 Leeds Road / Heybeck Lane	
1/1	480
1/2 (with short)	567(In) 399(Out)
1/3 (short)	168
2/1	650
2/2 (with short)	797(In) 640(Out)
2/3 (short)	157
3/1	486
4/1	387
5/1	1449
6/1	1093
7/1	429
8/1	396

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road / Heybeck Lane								
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 North Lane 1)	This lane uses a directly entered Saturation Flow						2082	2082
1/2 (A653 Leeds Road North Lane 2)	This lane uses a directly entered Saturation Flow						2143	2143
1/3 (A653 Leeds Road North Lane 3)	This lane uses a directly entered Saturation Flow						2130	2130
2/1 (A653 Leeds Road South Lane 1)	This lane uses a directly entered Saturation Flow						2160	2160
2/2 (A653 Leeds Road South Lane 2)	This lane uses a directly entered Saturation Flow						2197	2197
2/3 (A653 Leeds Road South Lane 3)	This lane uses a directly entered Saturation Flow						2170	2170
3/1 (Soothill Lane Lane 1)	This lane uses a directly entered Saturation Flow						1993	1993
4/1 (Heybeck Lane Lane 1)	This lane uses a directly entered Saturation Flow						2194	2194
5/1 (A653 Leeds Road North - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A653 Leeds Road South - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Heybeck Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Soothill Lane - 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: 'No all peds stage')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	233	1052	81	1366
	B	181	0	33	153	367
	C	828	101	0	159	1088
	D	29	115	121	0	265
	Tot.	1038	449	1206	393	3086

Traffic Lane Flows

Lane	Scenario 8: 2024 DS(A) PM
Junction: A653 Leeds Road / Heybeck Lane	
1/1	558
1/2 (with short)	808(In) 575(Out)
1/3 (short)	233
2/1	451
2/2 (with short)	637(In) 478(Out)
2/3 (short)	159
3/1	367
4/1	265
5/1	1038
6/1	1206
7/1	393
8/1	449

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road / Heybeck Lane								
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 North Lane 1)	This lane uses a directly entered Saturation Flow						2082	2082
1/2 (A653 Leeds Road North Lane 2)	This lane uses a directly entered Saturation Flow						2143	2143
1/3 (A653 Leeds Road North Lane 3)	This lane uses a directly entered Saturation Flow						2130	2130
2/1 (A653 Leeds Road South Lane 1)	This lane uses a directly entered Saturation Flow						2160	2160
2/2 (A653 Leeds Road South Lane 2)	This lane uses a directly entered Saturation Flow						2197	2197
2/3 (A653 Leeds Road South Lane 3)	This lane uses a directly entered Saturation Flow						2170	2170
3/1 (Soothill Lane Lane 1)	This lane uses a directly entered Saturation Flow						1993	1993
4/1 (Heybeck Lane Lane 1)	This lane uses a directly entered Saturation Flow						2194	2194
5/1 (A653 Leeds Road North - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A653 Leeds Road South - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Heybeck Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Soothill Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 9: '2030 DS(A) AM' (FG9: '2030 DS(A) AM', Plan 1: 'No all peds stage')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	193	1016	84	1293
	B	187	0	59	218	464
	C	1299	103	0	210	1612
	D	61	161	277	0	499
	Tot.	1547	457	1352	512	3868

Traffic Lane Flows

Lane	Scenario 9: 2030 DS(A) AM
Junction: A653 Leeds Road / Heybeck Lane	
1/1	577
1/2 (with short)	716(In) 523(Out)
1/3 (short)	193
2/1	715
2/2 (with short)	897(In) 687(Out)
2/3 (short)	210
3/1	464
4/1	499
5/1	1547
6/1	1352
7/1	512
8/1	457

Full Input Data And Results

Lane Saturation Flows

Junction: A653 Leeds Road / Heybeck Lane								
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 North Lane 1)	This lane uses a directly entered Saturation Flow						2082	2082
1/2 (A653 Leeds Road North Lane 2)	This lane uses a directly entered Saturation Flow						2143	2143
1/3 (A653 Leeds Road North Lane 3)	This lane uses a directly entered Saturation Flow						2130	2130
2/1 (A653 Leeds Road South Lane 1)	This lane uses a directly entered Saturation Flow						2160	2160
2/2 (A653 Leeds Road South Lane 2)	This lane uses a directly entered Saturation Flow						2197	2197
2/3 (A653 Leeds Road South Lane 3)	This lane uses a directly entered Saturation Flow						2170	2170
3/1 (Soothill Lane Lane 1)	This lane uses a directly entered Saturation Flow						1993	1993
4/1 (Heybeck Lane Lane 1)	This lane uses a directly entered Saturation Flow						2194	2194
5/1 (A653 Leeds Road North - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A653 Leeds Road South - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Heybeck Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Soothill Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 10: '2030 DS(A) PM' (FG10: '2030 DS(A) PM', Plan 1: 'No all peds stage')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	270	1159	139	1568
	B	175	0	39	146	360
	C	886	99	0	177	1162
	D	39	118	140	0	297
	Tot.	1100	487	1338	462	3387

Traffic Lane Flows

Lane	Scenario 10: 2030 DS(A) PM
Junction: A653 Leeds Road / Heybeck Lane	
1/1	643
1/2 (with short)	925(In) 655(Out)
1/3 (short)	270
2/1	481
2/2 (with short)	681(In) 504(Out)
2/3 (short)	177
3/1	360
4/1	297
5/1	1100
6/1	1338
7/1	462
8/1	487

Full Input Data And Results

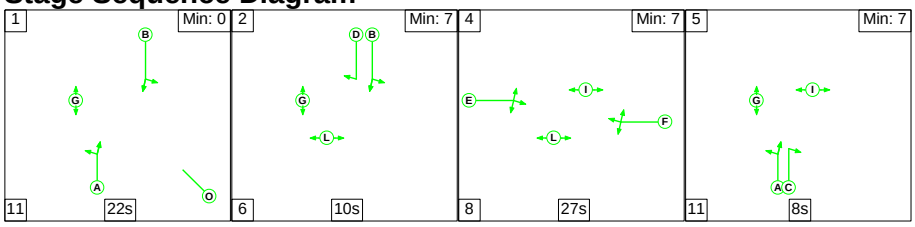
Lane Saturation Flows

Junction: A653 Leeds Road / Heybeck Lane								
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 North Lane 1)	This lane uses a directly entered Saturation Flow						2082	2082
1/2 (A653 Leeds Road North Lane 2)	This lane uses a directly entered Saturation Flow						2143	2143
1/3 (A653 Leeds Road North Lane 3)	This lane uses a directly entered Saturation Flow						2130	2130
2/1 (A653 Leeds Road South Lane 1)	This lane uses a directly entered Saturation Flow						2160	2160
2/2 (A653 Leeds Road South Lane 2)	This lane uses a directly entered Saturation Flow						2197	2197
2/3 (A653 Leeds Road South Lane 3)	This lane uses a directly entered Saturation Flow						2170	2170
3/1 (Soothill Lane Lane 1)	This lane uses a directly entered Saturation Flow						1993	1993
4/1 (Heybeck Lane Lane 1)	This lane uses a directly entered Saturation Flow						2194	2194
5/1 (A653 Leeds Road North - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A653 Leeds Road South - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Heybeck Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Soothill Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 1: '2019 Base AM' (FG1: '2019 Base AM', Plan 1: 'No all peds stage')

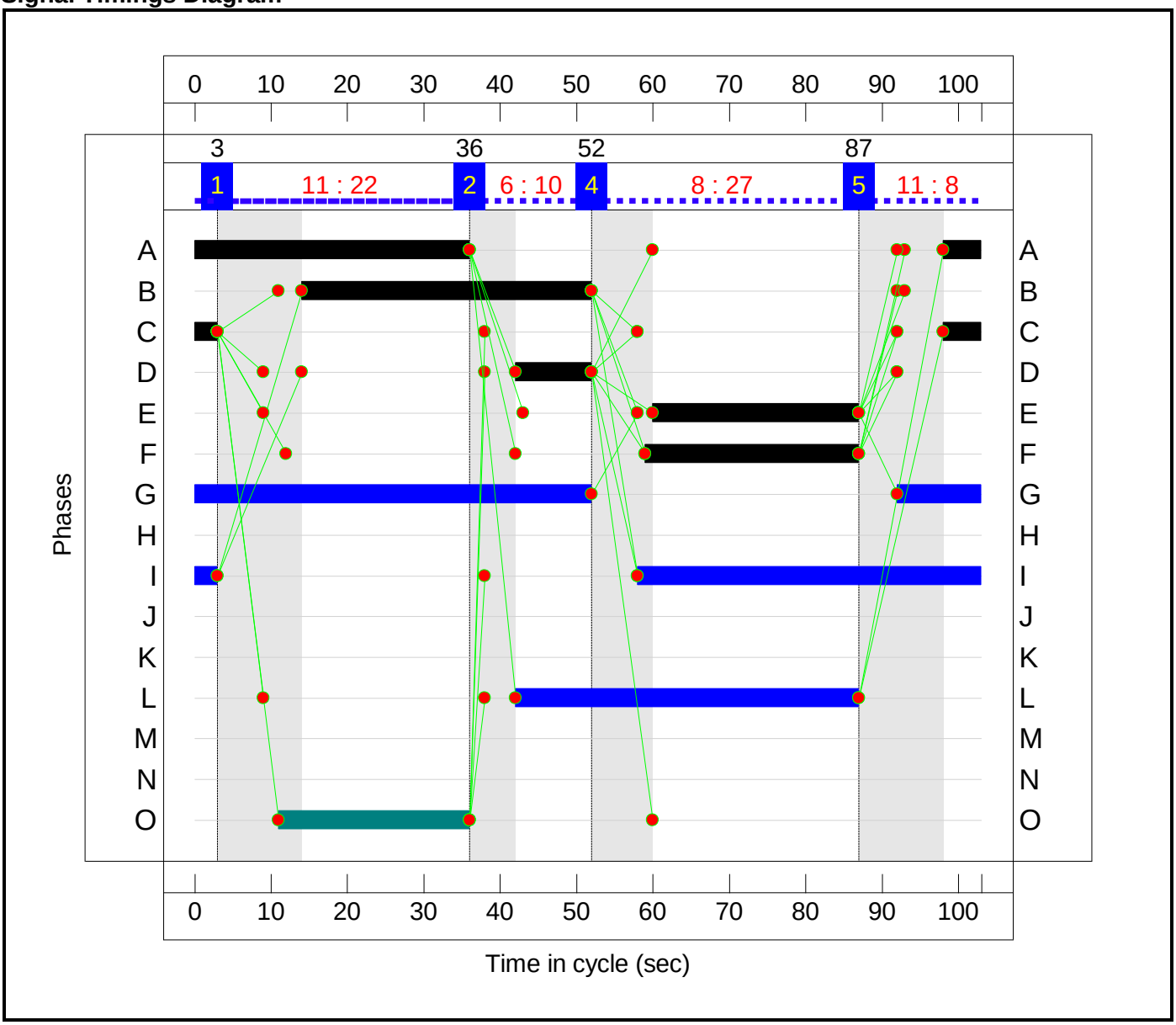
Stage Sequence Diagram



Stage Timings

Stage	1	2	4	5
Duration	22	10	27	8
Change Point	3	36	52	87

Signal Timings Diagram



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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**94.1%**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**94.1%**
1/1	A653 Leeds Road North Ahead Left	U	N/A	N/A	B		1	38	-	607	2082	788	77.0%
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	N/A	B D		1	38:10	-	225	2143:2130	123+227	64.2 : 64.2%
2/1	A653 Leeds Road South Ahead Left	U	N/A	N/A	A		1	41	-	600	2160	881	68.1%
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	N/A	A C		1	41:8	-	706	2197:2170	831+149	72.1 : 72.1%
3/1	Soothill Lane Left Right Ahead	O	N/A	N/A	E		1	27	-	510	1993	542	94.1%
4/1	Heybeck Lane Right Left Ahead	O	N/A	N/A	F		1	28	-	266	2194	618	43.1%
5/1	A653 Leeds Road North - EXIT	U	N/A	N/A	-		-	-	-	1389	Inf	Inf	0.0%
6/1	A653 Leeds Road South - EXIT	U	N/A	N/A	-		-	-	-	858	Inf	Inf	0.0%
7/1	Heybeck Lane - EXIT	U	N/A	N/A	-		-	-	-	332	Inf	Inf	0.0%
8/1	Soothill Lane - EXIT	U	N/A	N/A	-		-	-	-	335	Inf	Inf	0.0%

Full Input Data And Results

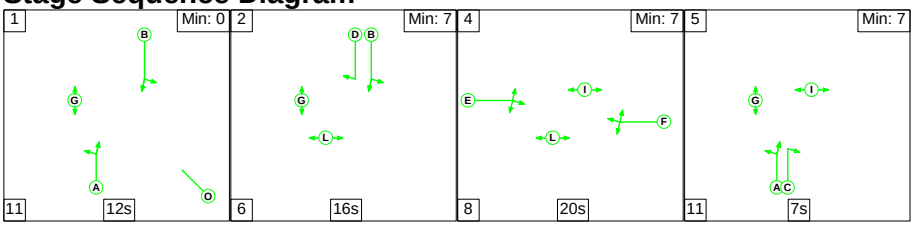
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A653 Leeds Road / Heybeck Lane	**-**	**-**	**69**	**0**	**1**	**24.1**	**11.1**	**0.1**	**35.3**	**-**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**69**	**0**	**1**	**24.1**	**11.1**	**0.1**	**35.3**	**-**	**-**	**-**	**-**
1/1	607	607	-	-	-	4.7	1.6	-	6.4	37.8	15.2	1.6	16.8
1/2+1/3	225	225	-	-	-	2.2	0.9	-	3.1	50.0	4.0	0.9	4.9
2/1	600	600	-	-	-	4.2	1.1	-	5.2	31.4	14.0	1.1	15.1
2/2+2/3	706	706	-	-	-	5.5	1.3	-	6.8	34.4	13.8	1.3	15.1
3/1	510	510	54	0	1	5.2	5.9	0.0	11.1	78.2	14.2	5.9	20.0
4/1	266	266	15	0	0	2.2	0.4	0.1	2.7	36.4	6.2	0.4	6.6
5/1	1389	1389	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	858	858	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	332	332	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	335	335	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -4.6 Total Delay for Signalled Lanes (pcuHr): 35.26 Cycle Time (s): 103
PRC Over All Lanes (%): -4.6 Total Delay Over All Lanes(pcuHr): 35.26

Full Input Data And Results

Scenario 2: '2019 Base PM' (FG2: '2019 Base PM', Plan 1: 'No all peds stage')

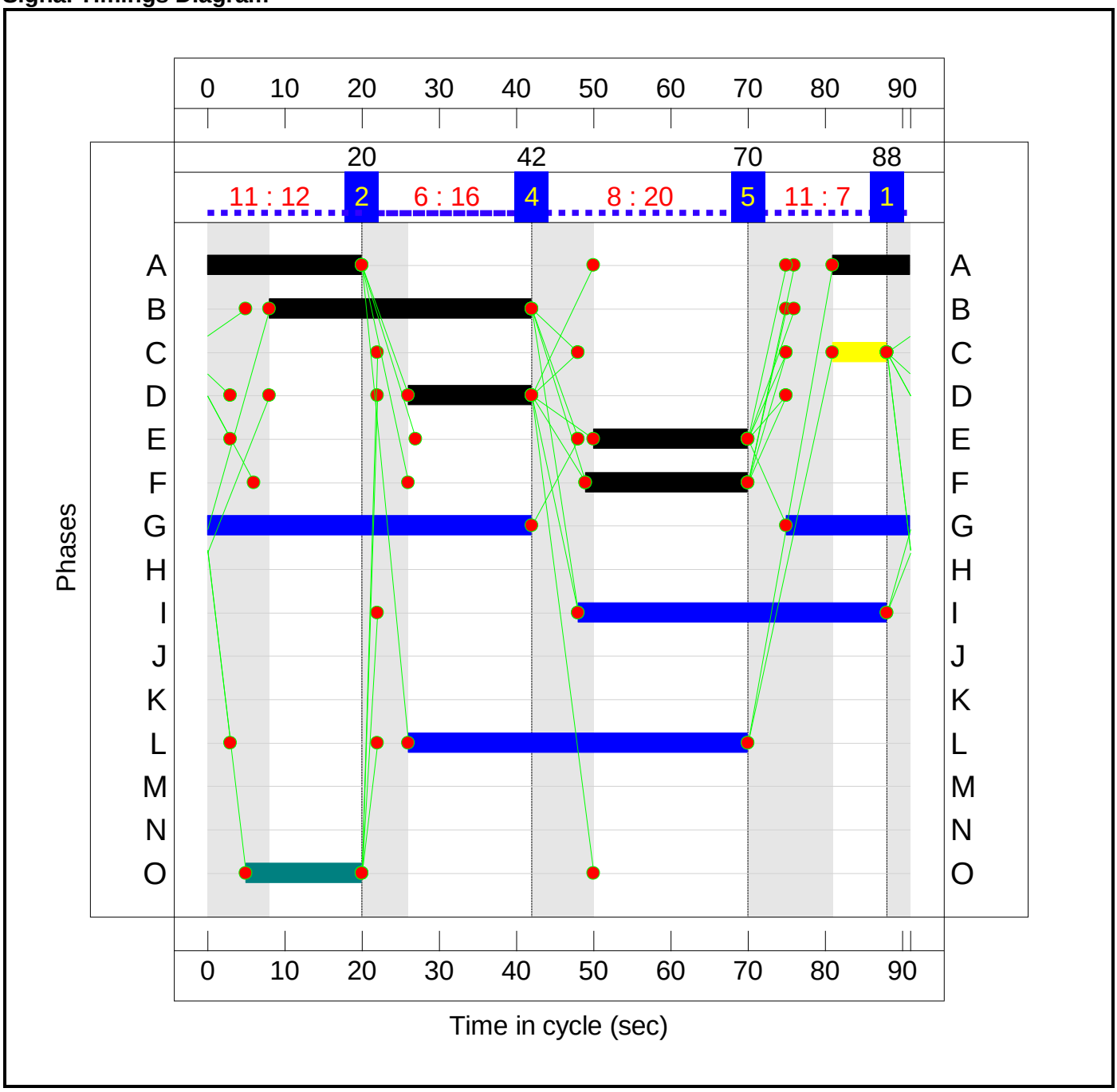
Stage Sequence Diagram



Stage Timings

Stage	1	2	4	5
Duration	12	16	20	7
Change Point	88	20	42	70

Signal Timings Diagram



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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**82.6%**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**82.6%**
1/1	A653 Leeds Road North Ahead Left	U	N/A	N/A	B		1	34	-	522	2082	801	65.2%
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	N/A	B D		1	34:16	-	680	2143:2130	764+332	62.0 : 62.0%
2/1	A653 Leeds Road South Ahead Left	U	N/A	N/A	A		1	30	-	418	2160	736	56.8%
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	N/A	A C		1	30:7	-	568	2197:2170	705+191	62.1 : 68.1%
3/1	Soothill Lane Left Right Ahead	O	N/A	N/A	E		1	20	-	380	1993	460	82.6%
4/1	Heybeck Lane Right Left Ahead	O	N/A	N/A	F		1	21	-	218	2194	530	41.1%
5/1	A653 Leeds Road North - EXIT	U	N/A	N/A	-		-	-	-	986	Inf	Inf	0.0%
6/1	A653 Leeds Road South - EXIT	U	N/A	N/A	-		-	-	-	1091	Inf	Inf	0.0%
7/1	Heybeck Lane - EXIT	U	N/A	N/A	-		-	-	-	306	Inf	Inf	0.0%
8/1	Soothill Lane - EXIT	U	N/A	N/A	-		-	-	-	403	Inf	Inf	0.0%

Full Input Data And Results

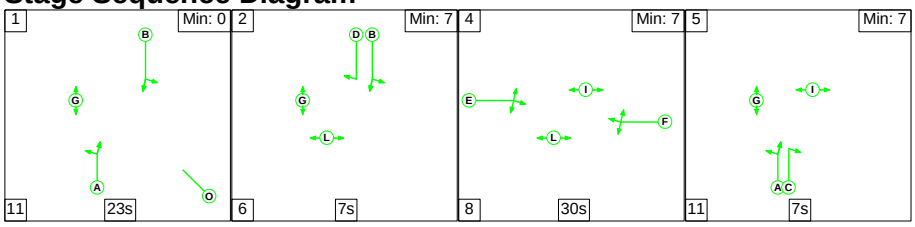
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A653 Leeds Road / Heybeck Lane	**-**	**-**	**48**	**0**	**1**	**20.7**	**5.9**	**0.1**	**26.7**	**-**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**48**	**0**	**1**	**20.7**	**5.9**	**0.1**	**26.7**	**-**	**-**	**-**	**-**
1/1	522	522	-	-	-	3.3	0.9	-	4.3	29.4	10.7	0.9	11.7
1/2+1/3	680	680	-	-	-	4.8	0.8	-	5.6	29.8	9.3	0.8	10.2
2/1	418	418	-	-	-	2.8	0.7	-	3.5	30.2	8.6	0.7	9.2
2/2+2/3	568	568	-	-	-	4.5	0.9	-	5.3	33.7	9.0	0.9	9.9
3/1	380	380	31	0	0	3.5	2.3	0.0	5.8	54.7	9.1	2.3	11.3
4/1	218	218	18	0	0	1.8	0.3	0.1	2.2	35.8	4.6	0.3	5.0
5/1	986	986	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1091	1091	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	306	306	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	403	403	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 8.9 Total Delay for Signalled Lanes (pcuHr): 26.67 Cycle Time (s): 91
PRC Over All Lanes (%): 8.9 Total Delay Over All Lanes(pcuHr): 26.67

Full Input Data And Results

Scenario 3: '2024 DN AM' (FG3: '2024 DN AM', Plan 1: 'No all peds stage')

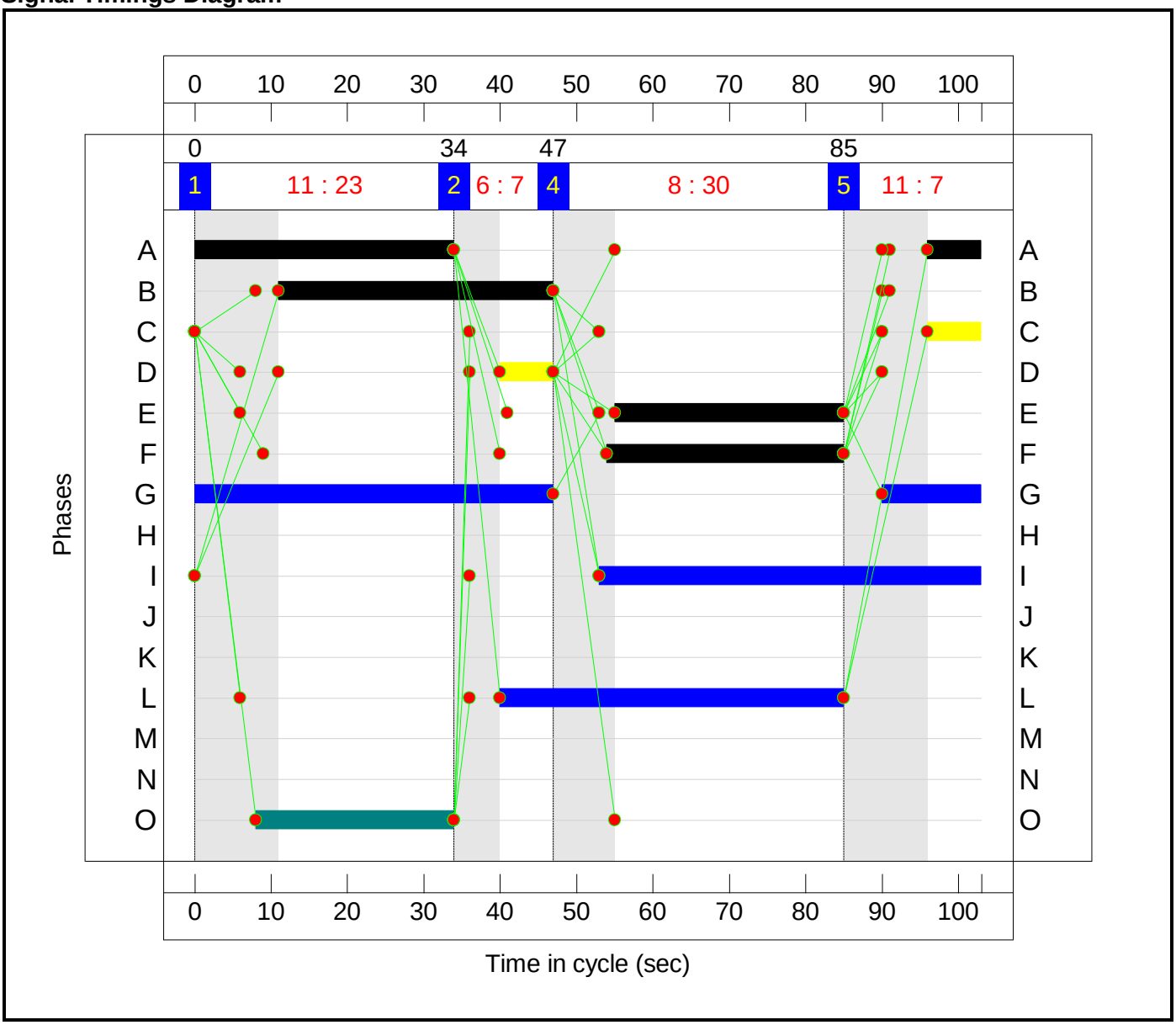
Stage Sequence Diagram



Stage Timings

Stage	1	2	4	5
Duration	23	7	30	7
Change Point	0	34	47	85

Signal Timings Diagram



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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**73.9%**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**73.9%**
1/1	A653 Leeds Road North Ahead Left	U	N/A	N/A	B		1	36	-	474	2082	809	58.6%
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	N/A	B D		1	36:7	-	567	2143:2130	749+227	53.3 : 73.9%
2/1	A653 Leeds Road South Ahead Left	U	N/A	N/A	A		1	41	-	650	2160	944	68.9%
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	N/A	A C		1	41:7	-	792	2197:2170	868+221	73.7 : 68.6%
3/1	Soothill Lane Left Right Ahead	O	N/A	N/A	E		1	30	-	483	1993	658	73.4%
4/1	Heybeck Lane Right Left Ahead	O	N/A	N/A	F		1	31	-	335	2194	746	44.9%
5/1	A653 Leeds Road North - EXIT	U	N/A	N/A	-		-	-	-	1427	Inf	Inf	0.0%
6/1	A653 Leeds Road South - EXIT	U	N/A	N/A	-		-	-	-	1075	Inf	Inf	0.0%
7/1	Heybeck Lane - EXIT	U	N/A	N/A	-		-	-	-	415	Inf	Inf	0.0%
8/1	Soothill Lane - EXIT	U	N/A	N/A	-		-	-	-	384	Inf	Inf	0.0%

Full Input Data And Results

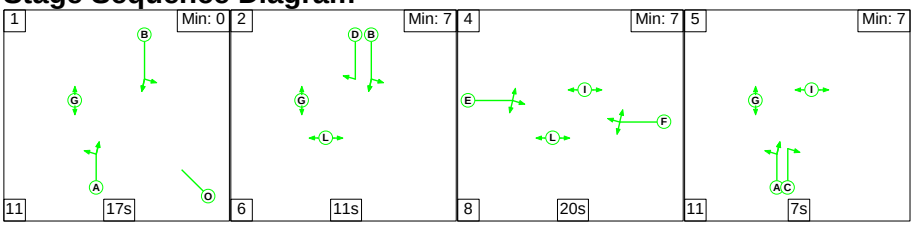
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A653 Leeds Road / Heybeck Lane	**-**	**-**	**75**	**0**	**1**	**24.7**	**5.6**	**0.1**	**30.4**	**-**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**75**	**0**	**1**	**24.7**	**5.6**	**0.1**	**30.4**	**-**	**-**	**-**	**-**
1/1	474	474	-	-	-	3.3	0.7	-	4.0	30.3	10.7	0.7	11.4
1/2+1/3	567	567	-	-	-	4.7	0.7	-	5.4	34.3	8.5	0.7	9.2
2/1	650	650	-	-	-	4.2	1.1	-	5.3	29.4	14.8	1.1	15.9
2/2+2/3	792	792	-	-	-	6.0	1.3	-	7.3	33.1	14.4	1.3	15.7
3/1	483	483	57	0	1	4.1	1.4	0.0	5.5	41.0	12.2	1.4	13.6
4/1	335	335	18	0	0	2.5	0.4	0.1	2.9	31.6	7.4	0.4	7.9
5/1	1427	1427	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1075	1075	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	415	415	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	384	384	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 21.9 Total Delay for Signalled Lanes (pcuHr): 30.42 Cycle Time (s): 103
PRC Over All Lanes (%): 21.9 Total Delay Over All Lanes(pcuHr): 30.42

Full Input Data And Results

Scenario 4: '2024 DN PM' (FG4: '2024 DN PM', Plan 1: 'No all peds stage')

