



APPENDIX L

**PROPOSED LAYOUT: RICE LANE/ CAVENDISH DRIVE/ SITE
ACCESS – MODEL OUTPUTS**

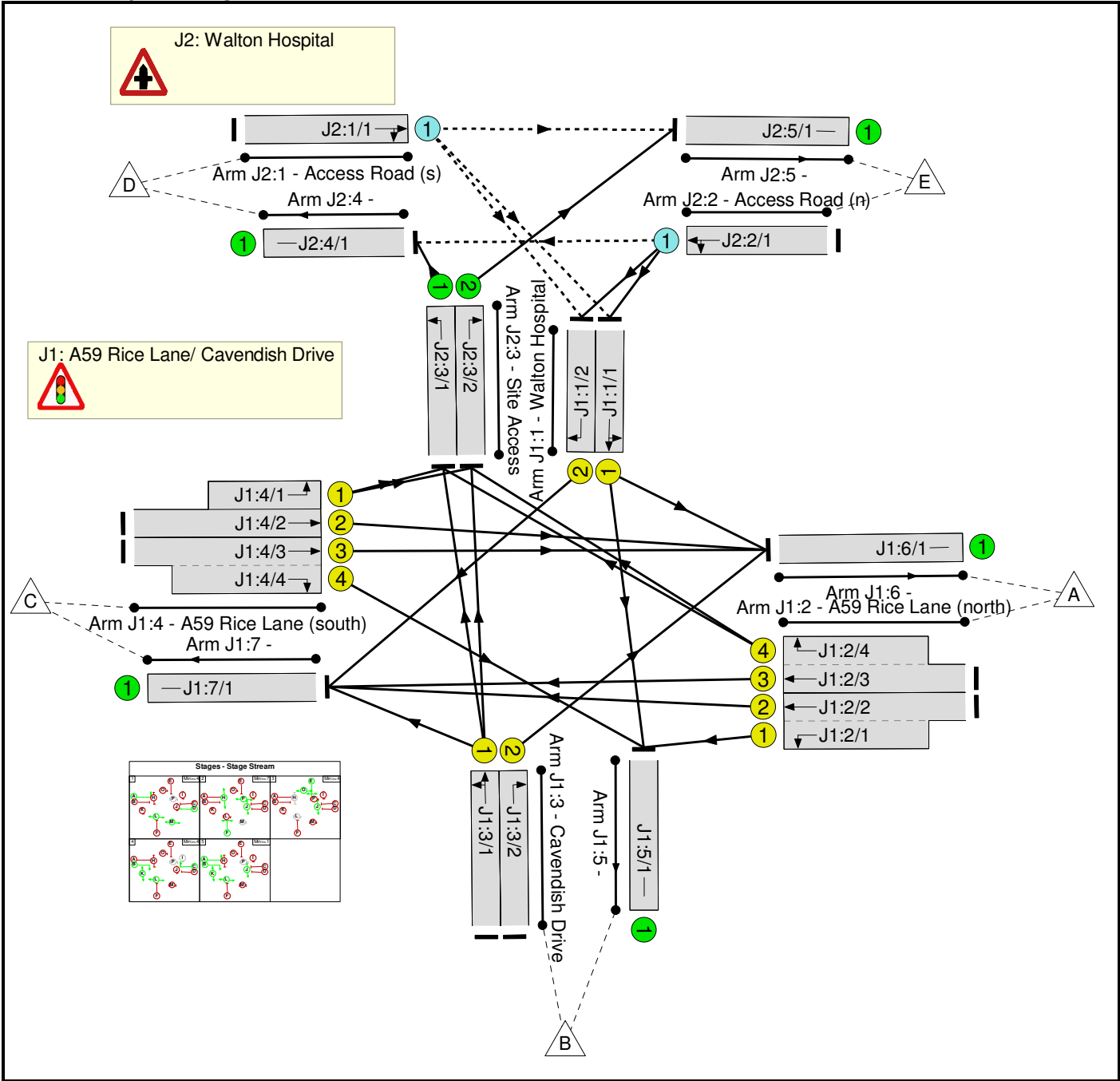
Full Input Data And Results

Full Input Data And Results

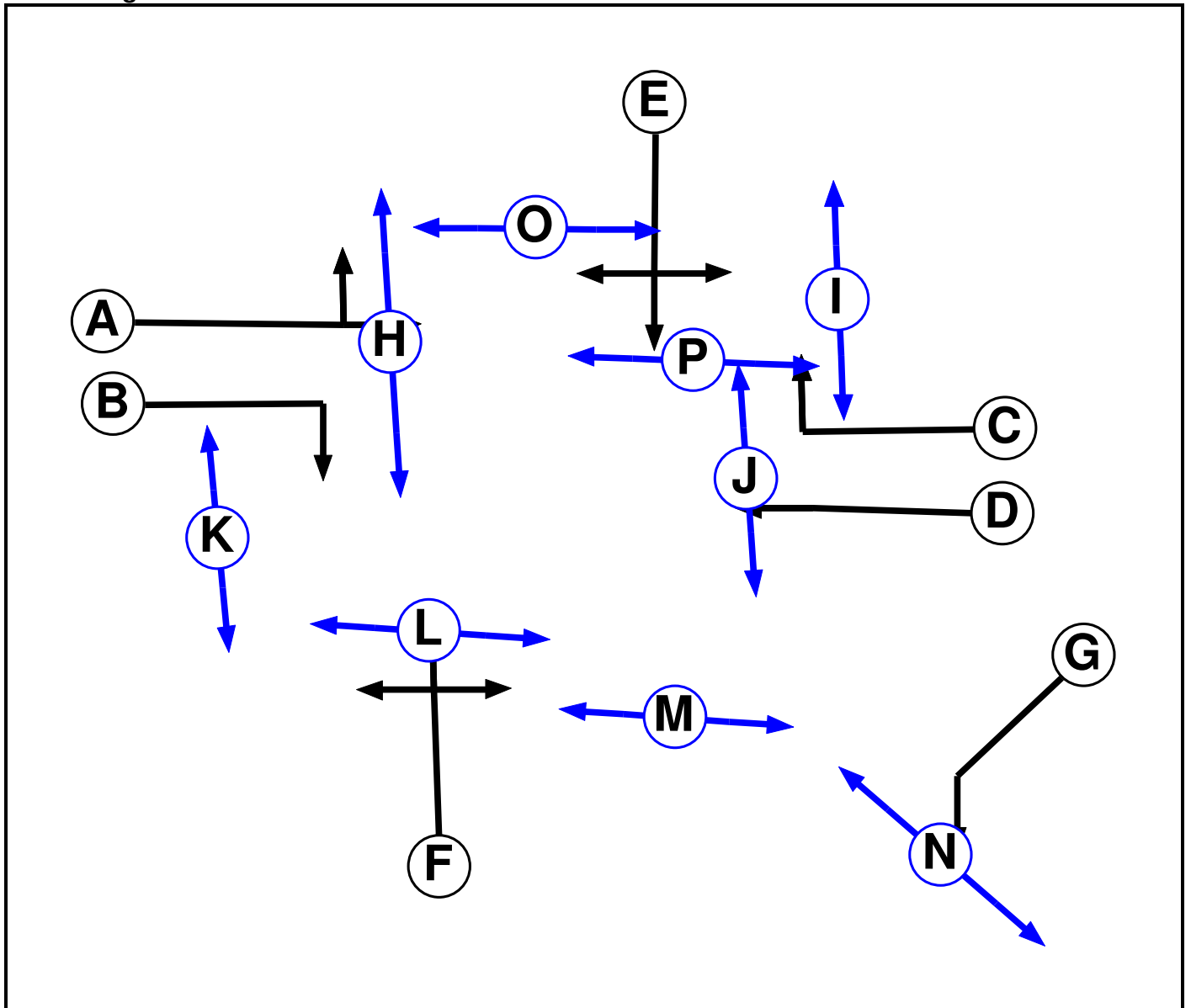
User and Project Details

Project:	Walton Hospital Site, Rice Lane
Title:	A59 Rice Lane/ Cavendish Drive
Location:	
File name:	A59_Rice Lane_Proposed.lsg3x
Author:	
Company:	Cameron Rose Associates
Address:	10 King Street, Newcastle-under-Lyme, Staffordshire, ST5 1EL
Notes:	

Network Layout Diagram



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	Traffic	1		7	7
E	Traffic	1		7	7
F	Traffic	1		7	7
G	Traffic	2		7	7
H	Pedestrian	1		10	10
I	Pedestrian	1		6	6
J	Pedestrian	1		10	10
K	Pedestrian	1		6	6
L	Pedestrian	1		6	6
M	Pedestrian	1		6	6
N	Pedestrian	2		6	6
O	Pedestrian	1		4	4
P	Pedestrian	1		4	4

Phase Intergreens Matrix

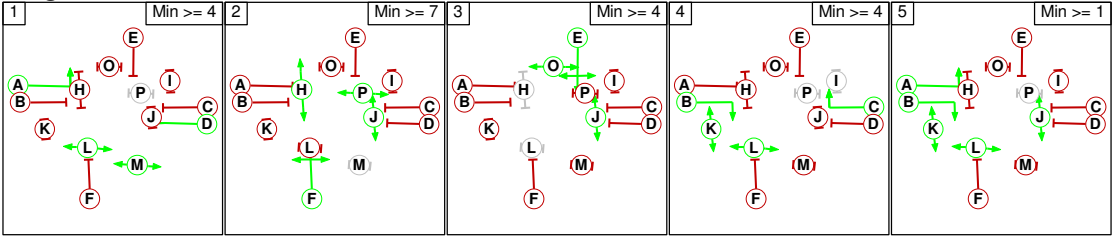
Terminating Phase	Starting Phase																
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	A		-	6	-	7	5	-	5	9	-	-	-	-	-	9	-
	B	-		-	7	5	5	-	5	-	-	-	10	-	-	-	
	C	7	-		-	5	5	-	-	-	5	-	-	-	-	10	-
	D	-	6	-		5	6	-	-	-	5	9	-	-	-	-	-
	E	5	5	5	6		8	-	-	8	-	11	-	9	-	-	5
	F	7	6	6	5	8		-	-	12	-	9	5	-	-	10	-
	G	-	-	-	-	-	-		-	-	-	-	-	-	5	-	-
	H	15	15	-	-	-	-	-		-	-	-	-	-	-	-	-
	I	5	-	-	-	5	5	-	-		-	-	-	-	-	-	-
	J	-	-	12	12	-	-	-	-	-		-	-	-	-	-	-
	K	-	-	-	5	5	5	-	-	-	-		-	-	-	-	-
	L	-	-	-	-	-	8	-	-	-	-	-		-	-	-	-
	M	-	5	-	-	5	-	-	-	-	-	-	-		-	-	-
	N	-	-	-	-	-	-	8	-	-	-	-	-	-		-	-
	O	5	-	5	-	-	5	-	-	-	-	-	-	-	-		-
	P	-	-	-	-	7	-	-	-	-	-	-	-	-	-	-	-

Phases in Stage

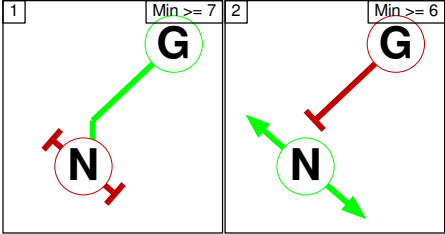
Stream	Stage No.	Phases in Stage
1	1	A D L M
1	2	F H J P
1	3	E J O
1	4	B C K L
1	5	A B J K L
2	1	G
2	2	N

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Phase Delays

Stage Stream: 1

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

Stage Stream: 2

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

Prohibited Stage Change

Stage Stream: 1

From Stage	To Stage					
		1	2	3	4	5
	1		8	9	9	9
	2	15		10	15	15
	3	12	8		12	11
	4	10	8	10		7
	5	12	8	9	12	

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: A59 Rice Lane/ Cavendish Drive
There are no Opposed Lanes in this Junction

Junction: J2: Walton Hospital											
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)
J2:1/1 (Access Road (s))	J1:1/1 (Right)	600	0	J2:2/1	0.22	All	-	-	-	-	-
				J2:3/2	0.22	All					
	J1:1/2 (Right)	600	0	J2:2/1	0.22	All					
				J2:3/2	0.22	All					
	J2:5/1 (Ahead)	850	0	J2:3/2	0.35	All					
J2:2/1 (Access Road (n))	J2:4/1 (Ahead)	850	0	J2:3/1	0.35	All	-	-	-	-	-
				J2:3/2	0.35	All					

Lane Input Data

Junction: J1: A59 Rice Lane/ Cavendish Drive												
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 (Walton Hospital)	U	E	2	3	3.8	Geom	-	2.80	0.00	Y	Arm J1:5 Ahead	Inf
											Arm J1:6 Left	12.00
J1:1/2 (Walton Hospital)	U	E	2	3	3.8	Geom	-	2.70	0.00	N	Arm J1:7 Right	20.00
J1:2/1 (A59 Rice Lane (north))	U	G	2	3	15.7	Geom	-	4.70	0.00	Y	Arm J1:5 Left	25.00
J1:2/2 (A59 Rice Lane (north))	U	D	2	3	60.0	Geom	-	4.00	0.00	Y	Arm J1:7 Ahead	Inf
J1:2/3 (A59 Rice Lane (north))	U	D	2	3	60.0	Geom	-	4.00	0.00	N	Arm J1:7 Ahead	Inf
J1:2/4 (A59 Rice Lane (north))	U	C	2	3	8.7	Geom	-	3.50	0.00	Y	Arm J2:3 Right	30.00
J1:3/1 (Cavendish Drive)	U	F	2	3	15.7	Geom	-	3.50	0.00	Y	Arm J1:7 Left	20.00
											Arm J2:3 Ahead	Inf
J1:3/2 (Cavendish Drive)	U	F	2	3	60.0	Geom	-	3.50	0.00	N	Arm J1:6 Right	25.00
J1:4/1 (A59 Rice Lane (south))	U	A	2	3	6.0	Geom	-	3.25	0.00	Y	Arm J2:3 Left	12.00
J1:4/2 (A59 Rice Lane (south))	U	A	2	3	60.0	Geom	-	3.50	0.00	N	Arm J1:6 Ahead	Inf
J1:4/3 (A59 Rice Lane (south))	U	A	2	3	60.0	Geom	-	3.75	0.00	N	Arm J1:6 Ahead	Inf
J1:4/4 (A59 Rice Lane (south))	U	B	2	3	8.7	Geom	-	3.50	0.00	Y	Arm J1:5 Right	30.00
J1:5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:7/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Junction: J2: Walton Hospital												
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 (Access Road (s))	O		2	3	60.0	Geom	-	3.00	0.00	Y	Arm J1:1 Right	Inf
											Arm J2:5 Ahead	Inf
J2:2/1 (Access Road (n))	O		2	3	60.0	Geom	-	3.00	0.00	Y	Arm J1:1 Left	Inf
											Arm J2:4 Ahead	Inf
J2:3/1 (Site Access)	U		2	3	3.8	Geom	-	3.00	0.00	Y	Arm J2:4 Left	10.00
J2:3/2 (Site Access)	U		2	3	3.8	Geom	-	3.00	0.00	N	Arm J2:5 Right	15.00
J2:4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:5/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2015 AM Peak Base'	08:15	09:15	01:00	
2: '2015 PM Peak Base'	15:15	16:15	01:00	
3: '2015 Saturday Peak Base'	13:00	14:00	01:00	
4: '2020 AM Peak Base + Committed '	08:15	09:15	01:00	
5: '2020 PM Peak Base + Committed'	15:15	16:15	01:00	
6: '2020 Saturday Peak Base + Committed'	13:00	14:00	01:00	
7: '2020 AM Peak Base + Committed + Development (Average)'	08:15	09:15	01:00	
8: '2020 PM Peak Base + Committed + Development (Average)'	15:15	16:15	01:00	
9: '2020 Saturday Peak Base + Committed + Development (Average)'	13:00	14:00	01:00	
10: '2020 AM Peak Base + Committed + Development (85th)'	08:15	09:15	01:00	
11: '2020 PM Peak Base + Committed + Development (85th)'	15:15	16:15	01:00	
12: '2020 Saturday Peak Base + Committed + Development (85th)'	13:00	14:00	01:00	

Full Input Data And Results

Scenario 1: '1' (FG1: '2015 AM Peak Base', Plan 1: 'AM Peak')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	0	158	934	9	4	1105
	B	122	0	237	3	1	363
	C	733	232	0	13	5	983
	D	10	4	13	0	0	27
	E	4	2	6	0	0	12
	Tot.	869	396	1190	25	10	2490

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 1
Junction: J1: A59 Rice Lane/ Cavendish Drive	
J1:1/1	20
J1:1/2	19
J1:2/1 (short)	158
J1:2/2 (with short)	604(In) 446(Out)
J1:2/3 (with short)	501(In) 488(Out)
J1:2/4 (short)	13
J1:3/1	241
J1:3/2	122
J1:4/1 (short)	18
J1:4/2 (with short)	751(In) 733(Out)
J1:4/3 (with short)	232(In) 0(Out)
J1:4/4 (short)	232
J1:5/1	396
J1:6/1	869
J1:7/1	1190
Junction: J2: Walton Hospital	
J2:1/1	27
J2:2/1	12
J2:3/1	25
J2:3/2	10
J2:4/1	25
J2:5/1	10

Lane Saturation Flows

Junction: J2: Walton Hospital								
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 (Access Road (s))	3.00	0.00	Y	Arm J1:1 Right Arm J2:5 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:2/1 (Access Road (n))	3.00	0.00	Y	Arm J1:1 Left Arm J2:4 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:3/1 (Site Access)	3.00	0.00	Y	Arm J2:4 Left	10.00	100.0 %	1665	1665
J2:3/2 (Site Access)	3.00	0.00	N	Arm J2:5 Right	15.00	100.0 %	1868	1868
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2' (FG2: '2015 PM Peak Base', Plan 2: 'PM & Saturday Peak')

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	176	611	7	3	797
	B	187	0	319	4	2	512
	C	843	329	0	16	7	1195
	D	10	14	10	0	0	34
	E	4	6	4	0	0	14
	Tot.	1044	525	944	27	12	2552

Traffic Lane Flows

Lane	Scenario 2: 2
Junction: J1: A59 Rice Lane/ Cavendish Drive	
J1:1/1	34
J1:1/2	14
J1:2/1 (short)	176
J1:2/2 (with short)	482(In) 306(Out)
J1:2/3 (with short)	315(In) 305(Out)
J1:2/4 (short)	10
J1:3/1	325
J1:3/2	187
J1:4/1 (short)	23
J1:4/2 (with short)	866(In) 843(Out)
J1:4/3 (with short)	329(In) 0(Out)
J1:4/4 (short)	329
J1:5/1	525
J1:6/1	1044
J1:7/1	944
Junction: J2: Walton Hospital	
J2:1/1	34
J2:2/1	14
J2:3/1	27
J2:3/2	12
J2:4/1	27
J2:5/1	12

Lane Saturation Flows

Junction: J2: Walton Hospital								
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 (Access Road (s))	3.00	0.00	Y	Arm J1:1 Right Arm J2:5 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:2/1 (Access Road (n))	3.00	0.00	Y	Arm J1:1 Left Arm J2:4 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:3/1 (Site Access)	3.00	0.00	Y	Arm J2:4 Left	10.00	100.0 %	1665	1665
J2:3/2 (Site Access)	3.00	0.00	N	Arm J2:5 Right	15.00	100.0 %	1868	1868
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '3' (FG3: '2015 Saturday Peak Base', Plan 2: 'PM & Saturday Peak')

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	236	682	4	2	924
	B	238	0	275	3	1	517
	C	669	274	0	12	5	960
	D	7	8	8	0	0	23
	E	3	4	3	0	0	10
	Tot.	917	522	968	19	8	2434

Traffic Lane Flows

Lane	Scenario 3: 3
Junction: J1: A59 Rice Lane/ Cavendish Drive	
J1:1/1	22
J1:1/2	11
J1:2/1 (short)	236
J1:2/2 (with short)	575(In) 339(Out)
J1:2/3 (with short)	349(In) 343(Out)
J1:2/4 (short)	6
J1:3/1	279
J1:3/2	238
J1:4/1 (short)	17
J1:4/2 (with short)	686(In) 669(Out)
J1:4/3 (with short)	274(In) 0(Out)
J1:4/4 (short)	274
J1:5/1	522
J1:6/1	917
J1:7/1	968
Junction: J2: Walton Hospital	
J2:1/1	23
J2:2/1	10
J2:3/1	19
J2:3/2	8
J2:4/1	19
J2:5/1	8

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A59 Rice Lane/ Cavendish Drive								
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 (Walton Hospital)	2.80	0.00	Y	Arm J1:5 Ahead	Inf	54.5 %	1793	1793
				Arm J1:6 Left	12.00	45.5 %		
J1:1/2 (Walton Hospital)	2.70	0.00	N	Arm J1:7 Right	20.00	100.0 %	1884	1884
J1:2/1 (A59 Rice Lane (north))	4.70	0.00	Y	Arm J1:5 Left	25.00	100.0 %	1967	1967
J1:2/2 (A59 Rice Lane (north))	4.00	0.00	Y	Arm J1:7 Ahead	Inf	100.0 %	2015	2015
J1:2/3 (A59 Rice Lane (north))	4.00	0.00	N	Arm J1:7 Ahead	Inf	100.0 %	2155	2155
J1:2/4 (A59 Rice Lane (north))	3.50	0.00	Y	Arm J2:3 Right	30.00	100.0 %	1871	1871
J1:3/1 (Cavendish Drive)	3.50	0.00	Y	Arm J1:7 Left	20.00	98.6 %	1830	1830
				Arm J2:3 Ahead	Inf	1.4 %		
J1:3/2 (Cavendish Drive)	3.50	0.00	N	Arm J1:6 Right	25.00	100.0 %	1986	1986
J1:4/1 (A59 Rice Lane (south))	3.25	0.00	Y	Arm J2:3 Left	12.00	100.0 %	1724	1724
J1:4/2 (A59 Rice Lane (south))	3.50	0.00	N	Arm J1:6 Ahead	Inf	100.0 %	2105	2105
J1:4/3 (A59 Rice Lane (south))	3.75	0.00	N	Arm J1:6 Ahead	Inf	0.0 %	2130	2130
J1:4/4 (A59 Rice Lane (south))	3.50	0.00	Y	Arm J1:5 Right	30.00	100.0 %	1871	1871
J1:5/1	Infinite Saturation Flow						Inf	Inf
J1:6/1	Infinite Saturation Flow						Inf	Inf
J1:7/1	Infinite Saturation Flow						Inf	Inf

Junction: J2: Walton Hospital								
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 (Access Road (s))	3.00	0.00	Y	Arm J1:1 Right Arm J2:5 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:2/1 (Access Road (n))	3.00	0.00	Y	Arm J1:1 Left Arm J2:4 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:3/1 (Site Access)	3.00	0.00	Y	Arm J2:4 Left	10.00	100.0 %	1665	1665
J2:3/2 (Site Access)	3.00	0.00	N	Arm J2:5 Right	15.00	100.0 %	1868	1868
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '4' (FG4: '2020 AM Peak Base + Committed ', Plan 1: 'AM Peak')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	0	169	1004	11	5	1189
	B	131	0	254	2	1	388
	C	788	249	0	13	6	1056
	D	12	4	13	0	0	29
	E	5	2	6	0	0	13
	Tot.	936	424	1277	26	12	2675

Traffic Lane Flows

Lane	Scenario 4: 4
Junction: J1: A59 Rice Lane/ Cavendish Drive	
J1:1/1	23
J1:1/2	19
J1:2/1 (short)	169
J1:2/2 (with short)	649(In) 480(Out)
J1:2/3 (with short)	540(In) 524(Out)
J1:2/4 (short)	16
J1:3/1	257
J1:3/2	131
J1:4/1 (short)	19
J1:4/2 (with short)	806(In) 787(Out)
J1:4/3 (with short)	250(In) 1(Out)
J1:4/4 (short)	249
J1:5/1	424
J1:6/1	936
J1:7/1	1277
Junction: J2: Walton Hospital	
J2:1/1	29
J2:2/1	13
J2:3/1	26
J2:3/2	12
J2:4/1	26
J2:5/1	12

