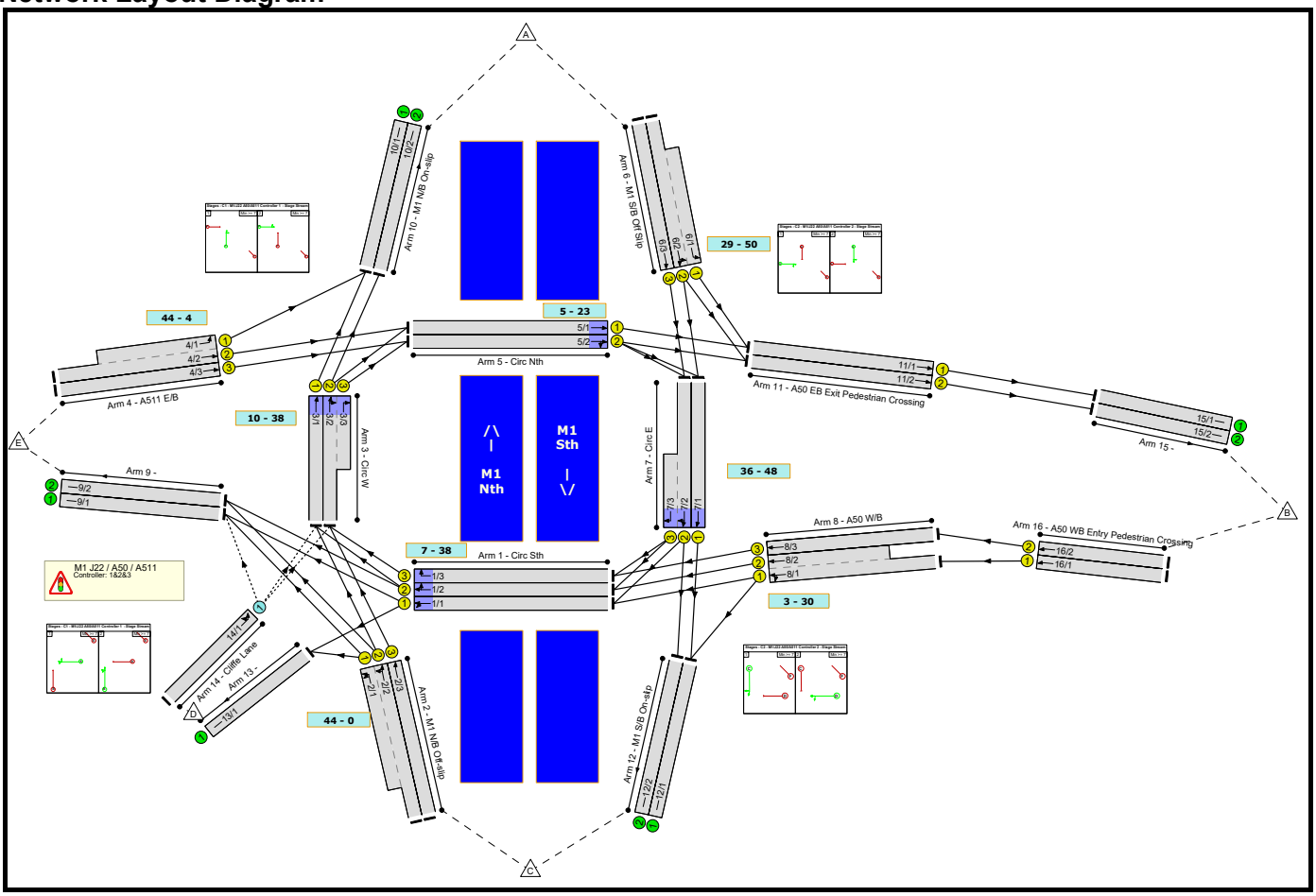
Detailed Input Data And Results

User and Project Details

Project:	**Markfield**
Title:	
Location:	M1 J22 / A50
Additional detail:	
File name:	T22523 M1 J22 Roundabout Proposed Rev D.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 2, 0

Network Layout Diagram



Scenarios

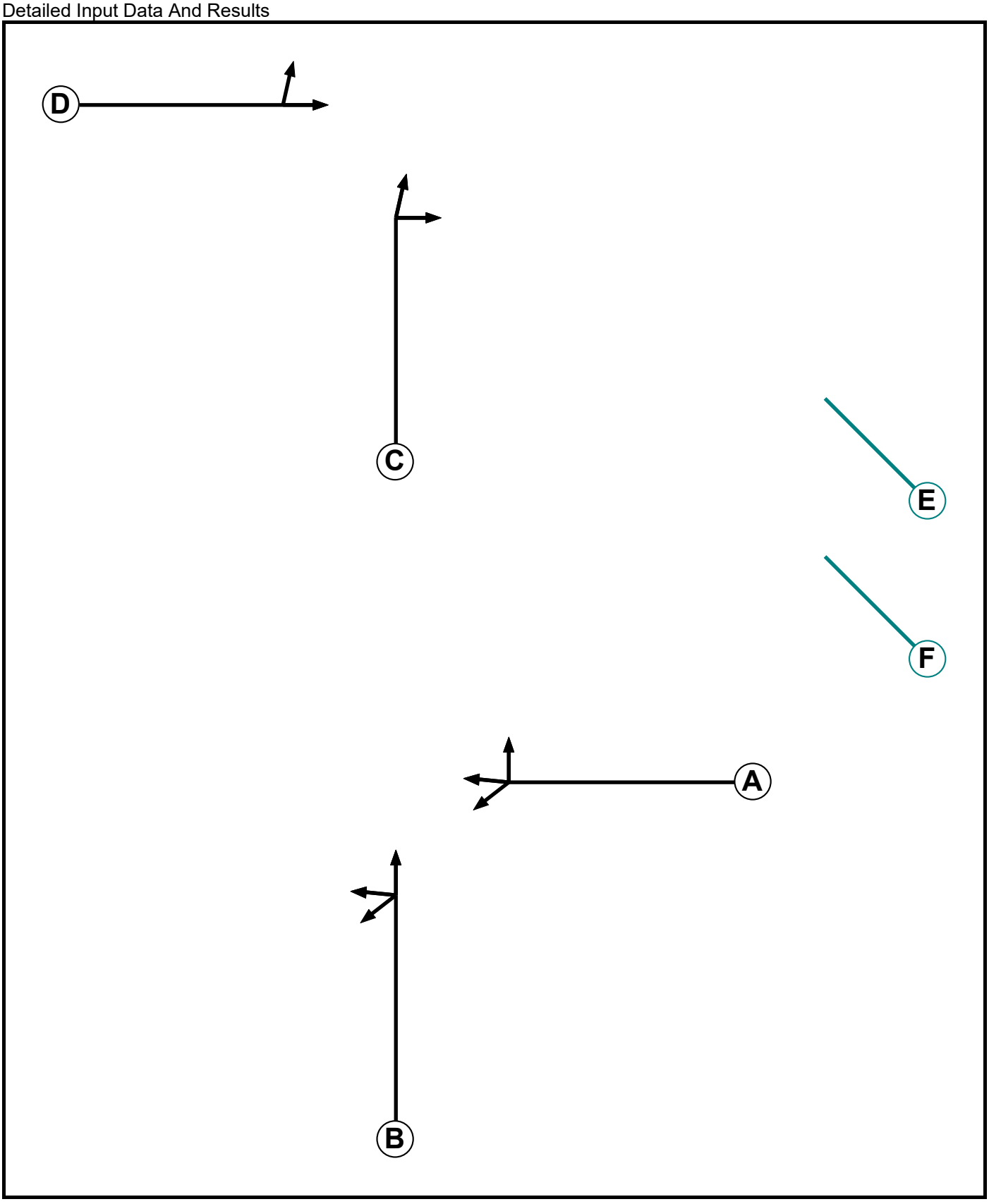
Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2028 Future Base + Proposed Development AM Peak	2028 Future Base + Proposed Development AM Peak	Network Control Plan 1	08:00 - 09:00	60/57/228	-8.8	82.49
2	2028 Future Base + Proposed Development PM Peak	2028 Future Base + Proposed Development PM Peak	Network Control Plan 1	17:00 - 18:00	60/51/228	0.6	58.39
3	2030 Future Base + Proposed Development AM Peak	2030 Future Base + Proposed Development AM Peak	Network Control Plan 1	08:00 - 09:00	60/57/228	-8.9	84.90
4	2030 Future Base + Proposed Development PM Peak	2030 Future Base + Proposed Development PM Peak	Network Control Plan 1	17:00 - 18:00	60/51/228	-0.0	62.46
5	2036 Future Base + Proposed Development AM Peak	2036 Future Base + Proposed Development AM Peak	Network Control Plan 1	08:00 - 09:00	60/57/228	-9.0	97.09
6	2036 Future Base + Proposed Development PM Peak	2036 Future Base + Proposed Development PM Peak	Network Control Plan 1	17:00 - 18:00	60/51/228	-0.7	65.99
7	2028 Future Base + Proposed Development Sensitivity AM Peak	2028 Future Base + Proposed Development Sensitivity AM Peak	Network Control Plan 1	08:00 - 09:00	60/57/228	-9.3	85.61
8	2028 Future Base + Proposed Development Sensitivity PM Peak	2028 Future Base + Proposed Development Sensitivity PM Peak	Network Control Plan 1	17:00 - 18:00	60/51/228	1.5	60.43
9	2030 Future Base + Proposed Development Sensitivity AM Peak	2030 Future Base + Proposed Development Sensitivity AM Peak	Network Control Plan 1	08:00 - 09:00	60/57/228	-10.8	87.52
10	2030 Future Base + Proposed Development Sensitivity PM Peak	2030 Future Base + Proposed Development Sensitivity PM Peak	Network Control Plan 1	17:00 - 18:00	60/51/228	-2.0	63.08
11	2036 Future Base + Proposed Development Sensitivity AM Peak	2036 Future Base + Proposed Development Sensitivity AM Peak	Network Control Plan 1	08:00 - 09:00	60/57/228	-10.9	98.10
12	2036 Future Base + Proposed Development Sensitivity PM Peak	2036 Future Base + Proposed Development Sensitivity PM Peak	Network Control Plan 1	17:00 - 18:00	60/51/228	-3.5	67.30

Controller Summary

Controller	Type	SCN	Stage Stream	Num Phases	Num Stages	Controls Junctions	Controller Notes
C1 - M1/J22 A50/A511 Controller 1	Gen		Stage Stream 1	3	2	M1 J22 / A50 / A511	
			Stage Stream 2	3	2	M1 J22 / A50 / A511	
C2 - M1/J22 A50/A511 Controller 2	Pek		Stage Stream 1	3	2	M1 J22 / A50 / A511	
			Stage Stream 2	3	2	M1 J22 / A50 / A511	
C3 - A50 East Pedestrian Crossings	Gen		Stage Stream 1	2	2	M1 J22 / A50 / A511	
			Stage Stream 2	2	2	M1 J22 / A50 / A511	

Controller :C1 - M1/J22 A50/A511 Controller 1

Phase Diagram


D
C
E
F
A
B

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	2		7	7
D	Traffic	2		7	7
E	Dummy	1		4	4
F	Dummy	2		4	4

Phase Intergreens Matrix

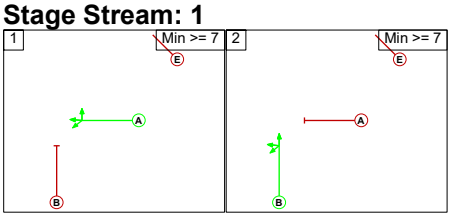
		Starting Phase					
		A	B	C	D	E	F
Terminating Phase	A		6	-	-	3	-
	B	7		-	-	3	-
	C	-	-		6	-	3
	D	-	-	6		-	3
	E	2	2	-	-		-
	F	-	-	2	2	-	

Phases in Stage

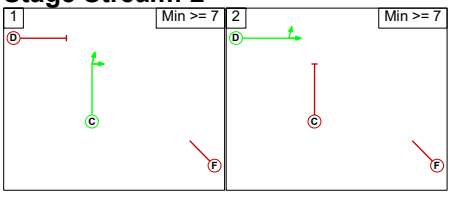
Stream	Stage No.	Phases in Stage
1	1	A
1	2	B
2	1	C
2	2	D

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

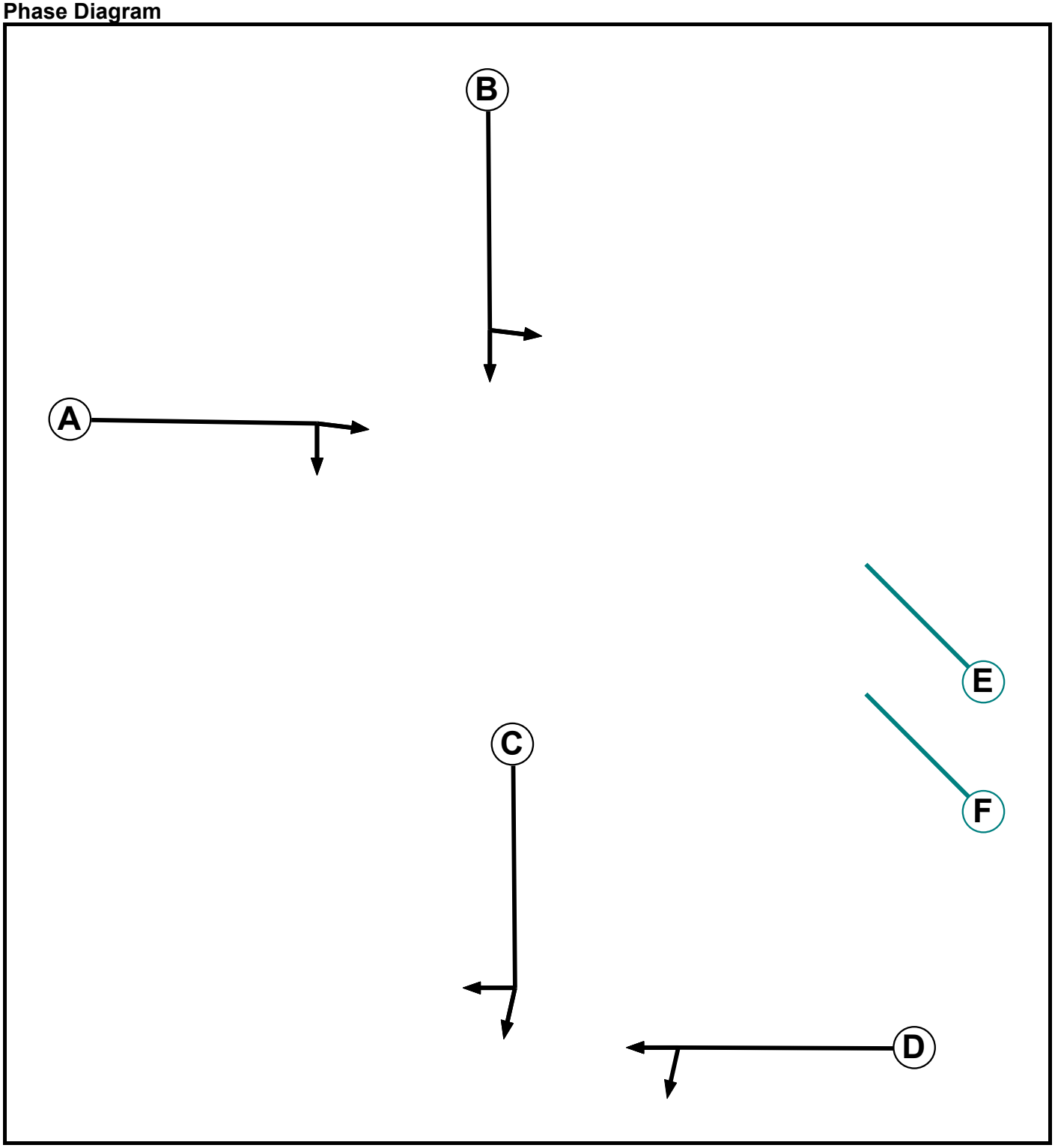
From Stage \ To Stage	1	2
1		6
2	7	

Stage Stream: 2

From Stage \ To Stage	1	2
1		6
2	6	

Controller :C2 - M1/J22 A50/A511 Controller 2

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	2		7	7
D	Traffic	2		7	7
E	Dummy	1		4	4
F	Dummy	2		4	4

Phase Intergreens Matrix

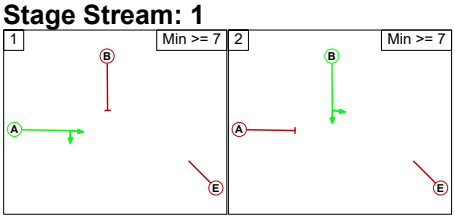
		Starting Phase					
		A	B	C	D	E	F
Terminating Phase	A		6	-	-	3	-
	B	6		-	-	3	-
	C	-	-		6	-	3
	D	-	-	6		-	3
	E	2	2	-	-		-
	F	-	-	2	2	-	

Phases in Stage

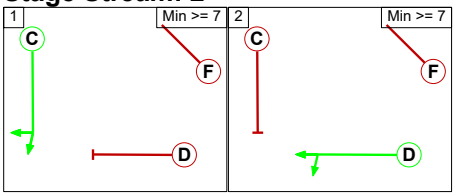
Stream	Stage No.	Phases in Stage
1	1	A
1	2	B
2	1	C
2	2	D

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

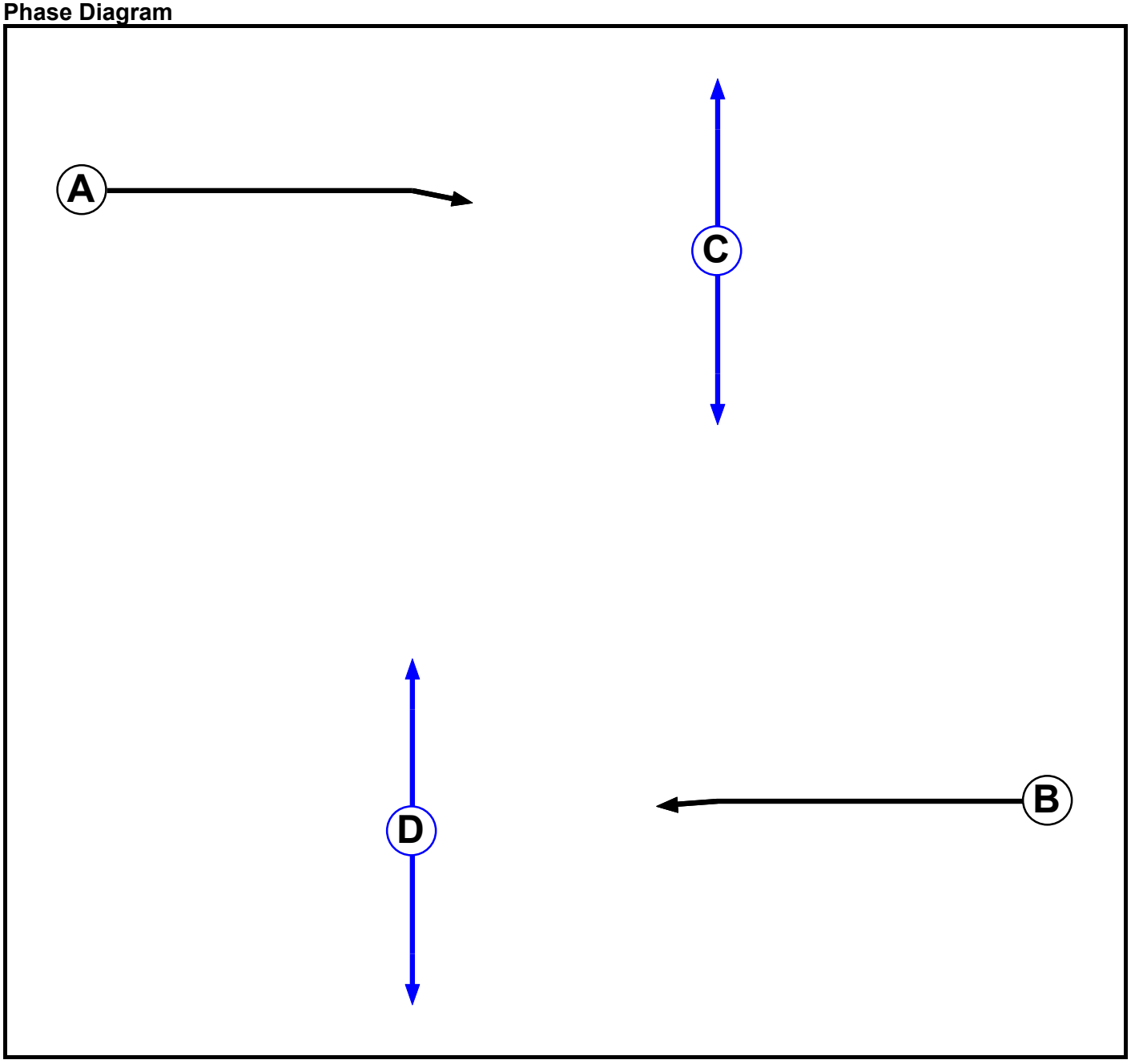
From Stage \ To Stage	1	2
1		6
2	6	

Stage Stream: 2

From Stage \ To Stage	1	2
1		6
2	6	

Controller :C3 - A50 East Pedestrian Crossings

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic	1		7	7
B	Traffic	2		7	7
C	Pedestrian	1		5	5
D	Pedestrian	2		5	5

Phase Intergreens Matrix

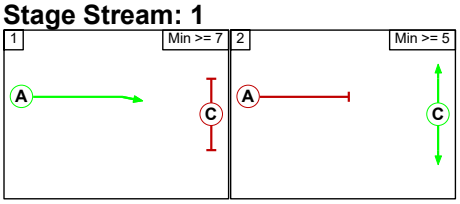
	Starting Phase			
Terminating Phase	A	B	C	D
A		-	5	-
B	-		-	5
C	9	-		-
D	-	9	-	

Phases in Stage

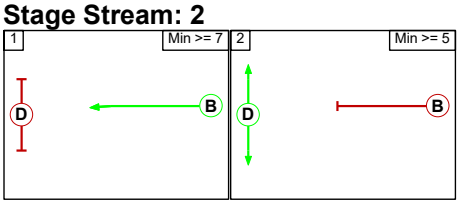
Stream	Stage No.	Phases in Stage
1	1	A
1	2	C
2	1	B
2	2	D

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

	To Stage		
From Stage	1	2	
1		5	
2	9		

Stage Stream: 2

From Stage	To Stage 1	To Stage 2
1		5
2	9	

Lane Input Data

Junction: M1 J22 / A50 / A511												
Lane	**Lane Type**	**Phases**	**Start Disp. (s)**	**End Disp. (s)**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (Circ Sth)	U	A	2	3	17.4	Geom	-	3.80	0.00	Y	Arm 9 Ahead	Inf
											Arm 13 Ahead	Inf
1/2 (Circ Sth)	U	A	2	3	17.4	Geom	-	3.80	0.00	N	Arm 3 Right	75.00
											Arm 9 Ahead	75.00
1/3 (Circ Sth)	U	A	2	3	17.4	Geom	-	3.80	0.00	Y	Arm 3 Right	75.00
2/1 (M1 N/B Off-slip)	U	B	2	3	16.9	Geom	-	4.00	0.00	Y	Arm 9 Left	80.00
											Arm 13 Left	60.00
2/2 (M1 N/B Off-slip)	U	B	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 3 Ahead	80.00
											Arm 9 Left	60.00
2/3 (M1 N/B Off-slip)	U	B	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 3 Ahead	80.00
3/1 (Circ W)	U	C	2	3	5.2	Geom	-	4.20	0.00	Y	Arm 10 Ahead	75.00
3/2 (Circ W)	U	C	2	3	5.2	Geom	-	4.20	0.00	N	Arm 5 Right	75.00
											Arm 10 Ahead	75.00
3/3 (Circ W)	U	C	2	3	8.0	Geom	-	4.20	0.00	Y	Arm 5 Right	75.00
4/1 (A511 E/B)	U	D	2	3	13.0	Geom	-	4.10	0.00	Y	Arm 10 Left	50.00
4/2 (A511 E/B)	U	D	2	3	60.0	Geom	-	4.10	0.00	N	Arm 5 Ahead	70.00
4/3 (A511 E/B)	U	D	2	3	60.0	Geom	-	4.10	0.00	Y	Arm 5 Ahead	70.00
5/1 (Circ Nth)	U	A	2	3	19.7	Geom	-	4.60	0.00	Y	Arm 11 Ahead	75.00
5/2 (Circ Nth)	U	A	2	3	19.7	Geom	-	4.60	0.00	Y	Arm 7 Right	75.00
											Arm 11 Ahead	75.00
6/1 (M1 S/B Off Slip)	U	B	2	3	15.0	Geom	-	4.50	0.00	Y	Arm 11 Left	80.00

6/2 (M1 S/B Off Slip)	U	B	2	3	60.0	Geom	-	4.50	0.00	Y	Arm 7 Ahead	80.00
											Arm 11 Left	80.00
6/3 (M1 S/B Off Slip)	U	B	2	3	60.0	Geom	-	4.50	0.00	Y	Arm 7 Ahead	80.00
7/1 (Circ E)	U	C	2	3	7.8	Geom	-	4.50	0.00	Y	Arm 12 Ahead	Inf
7/2 (Circ E)	U	C	2	3	12.2	Geom	-	4.50	0.00	N	Arm 1 Right	75.00
											Arm 12 Ahead	Inf
7/3 (Circ E)	U	C	2	3	8.0	Geom	-	4.50	0.00	Y	Arm 1 Right	75.00
8/1 (A50 W/B)	U	D	2	3	60.0	Geom	-	3.80	0.00	Y	Arm 1 Ahead	70.00
											Arm 12 Left	70.00
8/2 (A50 W/B)	U	D	2	3	13.2	Geom	-	3.80	0.00	N	Arm 1 Ahead	70.00
8/3 (A50 W/B)	U	D	2	3	21.7	Geom	-	3.80	0.00	Y	Arm 1 Ahead	70.00
9/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/2	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1 (M1 N/B On-slip)	U		2	3	60.0	Inf	-	-	-	-	-	-
10/2 (M1 N/B On-slip)	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1 (A50 EB Exit Pedestrian Crossing)	U	A	2	3	29.6	Geom	-	3.65	0.00	Y	Arm 15 Ahead	Inf
11/2 (A50 EB Exit Pedestrian Crossing)	U	A	2	3	29.6	Geom	-	3.65	0.00	Y	Arm 15 Ahead	Inf
12/1 (M1 S/B On-slip)	U		2	3	60.0	Inf	-	-	-	-	-	-
12/2 (M1 S/B On-slip)	U		2	3	60.0	Inf	-	-	-	-	-	-
13/1	U		2	3	60.0	Inf	-	-	-	-	-	-
14/1 (Cliffe Lane)	O		2	3	60.0	Geom	-	3.90	0.00	Y	Arm 3 Left	Inf
											Arm 9 Left	Inf
15/1	U		2	3	60.0	Inf	-	-	-	-	-	-
15/2	U		2	3	60.0	Inf	-	-	-	-	-	-

16/1 (A50 WB Entry Pedestrian Crossing)	U	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 8 Ahead	Inf
16/2 (A50 WB Entry Pedestrian Crossing)	U	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 8 Ahead	Inf

Give-Way Lane Input Data

Junction: M1 J22 / A50 / A511

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)
14/1 (Cliffe Lane)	3/1 (Left)	1000	0	1/1	0.33	To 9/1 (Ahead)	-	-	-	-	-
				1/2	0.33	All					
				2/1	0.33	To 9/1 (Left)					
				2/2	0.33	All					
				1/3	0.33	All					
	3/2 (Left)	1000	0	1/1	0.33	To 9/1 (Ahead)					
				1/2	0.33	All					
				1/3	0.33	All					
				2/1	0.33	To 9/1 (Left)					
				2/2	0.33	All					
				2/3	0.33	All					
	9/1 (Left)	1000	0	1/1	0.33	To 9/1 (Ahead)					
				1/2	0.33	To 9/2 (Ahead)					
				2/1	0.33	To 9/1 (Left)					
				2/2	0.33	To 9/2 (Left)					

Lane Connector Input Data

Junction: M1 J22 / A50 / A511

Org Lane	Dest Lane	Junction	Modelled Mean Cruise Time (s)	Platoon Dispersion
1/1	9/1	Internal	31	35
1/1	13/1	Internal	31	35
1/2	3/1	Internal	3	N/A
1/2	9/2	Internal	31	35
1/3	3/2	Internal	3	N/A
2/1	9/1	Internal	31	35
2/1	13/1	Internal	31	35
2/2	3/1	Internal	3	N/A
2/2	9/2	Internal	31	35
2/3	3/2	Internal	3	N/A
3/1	10/1	Internal	31	35
3/2	5/1	Internal	10	N/A
3/2	10/2	Internal	31	35
3/3	5/2	Internal	10	N/A
4/1	10/1	Internal	31	35
4/2	5/1	Internal	10	N/A
4/3	5/2	Internal	10	N/A
5/1	11/1	Internal	15	35
5/2	7/1	Internal	4	N/A
5/2	7/2	Internal	6	N/A
5/2	11/2	Internal	15	35
6/1	11/1	Internal	15	35
6/2	7/1	Internal	4	N/A
6/2	11/2	Internal	15	35
6/3	7/2	Internal	6	N/A
7/1	12/1	Internal	31	35
7/2	1/1	Internal	9	N/A
7/2	12/2	Internal	31	35
7/3	1/2	Internal	9	N/A
7/3	1/3	Internal	9	N/A
8/1	1/1	Internal	9	N/A
8/1	12/1	Internal	31	35
8/2	1/2	Internal	9	N/A
8/3	1/3	Internal	9	N/A
11/1	15/1	Internal	5	35
11/2	15/2	Internal	5	35
14/1	3/1	Internal	3	N/A

14/1	3/2	Internal	3	N/A
14/1	9/1	Internal	31	35
16/1	8/1	Internal	31	35
16/2	8/3	Internal	11	35

Scenario 1: '2028 Future Base + Proposed Development AM Peak' (FG1: '2028 Future Base + Proposed Development AM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: M1 J22 / A50 / A511

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 (Circ Sth)	3.80	0.00	Y	Arm 9 Ahead	Inf	85.5 %	1995	1995
				Arm 13 Ahead	Inf	14.5 %		
1/2 (Circ Sth)	3.80	0.00	N	Arm 3 Right	75.00	23.7 %	2093	2093
				Arm 9 Ahead	75.00	76.3 %		
1/3 (Circ Sth)	3.80	0.00	Y	Arm 3 Right	75.00	100.0 %	1956	1956
2/1 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 9 Left	80.00	93.6 %	1977	1977
				Arm 13 Left	60.00	6.4 %		
2/2 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	0.2 %	1966	1966
				Arm 9 Left	60.00	99.8 %		
2/3 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	100.0 %	1978	1978
3/1 (Circ W)	4.20	0.00	Y	Arm 10 Ahead	75.00	100.0 %	1995	1995
3/2 (Circ W)	4.20	0.00	N	Arm 5 Right	75.00	0.0 %	2132	2132
				Arm 10 Ahead	75.00	100.0 %		
3/3 (Circ W)	4.20	0.00	Y	Arm 5 Right	75.00	100.0 %	1995	1995
4/1 (A511 E/B)	4.10	0.00	Y	Arm 10 Left	50.00	100.0 %	1966	1966
4/2 (A511 E/B)	4.10	0.00	N	Arm 5 Ahead	70.00	100.0 %	2120	2120
4/3 (A511 E/B)	4.10	0.00	Y	Arm 5 Ahead	70.00	100.0 %	1983	1983
5/1 (Circ Nth)	4.60	0.00	Y	Arm 11 Ahead	75.00	100.0 %	2034	2034
5/2 (Circ Nth)	4.60	0.00	Y	Arm 7 Right	75.00	75.2 %	2034	2034
				Arm 11 Ahead	75.00	24.8 %		
6/1 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 11 Left	80.00	100.0 %	2027	2027
6/2 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	0.0 %	2027	2027
				Arm 11 Left	80.00	100.0 %		
6/3 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	100.0 %	2027	2027
7/1 (Circ E)	4.50	0.00	Y	Arm 12 Ahead	Inf	100.0 %	2065	2065
7/2	4.50	0.00	N	Arm 1 Right	75.00	53.1 %	2182	2182

(Circ E)				Arm 12 Ahead	Inf	46.9 %		
7/3 (Circ E)	4.50	0.00	Y	Arm 1 Right	75.00	100.0 %	2025	2025
8/1 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	87.0 %	1953	1953
				Arm 12 Left	70.00	13.0 %		
8/2 (A50 W/B)	3.80	0.00	N	Arm 1 Ahead	70.00	100.0 %	2090	2090
8/3 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	100.0 %	1953	1953
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1 (M1 N/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M1 N/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
11/1 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
11/2 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
12/1 (M1 S/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (M1 S/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (Cliffe Lane)	3.90	0.00	Y	Arm 3 Left	Inf	74.5 %	2005	2005
				Arm 9 Left	Inf	25.5 %		
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
16/2 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980

Bonus Green Times

No Bonus Greens are defined For Scenario 1

Scenario 2: '2028 Future Base + Proposed Development PM Peak' (FG2: '2028 Future Base + Proposed Development PM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: M1 J22 / A50 / A511

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 (Circ Sth)	3.80	0.00	Y	Arm 9 Ahead	Inf	93.1 %	1995	1995
				Arm 13 Ahead	Inf	6.9 %		
1/2 (Circ Sth)	3.80	0.00	N	Arm 3 Right	75.00	0.0 %	2093	2093
				Arm 9 Ahead	75.00	100.0 %		
1/3 (Circ Sth)	3.80	0.00	Y	Arm 3 Right	75.00	100.0 %	1956	1956
2/1 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 9 Left	80.00	96.0 %	1977	1977
				Arm 13 Left	60.00	4.0 %		
2/2 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	0.0 %	1966	1966
				Arm 9 Left	60.00	100.0 %		
2/3 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	100.0 %	1978	1978
3/1 (Circ W)	4.20	0.00	Y	Arm 10 Ahead	75.00	100.0 %	1995	1995
3/2 (Circ W)	4.20	0.00	N	Arm 5 Right	75.00	0.6 %	2132	2132
				Arm 10 Ahead	75.00	99.4 %		
3/3 (Circ W)	4.20	0.00	Y	Arm 5 Right	75.00	100.0 %	1995	1995
4/1 (A511 E/B)	4.10	0.00	Y	Arm 10 Left	50.00	100.0 %	1966	1966
4/2 (A511 E/B)	4.10	0.00	N	Arm 5 Ahead	70.00	100.0 %	2120	2120
4/3 (A511 E/B)	4.10	0.00	Y	Arm 5 Ahead	70.00	100.0 %	1983	1983
5/1 (Circ Nth)	4.60	0.00	Y	Arm 11 Ahead	75.00	100.0 %	2034	2034
5/2 (Circ Nth)	4.60	0.00	Y	Arm 7 Right	75.00	84.3 %	2034	2034
				Arm 11 Ahead	75.00	15.7 %		
6/1 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 11 Left	80.00	100.0 %	2027	2027
6/2 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	0.3 %	2027	2027
				Arm 11 Left	80.00	99.7 %		
6/3 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	100.0 %	2027	2027
7/1 (Circ E)	4.50	0.00	Y	Arm 12 Ahead	Inf	100.0 %	2065	2065

7/2 (Circ E)	4.50	0.00	N	Arm 1 Right	75.00	100.0 %	2162	2162
				Arm 12 Ahead	Inf	0.0 %		
7/3 (Circ E)	4.50	0.00	Y	Arm 1 Right	75.00	100.0 %	2025	2025
8/1 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	91.7 %	1953	1953
				Arm 12 Left	70.00	8.3 %		
8/2 (A50 W/B)	3.80	0.00	N	Arm 1 Ahead	70.00	100.0 %	2090	2090
8/3 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	100.0 %	1953	1953
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1 (M1 N/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M1 N/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
11/1 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
11/2 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
12/1 (M1 S/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (M1 S/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (Cliffe Lane)	3.90	0.00	Y	Arm 3 Left	Inf	85.4 %	2005	2005
				Arm 9 Left	Inf	14.6 %		
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
16/2 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Scenario 3: '2030 Future Base + Proposed Development AM Peak' (FG3: '2030 Future Base + Proposed Development AM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: M1 J22 / A50 / A511

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 (Circ Sth)	3.80	0.00	Y	Arm 9 Ahead	Inf	85.5 %	1995	1995
				Arm 13 Ahead	Inf	14.5 %		
1/2 (Circ Sth)	3.80	0.00	N	Arm 3 Right	75.00	25.8 %	2093	2093
				Arm 9 Ahead	75.00	74.2 %		
1/3 (Circ Sth)	3.80	0.00	Y	Arm 3 Right	75.00	100.0 %	1956	1956
2/1 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 9 Left	80.00	93.4 %	1977	1977
				Arm 13 Left	60.00	6.6 %		
2/2 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	0.2 %	1966	1966
				Arm 9 Left	60.00	99.8 %		
2/3 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	100.0 %	1978	1978
3/1 (Circ W)	4.20	0.00	Y	Arm 10 Ahead	75.00	100.0 %	1995	1995
3/2 (Circ W)	4.20	0.00	N	Arm 5 Right	75.00	0.0 %	2132	2132
				Arm 10 Ahead	75.00	100.0 %		
3/3 (Circ W)	4.20	0.00	Y	Arm 5 Right	75.00	100.0 %	1995	1995
4/1 (A511 E/B)	4.10	0.00	Y	Arm 10 Left	50.00	100.0 %	1966	1966
4/2 (A511 E/B)	4.10	0.00	N	Arm 5 Ahead	70.00	100.0 %	2120	2120
4/3 (A511 E/B)	4.10	0.00	Y	Arm 5 Ahead	70.00	100.0 %	1983	1983
5/1 (Circ Nth)	4.60	0.00	Y	Arm 11 Ahead	75.00	100.0 %	2034	2034
5/2 (Circ Nth)	4.60	0.00	Y	Arm 7 Right	75.00	75.5 %	2034	2034
				Arm 11 Ahead	75.00	24.5 %		
6/1 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 11 Left	80.00	100.0 %	2027	2027
6/2 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	0.0 %	2027	2027
				Arm 11 Left	80.00	100.0 %		
6/3 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	100.0 %	2027	2027
7/1 (Circ E)	4.50	0.00	Y	Arm 12 Ahead	Inf	100.0 %	2065	2065