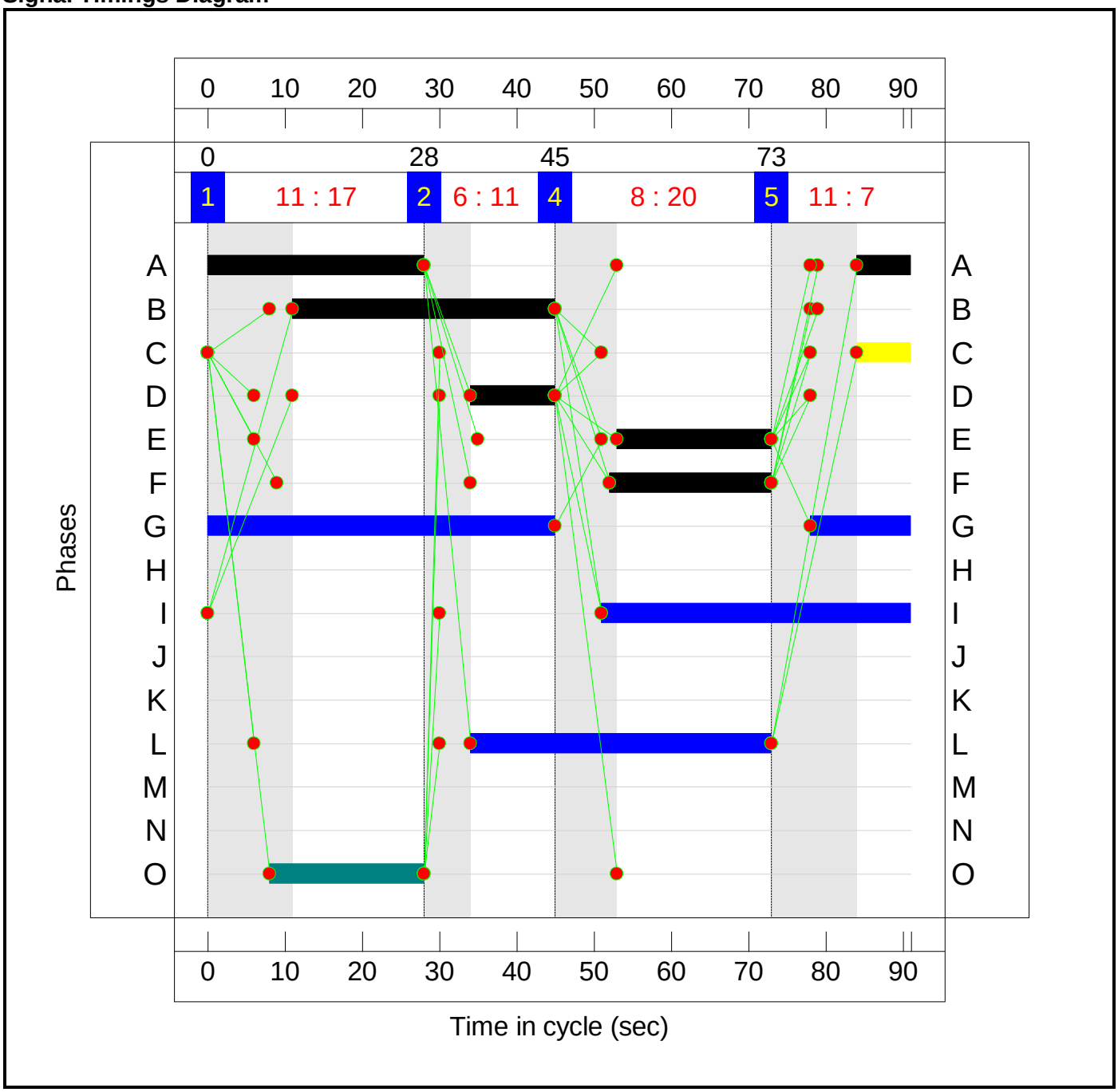
Stage Sequence Diagram



Stage Timings

Stage	1	2	4	5
Duration	17	11	20	7
Change Point	0	28	45	73

Signal Timings Diagram



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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**68.8%**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**68.8%**
1/1	A653 Leeds Road North Ahead Left	U	N/A	N/A	B		1	34	-	598	2082	869	68.8%
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	N/A	B D		1	34:11	-	752	2143:2130	811+351	64.0 : 66.4%
2/1	A653 Leeds Road South Ahead Left	U	N/A	N/A	A		1	35	-	452	2160	926	48.8%
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	N/A	A C		1	35:7	-	622	2197:2170	852+262	56.0 : 55.3%
3/1	Soothill Lane Left Right Ahead	O	N/A	N/A	E		1	20	-	357	1993	526	67.9%
4/1	Heybeck Lane Right Left Ahead	O	N/A	N/A	F		1	21	-	240	2194	603	39.8%
5/1	A653 Leeds Road North - EXIT	U	N/A	N/A	-		-	-	-	1028	Inf	Inf	0.0%
6/1	A653 Leeds Road South - EXIT	U	N/A	N/A	-		-	-	-	1197	Inf	Inf	0.0%
7/1	Heybeck Lane - EXIT	U	N/A	N/A	-		-	-	-	353	Inf	Inf	0.0%
8/1	Soothill Lane - EXIT	U	N/A	N/A	-		-	-	-	443	Inf	Inf	0.0%

Full Input Data And Results

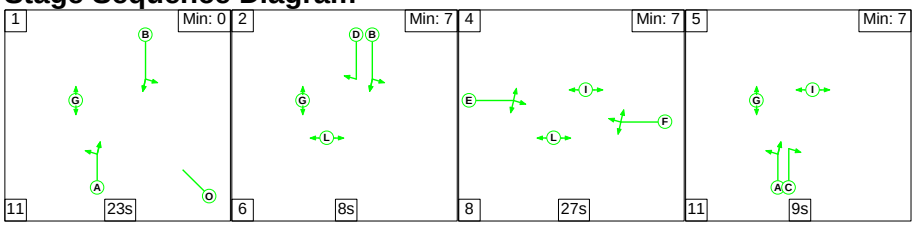
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A653 Leeds Road / Heybeck Lane	**-**	**-**	**51**	**0**	**1**	**20.0**	**4.5**	**0.1**	**24.6**	**-**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**51**	**0**	**1**	**20.0**	**4.5**	**0.1**	**24.6**	**-**	**-**	**-**	**-**
1/1	598	598	-	-	-	3.6	1.1	-	4.7	28.2	12.3	1.1	13.4
1/2+1/3	752	752	-	-	-	5.2	0.9	-	6.2	29.5	9.9	0.9	10.9
2/1	452	452	-	-	-	2.4	0.5	-	2.8	22.6	8.2	0.5	8.6
2/2+2/3	622	622	-	-	-	4.0	0.6	-	4.7	27.0	8.7	0.6	9.4
3/1	357	357	33	0	0	3.0	1.0	0.0	4.0	40.7	8.0	1.0	9.1
4/1	240	240	19	0	0	1.8	0.3	0.1	2.2	32.6	4.9	0.3	5.3
5/1	1028	1028	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1197	1197	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	353	353	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	443	443	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 30.8 Total Delay for Signalled Lanes (pcuHr): 24.56 Cycle Time (s): 91
PRC Over All Lanes (%): 30.8 Total Delay Over All Lanes(pcuHr): 24.56

Full Input Data And Results

Scenario 5: '2030 DN AM' (FG5: '2030 DN AM', Plan 1: 'No all peds stage')

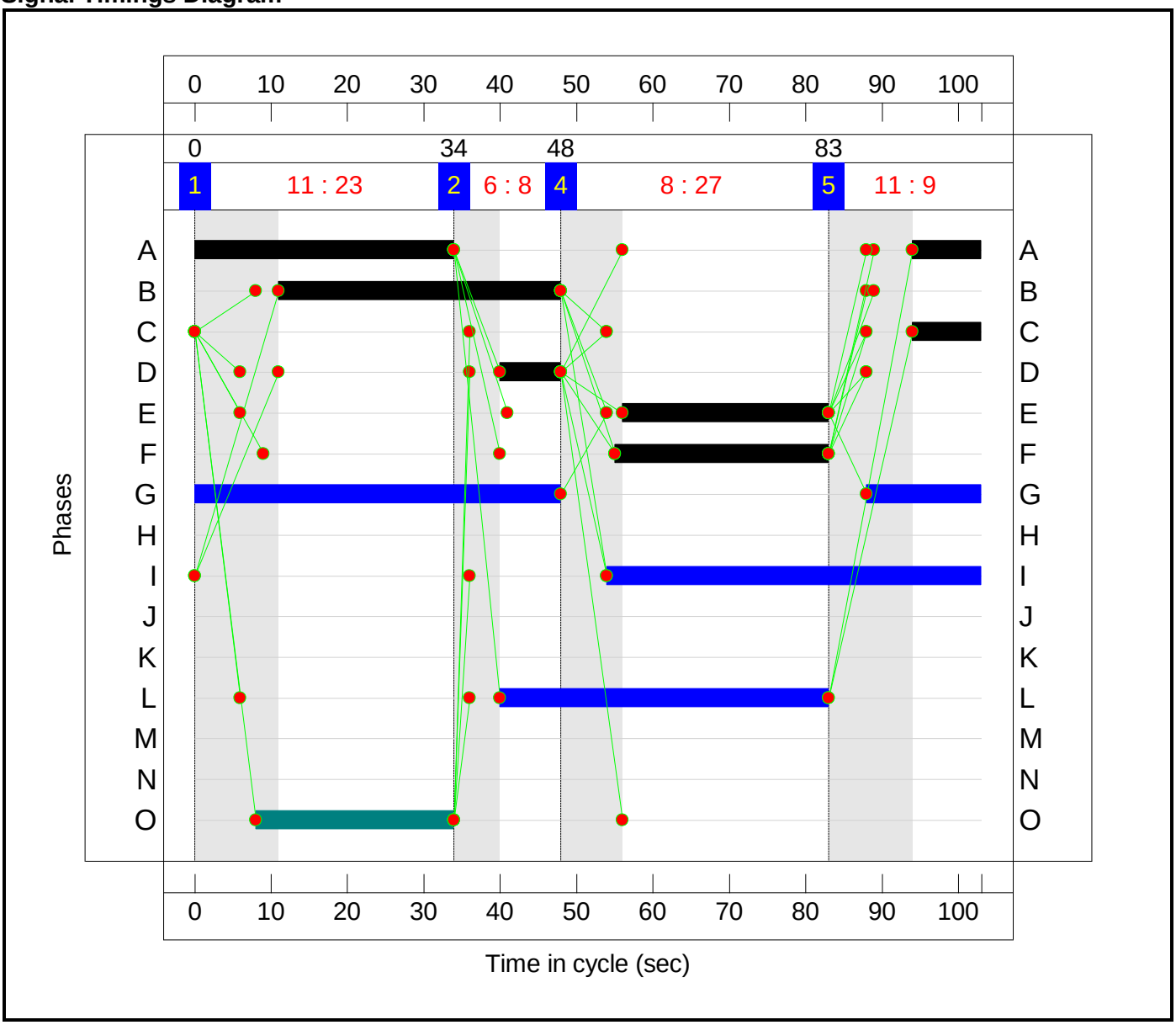
Stage Sequence Diagram



Stage Timings

Stage	1	2	4	5
Duration	23	8	27	9
Change Point	0	34	48	83

Signal Timings Diagram



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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.8%**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.8%**
1/1	A653 Leeds Road North Ahead Left	U	N/A	N/A	B		1	37	-	563	2082	829	67.9%
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	N/A	B D		1	37:8	-	719	2143:2130	772+248	68.1 : 77.8%
2/1	A653 Leeds Road South Ahead Left	U	N/A	N/A	A		1	43	-	714	2160	986	72.4%
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	N/A	A C		1	43:9	-	889	2197:2170	886+274	77.6 : 73.4%
3/1	Soothill Lane Left Right Ahead	O	N/A	N/A	E		1	27	-	458	1993	600	76.4%
4/1	Heybeck Lane Right Left Ahead	O	N/A	N/A	F		1	28	-	404	2194	682	59.3%
5/1	A653 Leeds Road North - EXIT	U	N/A	N/A	-		-	-	-	1507	Inf	Inf	0.0%
6/1	A653 Leeds Road South - EXIT	U	N/A	N/A	-		-	-	-	1319	Inf	Inf	0.0%
7/1	Heybeck Lane - EXIT	U	N/A	N/A	-		-	-	-	486	Inf	Inf	0.0%
8/1	Soothill Lane - EXIT	U	N/A	N/A	-		-	-	-	435	Inf	Inf	0.0%

Full Input Data And Results

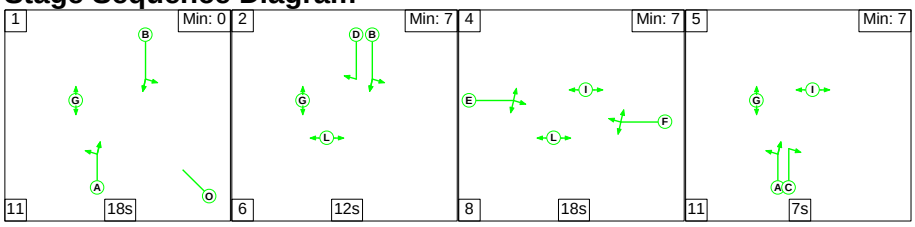
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A653 Leeds Road / Heybeck Lane	**-**	**-**	**79**	**0**	**1**	**28.7**	**7.5**	**0.2**	**36.3**	**-**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**79**	**0**	**1**	**28.7**	**7.5**	**0.2**	**36.3**	**-**	**-**	**-**	**-**
1/1	563	563	-	-	-	4.0	1.1	-	5.1	32.3	13.1	1.1	14.2
1/2+1/3	719	719	-	-	-	6.0	1.2	-	7.2	35.9	12.0	1.2	13.2
2/1	714	714	-	-	-	4.5	1.3	-	5.8	29.3	16.5	1.3	17.8
2/2+2/3	889	889	-	-	-	6.7	1.6	-	8.3	33.5	16.0	1.6	17.6
3/1	458	458	58	0	1	4.2	1.6	0.1	5.8	45.8	11.8	1.6	13.4
4/1	404	404	21	0	0	3.4	0.7	0.1	4.2	37.1	9.8	0.7	10.5
5/1	1507	1507	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1319	1319	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	486	486	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	435	435	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 15.7 Total Delay for Signalled Lanes (pcuHr): 36.30 Cycle Time (s): 103
PRC Over All Lanes (%): 15.7 Total Delay Over All Lanes(pcuHr): 36.30

Full Input Data And Results

Scenario 6: '2030 DN PM' (FG6: '2030 DN PM', Plan 1: 'No all peds stage')

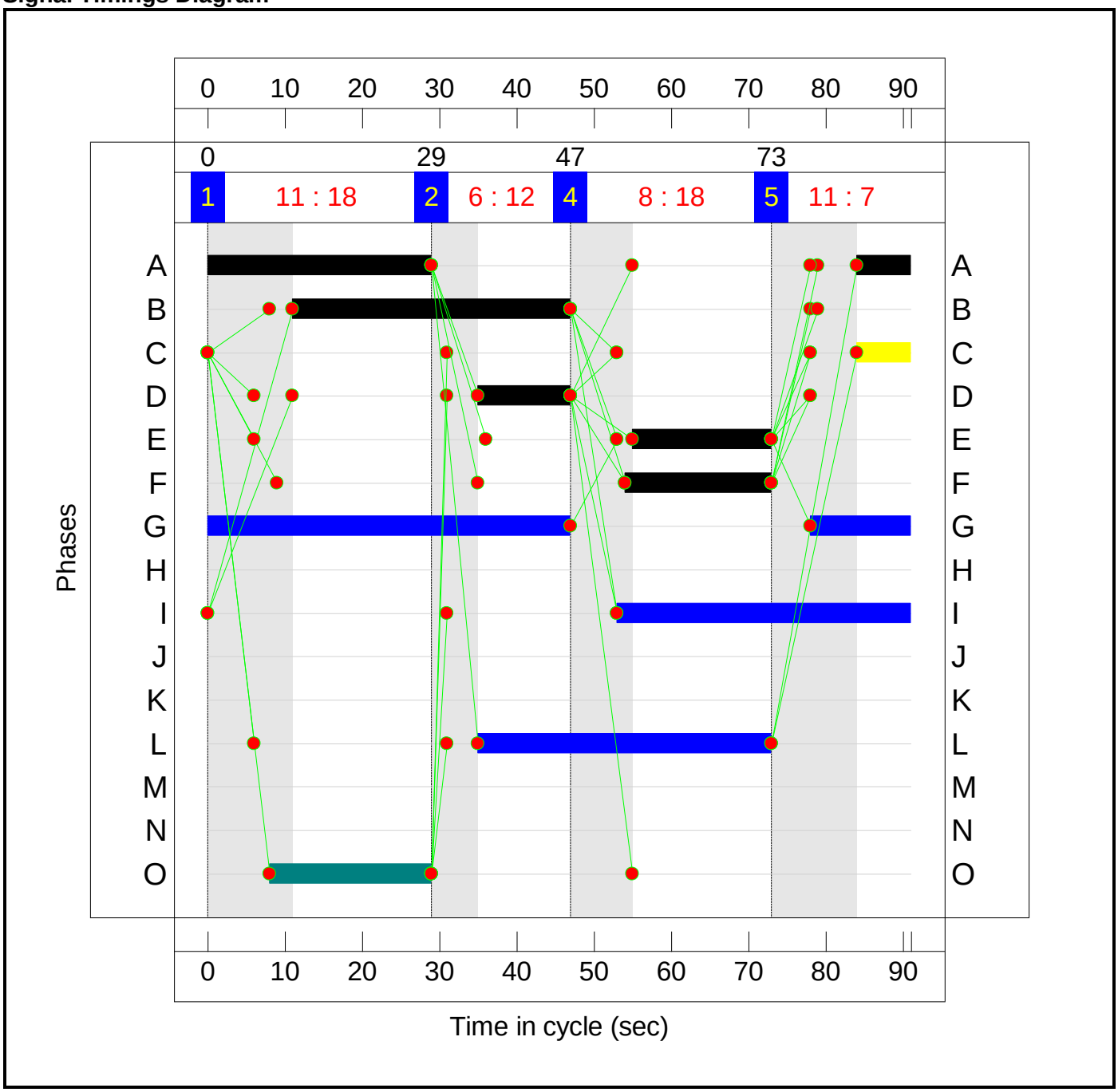
Stage Sequence Diagram



Stage Timings

Stage	1	2	4	5
Duration	18	12	18	7
Change Point	0	29	47	73

Signal Timings Diagram



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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**74.2%**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**74.2%**
1/1	A653 Leeds Road North Ahead Left	U	N/A	N/A	B		1	36	-	640	2082	915	69.9%
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	N/A	B D		1	36:12	-	898	2143:2130	847+364	74.2 : 74.2%
2/1	A653 Leeds Road South Ahead Left	U	N/A	N/A	A		1	36	-	481	2160	949	50.7%
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	N/A	A C		1	36:7	-	656	2197:2170	871+262	57.9 : 57.9%
3/1	Soothill Lane Left Right Ahead	O	N/A	N/A	E		1	18	-	343	1993	482	71.2%
4/1	Heybeck Lane Right Left Ahead	O	N/A	N/A	F		1	19	-	251	2194	555	45.3%
5/1	A653 Leeds Road North - EXIT	U	N/A	N/A	-		-	-	-	1081	Inf	Inf	0.0%
6/1	A653 Leeds Road South - EXIT	U	N/A	N/A	-		-	-	-	1322	Inf	Inf	0.0%
7/1	Heybeck Lane - EXIT	U	N/A	N/A	-		-	-	-	390	Inf	Inf	0.0%
8/1	Soothill Lane - EXIT	U	N/A	N/A	-		-	-	-	476	Inf	Inf	0.0%

Full Input Data And Results

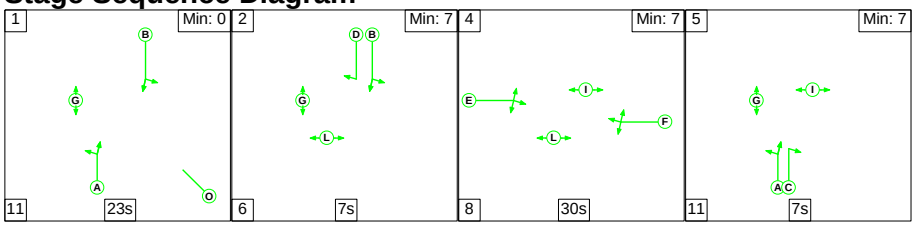
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A653 Leeds Road / Heybeck Lane	**-**	**-**	**58**	**0**	**1**	**21.5**	**5.4**	**0.1**	**27.0**	**-**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**58**	**0**	**1**	**21.5**	**5.4**	**0.1**	**27.0**	**-**	**-**	**-**	**-**
1/1	640	640	-	-	-	3.7	1.2	-	4.8	27.1	13.0	1.2	14.1
1/2+1/3	898	898	-	-	-	6.2	1.4	-	7.6	30.5	12.6	1.4	14.0
2/1	481	481	-	-	-	2.5	0.5	-	3.0	22.2	8.7	0.5	9.2
2/2+2/3	656	656	-	-	-	4.2	0.7	-	4.9	26.8	9.2	0.7	9.9
3/1	343	343	39	0	0	3.0	1.2	0.0	4.2	44.6	7.9	1.2	9.1
4/1	251	251	20	0	0	2.0	0.4	0.1	2.5	35.4	5.3	0.4	5.7
5/1	1081	1081	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1322	1322	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	390	390	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	476	476	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 21.3 Total Delay for Signalled Lanes (pcuHr): 26.99 Cycle Time (s): 91
PRC Over All Lanes (%): 21.3 Total Delay Over All Lanes(pcuHr): 26.99

Full Input Data And Results

Scenario 7: '2024 DS(A) AM' (FG7: '2024 DS(A) AM', Plan 1: 'No all peds stage')

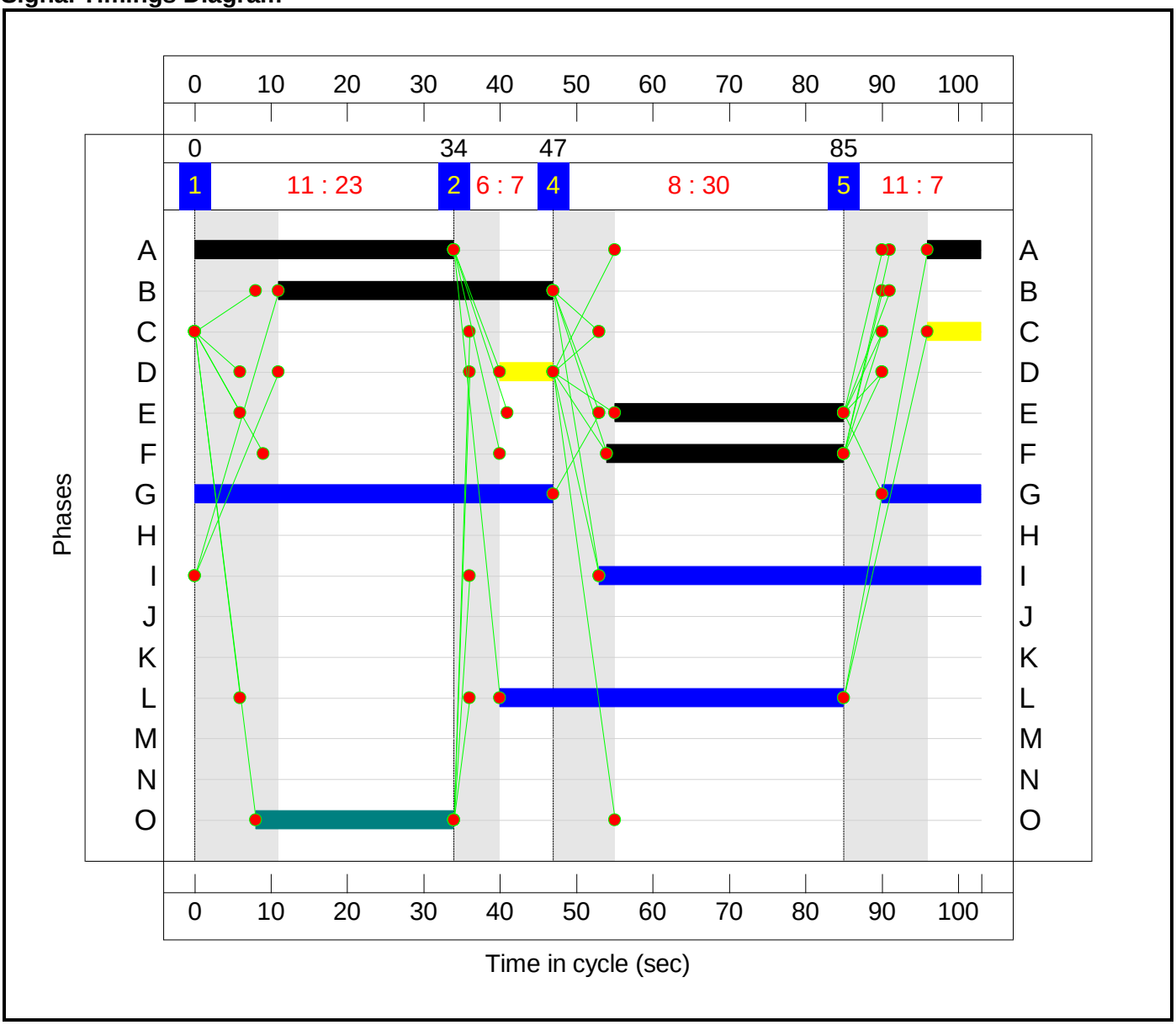
Stage Sequence Diagram



Stage Timings

Stage	1	2	4	5
Duration	23	7	30	7
Change Point	0	34	47	85

Signal Timings Diagram



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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**73.9%**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**73.9%**
1/1	A653 Leeds Road North Ahead Left	U	N/A	N/A	B		1	36	-	480	2082	809	59.4%
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	N/A	B D		1	36:7	-	567	2143:2130	749+227	53.3 : 73.9%
2/1	A653 Leeds Road South Ahead Left	U	N/A	N/A	A		1	41	-	650	2160	944	68.9%
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	N/A	A C		1	41:7	-	797	2197:2170	866+232	73.9 : 67.7%
3/1	Soothill Lane Left Right Ahead	O	N/A	N/A	E		1	30	-	486	1993	658	73.9%
4/1	Heybeck Lane Right Left Ahead	O	N/A	N/A	F		1	31	-	387	2194	736	52.6%
5/1	A653 Leeds Road North - EXIT	U	N/A	N/A	-		-	-	-	1449	Inf	Inf	0.0%
6/1	A653 Leeds Road South - EXIT	U	N/A	N/A	-		-	-	-	1093	Inf	Inf	0.0%
7/1	Heybeck Lane - EXIT	U	N/A	N/A	-		-	-	-	429	Inf	Inf	0.0%
8/1	Soothill Lane - EXIT	U	N/A	N/A	-		-	-	-	396	Inf	Inf	0.0%

Full Input Data And Results

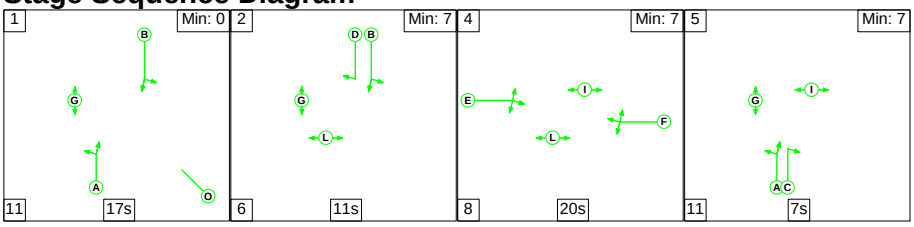
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A653 Leeds Road / Heybeck Lane	**-**	**-**	**97**	**0**	**1**	**25.3**	**5.8**	**0.2**	**31.3**	**-**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**97**	**0**	**1**	**25.3**	**5.8**	**0.2**	**31.3**	**-**	**-**	**-**	**-**
1/1	480	480	-	-	-	3.3	0.7	-	4.1	30.5	10.8	0.7	11.5
1/2+1/3	567	567	-	-	-	4.7	0.7	-	5.4	34.3	8.5	0.7	9.2
2/1	650	650	-	-	-	4.2	1.1	-	5.3	29.4	14.8	1.1	15.9
2/2+2/3	797	797	-	-	-	6.0	1.3	-	7.3	33.2	14.4	1.3	15.7
3/1	486	486	57	0	1	4.1	1.4	0.1	5.6	41.4	12.3	1.4	13.7
4/1	387	387	40	0	0	2.9	0.6	0.2	3.6	33.9	8.8	0.6	9.4
5/1	1449	1449	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1093	1093	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	429	429	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	396	396	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 21.8 Total Delay for Signalled Lanes (pcuHr): 31.35 Cycle Time (s): 103
PRC Over All Lanes (%): 21.8 Total Delay Over All Lanes(pcuHr): 31.35

Full Input Data And Results

Scenario 8: '2024 DS(A) PM' (FG8: '2024 DS(A) PM', Plan 1: 'No all peds stage')

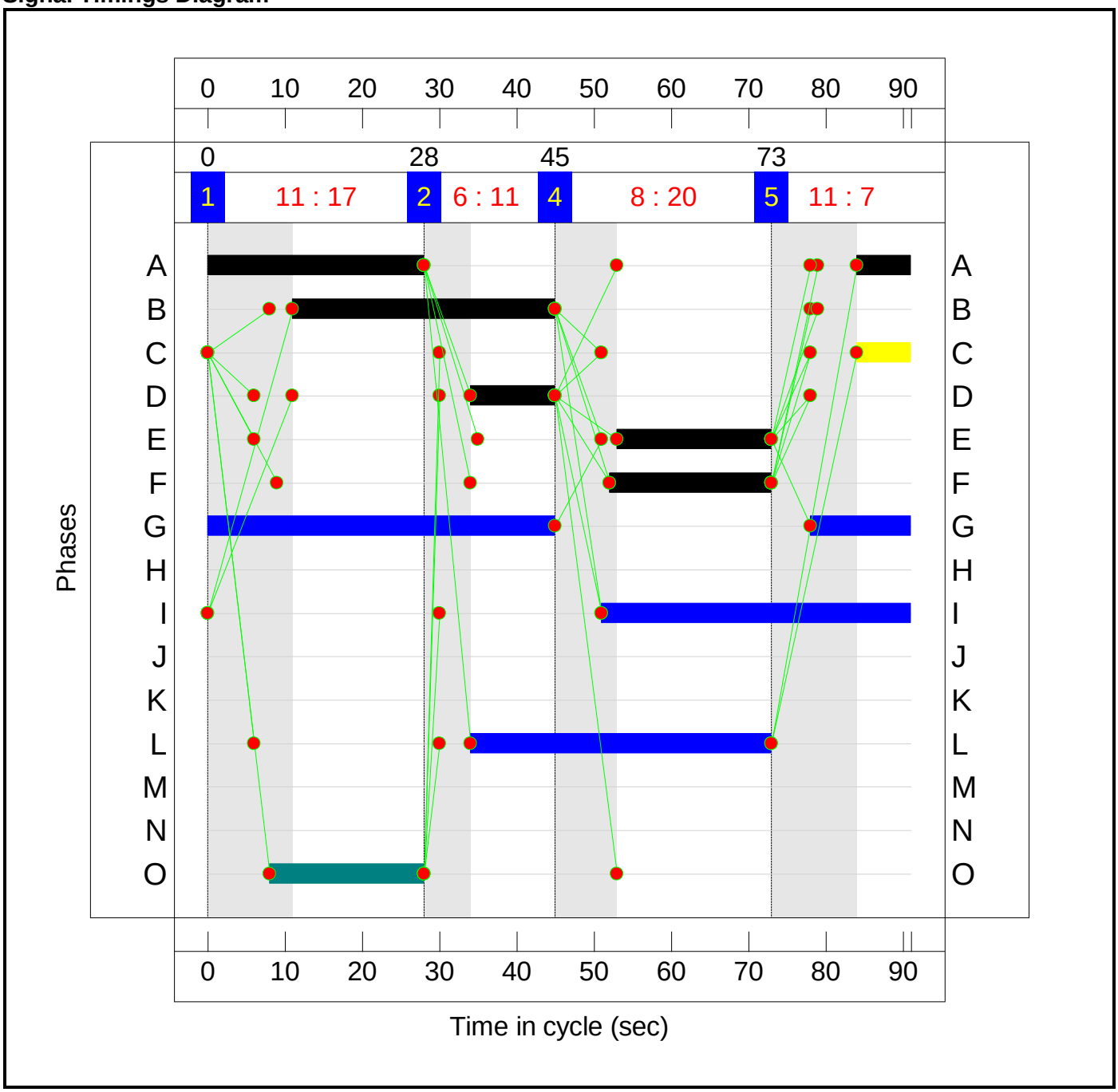
Stage Sequence Diagram



Stage Timings

Stage	1	2	4	5
Duration	17	11	20	7
Change Point	0	28	45	73

Signal Timings Diagram



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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**70.4%**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**70.4%**
1/1	A653 Leeds Road North Ahead Left	U	N/A	N/A	B		1	34	-	558	2082	869	64.2%
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	N/A	B D		1	34:11	-	808	2143:2130	817+331	70.4 : 70.4%
2/1	A653 Leeds Road South Ahead Left	U	N/A	N/A	A		1	35	-	451	2160	926	48.7%
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	N/A	A C		1	35:7	-	637	2197:2170	846+262	56.5 : 60.6%
3/1	Soothill Lane Left Right Ahead	O	N/A	N/A	E		1	20	-	367	1993	526	69.8%
4/1	Heybeck Lane Right Left Ahead	O	N/A	N/A	F		1	21	-	265	2194	603	44.0%
5/1	A653 Leeds Road North - EXIT	U	N/A	N/A	-		-	-	-	1038	Inf	Inf	0.0%
6/1	A653 Leeds Road South - EXIT	U	N/A	N/A	-		-	-	-	1206	Inf	Inf	0.0%
7/1	Heybeck Lane - EXIT	U	N/A	N/A	-		-	-	-	393	Inf	Inf	0.0%
8/1	Soothill Lane - EXIT	U	N/A	N/A	-		-	-	-	449	Inf	Inf	0.0%