Lane Saturation Flows

Junction: J2: Walton Hospital								
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 (Access Road (s))	3.00	0.00	Y	Arm J1:1 Right Arm J2:5 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:2/1 (Access Road (n))	3.00	0.00	Y	Arm J1:1 Left Arm J2:4 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:3/1 (Site Access)	3.00	0.00	Y	Arm J2:4 Left	10.00	100.0 %	1665	1665
J2:3/2 (Site Access)	3.00	0.00	N	Arm J2:5 Right	15.00	100.0 %	1868	1868
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: '5' (FG5: '2020 PM Peak Base + Committed', Plan 2: 'PM & Saturday Peak')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	0	189	657	8	3	857
	B	201	0	343	3	1	548
	C	905	353	0	18	8	1284
	D	12	11	13	0	0	36
	E	5	5	6	0	0	16
	Tot.	1123	558	1019	29	12	2741

Traffic Lane Flows

Lane	Scenario 5: 5
Junction: J1: A59 Rice Lane/ Cavendish Drive	
J1:1/1	33
J1:1/2	19
J1:2/1 (short)	189
J1:2/2 (with short)	523(In) 334(Out)
J1:2/3 (with short)	334(In) 323(Out)
J1:2/4 (short)	11
J1:3/1	347
J1:3/2	201
J1:4/1 (short)	26
J1:4/2 (with short)	781(In) 755(Out)
J1:4/3 (with short)	503(In) 150(Out)
J1:4/4 (short)	353
J1:5/1	558
J1:6/1	1123
J1:7/1	1019
Junction: J2: Walton Hospital	
J2:1/1	36
J2:2/1	16
J2:3/1	29
J2:3/2	12
J2:4/1	29
J2:5/1	12

Lane Saturation Flows

Junction: J2: Walton Hospital								
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 (Access Road (s))	3.00	0.00	Y	Arm J1:1 Right Arm J2:5 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:2/1 (Access Road (n))	3.00	0.00	Y	Arm J1:1 Left Arm J2:4 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:3/1 (Site Access)	3.00	0.00	Y	Arm J2:4 Left	10.00	100.0 %	1665	1665
J2:3/2 (Site Access)	3.00	0.00	N	Arm J2:5 Right	15.00	100.0 %	1868	1868
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 6: '6' (FG6: '2020 Saturday Peak Base + Committed', Plan 2: 'PM & Saturday Peak')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	0	253	732	5	2	992
	B	255	0	295	2	1	553
	C	718	294	0	13	5	1030
	D	9	6	10	0	0	25
	E	4	3	4	0	0	11
	Tot.	986	556	1041	20	8	2611

Traffic Lane Flows

Lane	Scenario 6: 6
Junction: J1: A59 Rice Lane/ Cavendish Drive	
J1:1/1	22
J1:1/2	14
J1:2/1 (short)	253
J1:2/2 (with short)	628(In) 375(Out)
J1:2/3 (with short)	364(In) 357(Out)
J1:2/4 (short)	7
J1:3/1	298
J1:3/2	255
J1:4/1 (short)	18
J1:4/2 (with short)	736(In) 718(Out)
J1:4/3 (with short)	294(In) 0(Out)
J1:4/4 (short)	294
J1:5/1	556
J1:6/1	986
J1:7/1	1041
Junction: J2: Walton Hospital	
J2:1/1	25
J2:2/1	11
J2:3/1	20
J2:3/2	8
J2:4/1	20
J2:5/1	8

Lane Saturation Flows

Junction: J2: Walton Hospital								
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 (Access Road (s))	3.00	0.00	Y	Arm J1:1 Right Arm J2:5 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:2/1 (Access Road (n))	3.00	0.00	Y	Arm J1:1 Left Arm J2:4 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:3/1 (Site Access)	3.00	0.00	Y	Arm J2:4 Left	10.00	100.0 %	1665	1665
J2:3/2 (Site Access)	3.00	0.00	N	Arm J2:5 Right	15.00	100.0 %	1868	1868
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 7: '7' (FG7: '2020 AM Peak Base + Committed + Development (Average)', Plan 1: 'AM Peak')

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	169	1001	19	18	1207
	B	131	0	254	2	2	389
	C	785	249	0	20	19	1073
	D	22	4	26	0	0	52
	E	17	3	21	0	0	41
	Tot.	955	425	1302	41	39	2762

Traffic Lane Flows

Lane	Scenario 7: 7
Junction: J1: A59 Rice Lane/ Cavendish Drive	
J1:1/1	46
J1:1/2	47
J1:2/1 (short)	169
J1:2/2 (with short)	650(In) 481(Out)
J1:2/3 (with short)	557(In) 520(Out)
J1:2/4 (short)	37
J1:3/1	258
J1:3/2	131
J1:4/1 (short)	39
J1:4/2 (with short)	824(In) 785(Out)
J1:4/3 (with short)	249(In) 0(Out)
J1:4/4 (short)	249
J1:5/1	425
J1:6/1	955
J1:7/1	1302
Junction: J2: Walton Hospital	
J2:1/1	52
J2:2/1	41
J2:3/1	41
J2:3/2	39
J2:4/1	41
J2:5/1	39

Full Input Data And Results

Lane Saturation Flows

Junction: J1: A59 Rice Lane/ Cavendish Drive								
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 (Walton Hospital)	2.80	0.00	Y	Arm J1:5 Ahead	Inf	15.2 %	1713	1713
				Arm J1:6 Left	12.00	84.8 %		
J1:1/2 (Walton Hospital)	2.70	0.00	N	Arm J1:7 Right	20.00	100.0 %	1884	1884
J1:2/1 (A59 Rice Lane (north))	4.70	0.00	Y	Arm J1:5 Left	25.00	100.0 %	1967	1967
J1:2/2 (A59 Rice Lane (north))	4.00	0.00	Y	Arm J1:7 Ahead	Inf	100.0 %	2015	2015
J1:2/3 (A59 Rice Lane (north))	4.00	0.00	N	Arm J1:7 Ahead	Inf	100.0 %	2155	2155
J1:2/4 (A59 Rice Lane (north))	3.50	0.00	Y	Arm J2:3 Right	30.00	100.0 %	1871	1871
J1:3/1 (Cavendish Drive)	3.50	0.00	Y	Arm J1:7 Left	20.00	98.4 %	1830	1830
				Arm J2:3 Ahead	Inf	1.6 %		
J1:3/2 (Cavendish Drive)	3.50	0.00	N	Arm J1:6 Right	25.00	100.0 %	1986	1986
J1:4/1 (A59 Rice Lane (south))	3.25	0.00	Y	Arm J2:3 Left	12.00	100.0 %	1724	1724
J1:4/2 (A59 Rice Lane (south))	3.50	0.00	N	Arm J1:6 Ahead	Inf	100.0 %	2105	2105
J1:4/3 (A59 Rice Lane (south))	3.75	0.00	N	Arm J1:6 Ahead	Inf	0.0 %	2130	2130
J1:4/4 (A59 Rice Lane (south))	3.50	0.00	Y	Arm J1:5 Right	30.00	100.0 %	1871	1871
J1:5/1	Infinite Saturation Flow						Inf	Inf
J1:6/1	Infinite Saturation Flow						Inf	Inf
J1:7/1	Infinite Saturation Flow						Inf	Inf

Junction: J2: Walton Hospital								
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 (Access Road (s))	3.00	0.00	Y	Arm J1:1 Right Arm J2:5 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:2/1 (Access Road (n))	3.00	0.00	Y	Arm J1:1 Left Arm J2:4 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:3/1 (Site Access)	3.00	0.00	Y	Arm J2:4 Left	10.00	100.0 %	1665	1665
J2:3/2 (Site Access)	3.00	0.00	N	Arm J2:5 Right	15.00	100.0 %	1868	1868
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 8: '8' (FG8: '2020 PM Peak Base + Committed + Development (Average)', Plan 2: 'PM & Saturday Peak')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	0	189	649	16	32	886
	B	201	0	343	2	5	551
	C	893	353	0	28	56	1330
	D	23	7	22	0	0	52
	E	41	13	40	0	0	94
	Tot.	1158	562	1054	46	93	2913

Traffic Lane Flows

Lane	Scenario 8: 8
Junction: J1: A59 Rice Lane/ Cavendish Drive	
J1:1/1	84
J1:1/2	62
J1:2/1 (short)	189
J1:2/2 (with short)	517(In) 328(Out)
J1:2/3 (with short)	369(In) 321(Out)
J1:2/4 (short)	48
J1:3/1	350
J1:3/2	201
J1:4/1 (short)	84
J1:4/2 (with short)	792(In) 708(Out)
J1:4/3 (with short)	538(In) 185(Out)
J1:4/4 (short)	353
J1:5/1	562
J1:6/1	1158
J1:7/1	1054
Junction: J2: Walton Hospital	
J2:1/1	52
J2:2/1	94
J2:3/1	46
J2:3/2	93
J2:4/1	46
J2:5/1	93

Lane Saturation Flows

Junction: J2: Walton Hospital								
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 (Access Road (s))	3.00	0.00	Y	Arm J1:1 Right Arm J2:5 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:2/1 (Access Road (n))	3.00	0.00	Y	Arm J1:1 Left Arm J2:4 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:3/1 (Site Access)	3.00	0.00	Y	Arm J2:4 Left	10.00	100.0 %	1665	1665
J2:3/2 (Site Access)	3.00	0.00	N	Arm J2:5 Right	15.00	100.0 %	1868	1868
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 9: '9' (FG9: '2020 Saturday Peak Base + Committed + Development (Average)', Plan 2: 'PM & Saturday Peak')

Traffic Flows, Desired

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	0	253	716	15	53	1037
	B	255	0	295	2	5	557
	C	701	294	0	21	73	1089
	D	22	4	23	0	0	49
	E	62	10	67	0	0	139
	Tot.	1040	561	1101	38	131	2871

Traffic Lane Flows

Lane	Scenario 9: 9
Junction: J1: A59 Rice Lane/ Cavendish Drive	
J1:1/1	98
J1:1/2	90
J1:2/1 (short)	253
J1:2/2 (with short)	623(In) 370(Out)
J1:2/3 (with short)	414(In) 346(Out)
J1:2/4 (short)	68
J1:3/1	302
J1:3/2	255
J1:4/1 (short)	94
J1:4/2 (with short)	777(In) 683(Out)
J1:4/3 (with short)	312(In) 18(Out)
J1:4/4 (short)	294
J1:5/1	561
J1:6/1	1040
J1:7/1	1101
Junction: J2: Walton Hospital	
J2:1/1	49
J2:2/1	139
J2:3/1	38
J2:3/2	131
J2:4/1	38
J2:5/1	131

Lane Saturation Flows

Junction: J2: Walton Hospital								
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 (Access Road (s))	3.00	0.00	Y	Arm J1:1 Right Arm J2:5 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:2/1 (Access Road (n))	3.00	0.00	Y	Arm J1:1 Left Arm J2:4 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:3/1 (Site Access)	3.00	0.00	Y	Arm J2:4 Left	10.00	100.0 %	1665	1665
J2:3/2 (Site Access)	3.00	0.00	N	Arm J2:5 Right	15.00	100.0 %	1868	1868
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 10: '10' (FG10: '2020 AM Peak Base + Committed + Development (85th)', Plan 1: 'AM Peak')

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	169	1000	23	24	1216
	B	131	0	254	2	2	389
	C	784	249	0	24	25	1082
	D	28	4	35	0	0	67
	E	23	4	28	0	0	55
	Tot.	966	426	1317	49	51	2809

Traffic Lane Flows

Lane	Scenario 10: 10
Junction: J1: A59 Rice Lane/ Cavendish Drive	
J1:1/1	59
J1:1/2	63
J1:2/1 (short)	169
J1:2/2 (with short)	652(In) 483(Out)
J1:2/3 (with short)	564(In) 517(Out)
J1:2/4 (short)	47
J1:3/1	258
J1:3/2	131
J1:4/1 (short)	49
J1:4/2 (with short)	819(In) 770(Out)
J1:4/3 (with short)	263(In) 14(Out)
J1:4/4 (short)	249
J1:5/1	426
J1:6/1	966
J1:7/1	1317
Junction: J2: Walton Hospital	
J2:1/1	67
J2:2/1	55
J2:3/1	49
J2:3/2	51
J2:4/1	49
J2:5/1	51

Lane Saturation Flows

Junction: J2: Walton Hospital								
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 (Access Road (s))	3.00	0.00	Y	Arm J1:1 Right Arm J2:5 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:2/1 (Access Road (n))	3.00	0.00	Y	Arm J1:1 Left Arm J2:4 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:3/1 (Site Access)	3.00	0.00	Y	Arm J2:4 Left	10.00	100.0 %	1665	1665
J2:3/2 (Site Access)	3.00	0.00	N	Arm J2:5 Right	15.00	100.0 %	1868	1868
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 11: '11' (FG11: '2020 PM Peak Base + Committed + Development (85th)', Plan 2: 'PM & Saturday Peak')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	0	189	647	21	42	899
	B	201	0	343	3	5	552
	C	890	353	0	37	72	1352
	D	29	7	27	0	0	63
	E	52	13	49	0	0	114
	Tot.	1172	562	1066	61	119	2980

Traffic Lane Flows

Lane	Scenario 11: 11
Junction: J1: A59 Rice Lane/ Cavendish Drive	
J1:1/1	101
J1:1/2	76
J1:2/1 (short)	189
J1:2/2 (with short)	515(In) 326(Out)
J1:2/3 (with short)	384(In) 321(Out)
J1:2/4 (short)	63
J1:3/1	351
J1:3/2	201
J1:4/1 (short)	109
J1:4/2 (with short)	794(In) 685(Out)
J1:4/3 (with short)	558(In) 205(Out)
J1:4/4 (short)	353
J1:5/1	562
J1:6/1	1172
J1:7/1	1066
Junction: J2: Walton Hospital	
J2:1/1	63
J2:2/1	114
J2:3/1	61
J2:3/2	119
J2:4/1	61
J2:5/1	119

Lane Saturation Flows

Junction: J2: Walton Hospital								
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 (Access Road (s))	3.00	0.00	Y	Arm J1:1 Right Arm J2:5 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:2/1 (Access Road (n))	3.00	0.00	Y	Arm J1:1 Left Arm J2:4 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:3/1 (Site Access)	3.00	0.00	Y	Arm J2:4 Left	10.00	100.0 %	1665	1665
J2:3/2 (Site Access)	3.00	0.00	N	Arm J2:5 Right	15.00	100.0 %	1868	1868
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 12: '12' (FG12: '2020 Saturday Peak Base + Committed + Development (85th)', Plan 2: 'PM & Saturday Peak')

Traffic Flows, Desired

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	0	253	712	23	71	1059
	B	255	0	295	2	6	558
	C	697	294	0	30	93	1114
	D	29	4	31	0	0	64
	E	86	11	92	0	0	189
	Tot.	1067	562	1130	55	170	2984

Traffic Lane Flows

Lane	Scenario 12: 12
Junction: J1: A59 Rice Lane/ Cavendish Drive	
J1:1/1	130
J1:1/2	123
J1:2/1 (short)	253
J1:2/2 (with short)	625(In) 372(Out)
J1:2/3 (with short)	434(In) 340(Out)
J1:2/4 (short)	94
J1:3/1	303
J1:3/2	255
J1:4/1 (short)	123
J1:4/2 (with short)	740(In) 617(Out)
J1:4/3 (with short)	374(In) 80(Out)
J1:4/4 (short)	294
J1:5/1	562
J1:6/1	1067
J1:7/1	1130
Junction: J2: Walton Hospital	
J2:1/1	64
J2:2/1	189
J2:3/1	55
J2:3/2	170
J2:4/1	55
J2:5/1	170

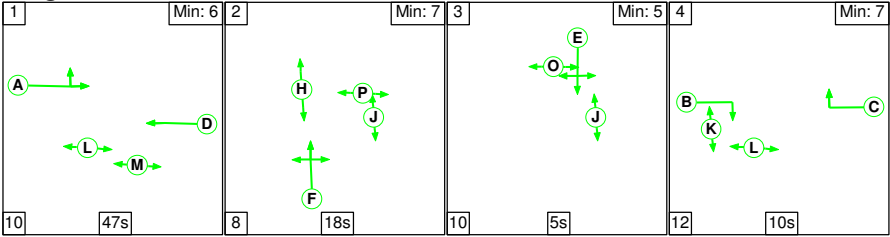
Lane Saturation Flows

Junction: J2: Walton Hospital								
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 (Access Road (s))	3.00	0.00	Y	Arm J1:1 Right Arm J2:5 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:2/1 (Access Road (n))	3.00	0.00	Y	Arm J1:1 Left Arm J2:4 Ahead	Inf Inf	100.0 % 0.0 %	1915	1915
J2:3/1 (Site Access)	3.00	0.00	Y	Arm J2:4 Left	10.00	100.0 %	1665	1665
J2:3/2 (Site Access)	3.00	0.00	N	Arm J2:5 Right	15.00	100.0 %	1868	1868
J2:4/1	Infinite Saturation Flow						Inf	Inf
J2:5/1	Infinite Saturation Flow						Inf	Inf

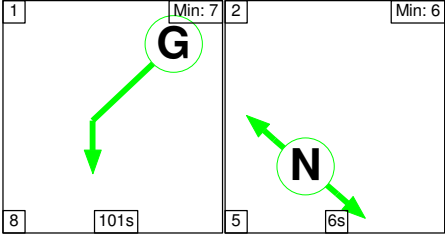
Scenario 1: '1' (FG1: '2015 AM Peak Base', Plan 1: 'AM Peak')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

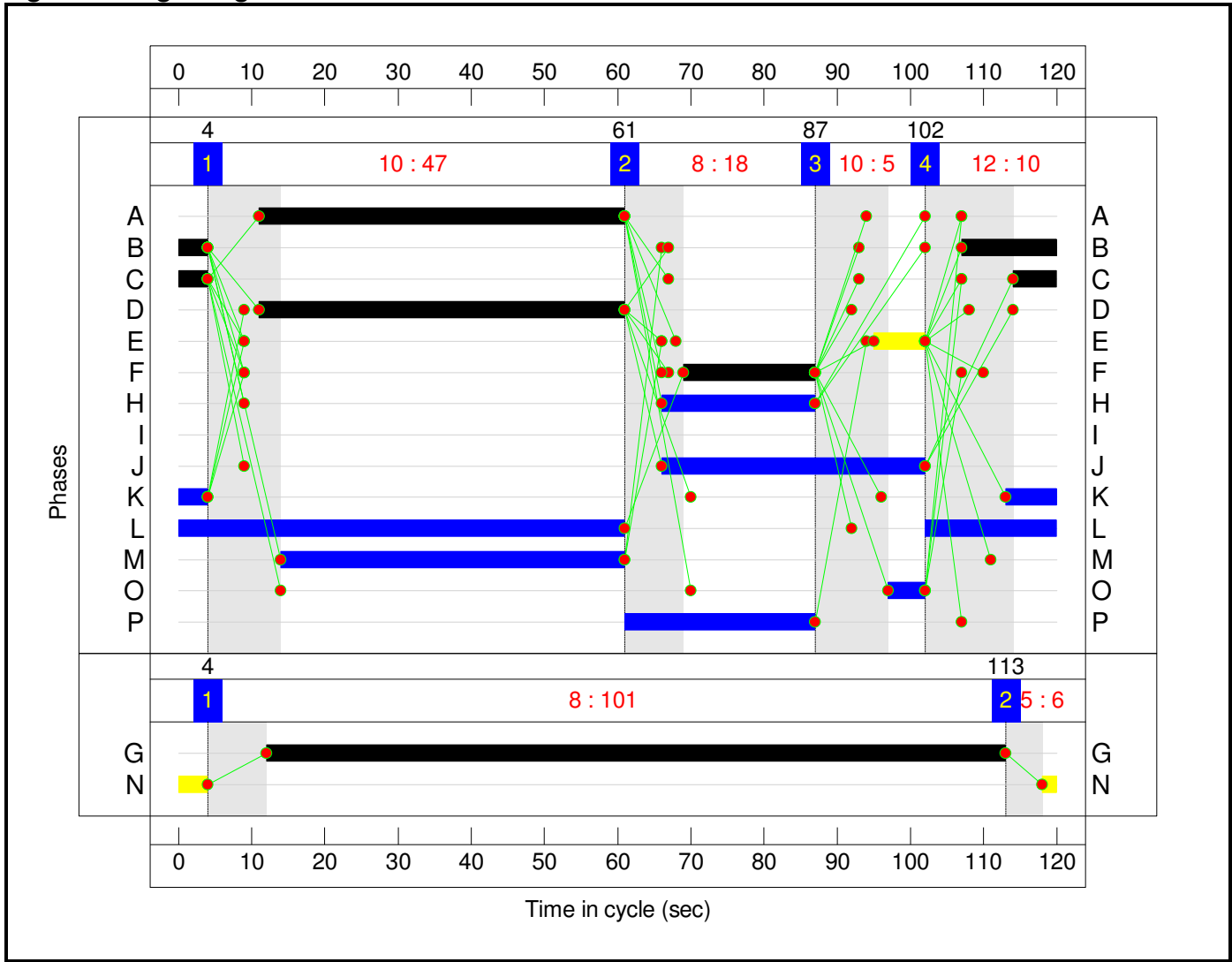
Stage Stream: 1

Stage	1	2	3	4
Duration	47	18	5	10
Change Point	4	61	87	102

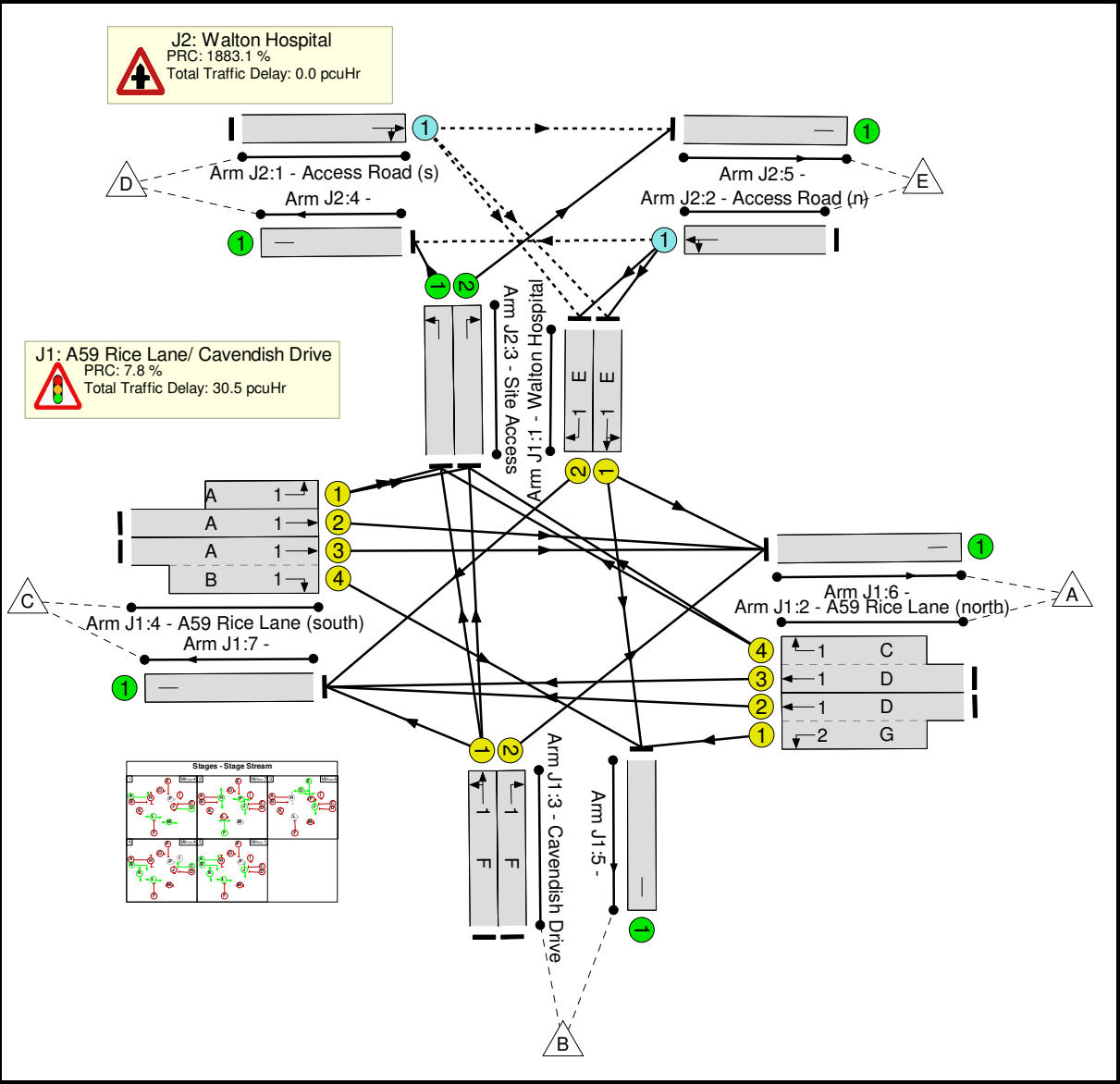
Stage Stream: 2

Stage	1	2
Duration	101	6
Change Point	4	113

Signal Timings Diagram



Full Input Data And Results
Network Layout 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: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	83.5%
J1: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	83.5%
1/1	Walton Hospital Ahead Left	U	1	N/A	E		1	7	-	20	1743	116	17.2%
1/2	Walton Hospital Right	U	1	N/A	E		1	7	-	19	1884	126	15.1%
2/2+2/1	A59 Rice Lane (north) Left Ahead	U	1	N/A	D G		1	50:101	-	604	2015:1967	759+269	58.8 : 58.8%
2/3+2/4	A59 Rice Lane (north) Ahead Right	U	1	N/A	D C		1	50:10	-	501	2155:1871	911+24	53.6 : 53.6%
3/1	Cavendish Drive Left Ahead	U	1	N/A	F		1	18	-	241	1830	290	83.2%
3/2	Cavendish Drive Right	U	1	N/A	F		1	18	-	122	1986	314	38.8%
4/2+4/1	A59 Rice Lane (south) Ahead Left	U	1	N/A	A		1	50	-	751	2105:1724	878+22	83.5 : 83.5%
4/3+4/4	A59 Rice Lane (south) Right Ahead	U	1	N/A	A B		1	50:17	-	232	2130:1871	0+281	0.0 : 82.7%
5/1		U	N/A	N/A	-		-	-	-	396	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	869	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	1190	Inf	Inf	0.0%
J2: Walton Hospital	-	-	N/A	-	-		-	-	-	-	-	-	4.5%
1/1	Access Road (s) Right Ahead	O	N/A	N/A	-		-	-	-	27	1915	595	4.5%