7/2 (Circ E)	4.50	0.00	N	Arm 1 Right	75.00	53.2 %	2182	2182
				Arm 12 Ahead	Inf	46.8 %		
7/3 (Circ E)	4.50	0.00	Y	Arm 1 Right	75.00	100.0 %	2025	2025
8/1 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	87.1 %	1953	1953
				Arm 12 Left	70.00	12.9 %		
8/2 (A50 W/B)	3.80	0.00	N	Arm 1 Ahead	70.00	100.0 %	2090	2090
8/3 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	100.0 %	1953	1953
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1 (M1 N/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M1 N/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
11/1 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
11/2 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
12/1 (M1 S/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (M1 S/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (Cliffe Lane)	3.90	0.00	Y	Arm 3 Left	Inf	75.5 %	2005	2005
				Arm 9 Left	Inf	24.5 %		
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
16/2 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980

Bonus Green Times

No Bonus Greens are defined For Scenario 3

Scenario 4: '2030 Future Base + Proposed Development PM Peak' (FG4: '2030 Future Base + Proposed Development PM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: M1 J22 / A50 / A511

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 (Circ Sth)	3.80	0.00	Y	Arm 9 Ahead	Inf	92.2 %	1995	1995
				Arm 13 Ahead	Inf	7.8 %		
1/2 (Circ Sth)	3.80	0.00	N	Arm 3 Right	75.00	1.5 %	2093	2093
				Arm 9 Ahead	75.00	98.5 %		
1/3 (Circ Sth)	3.80	0.00	Y	Arm 3 Right	75.00	100.0 %	1956	1956
2/1 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 9 Left	80.00	95.4 %	1977	1977
				Arm 13 Left	60.00	4.6 %		
2/2 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	0.0 %	1966	1966
				Arm 9 Left	60.00	100.0 %		
2/3 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	100.0 %	1978	1978
3/1 (Circ W)	4.20	0.00	Y	Arm 10 Ahead	75.00	100.0 %	1995	1995
3/2 (Circ W)	4.20	0.00	N	Arm 5 Right	75.00	0.5 %	2132	2132
				Arm 10 Ahead	75.00	99.5 %		
3/3 (Circ W)	4.20	0.00	Y	Arm 5 Right	75.00	100.0 %	1995	1995
4/1 (A511 E/B)	4.10	0.00	Y	Arm 10 Left	50.00	100.0 %	1966	1966
4/2 (A511 E/B)	4.10	0.00	N	Arm 5 Ahead	70.00	100.0 %	2120	2120
4/3 (A511 E/B)	4.10	0.00	Y	Arm 5 Ahead	70.00	100.0 %	1983	1983
5/1 (Circ Nth)	4.60	0.00	Y	Arm 11 Ahead	75.00	100.0 %	2034	2034
5/2 (Circ Nth)	4.60	0.00	Y	Arm 7 Right	75.00	86.5 %	2034	2034
				Arm 11 Ahead	75.00	13.5 %		
6/1 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 11 Left	80.00	100.0 %	2027	2027
6/2 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	0.3 %	2027	2027
				Arm 11 Left	80.00	99.7 %		
6/3 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	100.0 %	2027	2027
7/1 (Circ E)	4.50	0.00	Y	Arm 12 Ahead	Inf	100.0 %	2065	2065

7/2 (Circ E)	4.50	0.00	N	Arm 1 Right	75.00	100.0 %	2162	2162
				Arm 12 Ahead	Inf	0.0 %		
7/3 (Circ E)	4.50	0.00	Y	Arm 1 Right	75.00	100.0 %	2025	2025
8/1 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	91.3 %	1953	1953
				Arm 12 Left	70.00	8.7 %		
8/2 (A50 W/B)	3.80	0.00	N	Arm 1 Ahead	70.00	100.0 %	2090	2090
8/3 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	100.0 %	1953	1953
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1 (M1 N/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M1 N/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
11/1 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
11/2 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
12/1 (M1 S/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (M1 S/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (Cliffe Lane)	3.90	0.00	Y	Arm 3 Left	Inf	85.8 %	2005	2005
				Arm 9 Left	Inf	14.2 %		
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
16/2 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980

Bonus Green Times

No Bonus Greens are defined For Scenario 4

Scenario 5: '2036 Future Base + Proposed Development AM Peak' (FG5: '2036 Future Base + Proposed Development AM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: M1 J22 / A50 / A511

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 (Circ Sth)	3.80	0.00	Y	Arm 9 Ahead	Inf	83.5 %	1995	1995
				Arm 13 Ahead	Inf	16.5 %		
1/2 (Circ Sth)	3.80	0.00	N	Arm 3 Right	75.00	34.7 %	2093	2093
				Arm 9 Ahead	75.00	65.3 %		
1/3 (Circ Sth)	3.80	0.00	Y	Arm 3 Right	75.00	100.0 %	1956	1956
2/1 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 9 Left	80.00	92.5 %	1977	1977
				Arm 13 Left	60.00	7.5 %		
2/2 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	0.2 %	1966	1966
				Arm 9 Left	60.00	99.8 %		
2/3 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	100.0 %	1978	1978
3/1 (Circ W)	4.20	0.00	Y	Arm 10 Ahead	75.00	100.0 %	1995	1995
3/2 (Circ W)	4.20	0.00	N	Arm 5 Right	75.00	0.8 %	2132	2132
				Arm 10 Ahead	75.00	99.2 %		
3/3 (Circ W)	4.20	0.00	Y	Arm 5 Right	75.00	100.0 %	1995	1995
4/1 (A511 E/B)	4.10	0.00	Y	Arm 10 Left	50.00	100.0 %	1966	1966
4/2 (A511 E/B)	4.10	0.00	N	Arm 5 Ahead	70.00	100.0 %	2120	2120
4/3 (A511 E/B)	4.10	0.00	Y	Arm 5 Ahead	70.00	100.0 %	1983	1983
5/1 (Circ Nth)	4.60	0.00	Y	Arm 11 Ahead	75.00	100.0 %	2034	2034
5/2 (Circ Nth)	4.60	0.00	Y	Arm 7 Right	75.00	77.9 %	2034	2034
				Arm 11 Ahead	75.00	22.1 %		
6/1 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 11 Left	80.00	100.0 %	2027	2027
6/2 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	0.0 %	2027	2027
				Arm 11 Left	80.00	100.0 %		
6/3 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	100.0 %	2027	2027
7/1 (Circ E)	4.50	0.00	Y	Arm 12 Ahead	Inf	100.0 %	2065	2065

7/2 (Circ E)	4.50	0.00	N	Arm 1 Right	75.00	59.8 %	2179	2179
				Arm 12 Ahead	Inf	40.2 %		
7/3 (Circ E)	4.50	0.00	Y	Arm 1 Right	75.00	100.0 %	2025	2025
8/1 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	86.4 %	1953	1953
				Arm 12 Left	70.00	13.6 %		
8/2 (A50 W/B)	3.80	0.00	N	Arm 1 Ahead	70.00	100.0 %	2090	2090
8/3 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	100.0 %	1953	1953
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1 (M1 N/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M1 N/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
11/1 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
11/2 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
12/1 (M1 S/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (M1 S/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (Cliffe Lane)	3.90	0.00	Y	Arm 3 Left	Inf	76.5 %	2005	2005
				Arm 9 Left	Inf	23.5 %		
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
16/2 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980

Bonus Green Times

No Bonus Greens are defined For Scenario 5

Scenario 6: '2036 Future Base + Proposed Development PM Peak' (FG6: '2036 Future Base + Proposed Development PM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: M1 J22 / A50 / A511

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 (Circ Sth)	3.80	0.00	Y	Arm 9 Ahead	Inf	88.1 %	1995	1995
				Arm 13 Ahead	Inf	11.9 %		
1/2 (Circ Sth)	3.80	0.00	N	Arm 3 Right	75.00	0.0 %	2093	2093
				Arm 9 Ahead	75.00	100.0 %		
1/3 (Circ Sth)	3.80	0.00	Y	Arm 3 Right	75.00	100.0 %	1956	1956
2/1 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 9 Left	80.00	93.4 %	1977	1977
				Arm 13 Left	60.00	6.6 %		
2/2 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	0.0 %	1966	1966
				Arm 9 Left	60.00	100.0 %		
2/3 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	100.0 %	1978	1978
3/1 (Circ W)	4.20	0.00	Y	Arm 10 Ahead	75.00	100.0 %	1995	1995
3/2 (Circ W)	4.20	0.00	N	Arm 5 Right	75.00	0.5 %	2132	2132
				Arm 10 Ahead	75.00	99.5 %		
3/3 (Circ W)	4.20	0.00	Y	Arm 5 Right	75.00	100.0 %	1995	1995
4/1 (A511 E/B)	4.10	0.00	Y	Arm 10 Left	50.00	100.0 %	1966	1966
4/2 (A511 E/B)	4.10	0.00	N	Arm 5 Ahead	70.00	100.0 %	2120	2120
4/3 (A511 E/B)	4.10	0.00	Y	Arm 5 Ahead	70.00	100.0 %	1983	1983
5/1 (Circ Nth)	4.60	0.00	Y	Arm 11 Ahead	75.00	100.0 %	2034	2034
5/2 (Circ Nth)	4.60	0.00	Y	Arm 7 Right	75.00	87.8 %	2034	2034
				Arm 11 Ahead	75.00	12.2 %		
6/1 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 11 Left	80.00	100.0 %	2027	2027
6/2 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	0.3 %	2027	2027
				Arm 11 Left	80.00	99.7 %		
6/3 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	100.0 %	2027	2027
7/1 (Circ E)	4.50	0.00	Y	Arm 12 Ahead	Inf	100.0 %	2065	2065

7/2 (Circ E)	4.50	0.00	N	Arm 1 Right	75.00	60.8 %	2178	2178
				Arm 12 Ahead	Inf	39.2 %		
7/3 (Circ E)	4.50	0.00	Y	Arm 1 Right	75.00	100.0 %	2025	2025
8/1 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	91.4 %	1953	1953
				Arm 12 Left	70.00	8.6 %		
8/2 (A50 W/B)	3.80	0.00	N	Arm 1 Ahead	70.00	100.0 %	2090	2090
8/3 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	100.0 %	1953	1953
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1 (M1 N/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M1 N/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
11/1 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
11/2 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
12/1 (M1 S/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (M1 S/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (Cliffe Lane)	3.90	0.00	Y	Arm 3 Left	Inf	86.4 %	2005	2005
				Arm 9 Left	Inf	13.6 %		
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
16/2 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980

Bonus Green Times

No Bonus Greens are defined For Scenario 6

Scenario 7: '2028 Future Base + Proposed Development Sensitivity AM Peak' (FG7: '2028 Future Base + Proposed Development Sensitivity AM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: M1 J22 / A50 / A511

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 (Circ Sth)	3.80	0.00	Y	Arm 9 Ahead	Inf	85.7 %	1995	1995
				Arm 13 Ahead	Inf	14.3 %		
1/2 (Circ Sth)	3.80	0.00	N	Arm 3 Right	75.00	24.1 %	2093	2093
				Arm 9 Ahead	75.00	75.9 %		
1/3 (Circ Sth)	3.80	0.00	Y	Arm 3 Right	75.00	100.0 %	1956	1956
2/1 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 9 Left	80.00	93.6 %	1977	1977
				Arm 13 Left	60.00	6.4 %		
2/2 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	0.2 %	1966	1966
				Arm 9 Left	60.00	99.8 %		
2/3 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	100.0 %	1978	1978
3/1 (Circ W)	4.20	0.00	Y	Arm 10 Ahead	75.00	100.0 %	1995	1995
3/2 (Circ W)	4.20	0.00	N	Arm 5 Right	75.00	0.3 %	2132	2132
				Arm 10 Ahead	75.00	99.7 %		
3/3 (Circ W)	4.20	0.00	Y	Arm 5 Right	75.00	100.0 %	1995	1995
4/1 (A511 E/B)	4.10	0.00	Y	Arm 10 Left	50.00	100.0 %	1966	1966
4/2 (A511 E/B)	4.10	0.00	N	Arm 5 Ahead	70.00	100.0 %	2120	2120
4/3 (A511 E/B)	4.10	0.00	Y	Arm 5 Ahead	70.00	100.0 %	1983	1983
5/1 (Circ Nth)	4.60	0.00	Y	Arm 11 Ahead	75.00	100.0 %	2034	2034
5/2 (Circ Nth)	4.60	0.00	Y	Arm 7 Right	75.00	74.9 %	2034	2034
				Arm 11 Ahead	75.00	25.1 %		
6/1 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 11 Left	80.00	100.0 %	2027	2027
6/2 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	0.0 %	2027	2027
				Arm 11 Left	80.00	100.0 %		
6/3 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	100.0 %	2027	2027
7/1 (Circ E)	4.50	0.00	Y	Arm 12 Ahead	Inf	100.0 %	2065	2065

7/2 (Circ E)	4.50	0.00	N	Arm 1 Right	75.00	52.1 %	2182	2182
				Arm 12 Ahead	Inf	47.9 %		
7/3 (Circ E)	4.50	0.00	Y	Arm 1 Right	75.00	100.0 %	2025	2025
8/1 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	83.8 %	1953	1953
				Arm 12 Left	70.00	16.2 %		
8/2 (A50 W/B)	3.80	0.00	N	Arm 1 Ahead	70.00	100.0 %	2090	2090
8/3 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	100.0 %	1953	1953
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1 (M1 N/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M1 N/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
11/1 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
11/2 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
12/1 (M1 S/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (M1 S/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (Cliffe Lane)	3.90	0.00	Y	Arm 3 Left	Inf	76.4 %	2005	2005
				Arm 9 Left	Inf	23.6 %		
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
16/2 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980

Bonus Green Times

No Bonus Greens are defined For Scenario 7

Scenario 8: '2028 Future Base + Proposed Development Sensitivity PM Peak' (FG8: '2028 Future Base + Proposed Development Sensitivity PM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: M1 J22 / A50 / A511

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 (Circ Sth)	3.80	0.00	Y	Arm 9 Ahead	Inf	93.2 %	1995	1995
				Arm 13 Ahead	Inf	6.8 %		
1/2 (Circ Sth)	3.80	0.00	N	Arm 3 Right	75.00	0.0 %	2093	2093
				Arm 9 Ahead	75.00	100.0 %		
1/3 (Circ Sth)	3.80	0.00	Y	Arm 3 Right	75.00	100.0 %	1956	1956
2/1 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 9 Left	80.00	94.7 %	1977	1977
				Arm 13 Left	60.00	5.3 %		
2/2 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	0.0 %	1966	1966
				Arm 9 Left	60.00	100.0 %		
2/3 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	100.0 %	1978	1978
3/1 (Circ W)	4.20	0.00	Y	Arm 10 Ahead	75.00	100.0 %	1995	1995
3/2 (Circ W)	4.20	0.00	N	Arm 5 Right	75.00	0.6 %	2132	2132
				Arm 10 Ahead	75.00	99.4 %		
3/3 (Circ W)	4.20	0.00	Y	Arm 5 Right	75.00	100.0 %	1995	1995
4/1 (A511 E/B)	4.10	0.00	Y	Arm 10 Left	50.00	100.0 %	1966	1966
4/2 (A511 E/B)	4.10	0.00	N	Arm 5 Ahead	70.00	100.0 %	2120	2120
4/3 (A511 E/B)	4.10	0.00	Y	Arm 5 Ahead	70.00	100.0 %	1983	1983
5/1 (Circ Nth)	4.60	0.00	Y	Arm 11 Ahead	75.00	100.0 %	2034	2034
5/2 (Circ Nth)	4.60	0.00	Y	Arm 7 Right	75.00	82.1 %	2034	2034
				Arm 11 Ahead	75.00	17.9 %		
6/1 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 11 Left	80.00	100.0 %	2027	2027
6/2 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	0.3 %	2027	2027
				Arm 11 Left	80.00	99.7 %		
6/3 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	100.0 %	2027	2027
7/1 (Circ E)	4.50	0.00	Y	Arm 12 Ahead	Inf	100.0 %	2065	2065

7/2 (Circ E)	4.50	0.00	N	Arm 1 Right	75.00	100.0 %	2162	2162
				Arm 12 Ahead	Inf	0.0 %		
7/3 (Circ E)	4.50	0.00	Y	Arm 1 Right	75.00	100.0 %	2025	2025
8/1 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	89.7 %	1953	1953
				Arm 12 Left	70.00	10.3 %		
8/2 (A50 W/B)	3.80	0.00	N	Arm 1 Ahead	70.00	100.0 %	2090	2090
8/3 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	100.0 %	1953	1953
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1 (M1 N/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M1 N/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
11/1 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
11/2 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
12/1 (M1 S/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (M1 S/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (Cliffe Lane)	3.90	0.00	Y	Arm 3 Left	Inf	85.8 %	2005	2005
				Arm 9 Left	Inf	14.2 %		
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
16/2 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980

Bonus Green Times

No Bonus Greens are defined For Scenario 8

Scenario 9: '2030 Future Base + Proposed Development Sensitivity AM Peak' (FG9: '2030 Future Base + Proposed Development Sensitivity AM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: M1 J22 / A50 / A511

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 (Circ Sth)	3.80	0.00	Y	Arm 9 Ahead	Inf	85.7 %	1995	1995
				Arm 13 Ahead	Inf	14.3 %		
1/2 (Circ Sth)	3.80	0.00	N	Arm 3 Right	75.00	26.6 %	2093	2093
				Arm 9 Ahead	75.00	73.4 %		
1/3 (Circ Sth)	3.80	0.00	Y	Arm 3 Right	75.00	100.0 %	1956	1956
2/1 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 9 Left	80.00	93.4 %	1977	1977
				Arm 13 Left	60.00	6.6 %		
2/2 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	0.2 %	1966	1966
				Arm 9 Left	60.00	99.8 %		
2/3 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	100.0 %	1978	1978
3/1 (Circ W)	4.20	0.00	Y	Arm 10 Ahead	75.00	100.0 %	1995	1995
3/2 (Circ W)	4.20	0.00	N	Arm 5 Right	75.00	0.0 %	2132	2132
				Arm 10 Ahead	75.00	100.0 %		
3/3 (Circ W)	4.20	0.00	Y	Arm 5 Right	75.00	100.0 %	1995	1995
4/1 (A511 E/B)	4.10	0.00	Y	Arm 10 Left	50.00	100.0 %	1966	1966
4/2 (A511 E/B)	4.10	0.00	N	Arm 5 Ahead	70.00	100.0 %	2120	2120
4/3 (A511 E/B)	4.10	0.00	Y	Arm 5 Ahead	70.00	100.0 %	1983	1983
5/1 (Circ Nth)	4.60	0.00	Y	Arm 11 Ahead	75.00	100.0 %	2034	2034
5/2 (Circ Nth)	4.60	0.00	Y	Arm 7 Right	75.00	75.1 %	2034	2034
				Arm 11 Ahead	75.00	24.9 %		
6/1 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 11 Left	80.00	100.0 %	2027	2027
6/2 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	0.0 %	2027	2027
				Arm 11 Left	80.00	100.0 %		
6/3 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	100.0 %	2027	2027
7/1 (Circ E)	4.50	0.00	Y	Arm 12 Ahead	Inf	100.0 %	2065	2065

7/2 (Circ E)	4.50	0.00	N	Arm 1 Right	75.00	55.4 %	2181	2181
				Arm 12 Ahead	Inf	44.6 %		
7/3 (Circ E)	4.50	0.00	Y	Arm 1 Right	75.00	100.0 %	2025	2025
8/1 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	83.5 %	1953	1953
				Arm 12 Left	70.00	16.5 %		
8/2 (A50 W/B)	3.80	0.00	N	Arm 1 Ahead	70.00	100.0 %	2090	2090
8/3 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	100.0 %	1953	1953
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1 (M1 N/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M1 N/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
11/1 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
11/2 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
12/1 (M1 S/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (M1 S/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (Cliffe Lane)	3.90	0.00	Y	Arm 3 Left	Inf	77.2 %	2005	2005
				Arm 9 Left	Inf	22.8 %		
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
16/2 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980

Bonus Green Times

No Bonus Greens are defined For Scenario 9

Scenario 10: '2030 Future Base + Proposed Development Sensitivity PM Peak' (FG10: '2030 Future Base + Proposed Development Sensitivity PM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: M1 J22 / A50 / A511

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 (Circ Sth)	3.80	0.00	Y	Arm 9 Ahead	Inf	92.3 %	1995	1995
				Arm 13 Ahead	Inf	7.7 %		
1/2 (Circ Sth)	3.80	0.00	N	Arm 3 Right	75.00	0.0 %	2093	2093
				Arm 9 Ahead	75.00	100.0 %		
1/3 (Circ Sth)	3.80	0.00	Y	Arm 3 Right	75.00	100.0 %	1956	1956
2/1 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 9 Left	80.00	94.1 %	1977	1977
				Arm 13 Left	60.00	5.9 %		
2/2 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	0.0 %	1966	1966
				Arm 9 Left	60.00	100.0 %		
2/3 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	100.0 %	1978	1978
3/1 (Circ W)	4.20	0.00	Y	Arm 10 Ahead	75.00	100.0 %	1995	1995
3/2 (Circ W)	4.20	0.00	N	Arm 5 Right	75.00	0.7 %	2132	2132
				Arm 10 Ahead	75.00	99.3 %		
3/3 (Circ W)	4.20	0.00	Y	Arm 5 Right	75.00	100.0 %	1995	1995
4/1 (A511 E/B)	4.10	0.00	Y	Arm 10 Left	50.00	100.0 %	1966	1966
4/2 (A511 E/B)	4.10	0.00	N	Arm 5 Ahead	70.00	100.0 %	2120	2120
4/3 (A511 E/B)	4.10	0.00	Y	Arm 5 Ahead	70.00	100.0 %	1983	1983
5/1 (Circ Nth)	4.60	0.00	Y	Arm 11 Ahead	75.00	100.0 %	2034	2034
5/2 (Circ Nth)	4.60	0.00	Y	Arm 7 Right	75.00	84.5 %	2034	2034
				Arm 11 Ahead	75.00	15.5 %		
6/1 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 11 Left	80.00	100.0 %	2027	2027
6/2 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	0.3 %	2027	2027
				Arm 11 Left	80.00	99.7 %		
6/3 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	100.0 %	2027	2027
7/1 (Circ E)	4.50	0.00	Y	Arm 12 Ahead	Inf	100.0 %	2065	2065

7/2 (Circ E)	4.50	0.00	N	Arm 1 Right	75.00	62.2 %	2178	2178
				Arm 12 Ahead	Inf	37.8 %		
7/3 (Circ E)	4.50	0.00	Y	Arm 1 Right	75.00	100.0 %	2025	2025
8/1 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	89.1 %	1953	1953
				Arm 12 Left	70.00	10.9 %		
8/2 (A50 W/B)	3.80	0.00	N	Arm 1 Ahead	70.00	100.0 %	2090	2090
8/3 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	100.0 %	1953	1953
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1 (M1 N/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M1 N/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
11/1 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
11/2 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
12/1 (M1 S/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (M1 S/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (Cliffe Lane)	3.90	0.00	Y	Arm 3 Left	Inf	86.2 %	2005	2005
				Arm 9 Left	Inf	13.8 %		
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
16/2 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980

Bonus Green Times

No Bonus Greens are defined For Scenario 10

Scenario 11: '2036 Future Base + Proposed Development Sensitivity AM Peak' (FG11: '2036 Future Base + Proposed Development Sensitivity AM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: M1 J22 / A50 / A511

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 (Circ Sth)	3.80	0.00	Y	Arm 9 Ahead	Inf	83.5 %	1995	1995
				Arm 13 Ahead	Inf	16.5 %		
1/2 (Circ Sth)	3.80	0.00	N	Arm 3 Right	75.00	33.6 %	2093	2093
				Arm 9 Ahead	75.00	66.4 %		
1/3 (Circ Sth)	3.80	0.00	Y	Arm 3 Right	75.00	100.0 %	1956	1956
2/1 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 9 Left	80.00	92.4 %	1977	1977
				Arm 13 Left	60.00	7.6 %		
2/2 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	0.0 %	1966	1966
				Arm 9 Left	60.00	100.0 %		
2/3 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	100.0 %	1978	1978
3/1 (Circ W)	4.20	0.00	Y	Arm 10 Ahead	75.00	100.0 %	1995	1995
3/2 (Circ W)	4.20	0.00	N	Arm 5 Right	75.00	0.7 %	2132	2132
				Arm 10 Ahead	75.00	99.3 %		
3/3 (Circ W)	4.20	0.00	Y	Arm 5 Right	75.00	100.0 %	1995	1995
4/1 (A511 E/B)	4.10	0.00	Y	Arm 10 Left	50.00	100.0 %	1966	1966
4/2 (A511 E/B)	4.10	0.00	N	Arm 5 Ahead	70.00	100.0 %	2120	2120
4/3 (A511 E/B)	4.10	0.00	Y	Arm 5 Ahead	70.00	100.0 %	1983	1983
5/1 (Circ Nth)	4.60	0.00	Y	Arm 11 Ahead	75.00	100.0 %	2034	2034
5/2 (Circ Nth)	4.60	0.00	Y	Arm 7 Right	75.00	77.6 %	2034	2034
				Arm 11 Ahead	75.00	22.4 %		
6/1 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 11 Left	80.00	100.0 %	2027	2027
6/2 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	0.0 %	2027	2027
				Arm 11 Left	80.00	100.0 %		
6/3 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	100.0 %	2027	2027
7/1 (Circ E)	4.50	0.00	Y	Arm 12 Ahead	Inf	100.0 %	2065	2065

7/2 (Circ E)	4.50	0.00	N	Arm 1 Right	75.00	57.1 %	2180	2180
				Arm 12 Ahead	Inf	42.9 %		
7/3 (Circ E)	4.50	0.00	Y	Arm 1 Right	75.00	100.0 %	2025	2025
8/1 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	83.7 %	1953	1953
				Arm 12 Left	70.00	16.3 %		
8/2 (A50 W/B)	3.80	0.00	N	Arm 1 Ahead	70.00	100.0 %	2090	2090
8/3 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	100.0 %	1953	1953
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1 (M1 N/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M1 N/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
11/1 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
11/2 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
12/1 (M1 S/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (M1 S/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (Cliffe Lane)	3.90	0.00	Y	Arm 3 Left	Inf	78.3 %	2005	2005
				Arm 9 Left	Inf	21.7 %		
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
16/2 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980

Bonus Green Times

No Bonus Greens are defined For Scenario 11

Scenario 12: '2036 Future Base + Proposed Development Sensitivity PM Peak' (FG12: '2036 Future Base + Proposed Development Sensitivity PM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: M1 J22 / A50 / A511

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 (Circ Sth)	3.80	0.00	Y	Arm 9 Ahead	Inf	88.2 %	1995	1995
				Arm 13 Ahead	Inf	11.8 %		
1/2 (Circ Sth)	3.80	0.00	N	Arm 3 Right	75.00	0.0 %	2093	2093
				Arm 9 Ahead	75.00	100.0 %		
1/3 (Circ Sth)	3.80	0.00	Y	Arm 3 Right	75.00	100.0 %	1956	1956
2/1 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 9 Left	80.00	92.2 %	1977	1977
				Arm 13 Left	60.00	7.8 %		
2/2 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	0.0 %	1966	1966
				Arm 9 Left	60.00	100.0 %		
2/3 (M1 N/B Off-slip)	4.00	0.00	Y	Arm 3 Ahead	80.00	100.0 %	1978	1978
3/1 (Circ W)	4.20	0.00	Y	Arm 10 Ahead	75.00	100.0 %	1995	1995
3/2 (Circ W)	4.20	0.00	N	Arm 5 Right	75.00	0.2 %	2132	2132
				Arm 10 Ahead	75.00	99.8 %		
3/3 (Circ W)	4.20	0.00	Y	Arm 5 Right	75.00	100.0 %	1995	1995
4/1 (A511 E/B)	4.10	0.00	Y	Arm 10 Left	50.00	100.0 %	1966	1966
4/2 (A511 E/B)	4.10	0.00	N	Arm 5 Ahead	70.00	100.0 %	2120	2120
4/3 (A511 E/B)	4.10	0.00	Y	Arm 5 Ahead	70.00	100.0 %	1983	1983
5/1 (Circ Nth)	4.60	0.00	Y	Arm 11 Ahead	75.00	100.0 %	2034	2034
5/2 (Circ Nth)	4.60	0.00	Y	Arm 7 Right	75.00	85.5 %	2034	2034
				Arm 11 Ahead	75.00	14.5 %		
6/1 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 11 Left	80.00	100.0 %	2027	2027
6/2 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	0.3 %	2027	2027
				Arm 11 Left	80.00	99.7 %		
6/3 (M1 S/B Off Slip)	4.50	0.00	Y	Arm 7 Ahead	80.00	100.0 %	2027	2027
7/1 (Circ E)	4.50	0.00	Y	Arm 12 Ahead	Inf	100.0 %	2065	2065

7/2 (Circ E)	4.50	0.00	N	Arm 1 Right	75.00	60.9 %	2178	2178
				Arm 12 Ahead	Inf	39.1 %		
7/3 (Circ E)	4.50	0.00	Y	Arm 1 Right	75.00	100.0 %	2025	2025
8/1 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	89.4 %	1953	1953
				Arm 12 Left	70.00	10.6 %		
8/2 (A50 W/B)	3.80	0.00	N	Arm 1 Ahead	70.00	100.0 %	2090	2090
8/3 (A50 W/B)	3.80	0.00	Y	Arm 1 Ahead	70.00	100.0 %	1953	1953
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1 (M1 N/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M1 N/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
11/1 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
11/2 (A50 EB Exit Pedestrian Crossing)	3.65	0.00	Y	Arm 15 Ahead	Inf	100.0 %	1980	1980
12/1 (M1 S/B On-slip Lane 1)	Infinite Saturation Flow						Inf	Inf
12/2 (M1 S/B On-slip Lane 2)	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (Cliffe Lane)	3.90	0.00	Y	Arm 3 Left	Inf	86.7 %	2005	2005
				Arm 9 Left	Inf	13.3 %		
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
16/2 (A50 WB Entry Pedestrian Crossing)	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980

Bonus Green Times

No Bonus Greens are defined For Scenario 12

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2028 Future Base + Proposed Development AM Peak'	08:00	09:00	01:00	
2: '2028 Future Base + Proposed Development PM Peak'	17:00	18:00	01:00	
3: '2030 Future Base + Proposed Development AM Peak'	08:00	09:00	01:00	
4: '2030 Future Base + Proposed Development PM Peak'	17:00	18:00	01:00	
5: '2036 Future Base + Proposed Development AM Peak'	08:00	09:00	01:00	
6: '2036 Future Base + Proposed Development PM Peak'	17:00	18:00	01:00	
7: '2028 Future Base + Proposed Development Sensitivity AM Peak'	08:00	09:00	01:00	
8: '2028 Future Base + Proposed Development Sensitivity PM Peak'	17:00	18:00	01:00	
9: '2030 Future Base + Proposed Development Sensitivity AM Peak'	08:00	09:00	01:00	
10: '2030 Future Base + Proposed Development Sensitivity PM Peak'	17:00	18:00	01:00	
11: '2036 Future Base + Proposed Development Sensitivity AM Peak'	08:00	09:00	01:00	
12: '2036 Future Base + Proposed Development Sensitivity PM Peak'	17:00	18:00	01:00	

Traffic Flows, Desired

FG1: '2028 Future Base + Proposed Development AM Peak'

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1188	6	106	426	1727
	B	1066	6	83	14	982	2151
	C	2	39	0	27	814	882
	D	90	14	8	2	39	153
	E	300	929	591	0	5	1825
	Tot.	1459	2176	688	149	2266	6738

FG2: '2028 Future Base + Proposed Development PM Peak'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	968	2	43	494	1508
	B	781	6	52	15	1210	2064
	C	0	30	3	18	886	937
	D	87	15	9	0	19	130
	E	320	726	530	1	9	1586
	Tot.	1189	1745	596	77	2618	6225

FG3: '2030 Future Base + Proposed Development AM Peak'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1214	2	109	435	1761
	B	1108	6	85	14	990	2203
	C	2	42	0	28	813	885
	D	92	14	9	2	38	155
	E	307	926	596	0	5	1834
	Tot.	1510	2202	692	153	2281	6838

FG4: '2030 Future Base + Proposed Development PM Peak'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	997	2	51	510	1561
	B	820	6	56	17	1230	2129
	C	0	30	4	21	887	942
	D	99	17	11	0	21	148
	E	317	702	540	1	9	1569
	Tot.	1237	1752	613	90	2657	6349

FG5: '2036 Future Base + Proposed Development AM Peak'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1291	2	139	478	1911
	B	1196	6	90	17	984	2293
	C	2	41	0	32	812	887
	D	91	13	8	2	35	149
	E	335	914	613	0	5	1867
	Tot.	1625	2265	713	190	2314	7107

FG6: '2036 Future Base + Proposed Development PM Peak'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
	A	2	1069	2	80	568	1721
	B	877	6	55	24	1215	2177
Origin	C	0	29	4	30	882	945
	D	123	18	12	0	24	177
	E	348	687	541	1	9	1586
	Tot.	1350	1809	614	135	2698	6606

FG7: '2028 Future Base + Proposed Development Sensitivity AM Peak'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
	A	1	1194	6	106	426	1733
	B	1082	6	111	14	1001	2214
Origin	C	2	42	0	27	814	885
	D	102	14	8	2	39	165
	E	300	936	591	0	5	1832
	Tot.	1487	2192	716	149	2285	6829

FG8: '2028 Future Base + Proposed Development Sensitivity PM Peak'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
	A	1	996	2	43	494	1536
	B	789	6	66	15	1220	2096
Origin	C	0	38	3	24	886	951
	D	91	15	9	0	19	134
	E	320	744	530	1	9	1604
	Tot.	1201	1799	610	83	2628	6321

FG9: '2030 Future Base + Proposed Development Sensitivity AM Peak'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
	A	1	1220	2	109	435	1767
	B	1124	6	113	14	1009	2266
Origin	C	2	45	0	28	813	888
	D	104	14	9	2	38	167
	E	307	933	596	0	5	1841
	Tot.	1538	2218	720	153	2300	6929

FG10: '2030 Future Base + Proposed Development Sensitivity PM Peak'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1025	2	51	510	1589
	B	828	6	70	17	1240	2161
	C	0	38	4	27	887	956
	D	103	17	11	0	21	152
	E	317	720	540	1	9	1587
	Tot.	1249	1806	627	96	2667	6445

FG11: '2036 Future Base + Proposed Development Sensitivity AM Peak'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1297	2	139	478	1917
	B	1212	6	118	17	1003	2356
	C	2	44	0	32	812	890
	D	103	13	8	2	35	161
	E	335	921	613	0	5	1874
	Tot.	1653	2281	741	190	2333	7198

FG12: '2036 Future Base + Proposed Development Sensitivity PM Peak'
Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	2	1097	2	80	568	1749
	B	885	6	69	24	1225	2209
	C	0	37	4	36	882	959
	D	127	18	12	0	24	181
	E	348	705	541	1	9	1604
	Tot.	1362	1863	628	141	2708	6702

Scenario 1: '2028 Future Base + Proposed Development AM Peak' (FG1: '2028 Future Base + Proposed Development AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1188	6	106	426	1727
	B	1066	6	83	14	982	2151
	C	2	39	0	27	814	882
	D	90	14	8	2	39	153
	E	300	929	591	0	5	1825
	Tot.	1459	2176	688	149	2266	6738

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 2: '2028 Future Base + Proposed Development PM Peak' (FG2: '2028 Future Base + Proposed Development PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	968	2	43	494	1508
	B	781	6	52	15	1210	2064
	C	0	30	3	18	886	937
	D	87	15	9	0	19	130
	E	320	726	530	1	9	1586
	Tot.	1189	1745	596	77	2618	6225

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 3: '2030 Future Base + Proposed Development AM Peak' (FG3: '2030 Future Base + Proposed Development AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1214	2	109	435	1761
	B	1108	6	85	14	990	2203
	C	2	42	0	28	813	885
	D	92	14	9	2	38	155
	E	307	926	596	0	5	1834
	Tot.	1510	2202	692	153	2281	6838

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 4: '2030 Future Base + Proposed Development PM Peak' (FG4: '2030 Future Base + Proposed Development PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	997	2	51	510	1561
	B	820	6	56	17	1230	2129
	C	0	30	4	21	887	942
	D	99	17	11	0	21	148
	E	317	702	540	1	9	1569
	Tot.	1237	1752	613	90	2657	6349

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 5: '2036 Future Base + Proposed Development AM Peak' (FG5: '2036 Future Base + Proposed Development AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1291	2	139	478	1911
	B	1196	6	90	17	984	2293
	C	2	41	0	32	812	887
	D	91	13	8	2	35	149
	E	335	914	613	0	5	1867
	Tot.	1625	2265	713	190	2314	7107

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 6: '2036 Future Base + Proposed Development PM Peak' (FG6: '2036 Future Base + Proposed Development PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	2	1069	2	80	568	1721
	B	877	6	55	24	1215	2177
	C	0	29	4	30	882	945
	D	123	18	12	0	24	177
	E	348	687	541	1	9	1586
	Tot.	1350	1809	614	135	2698	6606

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 7: '2028 Future Base + Proposed Development Sensitivity AM Peak' (FG7: '2028 Future Base + Proposed Development Sensitivity AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
	A	1	1194	6	106	426	1733
	B	1082	6	111	14	1001	2214
Origin	C	2	42	0	27	814	885
	D	102	14	8	2	39	165
	E	300	936	591	0	5	1832
	Tot.	1487	2192	716	149	2285	6829

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
Origin	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 8: '2028 Future Base + Proposed Development Sensitivity PM Peak' (FG8: '2028 Future Base + Proposed Development Sensitivity PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
	A	1	996	2	43	494	1536
	B	789	6	66	15	1220	2096
Origin	C	0	38	3	24	886	951
	D	91	15	9	0	19	134
	E	320	744	530	1	9	1604
	Tot.	1201	1799	610	83	2628	6321

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 9: '2030 Future Base + Proposed Development Sensitivity AM Peak' (FG9: '2030 Future Base + Proposed Development Sensitivity AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	1	1220	2	109	435	1767
	B	1124	6	113	14	1009	2266
	C	2	45	0	28	813	888
	D	104	14	9	2	38	167
	E	307	933	596	0	5	1841
	Tot.	1538	2218	720	153	2300	6929

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 10: '2030 Future Base + Proposed Development Sensitivity PM Peak' (FG10: '2030 Future Base + Proposed Development Sensitivity PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
	A	1	1025	2	51	510	1589
	B	828	6	70	17	1240	2161
Origin	C	0	38	4	27	887	956
	D	103	17	11	0	21	152
	E	317	720	540	1	9	1587
	Tot.	1249	1806	627	96	2667	6445