Full Input Data And Results

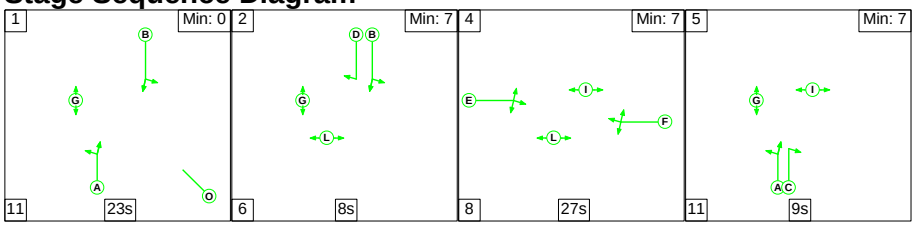
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A653 Leeds Road / Heybeck Lane	**-**	**-**	**61**	**0**	**1**	**20.6**	**4.8**	**0.1**	**25.4**	**-**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**61**	**0**	**1**	**20.6**	**4.8**	**0.1**	**25.4**	**-**	**-**	**-**	**-**
1/1	558	558	-	-	-	3.3	0.9	-	4.2	26.8	11.2	0.9	12.1
1/2+1/3	808	808	-	-	-	5.7	1.2	-	6.9	30.5	11.5	1.2	12.7
2/1	451	451	-	-	-	2.4	0.5	-	2.8	22.6	8.1	0.5	8.6
2/2+2/3	637	637	-	-	-	4.2	0.7	-	4.9	27.5	8.8	0.7	9.4
3/1	367	367	33	0	0	3.1	1.1	0.0	4.2	41.6	8.4	1.1	9.5
4/1	265	265	29	0	0	2.0	0.4	0.1	2.5	33.6	5.5	0.4	5.9
5/1	1038	1038	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1206	1206	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	393	393	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	449	449	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 27.9 Total Delay for Signalled Lanes (pcuHr): 25.43 Cycle Time (s): 91
PRC Over All Lanes (%): 27.9 Total Delay Over All Lanes(pcuHr): 25.43

Full Input Data And Results

Scenario 9: '2030 DS(A) AM' (FG9: '2030 DS(A) AM', Plan 1: 'No all peds stage')

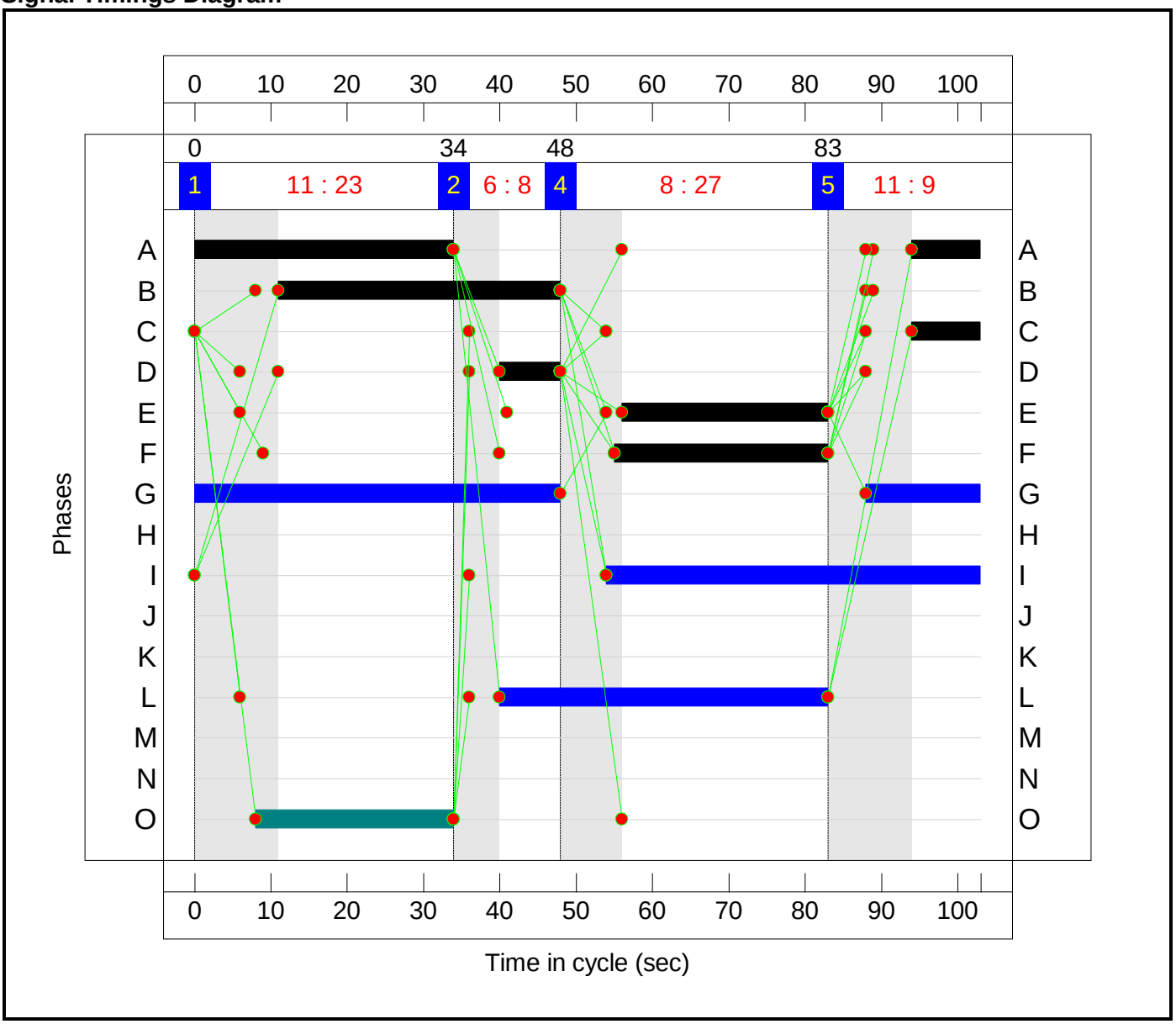
Stage Sequence Diagram



Stage Timings

Stage	1	2	4	5
Duration	23	8	27	9
Change Point	0	34	48	83

Signal Timings Diagram



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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.8%**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.8%**
1/1	A653 Leeds Road North Ahead Left	U	N/A	N/A	B		1	37	-	577	2082	829	69.6%
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	N/A	B D		1	37:8	-	716	2143:2130	772+248	67.8 : 77.8%
2/1	A653 Leeds Road South Ahead Left	U	N/A	N/A	A		1	43	-	715	2160	986	72.5%
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	N/A	A C		1	43:9	-	897	2197:2170	883+274	77.8 : 76.7%
3/1	Soothill Lane Left Right Ahead	O	N/A	N/A	E		1	27	-	464	1993	599	77.4%
4/1	Heybeck Lane Right Left Ahead	O	N/A	N/A	F		1	28	-	499	2194	657	75.9%
5/1	A653 Leeds Road North - EXIT	U	N/A	N/A	-		-	-	-	1547	Inf	Inf	0.0%
6/1	A653 Leeds Road South - EXIT	U	N/A	N/A	-		-	-	-	1352	Inf	Inf	0.0%
7/1	Heybeck Lane - EXIT	U	N/A	N/A	-		-	-	-	512	Inf	Inf	0.0%
8/1	Soothill Lane - EXIT	U	N/A	N/A	-		-	-	-	457	Inf	Inf	0.0%

Full Input Data And Results

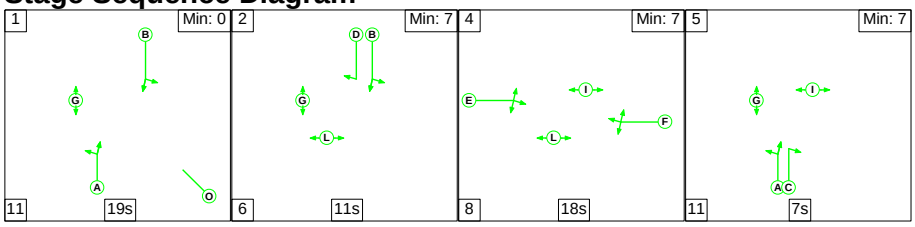
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A653 Leeds Road / Heybeck Lane	**-**	**-**	**119**	**0**	**1**	**30.0**	**8.5**	**0.4**	**38.9**	**-**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**119**	**0**	**1**	**30.0**	**8.5**	**0.4**	**38.9**	**-**	**-**	**-**	**-**
1/1	577	577	-	-	-	4.1	1.1	-	5.3	32.9	13.6	1.1	14.8
1/2+1/3	716	716	-	-	-	6.0	1.2	-	7.1	35.8	11.9	1.2	13.1
2/1	715	715	-	-	-	4.5	1.3	-	5.8	29.3	16.5	1.3	17.8
2/2+2/3	897	897	-	-	-	6.8	1.7	-	8.5	34.0	16.0	1.7	17.7
3/1	464	464	58	0	1	4.2	1.7	0.2	6.1	47.1	12.0	1.7	13.7
4/1	499	499	60	0	1	4.4	1.5	0.2	6.2	44.4	12.6	1.5	14.2
5/1	1547	1547	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1352	1352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	512	512	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	457	457	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 15.6 Total Delay for Signalled Lanes (pcuHr): 38.93 Cycle Time (s): 103
PRC Over All Lanes (%): 15.6 Total Delay Over All Lanes(pcuHr): 38.93

Full Input Data And Results

Scenario 10: '2030 DS(A) PM' (FG10: '2030 DS(A) PM', Plan 1: 'No all peds stage')

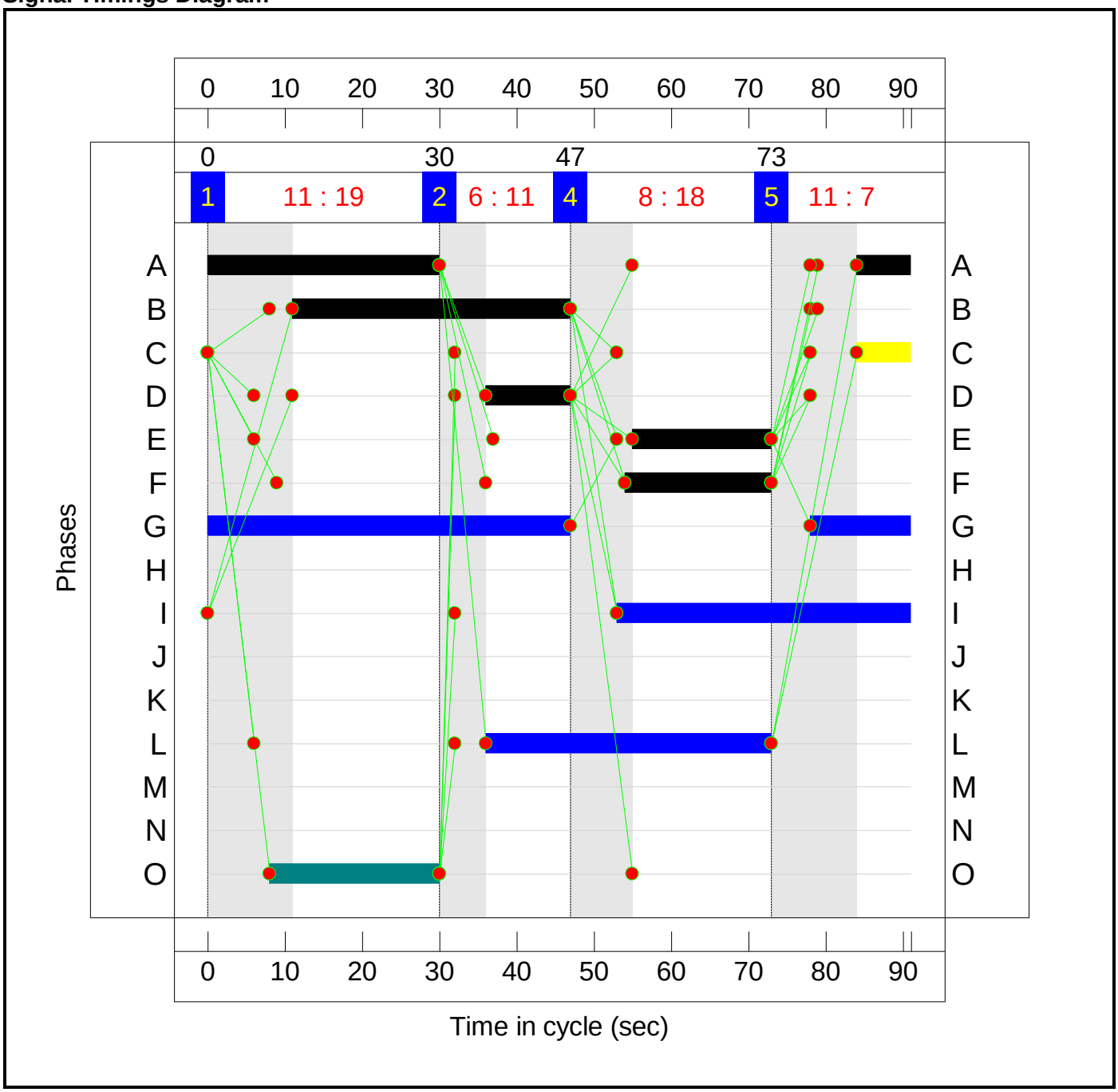
Stage Sequence Diagram



Stage Timings

Stage	1	2	4	5
Duration	19	11	18	7
Change Point	0	30	47	73

Signal Timings Diagram



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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.1%**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.1%**
1/1	A653 Leeds Road North Ahead Left	U	N/A	N/A	B		1	36	-	643	2082	915	70.3%
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	N/A	B D		1	36:11	-	925	2143:2130	849+350	77.1 : 77.1%
2/1	A653 Leeds Road South Ahead Left	U	N/A	N/A	A		1	37	-	481	2160	973	49.4%
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	N/A	A C		1	37:7	-	681	2197:2170	878+262	57.4 : 67.5%
3/1	Soothill Lane Left Right Ahead	O	N/A	N/A	E		1	18	-	360	1993	482	74.7%
4/1	Heybeck Lane Right Left Ahead	O	N/A	N/A	F		1	19	-	297	2194	552	53.8%
5/1	A653 Leeds Road North - EXIT	U	N/A	N/A	-		-	-	-	1100	Inf	Inf	0.0%
6/1	A653 Leeds Road South - EXIT	U	N/A	N/A	-		-	-	-	1338	Inf	Inf	0.0%
7/1	Heybeck Lane - EXIT	U	N/A	N/A	-		-	-	-	462	Inf	Inf	0.0%
8/1	Soothill Lane - EXIT	U	N/A	N/A	-		-	-	-	487	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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**77**	**0**	**1**	**22.5**	**6.1**	**0.1**	**28.8**	**-**	**-**	**-**	**-**
A653 Leeds Road / Heybeck Lane	**-**	**-**	**77**	**0**	**1**	**22.5**	**6.1**	**0.1**	**28.8**	**-**	**-**	**-**	**-**
1/1	643	643	-	-	-	3.7	1.2	-	4.9	27.2	13.0	1.2	14.2
1/2+1/3	925	925	-	-	-	6.5	1.7	-	8.1	31.7	13.3	1.7	14.9
2/1	481	481	-	-	-	2.4	0.5	-	2.8	21.3	8.6	0.5	9.0
2/2+2/3	681	681	-	-	-	4.4	0.7	-	5.1	27.1	9.0	0.7	9.7
3/1	360	360	39	0	0	3.2	1.4	0.0	4.7	46.7	8.4	1.4	9.8
4/1	297	297	39	0	0	2.4	0.6	0.1	3.1	37.8	6.4	0.6	7.0
5/1	1100	1100	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1338	1338	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	462	462	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	487	487	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 16.7 Total Delay for Signalled Lanes (pcuHr): 28.75 Cycle Time (s): 91
PRC Over All Lanes (%): 16.7 Total Delay Over All Lanes(pcuHr): 28.75

Junction 3 – Double

Full Input Data And Results

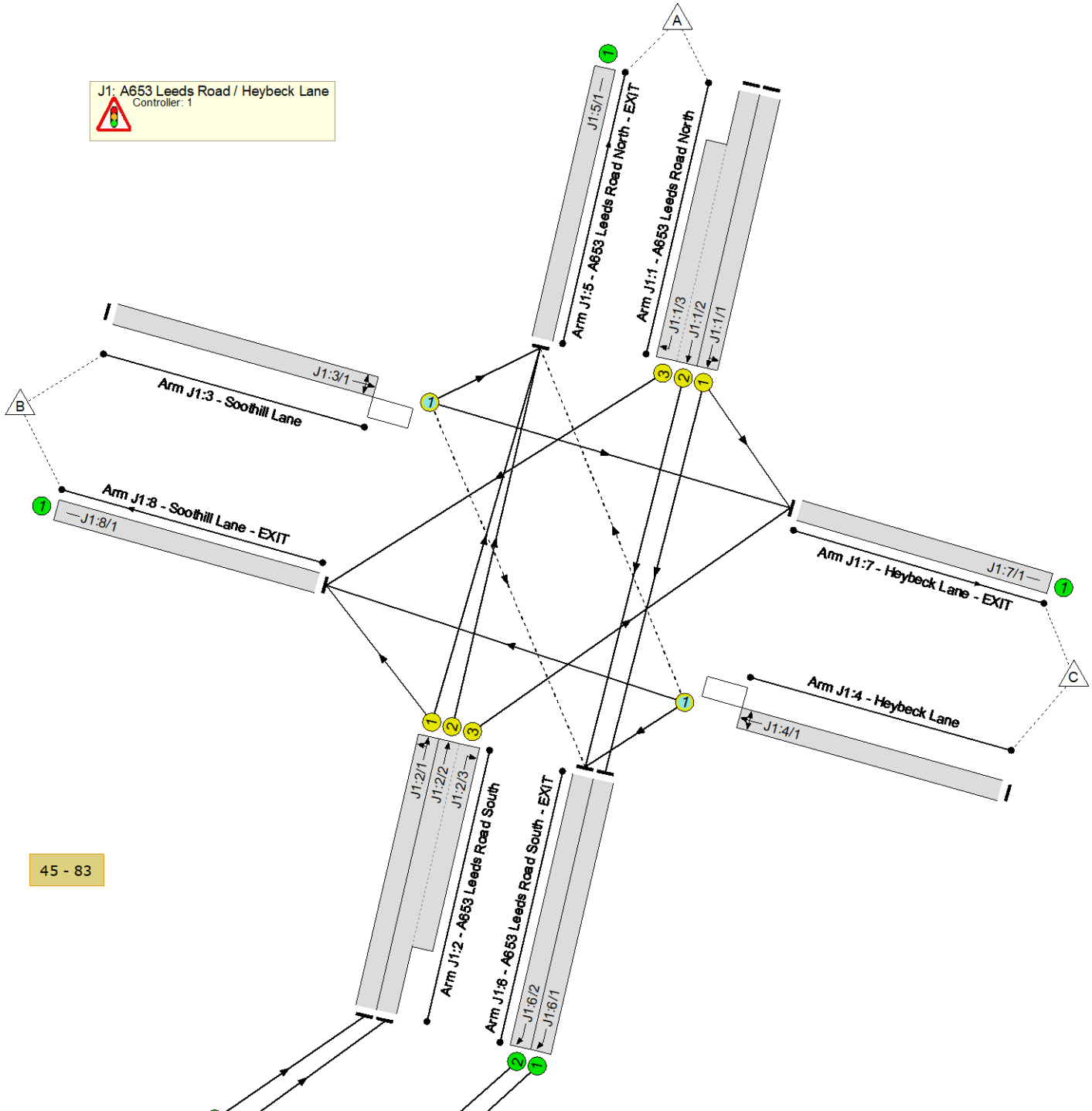
User and Project Details

Project:	**Land at Chidswell**
Title:	**A653 Leeds Road / Heybeck Lane**
Location:	A653 Leeds Road / Heybeck Lane
Additional detail:	
File name:	Junc 3 A653 Leeds Road - Heybeck Lane - Soothill Lane and Site Access 2 (2024 DS(A+B) only) - Nov 2019_RevA.lsg3x
Company:	Pell Frischmann
Address:	London
Linsig Version:	3, 2, 40, 0

Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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	2024 DS(A+B) AM	2024 DS(A+B) AM	2019 Base AM	07:30 - 08:30	103/103	8.0	43.63
2	2024 DS(A+B) PM	2024 DS(A+B) PM	2019 Base AM	16:30 - 17:30	103/103	18.6	39.87

Full Input Data And Results

Network Results

Scenario 1: '2024 DS(A+B) AM' (FG1: '2024 DS(A+B) AM', Plan 1: '2019 Base AM')

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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**83.4%**	**-**	**-**	**-**
J1: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**83.4%**	**-**	**-**	**-**
1/1	A653 Leeds Road North Ahead Left	U	N/A	C1:B	64	98	502	2082	2082	707	71.0%	502	502	13.6
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	C1:B C1:D	64:89	98	595	2143:2130	2143	678+207	62.9 : 81.2%	595	595	11.0
2/1	A653 Leeds Road South Ahead Left	U	N/A	C1:A	45	83	664	2160	2160	818	81.2%	664	664	19.7
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	C1:A C1:C	45	83:53	794	2197:2170	2197	763+190	83.4 : 83.4%	794	794	19.6
3/1	Soothill Lane Left Right Ahead	O	N/A	C1:E	3	34	511	1993	1993	619	82.5%	511	511	15.8
4/1	Heybeck Lane Right Left Ahead	O	N/A	C1:F	2	34	391	2194	2194	687	56.9%	391	391	9.9
J2: Proposed Northern Site Access Junction	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**62.9%**	**-**	**-**	**-**
1/1	A653 Leeds Rd (North) - Before Xing Ahead	U	2:2	C2:I	78	60	452	1965	1965	1641	27.5%	452	452	0.2
1/2	A653 Leeds Rd (North) - Before Xing Ahead	U	2:2	C2:I	78	60	720	1965	1965	1641	43.9%	720	720	4.8
2/1	A653 Leeds Road (North) Ahead Left	U	2:1	C2:A	85	63	512	1921	1921	1529	33.5%	512	512	1.5
2/2	A653 Leeds Road (North) Ahead	U	2:1	C2:A	85	63	660	2105	2105	1676	39.4%	660	660	1.6
3/1	A653 Leeds Road (South) Ahead	U	2:1	C2:B	102	63	661	1960	1960	1237	53.4%	661	661	11.0
3/2+3/3	A653 Leeds Road (South) Ahead Right	U+O	2:1	C2:B	102	63	847	2100:1827	2100	1250+97	62.9 : 62.9%	847	847	14.5

Full Input Data And Results

4/1	Proposed Northern Site Access Left	U	2:1	C2:C	68	79	8	1613	1613	188	4.3%	8	8	0.2
4/2	Proposed Northern Site Access Right	U	2:1	C2:C	68	79	11	1868	1868	218	5.1%	11	11	0.3
Ped Link: P1	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf
Ped Link: P2	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf
Ped Link: P3	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf
Ped Link: P4	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf

C1		PRC for Signalled Lanes (%):	8.0	Total Delay for Signalled Lanes (pcuHr):	36.14	Cycle Time (s):	103
C2	Stream: 1	PRC for Signalled Lanes (%):	43.2	Total Delay for Signalled Lanes (pcuHr):	6.91	Cycle Time (s):	103
C2	Stream: 2	PRC for Signalled Lanes (%):	105.1	Total Delay for Signalled Lanes (pcuHr):	0.59	Cycle Time (s):	103
		PRC Over All Lanes (%):	8.0	Total Delay Over All Lanes(pcuHr):	43.63		

Full Input Data And Results

Scenario 2: '2024 DS(A+B) PM' (FG2: '2024 DS(A+B) PM', Plan 1: '2019 Base AM')

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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**75.9%**	**-**	**-**	**-**
J1: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**75.9%**	**-**	**-**	**-**
1/1	A653 Leeds Road North Ahead Left	U	N/A	C1:B	48	86	598	2082	2082	788	75.9%	598	598	16.3
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	C1:B C1:D	48:72	86	773	2143:2130	2143	733+310	73.6 : 75.1%	773	773	14.2
2/1	A653 Leeds Road South Ahead Left	U	N/A	C1:A	27	66	503	2160	2160	839	60.0%	503	503	8.0
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	C1:A C1:C	27	66:37	650	2197:2170	2197	764+232	63.9 : 69.9%	650	650	8.0
3/1	Soothill Lane Left Right Ahead	O	N/A	C1:E	94	16	370	1993	1993	503	73.5%	370	370	11.0
4/1	Heybeck Lane Right Left Ahead	O	N/A	C1:F	93	16	265	2194	2194	575	46.1%	265	265	6.8
J2: Proposed Northern Site Access Junction	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**46.0%**	**-**	**-**	**-**
1/1	A653 Leeds Rd (North) - Before Xing Ahead	U	2:2	C2:I	62	44	517	1965	1965	1641	31.5%	517	517	0.2
1/2	A653 Leeds Rd (North) - Before Xing Ahead	U	2:2	C2:I	62	44	697	1965	1965	1641	42.5%	697	697	8.2
2/1	A653 Leeds Road (North) Ahead Left	U	2:1	C2:A	14	95	552	1961	1961	1561	35.4%	552	552	2.9
2/2	A653 Leeds Road (North) Ahead	U	2:1	C2:A	14	95	662	2105	2105	1676	39.5%	662	662	4.6
3/1	A653 Leeds Road (South) Ahead	U	2:1	C2:B	31	95	480	1960	1960	1237	38.8%	480	480	7.0
3/2+3/3	A653 Leeds Road (South) Ahead Right	U+O	2:1	C2:B	31	95	615	2100:1827	2100	1321+15	46.0 : 46.0%	615	615	9.4

Full Input Data And Results

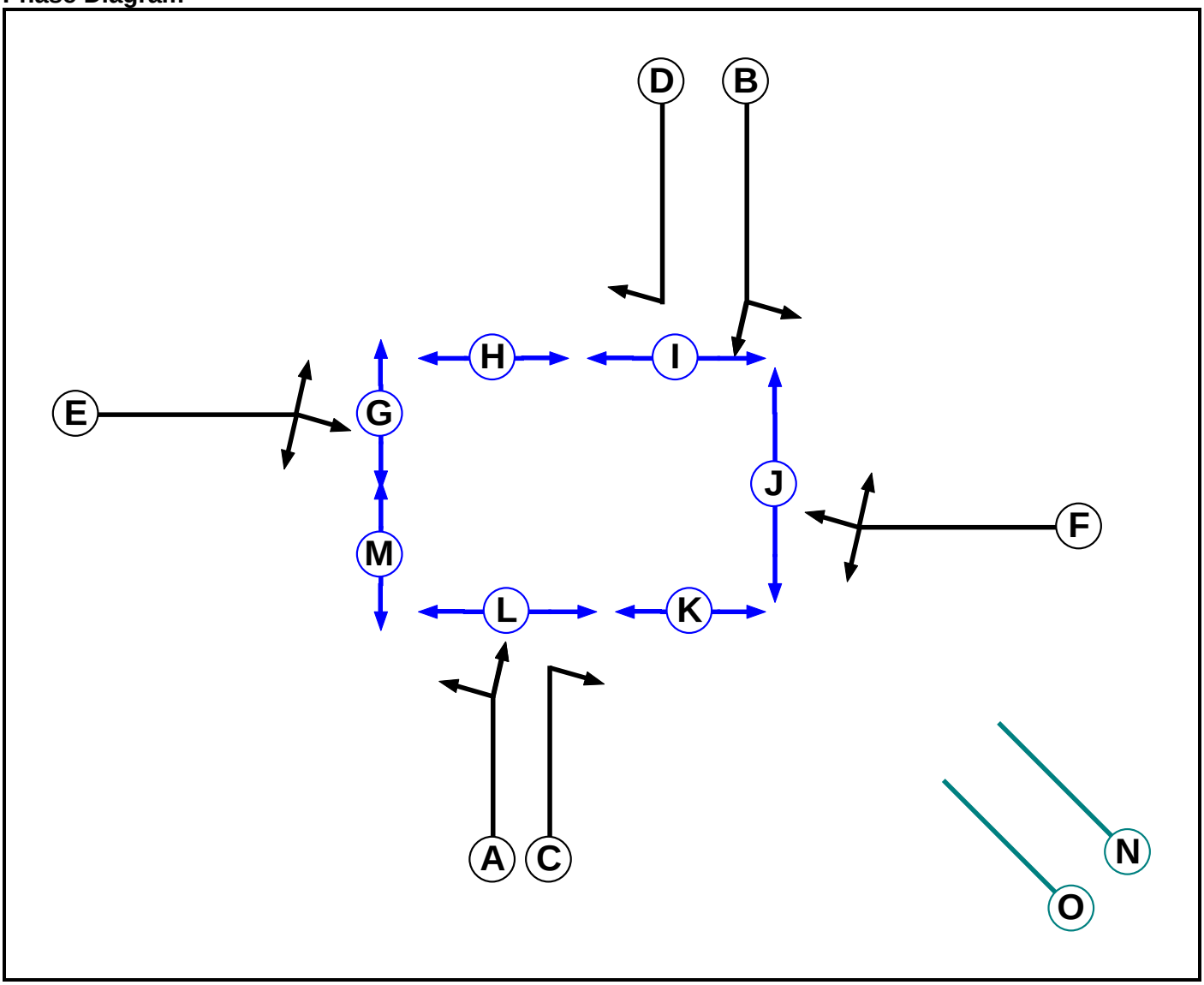
4/1	Proposed Northern Site Access Left	U	2:1	C2:C	100	8	51	1613	1613	188	27.1%	51	51	1.5
4/2	Proposed Northern Site Access Right	U	2:1	C2:C	100	8	65	1868	1868	218	29.9%	65	65	1.9
Ped Link: P1	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf
Ped Link: P2	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf
Ped Link: P3	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf
Ped Link: P4	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf

C1	PRC for Signalled Lanes (%):	18.6	Total Delay for Signalled Lanes (pcuHr):	32.42	Cycle Time (s):	103
C2	Stream: 1 PRC for Signalled Lanes (%):	95.5	Total Delay for Signalled Lanes (pcuHr):	6.83	Cycle Time (s):	103
C2	Stream: 2 PRC for Signalled Lanes (%):	111.9	Total Delay for Signalled Lanes (pcuHr):	0.62	Cycle Time (s):	103
	PRC Over All Lanes (%):	18.6	Total Delay Over All Lanes(pcuHr):	39.87		

Full Input Data And Results

C1

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	7
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Pedestrian		4	4
H	Pedestrian		5	5
I	Pedestrian		6	6
J	Pedestrian		8	8
K	Pedestrian		5	5
L	Pedestrian		6	6
M	Pedestrian		6	6
N	Dummy		3	3
O	Dummy		2	2