Full Input Data And Results

2/1	Access Road (n) Left Ahead	O	N/A	N/A	-		-	-	-	12	1915	1915	0.6%
3/1	Site Access Left	U	N/A	N/A	-		-	-	-	25	1665	1665	1.5%
3/2	Site Access Right	U	N/A	N/A	-		-	-	-	10	1868	1868	0.5%
4/1		U	N/A	N/A	-		-	-	-	25	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	10	Inf	Inf	0.0%

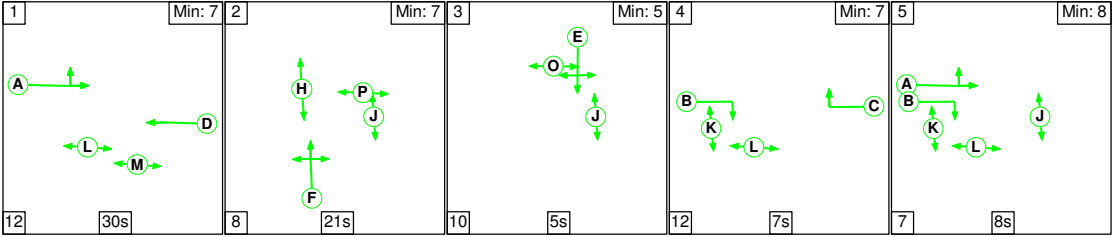
Full Input Data And Results

[illegible]

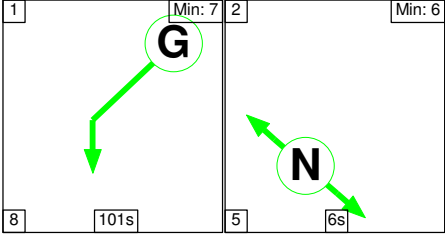
Full Input Data And Results
Scenario 2: '2' (FG2: '2015 PM Peak Base', Plan 2: 'PM & Saturday Peak')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

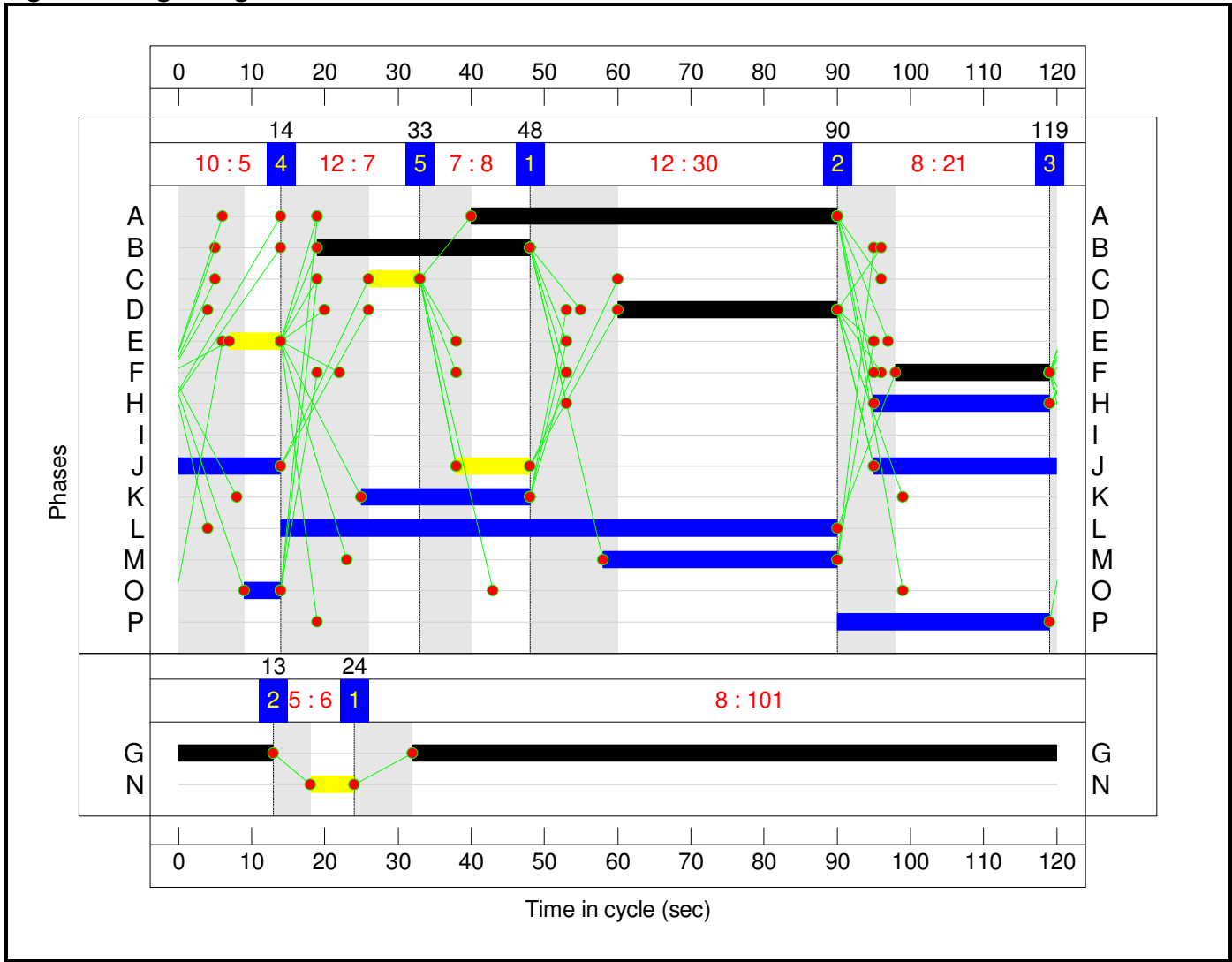
Stage Stream: 1

Stage	1	2	3	4	5
Duration	30	21	5	7	8
Change Point	48	90	119	14	33

Stage Stream: 2

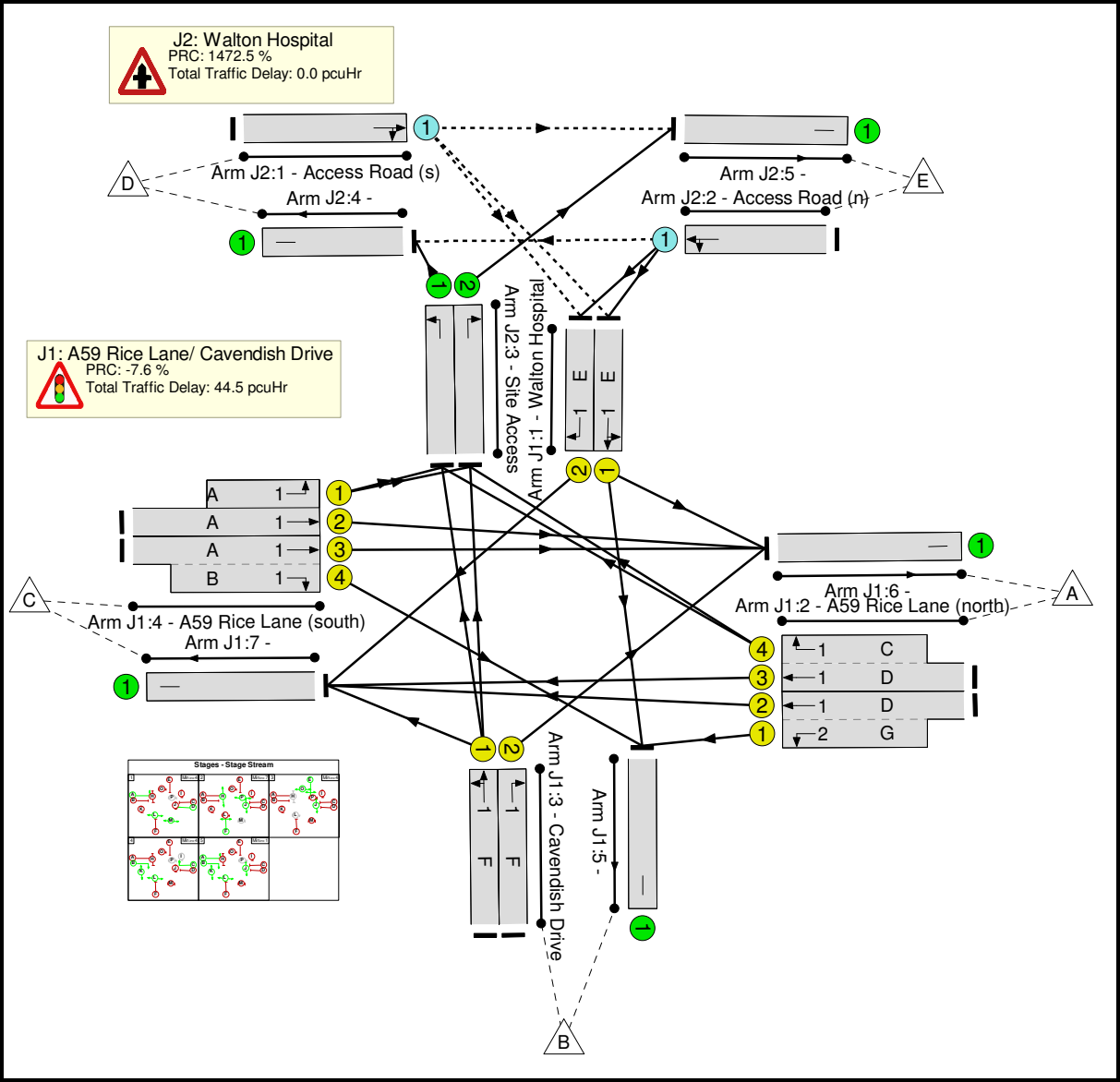
Stage	1	2
Duration	101	6
Change Point	24	13

Signal Timings Diagram



Full Input Data And Results

Network Layout 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: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	96.9%
J1: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	96.9%
1/1	Walton Hospital Ahead Left	U	1	N/A	E		1	7	-	34	1802	120	28.3%
1/2	Walton Hospital Right	U	1	N/A	E		1	7	-	14	1884	126	11.1%
2/2+2/1	A59 Rice Lane (north) Left Ahead	U	1	N/A	D G		1	30:101	-	482	2015:1967	507+292	60.4 : 60.4%
2/3+2/4	A59 Rice Lane (north) Ahead Right	U	1	N/A	D C		1	30:7	-	315	2155:1871	557+18	54.8 : 54.8%
3/1	Cavendish Drive Left Ahead	U	1	N/A	F		1	21	-	325	1830	335	96.9%
3/2	Cavendish Drive Right	U	1	N/A	F		1	21	-	187	1986	364	51.4%
4/2+4/1	A59 Rice Lane (south) Ahead Left	U	1	N/A	A		1	50	-	866	2105:1724	876+24	96.2 : 96.2%
4/3+4/4	A59 Rice Lane (south) Right Ahead	U	1	N/A	A B		1	50:29	-	329	2130:1871	0+468	0.0 : 70.3%
5/1		U	N/A	N/A	-		-	-	-	525	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1044	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	944	Inf	Inf	0.0%
J2: Walton Hospital	-	-	N/A	-	-		-	-	-	-	-	-	5.7%
1/1	Access Road (s) Right Ahead	O	N/A	N/A	-		-	-	-	34	1915	594	5.7%

Full Input Data And Results

2/1	Access Road (n) Left Ahead	O	N/A	N/A	-		-	-	-	14	1915	1915	0.7%
3/1	Site Access Left	U	N/A	N/A	-		-	-	-	27	1665	1665	1.6%
3/2	Site Access Right	U	N/A	N/A	-		-	-	-	12	1868	1868	0.6%
4/1		U	N/A	N/A	-		-	-	-	27	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	12	Inf	Inf	0.0%

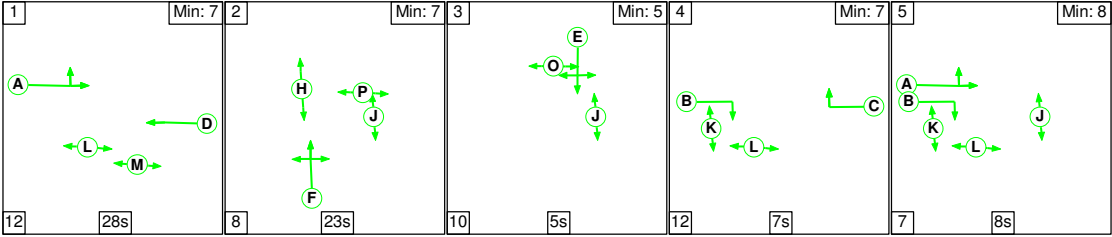
Full Input Data And Results

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: A59 Rice Lane/ Cavendish Drive	-	-	34	0	0	26.0	18.6	0.0	44.6	-	-	-	-
J1: A59 Rice Lane/ Cavendish Drive	-	-	0	0	0	26.0	18.6	0.0	44.5	-	-	-	-
1/1	34	34	-	-	-	0.5	0.2	-	0.7	74.1	1.1	0.2	1.3
1/2	14	14	-	-	-	0.2	0.1	-	0.3	68.8	0.4	0.1	0.5
2/2+2/1	482	482	-	-	-	3.4	0.8	-	4.1	30.9	8.8	0.8	9.6
2/3+2/4	315	315	-	-	-	3.4	0.6	-	4.0	45.8	8.7	0.6	9.3
3/1	325	325	-	-	-	4.4	6.8	-	11.2	123.6	10.7	6.8	17.5
3/2	187	187	-	-	-	2.3	0.5	-	2.8	54.3	5.6	0.5	6.1
4/2+4/1	866	866	-	-	-	8.0	8.5	-	16.5	68.7	27.7	8.5	36.2
4/3+4/4	329	329	-	-	-	3.7	1.2	-	4.9	53.7	10.0	1.2	11.1
5/1	525	525	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1044	1044	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	944	944	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Walton Hospital	-	-	34	0	0	0.0	0.0	0.0	0.0	-	-	-	-
1/1	34	34	34	0	0	0.0	0.0	-	0.0	3.2	0.0	0.0	0.0
2/1	14	14	0	0	0	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
3/1	27	27	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0
3/2	12	12	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
4/1	27	27	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	12	12	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%): -7.6 C1 Stream: 2 PRC for Signalled Lanes (%): 0.0 PRC Over All Lanes (%): -7.6 Total Delay for Signalled Lanes (pcuHr): 44.53 Total Delay for Signalled Lanes (pcuHr): 0.00 Total Delay Over All Lanes(pcuHr): 44.57 Cycle Time (s): 120 Cycle Time (s): 120													

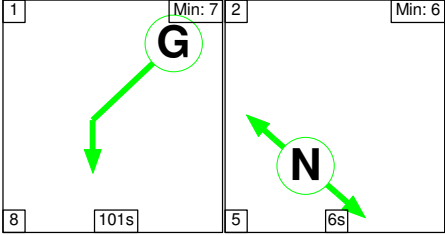
Full Input Data And Results
Scenario 3: '3' (FG3: '2015 Saturday Peak Base', Plan 2: 'PM & Saturday Peak')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

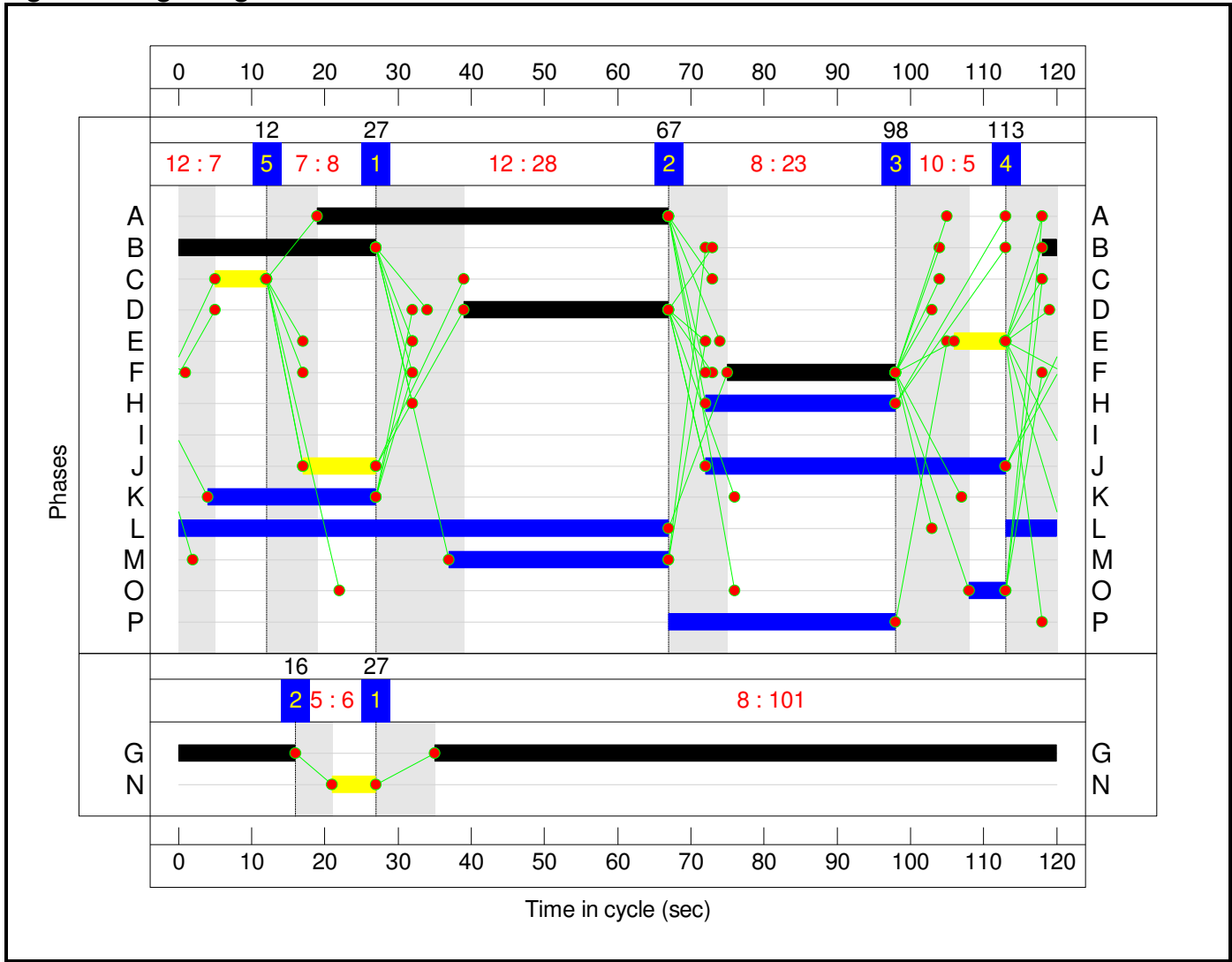
Stage Stream: 1

Stage	1	2	3	4	5
Duration	28	23	5	7	8
Change Point	27	67	98	113	12

Stage Stream: 2

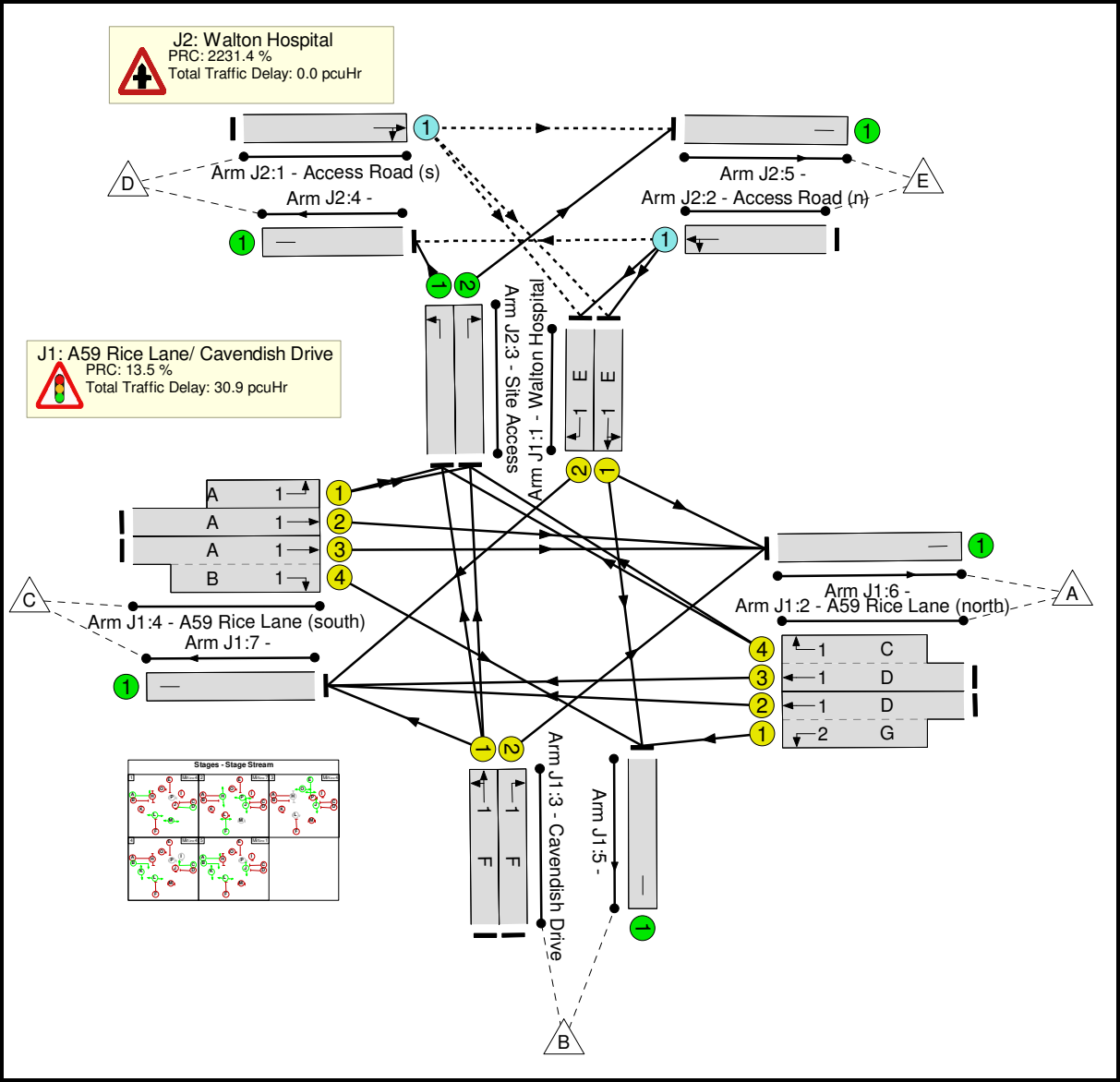
Stage	1	2
Duration	101	6
Change Point	27	16