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
Origin	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 11: '2036 Future Base + Proposed Development Sensitivity AM Peak' (FG11: '2036 Future Base + Proposed Development Sensitivity AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
	A	1	1297	2	139	478	1917
	B	1212	6	118	17	1003	2356
Origin	C	2	44	0	32	812	890
	D	103	13	8	2	35	161
	E	335	921	613	0	5	1874
	Tot.	1653	2281	741	190	2333	7198

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Scenario 12: '2036 Future Base + Proposed Development Sensitivity PM Peak' (FG12: '2036 Future Base + Proposed Development Sensitivity PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	2	1097	2	80	568	1749
	B	885	6	69	24	1225	2209
	C	0	37	4	36	882	959
	D	127	18	12	0	24	181
	E	348	705	541	1	9	1604
	Tot.	1362	1863	628	141	2708	6702

Traffic Flows, Difference

Difference :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	0	0	0	0
	B	0	0	0	0	0	0
	C	0	0	0	0	0	0
	D	0	0	0	0	0	0
	E	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0

Traffic Lane Flows

Lane	Scenario 1: 2028 Future Base + Proposed Development AM Peak	Scenario 2: 2028 Future Base + Proposed Development PM Peak	Scenario 3: 2030 Future Base + Proposed Development AM Peak	Scenario 4: 2030 Future Base + Proposed Development PM Peak	Scenario 5: 2036 Future Base + Proposed Development AM Peak	Scenario 6: 2036 Future Base + Proposed Development PM Peak
Junction: M1 J22 / A50 / A511						
1/1	842	860	860	889	959	885
1/2	908	912	937	943	1020	1012
1/3	858	788	873	813	849	885
2/1 (short)	422	453	422	455	424	457
2/2 (with short)	842(In) 420(Out)	904(In) 451(Out)	842(In) 420(Out)	908(In) 453(Out)	845(In) 421(Out)	912(In) 455(Out)
2/3	40	33	43	34	42	33
3/1	288	30	335	47	432	123
3/2 (with short)	940(In) 871(Out)	902(In) 844(Out)	941(In) 868(Out)	941(In) 877(Out)	928(In) 865(Out)	948(In) 883(Out)
3/3 (short)	69	58	73	64	63	65
4/1 (short)	300	320	307	317	335	348
4/2 (with short)	1088(In) 788(Out)	989(In) 669(Out)	1096(In) 789(Out)	980(In) 663(Out)	1124(In) 789(Out)	1005(In) 657(Out)
4/3	737	597	738	589	743	581
5/1	788	674	789	667	796	661
5/2	806	655	811	653	806	646
6/1 (short)	491	395	503	408	535	443
6/2 (with short)	1188(In) 697(Out)	970(In) 575(Out)	1214(In) 711(Out)	999(In) 591(Out)	1291(In) 756(Out)	1071(In) 628(Out)
6/3	539	538	547	562	620	650
7/1	351	544	356	557	361	364
7/2 (with short)	794(In) 542(Out)	548(In) 287(Out)	803(In) 536(Out)	572(In) 302(Out)	887(In) 651(Out)	855(In) 498(Out)
7/3 (short)	252	261	267	270	236	357
8/1 (with short)	1294(In) 637(Out)	1277(In) 625(Out)	1331(In) 660(Out)	1317(In) 643(Out)	1445(In) 660(Out)	1294(In) 637(Out)
8/2 (short)	657	652	671	674	785	657
8/3	857	787	872	812	848	883
9/1	1154	1255	1167	1275	1228	1231
9/2	1112	1363	1114	1382	1086	1467
10/1	588	350	642	364	767	471
10/2	871	839	868	873	858	879
11/1	1279	1069	1292	1075	1331	1104
11/2	897	676	910	677	934	705
12/1	434	596	441	613	451	419

12/2	254	0	251	0	262	195
13/1	149	77	153	90	190	135
14/1	153	130	155	148	149	177
15/1	1279	1069	1292	1075	1331	1104
15/2	897	676	910	677	934	705
16/1	1294	1277	1331	1317	1445	1294
16/2	857	787	872	812	848	883

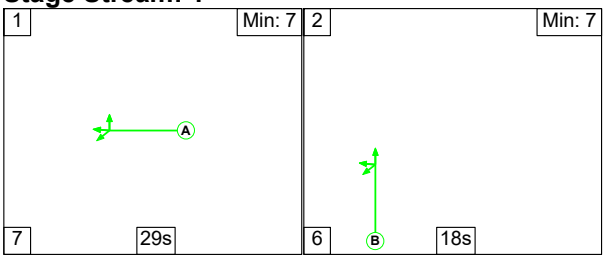
Lane	Scenario 7: 2028 Future Base + Proposed Development Sensitivity AM Peak	Scenario 8: 2028 Future Base + Proposed Development Sensitivity PM Peak	Scenario 9: 2030 Future Base + Proposed Development Sensitivity AM Peak	Scenario 10: 2030 Future Base + Proposed Development Sensitivity PM Peak	Scenario 11: 2036 Future Base + Proposed Development Sensitivity AM Peak	Scenario 12: 2036 Future Base + Proposed Development Sensitivity PM Peak
Junction: M1 J22 / A50 / A511						
1/1	851	863	877	891	960	890
1/2	926	919	949	937	1030	1017
1/3	866	796	879	835	873	893
2/1 (short)	422	456	422	458	423	460
2/2 (with short)	842(In) 420(Out)	910(In) 454(Out)	842(In) 420(Out)	914(In) 456(Out)	844(In) 421(Out)	918(In) 458(Out)
2/3	43	41	46	42	46	41
3/1	312	54	330	46	418	113
3/2 (with short)	947(In) 878(Out)	898(In) 832(Out)	977(In) 901(Out)	962(In) 892(Out)	973(In) 906(Out)	978(In) 903(Out)
3/3 (short)	69	66	76	70	67	75
4/1 (short)	300	320	307	317	335	348
4/2 (with short)	1092(In) 792(Out)	998(In) 678(Out)	1102(In) 795(Out)	988(In) 671(Out)	1132(In) 797(Out)	1016(In) 668(Out)
4/3	740	606	739	599	742	588
5/1	795	683	795	677	803	670
5/2	809	672	815	669	809	663
6/1 (short)	492	407	504	420	534	459
6/2 (with short)	1194(In) 702(Out)	998(In) 591(Out)	1220(In) 716(Out)	1027(In) 607(Out)	1297(In) 763(Out)	1099(In) 640(Out)
6/3	539	538	547	562	620	650
7/1	350	544	361	364	355	363
7/2 (with short)	795(In) 532(Out)	548(In) 289(Out)	798(In) 552(Out)	765(In) 511(Out)	893(In) 624(Out)	856(In) 501(Out)
7/3 (short)	263	259	246	254	269	355
8/1 (with short)	1349(In) 685(Out)	1301(In) 640(Out)	1388(In) 684(Out)	1327(In) 643(Out)	1484(In) 722(Out)	1318(In) 654(Out)
8/2 (short)	664	661	704	684	762	664
8/3	865	795	878	834	872	891
9/1	1163	1255	1184	1274	1228	1233
9/2	1122	1373	1116	1393	1105	1475
10/1	612	374	637	363	753	461
10/2	875	827	901	886	900	901
11/1	1287	1090	1299	1097	1337	1129
11/2	905	709	919	709	944	734
12/1	461	610	474	434	473	432

12/2	255	0	246	193	268	196
13/1	149	83	153	96	190	141
14/1	165	134	167	152	161	181
15/1	1287	1090	1299	1097	1337	1129
15/2	905	709	919	709	944	734
16/1	1349	1301	1388	1327	1484	1318
16/2	865	795	878	834	872	891

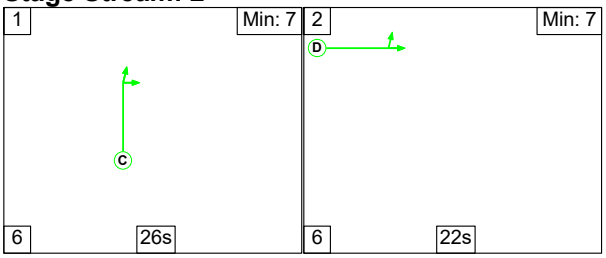
Scenario 1: '2028 Future Base + Proposed Development AM Peak' (FG1: '2028 Future Base + Proposed Development AM Peak', Plan 1: 'Network Control Plan 1')
Controller :C1 - M1/J22 A50/A511 Controller 1

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	29	18
Change Point	0	36

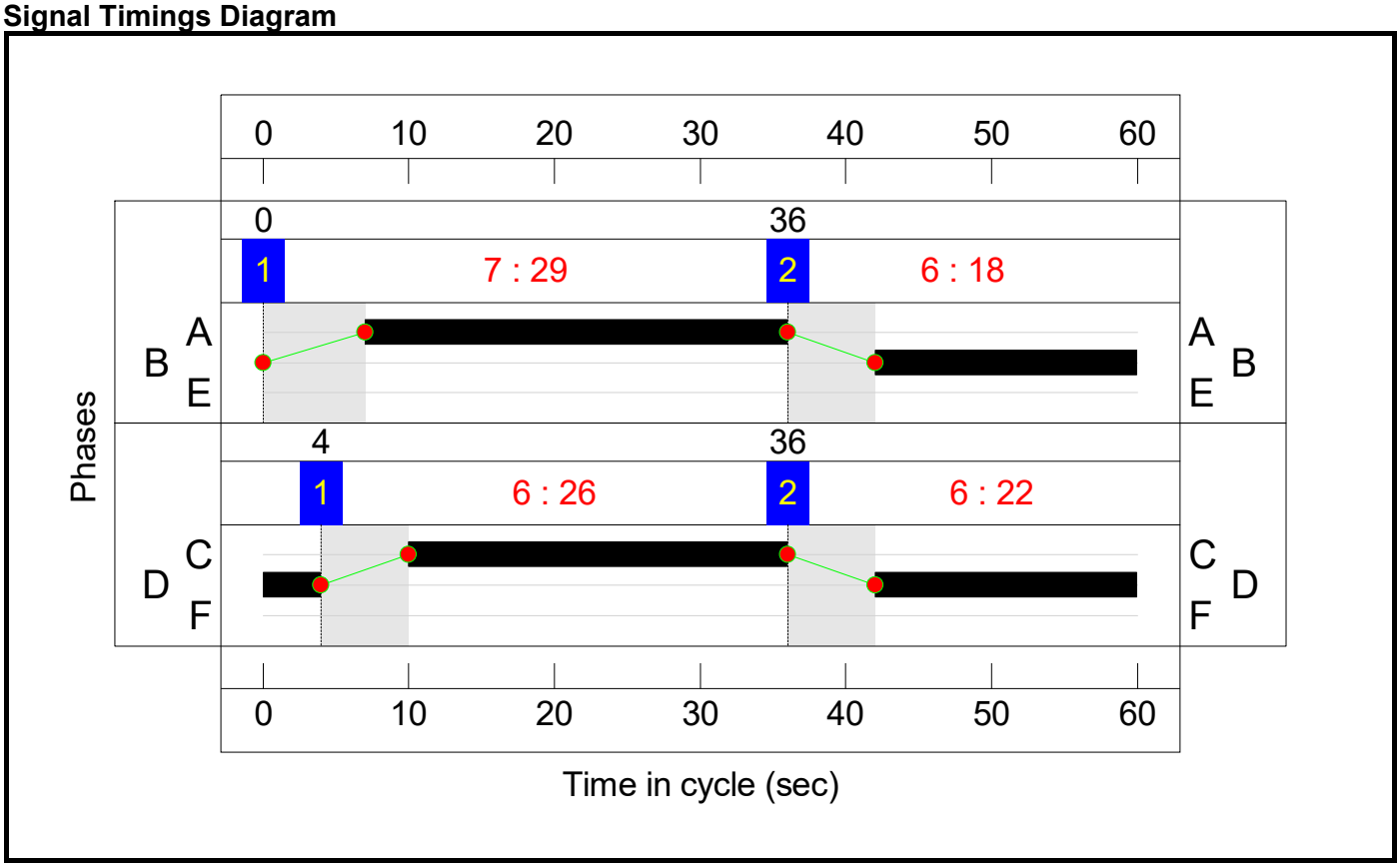
Stage Stream: 2

Stage	1	2
Duration	26	22
Change Point	4	36

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Sth Right Ahead Ahead2	Traffic	1	29	7	36
B	M1 N/B Off-slip Ahead Left Left2	Traffic	1	18	42	0
C	Circ W Right Ahead	Traffic	2	26	10	36
D	A511 E/B Ahead Left	Traffic	2	22	42	4
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

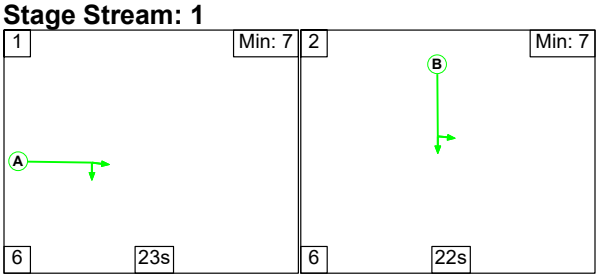
Signal Timings Diagram



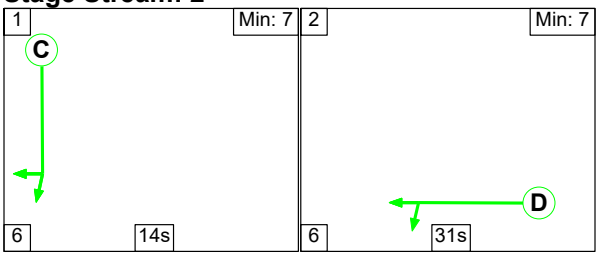
Controller :C2 - M1/J22 A50/A511 Controller 2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	23	22
Change Point	7	36

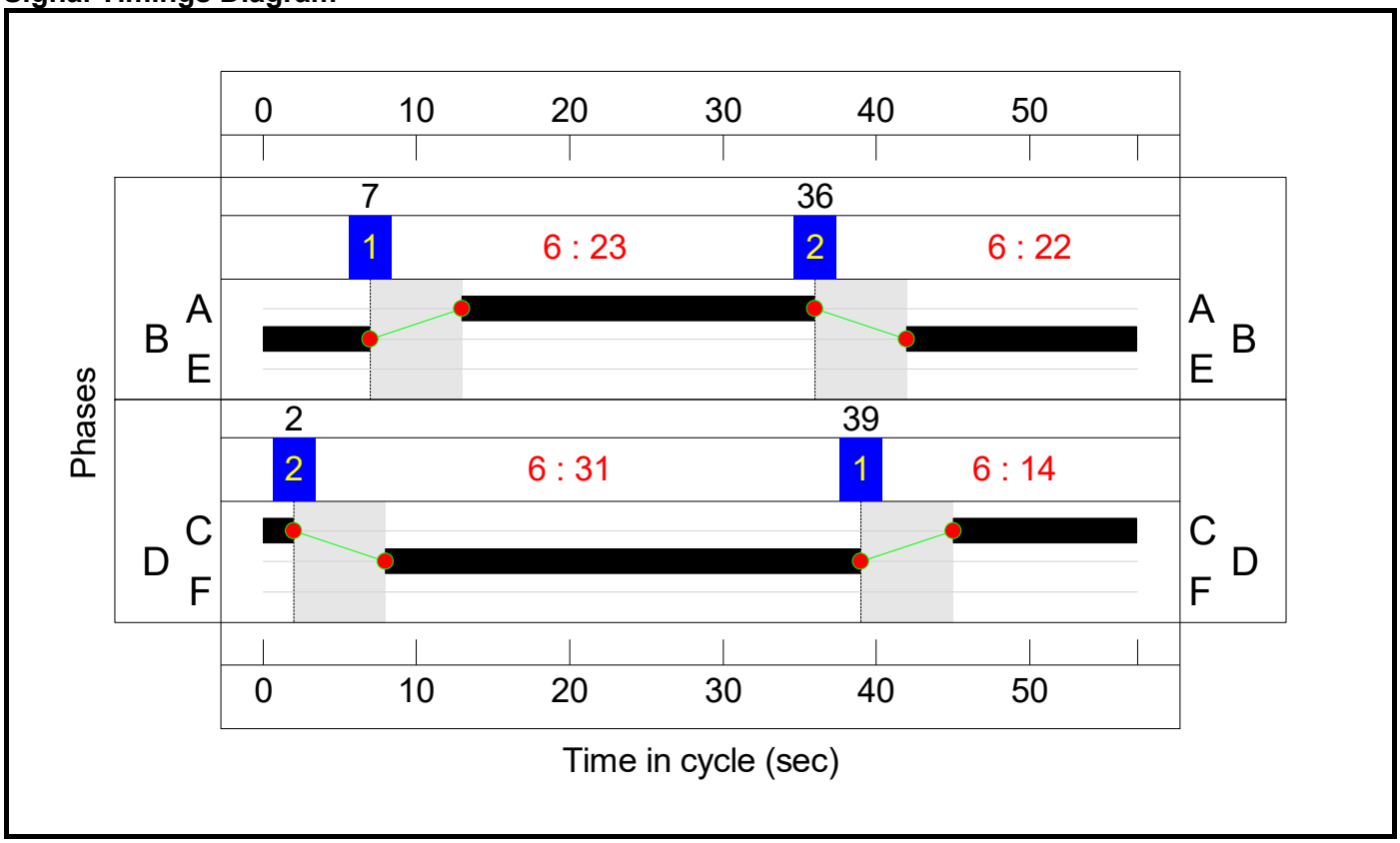
Stage Stream: 2

Stage	1	2
Duration	14	31
Change Point	39	2

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Nth Right Ahead	Traffic	1	23	13	36
B	M1 S/B Off Slip Ahead Left	Traffic	1	22	42	7
C	Circ E Right Ahead	Traffic	2	14	45	2
D	A50 W/B Ahead Left	Traffic	2	31	8	39
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

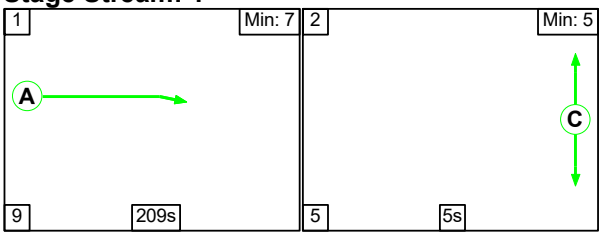
Signal Timings Diagram



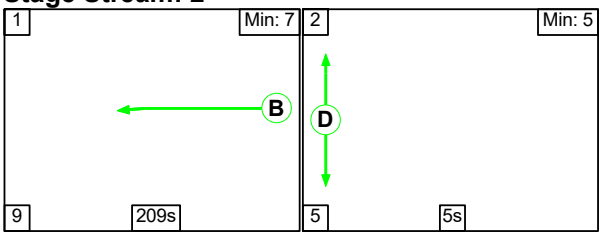
Controller :C3 - A50 East Pedestrian Crossings

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	209	5
Change Point	180	170

Detailed Input Data And Results

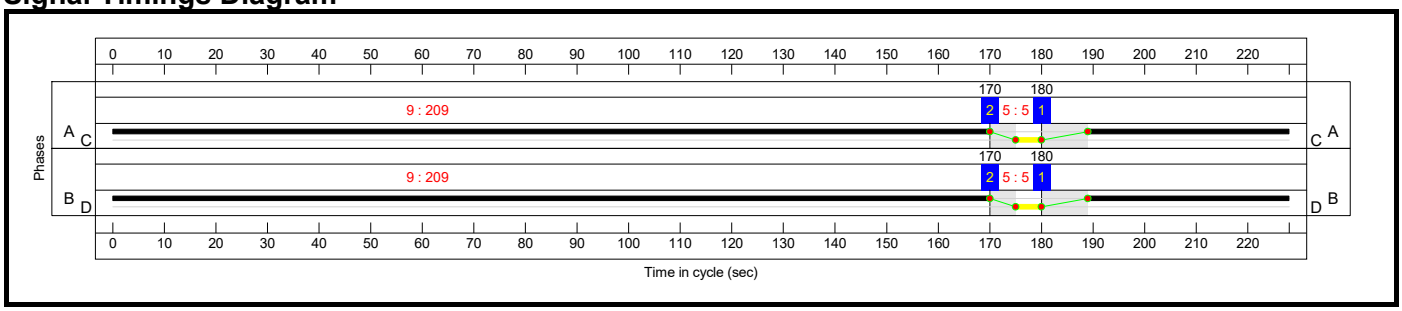
Stage Stream: 2

Stage	1	2
Duration	209	5
Change Point	180	170

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	A50 EB Exit Pedestrian Crossing Ahead	Traffic	1	209	189	170
B	A50 WB Entry Pedestrian Crossing Ahead	Traffic	2	209	189	170
C	Pedestrians across	Pedestrian	1	5	175	180
D	Pedestrians across	Pedestrian	2	5	175	180

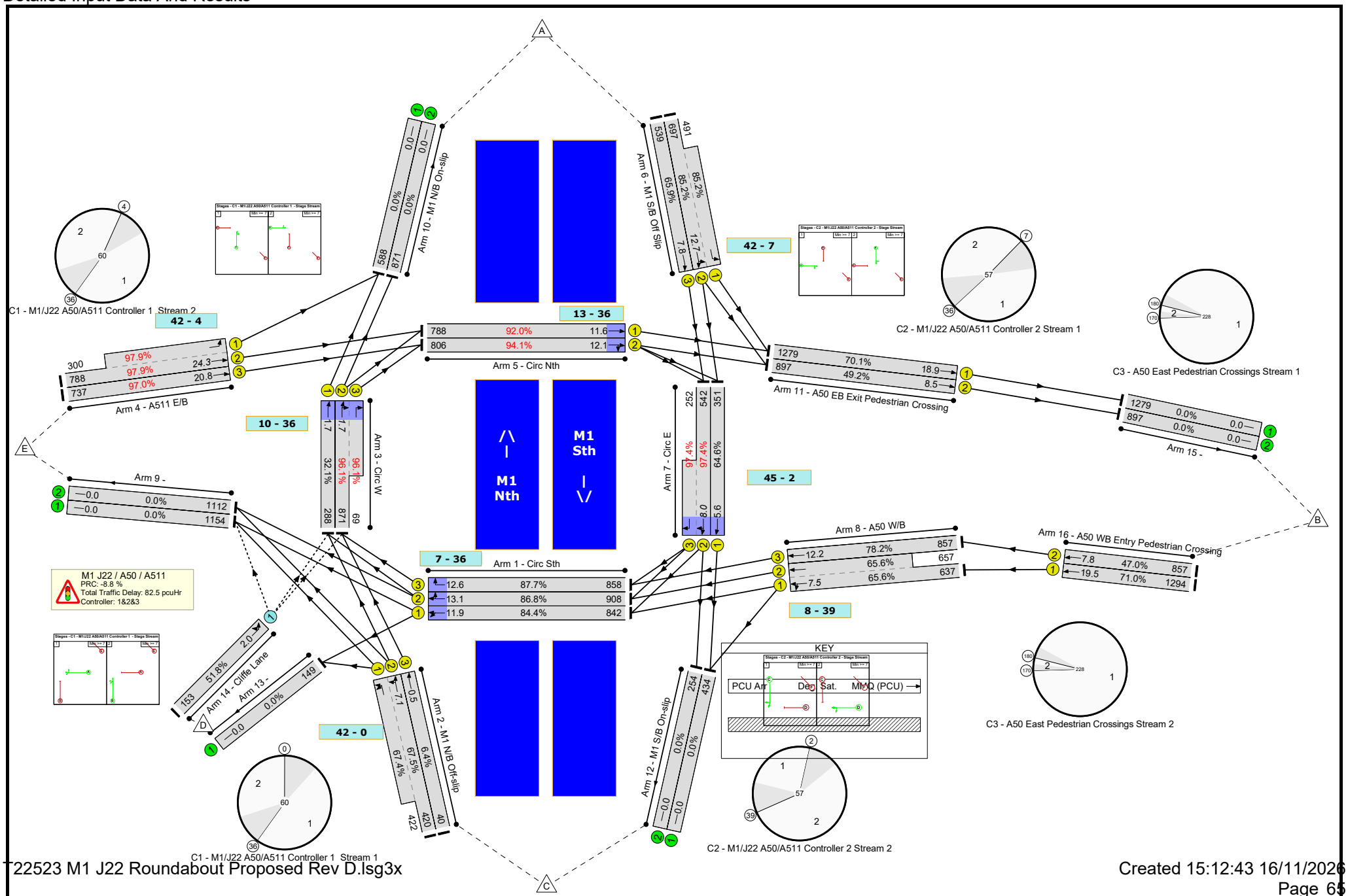
Signal Timings Diagram



Lane Green Times

Junction: M1 J22 / A50 / A511					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Circ Sth Ahead Ahead2	U	A	7	36
1/2	Circ Sth Right Ahead	U	A	7	36
1/3	Circ Sth Right	U	A	7	36
2/1	M1 N/B Off-slip Left Left2	U	B	42	0
2/2	M1 N/B Off-slip Ahead Left	U	B	42	0
2/3	M1 N/B Off-slip Ahead	U	B	42	0
3/1	Circ W Ahead	U	C	10	36
3/2	Circ W Right Ahead	U	C	10	36
3/3	Circ W Right	U	C	10	36
4/1	A511 E/B Left	U	D	42	4
4/2	A511 E/B Ahead	U	D	42	4
4/3	A511 E/B Ahead	U	D	42	4
5/1	Circ Nth Ahead	U	A	13	36
5/2	Circ Nth Right Ahead	U	A	13	36
6/1	M1 S/B Off Slip Left	U	B	42	7
6/2	M1 S/B Off Slip Ahead Left	U	B	42	7
6/3	M1 S/B Off Slip Ahead	U	B	42	7
7/1	Circ E Ahead	U	C	45	2
7/2	Circ E Right Ahead	U	C	45	2
7/3	Circ E Right	U	C	45	2
8/1	A50 W/B Ahead Left	U	D	8	39
8/2	A50 W/B Ahead	U	D	8	39
8/3	A50 W/B Ahead	U	D	8	39
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	A	189	170
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	A	189	170
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	B	189	170
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	B	189	170

Network Layout Diagram


A
B
C
D
E
42 - 4
13 - 36
42 - 7
10 - 36
45 - 2
7 - 36
8 - 39
42 - 0
M1 Nth
M1 Sth
Arm 1 - Circ Sth
Arm 2 - M1 N/B Off-slip
Arm 3 - Circ W
Arm 4 - A511 E/B
Arm 5 - Circ Nth
Arm 6 - M1 S/B Off Slip
Arm 7 - Circ E
Arm 8 - A50 W/B
Arm 9 -
Arm 10 - M1 N/B On-slip
Arm 11 - A50 EB Exit Pedestrian Crossing
Arm 12 - M1 S/B On-slip
Arm 13 -
Arm 14 - Cliffe Lane
Arm 15 -
Arm 16 - A50 WB Entry Pedestrian Crossing
M1 J22 / A50 / A511
PRC: -8.8 %
Total Traffic Delay: 82.5 pcuHr
Controller: 1&2&3
KEY
PCU Arr
Del
Sat.
MaxQ (PCU)
C1 - M1/J22 A50/A511 Controller 1 Stream 2
C2 - M1/J22 A50/A511 Controller 2 Stream 1
C3 - A50 East Pedestrian Crossings Stream 1
C3 - A50 East Pedestrian Crossings Stream 2
C2 - M1/J22 A50/A511 Controller 2 Stream 2
C1 - M1/J22 A50/A511 Controller 1 Stream 1

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**97.9%**
M1 J22 / A50 / A511	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**97.9%**
1/1	Circ Sth Ahead Ahead2	U	1:1	N/A	C1:A		1	29	-	-	842	1995	998	84.4%
1/2	Circ Sth Right Ahead	U	1:1	N/A	C1:A		1	29	-	-	908	2093	1047	86.8%
1/3	Circ Sth Right	U	1:1	N/A	C1:A		1	29	-	-	858	1956	978	87.7%
2/2+2/1	M1 N/B Off-slip Ahead Left Left2	U	1:1	N/A	C1:B		1	18	-	-	842	1966:1977	623+626	67.5 : 67.4%
2/3	M1 N/B Off-slip Ahead	U	1:1	N/A	C1:B		1	18	-	-	40	1978	626	6.4%
3/1	Circ W Ahead	U	1:2	N/A	C1:C		1	26	-	-	288	1995	898	32.1%
3/2+3/3	Circ W Right Ahead	U	1:2	N/A	C1:C		1	26	-	-	940	2132:1995	906+72	96.1 : 96.1%
4/2+4/1	A511 E/B Ahead Left	U	1:2	N/A	C1:D		1	22	-	-	1088	2120:1966	805+306	97.9 : 97.9%
4/3	A511 E/B Ahead	U	1:2	N/A	C1:D		1	22	-	-	737	1983	760	97.0%
5/1	Circ Nth Ahead	U	2:1	N/A	C2:A		1	23	-	-	788	2034	856	92.0%
5/2	Circ Nth Right Ahead	U	2:1	N/A	C2:A		1	23	-	-	806	2034	856	94.1%
6/2+6/1	M1 S/B Off Slip Ahead Left	U	2:1	N/A	C2:B		1	22	-	-	1188	2027:2027	818+576	85.2 : 85.2%
6/3	M1 S/B Off Slip Ahead	U	2:1	N/A	C2:B		1	22	-	-	539	2027	818	65.9%
7/1	Circ E Ahead	U	2:2	N/A	C2:C		1	14	-	-	351	2065	543	64.6%
7/2+7/3	Circ E Right Ahead	U	2:2	N/A	C2:C		1	14	-	-	794	2182:2025	556+259	97.4 : 97.4%
8/1+8/2	A50 W/B Ahead Left	U	2:2	N/A	C2:D		1	31	-	-	1294	1953:2090	971+1001	65.6 : 65.6%

8/3	A50 W/B Ahead	U	2:2	N/A	C2:D		1	31	-	-	857	1953	1096	78.2%
9/1		U	N/A	N/A	-		-	-	-	-	1154	Inf	Inf	0.0%
9/2		U	N/A	N/A	-		-	-	-	-	1112	Inf	Inf	0.0%
10/1	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	588	Inf	Inf	0.0%
10/2	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	871	Inf	Inf	0.0%
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	1279	1980	1824	70.1%
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	897	1980	1824	49.2%
12/1	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	434	Inf	Inf	0.0%
12/2	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	254	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	-	149	Inf	Inf	0.0%
14/1	Cliffe Lane Left Left2	O	N/A	N/A	-		-	-	-	-	153	2005	295	51.8%
15/1		U	N/A	N/A	-		-	-	-	-	1279	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	897	Inf	Inf	0.0%
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	1294	1980	1824	71.0%
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	857	1980	1824	47.0%

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	**-**	**-**	**72**	**81**	**0**	**50.5**	**32.0**	**0.0**	**82.5**	**-**	**-**	**-**	**-**	
M1 J22 / A50 / A511	**-**	**-**	**72**	**81**	**0**	**50.5**	**32.0**	**0.0**	**82.5**	**-**	**-**	**-**	**-**	
1/1	842	842	-	-	-	3.0	0.0	-	3.0	13.0	11.9	0.0	11.9	
1/2	908	908	-	-	-	3.3	0.0	-	3.3	13.2	13.1	0.0	13.1	
1/3	858	858	-	-	-	3.2	0.0	-	3.2	13.4	12.6	0.0	12.6	
2/2+2/1	842	842	-	-	-	4.2	1.0	-	5.2	22.2	6.1	1.0	7.1	
2/3	40	40	-	-	-	0.2	0.0	-	0.2	17.4	0.5	0.0	0.5	
3/1	288	288	-	-	-	0.4	0.0	-	0.4	4.7	1.7	0.0	1.7	
3/2+3/3	940	940	-	-	-	1.1	0.0	-	1.1	4.2	1.7	0.0	1.7	
4/2+4/1	1088	1088	-	-	-	5.1	11.6	-	16.7	55.3	12.7	11.6	24.3	
4/3	737	737	-	-	-	3.7	9.0	-	12.7	62.0	11.9	9.0	20.8	
5/1	788	788	-	-	-	3.4	0.0	-	3.4	15.6	11.6	0.0	11.6	
5/2	806	806	-	-	-	3.5	0.0	-	3.5	15.8	12.1	0.0	12.1	
6/2+6/1	1188	1188	-	-	-	4.8	2.8	-	7.6	23.1	9.9	2.8	12.7	
6/3	539	539	-	-	-	2.1	1.0	-	3.0	20.2	6.9	1.0	7.8	
7/1	351	351	-	-	-	2.1	0.0	-	2.1	21.5	5.6	0.0	5.6	
7/2+7/3	794	794	-	-	-	2.7	0.0	-	2.7	12.2	8.0	0.0	8.0	
8/1+8/2	1294	1294	-	-	-	2.9	1.0	-	3.9	10.7	6.6	1.0	7.5	
8/3	857	857	-	-	-	2.3	1.8	-	4.1	17.2	10.5	1.8	12.2	
9/1	1154	1154	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	1112	1112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	588	588	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	871	871	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	1279	1279	-	-	-	0.7	1.2	-	1.9	5.3	17.8	1.2	18.9	

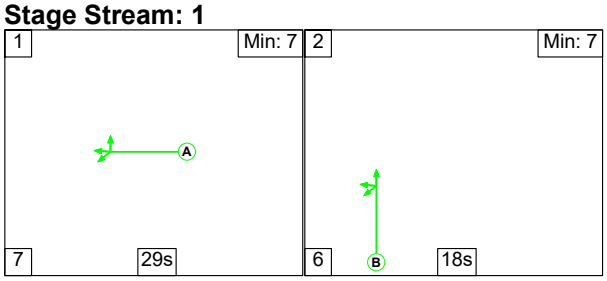
11/2	897	897	-	-	-	0.3	0.5	-	0.8	3.2	8.0	0.5	8.5
12/1	434	434	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	254	254	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	149	149	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1	153	153	72	81	0	0.4	0.5	-	0.9	21.8	1.4	0.5	2.0
15/1	1279	1279	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	897	897	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	1294	1294	-	-	-	0.7	1.2	-	2.0	5.4	18.3	1.2	19.5
16/2	857	857	-	-	-	0.3	0.4	-	0.7	3.1	7.4	0.4	7.8

C1 - M1/J22 A50/A511 Controller 1	Stream: 1 PRC for Signalled Lanes (%):	2.6	Total Delay for Signalled Lanes (pcuHr):	14.95	Cycle Time (s): 60
C1 - M1/J22 A50/A511 Controller 1	Stream: 2 PRC for Signalled Lanes (%):	-8.8	Total Delay for Signalled Lanes (pcuHr):	30.88	Cycle Time (s): 60
C2 - M1/J22 A50/A511 Controller 2	Stream: 1 PRC for Signalled Lanes (%):	-4.6	Total Delay for Signalled Lanes (pcuHr):	17.61	Cycle Time (s): 57
C2 - M1/J22 A50/A511 Controller 2	Stream: 2 PRC for Signalled Lanes (%):	-8.3	Total Delay for Signalled Lanes (pcuHr):	12.74	Cycle Time (s): 57
C3 - A50 East Pedestrian Crossings	Stream: 1 PRC for Signalled Lanes (%):	28.3	Total Delay for Signalled Lanes (pcuHr):	2.69	Cycle Time (s): 228
C3 - A50 East Pedestrian Crossings	Stream: 2 PRC for Signalled Lanes (%):	26.8	Total Delay for Signalled Lanes (pcuHr):	2.69	Cycle Time (s): 228
	PRC Over All Lanes (%):	-8.8	Total Delay Over All Lanes(pcuHr):	82.49	

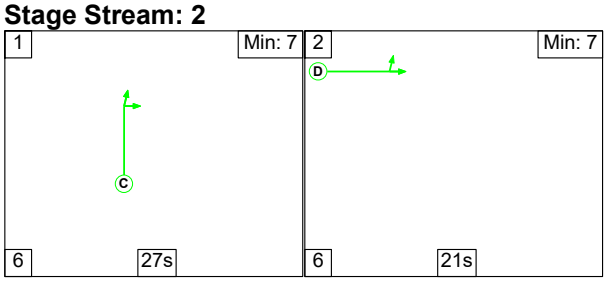
Scenario 2: '2028 Future Base + Proposed Development PM Peak' (FG2: '2028 Future Base + Proposed Development PM Peak', Plan 1: 'Network Control Plan 1')
Controller :C1 - M1/J22 A50/A511 Controller 1

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	29	18
Change Point	0	36

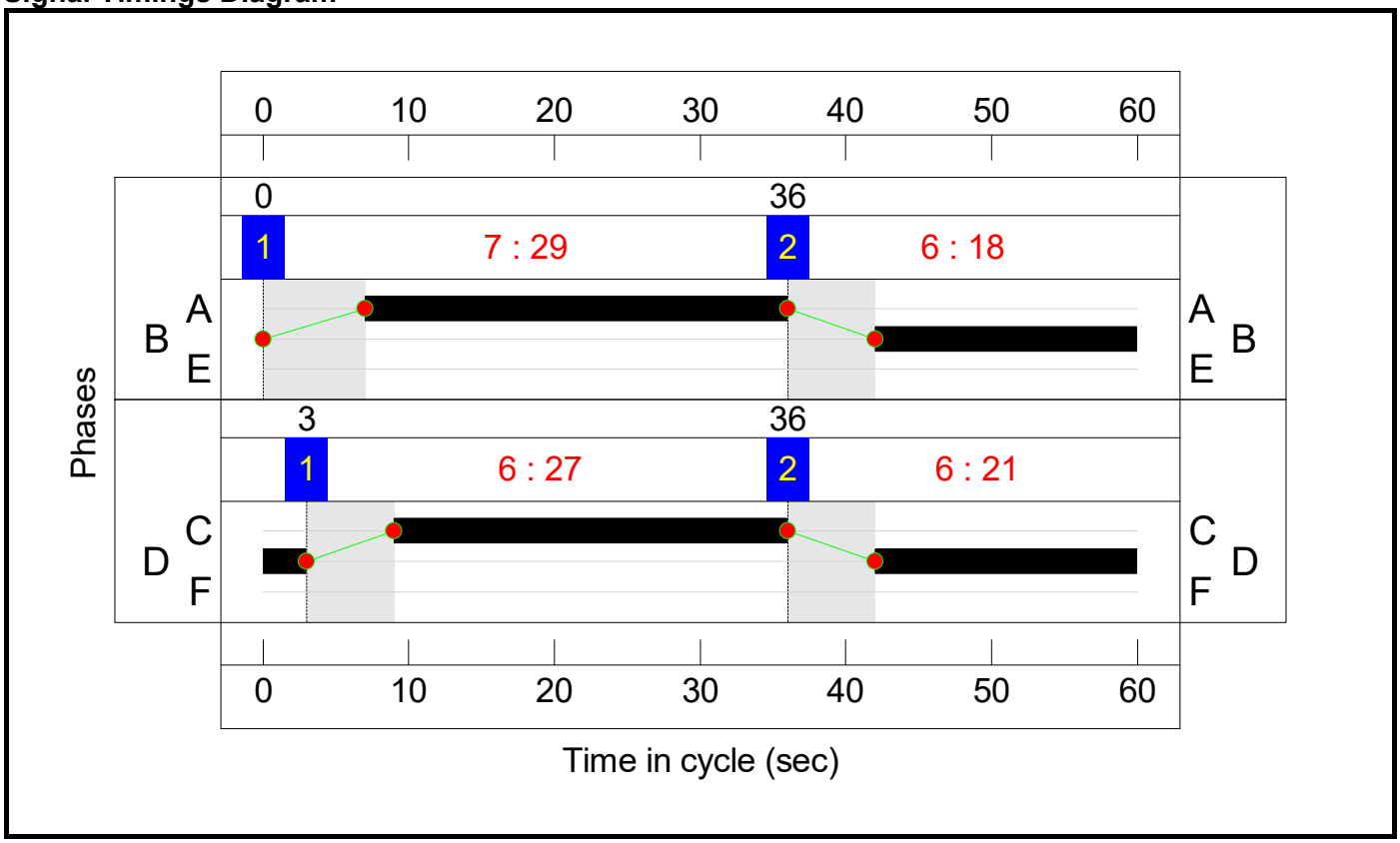
Stage Stream: 2

Stage	1	2
Duration	27	21
Change Point	3	36

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Sth Right Ahead Ahead2	Traffic	1	29	7	36
B	M1 N/B Off-slip Ahead Left Left2	Traffic	1	18	42	0
C	Circ W Right Ahead	Traffic	2	27	9	36
D	A511 E/B Ahead Left	Traffic	2	21	42	3
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