Full Input Data And Results

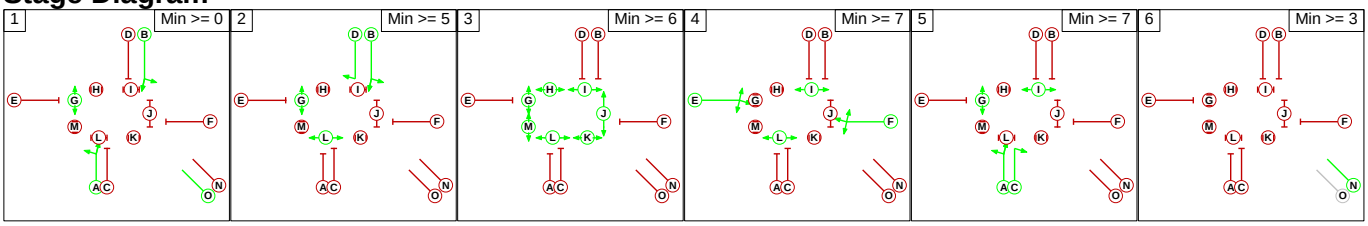
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
A		-	-	6	7	6	-	10	-	-	-	6	9	3	-
B	-		6	-	6	7	-	-	6	9	10	-	-	3	-
C	-	8		6	6	9	-	-	-	12	10	6	-	3	8
D	8	-	6		8	7	-	10	6	-	-	-	13	3	8
E	5	6	5	5		-	5	8	-	8	10	-	-	3	-
F	6	5	5	5	-		-	9	-	5	8	-	9	3	-
G	-	-	-	-	6	-		-	-	-	-	-	-	3	-
H	8	-	-	8	8	8	-		-	-	-	-	-	3	-
I	-	11	-	11	-	-	-	-		-	-	-	-	3	-
J	-	13	13	-	13	13	-	-	-		-	-	-	3	-
K	-	7	7	-	7	7	-	-	-	-		-	-	3	-
L	11	-	11	-	-	-	-	-	-	-	-		-	3	-
M	7	-	-	7	-	7	-	-	-	-	-	-		3	-
N	2	2	2	2	2	2	2	2	2	2	2	2	2		-
O	-	-	2	2	-	-	-	2	2	-	2	2	-	-	

Phases in Stage

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

Stage Diagram



Full Input Data And Results

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
6	1	A	Gaining relative	3	5
6	1	B	Gaining relative	3	5
6	2	B	Gaining relative	3	5
6	2	D	Gaining relative	3	5
6	4	E	Gaining relative	3	5
6	4	F	Gaining relative	3	5
6	5	A	Gaining relative	3	5
6	5	C	Gaining relative	3	5

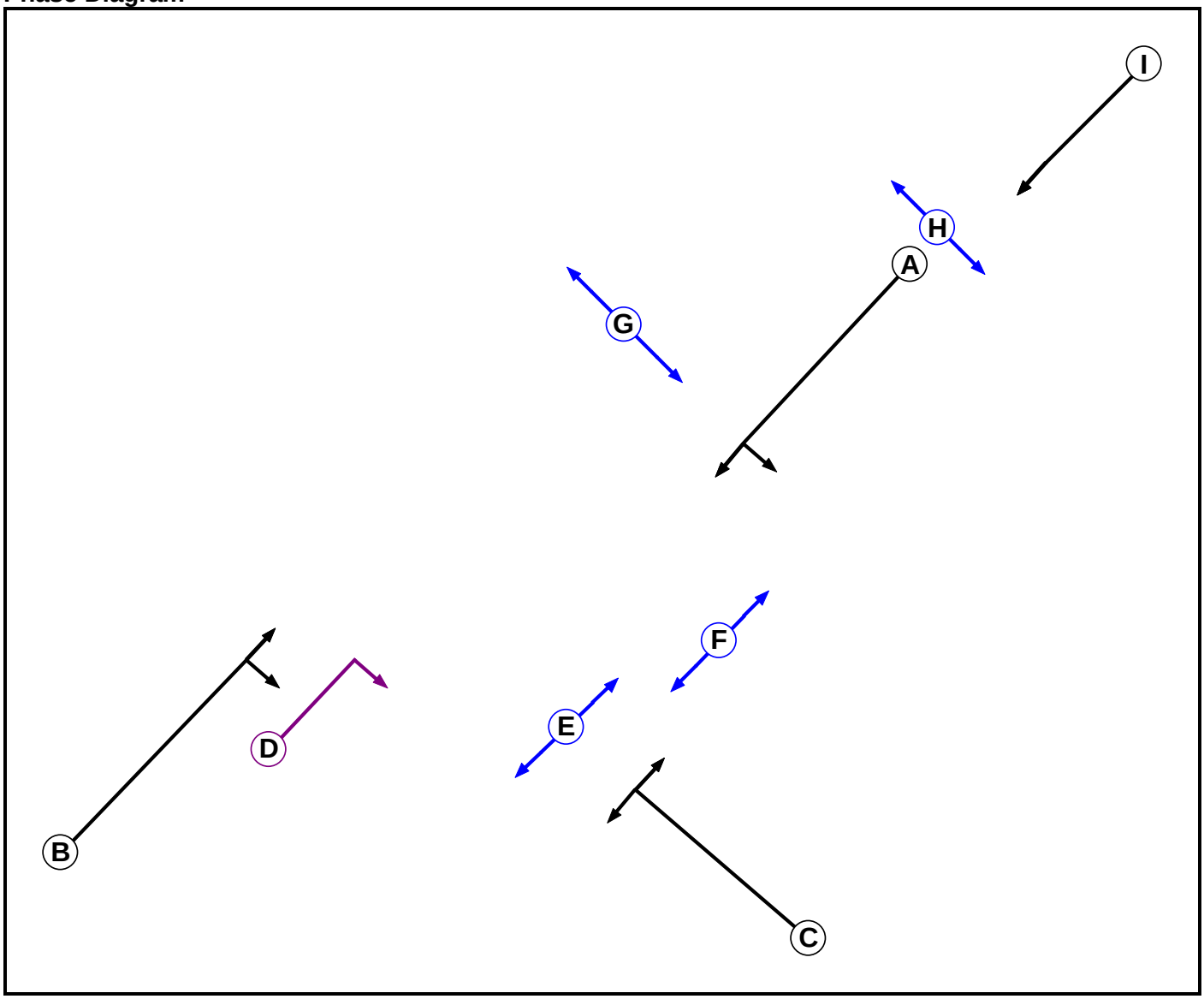
Prohibited Stage Change

		To Stage					
		1	2	3	4	5	6
From Stage	1		6	10	7	6	3
	2	11		13	8	11	3
	3	13	13		13	13	3
	4	11	11	10		11	3
	5	11	11	12	9		3
	6	5	5	2	5	5	

Full Input Data And Results

C2

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	1		7	7
D	Ind. Arrow	1	B	4	4
E	Pedestrian	1		5	5
F	Pedestrian	1		5	5
G	Pedestrian	1		5	5
H	Pedestrian	2		5	5
I	Traffic	2		7	7

Full Input Data And Results

Phase Intergreens Matrix

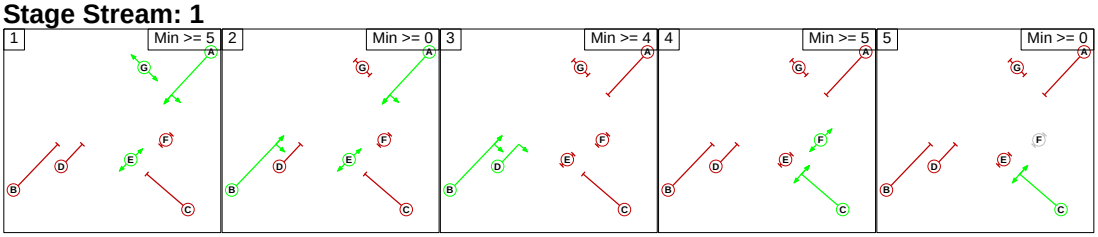
Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I
A		-	5	5	-	8	-	-	-
B	-		5	-	-	10	8	-	-
C	6	7		6	6	-	10	-	-
D	5	-	5		-	10	-	-	-
E	-	-	7	-		-	-	-	-
F	7	7	-	7	-		-	-	-
G	-	8	8	-	-	-		-	-
H	-	-	-	-	-	-	-		8
I	-	-	-	-	-	-	-	5	

Phases in Stage

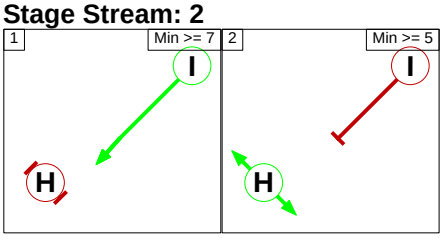
Stream	Stage No.	Phases in Stage
1	1	A E G
1	2	A B E
1	3	B D
1	4	C F
1	5	C
2	1	I
2	2	H

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Full Input Data And Results

Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	4	A	Losing	3	3
1	4	E	Losing	1	1
1	5	A	Losing	3	3
1	5	E	Losing	1	1
2	4	A	Losing	2	2
2	4	B	Losing	2	2
2	5	A	Losing	2	2
2	5	B	Losing	2	2
3	1	E	Gaining absolute	8	8
4	1	C	Losing	1	1
4	2	C	Losing	1	1

Stage Stream: 2

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

Prohibited Stage Change

Stage Stream: 1

		To Stage				
		1	2	3	4	5
From Stage	1		8	X	11	8
	2	8		5	12	7
	3	8	5		10	5
	4	11	8	7		0
	5	10	7	X	0	

Stage Stream: 2

		To Stage	
		1	2
From Stage	1		5
	2	8	

Full Input Data And Results

Give-Way Lane Input Data

Junction: J1: A653 Leeds Road / Heybeck 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-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
J1:3/1 (Soothill Lane)	J1:6/2 (Right)	1439	0	J1:4/1	1.09	To J1:6/2 (Left) To J1:8/1 (Ahead)	3.00	3.00	0.50	3	3.00
J1:4/1 (Heybeck Lane)	J1:5/1 (Right)	1439	0	J1:3/1	1.09	To J1:5/1 (Left) To J1:7/1 (Ahead)	3.00	3.00	0.50	3	3.00

Junction: J2: Proposed Northern Site Access Junction											
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)**
J2:3/3 (A653 Leeds Road (South))	J2:7/1 (Right)	1439	0	J2:2/1	1.09	All	3.00	-	0.50	3	3.00
				J2:2/2	1.09	All					

Full Input Data And Results

Lane Input Data

Junction: J1: A653 Leeds Road / Heybeck 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)**
J1:1/1 (A653 Leeds Road North)	U	B	2	3	60.0	User	2082	-	-	-	-	-
J1:1/2 (A653 Leeds Road North)	U	B	2	3	60.0	User	2143	-	-	-	-	-
J1:1/3 (A653 Leeds Road North)	U	D	2	3	16.0	User	2130	-	-	-	-	-
J1:2/1 (A653 Leeds Road South)	U	A	2	3	60.0	User	2160	-	-	-	-	-
J1:2/2 (A653 Leeds Road South)	U	A	2	3	60.0	User	2197	-	-	-	-	-
J1:2/3 (A653 Leeds Road South)	U	C	2	3	15.0	User	2170	-	-	-	-	-
J1:3/1 (Soothill Lane)	O	E	2	3	60.0	User	1993	-	-	-	-	-
J1:4/1 (Heybeck Lane)	O	F	2	3	60.0	User	2194	-	-	-	-	-
J1:5/1 (A653 Leeds Road North - EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:6/1 (A653 Leeds Road South - EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:6/2 (A653 Leeds Road South - EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:7/1 (Heybeck Lane - EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:8/1 (Soothill Lane - EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Junction: J2: Proposed Northern Site Access Junction												
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)**
J2:1/1 (A653 Leeds Rd (North) - Before Xing)	U	I	2	3	60.0	Geom	-	3.50	0.00	Y	Arm J2:2 Ahead	Inf
J2:1/2 (A653 Leeds Rd (North) - Before Xing)	U	I	2	3	60.0	Geom	-	3.50	0.00	Y	Arm J2:2 Ahead	Inf
J2:2/1 (A653 Leeds Road (North))	U	A	2	3	1.0	Geom	-	3.50	0.00	Y	Arm J2:6 Ahead	Inf
											Arm J2:7 Left	10.00
J2:2/2 (A653 Leeds Road (North))	U	A	2	3	1.0	Geom	-	3.50	0.00	N	Arm J2:6 Ahead	Inf
J2:3/1 (A653 Leeds Road (South))	U	B	2	3	22.6	Geom	-	3.45	0.00	Y	Arm J2:5 Ahead	Inf
J2:3/2 (A653 Leeds Road (South))	U	B	2	3	22.6	Geom	-	3.45	0.00	N	Arm J2:5 Ahead	Inf
J2:3/3 (A653 Leeds Road (South))	O	B D	2	3	9.0	Geom	-	3.00	0.00	N	Arm J2:7 Right	12.00
J2:4/1 (Proposed Northern Site Access)	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J2:6 Left	8.00
J2:4/2 (Proposed Northern Site Access)	U	C	2	3	60.0	Geom	-	3.00	0.00	N	Arm J2:5 Right	15.00
J2:5/1 (A653 Leeds Road (North) EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:5/2 (A653 Leeds Road (North) EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:6/1 (A653 Leeds Road (South) - EXIT)	U		2	3	26.1	Inf	-	-	-	-	-	-
J2:7/1 (Proposed Northern Site Access Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2024 DS(A+B) AM'	07:30	08:30	01:00	
2: '2024 DS(A+B) PM'	16:30	17:30	01:00	

Full Input Data And Results

Scenario 1: '2024 DS(A+B) AM' (FG1: '2024 DS(A+B) AM', Plan 1: '2019 Base AM')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	168	50	50	829	1097
	B	206	0	222	25	58	511
	C	40	141	0	4	206	391
	D	7	3	1	0	8	19
	E	1203	87	157	61	0	1508
	Tot.	1456	399	430	140	1101	3526

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2024 DS(A+B) AM
Junction: J1: A653 Leeds Road / Heybeck Lane	
J1:1/1	502
J1:1/2 (with short)	595(In) 427(Out)
J1:1/3 (short)	168
J1:2/1	664
J1:2/2 (with short)	794(In) 636(Out)
J1:2/3 (short)	158
J1:3/1	511
J1:4/1	391
J1:5/1	1456
J1:6/1	452
J1:6/2	720
J1:7/1	430
J1:8/1	399
Junction: J2: Proposed Northern Site Access Junction	
J2:1/1	452
J2:1/2	720
J2:2/1	512
J2:2/2	660
J2:3/1	661
J2:3/2 (with short)	847(In) 786(Out)
J2:3/3 (short)	61
J2:4/1	8
J2:4/2	11
J2:5/1	664
J2:5/2	794
J2:6/1	1101
J2:7/1	140

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A653 Leeds Road / Heybeck Lane								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A653 Leeds Road North Lane 1)	This lane uses a directly entered Saturation Flow						2082	2082
J1:1/2 (A653 Leeds Road North Lane 2)	This lane uses a directly entered Saturation Flow						2143	2143
J1:1/3 (A653 Leeds Road North Lane 3)	This lane uses a directly entered Saturation Flow						2130	2130
J1:2/1 (A653 Leeds Road South Lane 1)	This lane uses a directly entered Saturation Flow						2160	2160
J1:2/2 (A653 Leeds Road South Lane 2)	This lane uses a directly entered Saturation Flow						2197	2197
J1:2/3 (A653 Leeds Road South Lane 3)	This lane uses a directly entered Saturation Flow						2170	2170
J1:3/1 (Soothill Lane Lane 1)	This lane uses a directly entered Saturation Flow						1993	1993
J1:4/1 (Heybeck Lane Lane 1)	This lane uses a directly entered Saturation Flow						2194	2194
J1:5/1 (A653 Leeds Road North - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A653 Leeds Road South - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A653 Leeds Road South - EXIT Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Heybeck Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1 (Soothill Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: Proposed Northern Site Access Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A653 Leeds Rd (North) - Before Xing)	3.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1965	1965
J2:1/2 (A653 Leeds Rd (North) - Before Xing)	3.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1965	1965
J2:2/1 (A653 Leeds Road (North))	3.50	0.00	Y	Arm J2:6 Ahead	Inf	84.6 %	1921	1921
				Arm J2:7 Left	10.00	15.4 %		
J2:2/2 (A653 Leeds Road (North))	3.50	0.00	N	Arm J2:6 Ahead	Inf	100.0 %	2105	2105
J2:3/1 (A653 Leeds Road (South))	3.45	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	1960	1960
J2:3/2 (A653 Leeds Road (South))	3.45	0.00	N	Arm J2:5 Ahead	Inf	100.0 %	2100	2100
J2:3/3 (A653 Leeds Road (South))	3.00	0.00	N	Arm J2:7 Right	12.00	100.0 %	1827	1827
J2:4/1 (Proposed Northern Site Access)	3.00	0.00	Y	Arm J2:6 Left	8.00	100.0 %	1613	1613
J2:4/2 (Proposed Northern Site Access)	3.00	0.00	N	Arm J2:5 Right	15.00	100.0 %	1868	1868
J2:5/1 (A653 Leeds Road (North) EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/2 (A653 Leeds Road (North) EXIT Lane 2)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (A653 Leeds Road (South) - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:7/1 (Proposed Northern Site Access Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2024 DS(A+B) PM' (FG2: '2024 DS(A+B) PM', Plan 1: '2019 Base AM')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	233	81	5	1052	1371
	B	181	0	153	3	33	370
	C	29	115	0	0	121	265
	D	41	21	3	0	51	116
	E	828	101	159	7	0	1095
	Tot.	1079	470	396	15	1257	3217

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2024 DS(A+B) PM
Junction: J1: A653 Leeds Road / Heybeck Lane	
J1:1/1	598
J1:1/2 (with short)	773(In) 540(Out)
J1:1/3 (short)	233
J1:2/1	503
J1:2/2 (with short)	650(In) 488(Out)
J1:2/3 (short)	162
J1:3/1	370
J1:4/1	265
J1:5/1	1079
J1:6/1	517
J1:6/2	697
J1:7/1	396
J1:8/1	470
Junction: J2: Proposed Northern Site Access Junction	
J2:1/1	517
J2:1/2	697
J2:2/1	552
J2:2/2	662
J2:3/1	480
J2:3/2 (with short)	615(In) 608(Out)
J2:3/3 (short)	7
J2:4/1	51
J2:4/2	65
J2:5/1	503
J2:5/2	650
J2:6/1	1257
J2:7/1	15

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A653 Leeds Road / Heybeck Lane								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (A653 Leeds Road North Lane 1)	This lane uses a directly entered Saturation Flow						2082	2082
J1:1/2 (A653 Leeds Road North Lane 2)	This lane uses a directly entered Saturation Flow						2143	2143
J1:1/3 (A653 Leeds Road North Lane 3)	This lane uses a directly entered Saturation Flow						2130	2130
J1:2/1 (A653 Leeds Road South Lane 1)	This lane uses a directly entered Saturation Flow						2160	2160
J1:2/2 (A653 Leeds Road South Lane 2)	This lane uses a directly entered Saturation Flow						2197	2197
J1:2/3 (A653 Leeds Road South Lane 3)	This lane uses a directly entered Saturation Flow						2170	2170
J1:3/1 (Soothill Lane Lane 1)	This lane uses a directly entered Saturation Flow						1993	1993
J1:4/1 (Heybeck Lane Lane 1)	This lane uses a directly entered Saturation Flow						2194	2194
J1:5/1 (A653 Leeds Road North - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A653 Leeds Road South - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A653 Leeds Road South - EXIT Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Heybeck Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1 (Soothill Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

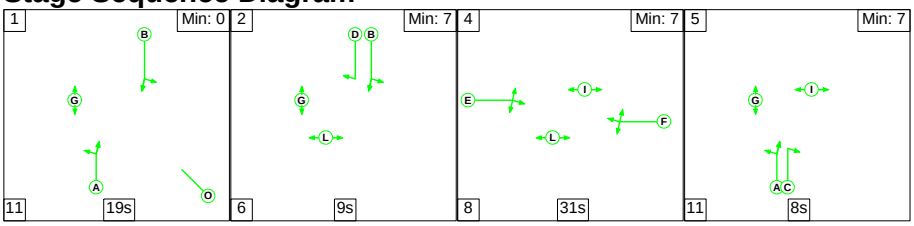
Junction: J2: Proposed Northern Site Access Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A653 Leeds Rd (North) - Before Xing)	3.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1965	1965
J2:1/2 (A653 Leeds Rd (North) - Before Xing)	3.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1965	1965
J2:2/1 (A653 Leeds Road (North))	3.50	0.00	Y	Arm J2:6 Ahead	Inf	98.6 %	1961	1961
				Arm J2:7 Left	10.00	1.4 %		
J2:2/2 (A653 Leeds Road (North))	3.50	0.00	N	Arm J2:6 Ahead	Inf	100.0 %	2105	2105
J2:3/1 (A653 Leeds Road (South))	3.45	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	1960	1960
J2:3/2 (A653 Leeds Road (South))	3.45	0.00	N	Arm J2:5 Ahead	Inf	100.0 %	2100	2100
J2:3/3 (A653 Leeds Road (South))	3.00	0.00	N	Arm J2:7 Right	12.00	100.0 %	1827	1827
J2:4/1 (Proposed Northern Site Access)	3.00	0.00	Y	Arm J2:6 Left	8.00	100.0 %	1613	1613
J2:4/2 (Proposed Northern Site Access)	3.00	0.00	N	Arm J2:5 Right	15.00	100.0 %	1868	1868
J2:5/1 (A653 Leeds Road (North) EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/2 (A653 Leeds Road (North) EXIT Lane 2)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (A653 Leeds Road (South) - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:7/1 (Proposed Northern Site Access Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 1: '2024 DS(A+B) AM' (FG1: '2024 DS(A+B) AM', Plan 1: '2019 Base AM')

C1

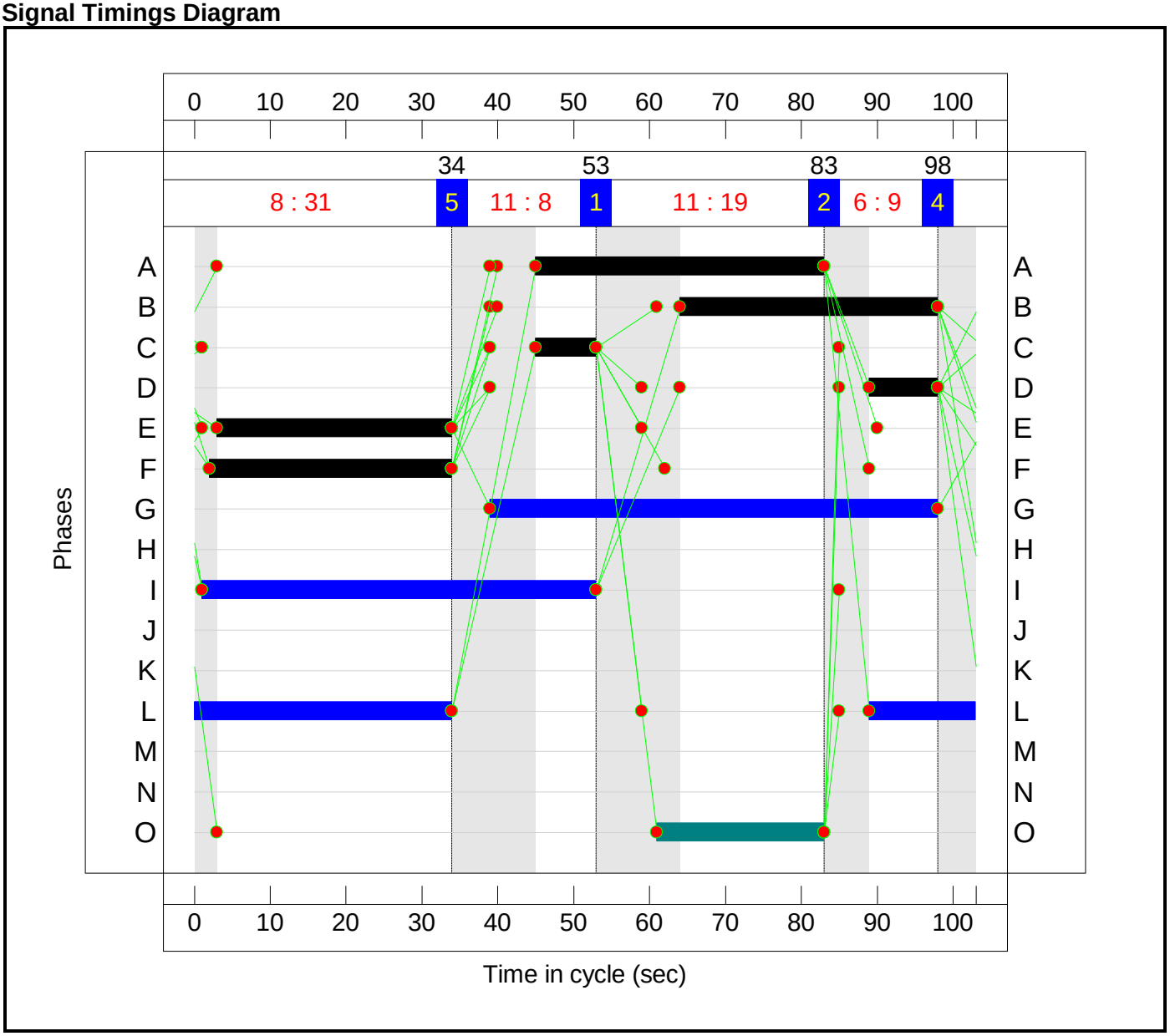
Stage Sequence Diagram



Stage Timings

Stage	1	2	4	5
Duration	19	9	31	8
Change Point	53	83	98	34

Signal Timings Diagram

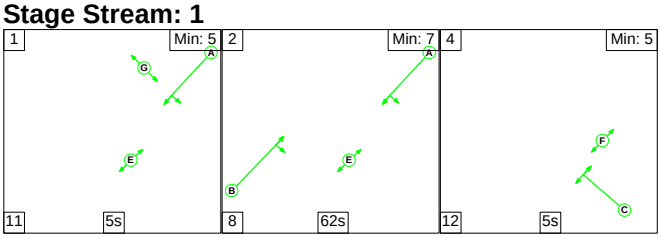


Full Input Data And Results

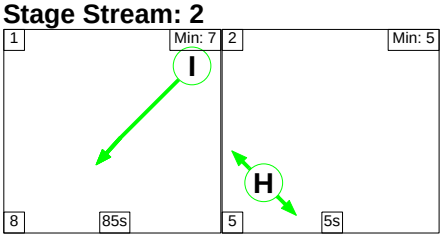
C2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

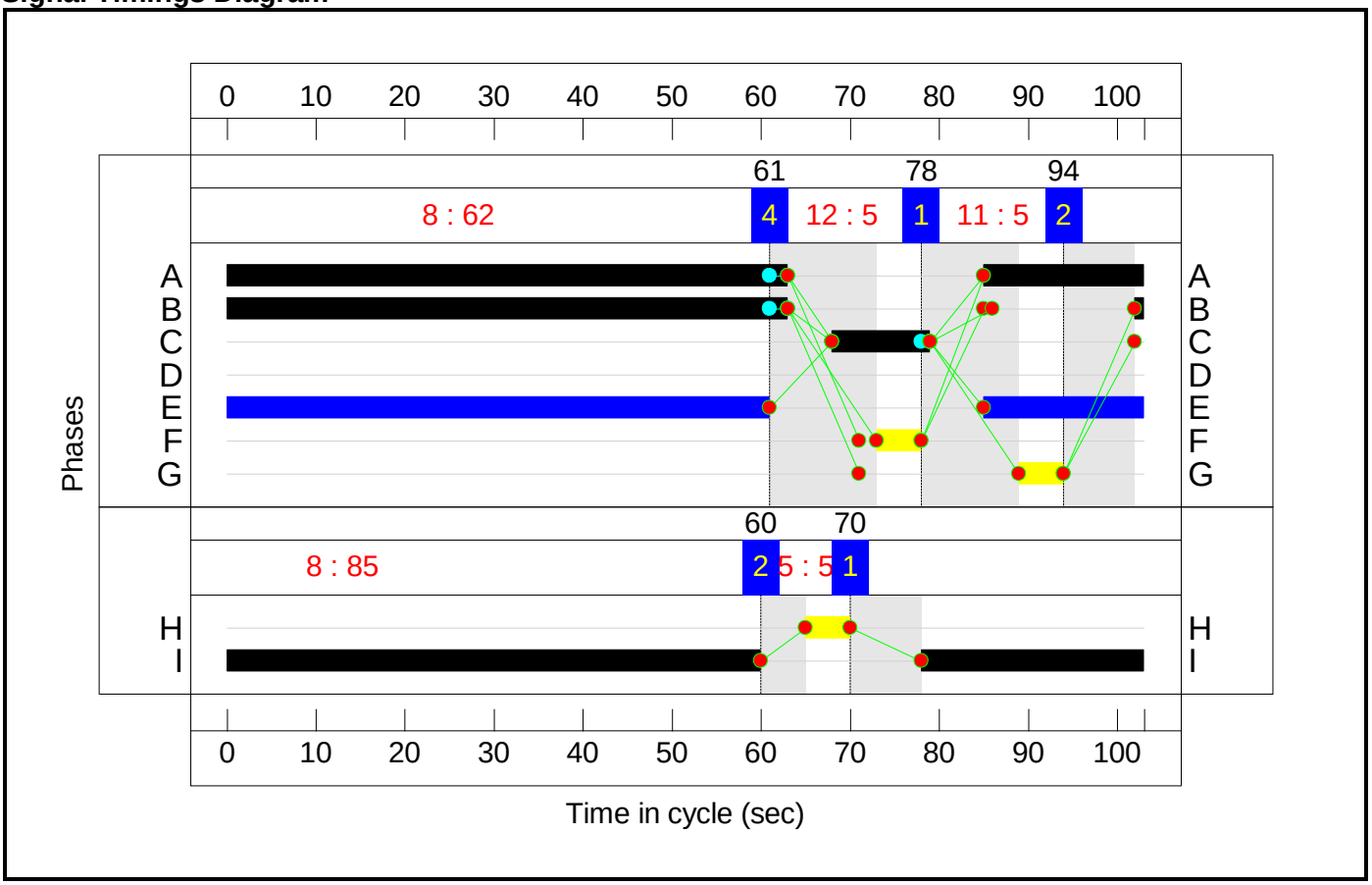
Stage Stream: 1

Stage	1	2	4
Duration	5	62	5
Change Point	78	94	61

Stage Stream: 2

Stage	1	2
Duration	85	5
Change Point	70	60

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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**83.4%**
J1: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**83.4%**
1/1	A653 Leeds Road North Ahead Left	U	N/A	N/A	C1:B		1	34	-	502	2082	707	71.0%
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	N/A	C1:B C1:D		1	34:9	-	595	2143:2130	678+207	62.9 : 81.2%
2/1	A653 Leeds Road South Ahead Left	U	N/A	N/A	C1:A		1	38	-	664	2160	818	81.2%
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	N/A	C1:A C1:C		1	38:8	-	794	2197:2170	763+190	83.4 : 83.4%
3/1	Soothill Lane Left Right Ahead	O	N/A	N/A	C1:E		1	31	-	511	1993	619	82.5%
4/1	Heybeck Lane Right Left Ahead	O	N/A	N/A	C1:F		1	32	-	391	2194	687	56.9%
5/1	A653 Leeds Road North - EXIT	U	N/A	N/A	-		-	-	-	1456	Inf	Inf	0.0%
6/1	A653 Leeds Road South - EXIT Ahead	U	N/A	N/A	-		-	-	-	452	Inf	Inf	0.0%
6/2	A653 Leeds Road South - EXIT Ahead	U	N/A	N/A	-		-	-	-	720	Inf	Inf	0.0%
7/1	Heybeck Lane - EXIT	U	N/A	N/A	-		-	-	-	430	Inf	Inf	0.0%
8/1	Soothill Lane - EXIT	U	N/A	N/A	-		-	-	-	399	Inf	Inf	0.0%
J2: Proposed Northern Site Access Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**62.9%**