Signal Timings Diagram



Full Input Data And Results

Network Layout 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: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	79.3%
J1: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	79.3%
1/1	Walton Hospital Ahead Left	U	1	N/A	E		1	7	-	22	1793	120	18.4%
1/2	Walton Hospital Right	U	1	N/A	E		1	7	-	11	1884	126	8.8%
2/2+2/1	A59 Rice Lane (north) Left Ahead	U	1	N/A	D G		1	28:101	-	575	2015:1967	485+338	69.9 : 69.9%
2/3+2/4	A59 Rice Lane (north) Ahead Right	U	1	N/A	D C		1	28:7	-	349	2155:1871	521+9	65.9 : 65.9%
3/1	Cavendish Drive Left Ahead	U	1	N/A	F		1	23	-	279	1830	366	76.2%
3/2	Cavendish Drive Right	U	1	N/A	F		1	23	-	238	1986	397	59.9%
4/2+4/1	A59 Rice Lane (south) Ahead Left	U	1	N/A	A		1	48	-	686	2105:1724	844+21	79.3 : 79.3%
4/3+4/4	A59 Rice Lane (south) Right Ahead	U	1	N/A	A B		1	48:29	-	274	2130:1871	0+468	0.0 : 58.6%
5/1		U	N/A	N/A	-		-	-	-	522	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	917	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	968	Inf	Inf	0.0%
J2: Walton Hospital	-	-	N/A	-	-		-	-	-	-	-	-	3.9%
1/1	Access Road (s) Right Ahead	O	N/A	N/A	-		-	-	-	23	1915	596	3.9%

Full Input Data And Results

2/1	Access Road (n) Left Ahead	O	N/A	N/A	-		-	-	-	10	1915	1915	0.5%
3/1	Site Access Left	U	N/A	N/A	-		-	-	-	19	1665	1665	1.1%
3/2	Site Access Right	U	N/A	N/A	-		-	-	-	8	1868	1868	0.4%
4/1		U	N/A	N/A	-		-	-	-	19	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	8	Inf	Inf	0.0%

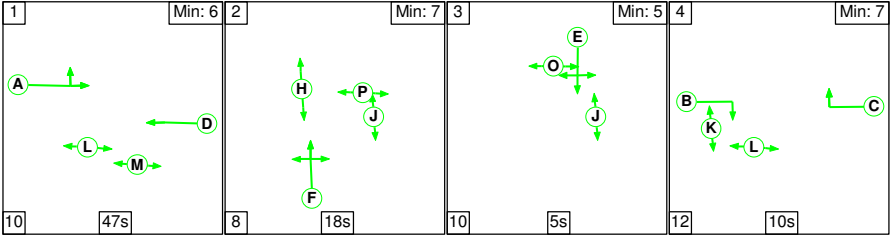
Full Input Data And Results

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: A59 Rice Lane/ Cavendish Drive	-	-	23	0	0	23.8	7.2	0.0	30.9	-	-	-	-
J1: A59 Rice Lane/ Cavendish Drive	-	-	0	0	0	23.8	7.1	0.0	30.9	-	-	-	-
1/1	22	22	-	-	-	0.3	0.1	-	0.4	71.4	0.7	0.1	0.8
1/2	11	11	-	-	-	0.2	0.0	-	0.2	68.4	0.3	0.0	0.4
2/2+2/1	575	575	-	-	-	4.0	1.2	-	5.2	32.3	10.3	1.2	11.4
2/3+2/4	349	349	-	-	-	4.0	1.0	-	5.0	51.1	10.3	1.0	11.2
3/1	279	279	-	-	-	3.5	1.5	-	5.1	65.3	8.8	1.5	10.3
3/2	238	238	-	-	-	2.9	0.7	-	3.6	54.8	7.2	0.7	7.9
4/2+4/1	686	686	-	-	-	5.9	1.9	-	7.8	40.7	19.7	1.9	21.5
4/3+4/4	274	274	-	-	-	3.0	0.7	-	3.7	48.8	8.0	0.7	8.7
5/1	522	522	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	917	917	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	968	968	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Walton Hospital	-	-	23	0	0	0.0	0.0	0.0	0.0	-	-	-	-
1/1	23	23	23	0	0	0.0	0.0	-	0.0	3.1	0.0	0.0	0.0
2/1	10	10	0	0	0	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
3/1	19	19	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0
3/2	8	8	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
4/1	19	19	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	8	8	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%): 13.5 Total Delay for Signalled Lanes (pcuHr): 30.91 Cycle Time (s): 120 C1 Stream: 2 PRC for Signalled Lanes (%): 0.0 Total Delay for Signalled Lanes (pcuHr): 0.00 Cycle Time (s): 120 PRC Over All Lanes (%): 13.5 Total Delay Over All Lanes(pcuHr): 30.94													

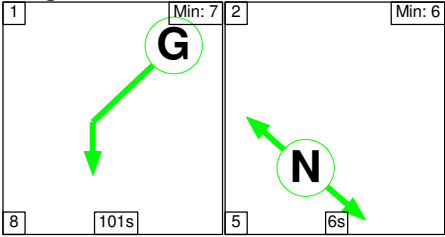
Full Input Data And Results
Scenario 4: '4' (FG4: '2020 AM Peak Base + Committed ', Plan 1: 'AM Peak')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

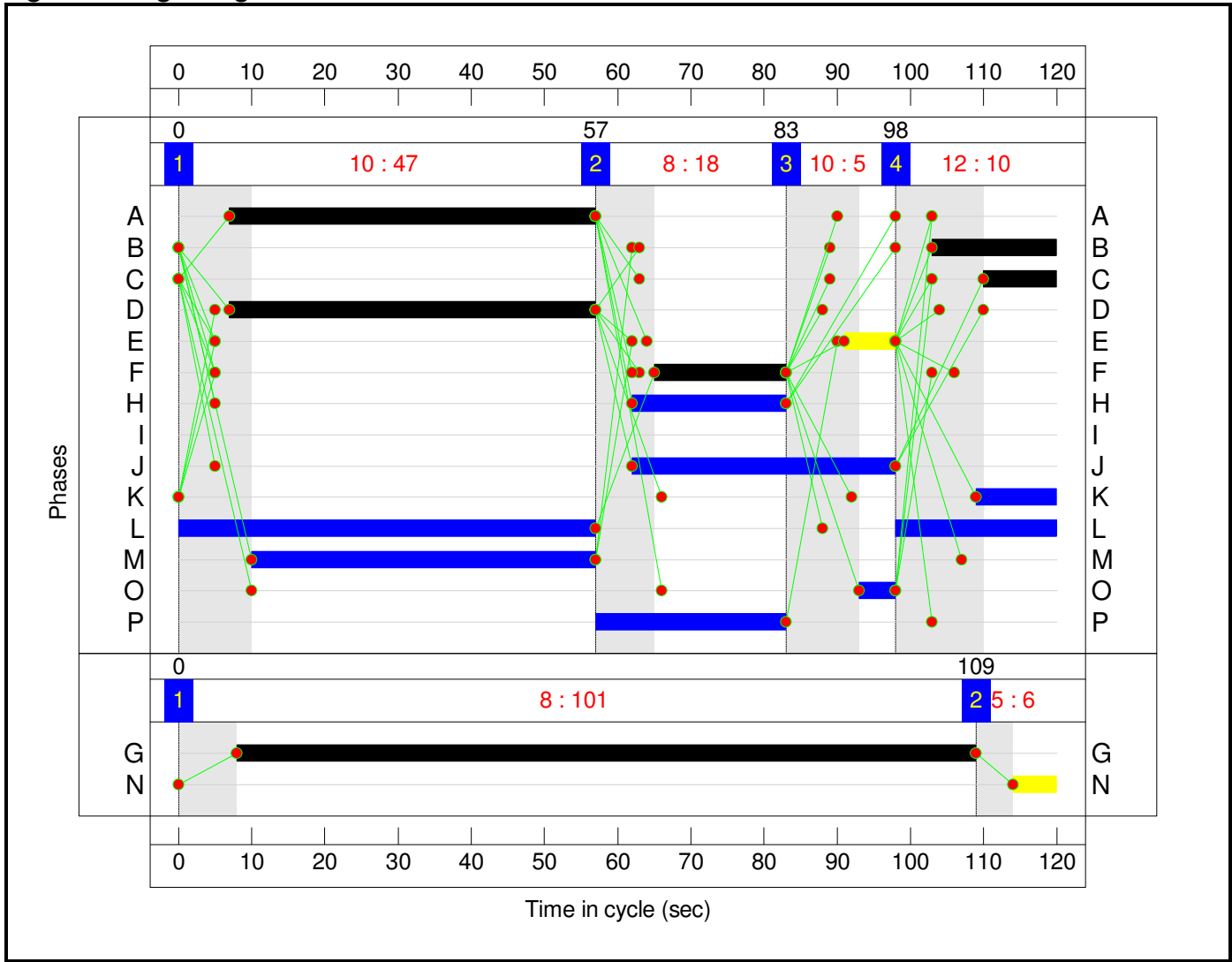
Stage Stream: 1

Stage	1	2	3	4
Duration	47	18	5	10
Change Point	0	57	83	98

Stage Stream: 2

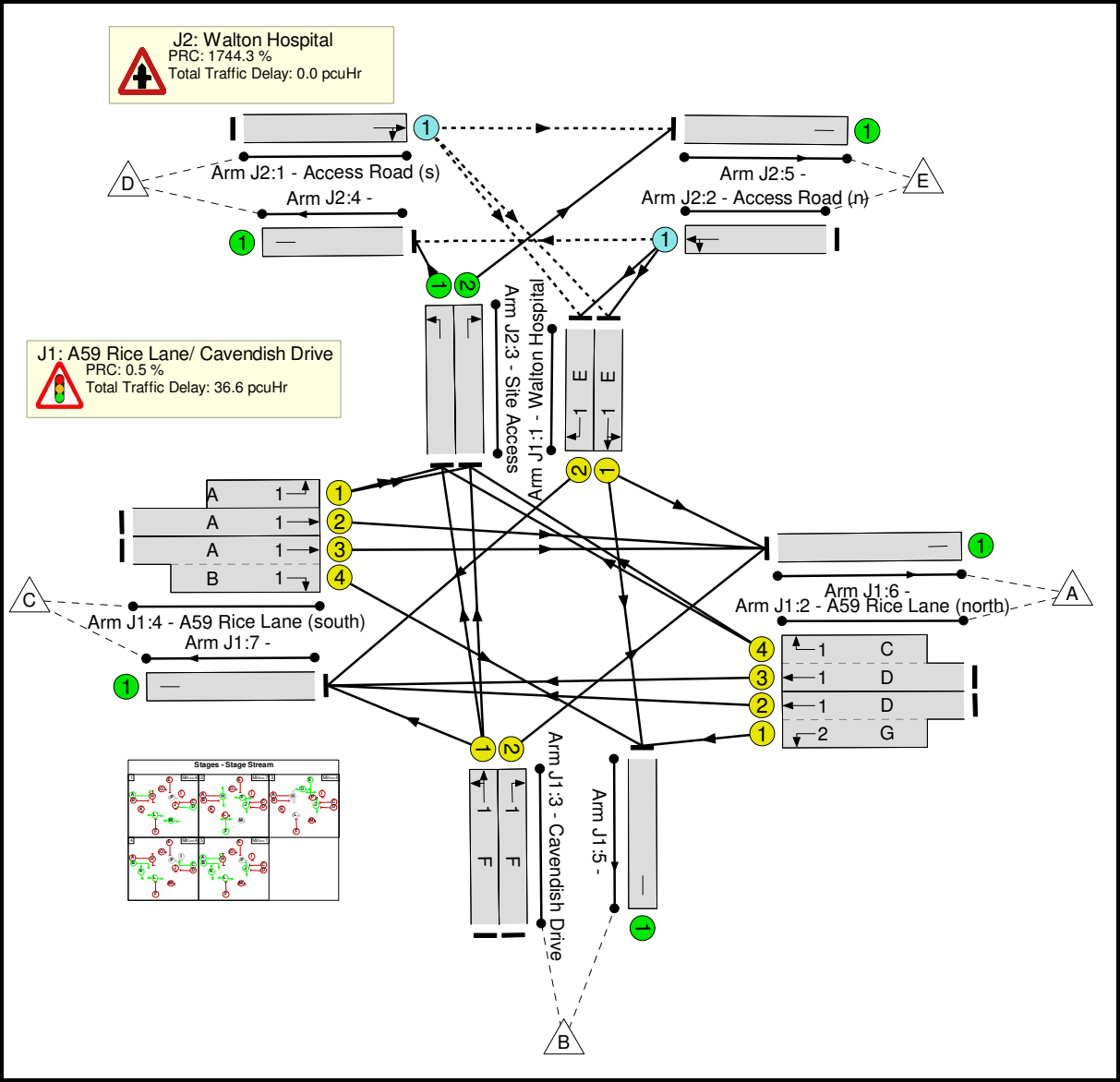
Stage	1	2
Duration	101	6
Change Point	0	109

Signal Timings Diagram



Full Input Data And Results

Network Layout 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: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	89.6%
J1: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	89.6%
1/1	Walton Hospital Ahead Left	U	1	N/A	E		1	7	-	23	1735	116	19.9%
1/2	Walton Hospital Right	U	1	N/A	E		1	7	-	19	1884	126	15.1%
2/2+2/1	A59 Rice Lane (north) Left Ahead	U	1	N/A	D G		1	50:101	-	649	2015:1967	759+267	63.2 : 63.2%
2/3+2/4	A59 Rice Lane (north) Ahead Right	U	1	N/A	D C		1	50:10	-	540	2155:1871	908+28	57.7 : 57.7%
3/1	Cavendish Drive Left Ahead	U	1	N/A	F		1	18	-	257	1829	290	88.7%
3/2	Cavendish Drive Right	U	1	N/A	F		1	18	-	131	1986	314	41.7%
4/2+4/1	A59 Rice Lane (south) Ahead Left	U	1	N/A	A		1	50	-	806	2105:1724	879+21	89.6 : 89.6%
4/3+4/4	A59 Rice Lane (south) Right Ahead	U	1	N/A	A B		1	50:17	-	250	2130:1871	1+281	88.7 : 88.7%
5/1		U	N/A	N/A	-		-	-	-	424	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	936	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	1277	Inf	Inf	0.0%
J2: Walton Hospital	-	-	N/A	-	-		-	-	-	-	-	-	4.9%
1/1	Access Road (s) Right Ahead	O	N/A	N/A	-		-	-	-	29	1915	594	4.9%

Full Input Data And Results

2/1	Access Road (n) Left Ahead	O	N/A	N/A	-		-	-	-	13	1915	1915	0.7%
3/1	Site Access Left	U	N/A	N/A	-		-	-	-	26	1665	1665	1.6%
3/2	Site Access Right	U	N/A	N/A	-		-	-	-	12	1868	1868	0.6%
4/1		U	N/A	N/A	-		-	-	-	26	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	12	Inf	Inf	0.0%

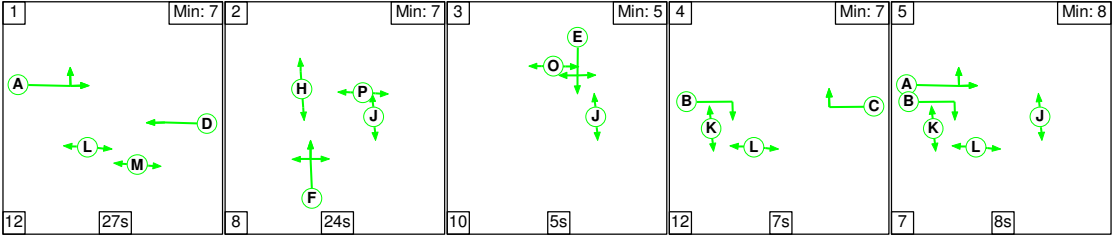
Full Input Data And Results

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: A59 Rice Lane/ Cavendish Drive	-	-	29	0	0	24.0	12.6	0.0	36.6	-	-	-	-
J1: A59 Rice Lane/ Cavendish Drive	-	-	0	0	0	24.0	12.6	0.0	36.6	-	-	-	-
1/1	23	23	-	-	-	0.3	0.1	-	0.5	72.4	0.7	0.1	0.8
1/2	19	19	-	-	-	0.3	0.1	-	0.4	69.7	0.6	0.1	0.7
2/2+2/1	649	649	-	-	-	3.5	0.9	-	4.4	24.4	12.0	0.9	12.9
2/3+2/4	540	540	-	-	-	4.0	0.7	-	4.7	31.5	13.2	0.7	13.9
3/1	257	257	-	-	-	3.5	3.3	-	6.8	95.4	8.4	3.3	11.6
3/2	131	131	-	-	-	1.7	0.4	-	2.0	55.3	3.9	0.4	4.3
4/2+4/1	806	806	-	-	-	7.1	4.0	-	11.1	49.5	24.7	4.0	28.7
4/3+4/4	250	250	-	-	-	3.5	3.3	-	6.7	96.9	8.1	3.3	11.4
5/1	424	424	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	936	936	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1277	1277	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Walton Hospital	-	-	29	0	0	0.0	0.0	0.0	0.0	-	-	-	-
1/1	29	29	29	0	0	0.0	0.0	-	0.0	3.2	0.0	0.0	0.0
2/1	13	13	0	0	0	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
3/1	26	26	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0
3/2	12	12	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
4/1	26	26	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	12	12	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%): 0.5 C1 Stream: 2 PRC for Signalled Lanes (%): 0.0 PRC Over All Lanes (%): 0.5 Total Delay for Signalled Lanes (pcuHr): 36.59 Total Delay for Signalled Lanes (pcuHr): 0.00 Total Delay Over All Lanes(pcuHr): 36.63 Cycle Time (s): 120 Cycle Time (s): 120													

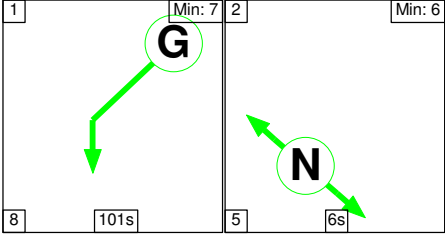
Full Input Data And Results
Scenario 5: '5' (FG5: '2020 PM Peak Base + Committed', Plan 2: 'PM & Saturday Peak')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

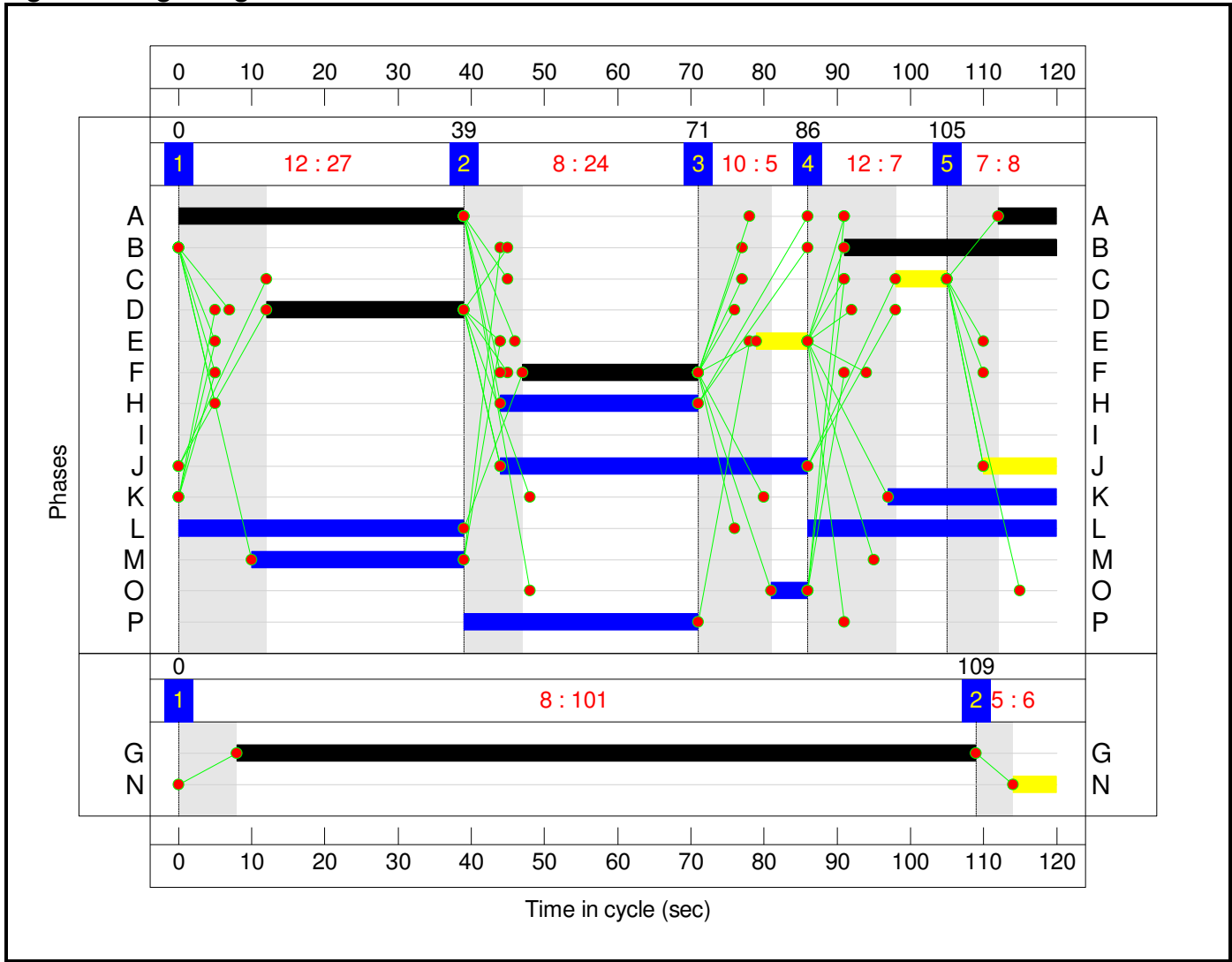
Stage Stream: 1

Stage	1	2	3	4	5
Duration	27	24	5	7	8
Change Point	0	39	71	86	105

Stage Stream: 2

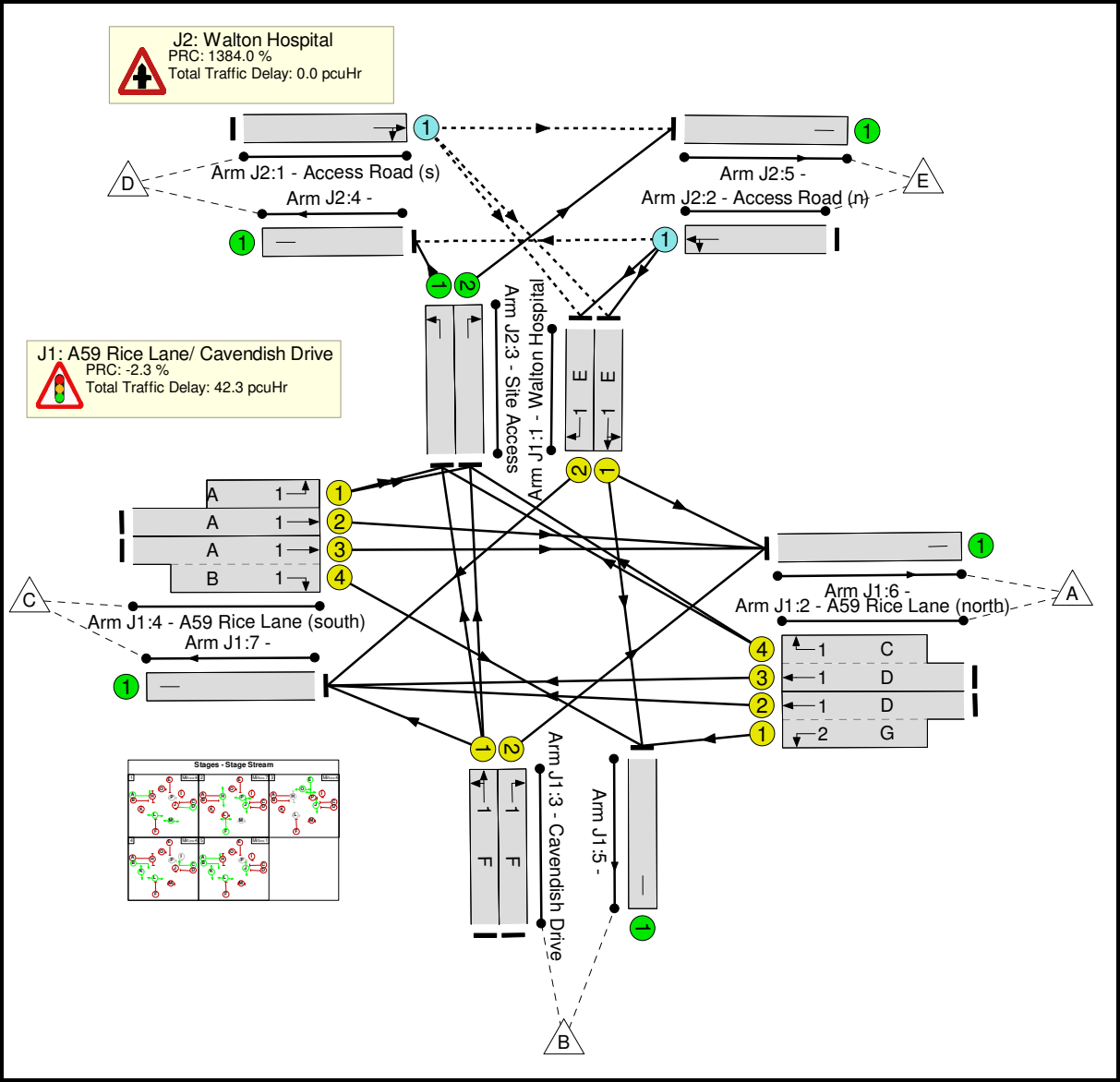
Stage	1	2
Duration	101	6
Change Point	0	109