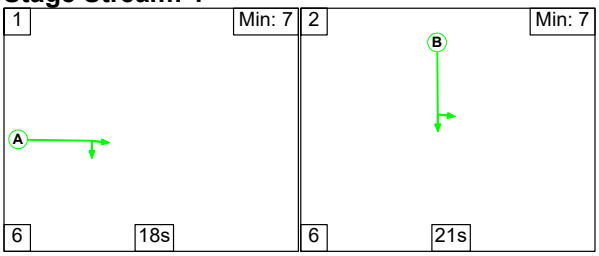
Signal Timings Diagram



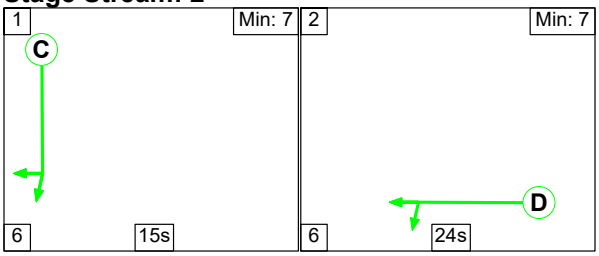
Controller :C2 - M1/J22 A50/A511 Controller 2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	18	21
Change Point	24	48

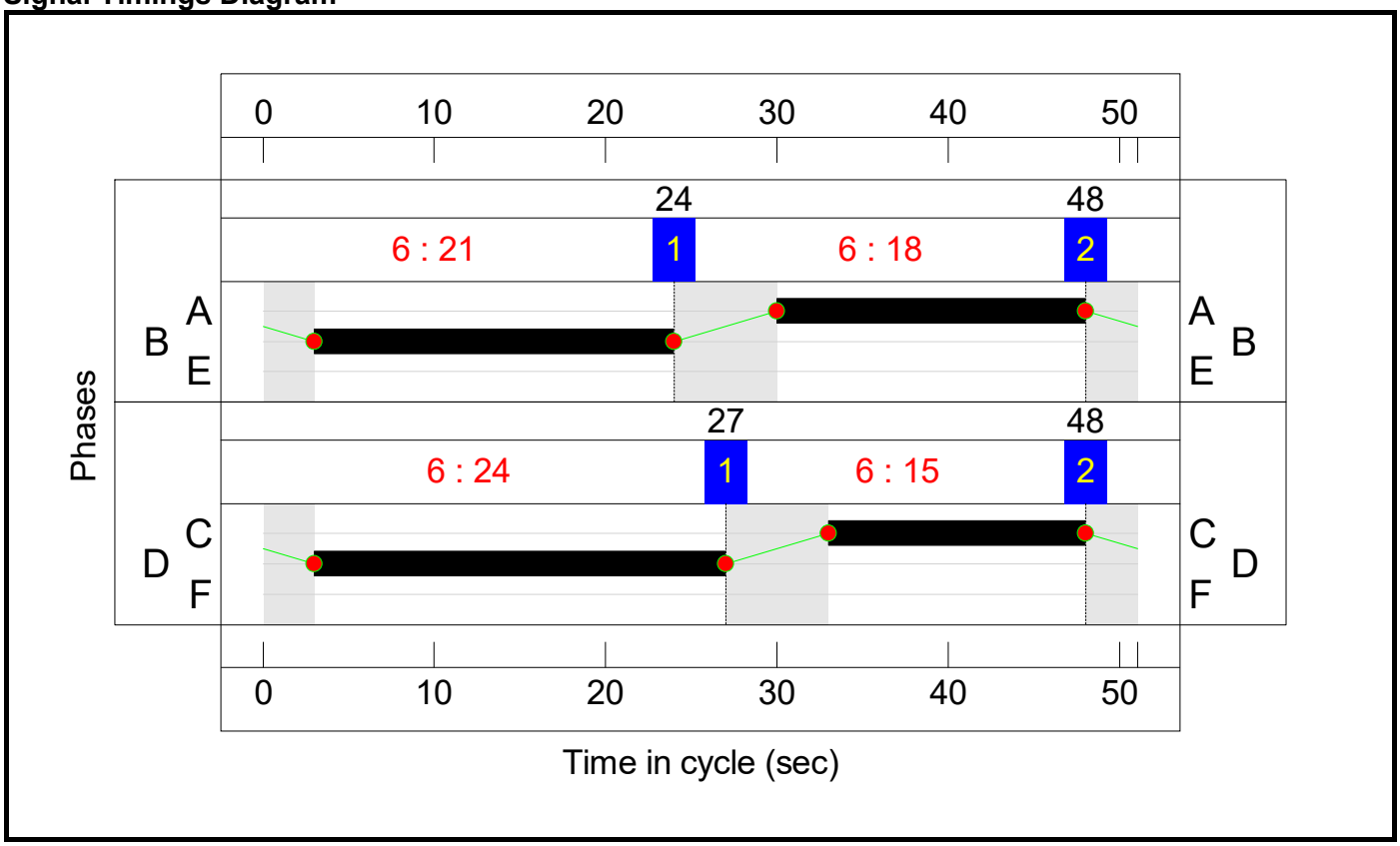
Stage Stream: 2

Stage	1	2
Duration	15	24
Change Point	27	48

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Nth Right Ahead	Traffic	1	18	30	48
B	M1 S/B Off Slip Ahead Left	Traffic	1	21	3	24
C	Circ E Right Ahead	Traffic	2	15	33	48
D	A50 W/B Ahead Left	Traffic	2	24	3	27
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

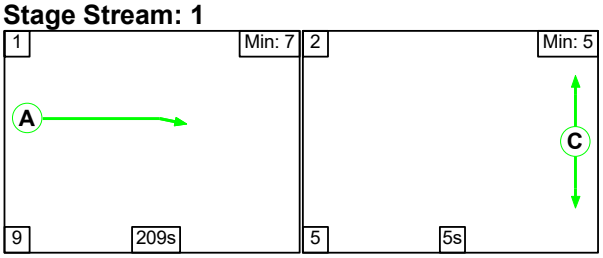
Signal Timings Diagram



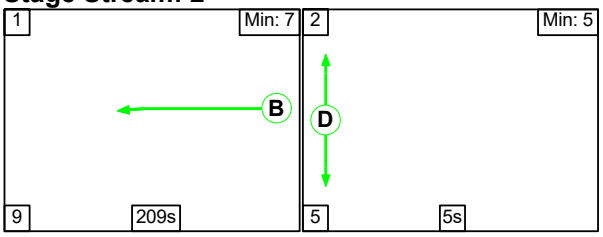
Controller :C3 - A50 East Pedestrian Crossings

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	209	5
Change Point	0	218

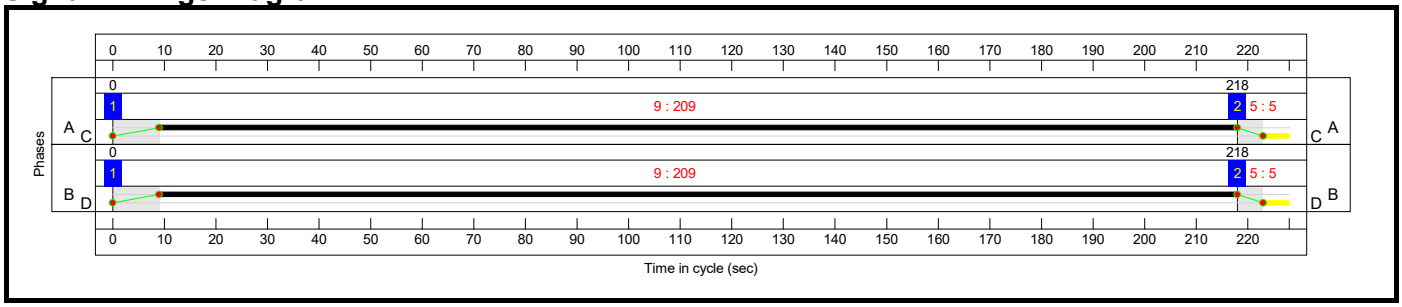
Stage Stream: 2

Stage	1	2
Duration	209	5
Change Point	0	218

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	A50 EB Exit Pedestrian Crossing Ahead	Traffic	1	209	9	218
B	A50 WB Entry Pedestrian Crossing Ahead	Traffic	2	209	9	218
C	Pedestrians across	Pedestrian	1	5	223	0
D	Pedestrians across	Pedestrian	2	5	223	0

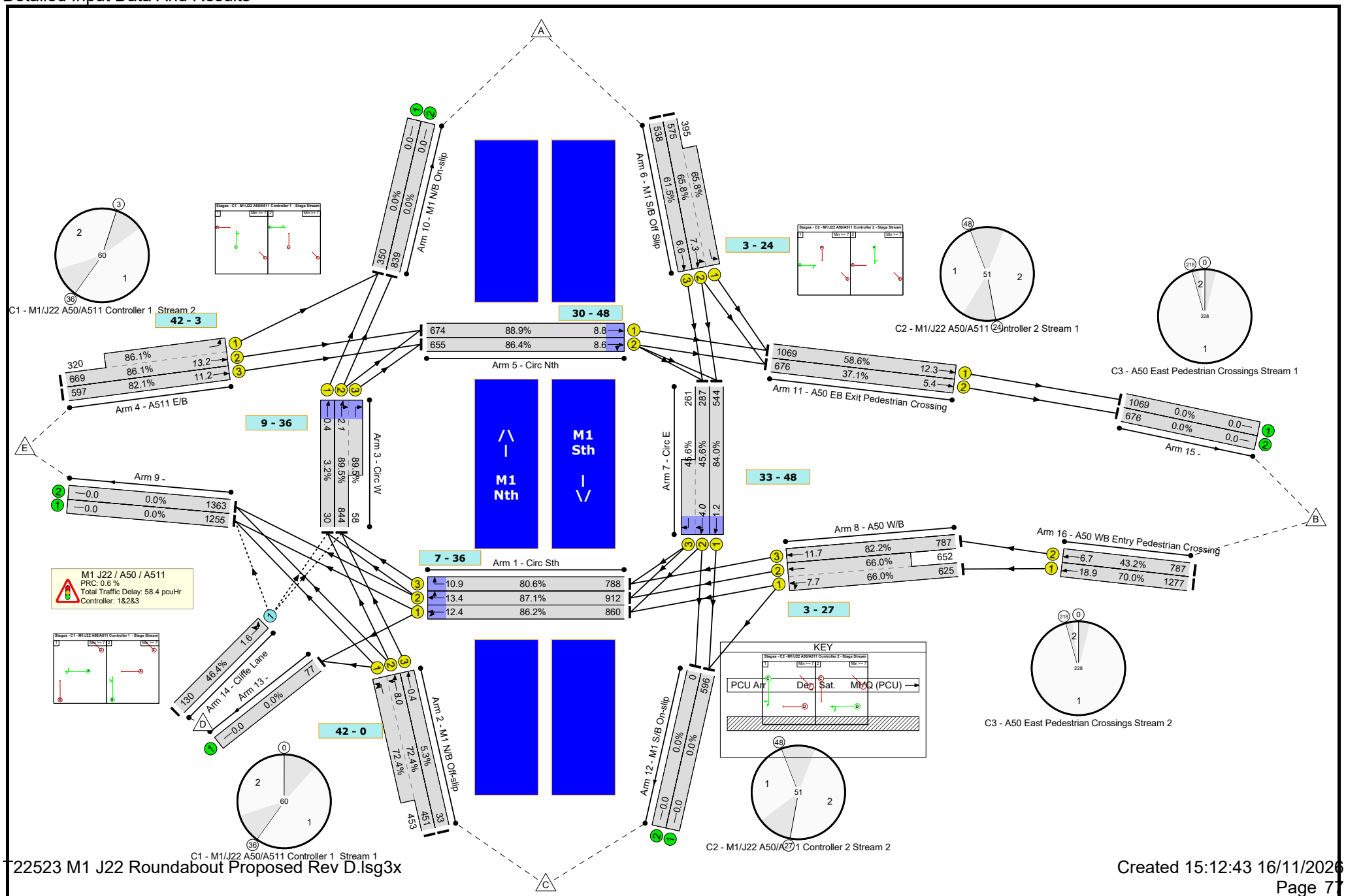
Signal Timings Diagram



Lane Green Times

Junction: M1 J22 / A50 / A511					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Circ Sth Ahead Ahead2	U	A	7	36
1/2	Circ Sth Right Ahead	U	A	7	36
1/3	Circ Sth Right	U	A	7	36
2/1	M1 N/B Off-slip Left Left2	U	B	42	0
2/2	M1 N/B Off-slip Ahead Left	U	B	42	0
2/3	M1 N/B Off-slip Ahead	U	B	42	0
3/1	Circ W Ahead	U	C	9	36
3/2	Circ W Right Ahead	U	C	9	36
3/3	Circ W Right	U	C	9	36
4/1	A511 E/B Left	U	D	42	3
4/2	A511 E/B Ahead	U	D	42	3
4/3	A511 E/B Ahead	U	D	42	3
5/1	Circ Nth Ahead	U	A	30	48
5/2	Circ Nth Right Ahead	U	A	30	48
6/1	M1 S/B Off Slip Left	U	B	3	24
6/2	M1 S/B Off Slip Ahead Left	U	B	3	24
6/3	M1 S/B Off Slip Ahead	U	B	3	24
7/1	Circ E Ahead	U	C	33	48
7/2	Circ E Right Ahead	U	C	33	48
7/3	Circ E Right	U	C	33	48
8/1	A50 W/B Ahead Left	U	D	3	27
8/2	A50 W/B Ahead	U	D	3	27
8/3	A50 W/B Ahead	U	D	3	27
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	A	9	218
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	A	9	218
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	B	9	218
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	B	9	218

Network Layout Diagram



A
B
C
D
E
Arm 10 - M1 N/B On-slip
Arm 6 - M1 S/B Off Slip
3 - 24
30 - 48
42 - 3
Arm 5 - Circ Nth
Arm 4 - A511 E/B
Arm 11 - A50 EB Exit Pedestrian Crossing
Arm 15 -
9 - 36
Arm 3 - Circ W
Arm 7 - Circ E
33 - 48
Arm 9 -
M1 Nth
M1 Sth
Arm 8 - A50 W/B
Arm 16 - A50 WB Entry Pedestrian Crossing
7 - 36
Arm 1 - Circ Sth
M1 J22 / A50 / A511
PRC: 0.6 %
Total Traffic Delay: 58.4 pcuHr
Controller: 1&2&3
3 - 27
KEY
PCU Arr
Dep. Sat.
MinQ (PCU)
Arm 14 - Cliffe Lane
Arm 13 -
42 - 0
Arm 2 - M1 N/B Off-slip
Arm 12 - M1 S/B On-slip
C1 - M1/J22 A50/A511 Controller 1 Stream 2
C2 - M1/J22 A50/A511 Controller 2 Stream 1
C3 - A50 East Pedestrian Crossings Stream 1
C3 - A50 East Pedestrian Crossings Stream 2
C1 - M1/J22 A50/A511 Controller 1 Stream 1
C2 - M1/J22 A50/A511 Controller 2 Stream 2

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**89.5%**
M1 J22 / A50 / A511	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**89.5%**
1/1	Circ Sth Ahead Ahead2	U	1:1	N/A	C1:A		1	29	-	-	860	1995	998	86.2%
1/2	Circ Sth Right Ahead	U	1:1	N/A	C1:A		1	29	-	-	912	2093	1047	87.1%
1/3	Circ Sth Right	U	1:1	N/A	C1:A		1	29	-	-	788	1956	978	80.6%
2/2+2/1	M1 N/B Off-slip Ahead Left Left2	U	1:1	N/A	C1:B		1	18	-	-	904	1966:1977	623+626	72.4 : 72.4%
2/3	M1 N/B Off-slip Ahead	U	1:1	N/A	C1:B		1	18	-	-	33	1978	626	5.3%
3/1	Circ W Ahead	U	1:2	N/A	C1:C		1	27	-	-	30	1995	931	3.2%
3/2+3/3	Circ W Right Ahead	U	1:2	N/A	C1:C		1	27	-	-	902	2132:1995	943+65	89.5 : 89.5%
4/2+4/1	A511 E/B Ahead Left	U	1:2	N/A	C1:D		1	21	-	-	989	2120:1966	777+372	86.1 : 86.1%
4/3	A511 E/B Ahead	U	1:2	N/A	C1:D		1	21	-	-	597	1983	727	82.1%
5/1	Circ Nth Ahead	U	2:1	N/A	C2:A		1	18	-	-	674	2034	758	88.9%
5/2	Circ Nth Right Ahead	U	2:1	N/A	C2:A		1	18	-	-	655	2034	758	86.4%
6/2+6/1	M1 S/B Off Slip Ahead Left	U	2:1	N/A	C2:B		1	21	-	-	970	2027:2027	874+601	65.8 : 65.8%
6/3	M1 S/B Off Slip Ahead	U	2:1	N/A	C2:B		1	21	-	-	538	2027	874	61.5%
7/1	Circ E Ahead	U	2:2	N/A	C2:C		1	15	-	-	544	2065	648	84.0%
7/2+7/3	Circ E Right Ahead	U	2:2	N/A	C2:C		1	15	-	-	548	2162:2025	629+572	45.6 : 45.6%
8/1+8/2	A50 W/B Ahead Left	U	2:2	N/A	C2:D		1	24	-	-	1277	1953:2090	947+988	66.0 : 66.0%

8/3	A50 W/B Ahead	U	2:2	N/A	C2:D		1	24	-	-	787	1953	957	82.2%
9/1		U	N/A	N/A	-		-	-	-	-	1255	Inf	Inf	0.0%
9/2		U	N/A	N/A	-		-	-	-	-	1363	Inf	Inf	0.0%
10/1	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	350	Inf	Inf	0.0%
10/2	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	839	Inf	Inf	0.0%
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	1069	1980	1824	58.6%
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	676	1980	1824	37.1%
12/1	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	596	Inf	Inf	0.0%
12/2	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	-	77	Inf	Inf	0.0%
14/1	Cliffe Lane Left Left2	O	N/A	N/A	-		-	-	-	-	130	2005	280	46.4%
15/1		U	N/A	N/A	-		-	-	-	-	1069	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	676	Inf	Inf	0.0%
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	1277	1980	1824	70.0%
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	787	1980	1824	43.2%

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	**-**	**-**	**71**	**59**	**0**	**43.9**	**14.5**	**0.0**	**58.4**	**-**	**-**	**-**	**-**	
M1 J22 / A50 / A511	**-**	**-**	**71**	**59**	**0**	**43.9**	**14.5**	**0.0**	**58.4**	**-**	**-**	**-**	**-**	
1/1	860	860	-	-	-	3.1	0.0	-	3.1	13.2	12.4	0.0	12.4	
1/2	912	912	-	-	-	3.4	0.0	-	3.4	13.3	13.4	0.0	13.4	
1/3	788	788	-	-	-	2.7	0.0	-	2.7	12.6	10.9	0.0	10.9	
2/2+2/1	904	904	-	-	-	4.6	1.3	-	5.9	23.4	6.7	1.3	8.0	
2/3	33	33	-	-	-	0.1	0.0	-	0.2	17.4	0.4	0.0	0.4	
3/1	30	30	-	-	-	0.1	0.0	-	0.1	12.2	0.4	0.0	0.4	
3/2+3/3	902	902	-	-	-	1.1	0.0	-	1.1	4.3	2.1	0.0	2.1	
4/2+4/1	989	989	-	-	-	4.5	3.0	-	7.5	27.4	10.2	3.0	13.2	
4/3	597	597	-	-	-	2.9	2.2	-	5.1	30.6	9.0	2.2	11.2	
5/1	674	674	-	-	-	2.8	0.0	-	2.8	15.0	8.8	0.0	8.8	
5/2	655	655	-	-	-	2.7	0.0	-	2.7	14.8	8.6	0.0	8.6	
6/2+6/1	970	970	-	-	-	3.0	1.0	-	3.9	14.5	6.4	1.0	7.3	
6/3	538	538	-	-	-	1.7	0.8	-	2.5	16.6	5.8	0.8	6.6	
7/1	544	544	-	-	-	0.5	0.0	-	0.5	3.0	1.2	0.0	1.2	
7/2+7/3	548	548	-	-	-	2.9	0.0	-	2.9	19.4	4.0	0.0	4.0	
8/1+8/2	1277	1277	-	-	-	3.4	1.0	-	4.4	12.4	6.7	1.0	7.7	
8/3	787	787	-	-	-	2.4	2.3	-	4.7	21.4	9.4	2.3	11.7	
9/1	1255	1255	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	1363	1363	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	350	350	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	839	839	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	1069	1069	-	-	-	0.5	0.7	-	1.2	3.9	11.6	0.7	12.3	

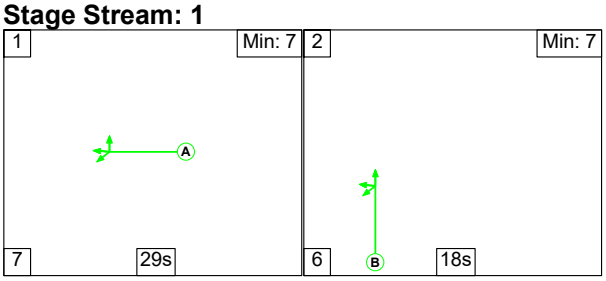
11/2	676	676	-	-	-	0.2	0.3	-	0.5	2.6	5.1	0.3	5.4
12/1	596	596	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	77	77	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1	130	130	71	59	0	0.3	0.4	-	0.8	21.0	1.2	0.4	1.6
15/1	1069	1069	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	676	676	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	1277	1277	-	-	-	0.7	1.2	-	1.9	5.3	17.7	1.2	18.9
16/2	787	787	-	-	-	0.3	0.4	-	0.6	2.9	6.3	0.4	6.7

C1 - M1/J22 A50/A511 Controller 1	Stream: 1 PRC for Signalled Lanes (%):	3.3	Total Delay for Signalled Lanes (pcuHr):	15.29	Cycle Time (s): 60
C1 - M1/J22 A50/A511 Controller 1	Stream: 2 PRC for Signalled Lanes (%):	0.6	Total Delay for Signalled Lanes (pcuHr):	13.78	Cycle Time (s): 60
C2 - M1/J22 A50/A511 Controller 2	Stream: 1 PRC for Signalled Lanes (%):	1.2	Total Delay for Signalled Lanes (pcuHr):	11.90	Cycle Time (s): 51
C2 - M1/J22 A50/A511 Controller 2	Stream: 2 PRC for Signalled Lanes (%):	7.2	Total Delay for Signalled Lanes (pcuHr):	12.48	Cycle Time (s): 51
C3 - A50 East Pedestrian Crossings	Stream: 1 PRC for Signalled Lanes (%):	53.5	Total Delay for Signalled Lanes (pcuHr):	1.66	Cycle Time (s): 228
C3 - A50 East Pedestrian Crossings	Stream: 2 PRC for Signalled Lanes (%):	28.5	Total Delay for Signalled Lanes (pcuHr):	2.51	Cycle Time (s): 228
	PRC Over All Lanes (%):	0.6	Total Delay Over All Lanes(pcuHr):	58.39	

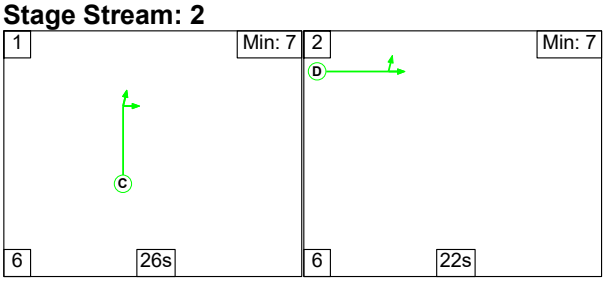
Scenario 3: '2030 Future Base + Proposed Development AM Peak' (FG3: '2030 Future Base + Proposed Development AM Peak', Plan 1: 'Network Control Plan 1')
Controller :C1 - M1/J22 A50/A511 Controller 1

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	29	18
Change Point	0	36

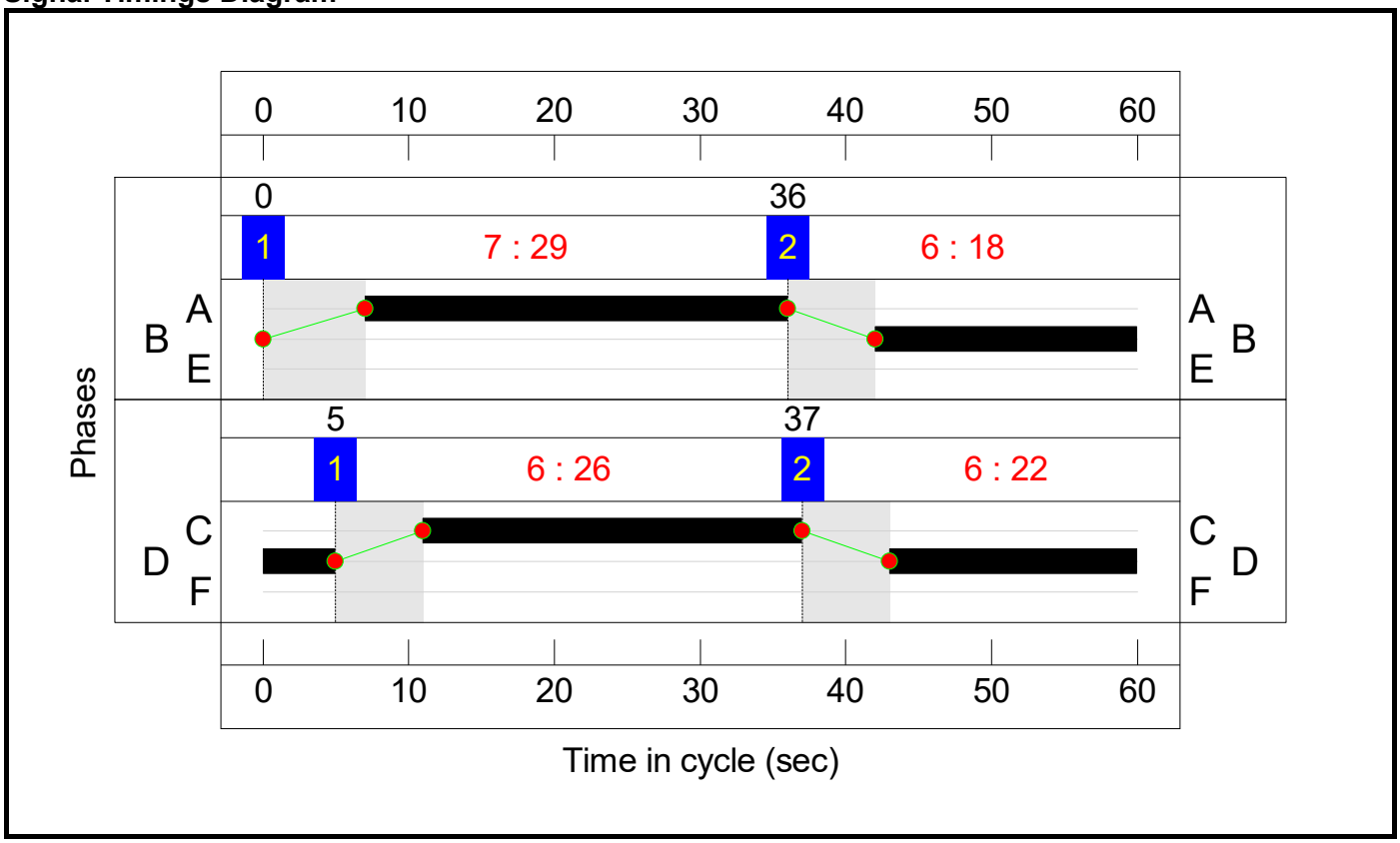
Stage Stream: 2

Stage	1	2
Duration	26	22
Change Point	5	37

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Sth Right Ahead Ahead2	Traffic	1	29	7	36
B	M1 N/B Off-slip Ahead Left Left2	Traffic	1	18	42	0
C	Circ W Right Ahead	Traffic	2	26	11	37
D	A511 E/B Ahead Left	Traffic	2	22	43	5
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

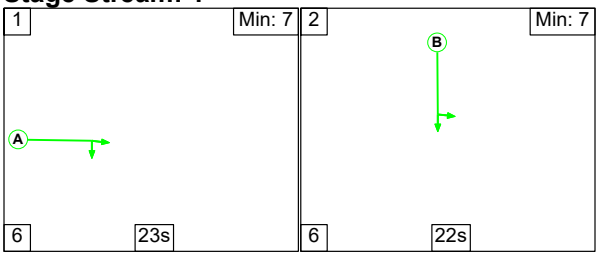
Signal Timings Diagram



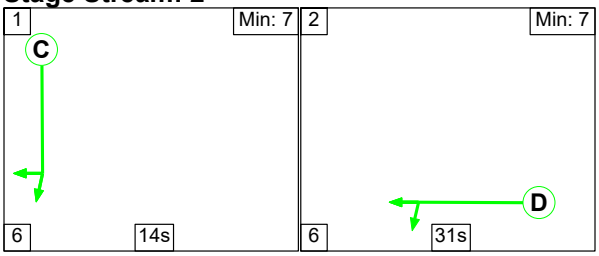
Controller :C2 - M1/J22 A50/A511 Controller 2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	23	22
Change Point	7	36

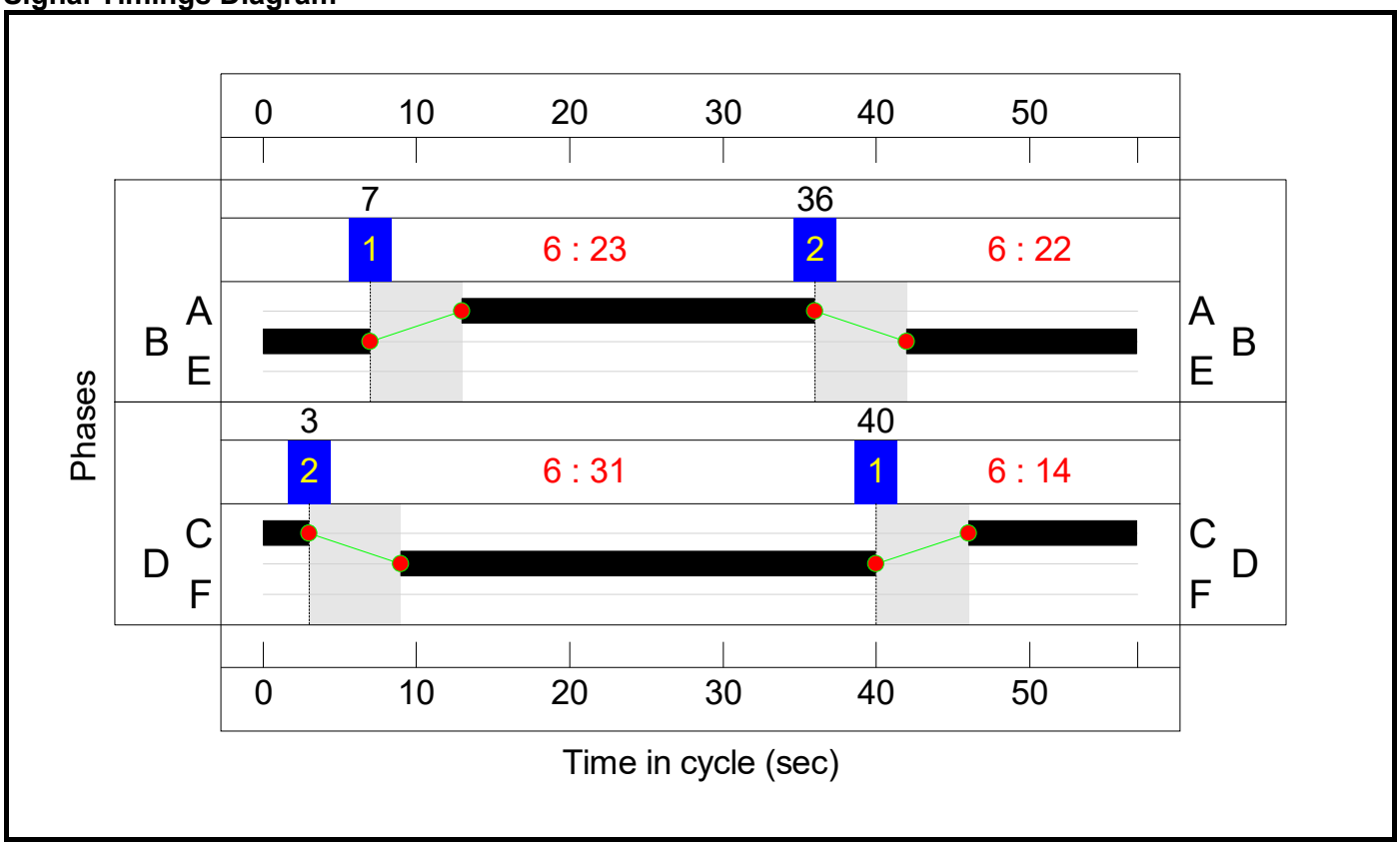
Stage Stream: 2

Stage	1	2
Duration	14	31
Change Point	40	3

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Nth Right Ahead	Traffic	1	23	13	36
B	M1 S/B Off Slip Ahead Left	Traffic	1	22	42	7
C	Circ E Right Ahead	Traffic	2	14	46	3
D	A50 W/B Ahead Left	Traffic	2	31	9	40
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

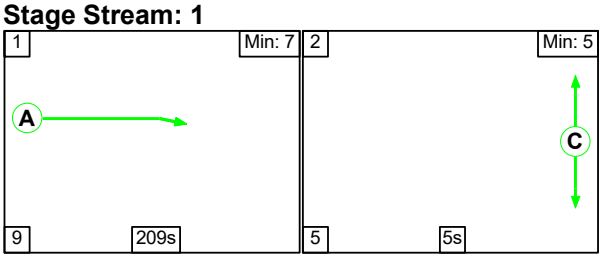
Signal Timings Diagram



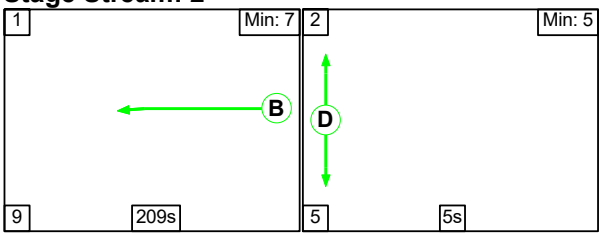
Controller :C3 - A50 East Pedestrian Crossings

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	209	5
Change Point	180	170

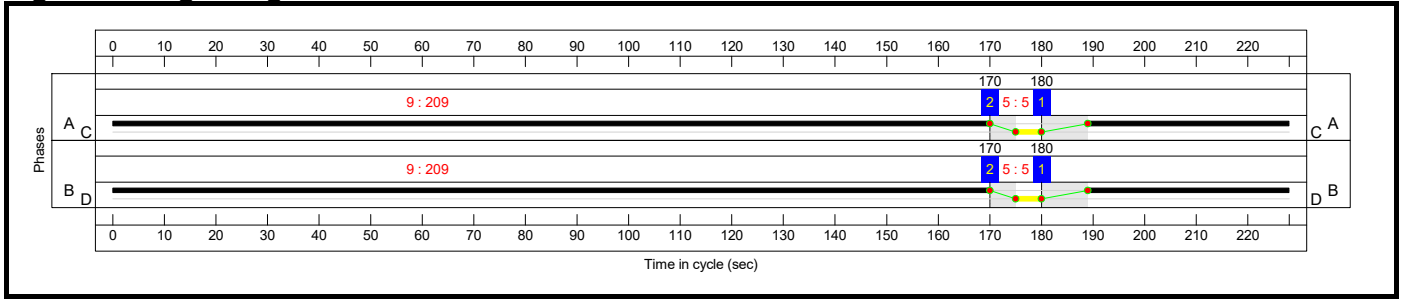
Stage Stream: 2

Stage	1	2
Duration	209	5
Change Point	180	170

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	A50 EB Exit Pedestrian Crossing Ahead	Traffic	1	209	189	170
B	A50 WB Entry Pedestrian Crossing Ahead	Traffic	2	209	189	170
C	Pedestrians across	Pedestrian	1	5	175	180
D	Pedestrians across	Pedestrian	2	5	175	180