Full Input Data And Results

1/1	A653 Leeds Rd (North) - Before Xing Ahead	U	2:2	N/A	C2:I		1	85	-	452	1965	1641	27.5%
1/2	A653 Leeds Rd (North) - Before Xing Ahead	U	2:2	N/A	C2:I		1	85	-	720	1965	1641	43.9%
2/1	A653 Leeds Road (North) Ahead Left	U	2:1	N/A	C2:A		1	81	-	512	1921	1529	33.5%
2/2	A653 Leeds Road (North) Ahead	U	2:1	N/A	C2:A		1	81	-	660	2105	1676	39.4%
3/1	A653 Leeds Road (South) Ahead	U	2:1	N/A	C2:B		1	64	-	661	1960	1237	53.4%
3/2+3/3	A653 Leeds Road (South) Ahead Right	U+O	2:1	N/A	C2:B	C2:D	1	64	0	847	2100:1827	1250+97	62.9 : 62.9%
4/1	Proposed Northern Site Access Left	U	2:1	N/A	C2:C		1	11	-	8	1613	188	4.3%
4/2	Proposed Northern Site Access Right	U	2:1	N/A	C2:C		1	11	-	11	1868	218	5.1%
5/1	A653 Leeds Road (North) EXIT Ahead	U	N/A	N/A	-		-	-	-	664	Inf	Inf	0.0%
5/2	A653 Leeds Road (North) EXIT Ahead	U	N/A	N/A	-		-	-	-	794	Inf	Inf	0.0%
6/1	A653 Leeds Road (South) - EXIT	U	N/A	N/A	-		-	-	-	1101	Inf	Inf	0.0%
7/1	Proposed Northern Site Access Exit	U	N/A	N/A	-		-	-	-	140	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**182**	**0**	**2**	**31.0**	**12.3**	**0.4**	**43.6**	**-**	**-**	**-**	**-**
J1: A653 Leeds Road / Heybeck Lane	**-**	**-**	**122**	**0**	**1**	**26.2**	**9.7**	**0.3**	**36.1**	**-**	**-**	**-**	**-**
1/1	502	502	-	-	-	4.1	1.2	-	5.3	38.2	12.4	1.2	13.6
1/2+1/3	595	595	-	-	-	5.5	1.0	-	6.5	39.1	10.0	1.0	11.0
2/1	664	664	-	-	-	3.8	2.1	-	5.9	31.8	17.6	2.1	19.7
2/2+2/3	794	794	-	-	-	5.0	2.4	-	7.4	33.7	17.2	2.4	19.6
3/1	511	511	82	0	1	4.7	2.3	0.1	7.0	49.7	13.5	2.3	15.8
4/1	391	391	40	0	0	3.1	0.7	0.2	4.0	36.7	9.2	0.7	9.9
5/1	1456	1456	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	452	452	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	720	720	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	430	430	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	399	399	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Proposed Northern Site Access Junction	**-**	**-**	**60**	**0**	**1**	**4.8**	**2.6**	**0.1**	**7.5**	**-**	**-**	**-**	**-**
1/1	452	452	-	-	-	0.0	0.2	-	0.2	1.5	0.0	0.2	0.2
1/2	720	720	-	-	-	0.0	0.4	-	0.4	2.0	4.4	0.4	4.8
2/1	512	512	-	-	-	0.0	0.3	-	0.3	1.9	1.3	0.3	1.5
2/2	660	660	-	-	-	0.0	0.3	-	0.3	1.9	1.3	0.3	1.6
3/1	661	661	-	-	-	1.9	0.6	-	2.5	13.7	10.5	0.6	11.0
3/2+3/3	847	847	60	0	1	2.6	0.8	0.1	3.5	14.9	13.7	0.8	14.5
4/1	8	8	-	-	-	0.1	0.0	-	0.1	50.6	0.2	0.0	0.2
4/2	11	11	-	-	-	0.1	0.0	-	0.2	49.3	0.3	0.0	0.3
5/1	664	664	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

5/2	794	794	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1101	1101	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	140	140	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P2	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P3	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P4	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf

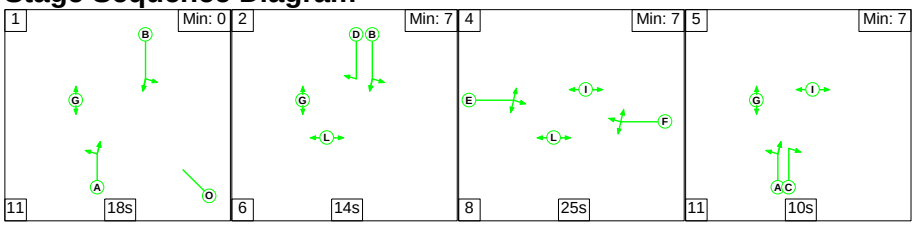
C1		PRC for Signalled Lanes (%):	8.0	Total Delay for Signalled Lanes (pcuHr):	36.14	Cycle Time (s):	103
C2	Stream: 1	PRC for Signalled Lanes (%):	43.2	Total Delay for Signalled Lanes (pcuHr):	6.91	Cycle Time (s):	103
C2	Stream: 2	PRC for Signalled Lanes (%):	105.1	Total Delay for Signalled Lanes (pcuHr):	0.59	Cycle Time (s):	103
		PRC Over All Lanes (%):	8.0	Total Delay Over All Lanes(pcuHr):	43.63		

Full Input Data And Results

Scenario 2: '2024 DS(A+B) PM' (FG2: '2024 DS(A+B) PM', Plan 1: '2019 Base AM')

C1

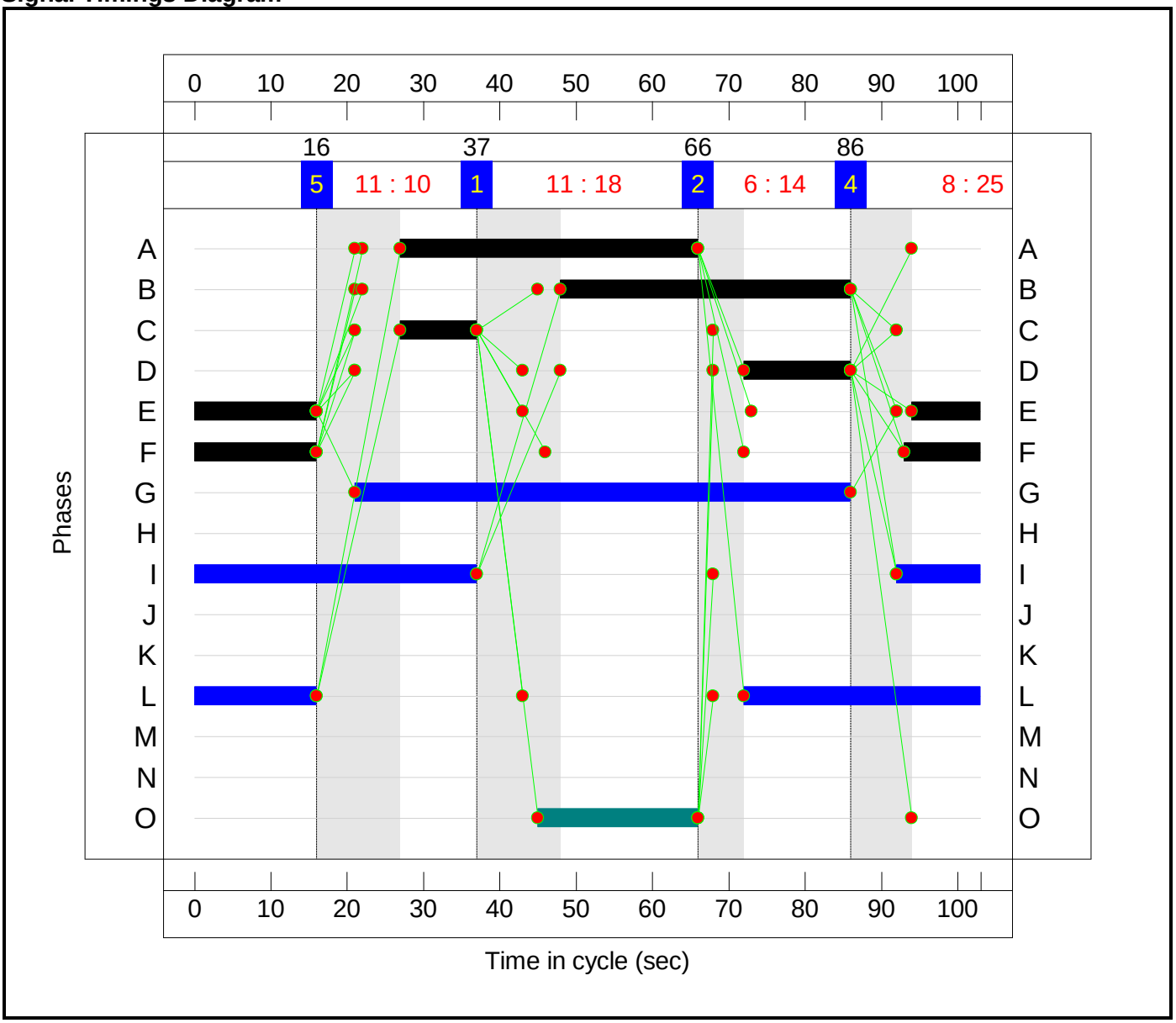
Stage Sequence Diagram



Stage Timings

Stage	1	2	4	5
Duration	18	14	25	10
Change Point	37	66	86	16

Signal Timings Diagram

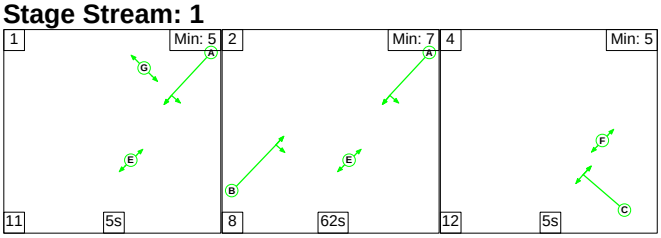


Full Input Data And Results

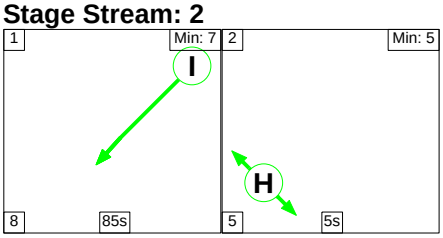
C2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

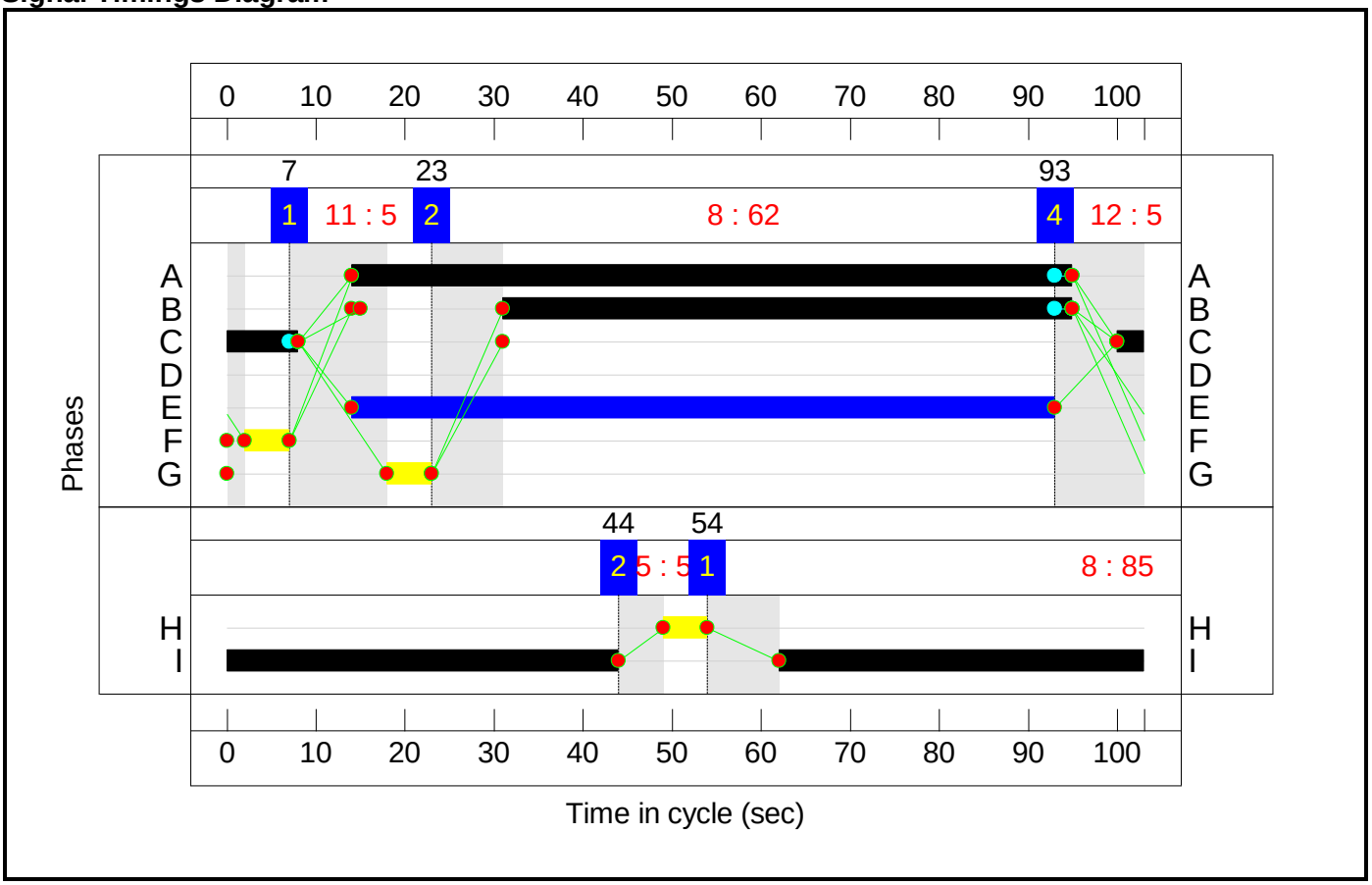
Stage Stream: 1

Stage	1	2	4
Duration	5	62	5
Change Point	7	23	93

Stage Stream: 2

Stage	1	2
Duration	85	5
Change Point	54	44

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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**75.9%**
J1: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**75.9%**
1/1	A653 Leeds Road North Ahead Left	U	N/A	N/A	C1:B		1	38	-	598	2082	788	75.9%
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	N/A	C1:B C1:D		1	38:14	-	773	2143:2130	733+310	73.6 : 75.1%
2/1	A653 Leeds Road South Ahead Left	U	N/A	N/A	C1:A		1	39	-	503	2160	839	60.0%
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	N/A	C1:A C1:C		1	39:10	-	650	2197:2170	764+232	63.9 : 69.9%
3/1	Soothill Lane Left Right Ahead	O	N/A	N/A	C1:E		1	25	-	370	1993	503	73.5%
4/1	Heybeck Lane Right Left Ahead	O	N/A	N/A	C1:F		1	26	-	265	2194	575	46.1%
5/1	A653 Leeds Road North - EXIT	U	N/A	N/A	-		-	-	-	1079	Inf	Inf	0.0%
6/1	A653 Leeds Road South - EXIT Ahead	U	N/A	N/A	-		-	-	-	517	Inf	Inf	0.0%
6/2	A653 Leeds Road South - EXIT Ahead	U	N/A	N/A	-		-	-	-	697	Inf	Inf	0.0%
7/1	Heybeck Lane - EXIT	U	N/A	N/A	-		-	-	-	396	Inf	Inf	0.0%
8/1	Soothill Lane - EXIT	U	N/A	N/A	-		-	-	-	470	Inf	Inf	0.0%
J2: Proposed Northern Site Access Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**46.0%**

Full Input Data And Results

1/1	A653 Leeds Rd (North) - Before Xing Ahead	U	2:2	N/A	C2:I		1	85	-	517	1965	1641	31.5%
1/2	A653 Leeds Rd (North) - Before Xing Ahead	U	2:2	N/A	C2:I		1	85	-	697	1965	1641	42.5%
2/1	A653 Leeds Road (North) Ahead Left	U	2:1	N/A	C2:A		1	81	-	552	1961	1561	35.4%
2/2	A653 Leeds Road (North) Ahead	U	2:1	N/A	C2:A		1	81	-	662	2105	1676	39.5%
3/1	A653 Leeds Road (South) Ahead	U	2:1	N/A	C2:B		1	64	-	480	1960	1237	38.8%
3/2+3/3	A653 Leeds Road (South) Ahead Right	U+O	2:1	N/A	C2:B	C2:D	1	64	0	615	2100:1827	1321+15	46.0 : 46.0%
4/1	Proposed Northern Site Access Left	U	2:1	N/A	C2:C		1	11	-	51	1613	188	27.1%
4/2	Proposed Northern Site Access Right	U	2:1	N/A	C2:C		1	11	-	65	1868	218	29.9%
5/1	A653 Leeds Road (North) EXIT Ahead	U	N/A	N/A	-		-	-	-	503	Inf	Inf	0.0%
5/2	A653 Leeds Road (North) EXIT Ahead	U	N/A	N/A	-		-	-	-	650	Inf	Inf	0.0%
6/1	A653 Leeds Road (South) - EXIT	U	N/A	N/A	-		-	-	-	1257	Inf	Inf	0.0%
7/1	Proposed Northern Site Access Exit	U	N/A	N/A	-		-	-	-	15	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**69**	**0**	**3**	**31.0**	**8.8**	**0.1**	**39.9**	**-**	**-**	**-**	**-**
J1: A653 Leeds Road / Heybeck Lane	**-**	**-**	**64**	**0**	**1**	**25.9**	**6.4**	**0.1**	**32.4**	**-**	**-**	**-**	**-**
1/1	598	598	-	-	-	4.6	1.5	-	6.2	37.2	14.8	1.5	16.3
1/2+1/3	773	773	-	-	-	6.7	1.4	-	8.1	37.9	12.8	1.4	14.2
2/1	503	503	-	-	-	3.0	0.7	-	3.7	26.7	7.2	0.7	8.0
2/2+2/3	650	650	-	-	-	5.5	0.9	-	6.5	35.9	7.1	0.9	8.0
3/1	370	370	36	0	0	3.6	1.4	0.0	5.0	48.8	9.7	1.4	11.0
4/1	265	265	29	0	0	2.3	0.4	0.1	2.9	39.0	6.3	0.4	6.8
5/1	1079	1079	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	517	517	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	697	697	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	396	396	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	470	470	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Proposed Northern Site Access Junction	**-**	**-**	**5**	**0**	**2**	**5.1**	**2.3**	**0.0**	**7.5**	**-**	**-**	**-**	**-**
1/1	517	517	-	-	-	0.0	0.2	-	0.2	1.6	0.0	0.2	0.2
1/2	697	697	-	-	-	0.0	0.4	-	0.4	2.0	7.8	0.4	8.2
2/1	552	552	-	-	-	0.4	0.3	-	0.7	4.5	2.6	0.3	2.9
2/2	662	662	-	-	-	0.4	0.3	-	0.7	4.0	4.3	0.3	4.6
3/1	480	480	-	-	-	1.2	0.3	-	1.6	11.7	6.7	0.3	7.0
3/2+3/3	615	615	5	0	2	1.7	0.4	0.0	2.1	12.4	9.0	0.4	9.4
4/1	51	51	-	-	-	0.6	0.2	-	0.8	54.6	1.3	0.2	1.5
4/2	65	65	-	-	-	0.8	0.2	-	1.0	53.4	1.7	0.2	1.9
5/1	503	503	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

5/2	650	650	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1257	1257	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	15	15	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P2	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P3	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P4	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf

C1		PRC for Signalled Lanes (%):	18.6	Total Delay for Signalled Lanes (pcuHr):	32.42	Cycle Time (s):	103
C2	Stream: 1	PRC for Signalled Lanes (%):	95.5	Total Delay for Signalled Lanes (pcuHr):	6.83	Cycle Time (s):	103
C2	Stream: 2	PRC for Signalled Lanes (%):	111.9	Total Delay for Signalled Lanes (pcuHr):	0.62	Cycle Time (s):	103
		PRC Over All Lanes (%):	18.6	Total Delay Over All Lanes(pcuHr):	39.87		

Junction 3 – Triple

Full Input Data And Results

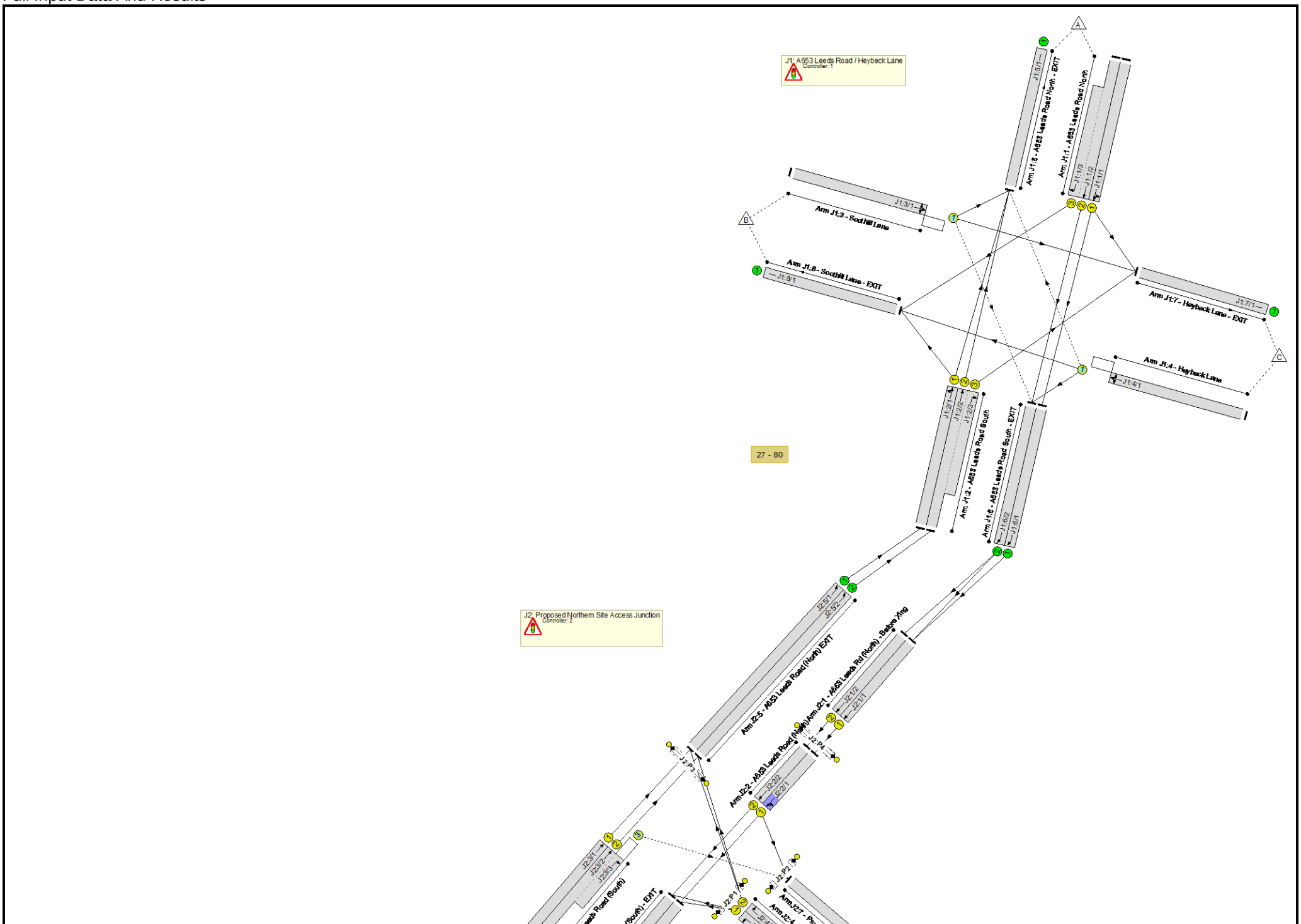
User and Project Details

Project:	**Land at Chidswell**
Title:	**A653 Leeds Road / Heybeck Lane**
Location:	A653 Leeds Road / Heybeck Lane
Additional detail:	
File name:	Junc 3 A653 Leeds Road - Heybeck Lane - B6124 Soothill Lane and Site Accesses 2 and 3 (2030 DS(A+B) only) - Feb 2020_filter S2&3.lsg3x
Company:	Pell Frischmann
Address:	London
Linsig Version:	3, 2, 40, 0

Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



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	2030 DS(A+B) AM	2030 DS(A+B) AM	2019 Base AM	07:30 - 08:30	120/120/120	-31.3	358.34
2	2030 DS(A+B) PM	2030 DS(A+B) PM	2019 Base AM	16:30 - 17:30	120/120/120	-48.8	617.97

Full Input Data And Results

Network Results

Scenario 1: '2030 DS(A+B) AM' (FG1: '2030 DS(A+B) AM', Plan 1: '2019 Base AM')

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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**118.2%**	**-**	**-**	**-**
J1: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**118.2%**	**-**	**-**	**-**
1/1	A653 Leeds Road North Ahead Left	U	N/A	C1:B	49	95	697	2082	2082	815	85.5%	697	697	23.9
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	C1:B C1:D	49:86	95	817	2143:2130	2143	752+178	82.9 : 108.7%	817	801	29.9
2/1	A653 Leeds Road South Ahead Left	U	N/A	C1:A	27	80	1149	2160	2160	972	118.2%	1149	972	137.0
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	C1:A C1:C	27	80:38	1277	2197:2170	2197	876+213	117.2 : 117.2%	1277	1106	147.3
3/1	Soothill Lane Left Right Ahead	O	N/A	C1:E	103	16	520	1993	1993	473	109.9%	520	473	46.9
4/1	Heybeck Lane Right Left Ahead	O	N/A	C1:F	102	16	514	2194	2194	619	83.1%	514	514	18.2
J2: Proposed Northern Site Access Junction	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**89.8%**	**-**	**-**	**-**
1/1	A653 Leeds Rd (North) - Before Xing Ahead	U	2:2	C2:I	65	47	780	1965	1965	1687	46.0%	776	776	0.6
1/2	A653 Leeds Rd (North) - Before Xing Ahead	U	2:2	C2:I	65	47	864	1965	1965	1687	50.9%	858	858	12.6
2/1	A653 Leeds Road (North) Ahead Left	U	2:1	C2:A	96	65	780	1943	1943	1457	53.2%	776	776	23.3
2/2	A653 Leeds Road (North) Ahead	U	2:1	C2:A	96	65	864	2105	2105	1579	54.3%	858	858	23.1
3/1	A653 Leeds Road (South) Ahead	U	2:1	C2:B	113	74	1114	1960	1960	1339	83.2%	1114	1114	15.7

Full Input Data And Results

3/2+3/3	A653 Leeds Road (South) Ahead Right	U+O	2:1	C2:B	113	74	1298	2100:1827	2100	1396+50	89.8 : 89.8%	1298	1298	28.8
4/1	Proposed Northern Site Access Left	U	2:1	C2:C	79	90	45	1613	1613	161	27.9%	45	45	1.6
4/2	Proposed Northern Site Access Right	U	2:1	C2:C	79	90	59	1868	1868	187	31.6%	59	59	2.0
Ped Link: P1	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf
Ped Link: P2	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf
Ped Link: P3	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf
Ped Link: P4	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf
J3: Proposed Southern Site Access Junction	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**89.2%**	**-**	**-**	**-**
1/1	Leeds Rd (North) - Before Xing Ahead	U	3:2	C3:G	82	63	835	1965	1965	1670	49.6%	829	829	19.1
1/2	Leeds Rd (North) - Before Xing Ahead	U	3:2	C3:G	82	63	795	2105	2105	1789	44.3%	792	792	0.5
2/1	Leeds Road North Ahead Left	U	3:1	C3:A	1	66	835	1901	1901	1046	79.3%	829	829	27.4
2/2	Leeds Road North Ahead	U	3:1	C3:A	1	66	795	2105	2105	1158	68.4%	792	792	24.2
3/1	Leeds Road South Ahead	U	3:1	C3:B	2	75	873	1960	1960	1209	72.2%	873	873	21.2
3/2+3/3	Leeds Road South Ahead Right	U+O	3:1	C3:B	2	75	1176	2100:1702	2100	1235+102	87.9 : 87.9%	1176	1176	33.9
4/1	Proposed Southern Site Access Left	U	3:1	C3:C	80	114	156	1613	1613	470	33.2%	156	156	4.3
4/2	Proposed Southern Site Access Right	U	3:1	C3:C	80	114	453	1741	1741	508	89.2%	453	453	18.0
5/1	Leeds Road North Exit Ahead	U	3:3	C3:H	83	65	1114	1960	1960	1682	66.2%	1114	1114	6.2
5/2	Leeds Road North Exit Ahead	U	3:3	C3:H	83	65	1298	2100	2100	1802	72.0%	1298	1298	7.4
Ped Link: P1	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf
Ped Link: P2	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf

Full Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf
Ped Link: P4	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf

C1		PRC for Signalled Lanes (%):	-31.3	Total Delay for Signalled Lanes (pcuHr):	299.31	Cycle Time (s): 120
C2	Stream: 1	PRC for Signalled Lanes (%):	0.3	Total Delay for Signalled Lanes (pcuHr):	22.14	Cycle Time (s): 120
C2	Stream: 2	PRC for Signalled Lanes (%):	77.0	Total Delay for Signalled Lanes (pcuHr):	0.99	Cycle Time (s): 120
C3	Stream: 1	PRC for Signalled Lanes (%):	0.9	Total Delay for Signalled Lanes (pcuHr):	31.69	Cycle Time (s): 120
C3	Stream: 2	PRC for Signalled Lanes (%):	81.3	Total Delay for Signalled Lanes (pcuHr):	0.99	Cycle Time (s): 120
C3	Stream: 3	PRC for Signalled Lanes (%):	25.0	Total Delay for Signalled Lanes (pcuHr):	3.21	Cycle Time (s): 120
		PRC Over All Lanes (%):	-31.3	Total Delay Over All Lanes(pcuHr):	358.34	

Full Input Data And Results

Scenario 2: '2030 DS(A+B) PM' (FG2: '2030 DS(A+B) PM', Plan 1: '2019 Base AM')

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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**133.9%**	**-**	**-**	**-**
J1: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**133.9%**	**-**	**-**	**-**
1/1	A653 Leeds Road North Ahead Left	U	N/A	C1:B	11	57	1082	2082	2082	815	132.7%	1082	815	180.2
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	C1:B C1:D	11:46	57	1287	2143:2130	2143	762+202	133.5 : 133.5%	1287	964	216.7
2/1	A653 Leeds Road South Ahead Left	U	N/A	C1:A	112	40	913	2160	2160	882	103.5%	913	882	56.2
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	C1:A C1:C	112	40:0	1054	2197:2170	2197	798+163	104.8 : 133.9%	1054	973	84.8
3/1	Soothill Lane Left Right Ahead	O	N/A	C1:E	65	101	622	1993	1993	468	132.8%	622	468	107.0
4/1	Heybeck Lane Right Left Ahead	O	N/A	C1:F	64	101	353	2194	2194	695	50.8%	353	353	10.0
J2: Proposed Northern Site Access Junction	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**84.2%**	**-**	**-**	**-**
1/1	A653 Leeds Rd (North) - Before Xing Ahead	U	2:2	C2:I	24	6	1185	1965	1965	1687	53.1%	896	896	17.5
1/2	A653 Leeds Rd (North) - Before Xing Ahead	U	2:2	C2:I	24	6	1272	1965	1965	1687	59.2%	999	999	0.9
2/1	A653 Leeds Road (North) Ahead Left	U	2:1	C2:A	101	63	1185	1905	1905	1318	68.0%	896	896	13.5
2/2	A653 Leeds Road (North) Ahead	U	2:1	C2:A	101	63	1272	2105	2105	1456	68.6%	999	999	17.8
3/1	A653 Leeds Road (South) Ahead	U	2:1	C2:B	118	72	808	1960	1960	1225	66.0%	808	808	10.5