Signal Timings Diagram



Full Input Data And Results

Network Layout 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: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	92.1%
J1: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	92.1%
1/1	Walton Hospital Ahead Left	U	1	N/A	E		1	7	-	33	1780	119	27.8%
1/2	Walton Hospital Right	U	1	N/A	E		1	7	-	19	1884	126	15.1%
2/2+2/1	A59 Rice Lane (north) Left Ahead	U	1	N/A	D G		1	27:101	-	523	2015:1967	470+266	71.0 : 71.0%
2/3+2/4	A59 Rice Lane (north) Ahead Right	U	1	N/A	D C		1	27:7	-	334	2155:1871	503+17	64.2 : 64.2%
3/1	Cavendish Drive Left Ahead	U	1	N/A	F		1	24	-	347	1829	381	91.1%
3/2	Cavendish Drive Right	U	1	N/A	F		1	24	-	201	1986	414	48.6%
4/2+4/1	A59 Rice Lane (south) Ahead Left	U	1	N/A	A		1	47	-	781	2105:1724	820+28	92.1 : 92.1%
4/3+4/4	A59 Rice Lane (south) Right Ahead	U	1	N/A	A B		1	47:29	-	503	2130:1871	180+424	83.2 : 83.2%
5/1		U	N/A	N/A	-		-	-	-	558	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1123	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	1019	Inf	Inf	0.0%
J2: Walton Hospital	-	-	N/A	-	-		-	-	-	-	-	-	6.1%
1/1	Access Road (s) Right Ahead	O	N/A	N/A	-		-	-	-	36	1915	594	6.1%

Full Input Data And Results

2/1	Access Road (n) Left Ahead	O	N/A	N/A	-		-	-	-	16	1915	1915	0.8%
3/1	Site Access Left	U	N/A	N/A	-		-	-	-	29	1665	1665	1.7%
3/2	Site Access Right	U	N/A	N/A	-		-	-	-	12	1868	1868	0.6%
4/1		U	N/A	N/A	-		-	-	-	29	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	12	Inf	Inf	0.0%

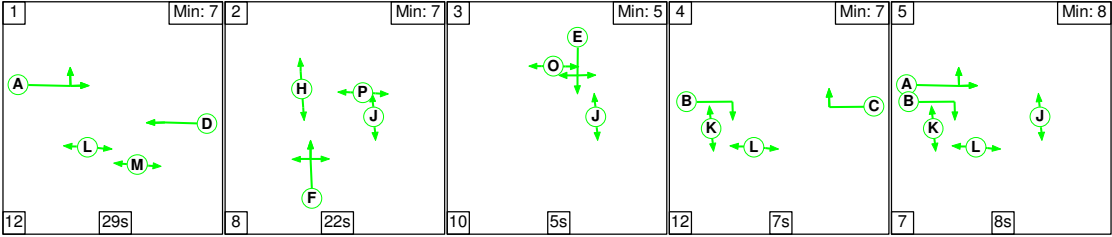
Full Input Data And Results

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: A59 Rice Lane/ Cavendish Drive	-	-	36	0	0	27.9	14.4	0.0	42.3	-	-	-	-
J1: A59 Rice Lane/ Cavendish Drive	-	-	0	0	0	27.9	14.4	0.0	42.3	-	-	-	-
1/1	33	33	-	-	-	0.5	0.2	-	0.7	74.2	1.0	0.2	1.2
1/2	19	19	-	-	-	0.3	0.1	-	0.4	69.7	0.6	0.1	0.7
2/2+2/1	523	523	-	-	-	4.0	1.2	-	5.2	35.9	10.2	1.2	11.4
2/3+2/4	334	334	-	-	-	3.9	0.9	-	4.8	51.4	9.7	0.9	10.6
3/1	347	347	-	-	-	4.5	4.1	-	8.6	89.0	11.3	4.1	15.4
3/2	201	201	-	-	-	2.3	0.5	-	2.8	50.3	5.9	0.5	6.3
4/2+4/1	781	781	-	-	-	7.4	5.1	-	12.4	57.3	24.3	5.1	29.4
4/3+4/4	503	503	-	-	-	5.0	2.4	-	7.4	53.1	11.8	2.4	14.2
5/1	558	558	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1123	1123	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1019	1019	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Walton Hospital	-	-	36	0	0	0.0	0.0	0.0	0.0	-	-	-	-
1/1	36	36	36	0	0	0.0	0.0	-	0.0	3.2	0.0	0.0	0.0
2/1	16	16	0	0	0	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
3/1	29	29	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0
3/2	12	12	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
4/1	29	29	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	12	12	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%): -2.3 C1 Stream: 2 PRC for Signalled Lanes (%): 0.0 PRC Over All Lanes (%): -2.3 Total Delay for Signalled Lanes (pcuHr): 42.28 Total Delay for Signalled Lanes (pcuHr): 0.00 Total Delay Over All Lanes(pcuHr): 42.32 Cycle Time (s): 120 Cycle Time (s): 120													

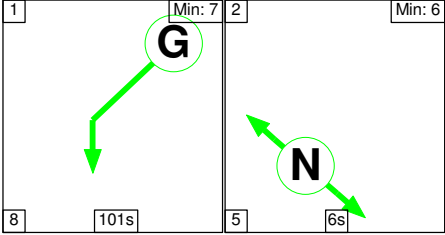
Full Input Data And Results
Scenario 6: '6' (FG6: '2020 Saturday Peak Base + Committed', Plan 2: 'PM & Saturday Peak')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

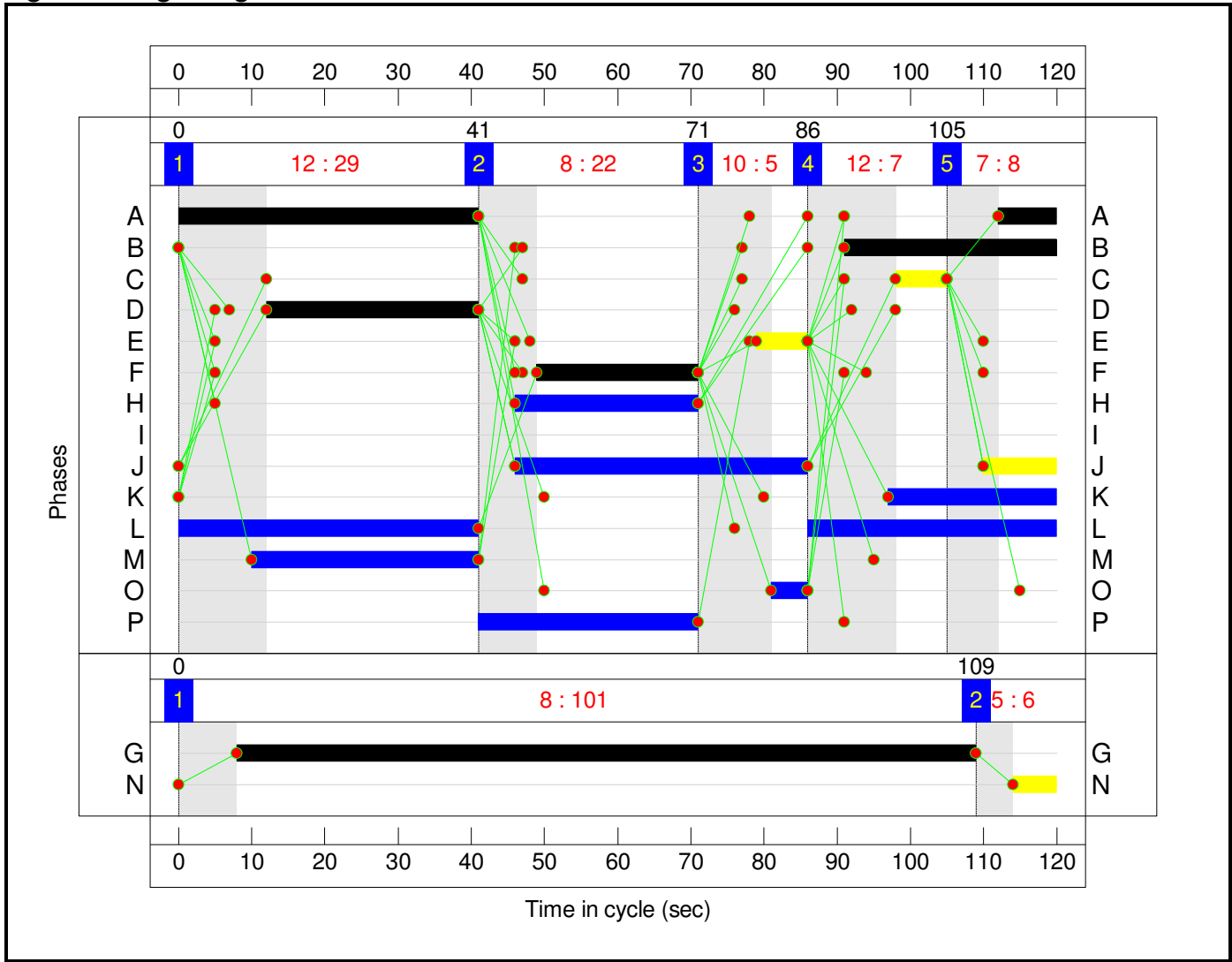
Stage Stream: 1

Stage	1	2	3	4	5
Duration	29	22	5	7	8
Change Point	0	41	71	86	105

Stage Stream: 2

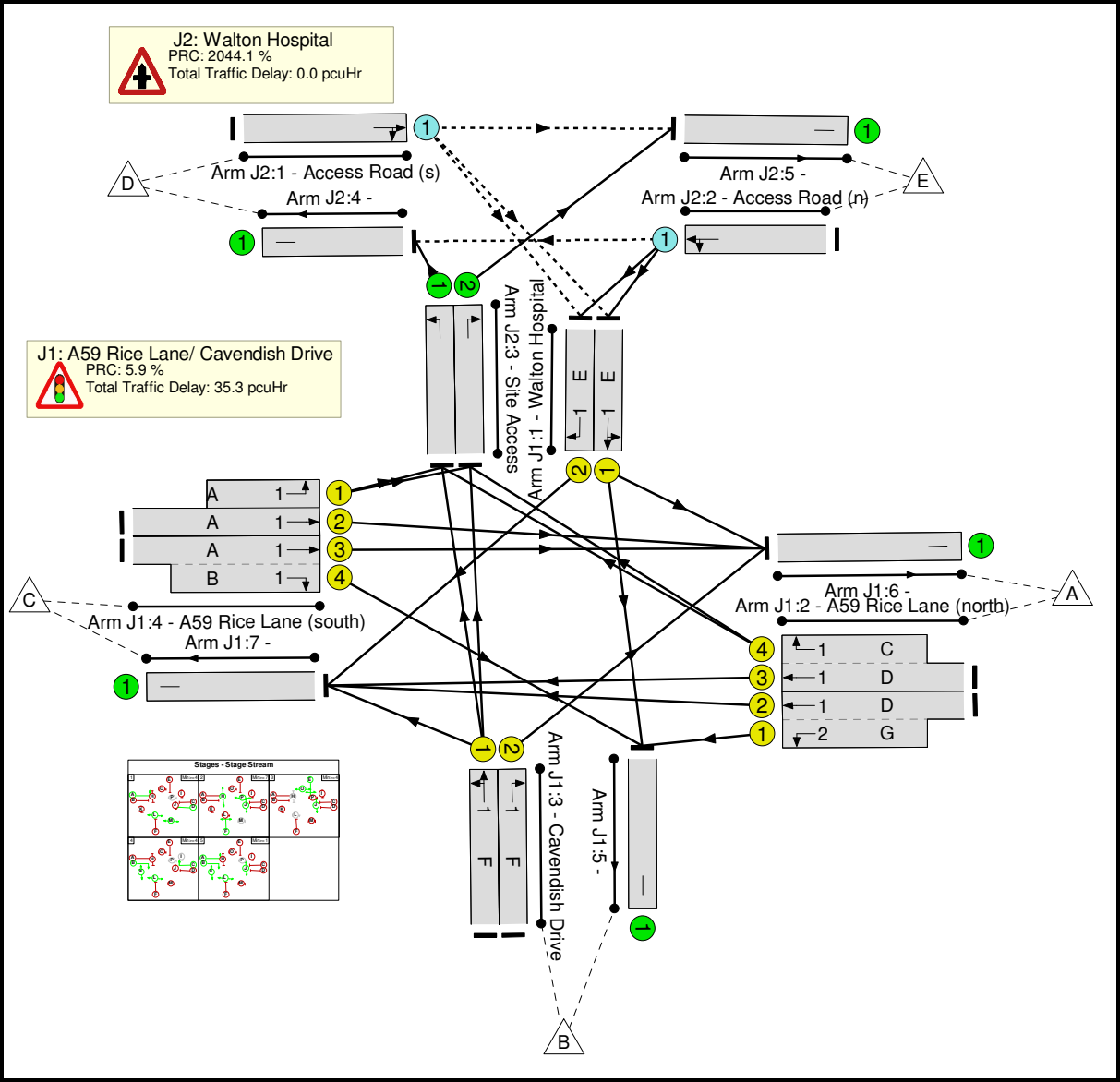
Stage	1	2
Duration	101	6
Change Point	0	109

Signal Timings Diagram



Full Input Data And Results

Network Layout 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: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	85.0%
J1: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	85.0%
1/1	Walton Hospital Ahead Left	U	1	N/A	E		1	7	-	22	1765	118	18.7%
1/2	Walton Hospital Right	U	1	N/A	E		1	7	-	14	1884	126	11.1%
2/2+2/1	A59 Rice Lane (north) Left Ahead	U	1	N/A	D G		1	29:101	-	628	2015:1967	495+334	75.8 : 75.8%
2/3+2/4	A59 Rice Lane (north) Ahead Right	U	1	N/A	D C		1	29:7	-	364	2155:1871	539+11	66.3 : 66.3%
3/1	Cavendish Drive Left Ahead	U	1	N/A	F		1	22	-	298	1829	351	85.0%
3/2	Cavendish Drive Right	U	1	N/A	F		1	22	-	255	1986	381	67.0%
4/2+4/1	A59 Rice Lane (south) Ahead Left	U	1	N/A	A		1	49	-	736	2105:1724	861+22	83.4 : 83.4%
4/3+4/4	A59 Rice Lane (south) Right Ahead	U	1	N/A	A B		1	49:29	-	294	2130:1871	0+468	0.0 : 62.9%
5/1		U	N/A	N/A	-		-	-	-	556	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	986	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	1041	Inf	Inf	0.0%
J2: Walton Hospital	-	-	N/A	-	-		-	-	-	-	-	-	4.2%
1/1	Access Road (s) Right Ahead	O	N/A	N/A	-		-	-	-	25	1915	596	4.2%

Full Input Data And Results

2/1	Access Road (n) Left Ahead	O	N/A	N/A	-		-	-	-	11	1915	1915	0.6%
3/1	Site Access Left	U	N/A	N/A	-		-	-	-	20	1665	1665	1.2%
3/2	Site Access Right	U	N/A	N/A	-		-	-	-	8	1868	1868	0.4%
4/1		U	N/A	N/A	-		-	-	-	20	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	8	Inf	Inf	0.0%

Full Input Data And Results

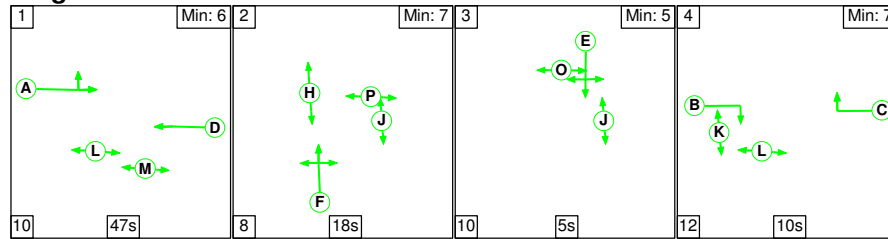
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A59 Rice Lane/ Cavendish Drive	-	-	25	0	0	25.8	9.6	0.0	35.3	-	-	-	-
J1: A59 Rice Lane/ Cavendish Drive	-	-	0	0	0	25.8	9.5	0.0	35.3	-	-	-	-
1/1	22	22	-	-	-	0.3	0.1	-	0.4	71.8	0.7	0.1	0.8
1/2	14	14	-	-	-	0.2	0.1	-	0.3	68.8	0.4	0.1	0.5
2/2+2/1	628	628	-	-	-	4.4	1.5	-	6.0	34.2	11.5	1.5	13.0
2/3+2/4	364	364	-	-	-	4.1	1.0	-	5.1	50.3	10.6	1.0	11.6
3/1	298	298	-	-	-	3.9	2.6	-	6.5	78.0	9.5	2.6	12.1
3/2	255	255	-	-	-	3.2	1.0	-	4.2	59.1	7.9	1.0	8.9
4/2+4/1	736	736	-	-	-	6.4	2.4	-	8.8	43.0	21.7	2.4	24.2
4/3+4/4	294	294	-	-	-	3.3	0.8	-	4.1	50.3	8.7	0.8	9.5
5/1	556	556	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	986	986	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1041	1041	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Walton Hospital	-	-	25	0	0	0.0	0.0	0.0	0.0	-	-	-	-
1/1	25	25	25	0	0	0.0	0.0	-	0.0	3.2	0.0	0.0	0.0
2/1	11	11	0	0	0	0.0	0.0	-	0.0	0.9	0.0	0.0	0.0
3/1	20	20	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0
3/2	8	8	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
4/1	20	20	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	8	8	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%): 5.9 Total Delay for Signalled Lanes (pcuHr): 35.30 Cycle Time (s): 120 C1 Stream: 2 PRC for Signalled Lanes (%): 0.0 Total Delay for Signalled Lanes (pcuHr): 0.00 Cycle Time (s): 120 PRC Over All Lanes (%): 5.9 Total Delay Over All Lanes(pcuHr): 35.34													

Full Input Data And Results

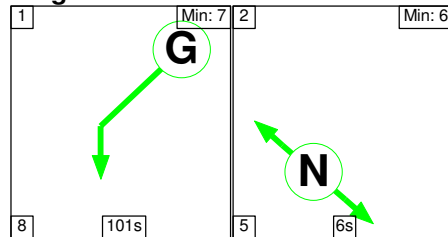
Scenario 7: '7' (FG7: '2020 AM Peak Base + Committed + Development (Average)', Plan 1: 'AM Peak')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