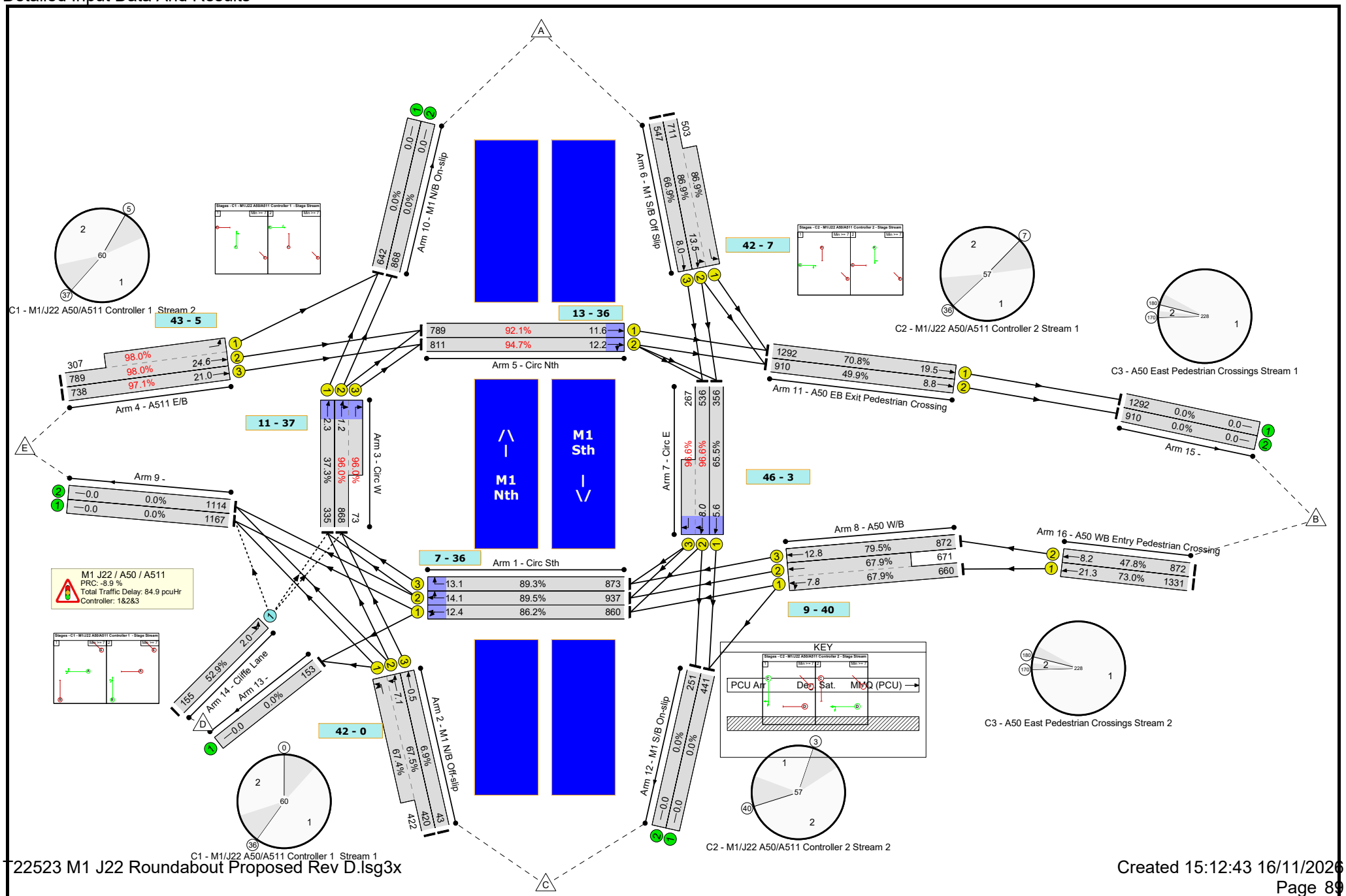
Signal Timings Diagram



Lane Green Times

Junction: M1 J22 / A50 / A511					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Circ Sth Ahead Ahead2	U	A	7	36
1/2	Circ Sth Right Ahead	U	A	7	36
1/3	Circ Sth Right	U	A	7	36
2/1	M1 N/B Off-slip Left Left2	U	B	42	0
2/2	M1 N/B Off-slip Ahead Left	U	B	42	0
2/3	M1 N/B Off-slip Ahead	U	B	42	0
3/1	Circ W Ahead	U	C	11	37
3/2	Circ W Right Ahead	U	C	11	37
3/3	Circ W Right	U	C	11	37
4/1	A511 E/B Left	U	D	43	5
4/2	A511 E/B Ahead	U	D	43	5
4/3	A511 E/B Ahead	U	D	43	5
5/1	Circ Nth Ahead	U	A	13	36
5/2	Circ Nth Right Ahead	U	A	13	36
6/1	M1 S/B Off Slip Left	U	B	42	7
6/2	M1 S/B Off Slip Ahead Left	U	B	42	7
6/3	M1 S/B Off Slip Ahead	U	B	42	7
7/1	Circ E Ahead	U	C	46	3
7/2	Circ E Right Ahead	U	C	46	3
7/3	Circ E Right	U	C	46	3
8/1	A50 W/B Ahead Left	U	D	9	40
8/2	A50 W/B Ahead	U	D	9	40
8/3	A50 W/B Ahead	U	D	9	40
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	A	189	170
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	A	189	170
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	B	189	170
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	B	189	170

Network Layout Diagram



C1 - M1/J22 A50/A511 Controller 1 Stream 2
43 - 5
Arm 4 - A511 E/B
Arm 10 - M1 N/B On-slip
Arm 6 - M1 S/B Off Slip
42 - 7
C2 - M1/J22 A50/A511 Controller 2 Stream 1
C3 - A50 East Pedestrian Crossings Stream 1
13 - 36
Arm 5 - Circ Nth
Arm 11 - A50 EB Exit Pedestrian Crossing
Arm 15 -
11 - 37
Arm 3 - Circ W
M1 Nth
M1 Sth
Arm 7 - Circ E
46 - 3
Arm 9 -
Arm 8 - A50 W/B
Arm 16 - A50 WB Entry Pedestrian Crossing
7 - 36
Arm 1 - Circ Sth
M1 J22 / A50 / A511
PRC: -8.9 %
Total Traffic Delay: 84.9 pcuHr
Controller: 1&2&3
9 - 40
KEY
PCU Arr
Dep. Sat.
MMQ (PCU)
Arm 14 - Cliffe Lane
Arm 13 -
42 - 0
Arm 2 - M1 N/B Off-slip
Arm 12 - M1 S/B On-slip
C3 - A50 East Pedestrian Crossings Stream 2
C1 - M1/J22 A50/A511 Controller 1 Stream 1
C2 - M1/J22 A50/A511 Controller 2 Stream 2

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**98.0%**
M1 J22 / A50 / A511	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**98.0%**
1/1	Circ Sth Ahead Ahead2	U	1:1	N/A	C1:A		1	29	-	-	860	1995	998	86.2%
1/2	Circ Sth Right Ahead	U	1:1	N/A	C1:A		1	29	-	-	937	2093	1047	89.5%
1/3	Circ Sth Right	U	1:1	N/A	C1:A		1	29	-	-	873	1956	978	89.3%
2/2+2/1	M1 N/B Off-slip Ahead Left Left2	U	1:1	N/A	C1:B		1	18	-	-	842	1966:1977	623+626	67.5 : 67.4%
2/3	M1 N/B Off-slip Ahead	U	1:1	N/A	C1:B		1	18	-	-	43	1978	626	6.9%
3/1	Circ W Ahead	U	1:2	N/A	C1:C		1	26	-	-	335	1995	898	37.3%
3/2+3/3	Circ W Right Ahead	U	1:2	N/A	C1:C		1	26	-	-	941	2132:1995	904+76	96.0 : 96.0%
4/2+4/1	A511 E/B Ahead Left	U	1:2	N/A	C1:D		1	22	-	-	1096	2120:1966	805+313	98.0 : 98.0%
4/3	A511 E/B Ahead	U	1:2	N/A	C1:D		1	22	-	-	738	1983	760	97.1%
5/1	Circ Nth Ahead	U	2:1	N/A	C2:A		1	23	-	-	789	2034	856	92.1%
5/2	Circ Nth Right Ahead	U	2:1	N/A	C2:A		1	23	-	-	811	2034	856	94.7%
6/2+6/1	M1 S/B Off Slip Ahead Left	U	2:1	N/A	C2:B		1	22	-	-	1214	2027:2027	818+579	86.9 : 86.9%
6/3	M1 S/B Off Slip Ahead	U	2:1	N/A	C2:B		1	22	-	-	547	2027	818	66.9%
7/1	Circ E Ahead	U	2:2	N/A	C2:C		1	14	-	-	356	2065	543	65.5%
7/2+7/3	Circ E Right Ahead	U	2:2	N/A	C2:C		1	14	-	-	803	2182:2025	555+277	96.6 : 96.6%
8/1+8/2	A50 W/B Ahead Left	U	2:2	N/A	C2:D		1	31	-	-	1331	1953:2090	972+988	67.9 : 67.9%

8/3	A50 W/B Ahead	U	2:2	N/A	C2:D		1	31	-	-	872	1953	1096	79.5%
9/1		U	N/A	N/A	-		-	-	-	-	1167	Inf	Inf	0.0%
9/2		U	N/A	N/A	-		-	-	-	-	1114	Inf	Inf	0.0%
10/1	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	642	Inf	Inf	0.0%
10/2	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	868	Inf	Inf	0.0%
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	1292	1980	1824	70.8%
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	910	1980	1824	49.9%
12/1	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	441	Inf	Inf	0.0%
12/2	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	251	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	-	153	Inf	Inf	0.0%
14/1	Cliffe Lane Left Left2	O	N/A	N/A	-		-	-	-	-	155	2005	293	52.9%
15/1		U	N/A	N/A	-		-	-	-	-	1292	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	910	Inf	Inf	0.0%
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	1331	1980	1824	73.0%
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	872	1980	1824	47.8%

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	**-**	**-**	**67**	**88**	**0**	**51.5**	**33.4**	**0.0**	**84.9**	**-**	**-**	**-**	**-**	
M1 J22 / A50 / A511	**-**	**-**	**67**	**88**	**0**	**51.5**	**33.4**	**0.0**	**84.9**	**-**	**-**	**-**	**-**	
1/1	860	860	-	-	-	3.1	0.0	-	3.1	13.2	12.4	0.0	12.4	
1/2	937	937	-	-	-	3.5	0.0	-	3.5	13.6	14.1	0.0	14.1	
1/3	873	873	-	-	-	3.3	0.0	-	3.3	13.5	13.1	0.0	13.1	
2/2+2/1	842	842	-	-	-	4.2	1.0	-	5.2	22.2	6.1	1.0	7.1	
2/3	43	43	-	-	-	0.2	0.0	-	0.2	17.4	0.5	0.0	0.5	
3/1	335	335	-	-	-	0.5	0.0	-	0.5	5.1	2.3	0.0	2.3	
3/2+3/3	941	941	-	-	-	1.0	0.0	-	1.0	3.7	1.2	0.0	1.2	
4/2+4/1	1096	1096	-	-	-	5.1	11.9	-	17.1	56.1	12.7	11.9	24.6	
4/3	738	738	-	-	-	3.7	9.1	-	12.9	62.7	11.9	9.1	21.0	
5/1	789	789	-	-	-	3.4	0.0	-	3.4	15.6	11.6	0.0	11.6	
5/2	811	811	-	-	-	3.6	0.0	-	3.6	15.9	12.2	0.0	12.2	
6/2+6/1	1214	1214	-	-	-	5.0	3.2	-	8.2	24.3	10.3	3.2	13.5	
6/3	547	547	-	-	-	2.1	1.0	-	3.1	20.5	7.0	1.0	8.0	
7/1	356	356	-	-	-	2.2	0.0	-	2.2	22.5	5.6	0.0	5.6	
7/2+7/3	803	803	-	-	-	2.6	0.0	-	2.6	11.7	8.0	0.0	8.0	
8/1+8/2	1331	1331	-	-	-	3.0	1.1	-	4.1	11.0	6.8	1.1	7.8	
8/3	872	872	-	-	-	2.4	1.9	-	4.3	17.8	10.9	1.9	12.8	
9/1	1167	1167	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	1114	1114	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	642	642	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	868	868	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	1292	1292	-	-	-	0.7	1.2	-	1.9	5.4	18.3	1.2	19.5	

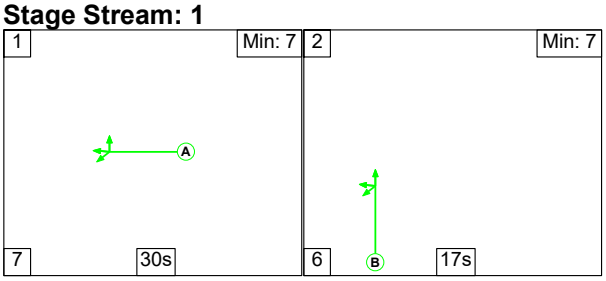
11/2	910	910	-	-	-	0.3	0.5	-	0.8	3.3	8.3	0.5	8.8
12/1	441	441	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	251	251	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	153	153	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1	155	155	67	88	0	0.4	0.6	-	1.0	22.4	1.5	0.6	2.0
15/1	1292	1292	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	910	910	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	1331	1331	-	-	-	0.8	1.3	-	2.1	5.8	20.0	1.3	21.3
16/2	872	872	-	-	-	0.3	0.5	-	0.8	3.2	7.8	0.5	8.2

C1 - M1/J22 A50/A511 Controller 1	Stream: 1 PRC for Signalled Lanes (%):	0.5	Total Delay for Signalled Lanes (pcuHr):	15.38	Cycle Time (s): 60
C1 - M1/J22 A50/A511 Controller 1	Stream: 2 PRC for Signalled Lanes (%):	-8.9	Total Delay for Signalled Lanes (pcuHr):	31.36	Cycle Time (s): 60
C2 - M1/J22 A50/A511 Controller 2	Stream: 1 PRC for Signalled Lanes (%):	-5.2	Total Delay for Signalled Lanes (pcuHr):	18.30	Cycle Time (s): 57
C2 - M1/J22 A50/A511 Controller 2	Stream: 2 PRC for Signalled Lanes (%):	-7.3	Total Delay for Signalled Lanes (pcuHr):	13.22	Cycle Time (s): 57
C3 - A50 East Pedestrian Crossings	Stream: 1 PRC for Signalled Lanes (%):	27.0	Total Delay for Signalled Lanes (pcuHr):	2.77	Cycle Time (s): 228
C3 - A50 East Pedestrian Crossings	Stream: 2 PRC for Signalled Lanes (%):	23.3	Total Delay for Signalled Lanes (pcuHr):	2.91	Cycle Time (s): 228
	PRC Over All Lanes (%):	-8.9	Total Delay Over All Lanes(pcuHr):	84.90	

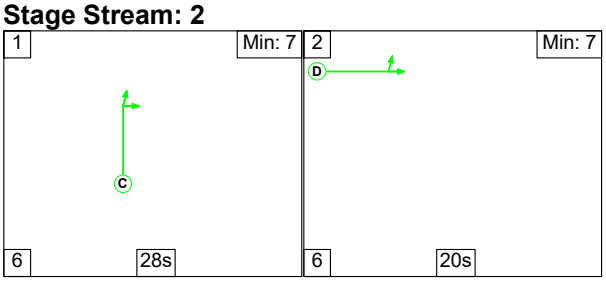
Scenario 4: '2030 Future Base + Proposed Development PM Peak' (FG4: '2030 Future Base + Proposed Development PM Peak', Plan 1: 'Network Control Plan 1')
Controller :C1 - M1/J22 A50/A511 Controller 1

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	30	17
Change Point	0	37

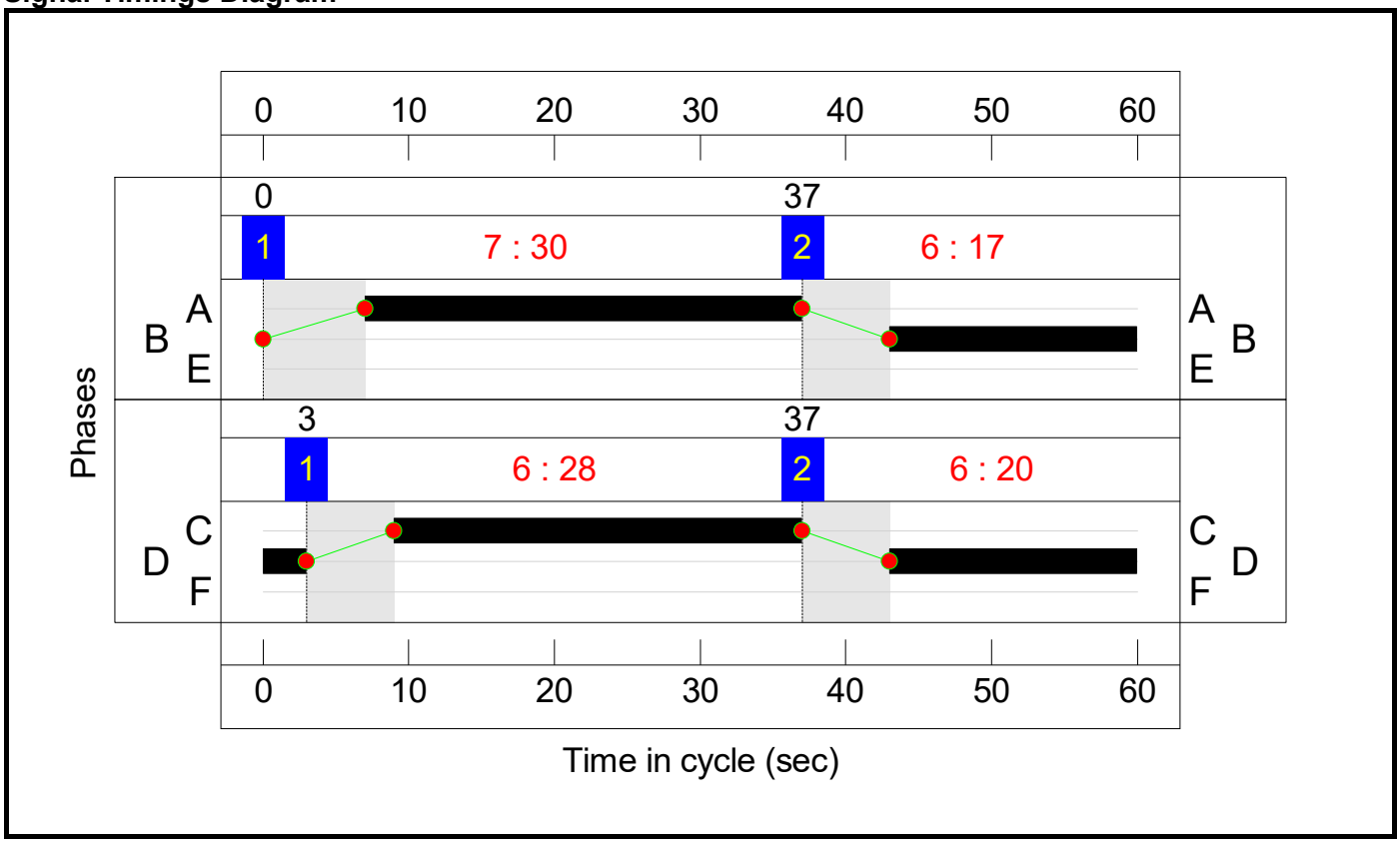
Stage Stream: 2

Stage	1	2
Duration	28	20
Change Point	3	37

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Sth Right Ahead Ahead2	Traffic	1	30	7	37
B	M1 N/B Off-slip Ahead Left Left2	Traffic	1	17	43	0
C	Circ W Right Ahead	Traffic	2	28	9	37
D	A511 E/B Ahead Left	Traffic	2	20	43	3
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

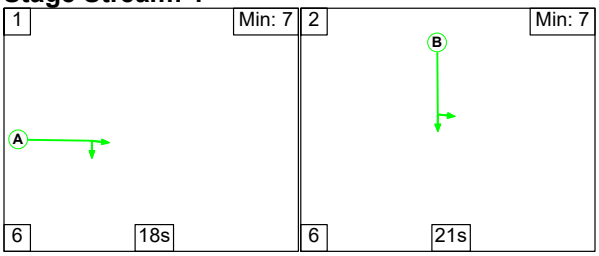
Signal Timings Diagram



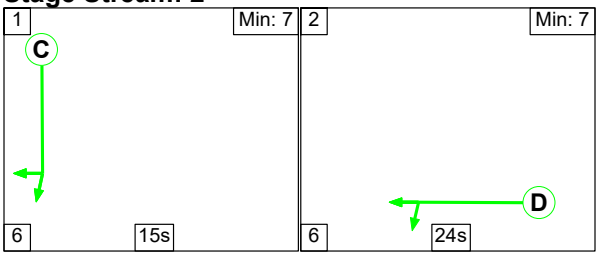
Controller :C2 - M1/J22 A50/A511 Controller 2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	18	21
Change Point	24	48

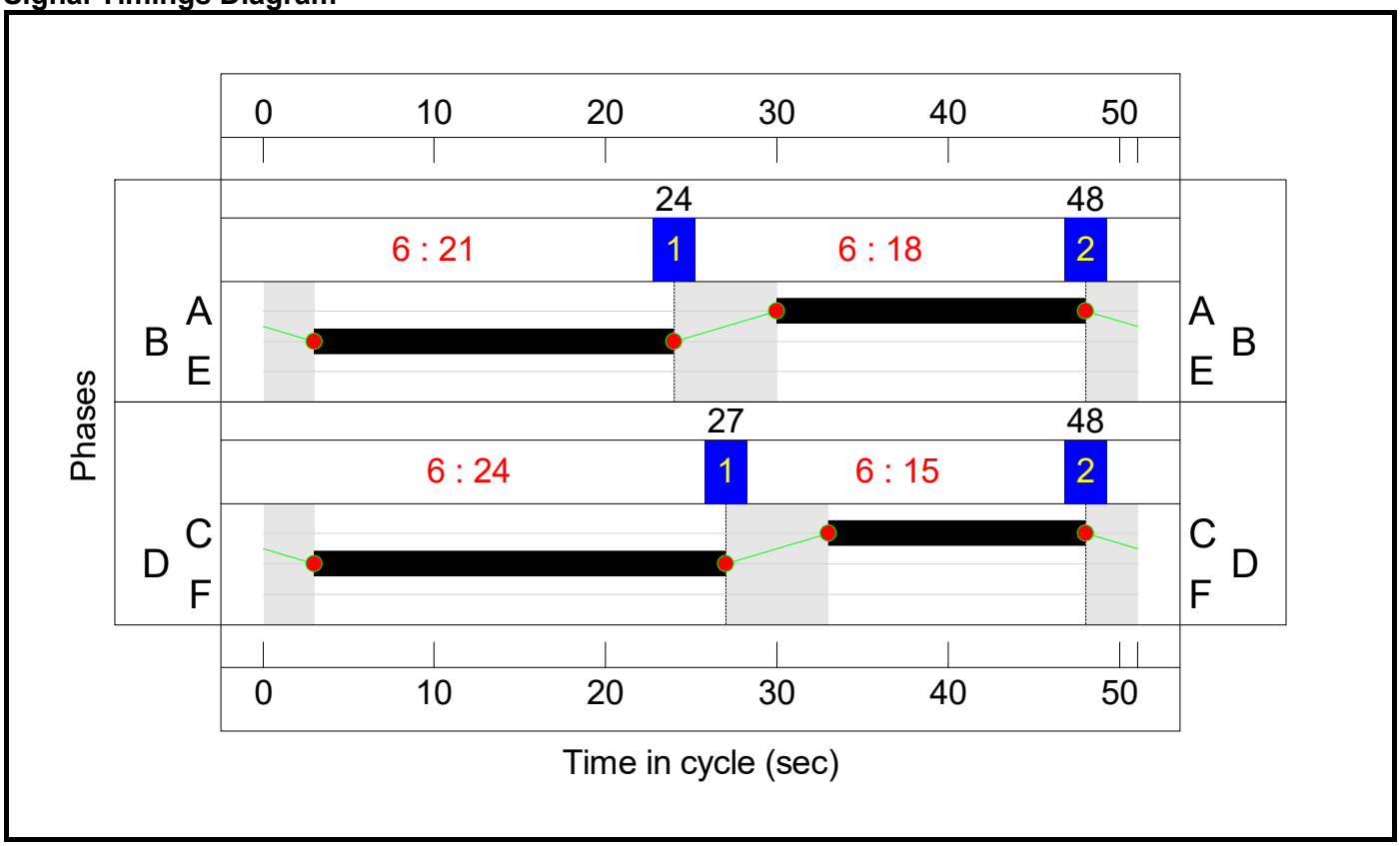
Stage Stream: 2

Stage	1	2
Duration	15	24
Change Point	27	48

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Nth Right Ahead	Traffic	1	18	30	48
B	M1 S/B Off Slip Ahead Left	Traffic	1	21	3	24
C	Circ E Right Ahead	Traffic	2	15	33	48
D	A50 W/B Ahead Left	Traffic	2	24	3	27
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

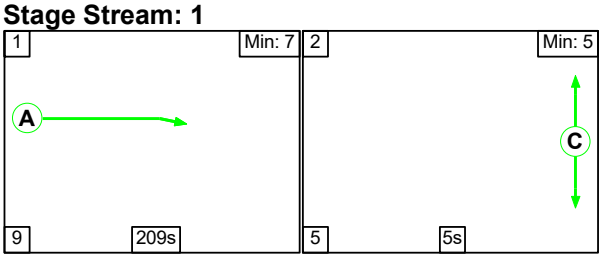
Signal Timings Diagram



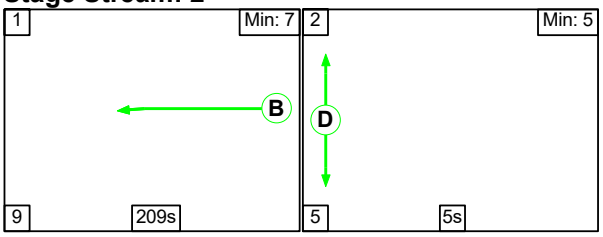
Controller :C3 - A50 East Pedestrian Crossings

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	209	5
Change Point	0	218

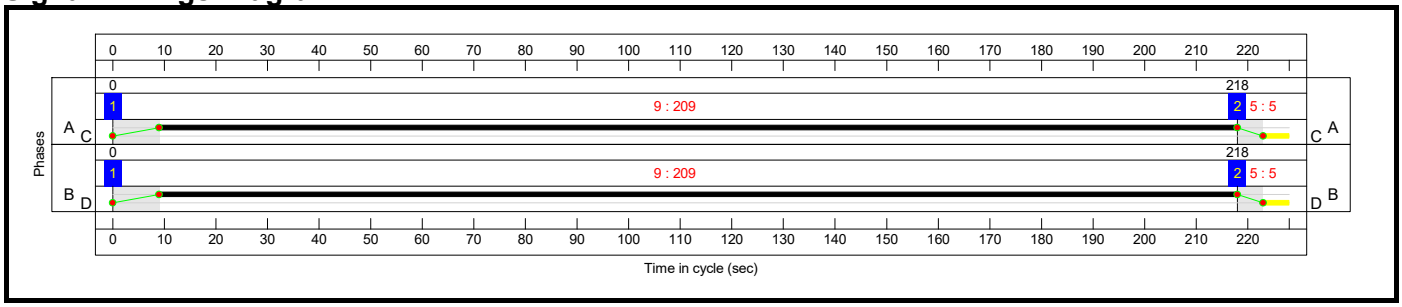
Stage Stream: 2

Stage	1	2
Duration	209	5
Change Point	0	218

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	A50 EB Exit Pedestrian Crossing Ahead	Traffic	1	209	9	218
B	A50 WB Entry Pedestrian Crossing Ahead	Traffic	2	209	9	218
C	Pedestrians across	Pedestrian	1	5	223	0
D	Pedestrians across	Pedestrian	2	5	223	0

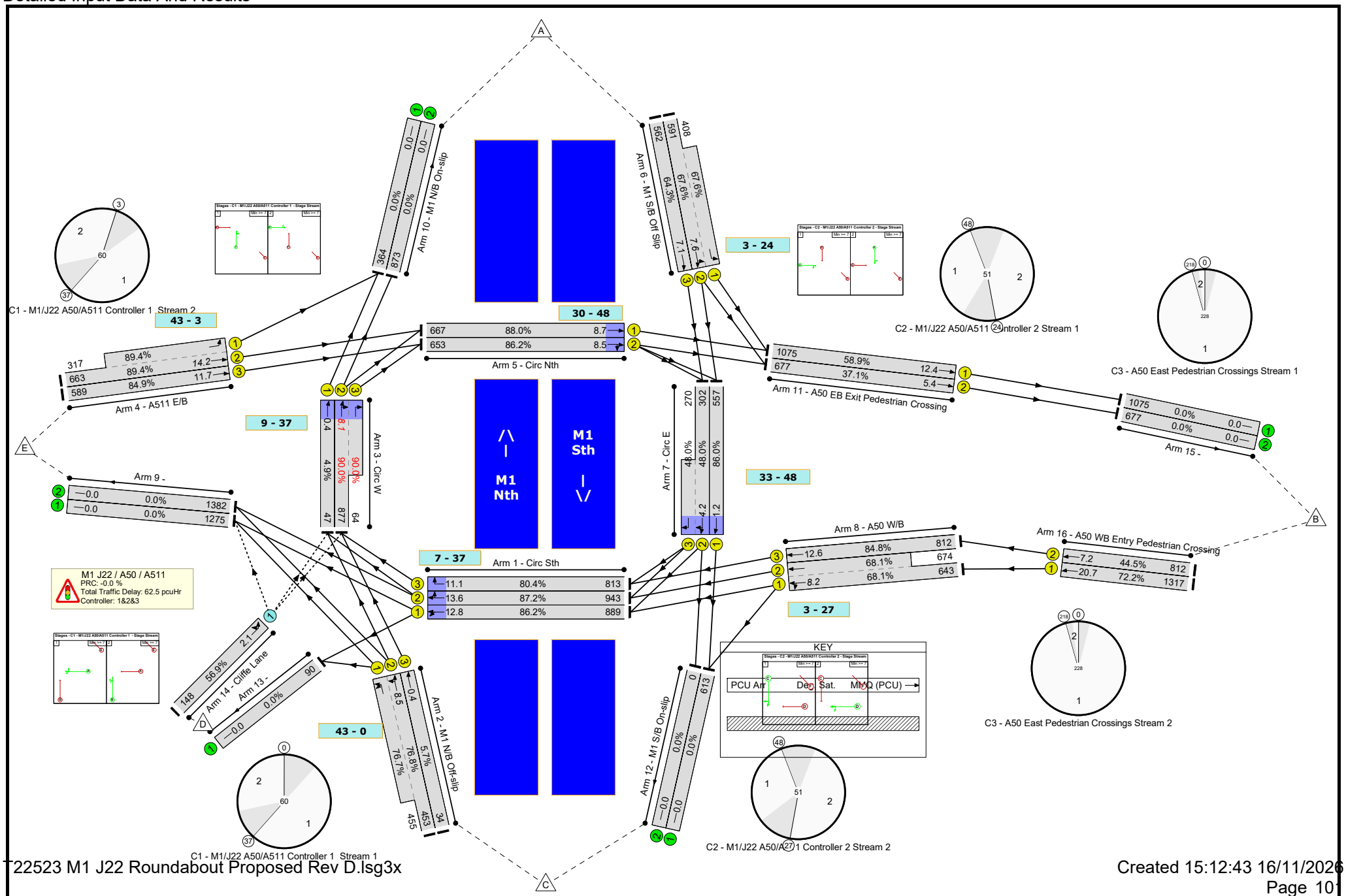
Signal Timings Diagram



Lane Green Times

Junction: M1 J22 / A50 / A511					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Circ Sth Ahead Ahead2	U	A	7	37
1/2	Circ Sth Right Ahead	U	A	7	37
1/3	Circ Sth Right	U	A	7	37
2/1	M1 N/B Off-slip Left Left2	U	B	43	0
2/2	M1 N/B Off-slip Ahead Left	U	B	43	0
2/3	M1 N/B Off-slip Ahead	U	B	43	0
3/1	Circ W Ahead	U	C	9	37
3/2	Circ W Right Ahead	U	C	9	37
3/3	Circ W Right	U	C	9	37
4/1	A511 E/B Left	U	D	43	3
4/2	A511 E/B Ahead	U	D	43	3
4/3	A511 E/B Ahead	U	D	43	3
5/1	Circ Nth Ahead	U	A	30	48
5/2	Circ Nth Right Ahead	U	A	30	48
6/1	M1 S/B Off Slip Left	U	B	3	24
6/2	M1 S/B Off Slip Ahead Left	U	B	3	24
6/3	M1 S/B Off Slip Ahead	U	B	3	24
7/1	Circ E Ahead	U	C	33	48
7/2	Circ E Right Ahead	U	C	33	48
7/3	Circ E Right	U	C	33	48
8/1	A50 W/B Ahead Left	U	D	3	27
8/2	A50 W/B Ahead	U	D	3	27
8/3	A50 W/B Ahead	U	D	3	27
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	A	9	218
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	A	9	218
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	B	9	218
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	B	9	218

Network Layout Diagram


A
B
C
D
E
M1 Nth
M1 Sth
Arm 1 - Circ Sth
Arm 2 - M1 N/B Off-slip
Arm 3 - Circ W
Arm 4 - A511 E/B
Arm 5 - Circ Nth
Arm 6 - M1 S/B Off Slip
Arm 7 - Circ E
Arm 8 - A50 W/B
Arm 9 -
Arm 10 - M1 N/B On-slip
Arm 11 - A50 EB Exit Pedestrian Crossing
Arm 12 - M1 S/B On-slip
Arm 13 -
Arm 14 - Cliffe Lane
Arm 15 -
Arm 16 - A50 WB Entry Pedestrian Crossing
43 - 3
30 - 48
3 - 24
9 - 37
33 - 48
7 - 37
3 - 27
43 - 0
M1 J22 / A50 / A511
PRC: -0.0 %
Total Traffic Delay: 62.5 pcuHr
Controller: 1&2&3
KEY
PCU Arr
Dep Sat.
MinQ (PCU)
C1 - M1/J22 A50/A511 Controller 1 Stream 2
C2 - M1/J22 A50/A511 Controller 2 Stream 1
C3 - A50 East Pedestrian Crossings Stream 1
C3 - A50 East Pedestrian Crossings Stream 2
C1 - M1/J22 A50/A511 Controller 1 Stream 1
C2 - M1/J22 A50/A511 Controller 2 Stream 2

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**90.0%**
M1 J22 / A50 / A511	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**90.0%**
1/1	Circ Sth Ahead Ahead2	U	1:1	N/A	C1:A		1	30	-	-	889	1995	1031	86.2%
1/2	Circ Sth Right Ahead	U	1:1	N/A	C1:A		1	30	-	-	943	2093	1081	87.2%
1/3	Circ Sth Right	U	1:1	N/A	C1:A		1	30	-	-	813	1956	1011	80.4%
2/2+2/1	M1 N/B Off-slip Ahead Left Left2	U	1:1	N/A	C1:B		1	17	-	-	908	1966:1977	590+593	76.8 : 76.7%
2/3	M1 N/B Off-slip Ahead	U	1:1	N/A	C1:B		1	17	-	-	34	1978	593	5.7%
3/1	Circ W Ahead	U	1:2	N/A	C1:C		1	28	-	-	47	1995	964	4.9%
3/2+3/3	Circ W Right Ahead	U	1:2	N/A	C1:C		1	28	-	-	941	2132:1995	974+71	90.0 : 90.0%
4/2+4/1	A511 E/B Ahead Left	U	1:2	N/A	C1:D		1	20	-	-	980	2120:1966	742+355	89.4 : 89.4%
4/3	A511 E/B Ahead	U	1:2	N/A	C1:D		1	20	-	-	589	1983	694	84.9%
5/1	Circ Nth Ahead	U	2:1	N/A	C2:A		1	18	-	-	667	2034	758	88.0%
5/2	Circ Nth Right Ahead	U	2:1	N/A	C2:A		1	18	-	-	653	2034	758	86.2%
6/2+6/1	M1 S/B Off Slip Ahead Left	U	2:1	N/A	C2:B		1	21	-	-	999	2027:2027	874+604	67.6 : 67.6%
6/3	M1 S/B Off Slip Ahead	U	2:1	N/A	C2:B		1	21	-	-	562	2027	874	64.3%
7/1	Circ E Ahead	U	2:2	N/A	C2:C		1	15	-	-	557	2065	648	86.0%
7/2+7/3	Circ E Right Ahead	U	2:2	N/A	C2:C		1	15	-	-	572	2162:2025	630+563	48.0 : 48.0%
8/1+8/2	A50 W/B Ahead Left	U	2:2	N/A	C2:D		1	24	-	-	1317	1953:2090	944+990	68.1 : 68.1%

8/3	A50 W/B Ahead	U	2:2	N/A	C2:D		1	24	-	-	812	1953	957	84.8%
9/1		U	N/A	N/A	-		-	-	-	-	1275	Inf	Inf	0.0%
9/2		U	N/A	N/A	-		-	-	-	-	1382	Inf	Inf	0.0%
10/1	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	364	Inf	Inf	0.0%
10/2	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	873	Inf	Inf	0.0%
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	1075	1980	1824	58.9%
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	677	1980	1824	37.1%
12/1	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	613	Inf	Inf	0.0%
12/2	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	-	90	Inf	Inf	0.0%
14/1	Cliffe Lane Left Left2	O	N/A	N/A	-		-	-	-	-	148	2005	260	56.9%
15/1		U	N/A	N/A	-		-	-	-	-	1075	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	677	Inf	Inf	0.0%
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	1317	1980	1824	72.2%
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	812	1980	1824	44.5%

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	**-**	**-**	**72**	**76**	**0**	**45.1**	**17.3**	**0.0**	**62.5**	**-**	**-**	**-**	**-**	
M1 J22 / A50 / A511	**-**	**-**	**72**	**76**	**0**	**45.1**	**17.3**	**0.0**	**62.5**	**-**	**-**	**-**	**-**	
1/1	889	889	-	-	-	3.1	0.0	-	3.1	12.6	12.8	0.0	12.8	
1/2	943	943	-	-	-	3.3	0.0	-	3.3	12.8	13.6	0.0	13.6	
1/3	813	813	-	-	-	2.7	0.0	-	2.7	12.0	11.1	0.0	11.1	
2/2+2/1	908	908	-	-	-	4.8	1.6	-	6.5	25.6	6.8	1.6	8.5	
2/3	34	34	-	-	-	0.1	0.0	-	0.2	18.3	0.4	0.0	0.4	
3/1	47	47	-	-	-	0.1	0.0	-	0.1	8.3	0.4	0.0	0.4	
3/2+3/3	941	941	-	-	-	1.1	0.0	-	1.1	4.2	8.1	0.0	8.1	
4/2+4/1	980	980	-	-	-	4.7	3.9	-	8.7	31.8	10.3	3.9	14.2	
4/3	589	589	-	-	-	3.0	2.7	-	5.6	34.3	9.0	2.7	11.7	
5/1	667	667	-	-	-	2.8	0.0	-	2.8	14.9	8.7	0.0	8.7	
5/2	653	653	-	-	-	2.7	0.0	-	2.7	14.8	8.5	0.0	8.5	
6/2+6/1	999	999	-	-	-	3.1	1.0	-	4.1	14.8	6.6	1.0	7.6	
6/3	562	562	-	-	-	1.8	0.9	-	2.7	17.1	6.2	0.9	7.1	
7/1	557	557	-	-	-	0.4	0.0	-	0.4	2.9	1.2	0.0	1.2	
7/2+7/3	572	572	-	-	-	3.1	0.0	-	3.1	19.3	4.2	0.0	4.2	
8/1+8/2	1317	1317	-	-	-	3.6	1.1	-	4.7	12.7	7.1	1.1	8.2	
8/3	812	812	-	-	-	2.6	2.7	-	5.3	23.3	9.9	2.7	12.6	
9/1	1275	1275	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	1382	1382	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	364	364	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	873	873	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	1075	1075	-	-	-	0.5	0.7	-	1.2	4.0	11.6	0.7	12.4	