Full Input Data And Results

3/2+3/3	A653 Leeds Road (South) Ahead Right	U+O	2:1	C2:B	118	72	1103	2100:1827	2100	1114+236	81.7 : 81.7%	1103	1103	26.0
4/1	Proposed Northern Site Access Left	U	2:1	C2:C	77	95	193	1613	1613	255	75.6%	193	193	7.6
4/2	Proposed Northern Site Access Right	U	2:1	C2:C	77	95	249	1868	1868	296	84.2%	249	249	10.4
Ped Link: P1	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf
Ped Link: P2	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf
Ped Link: P3	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf
Ped Link: P4	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf
J3: Proposed Southern Site Access Junction	**-**	**-**	**N/A**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**82.1%**	**-**	**-**	**-**
1/1	Leeds Rd (North) - Before Xing Ahead	U	3:2	C3:G	9	110	1235	1965	1965	1670	56.6%	945	945	13.1
1/2	Leeds Rd (North) - Before Xing Ahead	U	3:2	C3:G	9	110	1166	2105	2105	1789	53.2%	953	953	14.2
2/1	Leeds Road North Ahead Left	U	3:1	C3:A	7	79	1235	1891	1891	1150	82.1%	945	945	18.3
2/2	Leeds Road North Ahead	U	3:1	C3:A	7	79	1166	2105	2105	1281	74.4%	953	953	21.4
3/1	Leeds Road South Ahead	U	3:1	C3:B	8	88	692	1960	1960	1323	52.3%	692	692	12.1
3/2+3/3	Leeds Road South Ahead Right	U+O	3:1	C3:B	8	88	1052	2100:1702	2100	1322+150	71.5 : 71.5%	1052	1052	19.6
4/1	Proposed Southern Site Access Left	U	3:1	C3:C	93	0	118	1613	1613	376	31.4%	118	118	3.5
4/2	Proposed Southern Site Access Right	U	3:1	C3:C	93	0	274	1741	1741	406	67.4%	274	274	9.3
5/1	Leeds Road North Exit Ahead	U	3:3	C3:H	8	110	808	1960	1960	1682	48.0%	808	808	1.9
5/2	Leeds Road North Exit Ahead	U	3:3	C3:H	8	110	1103	2100	2100	1802	61.2%	1103	1103	2.7
Ped Link: P1	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf
Ped Link: P2	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf

Full Input Data And Results

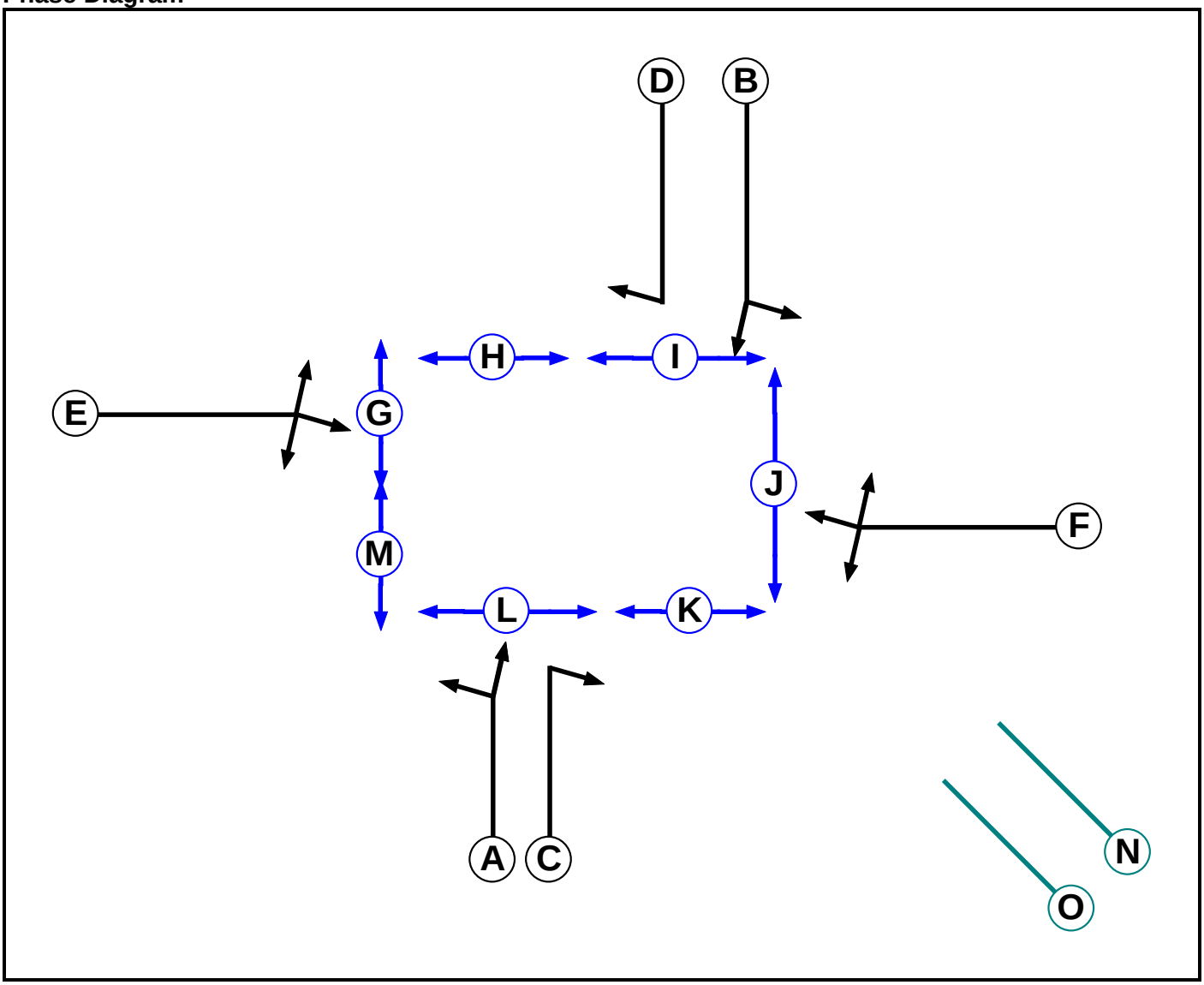
Ped Link: P3	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf
Ped Link: P4	Unnamed Ped Link	-	-		-	-	0	-	-	0	0.0%	0	0	Inf

C1		PRC for Signalled Lanes (%):	-48.8	Total Delay for Signalled Lanes (pcuHr):	562.88	Cycle Time (s): 120
C2	Stream: 1	PRC for Signalled Lanes (%):	6.9	Total Delay for Signalled Lanes (pcuHr):	27.77	Cycle Time (s): 120
C2	Stream: 2	PRC for Signalled Lanes (%):	52.0	Total Delay for Signalled Lanes (pcuHr):	1.35	Cycle Time (s): 120
C3	Stream: 1	PRC for Signalled Lanes (%):	9.6	Total Delay for Signalled Lanes (pcuHr):	20.78	Cycle Time (s): 120
C3	Stream: 2	PRC for Signalled Lanes (%):	59.1	Total Delay for Signalled Lanes (pcuHr):	3.55	Cycle Time (s): 120
C3	Stream: 3	PRC for Signalled Lanes (%):	47.1	Total Delay for Signalled Lanes (pcuHr):	1.64	Cycle Time (s): 120
		PRC Over All Lanes (%):	-48.8	Total Delay Over All Lanes(pcuHr):	617.97	

Full Input Data And Results

C1

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	7
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Pedestrian		4	4
H	Pedestrian		5	5
I	Pedestrian		6	6
J	Pedestrian		8	8
K	Pedestrian		5	5
L	Pedestrian		6	6
M	Pedestrian		6	6
N	Dummy		3	3
O	Dummy		2	2

Full Input Data And Results

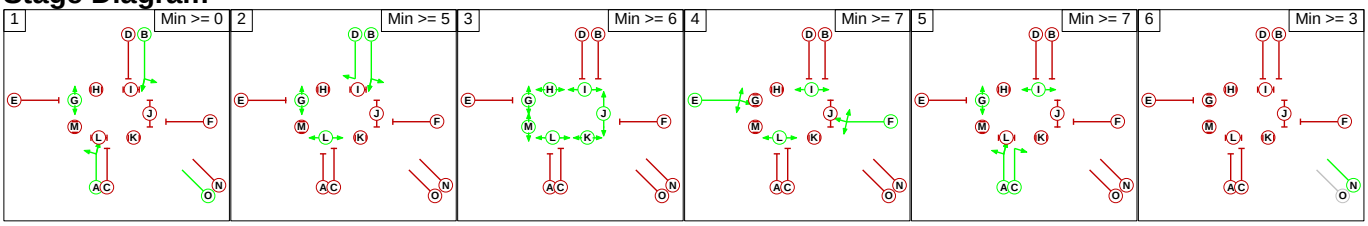
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
A		-	-	6	7	6	-	10	-	-	-	6	9	3	-
B	-		6	-	6	7	-	-	6	9	10	-	-	3	-
C	-	8		6	6	9	-	-	-	12	10	6	-	3	8
D	8	-	6		8	7	-	10	6	-	-	-	13	3	8
E	5	6	5	5		-	5	8	-	8	10	-	-	3	-
F	6	5	5	5	-		-	9	-	5	8	-	9	3	-
G	-	-	-	-	6	-		-	-	-	-	-	-	3	-
H	8	-	-	8	8	8	-		-	-	-	-	-	3	-
I	-	11	-	11	-	-	-	-		-	-	-	-	3	-
J	-	13	13	-	13	13	-	-	-		-	-	-	3	-
K	-	7	7	-	7	7	-	-	-	-		-	-	3	-
L	11	-	11	-	-	-	-	-	-	-	-		-	3	-
M	7	-	-	7	-	7	-	-	-	-	-	-		3	-
N	2	2	2	2	2	2	2	2	2	2	2	2	2		-
O	-	-	2	2	-	-	-	2	2	-	2	2	-	-	

Phases in Stage

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

Stage Diagram



Full Input Data And Results

Phase Delays

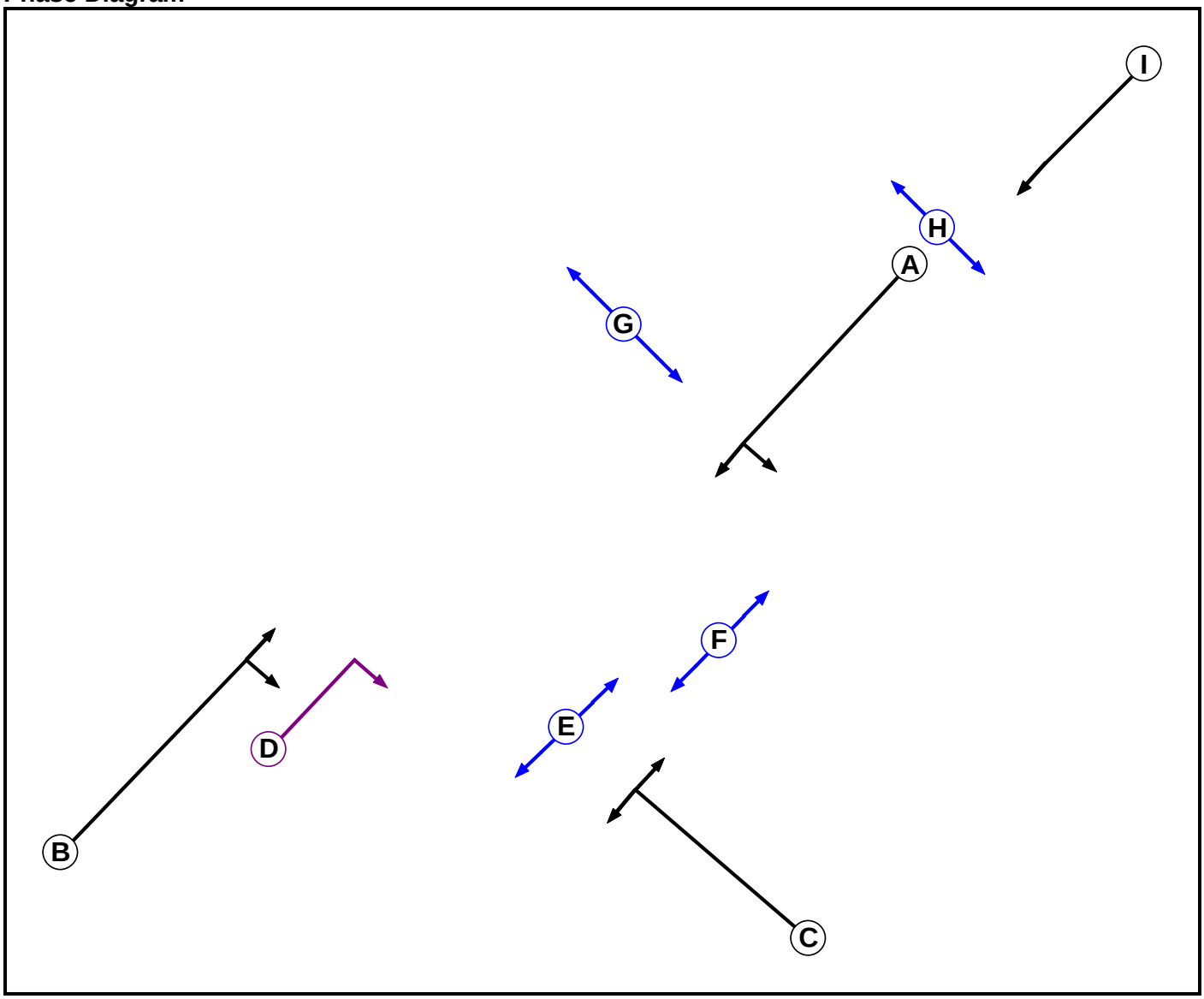
Term. Stage	Start Stage	Phase	Type	Value	Cont value
6	1	A	Gaining relative	3	5
6	1	B	Gaining relative	3	5
6	2	B	Gaining relative	3	5
6	2	D	Gaining relative	3	5
6	4	E	Gaining relative	3	5
6	4	F	Gaining relative	3	5
6	5	A	Gaining relative	3	5
6	5	C	Gaining relative	3	5

Prohibited Stage Change

		To Stage					
		1	2	3	4	5	6
From Stage	1		6	10	7	6	3
	2	11		13	8	11	3
	3	13	13		13	13	3
	4	11	11	10		11	3
	5	11	11	12	9		3
	6	5	5	2	5	5	

C2

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	1		7	7
D	Ind. Arrow	1	B	4	4
E	Pedestrian	1		5	5
F	Pedestrian	1		5	5
G	Pedestrian	1		5	5
H	Pedestrian	2		5	5
I	Traffic	2		7	7

Full Input Data And Results

Phase Intergreens Matrix

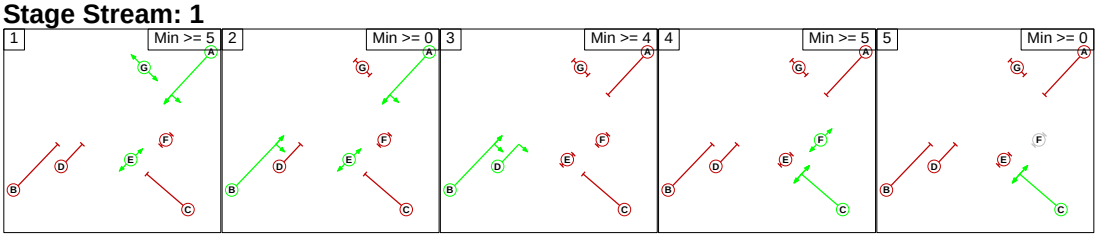
Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I
A		-	5	5	-	8	-	-	-
B	-		5	-	-	10	8	-	-
C	6	7		6	6	-	10	-	-
D	5	-	5		-	10	-	-	-
E	-	-	7	-		-	-	-	-
F	7	7	-	7	-		-	-	-
G	-	8	8	-	-	-		-	-
H	-	-	-	-	-	-	-		8
I	-	-	-	-	-	-	-	5	

Phases in Stage

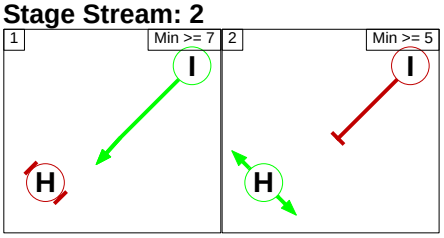
Stream	Stage No.	Phases in Stage
1	1	A E G
1	2	A B E
1	3	B D
1	4	C F
1	5	C
2	1	I
2	2	H

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Full Input Data And Results

Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	4	A	Losing	3	3
1	4	E	Losing	1	1
1	5	A	Losing	3	3
1	5	E	Losing	1	1
2	4	A	Losing	2	2
2	4	B	Losing	2	2
2	5	A	Losing	2	2
2	5	B	Losing	2	2
3	1	E	Gaining absolute	8	8
4	1	C	Losing	1	1
4	2	C	Losing	1	1

Stage Stream: 2

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

Prohibited Stage Change

Stage Stream: 1

		To Stage				
		1	2	3	4	5
From Stage	1		8	X	11	8
	2	8		5	12	7
	3	8	5		10	5
	4	11	8	7		0
	5	10	7	X	0	

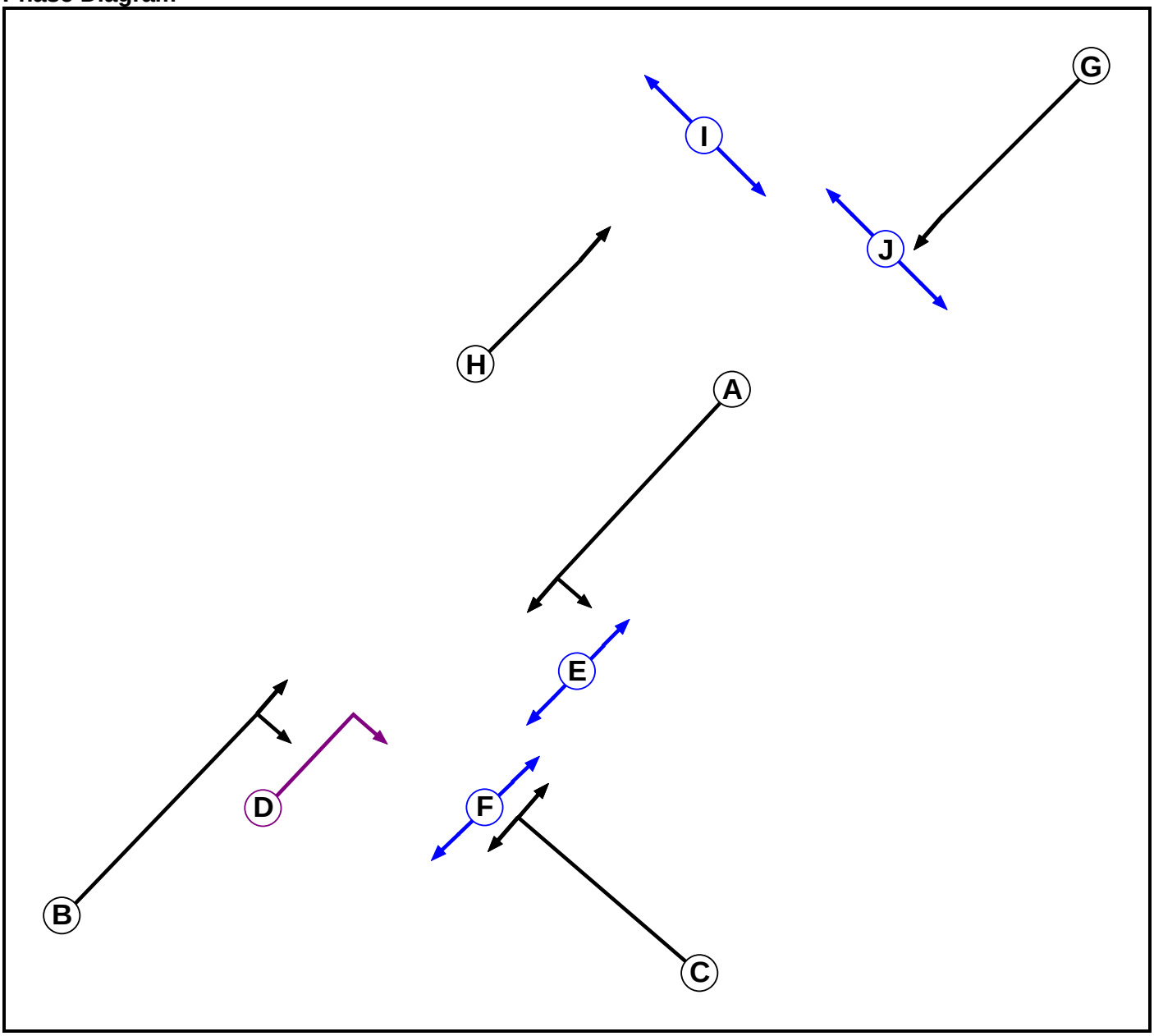
Stage Stream: 2

		To Stage	
		1	2
From Stage	1		5
	2	8	

Full Input Data And Results

C3

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	1		7	7
D	Ind. Arrow	1	B	4	4
E	Pedestrian	1		5	5
F	Pedestrian	1		5	5
G	Traffic	2		7	7
H	Traffic	3		7	7
I	Pedestrian	3		5	5
J	Pedestrian	2		5	5

Phase Intergreens Matrix

		Starting Phase									
		A	B	C	D	E	F	G	H	I	J
Terminating Phase	A		-	5	5	8	-	-	-	-	-
	B	-		5	-	9	-	-	-	-	-
	C	7	8		8	-	6	-	-	-	-
	D	7	-	5		9	-	-	-	-	-
	E	7	7	-	7		-	-	-	-	-
	F	-	-	8	-	-		-	-	-	-
	G	-	-	-	-	-	-		-	-	5
	H	-	-	-	-	-	-	-		5	-
	I	-	-	-	-	-	-	-	8		-
	J	-	-	-	-	-	-	9	-	-	

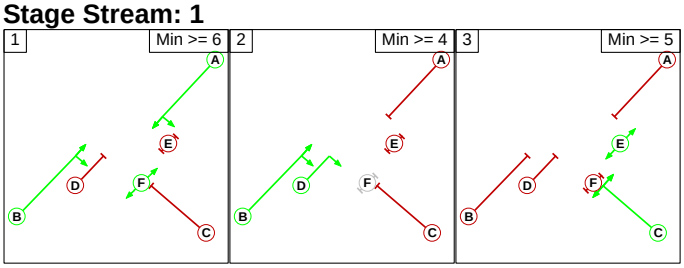
Phases in Stage

Stream	Stage No.	Phases in Stage
1	1	A B F
1	2	B D
1	3	C E
2	1	G
2	2	J
3	1	H
3	2	I

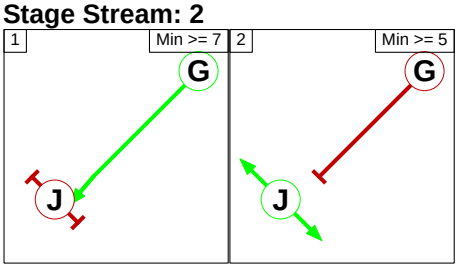
Full Input Data And Results

Stage Diagram

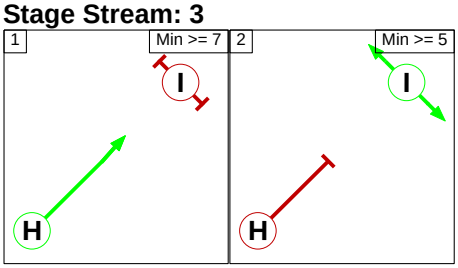
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Phase Delays

Stage Stream: 1

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

Stage Stream: 2

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

Stage Stream: 3

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

Full Input Data And Results

Prohibited Stage Change

Stage Stream: 1

	To Stage			
From Stage		1	2	3
	1		5	12
	2	7		9
	3	8	8	

Stage Stream: 2

	To Stage		
From Stage		1	2
	1		5
	2	9	

Stage Stream: 3

	To Stage		
From Stage		1	2
	1		5
	2	8	

Full Input Data And Results

Give-Way Lane Input Data

Junction: J1: A653 Leeds Road / Heybeck 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-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
J1:3/1 (Soothill Lane)	J1:6/2 (Right)	1439	0	J1:4/1	1.09	To J1:6/2 (Left) To J1:8/1 (Ahead)	3.00	3.00	0.50	3	3.00
J1:4/1 (Heybeck Lane)	J1:5/1 (Right)	1439	0	J1:3/1	1.09	To J1:5/1 (Left) To J1:7/1 (Ahead)	3.00	3.00	0.50	3	3.00

Junction: J2: Proposed Northern Site Access Junction											
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)**
J2:3/3 (A653 Leeds Road (South))	J2:7/1 (Right)	1439	0	J2:2/1	1.09	All	3.00	-	0.50	3	3.00
				J2:2/2	1.09	All					

Junction: J3: Proposed Southern Site Access Junction											
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)**
J3:3/3 (Leeds Road South)	J3:8/1 (Right)	1439	0	J3:2/1	1.09	All	3.00	-	0.50	3	3.00
				J3:2/2	1.09	All					

Full Input Data And Results

Lane Input Data

Junction: J1: A653 Leeds Road / Heybeck 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)**
J1:1/1 (A653 Leeds Road North)	U	B	2	3	60.0	User	2082	-	-	-	-	-
J1:1/2 (A653 Leeds Road North)	U	B	2	3	60.0	User	2143	-	-	-	-	-
J1:1/3 (A653 Leeds Road North)	U	D	2	3	16.0	User	2130	-	-	-	-	-
J1:2/1 (A653 Leeds Road South)	U	A	2	3	60.0	User	2160	-	-	-	-	-
J1:2/2 (A653 Leeds Road South)	U	A	2	3	60.0	User	2197	-	-	-	-	-
J1:2/3 (A653 Leeds Road South)	U	C	2	3	15.0	User	2170	-	-	-	-	-
J1:3/1 (Soothill Lane)	O	E	2	3	60.0	User	1993	-	-	-	-	-
J1:4/1 (Heybeck Lane)	O	F	2	3	60.0	User	2194	-	-	-	-	-
J1:5/1 (A653 Leeds Road North - EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:6/1 (A653 Leeds Road South - EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:6/2 (A653 Leeds Road South - EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:7/1 (Heybeck Lane - EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:8/1 (Soothill Lane - EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Junction: J2: Proposed Northern Site Access Junction												
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)**
J2:1/1 (A653 Leeds Rd (North) - Before Xing)	U	I	2	3	60.0	Geom	-	3.50	0.00	Y	Arm J2:2 Ahead	Inf
J2:1/2 (A653 Leeds Rd (North) - Before Xing)	U	I	2	3	60.0	Geom	-	3.50	0.00	Y	Arm J2:2 Ahead	Inf
J2:2/1 (A653 Leeds Road (North))	U	A	2	3	1.0	Geom	-	3.50	0.00	Y	Arm J2:6 Ahead	Inf
											Arm J2:7 Left	10.00
J2:2/2 (A653 Leeds Road (North))	U	A	2	3	1.0	Geom	-	3.50	0.00	N	Arm J2:6 Ahead	Inf
J2:3/1 (A653 Leeds Road (South))	U	B	2	3	22.6	Geom	-	3.45	0.00	Y	Arm J2:5 Ahead	Inf
J2:3/2 (A653 Leeds Road (South))	U	B	2	3	22.6	Geom	-	3.45	0.00	N	Arm J2:5 Ahead	Inf
J2:3/3 (A653 Leeds Road (South))	O	B D	2	3	9.0	Geom	-	3.00	0.00	N	Arm J2:7 Right	12.00
J2:4/1 (Proposed Northern Site Access)	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J2:6 Left	8.00
J2:4/2 (Proposed Northern Site Access)	U	C	2	3	60.0	Geom	-	3.00	0.00	N	Arm J2:5 Right	15.00
J2:5/1 (A653 Leeds Road (North) EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:5/2 (A653 Leeds Road (North) EXIT)	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:6/1 (A653 Leeds Road (South) - EXIT)	U		2	3	26.1	Inf	-	-	-	-	-	-
J2:6/2 (A653 Leeds Road (South) - EXIT)	U		2	3	26.1	Inf	-	-	-	-	-	-

J2:7/1 (Proposed Northern Site Access Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Junction: J3: Proposed Southern Site Access Junction												
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)**
J3:1/1 (Leeds Rd (North) - Before Xing)	U	G	2	3	26.1	Geom	-	3.50	0.00	Y	Arm J3:2 Ahead	Inf
J3:1/2 (Leeds Rd (North) - Before Xing)	U	G	2	3	26.1	Geom	-	3.50	0.00	N	Arm J3:2 Ahead	Inf
J3:2/1 (Leeds Road North)	U	A	2	3	2.0	Geom	-	3.50	0.00	Y	Arm J3:7 Ahead	Inf
											Arm J3:8 Left	10.00
J3:2/2 (Leeds Road North)	U	A	2	3	2.0	Geom	-	3.50	0.00	N	Arm J3:7 Ahead	Inf
J3:3/1 (Leeds Road South)	U	B	2	3	60.0	Geom	-	3.45	0.00	Y	Arm J3:5 Ahead	Inf
J3:3/2 (Leeds Road South)	U	B	2	3	60.0	Geom	-	3.45	0.00	N	Arm J3:5 Ahead	Inf
J3:3/3 (Leeds Road South)	O	B D	2	3	20.0	Geom	-	3.00	0.00	Y	Arm J3:8 Right	12.00
J3:4/1 (Proposed Southern Site Access)	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J3:7 Left	8.00
J3:4/2 (Proposed Southern Site Access)	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J3:5 Right	15.00
J3:5/1 (Leeds Road North Exit)	U	H	2	3	60.0	Geom	-	3.45	0.00	Y	Arm J3:6 Ahead	Inf
J3:5/2 (Leeds Road North Exit)	U	H	2	3	60.0	Geom	-	3.45	0.00	N	Arm J3:6 Ahead	Inf
J3:6/1 (Leeds Rd (North) - After Xing)	U		2	3	26.1	Inf	-	-	-	-	-	-
J3:6/2 (Leeds Rd (North) - After Xing)	U		2	3	26.1	Inf	-	-	-	-	-	-
J3:7/1 (Leeds Road South Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

J3:7/2 (Leeds Road South Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
J3:8/1 (Proposed Southern Site Access Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2030 DS(A+B) AM'	07:30	08:30	01:00	
2: '2030 DS(A+B) PM'	16:30	17:30	01:00	

Full Input Data And Results

Scenario 1: '2030 DS(A+B) AM' (FG1: '2030 DS(A+B) AM', Plan 1: '2019 Base AM')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	193	84	1068	132	37	1514
	B	187	0	218	49	47	19	520
	C	61	161	0	280	9	3	514
	D	1569	119	226	0	90	45	2049
	E	334	98	21	156	0	0	609
	F	37	19	3	45	0	0	104
	Tot.	2188	590	552	1598	278	104	5310