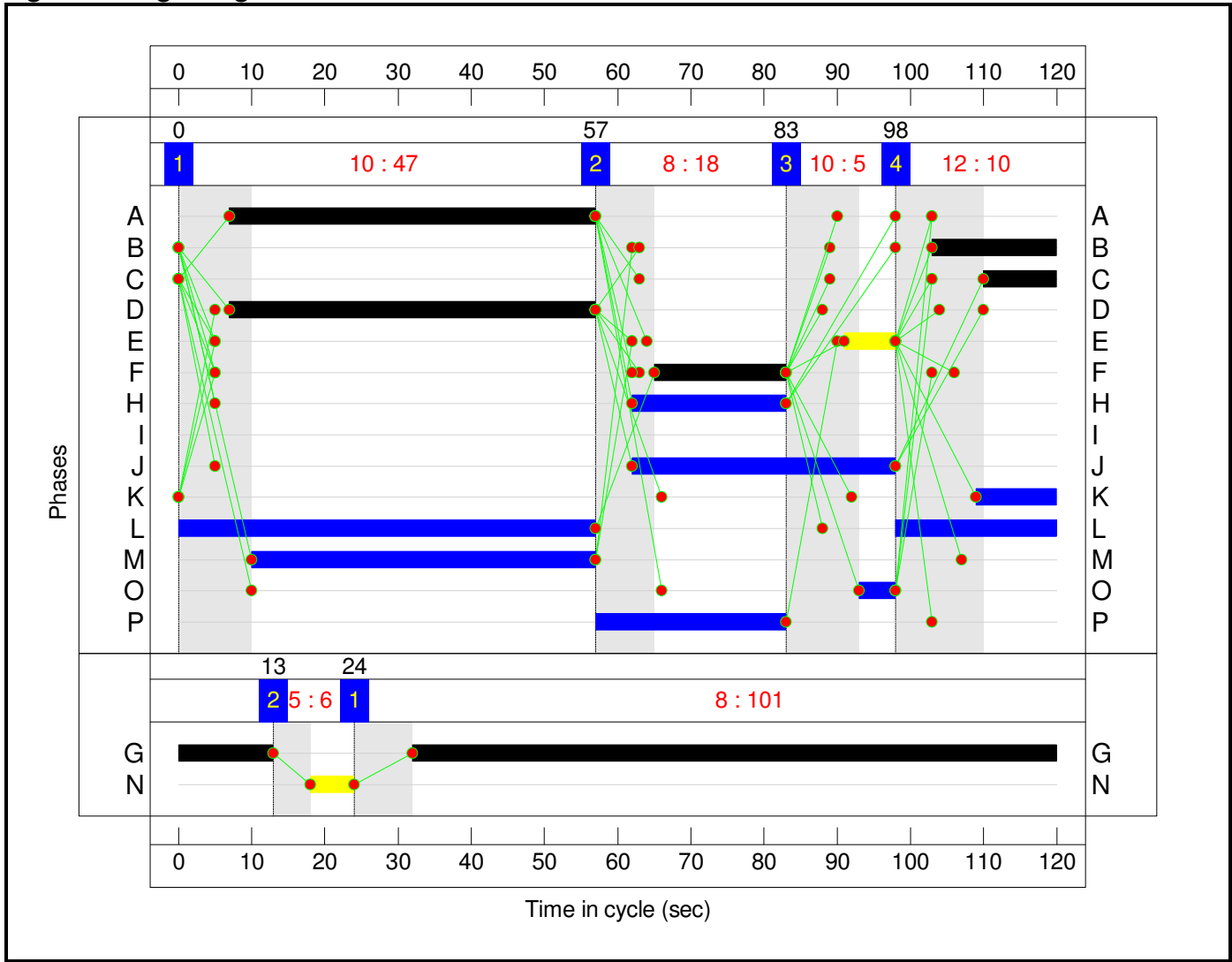
Stage Stream: 1

Stage	1	2	3	4
Duration	47	18	5	10
Change Point	0	57	83	98

Stage Stream: 2

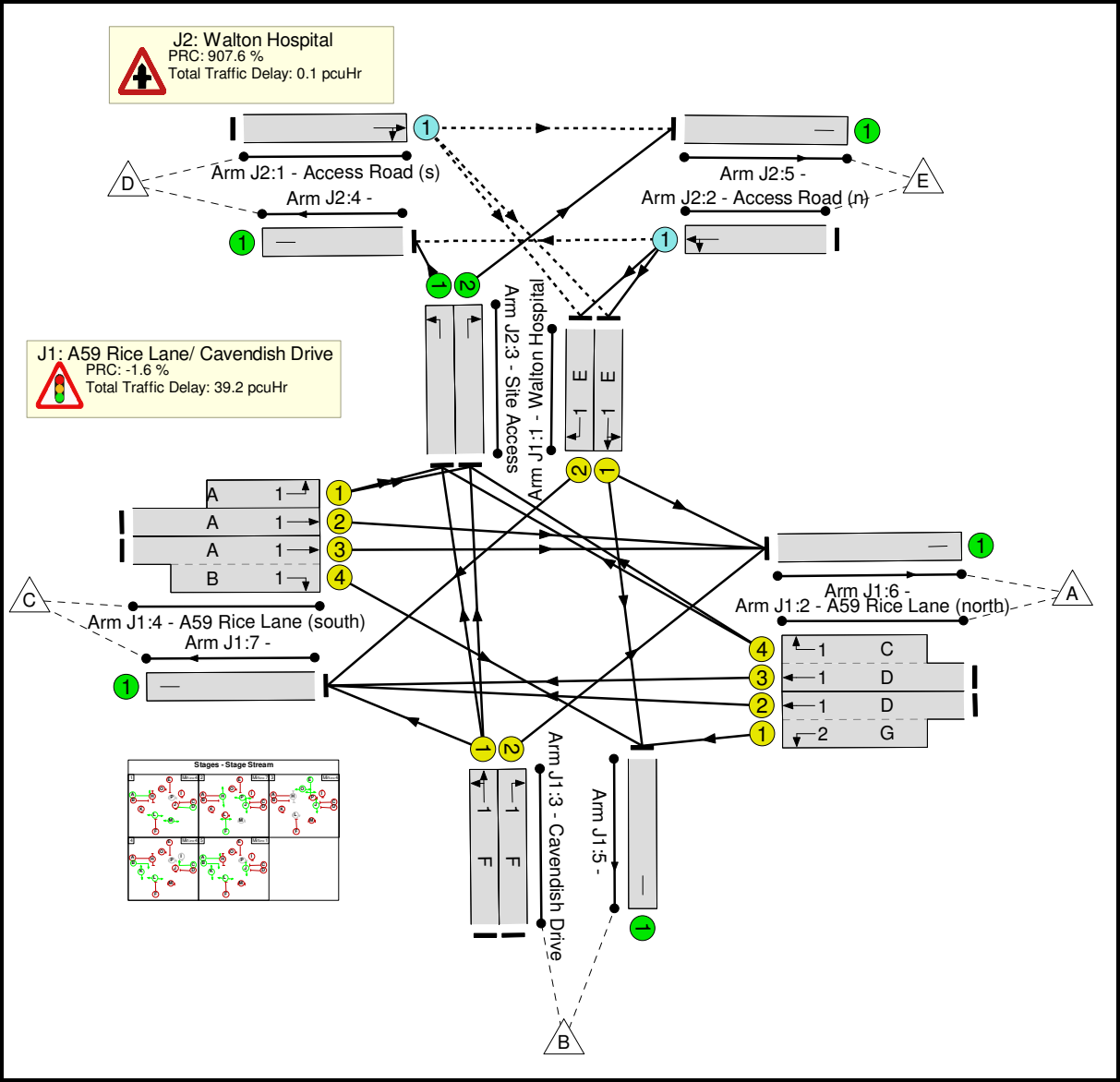
Stage	1	2
Duration	101	6
Change Point	24	13

Signal Timings Diagram



Full Input Data And Results

Network Layout 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: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	91.5%
J1: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	91.5%
1/1	Walton Hospital Ahead Left	U	1	N/A	E		1	7	-	46	1713	114	40.3%
1/2	Walton Hospital Right	U	1	N/A	E		1	7	-	47	1884	126	37.4%
2/2+2/1	A59 Rice Lane (north) Left Ahead	U	1	N/A	D G		1	50:101	-	650	2015:1967	760+267	63.3 : 63.3%
2/3+2/4	A59 Rice Lane (north) Ahead Right	U	1	N/A	D C		1	50:10	-	557	2155:1871	880+63	59.1 : 59.1%
3/1	Cavendish Drive Left Ahead	U	1	N/A	F		1	18	-	258	1830	290	89.0%
3/2	Cavendish Drive Right	U	1	N/A	F		1	18	-	131	1986	314	41.7%
4/2+4/1	A59 Rice Lane (south) Ahead Left	U	1	N/A	A		1	50	-	824	2105:1724	858+43	91.5 : 91.5%
4/3+4/4	A59 Rice Lane (south) Right Ahead	U	1	N/A	A B		1	50:17	-	249	2130:1871	0+281	0.0 : 88.7%
5/1		U	N/A	N/A	-		-	-	-	425	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	955	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	1302	Inf	Inf	0.0%
J2: Walton Hospital	-	-	N/A	-	-		-	-	-	-	-	-	8.9%
1/1	Access Road (s) Right Ahead	O	N/A	N/A	-		-	-	-	52	1915	582	8.9%

Full Input Data And Results

2/1	Access Road (n) Left Ahead	O	N/A	N/A	-		-	-	-	41	1915	1915	2.1%
3/1	Site Access Left	U	N/A	N/A	-		-	-	-	41	1665	1665	2.5%
3/2	Site Access Right	U	N/A	N/A	-		-	-	-	39	1868	1868	2.1%
4/1		U	N/A	N/A	-		-	-	-	41	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	39	Inf	Inf	0.0%

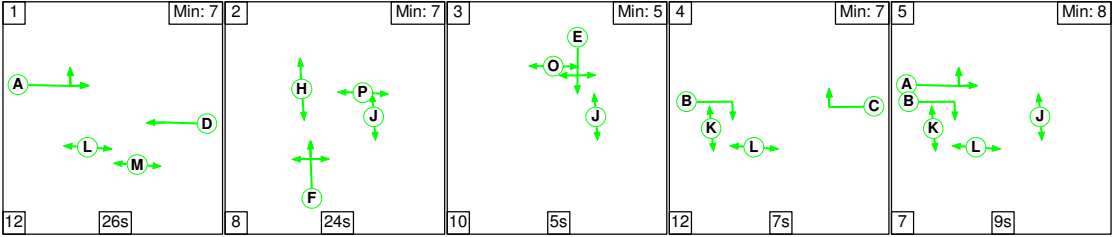
Full Input Data And Results

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: A59 Rice Lane/ Cavendish Drive	-	-	52	0	0	25.3	14.0	0.0	39.3	-	-	-	-
J1: A59 Rice Lane/ Cavendish Drive	-	-	0	0	0	25.3	14.0	0.0	39.2	-	-	-	-
1/1	46	46	-	-	-	0.7	0.3	-	1.0	79.9	1.5	0.3	1.8
1/2	47	47	-	-	-	0.7	0.3	-	1.0	76.4	1.5	0.3	1.8
2/2+2/1	650	650	-	-	-	3.6	0.9	-	4.4	24.4	12.0	0.9	12.9
2/3+2/4	557	557	-	-	-	4.3	0.7	-	5.0	32.5	13.3	0.7	14.0
3/1	258	258	-	-	-	3.5	3.4	-	6.9	96.3	8.4	3.4	11.7
3/2	131	131	-	-	-	1.7	0.4	-	2.0	55.3	3.9	0.4	4.3
4/2+4/1	824	824	-	-	-	7.4	4.8	-	12.1	53.0	25.3	4.8	30.1
4/3+4/4	249	249	-	-	-	3.5	3.3	-	6.7	97.2	8.1	3.3	11.4
5/1	425	425	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	955	955	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1302	1302	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Walton Hospital	-	-	52	0	0	0.0	0.1	0.0	0.1	-	-	-	-
1/1	52	52	52	0	0	0.0	0.0	-	0.0	3.4	0.0	0.0	0.0
2/1	41	41	0	0	0	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	41	41	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0
3/2	39	39	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
4/1	41	41	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	39	39	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%): -1.6 C1 Stream: 2 PRC for Signalled Lanes (%): 0.0 PRC Over All Lanes (%): -1.6 Total Delay for Signalled Lanes (pcuHr): 39.21 Total Delay for Signalled Lanes (pcuHr): 0.00 Total Delay Over All Lanes(pcuHr): 39.30 Cycle Time (s): 120 Cycle Time (s): 120													

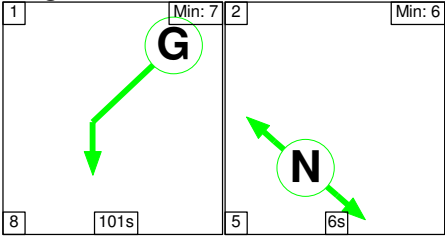
Full Input Data And Results
Scenario 8: '8' (FG8: '2020 PM Peak Base + Committed + Development (Average)', Plan 2: 'PM & Saturday Peak')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

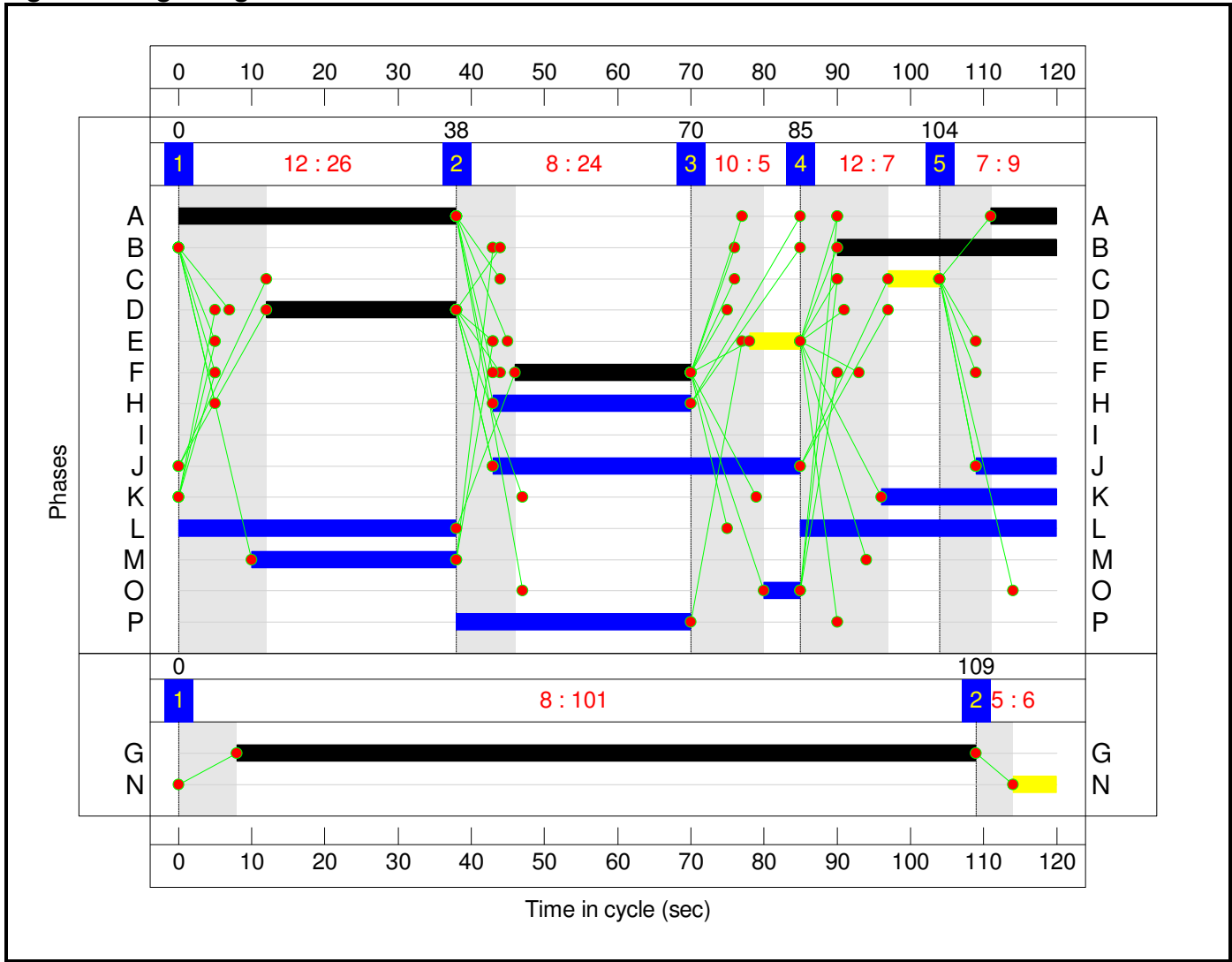
Stage Stream: 1

Stage	1	2	3	4	5
Duration	26	24	5	7	9
Change Point	0	38	70	85	104

Stage Stream: 2

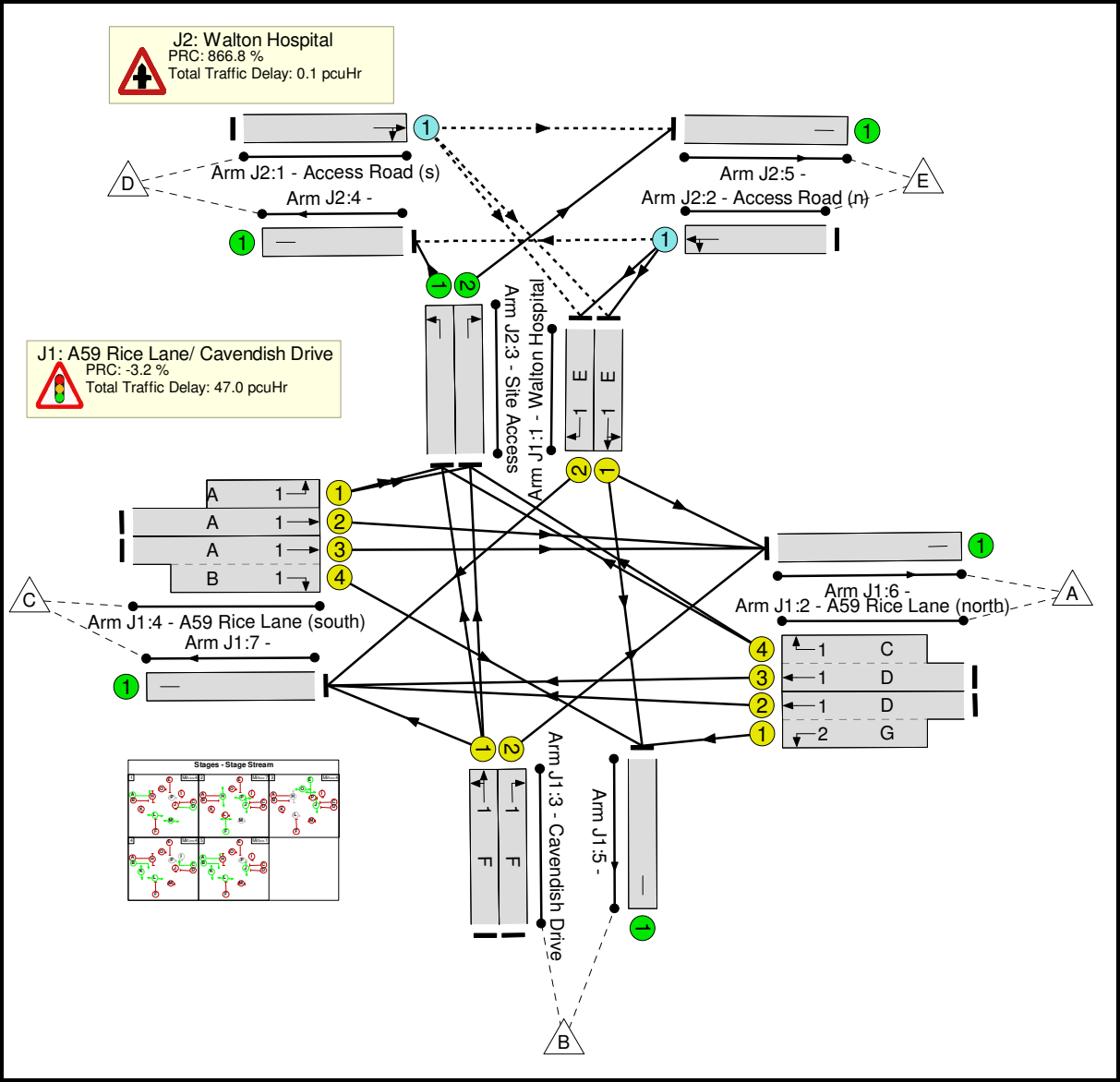
Stage	1	2
Duration	101	6
Change Point	0	109

Signal Timings Diagram



Full Input Data And Results

Network Layout 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: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	92.9%
J1: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	92.9%
1/1	Walton Hospital Ahead Left	U	1	N/A	E		1	7	-	84	1730	115	72.8%
1/2	Walton Hospital Right	U	1	N/A	E		1	7	-	62	1884	126	49.4%
2/2+2/1	A59 Rice Lane (north) Left Ahead	U	1	N/A	D G		1	26:101	-	517	2015:1967	453+261	72.3 : 72.3%
2/3+2/4	A59 Rice Lane (north) Ahead Right	U	1	N/A	D C		1	26:7	-	369	2155:1871	465+70	69.0 : 69.0%
3/1	Cavendish Drive Left Ahead	U	1	N/A	F		1	24	-	350	1830	381	91.8%
3/2	Cavendish Drive Right	U	1	N/A	F		1	24	-	201	1986	414	48.6%
4/2+4/1	A59 Rice Lane (south) Ahead Left	U	1	N/A	A		1	47	-	792	2105:1724	762+90	92.9 : 92.9%
4/3+4/4	A59 Rice Lane (south) Right Ahead	U	1	N/A	A B		1	47:30	-	538	2130:1871	223+425	83.0 : 83.0%
5/1		U	N/A	N/A	-		-	-	-	562	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1158	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	1054	Inf	Inf	0.0%
J2: Walton Hospital	-	-	N/A	-	-		-	-	-	-	-	-	9.3%
1/1	Access Road (s) Right Ahead	O	N/A	N/A	-		-	-	-	52	1915	559	9.3%

Full Input Data And Results

2/1	Access Road (n) Left Ahead	O	N/A	N/A	-		-	-	-	94	1915	1915	4.9%
3/1	Site Access Left	U	N/A	N/A	-		-	-	-	46	1665	1665	2.8%
3/2	Site Access Right	U	N/A	N/A	-		-	-	-	93	1868	1868	5.0%
4/1		U	N/A	N/A	-		-	-	-	46	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	93	Inf	Inf	0.0%

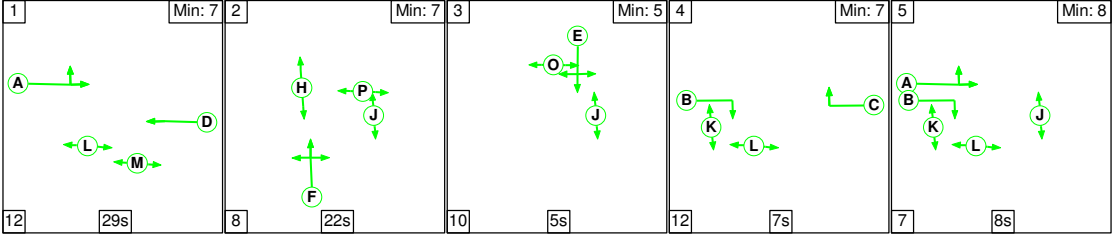
Full Input Data And Results

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: A59 Rice Lane/ Cavendish Drive	-	-	52	0	0	30.2	16.9	0.0	47.1	-	-	-	-
J1: A59 Rice Lane/ Cavendish Drive	-	-	0	0	0	30.2	16.8	0.0	47.0	-	-	-	-
1/1	84	84	-	-	-	1.3	1.2	-	2.5	108.2	2.7	1.2	4.0
1/2	62	62	-	-	-	0.9	0.5	-	1.4	81.9	2.0	0.5	2.5
2/2+2/1	517	517	-	-	-	4.0	1.3	-	5.3	36.8	10.1	1.3	11.4
2/3+2/4	369	369	-	-	-	4.5	1.1	-	5.6	54.5	9.8	1.1	10.9
3/1	350	350	-	-	-	4.5	4.4	-	8.9	91.5	11.4	4.4	15.7
3/2	201	201	-	-	-	2.3	0.5	-	2.8	50.3	5.9	0.5	6.3
4/2+4/1	792	792	-	-	-	7.4	5.5	-	12.9	58.8	24.4	5.5	29.9
4/3+4/4	538	538	-	-	-	5.2	2.3	-	7.6	50.5	11.9	2.3	14.2
5/1	562	562	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1158	1158	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1054	1054	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Walton Hospital	-	-	52	0	0	0.0	0.1	0.0	0.1	-	-	-	-
1/1	52	52	52	0	0	0.0	0.1	-	0.1	3.6	0.0	0.1	0.1
2/1	94	94	0	0	0	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	46	46	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0
3/2	93	93	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
4/1	46	46	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	93	93	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%): -3.2 C1 Stream: 2 PRC for Signalled Lanes (%): 0.0 PRC Over All Lanes (%): -3.2 Total Delay for Signalled Lanes (pcuHr): 47.00 Total Delay for Signalled Lanes (pcuHr): 0.00 Total Delay Over All Lanes(pcuHr): 47.12 Cycle Time (s): 120 Cycle Time (s): 120													

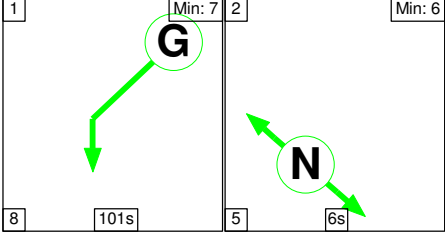
Full Input Data And Results
Scenario 9: '9' (FG9: '2020 Saturday Peak Base + Committed + Development (Average)', Plan 2: 'PM & Saturday Peak')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