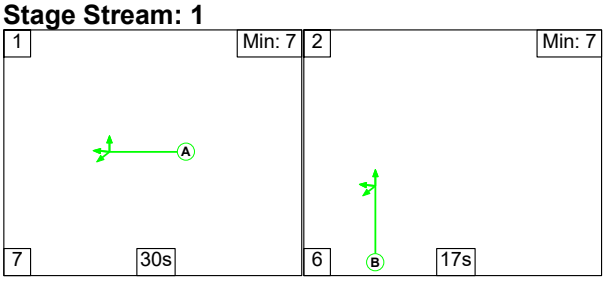
11/2	677	677	-	-	-	0.2	0.3	-	0.5	2.6	5.1	0.3	5.4
12/1	613	613	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	90	90	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1	148	148	72	76	0	0.4	0.7	-	1.1	26.0	1.4	0.7	2.1
15/1	1075	1075	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	677	677	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	1317	1317	-	-	-	0.8	1.3	-	2.1	5.7	19.4	1.3	20.7
16/2	812	812	-	-	-	0.3	0.4	-	0.7	3.0	6.8	0.4	7.2

C1 - M1/J22 A50/A511 Controller 1	Stream: 1 PRC for Signalled Lanes (%):	3.2	Total Delay for Signalled Lanes (pcuHr):	15.80	Cycle Time (s): 60
C1 - M1/J22 A50/A511 Controller 1	Stream: 2 PRC for Signalled Lanes (%):	-0.0	Total Delay for Signalled Lanes (pcuHr):	15.49	Cycle Time (s): 60
C2 - M1/J22 A50/A511 Controller 2	Stream: 1 PRC for Signalled Lanes (%):	2.2	Total Delay for Signalled Lanes (pcuHr):	12.25	Cycle Time (s): 51
C2 - M1/J22 A50/A511 Controller 2	Stream: 2 PRC for Signalled Lanes (%):	4.7	Total Delay for Signalled Lanes (pcuHr):	13.43	Cycle Time (s): 51
C3 - A50 East Pedestrian Crossings	Stream: 1 PRC for Signalled Lanes (%):	52.7	Total Delay for Signalled Lanes (pcuHr):	1.68	Cycle Time (s): 228
C3 - A50 East Pedestrian Crossings	Stream: 2 PRC for Signalled Lanes (%):	24.6	Total Delay for Signalled Lanes (pcuHr):	2.74	Cycle Time (s): 228
	PRC Over All Lanes (%):	-0.0	Total Delay Over All Lanes(pcuHr):	62.46	

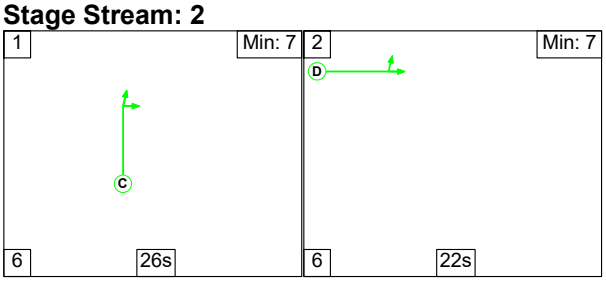
Scenario 5: '2036 Future Base + Proposed Development AM Peak' (FG5: '2036 Future Base + Proposed Development AM Peak', Plan 1: 'Network Control Plan 1')
Controller :C1 - M1/J22 A50/A511 Controller 1

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	30	17
Change Point	0	37

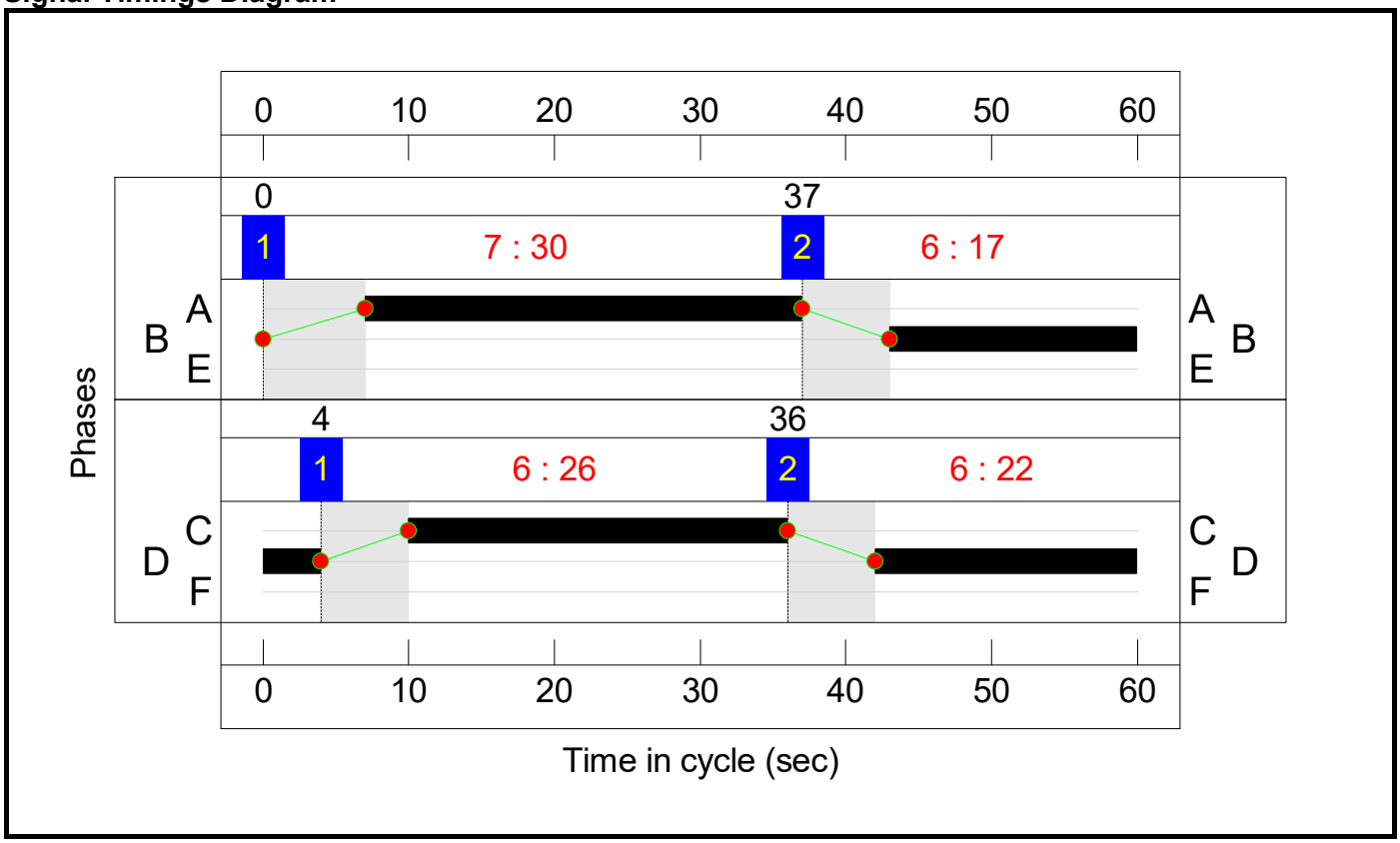
Stage Stream: 2

Stage	1	2
Duration	26	22
Change Point	4	36

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Sth Right Ahead Ahead2	Traffic	1	30	7	37
B	M1 N/B Off-slip Ahead Left Left2	Traffic	1	17	43	0
C	Circ W Right Ahead	Traffic	2	26	10	36
D	A511 E/B Ahead Left	Traffic	2	22	42	4
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

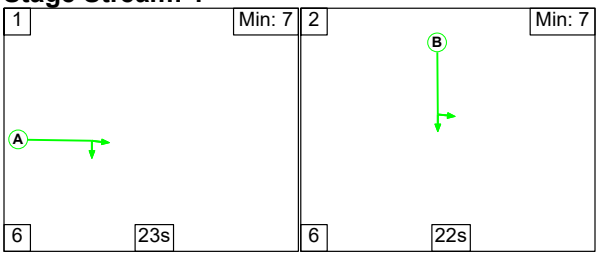
Signal Timings Diagram



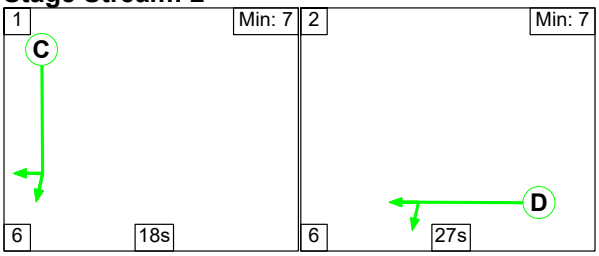
Controller :C2 - M1/J22 A50/A511 Controller 2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	23	22
Change Point	0	29

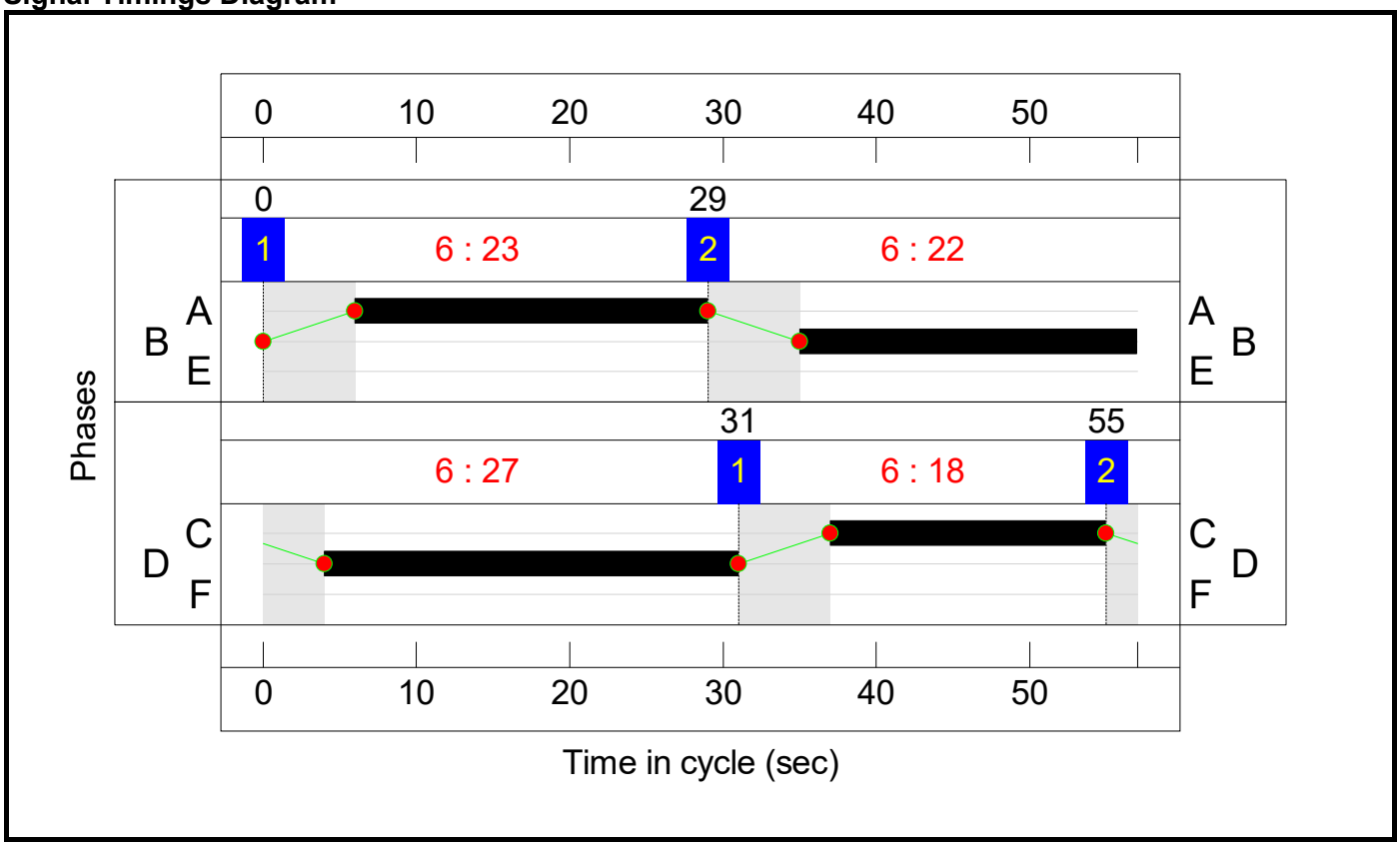
Stage Stream: 2

Stage	1	2
Duration	18	27
Change Point	31	55

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Nth Right Ahead	Traffic	1	23	6	29
B	M1 S/B Off Slip Ahead Left	Traffic	1	22	35	0
C	Circ E Right Ahead	Traffic	2	18	37	55
D	A50 W/B Ahead Left	Traffic	2	27	4	31
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

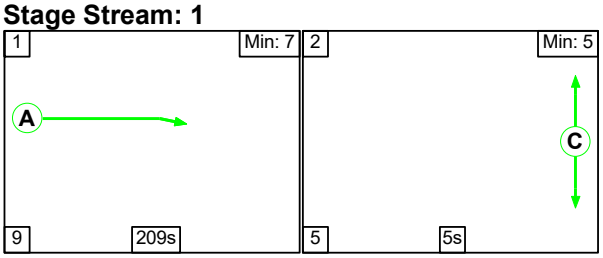
Signal Timings Diagram



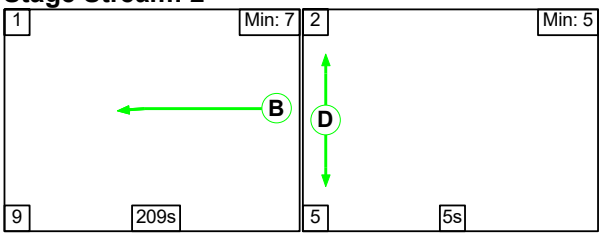
Controller :C3 - A50 East Pedestrian Crossings

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	209	5
Change Point	0	218

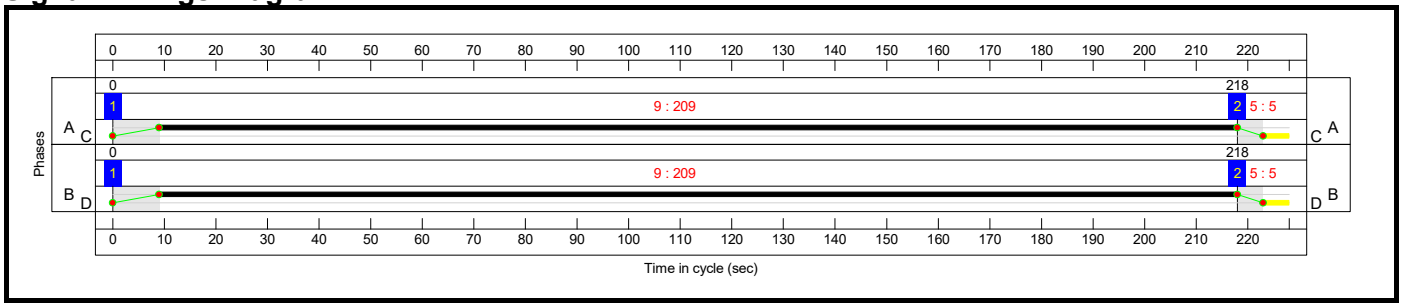
Stage Stream: 2

Stage	1	2
Duration	209	5
Change Point	0	218

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	A50 EB Exit Pedestrian Crossing Ahead	Traffic	1	209	9	218
B	A50 WB Entry Pedestrian Crossing Ahead	Traffic	2	209	9	218
C	Pedestrians across	Pedestrian	1	5	223	0
D	Pedestrians across	Pedestrian	2	5	223	0

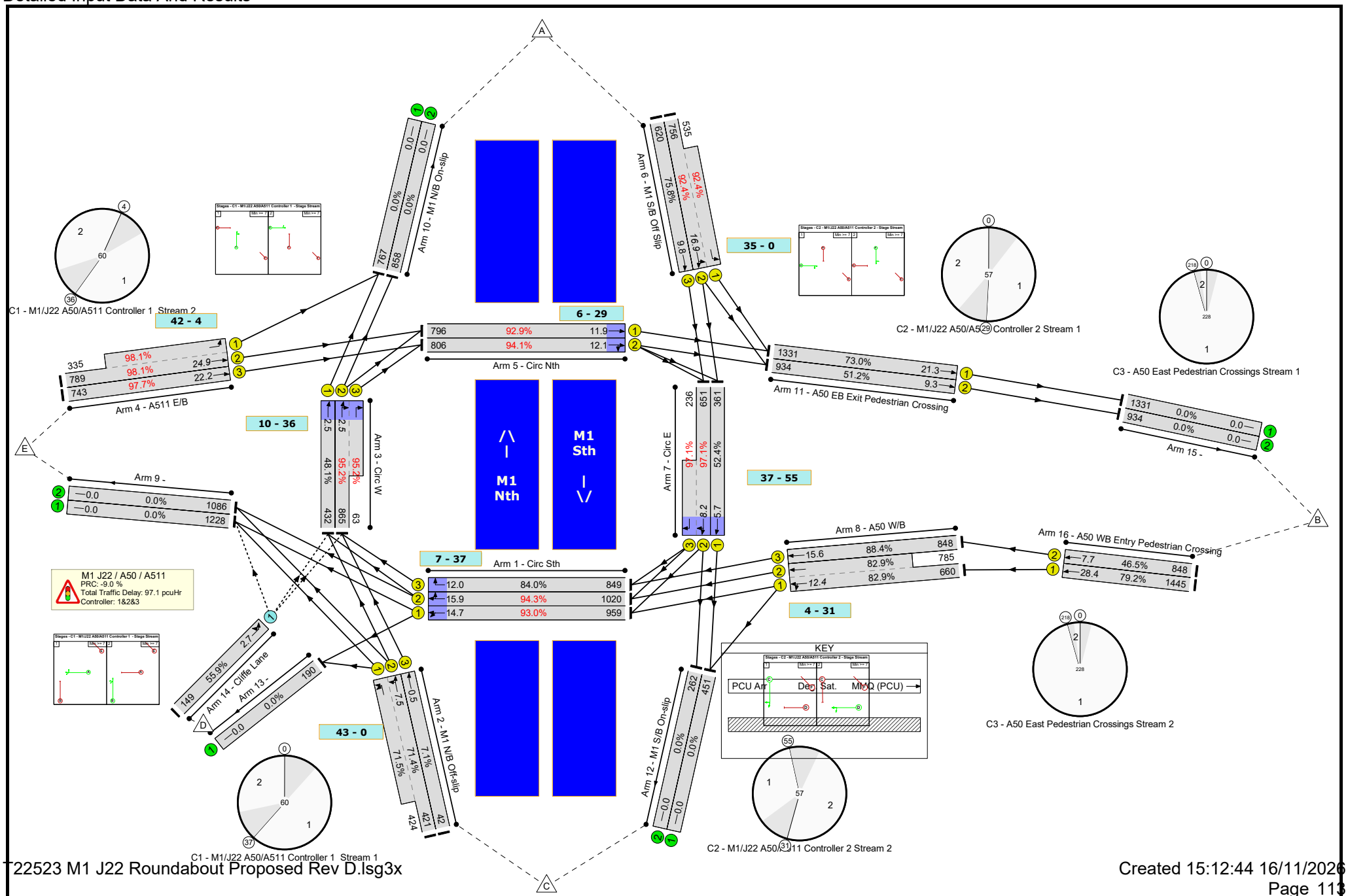
Signal Timings Diagram



Lane Green Times

Junction: M1 J22 / A50 / A511					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Circ Sth Ahead Ahead2	U	A	7	37
1/2	Circ Sth Right Ahead	U	A	7	37
1/3	Circ Sth Right	U	A	7	37
2/1	M1 N/B Off-slip Left Left2	U	B	43	0
2/2	M1 N/B Off-slip Ahead Left	U	B	43	0
2/3	M1 N/B Off-slip Ahead	U	B	43	0
3/1	Circ W Ahead	U	C	10	36
3/2	Circ W Right Ahead	U	C	10	36
3/3	Circ W Right	U	C	10	36
4/1	A511 E/B Left	U	D	42	4
4/2	A511 E/B Ahead	U	D	42	4
4/3	A511 E/B Ahead	U	D	42	4
5/1	Circ Nth Ahead	U	A	6	29
5/2	Circ Nth Right Ahead	U	A	6	29
6/1	M1 S/B Off Slip Left	U	B	35	0
6/2	M1 S/B Off Slip Ahead Left	U	B	35	0
6/3	M1 S/B Off Slip Ahead	U	B	35	0
7/1	Circ E Ahead	U	C	37	55
7/2	Circ E Right Ahead	U	C	37	55
7/3	Circ E Right	U	C	37	55
8/1	A50 W/B Ahead Left	U	D	4	31
8/2	A50 W/B Ahead	U	D	4	31
8/3	A50 W/B Ahead	U	D	4	31
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	A	9	218
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	A	9	218
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	B	9	218
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	B	9	218

Network Layout Diagram


A
B
C
D
E
42 - 4
6 - 29
35 - 0
10 - 36
37 - 55
7 - 37
4 - 31
43 - 0
Arm 4 - A511 E/B
Arm 5 - Circ Nth
Arm 6 - M1 S/B Off Slip
Arm 10 - M1 N/B On-slip
Arm 11 - A50 EB Exit Pedestrian Crossing
Arm 15 -
Arm 3 - Circ W
Arm 7 - Circ E
Arm 9 -
Arm 1 - Circ Sth
Arm 8 - A50 W/B
Arm 16 - A50 WB Entry Pedestrian Crossing
Arm 14 - Cliffe Lane
Arm 13 -
Arm 2 - M1 N/B Off-slip
Arm 12 - M1 S/B On-slip
M1 Nth
M1 Sth
M1 J22 / A50 / A511
PRC: -9.0 %
Total Traffic Delay: 97.1 pcuHr
Controller: 1&2&3
KEY
PCU Arr
Dep
Sat.
Max Q (PCU)
C1 - M1/J22 A50/A511 Controller 1 Stream 2
C2 - M1/J22 A50/A511 Controller 2 Stream 1
C3 - A50 East Pedestrian Crossings Stream 1
C3 - A50 East Pedestrian Crossings Stream 2
C1 - M1/J22 A50/A511 Controller 1 Stream 1
C2 - M1/J22 A50/A511 Controller 2 Stream 2

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**98.1%**
M1 J22 / A50 / A511	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**98.1%**
1/1	Circ Sth Ahead Ahead2	U	1:1	N/A	C1:A		1	30	-	-	959	1995	1031	93.0%
1/2	Circ Sth Right Ahead	U	1:1	N/A	C1:A		1	30	-	-	1020	2093	1081	94.3%
1/3	Circ Sth Right	U	1:1	N/A	C1:A		1	30	-	-	849	1956	1011	84.0%
2/2+2/1	M1 N/B Off-slip Ahead Left Left2	U	1:1	N/A	C1:B		1	17	-	-	845	1966:1977	590+593	71.4 : 71.5%
2/3	M1 N/B Off-slip Ahead	U	1:1	N/A	C1:B		1	17	-	-	42	1978	593	7.1%
3/1	Circ W Ahead	U	1:2	N/A	C1:C		1	26	-	-	432	1995	898	48.1%
3/2+3/3	Circ W Right Ahead	U	1:2	N/A	C1:C		1	26	-	-	928	2132:1995	909+66	95.2 : 95.2%
4/2+4/1	A511 E/B Ahead Left	U	1:2	N/A	C1:D		1	22	-	-	1124	2120:1966	804+341	98.1 : 98.1%
4/3	A511 E/B Ahead	U	1:2	N/A	C1:D		1	22	-	-	743	1983	760	97.7%
5/1	Circ Nth Ahead	U	2:1	N/A	C2:A		1	23	-	-	796	2034	856	92.9%
5/2	Circ Nth Right Ahead	U	2:1	N/A	C2:A		1	23	-	-	806	2034	856	94.1%
6/2+6/1	M1 S/B Off Slip Ahead Left	U	2:1	N/A	C2:B		1	22	-	-	1291	2027:2027	818+579	92.4 : 92.4%
6/3	M1 S/B Off Slip Ahead	U	2:1	N/A	C2:B		1	22	-	-	620	2027	818	75.8%
7/1	Circ E Ahead	U	2:2	N/A	C2:C		1	18	-	-	361	2065	688	52.4%
7/2+7/3	Circ E Right Ahead	U	2:2	N/A	C2:C		1	18	-	-	887	2179:2025	670+243	97.1 : 97.1%
8/1+8/2	A50 W/B Ahead Left	U	2:2	N/A	C2:D		1	27	-	-	1445	1953:2090	796+947	82.9 : 82.9%

8/3	A50 W/B Ahead	U	2:2	N/A	C2:D		1	27	-	-	848	1953	959	88.4%
9/1		U	N/A	N/A	-		-	-	-	-	1228	Inf	Inf	0.0%
9/2		U	N/A	N/A	-		-	-	-	-	1086	Inf	Inf	0.0%
10/1	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	767	Inf	Inf	0.0%
10/2	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	858	Inf	Inf	0.0%
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	1331	1980	1824	73.0%
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	934	1980	1824	51.2%
12/1	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	451	Inf	Inf	0.0%
12/2	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	262	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	-	190	Inf	Inf	0.0%
14/1	Cliffe Lane Left Left2	O	N/A	N/A	-		-	-	-	-	149	2005	267	55.9%
15/1		U	N/A	N/A	-		-	-	-	-	1331	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	934	Inf	Inf	0.0%
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	1445	1980	1824	79.2%
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	848	1980	1824	46.5%

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	**-**	**-**	**56**	**93**	**0**	**55.8**	**41.3**	**0.0**	**97.1**	**-**	**-**	**-**	**-**	
M1 J22 / A50 / A511	**-**	**-**	**56**	**93**	**0**	**55.8**	**41.3**	**0.0**	**97.1**	**-**	**-**	**-**	**-**	
1/1	959	959	-	-	-	3.6	0.0	-	3.6	13.5	14.7	0.0	14.7	
1/2	1020	1020	-	-	-	3.9	0.0	-	3.9	13.7	15.9	0.0	15.9	
1/3	849	849	-	-	-	2.9	0.0	-	2.9	12.4	12.0	0.0	12.0	
2/2+2/1	845	845	-	-	-	4.4	1.2	-	5.6	24.0	6.2	1.2	7.5	
2/3	42	42	-	-	-	0.2	0.0	-	0.2	18.3	0.5	0.0	0.5	
3/1	432	432	-	-	-	0.5	0.0	-	0.5	4.5	2.5	0.0	2.5	
3/2+3/3	928	928	-	-	-	1.2	0.0	-	1.2	4.6	2.5	0.0	2.5	
4/2+4/1	1124	1124	-	-	-	5.3	12.2	-	17.5	55.9	12.7	12.2	24.9	
4/3	743	743	-	-	-	3.8	10.0	-	13.8	66.7	12.2	10.0	22.2	
5/1	796	796	-	-	-	3.5	0.0	-	3.5	15.7	11.9	0.0	11.9	
5/2	806	806	-	-	-	3.5	0.0	-	3.5	15.8	12.1	0.0	12.1	
6/2+6/1	1291	1291	-	-	-	5.4	5.5	-	11.0	30.6	11.3	5.5	16.9	
6/3	620	620	-	-	-	2.5	1.5	-	4.1	23.6	8.3	1.5	9.8	
7/1	361	361	-	-	-	2.1	0.0	-	2.1	20.7	5.7	0.0	5.7	
7/2+7/3	887	887	-	-	-	2.4	0.0	-	2.4	9.7	8.2	0.0	8.2	
8/1+8/2	1445	1445	-	-	-	4.6	2.4	-	7.0	17.4	10.0	2.4	12.4	
8/3	848	848	-	-	-	3.1	3.6	-	6.6	28.2	12.0	3.6	15.6	
9/1	1228	1228	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	1086	1086	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	767	767	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	858	858	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	1331	1331	-	-	-	0.8	1.3	-	2.1	5.8	20.0	1.3	21.3	

11/2	934	934	-	-	-	0.3	0.5	-	0.9	3.4	8.8	0.5	9.3
12/1	451	451	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	262	262	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	190	190	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1	149	149	56	93	0	0.4	0.6	-	1.1	25.7	2.1	0.6	2.7
15/1	1331	1331	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	934	934	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	1445	1445	-	-	-	1.1	1.9	-	2.9	7.3	26.5	1.9	28.4
16/2	848	848	-	-	-	0.3	0.4	-	0.7	3.1	7.3	0.4	7.7

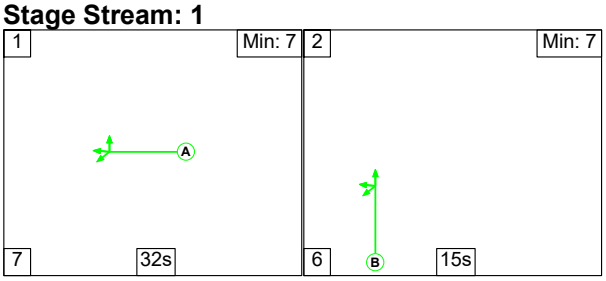
C1 - M1/J22 A50/A511 Controller 1	Stream: 1 PRC for Signalled Lanes (%):	-4.8	Total Delay for Signalled Lanes (pcuHr):	16.24
C1 - M1/J22 A50/A511 Controller 1	Stream: 2 PRC for Signalled Lanes (%):	-9.0	Total Delay for Signalled Lanes (pcuHr):	32.94
C2 - M1/J22 A50/A511 Controller 2	Stream: 1 PRC for Signalled Lanes (%):	-4.6	Total Delay for Signalled Lanes (pcuHr):	22.04
C2 - M1/J22 A50/A511 Controller 2	Stream: 2 PRC for Signalled Lanes (%):	-7.9	Total Delay for Signalled Lanes (pcuHr):	18.11
C3 - A50 East Pedestrian Crossings	Stream: 1 PRC for Signalled Lanes (%):	23.3	Total Delay for Signalled Lanes (pcuHr):	3.02
C3 - A50 East Pedestrian Crossings	Stream: 2 PRC for Signalled Lanes (%):	13.6	Total Delay for Signalled Lanes (pcuHr):	3.67
	PRC Over All Lanes (%):	-9.0	Total Delay Over All Lanes(pcuHr):	97.09

Cycle Time (s):	60
Cycle Time (s):	60
Cycle Time (s):	57
Cycle Time (s):	57
Cycle Time (s):	228
Cycle Time (s):	228

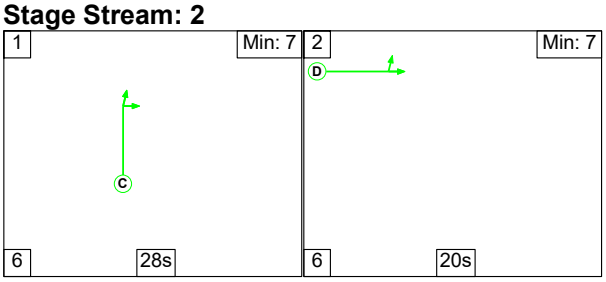
Scenario 6: '2036 Future Base + Proposed Development PM Peak' (FG6: '2036 Future Base + Proposed Development PM Peak', Plan 1: 'Network Control Plan 1')
Controller :C1 - M1/J22 A50/A511 Controller 1

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	32	15
Change Point	0	39

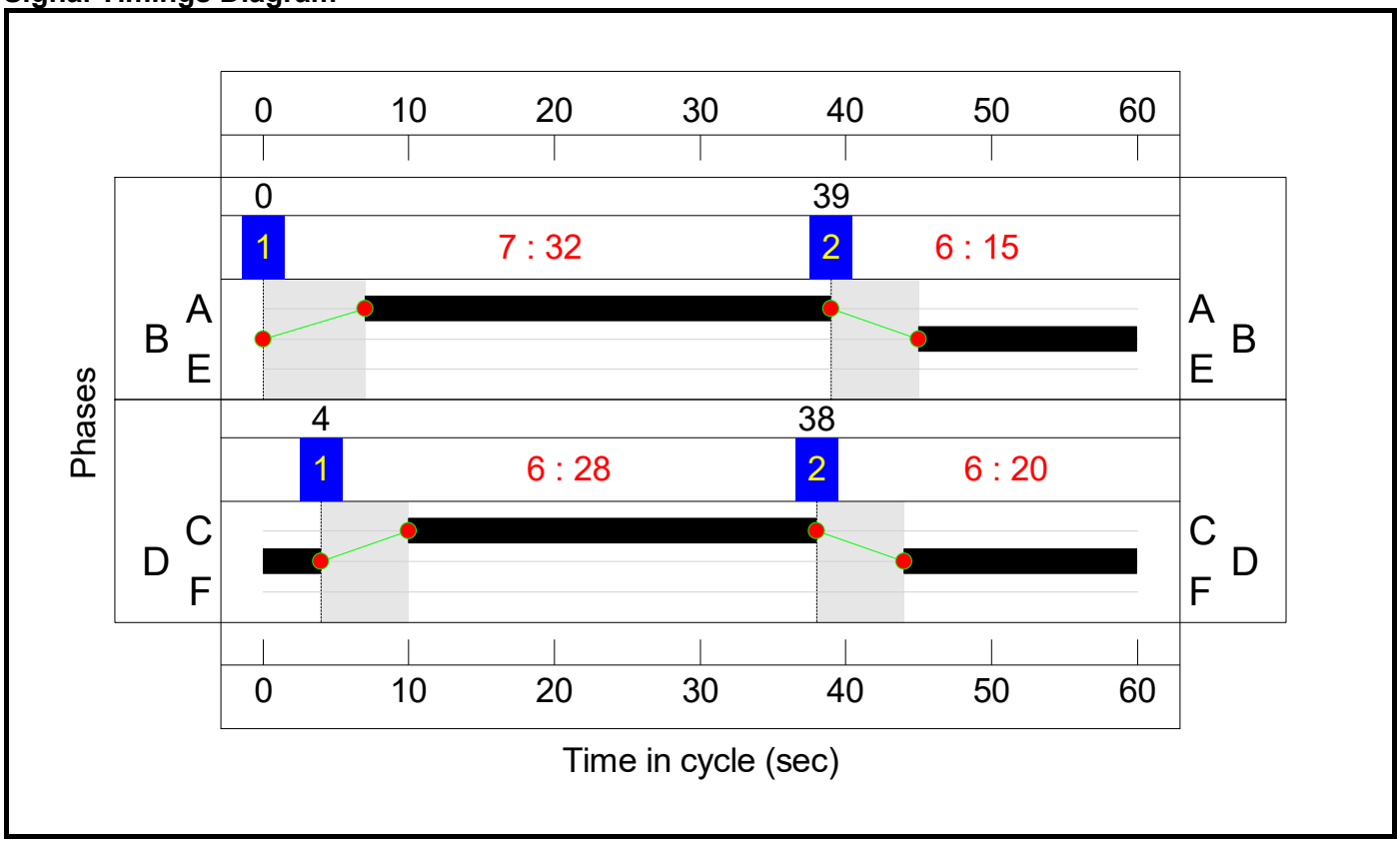
Stage Stream: 2

Stage	1	2
Duration	28	20
Change Point	4	38

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Sth Right Ahead Ahead2	Traffic	1	32	7	39
B	M1 N/B Off-slip Ahead Left Left2	Traffic	1	15	45	0
C	Circ W Right Ahead	Traffic	2	28	10	38
D	A511 E/B Ahead Left	Traffic	2	20	44	4
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

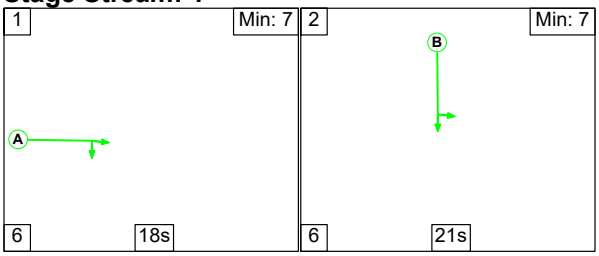
Signal Timings Diagram



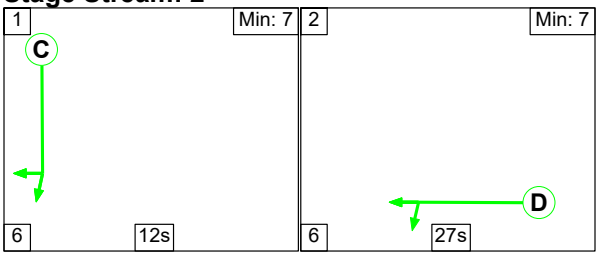
Controller :C2 - M1/J22 A50/A511 Controller 2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	18	21
Change Point	47	20