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2030 DS(A+B) AM
Junction: J1: A653 Leeds Road / Heybeck Lane	
J1:1/1	697
J1:1/2 (with short)	817(In) 624(Out)
J1:1/3 (short)	193
J1:2/1	1149
J1:2/2 (with short)	1277(In) 1027(Out)
J1:2/3 (short)	250
J1:3/1	520
J1:4/1	514
J1:5/1	2188
J1:6/1	613
J1:6/2	1031
J1:7/1	552
J1:8/1	590
Junction: J2: Proposed Northern Site Access Junction	
J2:1/1	780
J2:1/2	864
J2:2/1	780
J2:2/2	864
J2:3/1	1114
J2:3/2 (with short)	1298(In) 1253(Out)
J2:3/3 (short)	45
J2:4/1	45
J2:4/2	59
J2:5/1	1149
J2:5/2	1277
J2:6/1	722
J2:6/2	908
J2:7/1	104
Junction: J3: Proposed Southern Site Access Junction	
J3:1/1	835
J3:1/2	795
J3:2/1	835
J3:2/2	795
J3:3/1	873
J3:3/2 (with short)	1176(In) 1086(Out)

Full Input Data And Results

J3:3/3 (short)	90
J3:4/1	156
J3:4/2	453
J3:5/1	1114
J3:5/2	1298
J3:6/1	1114
J3:6/2	1298
J3:7/1	725
J3:7/2	873
J3:8/1	278

Lane Saturation Flows

Junction: J1: A653 Leeds Road / Heybeck Lane

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A653 Leeds Road North Lane 1)	This lane uses a directly entered Saturation Flow						2082	2082
J1:1/2 (A653 Leeds Road North Lane 2)	This lane uses a directly entered Saturation Flow						2143	2143
J1:1/3 (A653 Leeds Road North Lane 3)	This lane uses a directly entered Saturation Flow						2130	2130
J1:2/1 (A653 Leeds Road South Lane 1)	This lane uses a directly entered Saturation Flow						2160	2160
J1:2/2 (A653 Leeds Road South Lane 2)	This lane uses a directly entered Saturation Flow						2197	2197
J1:2/3 (A653 Leeds Road South Lane 3)	This lane uses a directly entered Saturation Flow						2170	2170
J1:3/1 (Soothill Lane Lane 1)	This lane uses a directly entered Saturation Flow						1993	1993
J1:4/1 (Heybeck Lane Lane 1)	This lane uses a directly entered Saturation Flow						2194	2194
J1:5/1 (A653 Leeds Road North - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A653 Leeds Road South - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A653 Leeds Road South - EXIT Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Heybeck Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1 (Soothill Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: Proposed Northern Site Access Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A653 Leeds Rd (North) - Before Xing)	3.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1965	1965
J2:1/2 (A653 Leeds Rd (North) - Before Xing)	3.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1965	1965
J2:2/1 (A653 Leeds Road (North))	3.50	0.00	Y	Arm J2:6 Ahead	Inf	92.4 %	1943	1943
				Arm J2:7 Left	10.00	7.6 %		
J2:2/2 (A653 Leeds Road (North))	3.50	0.00	N	Arm J2:6 Ahead	Inf	100.0 %	2105	2105
J2:3/1 (A653 Leeds Road (South))	3.45	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	1960	1960
J2:3/2 (A653 Leeds Road (South))	3.45	0.00	N	Arm J2:5 Ahead	Inf	100.0 %	2100	2100
J2:3/3 (A653 Leeds Road (South))	3.00	0.00	N	Arm J2:7 Right	12.00	100.0 %	1827	1827
J2:4/1 (Proposed Northern Site Access)	3.00	0.00	Y	Arm J2:6 Left	8.00	100.0 %	1613	1613
J2:4/2 (Proposed Northern Site Access)	3.00	0.00	N	Arm J2:5 Right	15.00	100.0 %	1868	1868
J2:5/1 (A653 Leeds Road (North) EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/2 (A653 Leeds Road (North) EXIT Lane 2)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (A653 Leeds Road (South) - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (A653 Leeds Road (South) - EXIT Lane 2)	Infinite Saturation Flow						Inf	Inf
J2:7/1 (Proposed Northern Site Access Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J3: Proposed Southern Site Access Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (Leeds Rd (North) - Before Xing)	3.50	0.00	Y	Arm J3:2 Ahead	Inf	100.0 %	1965	1965
J3:1/2 (Leeds Rd (North) - Before Xing)	3.50	0.00	N	Arm J3:2 Ahead	Inf	100.0 %	2105	2105
J3:2/1 (Leeds Road North)	3.50	0.00	Y	Arm J3:7 Ahead	Inf	77.5 %	1901	1901
				Arm J3:8 Left	10.00	22.5 %		
J3:2/2 (Leeds Road North)	3.50	0.00	N	Arm J3:7 Ahead	Inf	100.0 %	2105	2105
J3:3/1 (Leeds Road South)	3.45	0.00	Y	Arm J3:5 Ahead	Inf	100.0 %	1960	1960
J3:3/2 (Leeds Road South)	3.45	0.00	N	Arm J3:5 Ahead	Inf	100.0 %	2100	2100
J3:3/3 (Leeds Road South)	3.00	0.00	Y	Arm J3:8 Right	12.00	100.0 %	1702	1702
J3:4/1 (Proposed Southern Site Access)	3.00	0.00	Y	Arm J3:7 Left	8.00	100.0 %	1613	1613
J3:4/2 (Proposed Southern Site Access)	3.00	0.00	Y	Arm J3:5 Right	15.00	100.0 %	1741	1741
J3:5/1 (Leeds Road North Exit)	3.45	0.00	Y	Arm J3:6 Ahead	Inf	100.0 %	1960	1960
J3:5/2 (Leeds Road North Exit)	3.45	0.00	N	Arm J3:6 Ahead	Inf	100.0 %	2100	2100
J3:6/1 (Leeds Rd (North) - After Xing Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:6/2 (Leeds Rd (North) - After Xing Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:7/1 (Leeds Road South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:7/2 (Leeds Road South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:8/1 (Proposed Southern Site Access Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2030 DS(A+B) PM' (FG2: '2030 DS(A+B) PM', Plan 1: '2019 Base AM')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	270	139	1565	239	156	2369
	B	175	0	146	152	69	80	622
	C	39	118	0	168	15	13	353
	D	1110	142	192	0	107	193	1744
	E	196	65	13	118	0	0	392
	F	156	80	13	193	0	0	442
	Tot.	1676	675	503	2196	430	442	5922

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2030 DS(A+B) PM
Junction: J1: A653 Leeds Road / Heybeck Lane	
J1:1/1	1082
J1:1/2 (with short)	1287(In) 1017(Out)
J1:1/3 (short)	270
J1:2/1	913
J1:2/2 (with short)	1054(In) 836(Out)
J1:2/3 (short)	218
J1:3/1	622
J1:4/1	353
J1:5/1	1676
J1:6/1	943
J1:6/2	1514
J1:7/1	503
J1:8/1	675
Junction: J2: Proposed Northern Site Access Junction	
J2:1/1	1185
J2:1/2	1272
J2:2/1	1185
J2:2/2	1272
J2:3/1	808
J2:3/2 (with short)	1103(In) 910(Out)
J2:3/3 (short)	193
J2:4/1	193
J2:4/2	249
J2:5/1	913
J2:5/2	1054
J2:6/1	952
J2:6/2	1449
J2:7/1	442
Junction: J3: Proposed Southern Site Access Junction	
J3:1/1	1235
J3:1/2	1166
J3:2/1	1235
J3:2/2	1166
J3:3/1	692
J3:3/2 (with short)	1052(In) 945(Out)

J3:3/3 (short)	107
J3:4/1	118
J3:4/2	274
J3:5/1	808
J3:5/2	1103
J3:6/1	808
J3:6/2	1103
J3:7/1	971
J3:7/2	1225
J3:8/1	430

Lane Saturation Flows

Junction: J1: A653 Leeds Road / Heybeck Lane

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
J1:1/1 (A653 Leeds Road North Lane 1)	This lane uses a directly entered Saturation Flow						2082	2082
J1:1/2 (A653 Leeds Road North Lane 2)	This lane uses a directly entered Saturation Flow						2143	2143
J1:1/3 (A653 Leeds Road North Lane 3)	This lane uses a directly entered Saturation Flow						2130	2130
J1:2/1 (A653 Leeds Road South Lane 1)	This lane uses a directly entered Saturation Flow						2160	2160
J1:2/2 (A653 Leeds Road South Lane 2)	This lane uses a directly entered Saturation Flow						2197	2197
J1:2/3 (A653 Leeds Road South Lane 3)	This lane uses a directly entered Saturation Flow						2170	2170
J1:3/1 (Soothill Lane Lane 1)	This lane uses a directly entered Saturation Flow						1993	1993
J1:4/1 (Heybeck Lane Lane 1)	This lane uses a directly entered Saturation Flow						2194	2194
J1:5/1 (A653 Leeds Road North - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/1 (A653 Leeds Road South - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:6/2 (A653 Leeds Road South - EXIT Lane 2)	Infinite Saturation Flow						Inf	Inf
J1:7/1 (Heybeck Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J1:8/1 (Soothill Lane - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Junction: J2: Proposed Northern Site Access Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (A653 Leeds Rd (North) - Before Xing)	3.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1965	1965
J2:1/2 (A653 Leeds Rd (North) - Before Xing)	3.50	0.00	Y	Arm J2:2 Ahead	Inf	100.0 %	1965	1965
J2:2/1 (A653 Leeds Road (North))	3.50	0.00	Y	Arm J2:6 Ahead	Inf	79.0 %	1905	1905
				Arm J2:7 Left	10.00	21.0 %		
J2:2/2 (A653 Leeds Road (North))	3.50	0.00	N	Arm J2:6 Ahead	Inf	100.0 %	2105	2105
J2:3/1 (A653 Leeds Road (South))	3.45	0.00	Y	Arm J2:5 Ahead	Inf	100.0 %	1960	1960
J2:3/2 (A653 Leeds Road (South))	3.45	0.00	N	Arm J2:5 Ahead	Inf	100.0 %	2100	2100
J2:3/3 (A653 Leeds Road (South))	3.00	0.00	N	Arm J2:7 Right	12.00	100.0 %	1827	1827
J2:4/1 (Proposed Northern Site Access)	3.00	0.00	Y	Arm J2:6 Left	8.00	100.0 %	1613	1613
J2:4/2 (Proposed Northern Site Access)	3.00	0.00	N	Arm J2:5 Right	15.00	100.0 %	1868	1868
J2:5/1 (A653 Leeds Road (North) EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:5/2 (A653 Leeds Road (North) EXIT Lane 2)	Infinite Saturation Flow						Inf	Inf
J2:6/1 (A653 Leeds Road (South) - EXIT Lane 1)	Infinite Saturation Flow						Inf	Inf
J2:6/2 (A653 Leeds Road (South) - EXIT Lane 2)	Infinite Saturation Flow						Inf	Inf
J2:7/1 (Proposed Northern Site Access Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

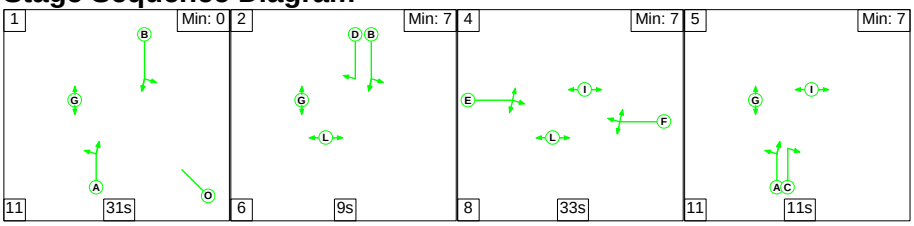
Junction: J3: Proposed Southern Site Access Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J3:1/1 (Leeds Rd (North) - Before Xing)	3.50	0.00	Y	Arm J3:2 Ahead	Inf	100.0 %	1965	1965
J3:1/2 (Leeds Rd (North) - Before Xing)	3.50	0.00	N	Arm J3:2 Ahead	Inf	100.0 %	2105	2105
J3:2/1 (Leeds Road North)	3.50	0.00	Y	Arm J3:7 Ahead	Inf	73.8 %	1891	1891
				Arm J3:8 Left	10.00	26.2 %		
J3:2/2 (Leeds Road North)	3.50	0.00	N	Arm J3:7 Ahead	Inf	100.0 %	2105	2105
J3:3/1 (Leeds Road South)	3.45	0.00	Y	Arm J3:5 Ahead	Inf	100.0 %	1960	1960
J3:3/2 (Leeds Road South)	3.45	0.00	N	Arm J3:5 Ahead	Inf	100.0 %	2100	2100
J3:3/3 (Leeds Road South)	3.00	0.00	Y	Arm J3:8 Right	12.00	100.0 %	1702	1702
J3:4/1 (Proposed Southern Site Access)	3.00	0.00	Y	Arm J3:7 Left	8.00	100.0 %	1613	1613
J3:4/2 (Proposed Southern Site Access)	3.00	0.00	Y	Arm J3:5 Right	15.00	100.0 %	1741	1741
J3:5/1 (Leeds Road North Exit)	3.45	0.00	Y	Arm J3:6 Ahead	Inf	100.0 %	1960	1960
J3:5/2 (Leeds Road North Exit)	3.45	0.00	N	Arm J3:6 Ahead	Inf	100.0 %	2100	2100
J3:6/1 (Leeds Rd (North) - After Xing Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:6/2 (Leeds Rd (North) - After Xing Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:7/1 (Leeds Road South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
J3:7/2 (Leeds Road South Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
J3:8/1 (Proposed Southern Site Access Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 1: '2030 DS(A+B) AM' (FG1: '2030 DS(A+B) AM', Plan 1: '2019 Base AM')

C1

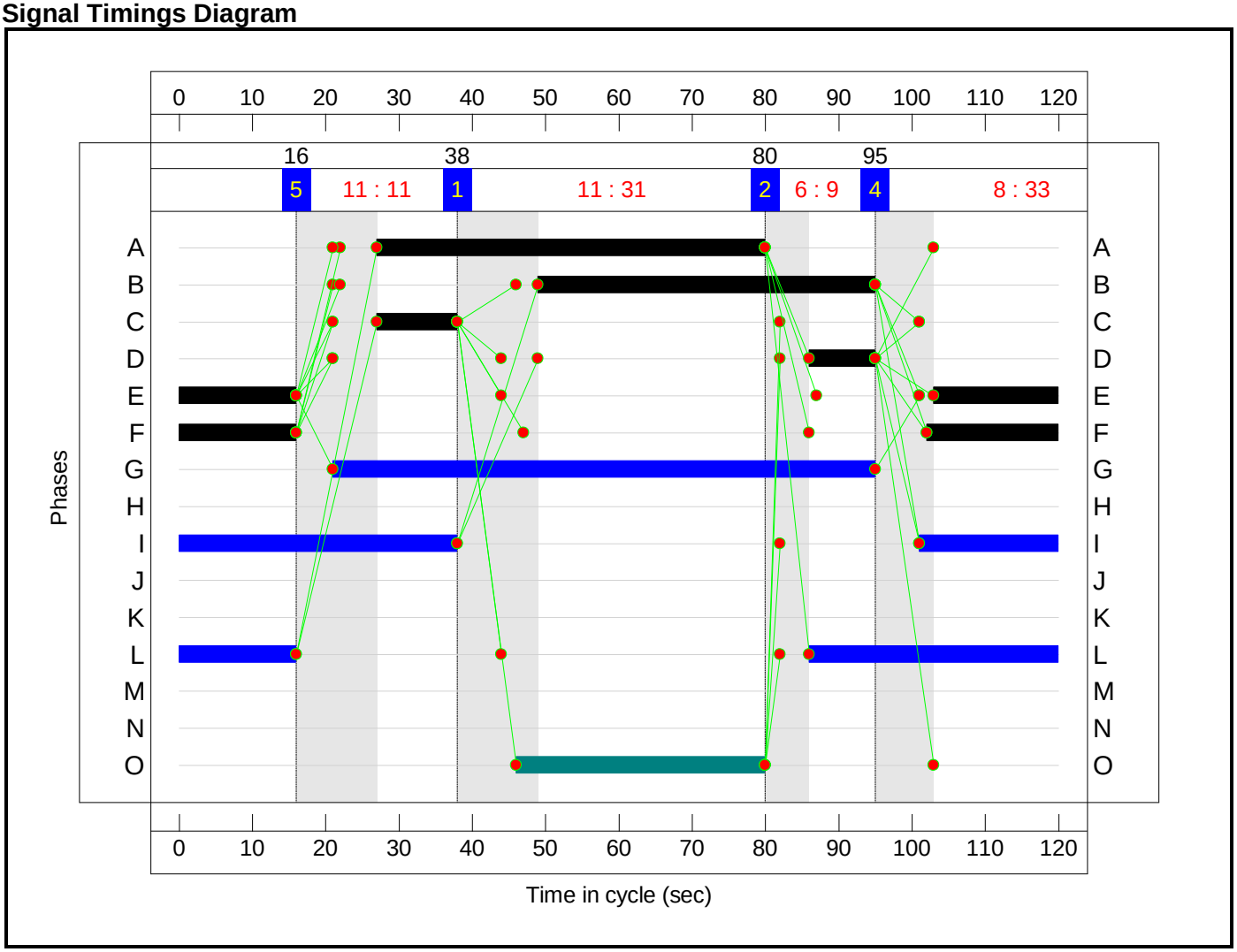
Stage Sequence Diagram



Stage Timings

Stage	1	2	4	5
Duration	31	9	33	11
Change Point	38	80	95	16

Signal Timings Diagram

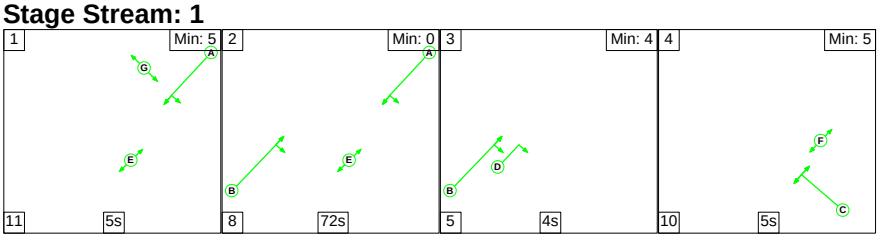


Full Input Data And Results

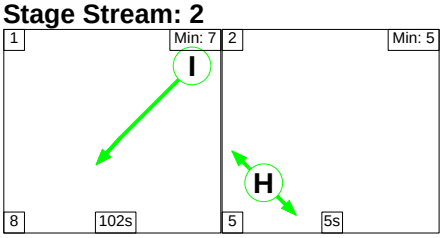
C2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

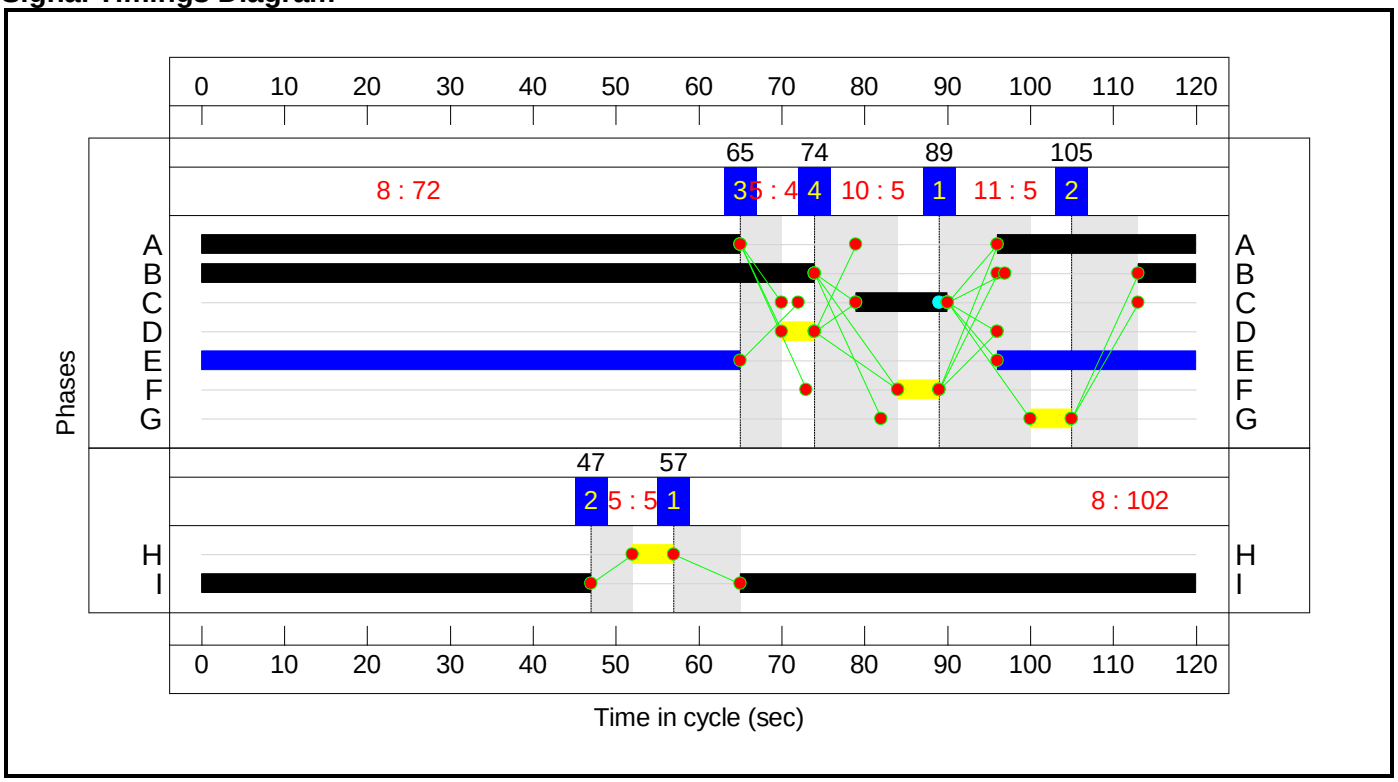
Stage Stream: 1

Stage	1	2	3	4
Duration	5	72	4	5
Change Point	89	105	65	74

Stage Stream: 2

Stage	1	2
Duration	102	5
Change Point	57	47

Signal Timings Diagram



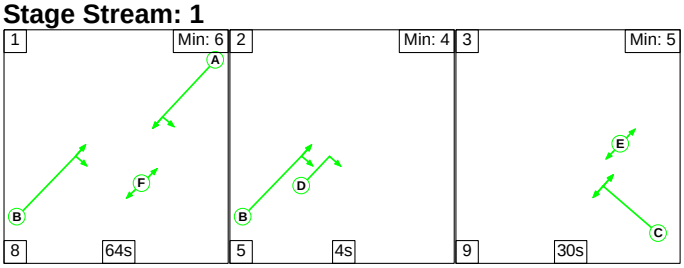
Full Input Data And Results

Full Input Data And Results

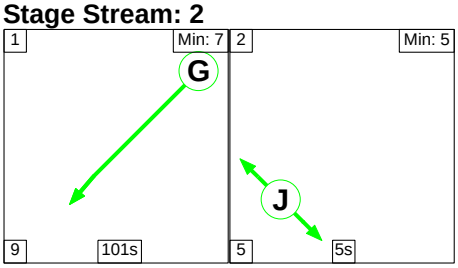
C3

Stage Sequence Diagram

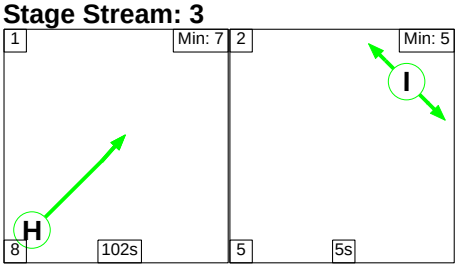
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2	3
Duration	64	4	30
Change Point	114	66	75

Stage Stream: 2

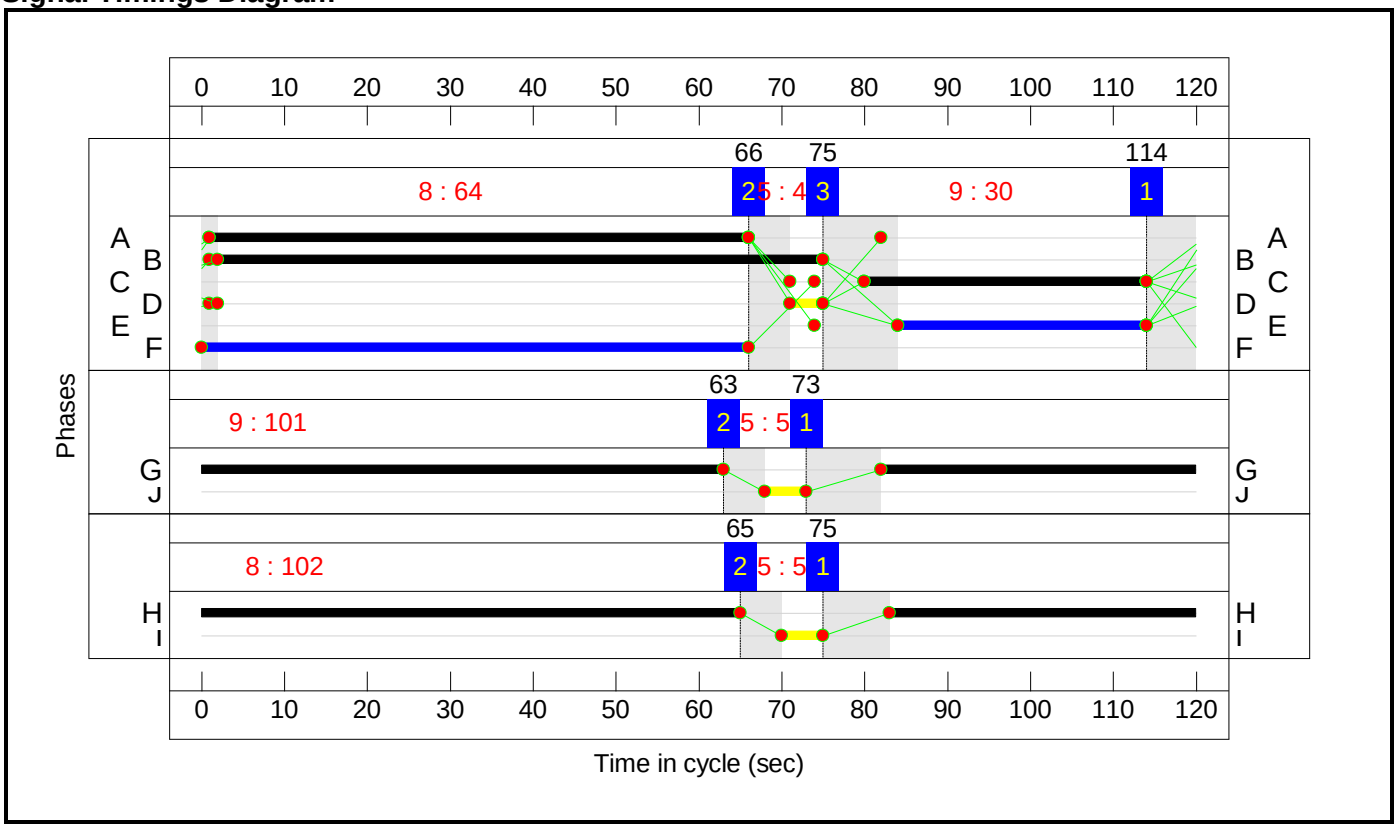
Stage	1	2
Duration	101	5
Change Point	73	63

Stage Stream: 3

Stage	1	2
Duration	102	5
Change Point	75	65

Full Input Data And Results

Signal Timings Diagram



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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**118.2%**
J1: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**118.2%**
1/1	A653 Leeds Road North Ahead Left	U	N/A	N/A	C1:B		1	46	-	697	2082	815	85.5%
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	N/A	C1:B C1:D		1	46:9	-	817	2143:2130	752+178	82.9 : 108.7%
2/1	A653 Leeds Road South Ahead Left	U	N/A	N/A	C1:A		1	53	-	1149	2160	972	118.2%
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	N/A	C1:A C1:C		1	53:11	-	1277	2197:2170	876+213	117.2 : 117.2%
3/1	Soothill Lane Left Right Ahead	O	N/A	N/A	C1:E		1	33	-	520	1993	473	109.9%
4/1	Heybeck Lane Right Left Ahead	O	N/A	N/A	C1:F		1	34	-	514	2194	619	83.1%
5/1	A653 Leeds Road North - EXIT	U	N/A	N/A	-		-	-	-	2188	Inf	Inf	0.0%
6/1	A653 Leeds Road South - EXIT Ahead	U	N/A	N/A	-		-	-	-	613	Inf	Inf	0.0%
6/2	A653 Leeds Road South - EXIT Ahead	U	N/A	N/A	-		-	-	-	1031	Inf	Inf	0.0%
7/1	Heybeck Lane - EXIT	U	N/A	N/A	-		-	-	-	552	Inf	Inf	0.0%
8/1	Soothill Lane - EXIT	U	N/A	N/A	-		-	-	-	590	Inf	Inf	0.0%
J2: Proposed Northern Site Access Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**89.8%**

Full Input Data And Results

1/1	A653 Leeds Rd (North) - Before Xing Ahead	U	2:2	N/A	C2:I		1	102	-	780	1965	1687	46.0%
1/2	A653 Leeds Rd (North) - Before Xing Ahead	U	2:2	N/A	C2:I		1	102	-	864	1965	1687	50.9%
2/1	A653 Leeds Road (North) Ahead Left	U	2:1	N/A	C2:A		1	89	-	780	1943	1457	53.2%
2/2	A653 Leeds Road (North) Ahead	U	2:1	N/A	C2:A		1	89	-	864	2105	1579	54.3%
3/1	A653 Leeds Road (South) Ahead	U	2:1	N/A	C2:B		1	81	-	1114	1960	1339	83.2%
3/2+3/3	A653 Leeds Road (South) Ahead Right	U+O	2:1	N/A	C2:B	C2:D	1	81	4	1298	2100:1827	1396+50	89.8 : 89.8%
4/1	Proposed Northern Site Access Left	U	2:1	N/A	C2:C		1	11	-	45	1613	161	27.9%
4/2	Proposed Northern Site Access Right	U	2:1	N/A	C2:C		1	11	-	59	1868	187	31.6%
5/1	A653 Leeds Road (North) EXIT Ahead	U	N/A	N/A	-		-	-	-	1149	Inf	Inf	0.0%
5/2	A653 Leeds Road (North) EXIT Ahead	U	N/A	N/A	-		-	-	-	1277	Inf	Inf	0.0%
6/1	A653 Leeds Road (South) - EXIT Ahead	U	N/A	N/A	-		-	-	-	722	Inf	Inf	0.0%
6/2	A653 Leeds Road (South) - EXIT Ahead	U	N/A	N/A	-		-	-	-	908	Inf	Inf	0.0%
7/1	Proposed Northern Site Access Exit	U	N/A	N/A	-		-	-	-	104	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
J3: Proposed Southern Site Access Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**89.2%**
1/1	Leeds Rd (North) - Before Xing Ahead	U	3:2	N/A	C3:G		1	101	-	835	1965	1670	49.6%
1/2	Leeds Rd (North) - Before Xing Ahead	U	3:2	N/A	C3:G		1	101	-	795	2105	1789	44.3%
2/1	Leeds Road North Ahead Left	U	3:1	N/A	C3:A		1	65	-	835	1901	1046	79.3%
2/2	Leeds Road North Ahead	U	3:1	N/A	C3:A		1	65	-	795	2105	1158	68.4%
3/1	Leeds Road South Ahead	U	3:1	N/A	C3:B		1	73	-	873	1960	1209	72.2%
3/2+3/3	Leeds Road South Ahead Right	U+O	3:1	N/A	C3:B	C3:D	1	73	4	1176	2100:1702	1235+102	87.9 : 87.9%
4/1	Proposed Southern Site Access Left	U	3:1	N/A	C3:C		1	34	-	156	1613	470	33.2%
4/2	Proposed Southern Site Access Right	U	3:1	N/A	C3:C		1	34	-	453	1741	508	89.2%
5/1	Leeds Road North Exit Ahead	U	3:3	N/A	C3:H		1	102	-	1114	1960	1682	66.2%
5/2	Leeds Road North Exit Ahead	U	3:3	N/A	C3:H		1	102	-	1298	2100	1802	72.0%
6/1	Leeds Rd (North) - After Xing Ahead	U	N/A	N/A	-		-	-	-	1114	Inf	Inf	0.0%