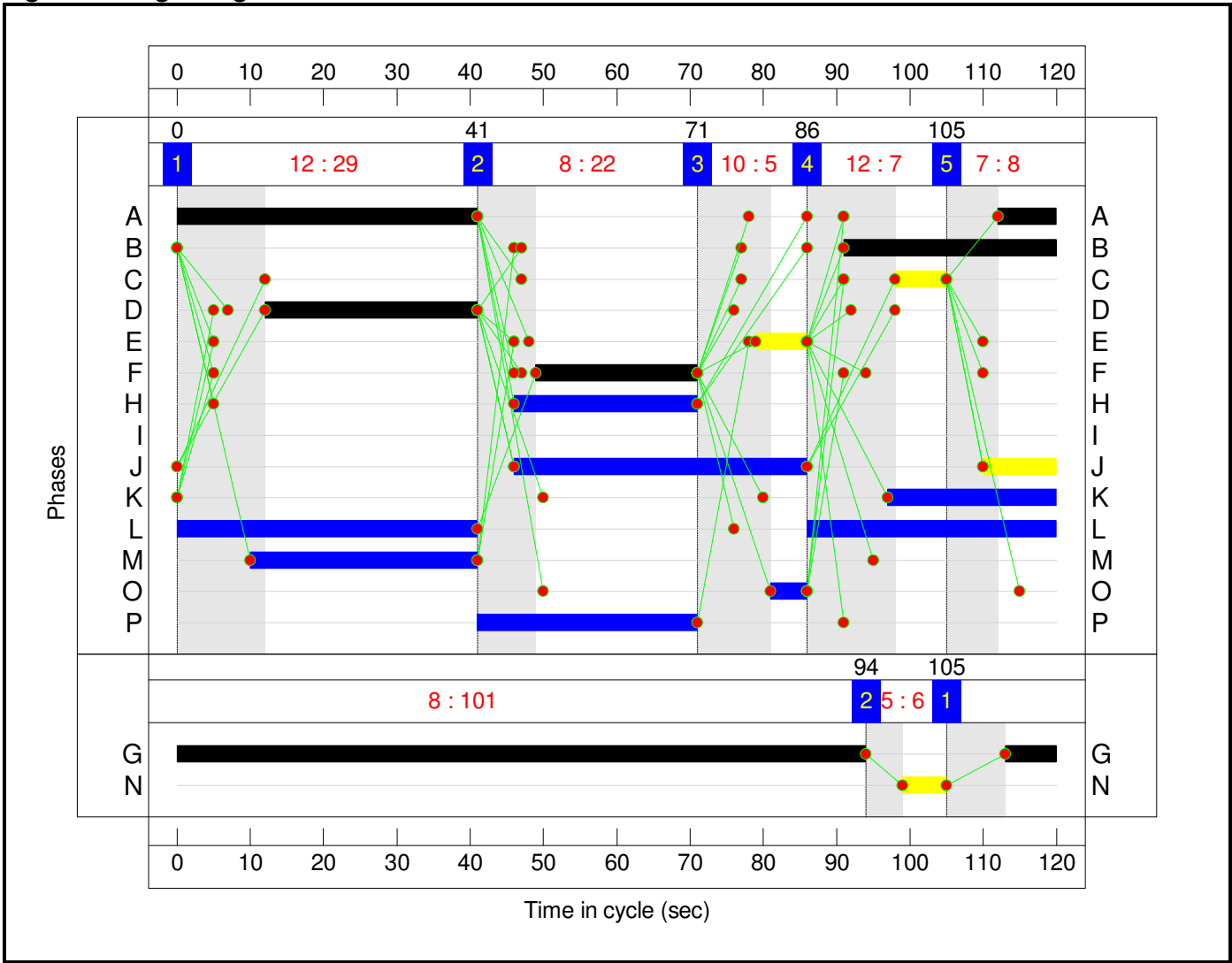
Stage Stream: 1

Stage	1	2	3	4	5
Duration	29	22	5	7	8
Change Point	0	41	71	86	105

Stage Stream: 2

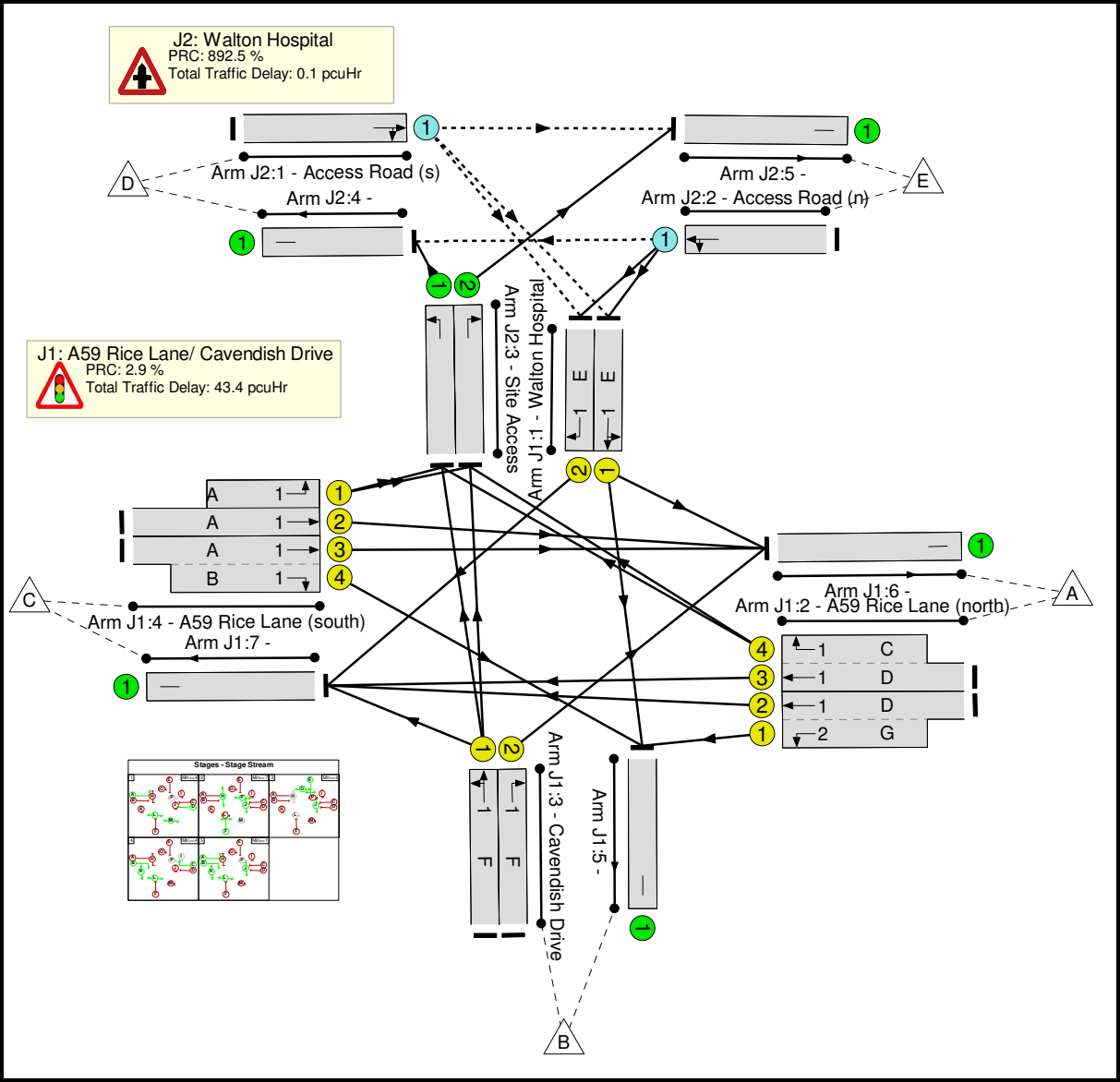
Stage	1	2
Duration	101	6
Change Point	105	94

Signal Timings Diagram



Full Input Data And Results

Network Layout 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: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	87.5%
J1: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	87.5%
1/1	Walton Hospital Ahead Left	U	1	N/A	E		1	7	-	98	1712	114	85.9%
1/2	Walton Hospital Right	U	1	N/A	E		1	7	-	90	1884	126	71.7%
2/2+2/1	A59 Rice Lane (north) Left Ahead	U	1	N/A	D G		1	29:101	-	623	2015:1967	495+338	74.8 : 74.8%
2/3+2/4	A59 Rice Lane (north) Ahead Right	U	1	N/A	D C		1	29:7	-	414	2155:1871	500+98	69.2 : 69.2%
3/1	Cavendish Drive Left Ahead	U	1	N/A	F		1	22	-	302	1831	351	86.1%
3/2	Cavendish Drive Right	U	1	N/A	F		1	22	-	255	1986	381	67.0%
4/2+4/1	A59 Rice Lane (south) Ahead Left	U	1	N/A	A		1	49	-	777	2105:1724	781+107	87.5 : 87.5%
4/3+4/4	A59 Rice Lane (south) Right Ahead	U	1	N/A	A B		1	49:29	-	312	2130:1871	29+468	62.9 : 62.9%
5/1		U	N/A	N/A	-		-	-	-	561	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1040	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	1101	Inf	Inf	0.0%
J2: Walton Hospital	-	-	N/A	-	-		-	-	-	-	-	-	9.1%
1/1	Access Road (s) Right Ahead	O	N/A	N/A	-		-	-	-	49	1915	540	9.1%

Full Input Data And Results

2/1	Access Road (n) Left Ahead	O	N/A	N/A	-		-	-	-	139	1915	1915	7.3%
3/1	Site Access Left	U	N/A	N/A	-		-	-	-	38	1665	1665	2.3%
3/2	Site Access Right	U	N/A	N/A	-		-	-	-	131	1868	1868	7.0%
4/1		U	N/A	N/A	-		-	-	-	38	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	131	Inf	Inf	0.0%

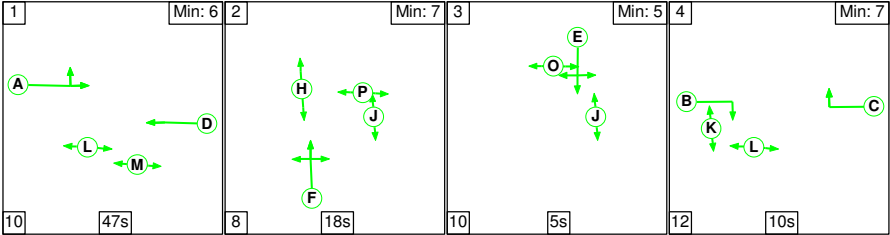
Full Input Data And Results

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: A59 Rice Lane/ Cavendish Drive	-	-	49	0	0	29.4	14.2	0.0	43.5	-	-	-	-
J1: A59 Rice Lane/ Cavendish Drive	-	-	0	0	0	29.4	14.0	0.0	43.4	-	-	-	-
1/1	98	98	-	-	-	1.5	2.4	-	3.9	141.8	3.2	2.4	5.6
1/2	90	90	-	-	-	1.4	1.2	-	2.6	102.3	2.9	1.2	4.1
2/2+2/1	623	623	-	-	-	4.4	1.5	-	5.8	33.6	11.3	1.5	12.8
2/3+2/4	414	414	-	-	-	4.9	1.1	-	6.0	52.1	10.5	1.1	11.6
3/1	302	302	-	-	-	3.9	2.8	-	6.7	80.0	9.7	2.8	12.5
3/2	255	255	-	-	-	3.2	1.0	-	4.2	59.1	7.9	1.0	8.9
4/2+4/1	777	777	-	-	-	6.8	3.3	-	10.1	46.6	22.7	3.3	26.0
4/3+4/4	312	312	-	-	-	3.4	0.8	-	4.2	48.6	8.7	0.8	9.5
5/1	561	561	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1040	1040	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1101	1101	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Walton Hospital	-	-	49	0	0	0.0	0.1	0.0	0.1	-	-	-	-
1/1	49	49	49	0	0	0.0	0.0	-	0.0	3.7	0.0	0.0	0.0
2/1	139	139	0	0	0	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	38	38	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0
3/2	131	131	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
4/1	38	38	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	131	131	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%): 2.9 Total Delay for Signalled Lanes (pcuHr): 43.40 Cycle Time (s): 120 C1 Stream: 2 PRC for Signalled Lanes (%): 0.0 Total Delay for Signalled Lanes (pcuHr): 0.00 Cycle Time (s): 120 PRC Over All Lanes (%): 2.9 Total Delay Over All Lanes(pcuHr): 43.54													

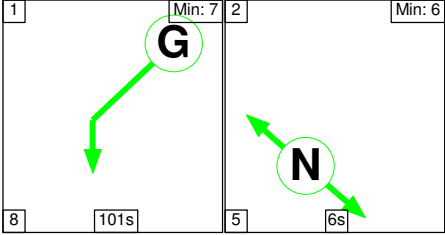
Full Input Data And Results
Scenario 10: '10' (FG10: '2020 AM Peak Base + Committed + Development (85th)', Plan 1: 'AM Peak')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

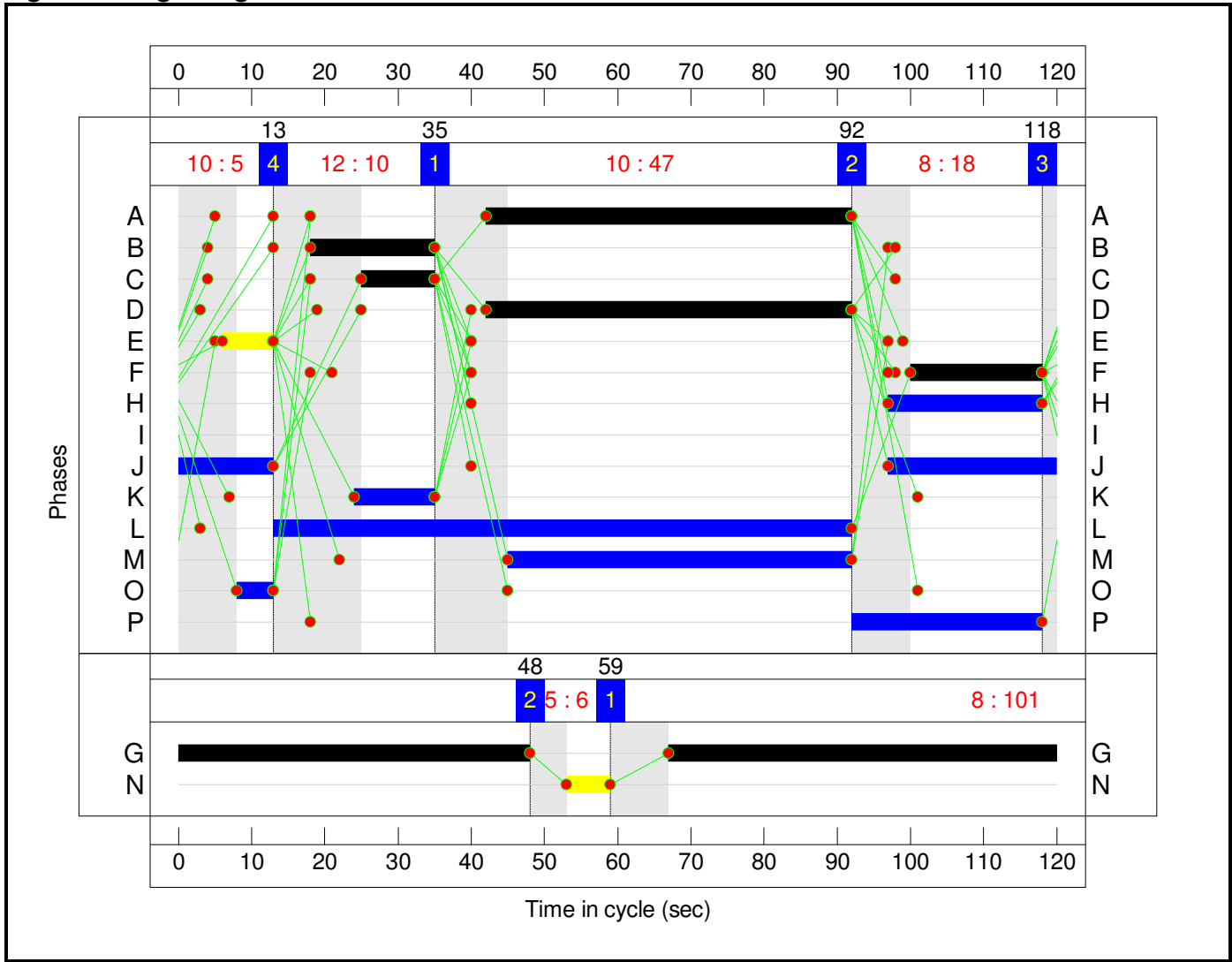
Stage Stream: 1

Stage	1	2	3	4
Duration	47	18	5	10
Change Point	35	92	118	13

Stage Stream: 2

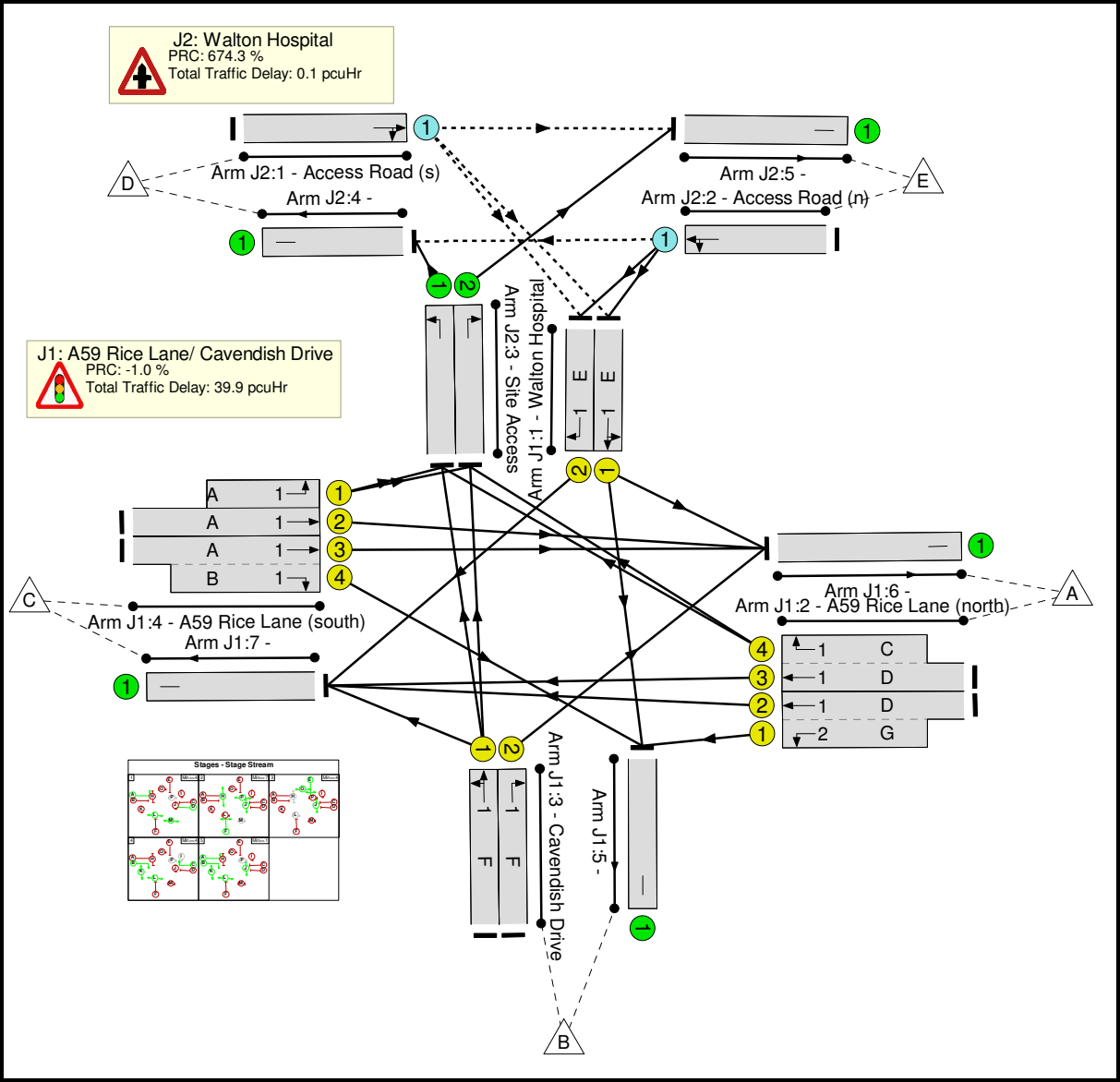
Stage	1	2
Duration	101	6
Change Point	59	48

Signal Timings Diagram



Full Input Data And Results

Network Layout 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: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	90.9%
J1: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	90.9%
1/1	Walton Hospital Ahead Left	U	1	N/A	E		1	7	-	59	1710	114	51.8%
1/2	Walton Hospital Right	U	1	N/A	E		1	7	-	63	1884	126	50.2%
2/2+2/1	A59 Rice Lane (north) Left Ahead	U	1	N/A	D G		1	50:101	-	652	2015:1967	760+266	63.6 : 63.6%
2/3+2/4	A59 Rice Lane (north) Ahead Right	U	1	N/A	D C		1	50:10	-	564	2155:1871	868+79	59.6 : 59.6%
3/1	Cavendish Drive Left Ahead	U	1	N/A	F		1	18	-	258	1830	290	89.0%
3/2	Cavendish Drive Right	U	1	N/A	F		1	18	-	131	1986	314	41.7%
4/2+4/1	A59 Rice Lane (south) Ahead Left	U	1	N/A	A		1	50	-	819	2105:1724	847+54	90.9 : 90.9%
4/3+4/4	A59 Rice Lane (south) Right Ahead	U	1	N/A	A B		1	50:17	-	263	2130:1871	16+281	88.7 : 88.7%
5/1		U	N/A	N/A	-		-	-	-	426	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	966	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	1317	Inf	Inf	0.0%
J2: Walton Hospital	-	-	N/A	-	-		-	-	-	-	-	-	11.6%
1/1	Access Road (s) Right Ahead	O	N/A	N/A	-		-	-	-	67	1915	576	11.6%

Full Input Data And Results

2/1	Access Road (n) Left Ahead	O	N/A	N/A	-		-	-	-	55	1915	1915	2.9%
3/1	Site Access Left	U	N/A	N/A	-		-	-	-	49	1665	1665	2.9%
3/2	Site Access Right	U	N/A	N/A	-		-	-	-	51	1868	1868	2.7%
4/1		U	N/A	N/A	-		-	-	-	49	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	51	Inf	Inf	0.0%

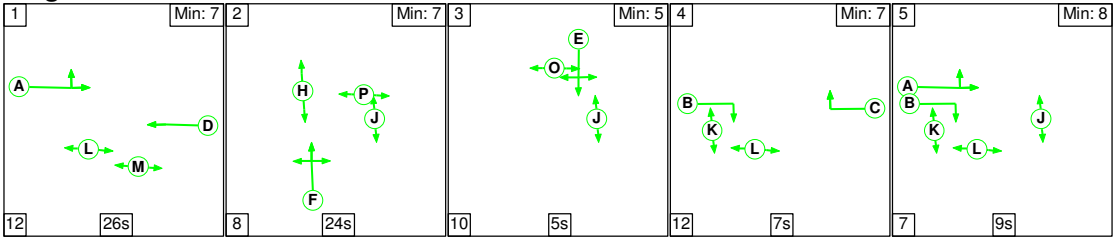
Full Input Data And Results

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: A59 Rice Lane/ Cavendish Drive	-	-	67	0	0	25.8	14.2	0.0	40.0	-	-	-	-
J1: A59 Rice Lane/ Cavendish Drive	-	-	0	0	0	25.8	14.1	0.0	39.9	-	-	-	-
1/1	59	59	-	-	-	0.9	0.5	-	1.4	86.2	1.9	0.5	2.4
1/2	63	63	-	-	-	0.9	0.5	-	1.4	82.4	2.0	0.5	2.5
2/2+2/1	652	652	-	-	-	3.6	0.9	-	4.4	24.5	12.1	0.9	12.9
2/3+2/4	564	564	-	-	-	4.4	0.7	-	5.2	32.9	13.3	0.7	14.0
3/1	258	258	-	-	-	3.5	3.4	-	6.9	96.3	8.4	3.4	11.7
3/2	131	131	-	-	-	1.7	0.4	-	2.0	55.3	3.9	0.4	4.3
4/2+4/1	819	819	-	-	-	7.3	4.5	-	11.7	51.6	25.1	4.5	29.6
4/3+4/4	263	263	-	-	-	3.5	3.3	-	6.8	93.4	8.1	3.3	11.4
5/1	426	426	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	966	966	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1317	1317	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Walton Hospital	-	-	67	0	0	0.0	0.1	0.0	0.1	-	-	-	-
1/1	67	67	67	0	0	0.0	0.1	-	0.1	3.5	0.0	0.1	0.1
2/1	55	55	0	0	0	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	49	49	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0
3/2	51	51	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
4/1	49	49	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	51	51	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%): -1.0 C1 Stream: 2 PRC for Signalled Lanes (%): 0.0 PRC Over All Lanes (%): -1.0 Total Delay for Signalled Lanes (pcuHr): 39.93 Total Delay for Signalled Lanes (pcuHr): 0.00 Total Delay Over All Lanes(pcuHr): 40.04 Cycle Time (s): 120 Cycle Time (s): 120													

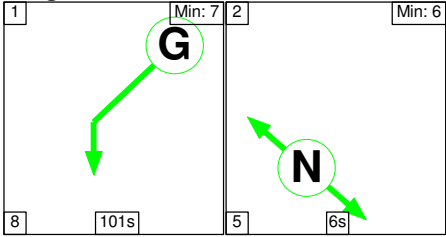
Full Input Data And Results
Scenario 11: '11' (FG11: '2020 PM Peak Base + Committed + Development (85th)', Plan 2: 'PM & Saturday Peak')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