Detailed Input Data And Results

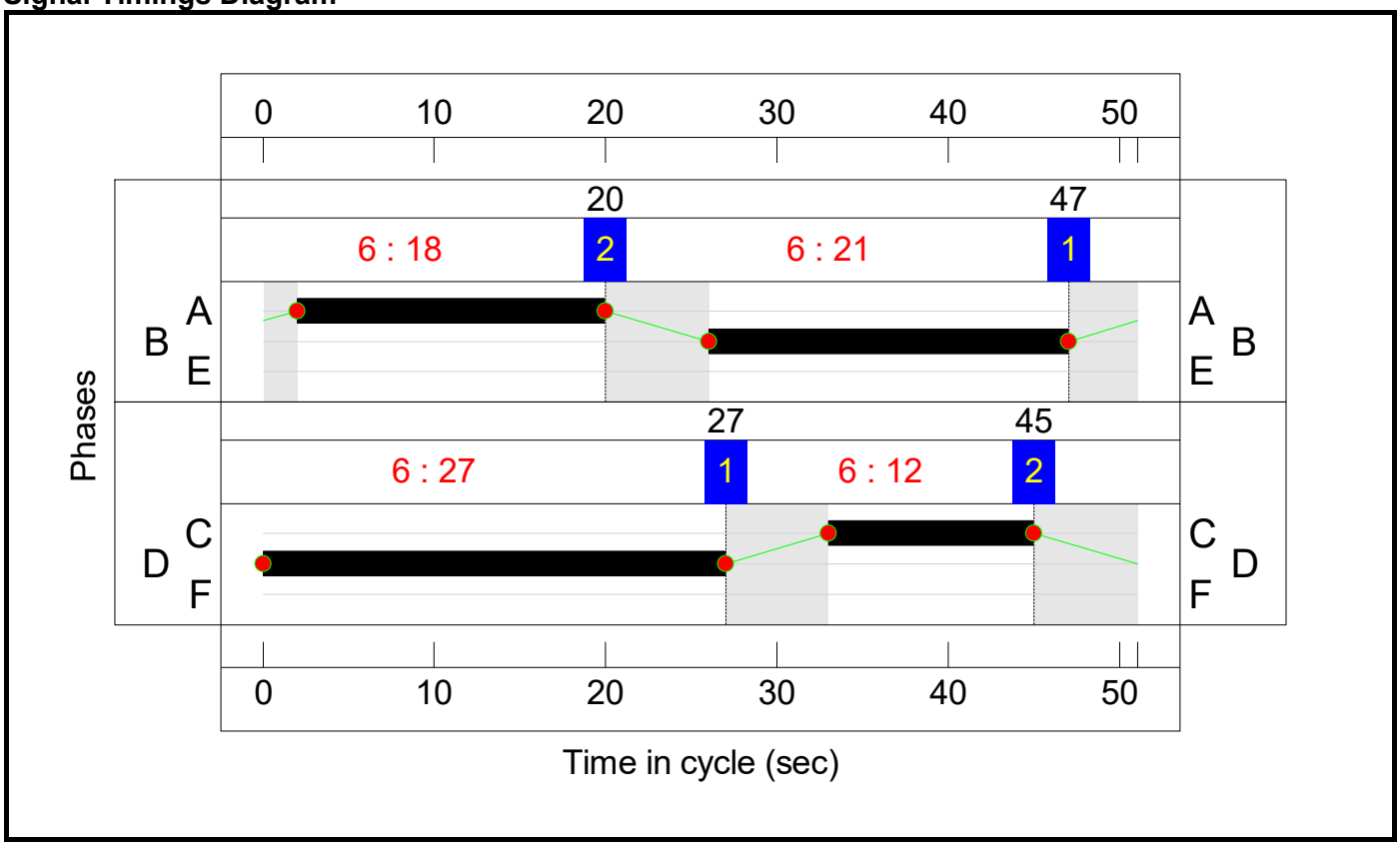
Stage Stream: 2

Stage	1	2
Duration	12	27
Change Point	27	45

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Nth Right Ahead	Traffic	1	18	2	20
B	M1 S/B Off Slip Ahead Left	Traffic	1	21	26	47
C	Circ E Right Ahead	Traffic	2	12	33	45
D	A50 W/B Ahead Left	Traffic	2	27	0	27
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

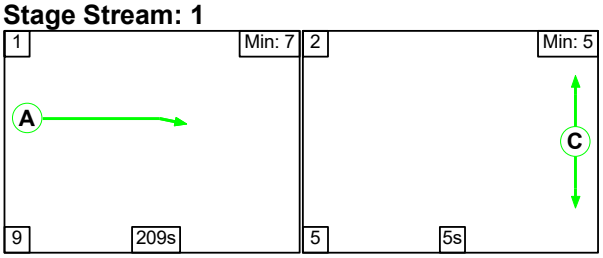
Signal Timings Diagram



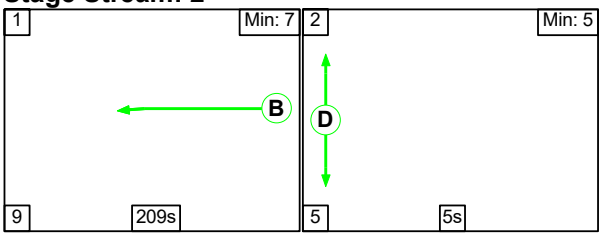
Controller :C3 - A50 East Pedestrian Crossings

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	209	5
Change Point	227	217

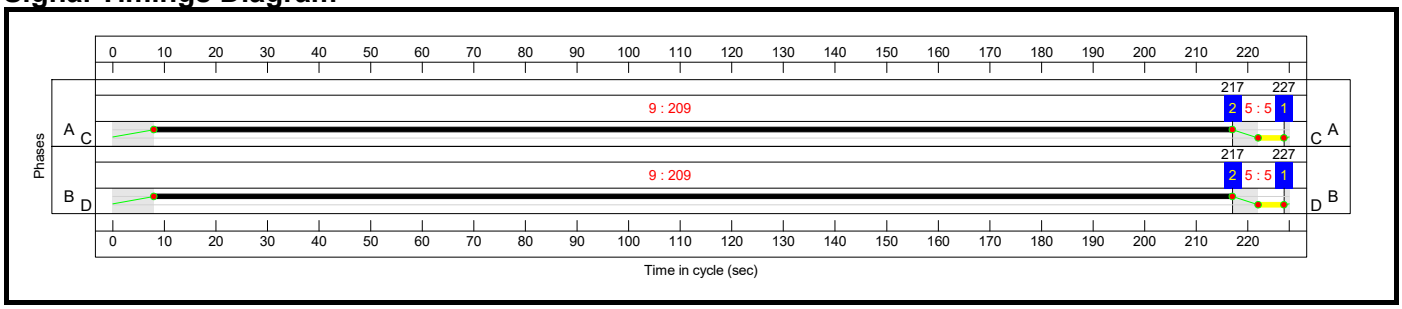
Stage Stream: 2

Stage	1	2
Duration	209	5
Change Point	227	217

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	A50 EB Exit Pedestrian Crossing Ahead	Traffic	1	209	8	217
B	A50 WB Entry Pedestrian Crossing Ahead	Traffic	2	209	8	217
C	Pedestrians across	Pedestrian	1	5	222	227
D	Pedestrians across	Pedestrian	2	5	222	227

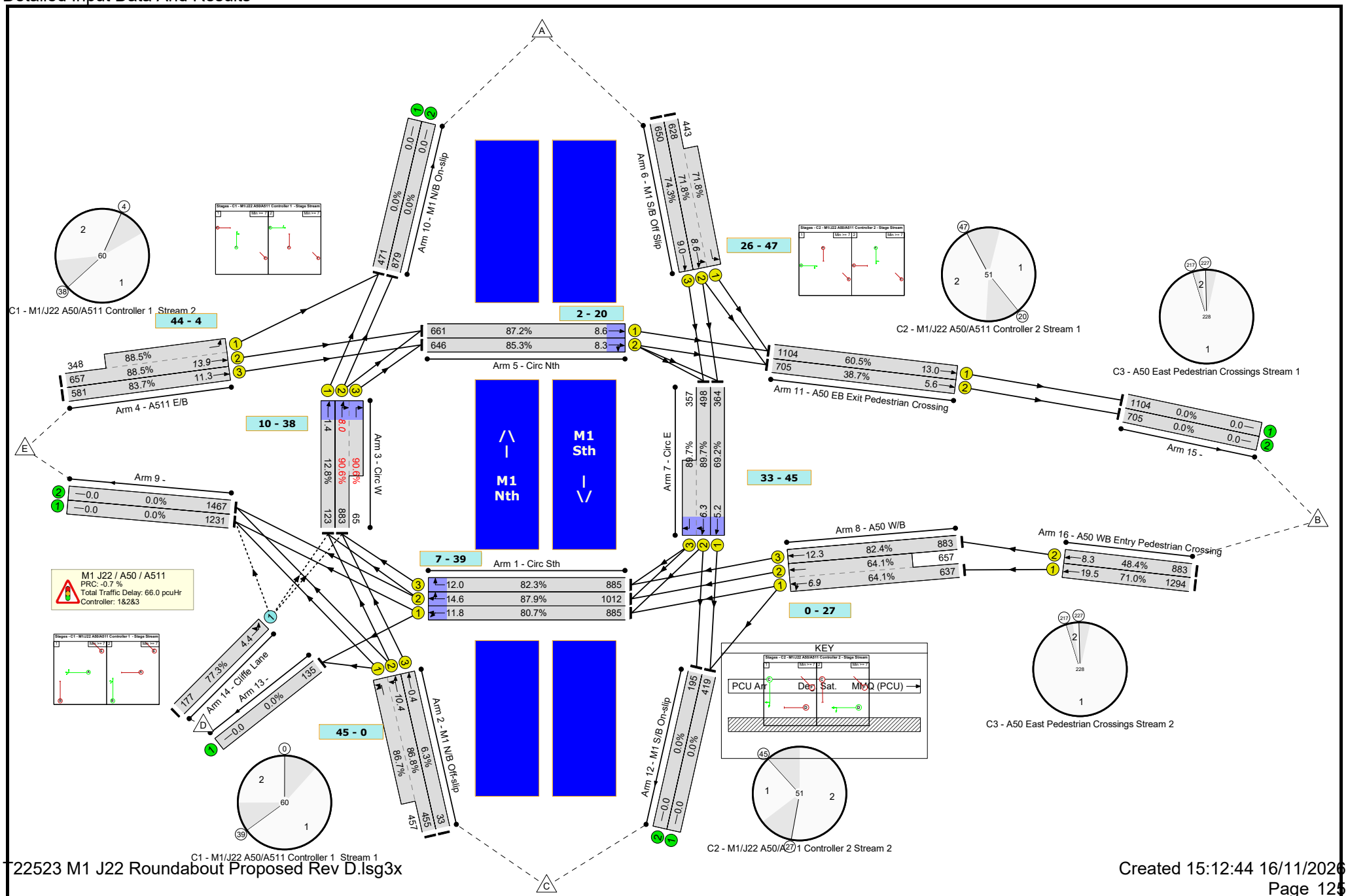
Signal Timings Diagram



Lane Green Times

Junction: M1 J22 / A50 / A511					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Circ Sth Ahead Ahead2	U	A	7	39
1/2	Circ Sth Right Ahead	U	A	7	39
1/3	Circ Sth Right	U	A	7	39
2/1	M1 N/B Off-slip Left Left2	U	B	45	0
2/2	M1 N/B Off-slip Ahead Left	U	B	45	0
2/3	M1 N/B Off-slip Ahead	U	B	45	0
3/1	Circ W Ahead	U	C	10	38
3/2	Circ W Right Ahead	U	C	10	38
3/3	Circ W Right	U	C	10	38
4/1	A511 E/B Left	U	D	44	4
4/2	A511 E/B Ahead	U	D	44	4
4/3	A511 E/B Ahead	U	D	44	4
5/1	Circ Nth Ahead	U	A	2	20
5/2	Circ Nth Right Ahead	U	A	2	20
6/1	M1 S/B Off Slip Left	U	B	26	47
6/2	M1 S/B Off Slip Ahead Left	U	B	26	47
6/3	M1 S/B Off Slip Ahead	U	B	26	47
7/1	Circ E Ahead	U	C	33	45
7/2	Circ E Right Ahead	U	C	33	45
7/3	Circ E Right	U	C	33	45
8/1	A50 W/B Ahead Left	U	D	0	27
8/2	A50 W/B Ahead	U	D	0	27
8/3	A50 W/B Ahead	U	D	0	27
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	A	8	217
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	A	8	217
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	B	8	217
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	B	8	217

Network Layout Diagram


A
B
C
D
E
C1 - M1/J22 A50/A511 Controller 1 Stream 2
C2 - M1/J22 A50/A511 Controller 2 Stream 1
C3 - A50 East Pedestrian Crossings Stream 1
C3 - A50 East Pedestrian Crossings Stream 2
C1 - M1/J22 A50/A511 Controller 1 Stream 1
C2 - M1/J22 A50/A511 Controller 2 Stream 2
44 - 4
2 - 20
26 - 47
10 - 38
33 - 45
7 - 39
0 - 27
45 - 0
Arm 1 - Circ Sth
Arm 2 - M1 N/B Off-slip
Arm 3 - Circ W
Arm 4 - A511 E/B
Arm 5 - Circ Nth
Arm 6 - M1 S/B Off Slip
Arm 7 - Circ E
Arm 8 - A50 W/B
Arm 9 -
Arm 10 - M1 N/B On-slip
Arm 11 - A50 EB Exit Pedestrian Crossing
Arm 12 - M1 S/B On-slip
Arm 13 -
Arm 14 - Cliffe Lane
Arm 15 -
Arm 16 - A50 WB Entry Pedestrian Crossing
M1 Sth
M1 Nth
M1 J22 / A50 / A511
PRC: -0.7 %
Total Traffic Delay: 66.0 pcuHr
Controller: 1&2&3
KEY
PCU Arr
Dep
Sat.
Max Q (PCU)

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**90.6%**
M1 J22 / A50 / A511	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**90.6%**
1/1	Circ Sth Ahead Ahead2	U	1:1	N/A	C1:A		1	32	-	-	885	1995	1097	80.7%
1/2	Circ Sth Right Ahead	U	1:1	N/A	C1:A		1	32	-	-	1012	2093	1151	87.9%
1/3	Circ Sth Right	U	1:1	N/A	C1:A		1	32	-	-	885	1956	1076	82.3%
2/2+2/1	M1 N/B Off-slip Ahead Left Left2	U	1:1	N/A	C1:B		1	15	-	-	912	1966:1977	524+527	86.8 : 86.7%
2/3	M1 N/B Off-slip Ahead	U	1:1	N/A	C1:B		1	15	-	-	33	1978	527	6.3%
3/1	Circ W Ahead	U	1:2	N/A	C1:C		1	28	-	-	123	1995	964	12.8%
3/2+3/3	Circ W Right Ahead	U	1:2	N/A	C1:C		1	28	-	-	948	2132:1995	974+72	90.6 : 90.6%
4/2+4/1	A511 E/B Ahead Left	U	1:2	N/A	C1:D		1	20	-	-	1005	2120:1966	742+393	88.5 : 88.5%
4/3	A511 E/B Ahead	U	1:2	N/A	C1:D		1	20	-	-	581	1983	694	83.7%
5/1	Circ Nth Ahead	U	2:1	N/A	C2:A		1	18	-	-	661	2034	758	87.2%
5/2	Circ Nth Right Ahead	U	2:1	N/A	C2:A		1	18	-	-	646	2034	758	85.3%
6/2+6/1	M1 S/B Off Slip Ahead Left	U	2:1	N/A	C2:B		1	21	-	-	1071	2027:2027	874+617	71.8 : 71.8%
6/3	M1 S/B Off Slip Ahead	U	2:1	N/A	C2:B		1	21	-	-	650	2027	874	74.3%
7/1	Circ E Ahead	U	2:2	N/A	C2:C		1	12	-	-	364	2065	526	69.2%
7/2+7/3	Circ E Right Ahead	U	2:2	N/A	C2:C		1	12	-	-	855	2178:2025	555+398	89.7 : 89.7%
8/1+8/2	A50 W/B Ahead Left	U	2:2	N/A	C2:D		1	27	-	-	1294	1953:2090	995+1026	64.1 : 64.1%

8/3	A50 W/B Ahead	U	2:2	N/A	C2:D		1	27	-	-	883	1953	1072	82.4%
9/1		U	N/A	N/A	-		-	-	-	-	1231	Inf	Inf	0.0%
9/2		U	N/A	N/A	-		-	-	-	-	1467	Inf	Inf	0.0%
10/1	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	471	Inf	Inf	0.0%
10/2	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	879	Inf	Inf	0.0%
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	1104	1980	1824	60.5%
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	705	1980	1824	38.7%
12/1	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	419	Inf	Inf	0.0%
12/2	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	195	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	-	135	Inf	Inf	0.0%
14/1	Cliffe Lane Left Left2	O	N/A	N/A	-		-	-	-	-	177	2005	229	77.3%
15/1		U	N/A	N/A	-		-	-	-	-	1104	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	705	Inf	Inf	0.0%
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	1294	1980	1824	71.0%
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	883	1980	1824	48.4%

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	**-**	**-**	**49**	**128**	**0**	**46.5**	**19.5**	**0.0**	**66.0**	**-**	**-**	**-**	**-**	
M1 J22 / A50 / A511	**-**	**-**	**49**	**128**	**0**	**46.5**	**19.5**	**0.0**	**66.0**	**-**	**-**	**-**	**-**	
1/1	885	885	-	-	-	2.7	0.0	-	2.7	10.9	11.8	0.0	11.8	
1/2	1012	1012	-	-	-	3.3	0.0	-	3.3	11.8	14.6	0.0	14.6	
1/3	885	885	-	-	-	2.7	0.0	-	2.7	11.1	12.0	0.0	12.0	
2/2+2/1	912	912	-	-	-	5.3	3.1	-	8.4	33.3	7.2	3.1	10.4	
2/3	33	33	-	-	-	0.2	0.0	-	0.2	20.1	0.4	0.0	0.4	
3/1	123	123	-	-	-	0.3	0.0	-	0.3	9.8	1.4	0.0	1.4	
3/2+3/3	948	948	-	-	-	1.1	0.0	-	1.1	4.0	8.0	0.0	8.0	
4/2+4/1	1005	1005	-	-	-	4.8	3.7	-	8.5	30.5	10.2	3.7	13.9	
4/3	581	581	-	-	-	2.9	2.5	-	5.4	33.2	8.9	2.5	11.3	
5/1	661	661	-	-	-	2.7	0.0	-	2.7	14.9	8.6	0.0	8.6	
5/2	646	646	-	-	-	2.6	0.0	-	2.6	14.7	8.3	0.0	8.3	
6/2+6/1	1071	1071	-	-	-	3.4	1.3	-	4.6	15.6	7.3	1.3	8.6	
6/3	650	650	-	-	-	2.2	1.4	-	3.6	20.1	7.6	1.4	9.0	
7/1	364	364	-	-	-	2.3	0.0	-	2.3	23.2	5.2	0.0	5.2	
7/2+7/3	855	855	-	-	-	2.4	0.0	-	2.4	10.0	6.3	0.0	6.3	
8/1+8/2	1294	1294	-	-	-	2.7	0.9	-	3.6	10.1	6.0	0.9	6.9	
8/3	883	883	-	-	-	2.3	2.3	-	4.6	18.8	10.1	2.3	12.3	
9/1	1231	1231	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	1467	1467	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	471	471	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	879	879	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	1104	1104	-	-	-	0.5	0.8	-	1.3	4.1	12.3	0.8	13.0	

11/2	705	705	-	-	-	0.2	0.3	-	0.5	2.7	5.3	0.3	5.6
12/1	419	419	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	195	195	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	135	135	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1	177	177	49	128	0	0.7	1.6	-	2.3	46.1	2.8	1.6	4.4
15/1	1104	1104	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	705	705	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	1294	1294	-	-	-	0.7	1.2	-	2.0	5.4	18.3	1.2	19.5
16/2	883	883	-	-	-	0.3	0.5	-	0.8	3.2	7.8	0.5	8.3

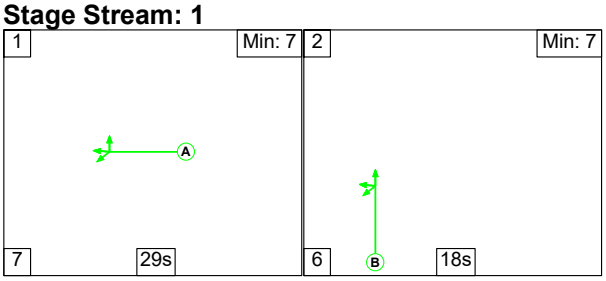
C1 - M1/J22 A50/A511 Controller 1	Stream: 1 PRC for Signalled Lanes (%):	2.4	Total Delay for Signalled Lanes (pcuHr):	17.35
C1 - M1/J22 A50/A511 Controller 1	Stream: 2 PRC for Signalled Lanes (%):	-0.7	Total Delay for Signalled Lanes (pcuHr):	15.25
C2 - M1/J22 A50/A511 Controller 2	Stream: 1 PRC for Signalled Lanes (%):	3.2	Total Delay for Signalled Lanes (pcuHr):	13.64
C2 - M1/J22 A50/A511 Controller 2	Stream: 2 PRC for Signalled Lanes (%):	0.3	Total Delay for Signalled Lanes (pcuHr):	12.95
C3 - A50 East Pedestrian Crossings	Stream: 1 PRC for Signalled Lanes (%):	48.7	Total Delay for Signalled Lanes (pcuHr):	1.79
C3 - A50 East Pedestrian Crossings	Stream: 2 PRC for Signalled Lanes (%):	26.8	Total Delay for Signalled Lanes (pcuHr):	2.74
	PRC Over All Lanes (%):	-0.7	Total Delay Over All Lanes(pcuHr):	65.99

Cycle Time (s):	60
Cycle Time (s):	60
Cycle Time (s):	51
Cycle Time (s):	51
Cycle Time (s):	228
Cycle Time (s):	228

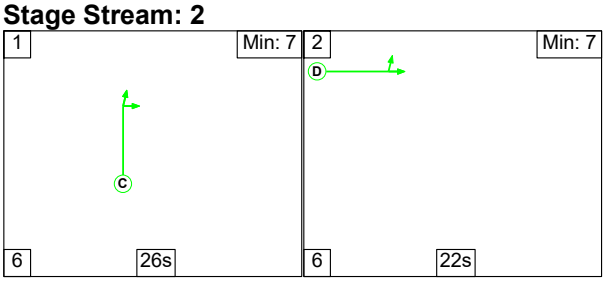
Scenario 7: '2028 Future Base + Proposed Development Sensitivity AM Peak' (FG7: '2028 Future Base + Proposed Development Sensitivity AM Peak', Plan 1: 'Network Control Plan 1')
Controller :C1 - M1/J22 A50/A511 Controller 1

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	29	18
Change Point	0	36

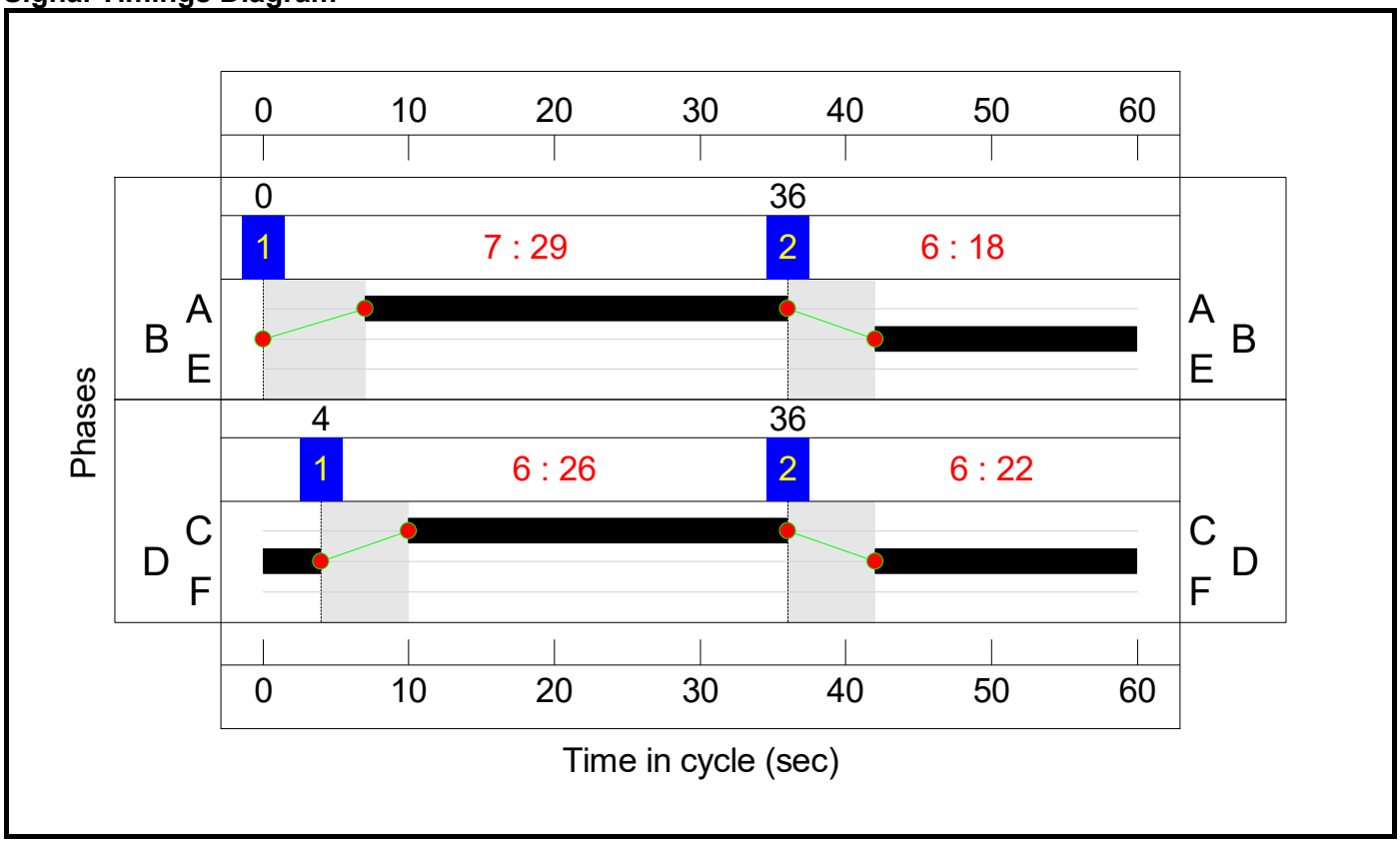
Stage Stream: 2

Stage	1	2
Duration	26	22
Change Point	4	36

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Sth Right Ahead Ahead2	Traffic	1	29	7	36
B	M1 N/B Off-slip Ahead Left Left2	Traffic	1	18	42	0
C	Circ W Right Ahead	Traffic	2	26	10	36
D	A511 E/B Ahead Left	Traffic	2	22	42	4
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

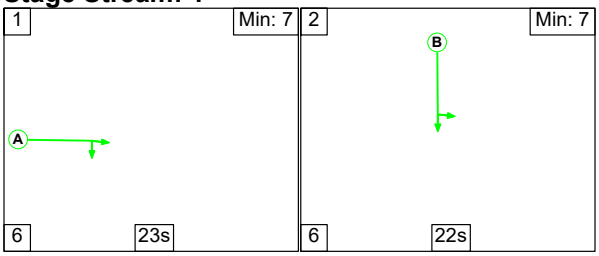
Signal Timings Diagram



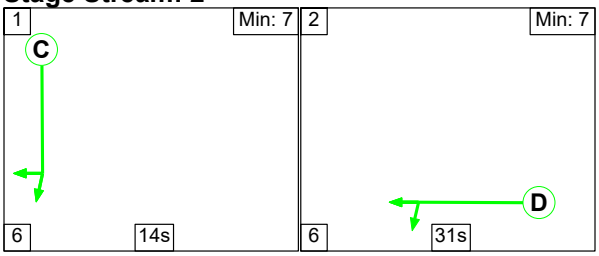
Controller :C2 - M1/J22 A50/A511 Controller 2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	23	22
Change Point	7	36

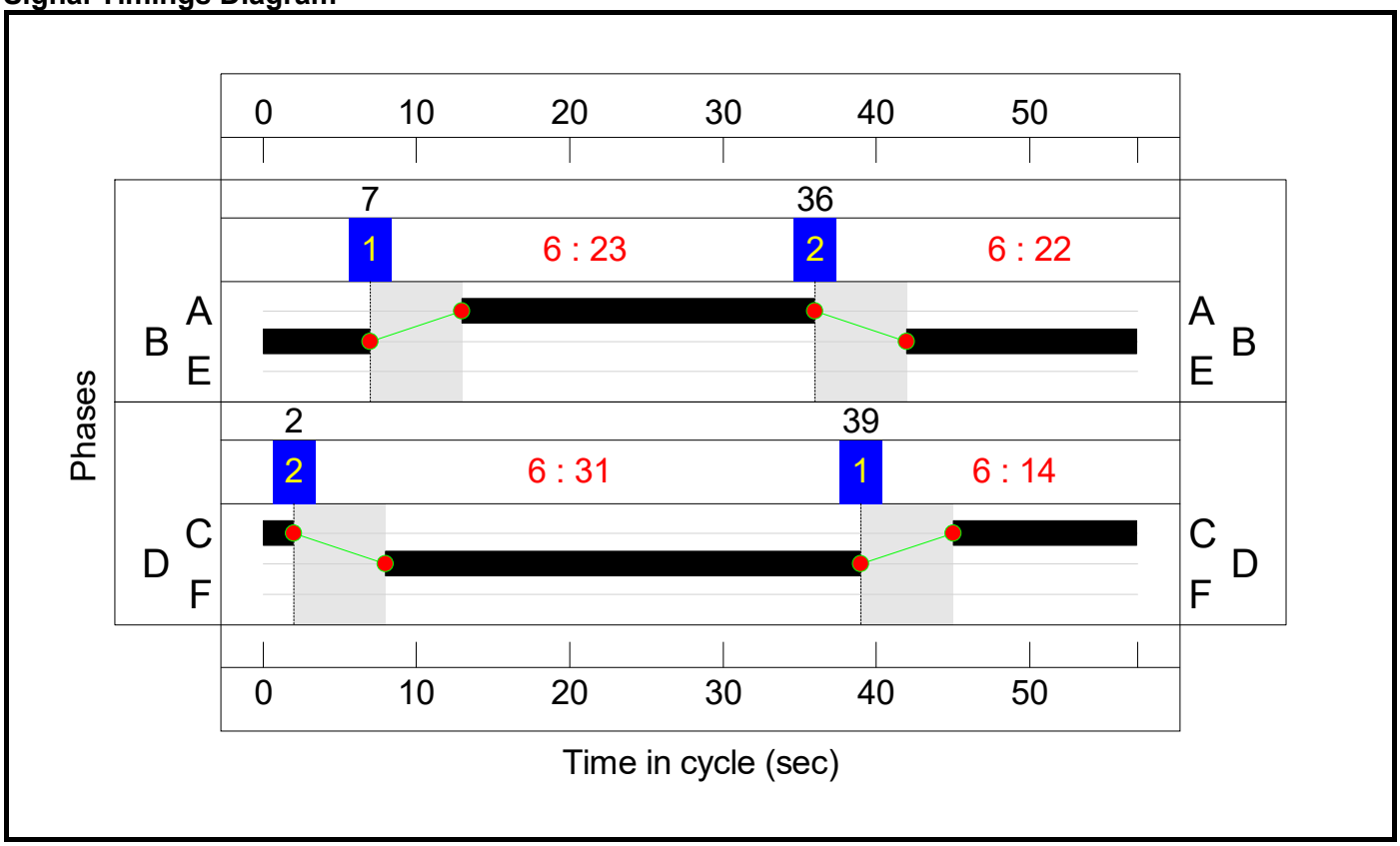
Stage Stream: 2

Stage	1	2
Duration	14	31
Change Point	39	2

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Nth Right Ahead	Traffic	1	23	13	36
B	M1 S/B Off Slip Ahead Left	Traffic	1	22	42	7
C	Circ E Right Ahead	Traffic	2	14	45	2
D	A50 W/B Ahead Left	Traffic	2	31	8	39
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

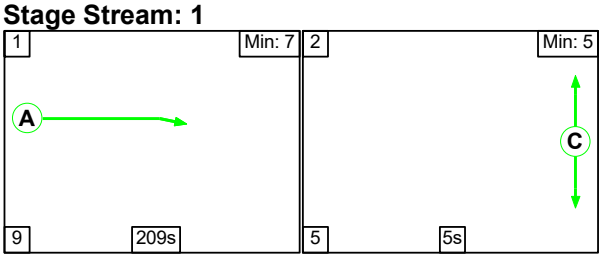
Signal Timings Diagram



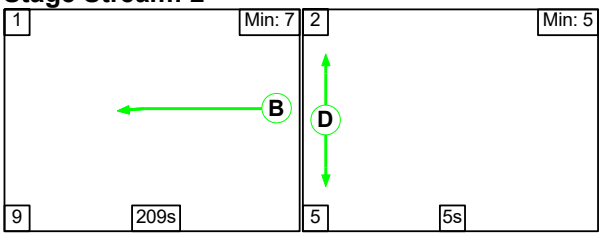
Controller :C3 - A50 East Pedestrian Crossings

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	209	5
Change Point	180	170

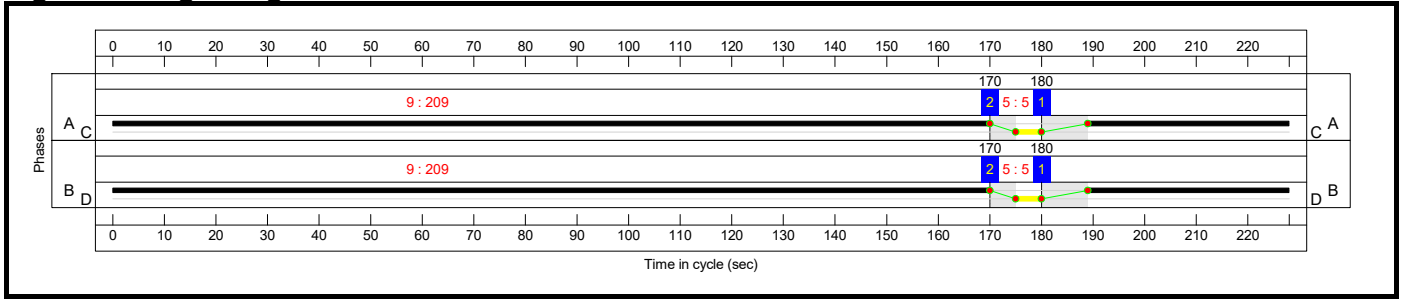
Stage Stream: 2

Stage	1	2
Duration	209	5
Change Point	180	170

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	A50 EB Exit Pedestrian Crossing Ahead	Traffic	1	209	189	170
B	A50 WB Entry Pedestrian Crossing Ahead	Traffic	2	209	189	170
C	Pedestrians across	Pedestrian	1	5	175	180
D	Pedestrians across	Pedestrian	2	5	175	180

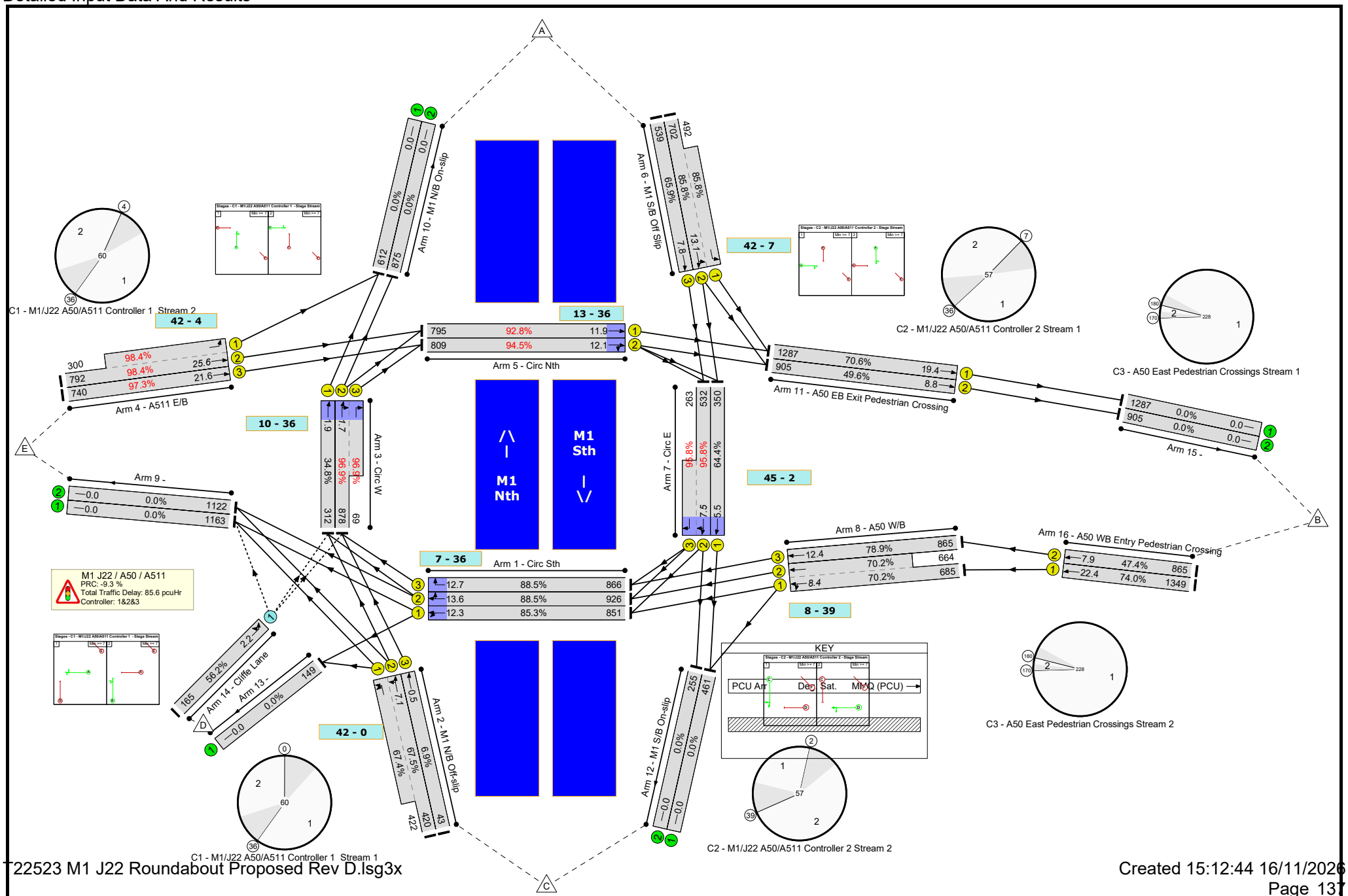
Signal Timings Diagram



Lane Green Times

Junction: M1 J22 / A50 / A511					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Circ Sth Ahead Ahead2	U	A	7	36
1/2	Circ Sth Right Ahead	U	A	7	36
1/3	Circ Sth Right	U	A	7	36
2/1	M1 N/B Off-slip Left Left2	U	B	42	0
2/2	M1 N/B Off-slip Ahead Left	U	B	42	0
2/3	M1 N/B Off-slip Ahead	U	B	42	0
3/1	Circ W Ahead	U	C	10	36
3/2	Circ W Right Ahead	U	C	10	36
3/3	Circ W Right	U	C	10	36
4/1	A511 E/B Left	U	D	42	4
4/2	A511 E/B Ahead	U	D	42	4
4/3	A511 E/B Ahead	U	D	42	4
5/1	Circ Nth Ahead	U	A	13	36
5/2	Circ Nth Right Ahead	U	A	13	36
6/1	M1 S/B Off Slip Left	U	B	42	7
6/2	M1 S/B Off Slip Ahead Left	U	B	42	7
6/3	M1 S/B Off Slip Ahead	U	B	42	7
7/1	Circ E Ahead	U	C	45	2
7/2	Circ E Right Ahead	U	C	45	2
7/3	Circ E Right	U	C	45	2
8/1	A50 W/B Ahead Left	U	D	8	39
8/2	A50 W/B Ahead	U	D	8	39
8/3	A50 W/B Ahead	U	D	8	39
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	A	189	170
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	A	189	170
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	B	189	170
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	B	189	170