Full Input Data And Results

6/2	Leeds Rd (North) - After Xing Ahead	U	N/A	N/A	-		-	-	-	1298	Inf	Inf	0.0%
7/1	Leeds Road South Exit	U	N/A	N/A	-		-	-	-	725	Inf	Inf	0.0%
7/2	Leeds Road South Exit	U	N/A	N/A	-		-	-	-	873	Inf	Inf	0.0%
8/1	Proposed Southern Site Access Exit	U	N/A	N/A	-		-	-	-	278	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**250**	**10**	**41**	**99.7**	**257.0**	**1.6**	**358.3**	**-**	**-**	**-**	**-**
J1: A653 Leeds Road / Heybeck Lane	**-**	**-**	**129**	**0**	**36**	**65.5**	**233.1**	**0.7**	**299.3**	**-**	**-**	**-**	**-**
1/1	697	697	-	-	-	6.5	2.8	-	9.3	47.9	21.1	2.8	23.9
1/2+1/3	817	801	-	-	-	9.0	11.2	-	20.2	88.9	18.7	11.2	29.9
2/1	1149	972	-	-	-	15.8	91.6	-	107.4	336.6	45.4	91.6	137.0
2/2+2/3	1277	1106	-	-	-	19.6	97.2	-	116.7	329.1	50.2	97.2	147.3
3/1	520	473	71	0	34	9.1	28.0	0.4	37.5	259.6	18.9	28.0	46.9
4/1	514	514	58	0	3	5.6	2.4	0.2	8.2	57.4	15.8	2.4	18.2
5/1	1880	1880	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	613	613	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1021	1021	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	499	499	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	550	550	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Proposed Northern Site Access Junction	**-**	**-**	**38**	**5**	**2**	**14.0**	**9.1**	**0.1**	**23.1**	**-**	**-**	**-**	**-**
1/1	776	776	-	-	-	0.0	0.4	-	0.4	2.0	0.2	0.4	0.6
1/2	858	858	-	-	-	0.0	0.5	-	0.6	2.3	12.0	0.5	12.6
2/1	776	776	-	-	-	4.3	0.6	-	4.9	22.8	22.8	0.6	23.3
2/2	858	858	-	-	-	4.1	0.6	-	4.7	19.8	22.6	0.6	23.1
3/1	1114	1114	-	-	-	1.8	2.4	-	4.3	13.7	13.3	2.4	15.7
3/2+3/3	1298	1298	38	5	2	2.2	4.1	0.1	6.4	17.7	24.7	4.1	28.8
4/1	45	45	-	-	-	0.6	0.2	-	0.8	65.4	1.4	0.2	1.6

Full Input Data And Results

4/2	59	59	-	-	-	0.8	0.2	-	1.1	64.3	1.8	0.2	2.0
5/1	1149	1149	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1277	1277	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	720	720	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	902	902	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	102	102	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P2	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P3	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P4	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
J3: Proposed Southern Site Access Junction	**-**	**-**	**83**	**5**	**2**	**20.3**	**14.8**	**0.8**	**35.9**	**-**	**-**	**-**	**-**
1/1	829	829	-	-	-	0.1	0.5	-	0.6	2.5	18.6	0.5	19.1
1/2	792	792	-	-	-	0.0	0.4	-	0.4	1.8	0.1	0.4	0.5
2/1	829	829	-	-	-	1.6	1.9	-	3.5	15.0	25.5	1.9	27.4
2/2	792	792	-	-	-	1.4	1.1	-	2.5	11.3	23.1	1.1	24.2
3/1	873	873	-	-	-	3.9	1.3	-	5.1	21.2	19.9	1.3	21.2
3/2+3/3	1176	1176	83	5	2	5.8	3.5	0.8	10.1	31.1	30.5	3.5	33.9
4/1	156	156	-	-	-	1.4	0.2	-	1.7	39.0	4.1	0.2	4.3
4/2	453	453	-	-	-	5.1	3.6	-	8.8	69.7	14.3	3.6	18.0
5/1	1114	1114	-	-	-	0.4	1.0	-	1.4	4.5	5.2	1.0	6.2
5/2	1298	1298	-	-	-	0.5	1.3	-	1.8	5.0	6.1	1.3	7.4
6/1	1114	1114	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1298	1298	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	723	723	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	870	870	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	274	274	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf

Full Input Data And Results

Ped Link: P2	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P3	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P4	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf

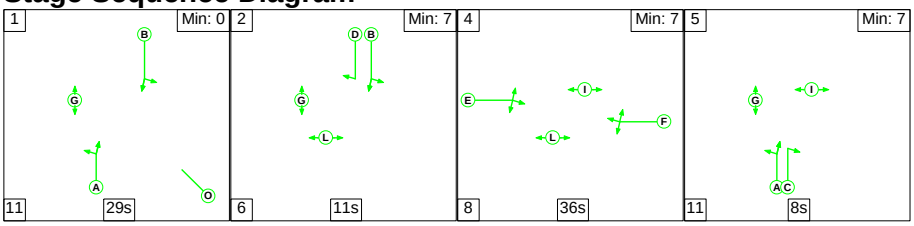
C1		PRC for Signalled Lanes (%):	-31.3	Total Delay for Signalled Lanes (pcuHr):	299.31	Cycle Time (s):	120
C2	Stream: 1	PRC for Signalled Lanes (%):	0.3	Total Delay for Signalled Lanes (pcuHr):	22.14	Cycle Time (s):	120
C2	Stream: 2	PRC for Signalled Lanes (%):	77.0	Total Delay for Signalled Lanes (pcuHr):	0.99	Cycle Time (s):	120
C3	Stream: 1	PRC for Signalled Lanes (%):	0.9	Total Delay for Signalled Lanes (pcuHr):	31.69	Cycle Time (s):	120
C3	Stream: 2	PRC for Signalled Lanes (%):	81.3	Total Delay for Signalled Lanes (pcuHr):	0.99	Cycle Time (s):	120
C3	Stream: 3	PRC for Signalled Lanes (%):	25.0	Total Delay for Signalled Lanes (pcuHr):	3.21	Cycle Time (s):	120
		PRC Over All Lanes (%):	-31.3	Total Delay Over All Lanes(pcuHr):	358.34		

Full Input Data And Results

Scenario 2: '2030 DS(A+B) PM' (FG2: '2030 DS(A+B) PM', Plan 1: '2019 Base AM')

C1

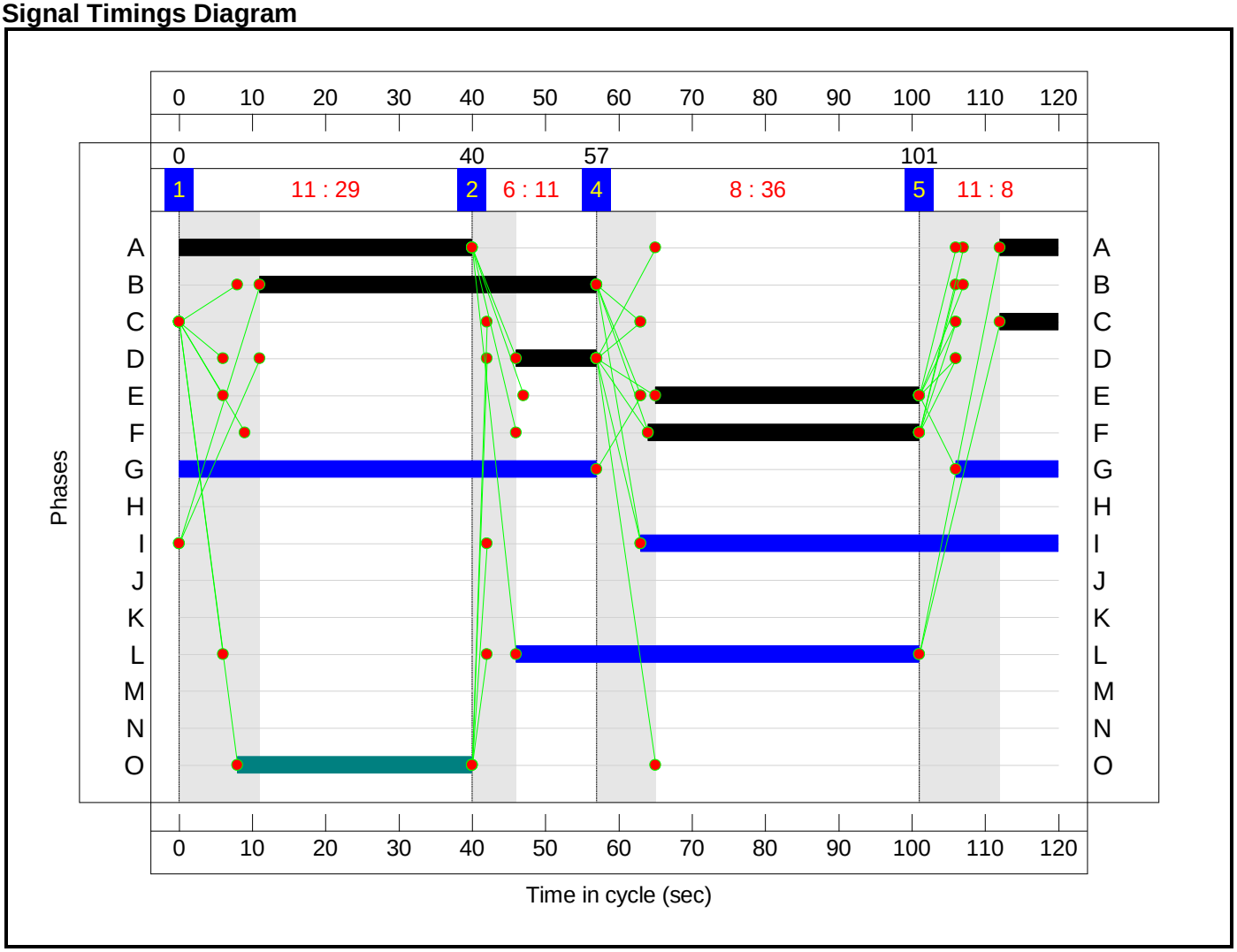
Stage Sequence Diagram



Stage Timings

Stage	1	2	4	5
Duration	29	11	36	8
Change Point	0	40	57	101

Signal Timings Diagram

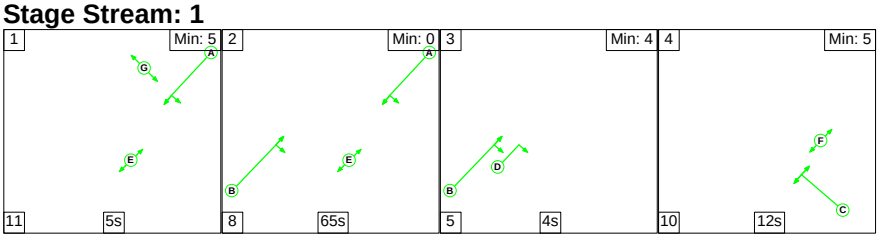


Full Input Data And Results

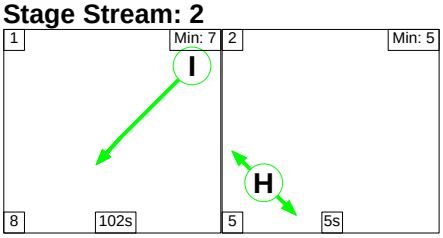
C2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

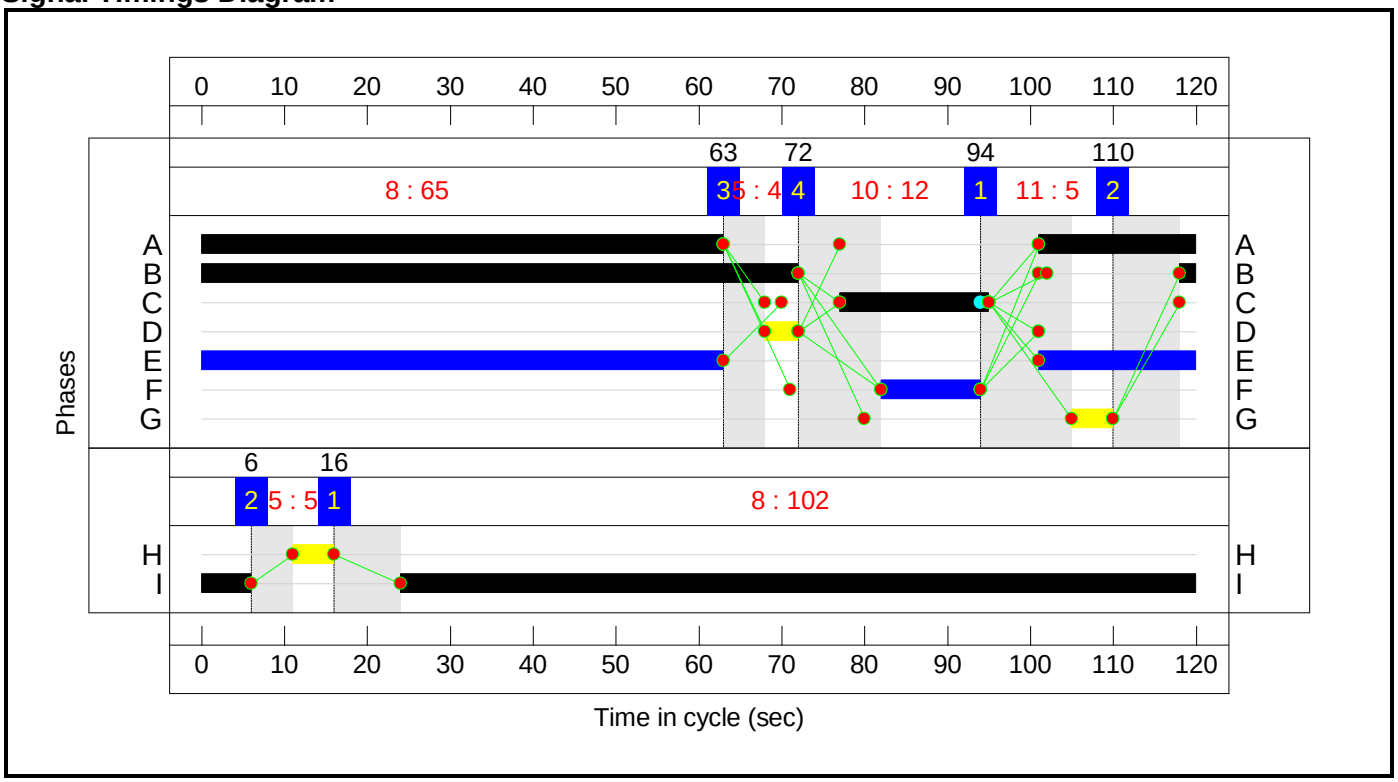
Stage Stream: 1

Stage	1	2	3	4
Duration	5	65	4	12
Change Point	94	110	63	72

Stage Stream: 2

Stage	1	2
Duration	102	5
Change Point	16	6

Signal Timings Diagram



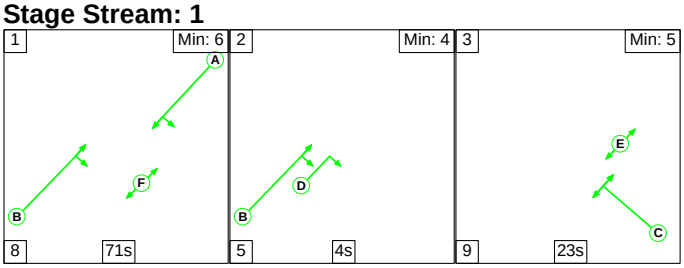
Full Input Data And Results

Full Input Data And Results

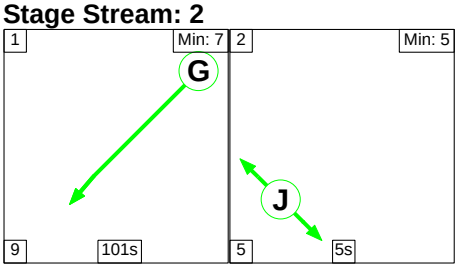
C3

Stage Sequence Diagram

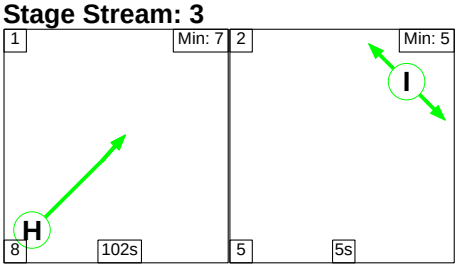
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2	3
Duration	71	4	23
Change Point	0	79	88

Stage Stream: 2

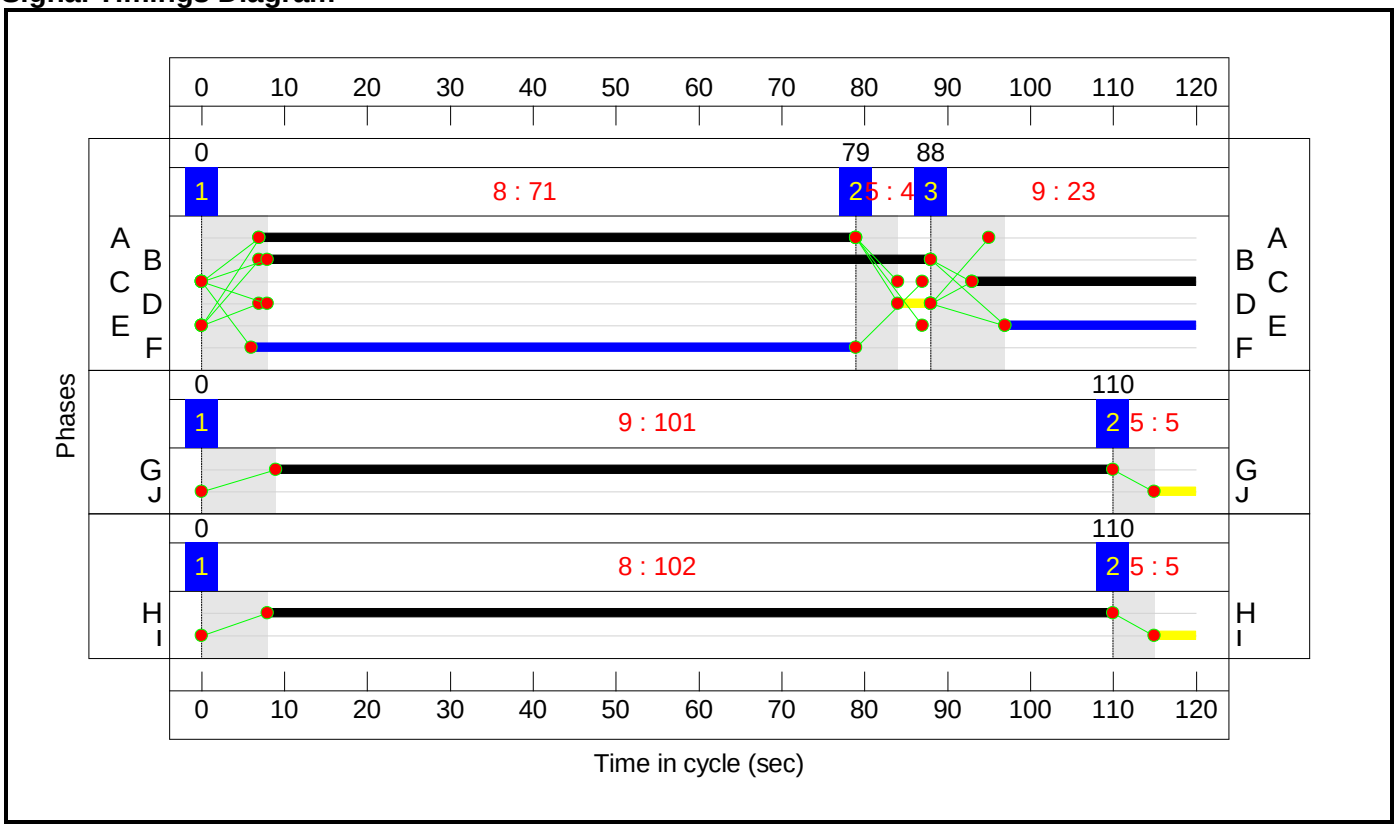
Stage	1	2
Duration	101	5
Change Point	0	110

Stage Stream: 3

Stage	1	2
Duration	102	5
Change Point	0	110

Full Input Data And Results

Signal Timings Diagram



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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**133.9%**
J1: A653 Leeds Road / Heybeck Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**133.9%**
1/1	A653 Leeds Road North Ahead Left	U	N/A	N/A	C1:B		1	46	-	1082	2082	815	132.7%
1/2+1/3	A653 Leeds Road North Ahead Right	U	N/A	N/A	C1:B C1:D		1	46:11	-	1287	2143:2130	762+202	133.5 : 133.5%
2/1	A653 Leeds Road South Ahead Left	U	N/A	N/A	C1:A		1	48	-	913	2160	882	103.5%
2/2+2/3	A653 Leeds Road South Ahead Right	U	N/A	N/A	C1:A C1:C		1	48:8	-	1054	2197:2170	798+163	104.8 : 133.9%
3/1	Soothill Lane Left Right Ahead	O	N/A	N/A	C1:E		1	36	-	622	1993	468	132.8%
4/1	Heybeck Lane Right Left Ahead	O	N/A	N/A	C1:F		1	37	-	353	2194	695	50.8%
5/1	A653 Leeds Road North - EXIT	U	N/A	N/A	-		-	-	-	1676	Inf	Inf	0.0%
6/1	A653 Leeds Road South - EXIT Ahead	U	N/A	N/A	-		-	-	-	943	Inf	Inf	0.0%
6/2	A653 Leeds Road South - EXIT Ahead	U	N/A	N/A	-		-	-	-	1514	Inf	Inf	0.0%
7/1	Heybeck Lane - EXIT	U	N/A	N/A	-		-	-	-	503	Inf	Inf	0.0%
8/1	Soothill Lane - EXIT	U	N/A	N/A	-		-	-	-	675	Inf	Inf	0.0%
J2: Proposed Northern Site Access Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**84.2%**

Full Input Data And Results

1/1	A653 Leeds Rd (North) - Before Xing Ahead	U	2:2	N/A	C2:I		1	102	-	1185	1965	1687	53.1%
1/2	A653 Leeds Rd (North) - Before Xing Ahead	U	2:2	N/A	C2:I		1	102	-	1272	1965	1687	59.2%
2/1	A653 Leeds Road (North) Ahead Left	U	2:1	N/A	C2:A		1	82	-	1185	1905	1318	68.0%
2/2	A653 Leeds Road (North) Ahead	U	2:1	N/A	C2:A		1	82	-	1272	2105	1456	68.6%
3/1	A653 Leeds Road (South) Ahead	U	2:1	N/A	C2:B		1	74	-	808	1960	1225	66.0%
3/2+3/3	A653 Leeds Road (South) Ahead Right	U+O	2:1	N/A	C2:B	C2:D	1	74	4	1103	2100:1827	1114+236	81.7 : 81.7%
4/1	Proposed Northern Site Access Left	U	2:1	N/A	C2:C		1	18	-	193	1613	255	75.6%
4/2	Proposed Northern Site Access Right	U	2:1	N/A	C2:C		1	18	-	249	1868	296	84.2%
5/1	A653 Leeds Road (North) EXIT Ahead	U	N/A	N/A	-		-	-	-	913	Inf	Inf	0.0%
5/2	A653 Leeds Road (North) EXIT Ahead	U	N/A	N/A	-		-	-	-	1054	Inf	Inf	0.0%
6/1	A653 Leeds Road (South) - EXIT Ahead	U	N/A	N/A	-		-	-	-	952	Inf	Inf	0.0%
6/2	A653 Leeds Road (South) - EXIT Ahead	U	N/A	N/A	-		-	-	-	1449	Inf	Inf	0.0%
7/1	Proposed Northern Site Access Exit	U	N/A	N/A	-		-	-	-	442	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%

Full Input Data And Results

Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
J3: Proposed Southern Site Access Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**82.1%**
1/1	Leeds Rd (North) - Before Xing Ahead	U	3:2	N/A	C3:G		1	101	-	1235	1965	1670	56.6%
1/2	Leeds Rd (North) - Before Xing Ahead	U	3:2	N/A	C3:G		1	101	-	1166	2105	1789	53.2%
2/1	Leeds Road North Ahead Left	U	3:1	N/A	C3:A		1	72	-	1235	1891	1150	82.1%
2/2	Leeds Road North Ahead	U	3:1	N/A	C3:A		1	72	-	1166	2105	1281	74.4%
3/1	Leeds Road South Ahead	U	3:1	N/A	C3:B		1	80	-	692	1960	1323	52.3%
3/2+3/3	Leeds Road South Ahead Right	U+O	3:1	N/A	C3:B	C3:D	1	80	4	1052	2100:1702	1322+150	71.5 : 71.5%
4/1	Proposed Southern Site Access Left	U	3:1	N/A	C3:C		1	27	-	118	1613	376	31.4%
4/2	Proposed Southern Site Access Right	U	3:1	N/A	C3:C		1	27	-	274	1741	406	67.4%
5/1	Leeds Road North Exit Ahead	U	3:3	N/A	C3:H		1	102	-	808	1960	1682	48.0%
5/2	Leeds Road North Exit Ahead	U	3:3	N/A	C3:H		1	102	-	1103	2100	1802	61.2%
6/1	Leeds Rd (North) - After Xing Ahead	U	N/A	N/A	-		-	-	-	808	Inf	Inf	0.0%

Full Input Data And Results

6/2	Leeds Rd (North) - After Xing Ahead	U	N/A	N/A	-		-	-	-	1103	Inf	Inf	0.0%
7/1	Leeds Road South Exit	U	N/A	N/A	-		-	-	-	971	Inf	Inf	0.0%
7/2	Leeds Road South Exit	U	N/A	N/A	-		-	-	-	1225	Inf	Inf	0.0%
8/1	Proposed Southern Site Access Exit	U	N/A	N/A	-		-	-	-	430	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	-			0	0	-	0	-	0	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: A653 Leeds Road / Heybeck Lane	**-**	**-**	**364**	**148**	**54**	**141.8**	**474.3**	**1.9**	**618.0**	**-**	**-**	**-**	**-**
J1: A653 Leeds Road / Heybeck Lane	**-**	**-**	**240**	**0**	**26**	**107.8**	**454.6**	**0.4**	**562.9**	**-**	**-**	**-**	**-**
1/1	1082	815	-	-	-	26.1	135.3	-	161.3	536.8	45.0	135.3	180.2
1/2+1/3	1287	964	-	-	-	32.0	163.4	-	195.4	546.6	53.3	163.4	216.7
2/1	913	882	-	-	-	12.4	24.7	-	37.2	146.6	31.5	24.7	56.2
2/2+2/3	1054	973	-	-	-	17.7	51.9	-	69.6	237.8	32.9	51.9	84.8
3/1	622	468	201	0	26	16.3	78.8	0.4	95.5	552.8	28.2	78.8	107.0
4/1	353	353	39	0	0	3.3	0.5	0.0	3.8	38.6	9.5	0.5	10.0
5/1	1584	1584	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	711	711	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1185	1185	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	377	377	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	599	599	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Proposed Northern Site Access Junction	**-**	**-**	**62**	**105**	**25**	**17.9**	**10.5**	**0.8**	**29.1**	**-**	**-**	**-**	**-**
1/1	896	896	-	-	-	0.0	0.6	-	0.6	2.4	16.9	0.6	17.5
1/2	999	999	-	-	-	0.0	0.7	-	0.7	2.7	0.2	0.7	0.9
2/1	896	896	-	-	-	3.2	1.1	-	4.2	16.9	12.5	1.1	13.5
2/2	999	999	-	-	-	3.4	1.1	-	4.5	16.0	16.7	1.1	17.8
3/1	808	808	-	-	-	2.2	1.0	-	3.2	14.1	9.6	1.0	10.5
3/2+3/3	1103	1103	62	105	25	3.1	2.2	0.8	6.1	19.8	23.8	2.2	26.0
4/1	193	193	-	-	-	2.6	1.5	-	4.1	75.8	6.1	1.5	7.6

Full Input Data And Results

4/2	249	249	-	-	-	3.4	2.4	-	5.8	83.9	8.0	2.4	10.4
5/1	913	913	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1054	1054	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	722	722	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1176	1176	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	383	383	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P2	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P3	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P4	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
J3: Proposed Southern Site Access Junction	**-**	**-**	**62**	**43**	**3**	**16.1**	**9.2**	**0.7**	**26.0**	**-**	**-**	**-**	**-**
1/1	945	945	-	-	-	1.2	0.7	-	1.9	7.2	12.5	0.7	13.1
1/2	953	953	-	-	-	1.1	0.6	-	1.7	6.3	13.7	0.6	14.2
2/1	945	945	-	-	-	1.4	2.3	-	3.7	14.1	16.0	2.3	18.3
2/2	953	953	-	-	-	2.4	1.4	-	3.8	14.4	20.0	1.4	21.4
3/1	692	692	-	-	-	1.9	0.5	-	2.4	12.6	11.5	0.5	12.1
3/2+3/3	1052	1052	62	43	3	3.2	1.2	0.7	5.2	17.7	18.4	1.2	19.6
4/1	118	118	-	-	-	1.2	0.2	-	1.5	45.0	3.2	0.2	3.5
4/2	274	274	-	-	-	3.2	1.0	-	4.2	55.3	8.3	1.0	9.3
5/1	808	808	-	-	-	0.2	0.5	-	0.6	2.8	1.4	0.5	1.9
5/2	1103	1103	-	-	-	0.2	0.8	-	1.0	3.3	1.9	0.8	2.7
6/1	808	808	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1103	1103	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	757	757	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1012	1012	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	354	354	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf

Full Input Data And Results

Ped Link: P2	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P3	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf
Ped Link: P4	0	0	-	-	-	-	-	-	Inf	Inf	-	-	Inf

C1		PRC for Signalled Lanes (%):	-48.8	Total Delay for Signalled Lanes (pcuHr):	562.88	Cycle Time (s):	120
C2	Stream: 1	PRC for Signalled Lanes (%):	6.9	Total Delay for Signalled Lanes (pcuHr):	27.77	Cycle Time (s):	120
C2	Stream: 2	PRC for Signalled Lanes (%):	52.0	Total Delay for Signalled Lanes (pcuHr):	1.35	Cycle Time (s):	120
C3	Stream: 1	PRC for Signalled Lanes (%):	9.6	Total Delay for Signalled Lanes (pcuHr):	20.78	Cycle Time (s):	120
C3	Stream: 2	PRC for Signalled Lanes (%):	59.1	Total Delay for Signalled Lanes (pcuHr):	3.55	Cycle Time (s):	120
C3	Stream: 3	PRC for Signalled Lanes (%):	47.1	Total Delay for Signalled Lanes (pcuHr):	1.64	Cycle Time (s):	120
		PRC Over All Lanes (%):	-48.8	Total Delay Over All Lanes(pcuHr):	617.97		