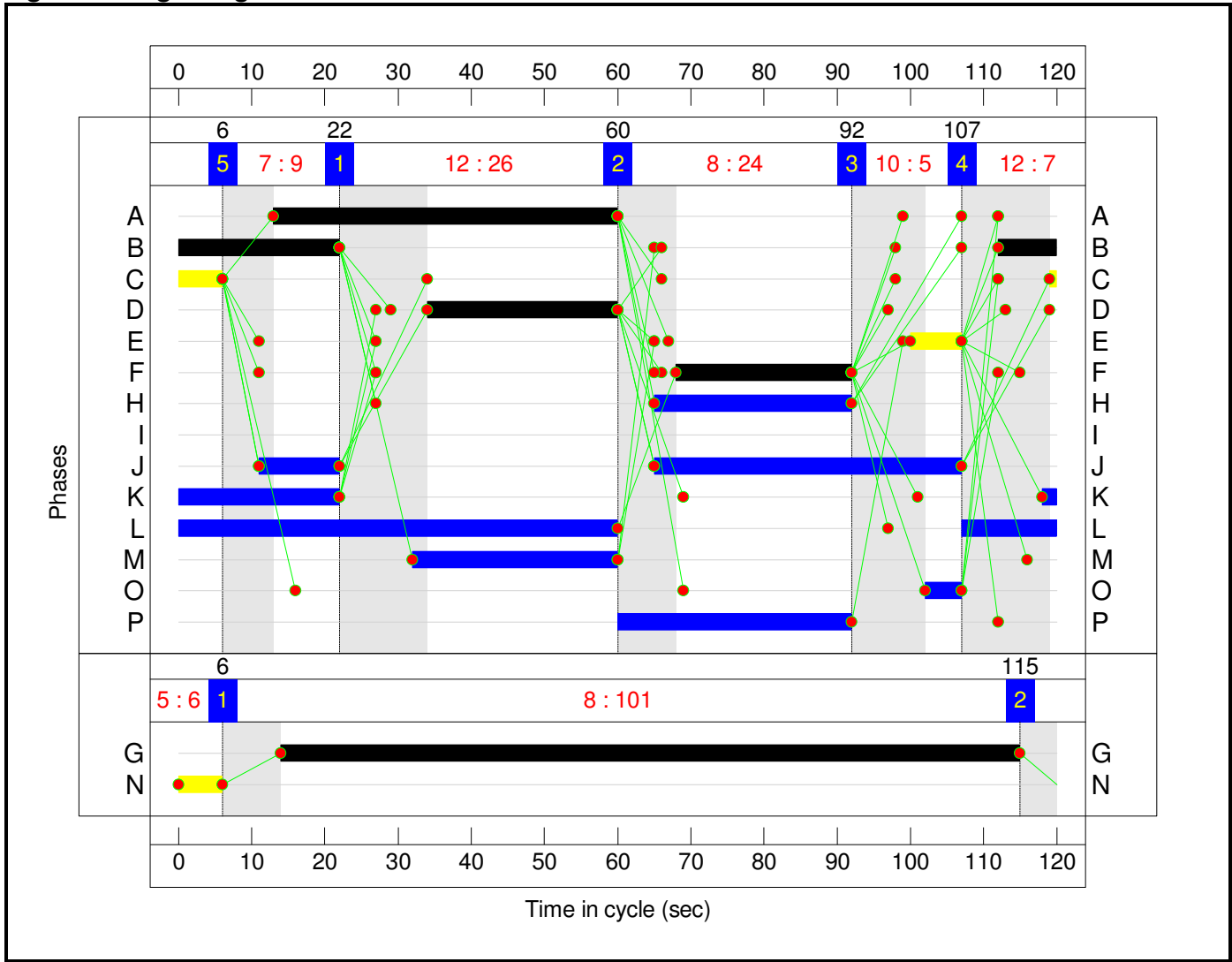
Stage Stream: 1

Stage	1	2	3	4	5
Duration	26	24	5	7	9
Change Point	22	60	92	107	6

Stage Stream: 2

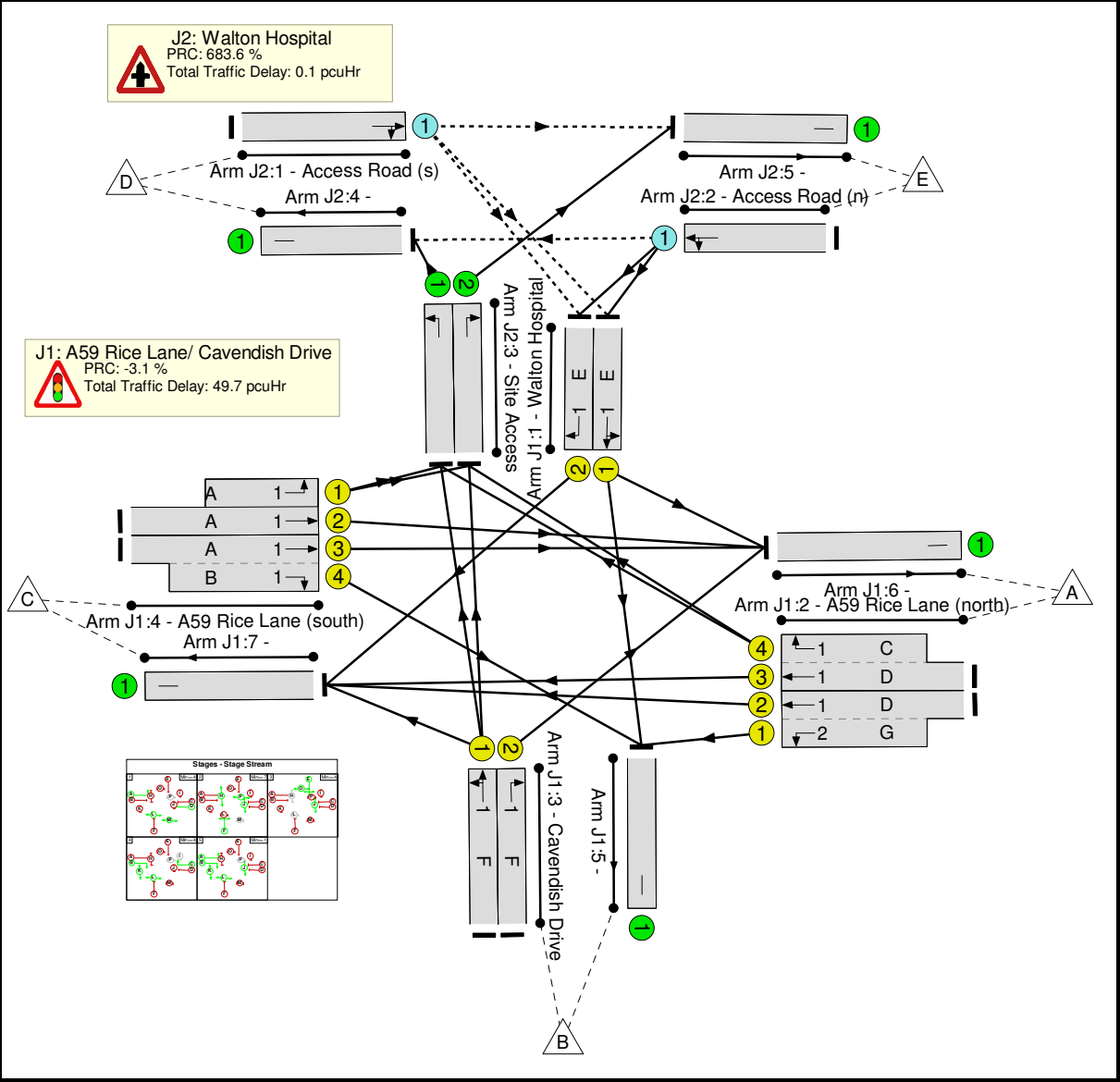
Stage	1	2
Duration	101	6
Change Point	6	115

Signal Timings Diagram



Full Input Data And Results

Network Layout 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: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	92.8%
J1: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	92.8%
1/1	Walton Hospital Ahead Left	U	1	N/A	E		1	7	-	101	1722	115	88.0%
1/2	Walton Hospital Right	U	1	N/A	E		1	7	-	76	1884	126	60.5%
2/2+2/1	A59 Rice Lane (north) Left Ahead	U	1	N/A	D G		1	26:101	-	515	2015:1967	453+263	71.9 : 71.9%
2/3+2/4	A59 Rice Lane (north) Ahead Right	U	1	N/A	D C		1	26:7	-	384	2155:1871	456+100	70.3 : 63.1%
3/1	Cavendish Drive Left Ahead	U	1	N/A	F		1	24	-	351	1831	381	92.0%
3/2	Cavendish Drive Right	U	1	N/A	F		1	24	-	201	1986	414	48.6%
4/2+4/1	A59 Rice Lane (south) Ahead Left	U	1	N/A	A		1	47	-	794	2105:1724	738+117	92.8 : 92.8%
4/3+4/4	A59 Rice Lane (south) Right Ahead	U	1	N/A	A B		1	47:30	-	558	2130:1871	244+420	84.1 : 84.1%
5/1		U	N/A	N/A	-		-	-	-	562	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1172	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	1066	Inf	Inf	0.0%
J2: Walton Hospital	-	-	N/A	-	-		-	-	-	-	-	-	11.5%
1/1	Access Road (s) Right Ahead	O	N/A	N/A	-		-	-	-	63	1915	548	11.5%

Full Input Data And Results

2/1	Access Road (n) Left Ahead	O	N/A	N/A	-		-	-	-	114	1915	1915	6.0%
3/1	Site Access Left	U	N/A	N/A	-		-	-	-	61	1665	1665	3.7%
3/2	Site Access Right	U	N/A	N/A	-		-	-	-	119	1868	1868	6.4%
4/1		U	N/A	N/A	-		-	-	-	61	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	119	Inf	Inf	0.0%

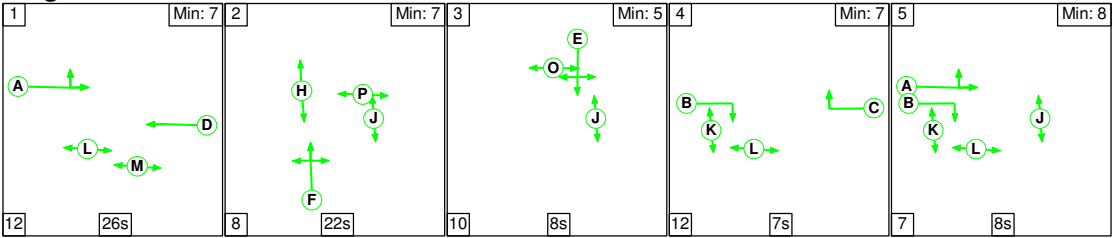
Full Input Data And Results

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: A59 Rice Lane/ Cavendish Drive	-	-	63	0	0	31.0	18.8	0.0	49.8	-	-	-	-
J1: A59 Rice Lane/ Cavendish Drive	-	-	0	0	0	31.0	18.7	0.0	49.7	-	-	-	-
1/1	101	101	-	-	-	1.6	2.6	-	4.2	149.8	3.3	2.6	6.0
1/2	76	76	-	-	-	1.2	0.7	-	1.9	89.7	2.4	0.7	3.2
2/2+2/1	515	515	-	-	-	4.0	1.3	-	5.2	36.6	10.0	1.3	11.2
2/3+2/4	384	384	-	-	-	4.7	1.1	-	5.8	54.6	9.8	1.1	10.9
3/1	351	351	-	-	-	4.5	4.5	-	9.0	92.2	11.4	4.5	15.9
3/2	201	201	-	-	-	2.3	0.5	-	2.8	50.3	5.9	0.5	6.3
4/2+4/1	794	794	-	-	-	7.4	5.5	-	12.9	58.3	24.2	5.5	29.7
4/3+4/4	558	558	-	-	-	5.4	2.5	-	7.9	50.8	12.0	2.5	14.5
5/1	562	562	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1172	1172	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1066	1066	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Walton Hospital	-	-	63	0	0	0.0	0.1	0.0	0.1	-	-	-	-
1/1	63	63	63	0	0	0.0	0.1	-	0.1	3.7	0.0	0.1	0.1
2/1	114	114	0	0	0	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
3/1	61	61	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0
3/2	119	119	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
4/1	61	61	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	119	119	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%): -3.1 C1 Stream: 2 PRC for Signalled Lanes (%): 0.0 PRC Over All Lanes (%): -3.1 Total Delay for Signalled Lanes (pcuHr): 49.68 Total Delay for Signalled Lanes (pcuHr): 0.00 Total Delay Over All Lanes(pcuHr): 49.83 Cycle Time (s): 120 Cycle Time (s): 120													

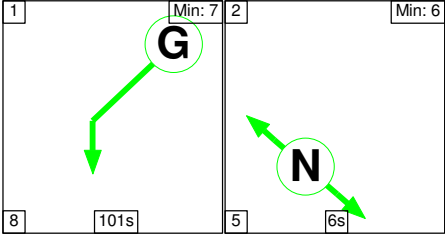
Full Input Data And Results
Scenario 12: '12' (FG12: '2020 Saturday Peak Base + Committed + Development (85th)', Plan 2: 'PM & Saturday Peak')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

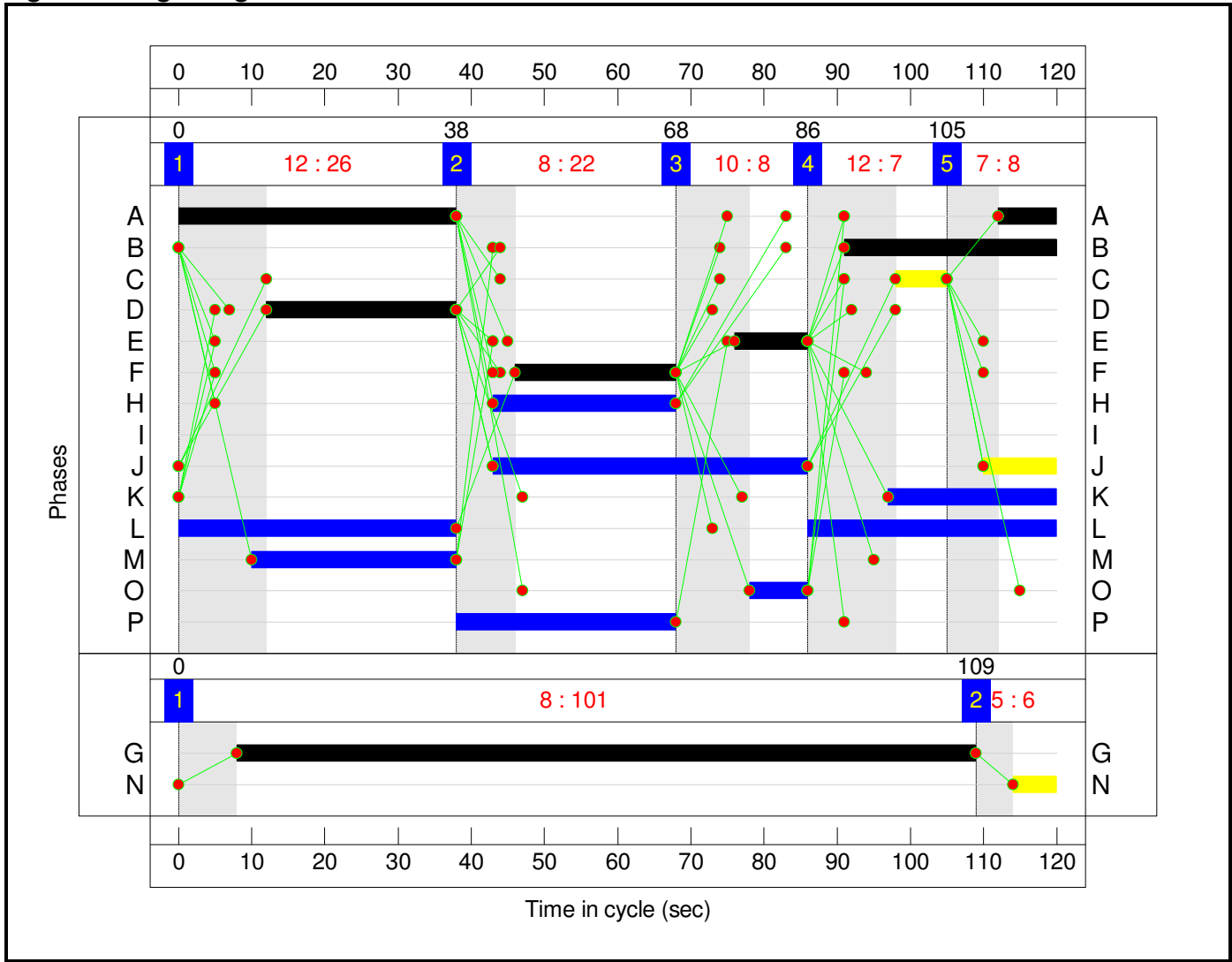
Stage Stream: 1

Stage	1	2	3	4	5
Duration	26	22	8	7	8
Change Point	0	38	68	86	105

Stage Stream: 2

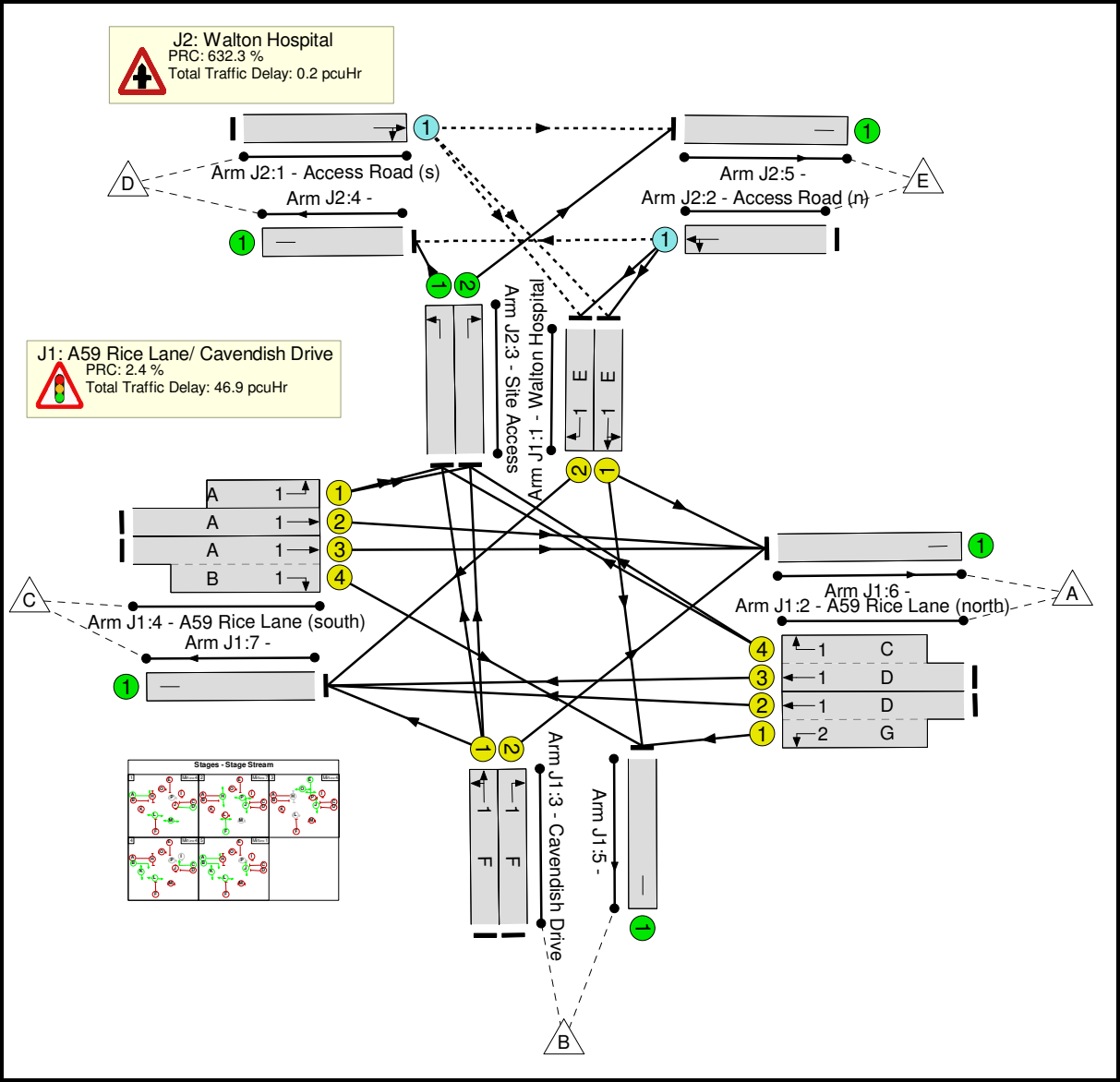
Stage	1	2
Duration	101	6
Change Point	0	109

Signal Timings Diagram



Full Input Data And Results

Network Layout 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: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	87.9%
J1: A59 Rice Lane/ Cavendish Drive	-	-	N/A	-	-		-	-	-	-	-	-	87.9%
1/1	Walton Hospital Ahead Left	U	1	N/A	E		1	10	-	130	1706	156	83.1%
1/2	Walton Hospital Right	U	1	N/A	E		1	10	-	123	1884	173	71.2%
2/2+2/1	A59 Rice Lane (north) Left Ahead	U	1	N/A	D G		1	26:101	-	625	2015:1967	453+308	82.1 : 82.1%
2/3+2/4	A59 Rice Lane (north) Ahead Right	U	1	N/A	D C		1	26:7	-	434	2155:1871	443+125	76.8 : 75.4%
3/1	Cavendish Drive Left Ahead	U	1	N/A	F		1	22	-	303	1831	351	86.3%
3/2	Cavendish Drive Right	U	1	N/A	F		1	22	-	255	1986	381	67.0%
4/2+4/1	A59 Rice Lane (south) Ahead Left	U	1	N/A	A		1	46	-	740	2105:1724	702+140	87.9 : 87.9%
4/3+4/4	A59 Rice Lane (south) Right Ahead	U	1	N/A	A B		1	46:29	-	374	2130:1871	120+442	66.6 : 66.6%
5/1		U	N/A	N/A	-		-	-	-	562	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	1067	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	1130	Inf	Inf	0.0%
J2: Walton Hospital	-	-	N/A	-	-		-	-	-	-	-	-	12.3%
1/1	Access Road (s) Right Ahead	O	N/A	N/A	-		-	-	-	64	1915	521	12.3%

Full Input Data And Results

2/1	Access Road (n) Left Ahead	O	N/A	N/A	-		-	-	-	189	1915	1915	9.9%
3/1	Site Access Left	U	N/A	N/A	-		-	-	-	55	1665	1665	3.3%
3/2	Site Access Right	U	N/A	N/A	-		-	-	-	170	1868	1868	9.1%
4/1		U	N/A	N/A	-		-	-	-	55	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	170	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: A59 Rice Lane/ Cavendish Drive	-	-	64	0	0	31.6	15.5	0.0	47.1	-	-	-	-
J1: A59 Rice Lane/ Cavendish Drive	-	-	0	0	0	31.6	15.3	0.0	46.9	-	-	-	-
1/1	130	130	-	-	-	1.9	2.1	-	4.1	112.4	4.2	2.1	6.3
1/2	123	123	-	-	-	1.8	1.2	-	3.0	87.5	4.0	1.2	5.1
2/2+2/1	625	625	-	-	-	4.7	2.2	-	6.9	39.7	11.8	2.2	14.0
2/3+2/4	434	434	-	-	-	5.5	1.6	-	7.1	58.6	10.9	1.6	12.4
3/1	303	303	-	-	-	4.0	2.8	-	6.8	80.6	9.8	2.8	12.6
3/2	255	255	-	-	-	3.2	1.0	-	4.2	59.1	7.9	1.0	8.9
4/2+4/1	740	740	-	-	-	6.7	3.4	-	10.1	49.3	21.4	3.4	24.8
4/3+4/4	374	374	-	-	-	3.8	1.0	-	4.8	45.9	8.7	1.0	9.6
5/1	562	562	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1067	1067	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1130	1130	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Walton Hospital	-	-	64	0	0	0.0	0.2	0.0	0.2	-	-	-	-
1/1	64	64	64	0	0	0.0	0.1	-	0.1	3.9	0.0	0.1	0.1
2/1	189	189	0	0	0	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
3/1	55	55	-	-	-	0.0	0.0	-	0.0	1.1	0.0	0.0	0.0
3/2	170	170	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
4/1	55	55	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	170	170	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 Stream: 1 PRC for Signalled Lanes (%): 2.4 C1 Stream: 2 PRC for Signalled Lanes (%): 0.0 PRC Over All Lanes (%): 2.4 Total Delay for Signalled Lanes (pcuHr): 46.88 Total Delay for Signalled Lanes (pcuHr): 0.00 Total Delay Over All Lanes(pcuHr): 47.07 Cycle Time (s): 120 Cycle Time (s): 120													