Network Layout Diagram


A
B
C
D
E
42 - 4
13 - 36
42 - 7
10 - 36
45 - 2
7 - 36
8 - 39
42 - 0
Arm 4 - A511 E/B
Arm 5 - Circ Nth
Arm 6 - M1 S/B Off Slip
Arm 10 - M1 N/B On-slip
Arm 11 - A50 EB Exit Pedestrian Crossing
Arm 15 -
Arm 3 - Circ W
Arm 7 - Circ E
Arm 9 -
Arm 8 - A50 W/B
Arm 16 - A50 WB Entry Pedestrian Crossing
Arm 1 - Circ Sth
Arm 14 - Cliffe Lane
Arm 13 -
Arm 2 - M1 N/B Off-slip
Arm 12 - M1 S/B On-slip
M1 Nth
M1 Sth
M1 J22 / A50 / A511
PRC: -9.3 %
Total Traffic Delay: 85.6 pcuHr
Controller: 1&2&3
KEY
PCU Arr
Dep
Sat.
MinQ (PCU)
C1 - M1/J22 A50/A511 Controller 1 Stream 2
C2 - M1/J22 A50/A511 Controller 2 Stream 1
C3 - A50 East Pedestrian Crossings Stream 1
C3 - A50 East Pedestrian Crossings Stream 2
C2 - M1/J22 A50/A511 Controller 2 Stream 2
C1 - M1/J22 A50/A511 Controller 1 Stream 1

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**98.4%**
M1 J22 / A50 / A511	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**98.4%**
1/1	Circ Sth Ahead Ahead2	U	1:1	N/A	C1:A		1	29	-	-	851	1995	998	85.3%
1/2	Circ Sth Right Ahead	U	1:1	N/A	C1:A		1	29	-	-	926	2093	1047	88.5%
1/3	Circ Sth Right	U	1:1	N/A	C1:A		1	29	-	-	866	1956	978	88.5%
2/2+2/1	M1 N/B Off-slip Ahead Left Left2	U	1:1	N/A	C1:B		1	18	-	-	842	1966:1977	623+626	67.5 : 67.4%
2/3	M1 N/B Off-slip Ahead	U	1:1	N/A	C1:B		1	18	-	-	43	1978	626	6.9%
3/1	Circ W Ahead	U	1:2	N/A	C1:C		1	26	-	-	312	1995	898	34.8%
3/2+3/3	Circ W Right Ahead	U	1:2	N/A	C1:C		1	26	-	-	947	2132:1995	906+71	96.9 : 96.9%
4/2+4/1	A511 E/B Ahead Left	U	1:2	N/A	C1:D		1	22	-	-	1092	2120:1966	805+305	98.4 : 98.4%
4/3	A511 E/B Ahead	U	1:2	N/A	C1:D		1	22	-	-	740	1983	760	97.3%
5/1	Circ Nth Ahead	U	2:1	N/A	C2:A		1	23	-	-	795	2034	856	92.8%
5/2	Circ Nth Right Ahead	U	2:1	N/A	C2:A		1	23	-	-	809	2034	856	94.5%
6/2+6/1	M1 S/B Off Slip Ahead Left	U	2:1	N/A	C2:B		1	22	-	-	1194	2027:2027	818+573	85.8 : 85.8%
6/3	M1 S/B Off Slip Ahead	U	2:1	N/A	C2:B		1	22	-	-	539	2027	818	65.9%
7/1	Circ E Ahead	U	2:2	N/A	C2:C		1	14	-	-	350	2065	543	64.4%
7/2+7/3	Circ E Right Ahead	U	2:2	N/A	C2:C		1	14	-	-	795	2182:2025	555+274	95.8 : 95.8%
8/1+8/2	A50 W/B Ahead Left	U	2:2	N/A	C2:D		1	31	-	-	1349	1953:2090	975+946	70.2 : 70.2%

8/3	A50 W/B Ahead	U	2:2	N/A	C2:D		1	31	-	-	865	1953	1096	78.9%
9/1		U	N/A	N/A	-		-	-	-	-	1163	Inf	Inf	0.0%
9/2		U	N/A	N/A	-		-	-	-	-	1122	Inf	Inf	0.0%
10/1	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	612	Inf	Inf	0.0%
10/2	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	875	Inf	Inf	0.0%
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	1287	1980	1824	70.6%
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	905	1980	1824	49.6%
12/1	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	461	Inf	Inf	0.0%
12/2	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	255	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	-	149	Inf	Inf	0.0%
14/1	Cliffe Lane Left Left2	O	N/A	N/A	-		-	-	-	-	165	2005	293	56.2%
15/1		U	N/A	N/A	-		-	-	-	-	1287	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	905	Inf	Inf	0.0%
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	1349	1980	1824	74.0%
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	865	1980	1824	47.4%

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	**-**	**-**	**72**	**93**	**0**	**51.4**	**34.2**	**0.0**	**85.6**	**-**	**-**	**-**	**-**	
M1 J22 / A50 / A511	**-**	**-**	**72**	**93**	**0**	**51.4**	**34.2**	**0.0**	**85.6**	**-**	**-**	**-**	**-**	
1/1	851	851	-	-	-	3.1	0.0	-	3.1	13.1	12.3	0.0	12.3	
1/2	926	926	-	-	-	3.5	0.0	-	3.5	13.5	13.6	0.0	13.6	
1/3	866	866	-	-	-	3.2	0.0	-	3.2	13.5	12.7	0.0	12.7	
2/2+2/1	842	842	-	-	-	4.2	1.0	-	5.2	22.2	6.1	1.0	7.1	
2/3	43	43	-	-	-	0.2	0.0	-	0.2	17.4	0.5	0.0	0.5	
3/1	312	312	-	-	-	0.4	0.0	-	0.4	5.1	1.9	0.0	1.9	
3/2+3/3	947	947	-	-	-	1.1	0.0	-	1.1	4.2	1.7	0.0	1.7	
4/2+4/1	1092	1092	-	-	-	5.1	12.6	-	17.7	58.5	13.0	12.6	25.6	
4/3	740	740	-	-	-	3.7	9.5	-	13.2	64.3	12.1	9.5	21.6	
5/1	795	795	-	-	-	3.5	0.0	-	3.5	15.7	11.9	0.0	11.9	
5/2	809	809	-	-	-	3.6	0.0	-	3.6	15.9	12.1	0.0	12.1	
6/2+6/1	1194	1194	-	-	-	4.9	2.9	-	7.8	23.5	10.1	2.9	13.1	
6/3	539	539	-	-	-	2.1	1.0	-	3.0	20.2	6.9	1.0	7.8	
7/1	350	350	-	-	-	2.1	0.0	-	2.1	21.5	5.5	0.0	5.5	
7/2+7/3	795	795	-	-	-	2.7	0.0	-	2.7	12.2	7.5	0.0	7.5	
8/1+8/2	1349	1349	-	-	-	3.1	1.2	-	4.3	11.4	7.2	1.2	8.4	
8/3	865	865	-	-	-	2.4	1.8	-	4.2	17.5	10.6	1.8	12.4	
9/1	1163	1163	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	1122	1122	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	612	612	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	875	875	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	1287	1287	-	-	-	0.7	1.2	-	1.9	5.4	18.2	1.2	19.4	

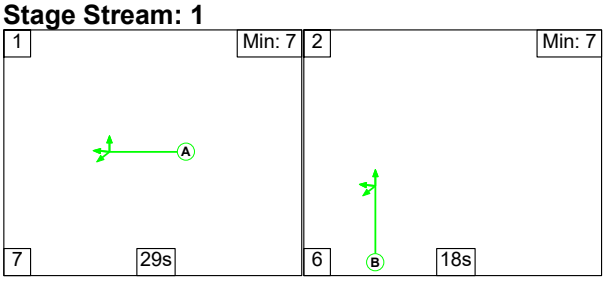
11/2	905	905	-	-	-	0.3	0.5	-	0.8	3.3	8.3	0.5	8.8
12/1	461	461	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	255	255	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	149	149	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1	165	165	72	93	0	0.4	0.6	-	1.1	23.5	1.6	0.6	2.2
15/1	1287	1287	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	905	905	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	1349	1349	-	-	-	0.8	1.4	-	2.2	6.0	21.0	1.4	22.4
16/2	865	865	-	-	-	0.3	0.5	-	0.8	3.1	7.4	0.5	7.9

C1 - M1/J22 A50/A511 Controller 1	Stream: 1 PRC for Signalled Lanes (%):	1.6	Total Delay for Signalled Lanes (pcuHr):	15.20	Cycle Time (s):	60
C1 - M1/J22 A50/A511 Controller 1	Stream: 2 PRC for Signalled Lanes (%):	-9.3	Total Delay for Signalled Lanes (pcuHr):	32.50	Cycle Time (s):	60
C2 - M1/J22 A50/A511 Controller 2	Stream: 1 PRC for Signalled Lanes (%):	-5.0	Total Delay for Signalled Lanes (pcuHr):	17.85	Cycle Time (s):	57
C2 - M1/J22 A50/A511 Controller 2	Stream: 2 PRC for Signalled Lanes (%):	-6.5	Total Delay for Signalled Lanes (pcuHr):	13.24	Cycle Time (s):	57
C3 - A50 East Pedestrian Crossings	Stream: 1 PRC for Signalled Lanes (%):	27.5	Total Delay for Signalled Lanes (pcuHr):	2.74	Cycle Time (s):	228
C3 - A50 East Pedestrian Crossings	Stream: 2 PRC for Signalled Lanes (%):	21.7	Total Delay for Signalled Lanes (pcuHr):	3.00	Cycle Time (s):	228
	PRC Over All Lanes (%):	-9.3	Total Delay Over All Lanes(pcuHr):	85.61		

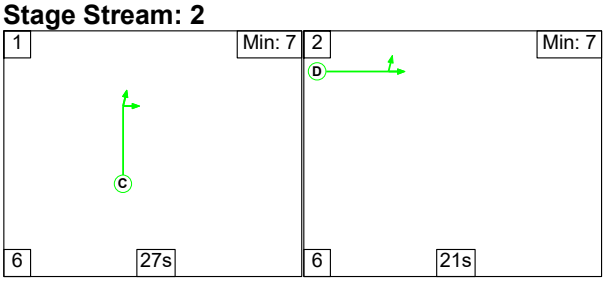
Scenario 8: '2028 Future Base + Proposed Development Sensitivity PM Peak' (FG8: '2028 Future Base + Proposed Development Sensitivity PM Peak', Plan 1: 'Network Control Plan 1')
Controller :C1 - M1/J22 A50/A511 Controller 1

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	29	18
Change Point	0	36

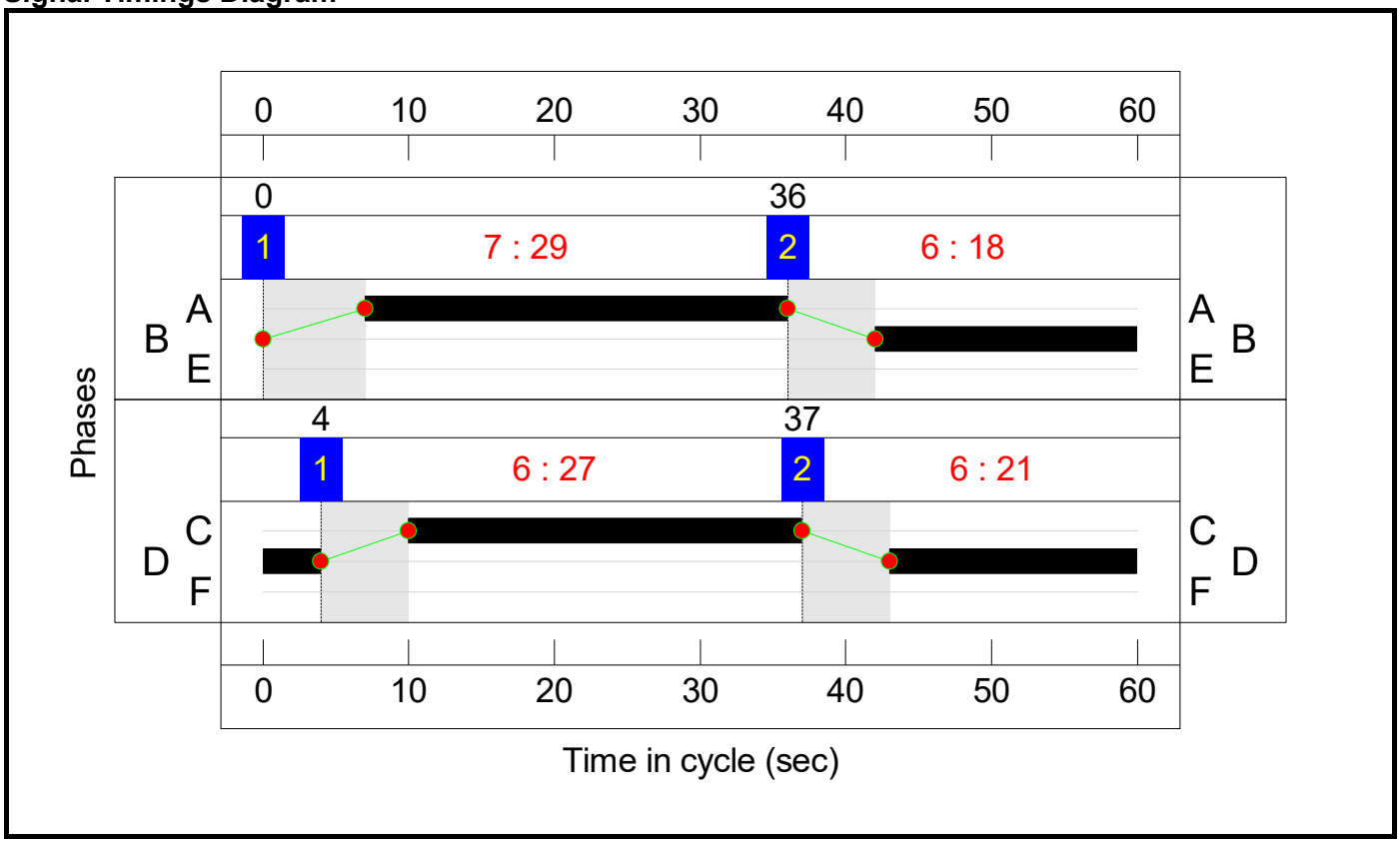
Stage Stream: 2

Stage	1	2
Duration	27	21
Change Point	4	37

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Sth Right Ahead Ahead2	Traffic	1	29	7	36
B	M1 N/B Off-slip Ahead Left Left2	Traffic	1	18	42	0
C	Circ W Right Ahead	Traffic	2	27	10	37
D	A511 E/B Ahead Left	Traffic	2	21	43	4
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

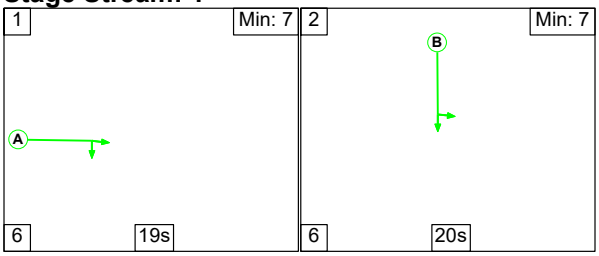
Signal Timings Diagram



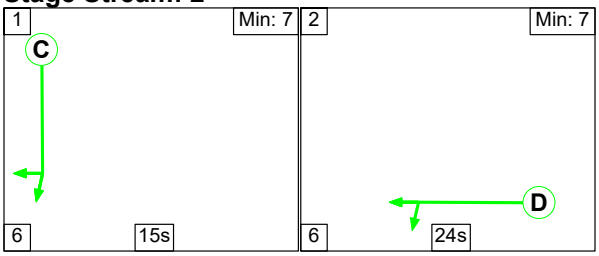
Controller :C2 - M1/J22 A50/A511 Controller 2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	19	20
Change Point	4	29

Detailed Input Data And Results

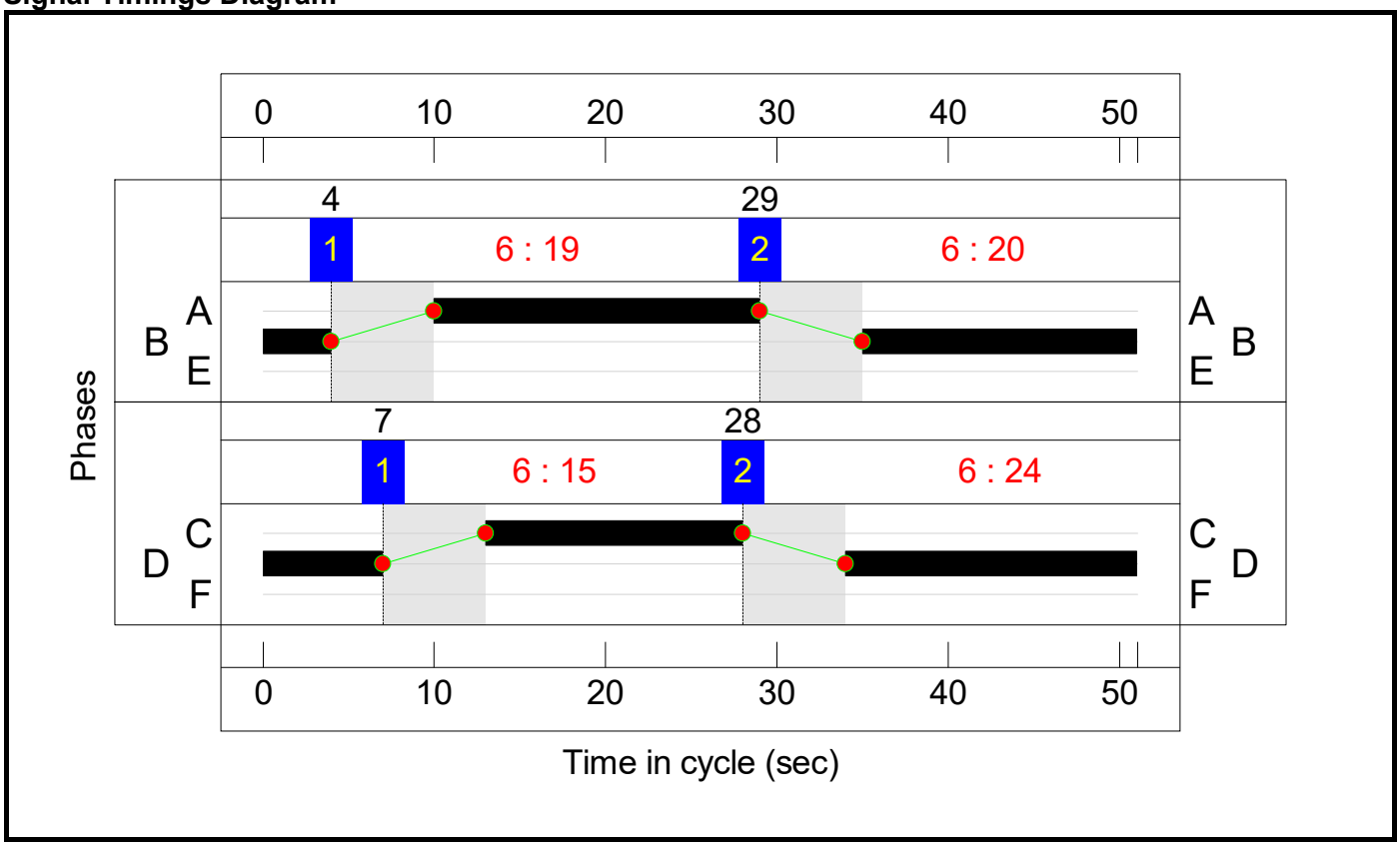
Stage Stream: 2

Stage	1	2
Duration	15	24
Change Point	7	28

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Nth Right Ahead	Traffic	1	19	10	29
B	M1 S/B Off Slip Ahead Left	Traffic	1	20	35	4
C	Circ E Right Ahead	Traffic	2	15	13	28
D	A50 W/B Ahead Left	Traffic	2	24	34	7
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

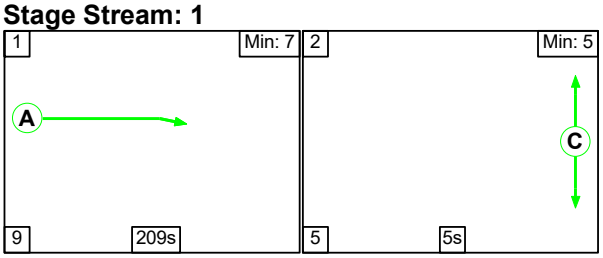
Signal Timings Diagram



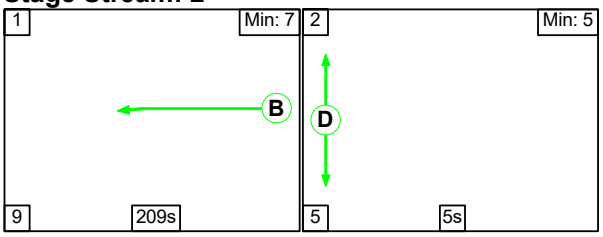
Controller :C3 - A50 East Pedestrian Crossings

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	209	5
Change Point	0	218

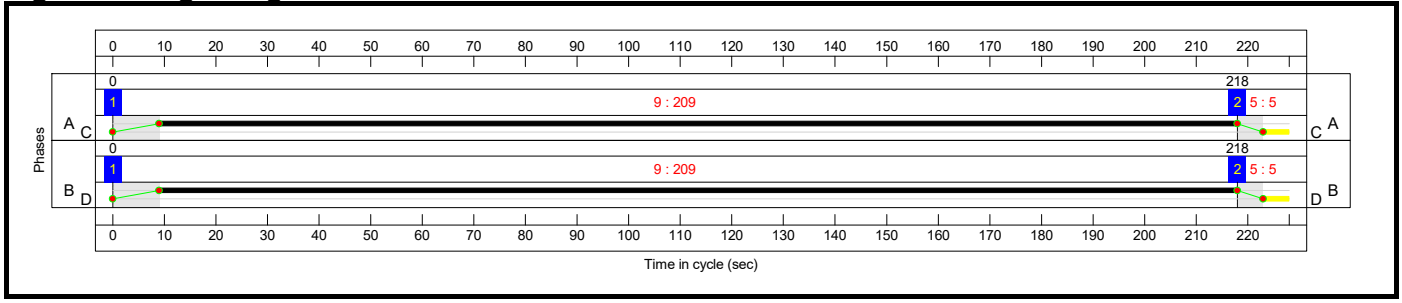
Stage Stream: 2

Stage	1	2
Duration	209	5
Change Point	0	218

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	A50 EB Exit Pedestrian Crossing Ahead	Traffic	1	209	9	218
B	A50 WB Entry Pedestrian Crossing Ahead	Traffic	2	209	9	218
C	Pedestrians across	Pedestrian	1	5	223	0
D	Pedestrians across	Pedestrian	2	5	223	0

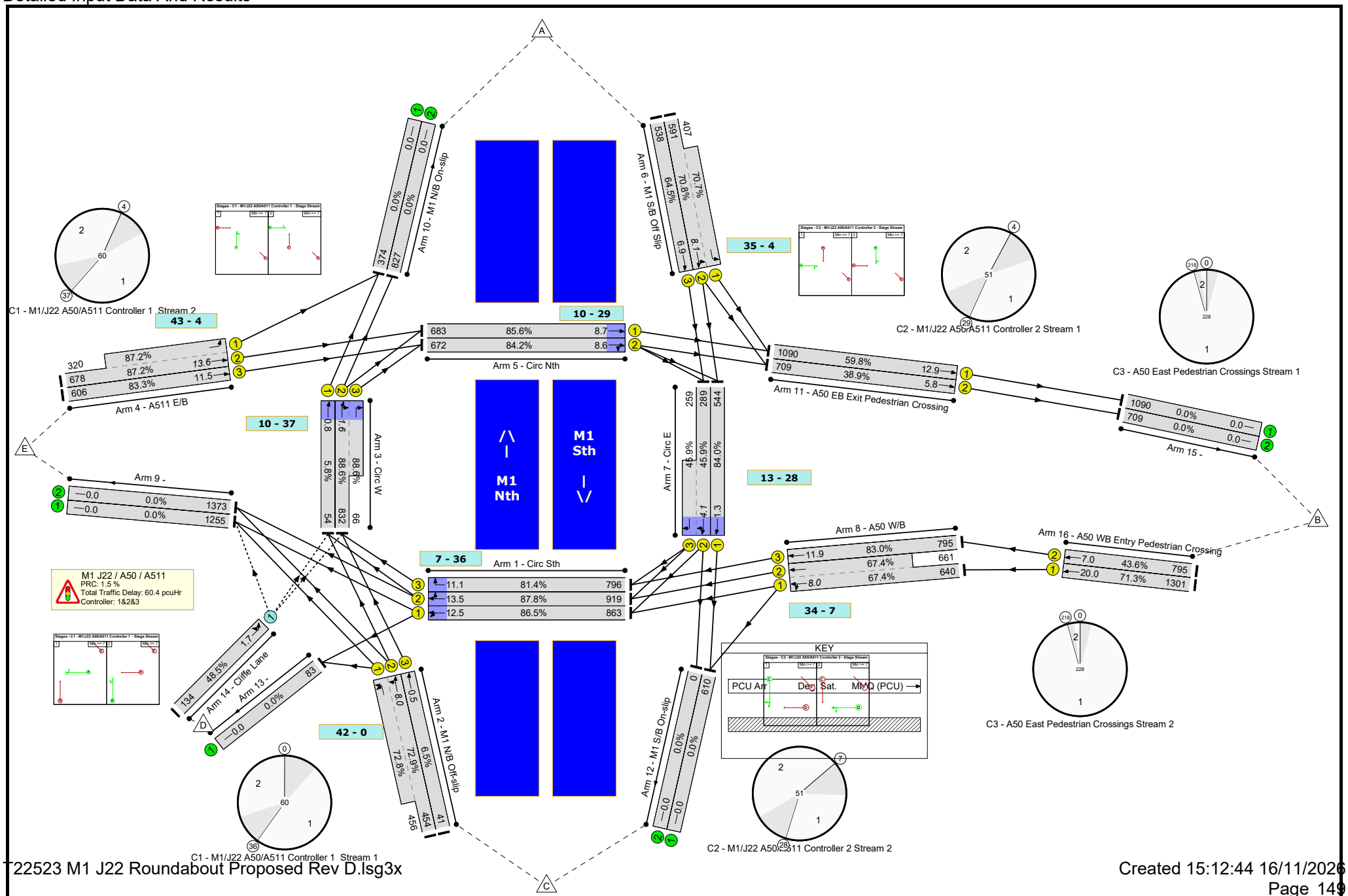
Signal Timings Diagram



Lane Green Times

Junction: M1 J22 / A50 / A511					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Circ Sth Ahead Ahead2	U	A	7	36
1/2	Circ Sth Right Ahead	U	A	7	36
1/3	Circ Sth Right	U	A	7	36
2/1	M1 N/B Off-slip Left Left2	U	B	42	0
2/2	M1 N/B Off-slip Ahead Left	U	B	42	0
2/3	M1 N/B Off-slip Ahead	U	B	42	0
3/1	Circ W Ahead	U	C	10	37
3/2	Circ W Right Ahead	U	C	10	37
3/3	Circ W Right	U	C	10	37
4/1	A511 E/B Left	U	D	43	4
4/2	A511 E/B Ahead	U	D	43	4
4/3	A511 E/B Ahead	U	D	43	4
5/1	Circ Nth Ahead	U	A	10	29
5/2	Circ Nth Right Ahead	U	A	10	29
6/1	M1 S/B Off Slip Left	U	B	35	4
6/2	M1 S/B Off Slip Ahead Left	U	B	35	4
6/3	M1 S/B Off Slip Ahead	U	B	35	4
7/1	Circ E Ahead	U	C	13	28
7/2	Circ E Right Ahead	U	C	13	28
7/3	Circ E Right	U	C	13	28
8/1	A50 W/B Ahead Left	U	D	34	7
8/2	A50 W/B Ahead	U	D	34	7
8/3	A50 W/B Ahead	U	D	34	7
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	A	9	218
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	A	9	218
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	B	9	218
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	B	9	218

Network Layout Diagram



A
B
C
D
E
Arm 10 - M1 N/B On-slip
Arm 6 - M1 S/B Off Slip
35 - 4
43 - 4
10 - 29
Arm 5 - Circ Nth
Arm 4 - A511 E/B
Arm 11 - A50 EB Exit Pedestrian Crossing
Arm 15 -
10 - 37
Arm 3 - Circ W
Arm 7 - Circ E
13 - 28
Arm 9 -
M1 Nth
M1 Sth
7 - 36
Arm 1 - Circ Sth
Arm 8 - A50 W/B
Arm 16 - A50 WB Entry Pedestrian Crossing
34 - 7
M1 J22 / A50 / A511
PRC: 1.5 %
Total Traffic Delay: 60.4 pcuHr
Controller: 1&2&3
Arm 14 - Cliffe Lane
Arm 13 -
42 - 0
Arm 2 - M1 N/B Off-slip
Arm 12 - M1 S/B On-slip
KEY
PCU Arr
Dep. Sat.
MMQ (PCU)
C1 - M1/J22 A50/A511 Controller 1 Stream 2
C2 - M1/J22 A50/A511 Controller 2 Stream 1
C3 - A50 East Pedestrian Crossings Stream 1
C3 - A50 East Pedestrian Crossings Stream 2
C1 - M1/J22 A50/A511 Controller 1 Stream 1
C2 - M1/J22 A50/A511 Controller 2 Stream 2

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**88.6%**
M1 J22 / A50 / A511	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**88.6%**
1/1	Circ Sth Ahead Ahead2	U	1:1	N/A	C1:A		1	29	-	-	863	1995	998	86.5%
1/2	Circ Sth Right Ahead	U	1:1	N/A	C1:A		1	29	-	-	919	2093	1047	87.8%
1/3	Circ Sth Right	U	1:1	N/A	C1:A		1	29	-	-	796	1956	978	81.4%
2/2+2/1	M1 N/B Off-slip Ahead Left Left2	U	1:1	N/A	C1:B		1	18	-	-	910	1966:1977	623+626	72.9 : 72.8%
2/3	M1 N/B Off-slip Ahead	U	1:1	N/A	C1:B		1	18	-	-	41	1978	626	6.5%
3/1	Circ W Ahead	U	1:2	N/A	C1:C		1	27	-	-	54	1995	931	5.8%
3/2+3/3	Circ W Right Ahead	U	1:2	N/A	C1:C		1	27	-	-	898	2132:1995	939+74	88.6 : 88.6%
4/2+4/1	A511 E/B Ahead Left	U	1:2	N/A	C1:D		1	21	-	-	998	2120:1966	777+367	87.2 : 87.2%
4/3	A511 E/B Ahead	U	1:2	N/A	C1:D		1	21	-	-	606	1983	727	83.3%
5/1	Circ Nth Ahead	U	2:1	N/A	C2:A		1	19	-	-	683	2034	798	85.6%
5/2	Circ Nth Right Ahead	U	2:1	N/A	C2:A		1	19	-	-	672	2034	798	84.2%
6/2+6/1	M1 S/B Off Slip Ahead Left	U	2:1	N/A	C2:B		1	20	-	-	998	2027:2027	835+575	70.8 : 70.7%
6/3	M1 S/B Off Slip Ahead	U	2:1	N/A	C2:B		1	20	-	-	538	2027	835	64.5%
7/1	Circ E Ahead	U	2:2	N/A	C2:C		1	15	-	-	544	2065	648	84.0%
7/2+7/3	Circ E Right Ahead	U	2:2	N/A	C2:C		1	15	-	-	548	2162:2025	630+564	45.9 : 45.9%
8/1+8/2	A50 W/B Ahead Left	U	2:2	N/A	C2:D		1	24	-	-	1301	1953:2090	949+980	67.4 : 67.4%

8/3	A50 W/B Ahead	U	2:2	N/A	C2:D		1	24	-	-	795	1953	957	83.0%
9/1		U	N/A	N/A	-		-	-	-	-	1255	Inf	Inf	0.0%
9/2		U	N/A	N/A	-		-	-	-	-	1373	Inf	Inf	0.0%
10/1	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	374	Inf	Inf	0.0%
10/2	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	827	Inf	Inf	0.0%
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	1090	1980	1824	59.8%
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	709	1980	1824	38.9%
12/1	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	610	Inf	Inf	0.0%
12/2	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	0	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	-	83	Inf	Inf	0.0%
14/1	Cliffe Lane Left Left2	O	N/A	N/A	-		-	-	-	-	134	2005	276	48.5%
15/1		U	N/A	N/A	-		-	-	-	-	1090	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	709	Inf	Inf	0.0%
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	1301	1980	1824	71.3%
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	795	1980	1824	43.6%

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	**-**	**-**	**67**	**67**	**0**	**44.7**	**15.7**	**0.0**	**60.4**	**-**	**-**	**-**	**-**	
M1 J22 / A50 / A511	**-**	**-**	**67**	**67**	**0**	**44.7**	**15.7**	**0.0**	**60.4**	**-**	**-**	**-**	**-**	
1/1	863	863	-	-	-	3.2	0.0	-	3.2	13.2	12.5	0.0	12.5	
1/2	919	919	-	-	-	3.4	0.0	-	3.4	13.4	13.5	0.0	13.5	
1/3	796	796	-	-	-	2.8	0.0	-	2.8	12.6	11.1	0.0	11.1	
2/2+2/1	910	910	-	-	-	4.6	1.3	-	5.9	23.5	6.7	1.3	8.0	
2/3	41	41	-	-	-	0.2	0.0	-	0.2	17.4	0.5	0.0	0.5	
3/1	54	54	-	-	-	0.2	0.0	-	0.2	13.0	0.8	0.0	0.8	
3/2+3/3	898	898	-	-	-	1.0	0.0	-	1.0	3.9	1.6	0.0	1.6	
4/2+4/1	998	998	-	-	-	4.6	3.3	-	7.9	28.4	10.4	3.3	13.6	
4/3	606	606	-	-	-	2.9	2.4	-	5.3	31.6	9.1	2.4	11.5	
5/1	683	683	-	-	-	2.7	0.0	-	2.7	14.2	8.7	0.0	8.7	
5/2	672	672	-	-	-	2.6	0.0	-	2.6	14.1	8.6	0.0	8.6	
6/2+6/1	998	998	-	-	-	3.3	1.2	-	4.5	16.2	6.9	1.2	8.1	
6/3	538	538	-	-	-	1.8	0.9	-	2.7	18.0	6.0	0.9	6.9	
7/1	544	544	-	-	-	0.6	0.0	-	0.6	3.8	1.3	0.0	1.3	
7/2+7/3	548	548	-	-	-	2.8	0.0	-	2.8	18.6	4.1	0.0	4.1	
8/1+8/2	1301	1301	-	-	-	3.5	1.0	-	4.6	12.6	7.0	1.0	8.0	
8/3	795	795	-	-	-	2.5	2.4	-	4.8	22.0	9.5	2.4	11.9	
9/1	1255	1255	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	1373	1373	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	374	374	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	827	827	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	1090	1090	-	-	-	0.5	0.7	-	1.2	4.0	12.1	0.7	12.9	

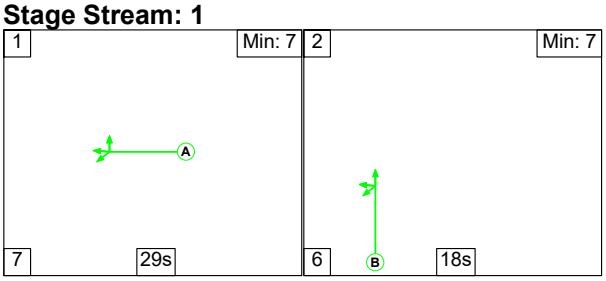
11/2	709	709	-	-	-	0.2	0.3	-	0.5	2.7	5.5	0.3	5.8
12/1	610	610	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	83	83	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1	134	134	67	67	0	0.3	0.5	-	0.8	21.9	1.2	0.5	1.7
15/1	1090	1090	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	709	709	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	1301	1301	-	-	-	0.7	1.2	-	2.0	5.5	18.8	1.2	20.0
16/2	795	795	-	-	-	0.3	0.4	-	0.6	2.9	6.6	0.4	7.0

C1 - M1/J22 A50/A511 Controller 1	Stream: 1 PRC for Signalled Lanes (%):	2.5	Total Delay for Signalled Lanes (pcuHr):	15.52	Cycle Time (s): 60
C1 - M1/J22 A50/A511 Controller 1	Stream: 2 PRC for Signalled Lanes (%):	1.5	Total Delay for Signalled Lanes (pcuHr):	14.37	Cycle Time (s): 60
C2 - M1/J22 A50/A511 Controller 2	Stream: 1 PRC for Signalled Lanes (%):	5.1	Total Delay for Signalled Lanes (pcuHr):	12.52	Cycle Time (s): 51
C2 - M1/J22 A50/A511 Controller 2	Stream: 2 PRC for Signalled Lanes (%):	7.2	Total Delay for Signalled Lanes (pcuHr):	12.81	Cycle Time (s): 51
C3 - A50 East Pedestrian Crossings	Stream: 1 PRC for Signalled Lanes (%):	50.6	Total Delay for Signalled Lanes (pcuHr):	1.76	Cycle Time (s): 228
C3 - A50 East Pedestrian Crossings	Stream: 2 PRC for Signalled Lanes (%):	26.2	Total Delay for Signalled Lanes (pcuHr):	2.64	Cycle Time (s): 228
	PRC Over All Lanes (%):	1.5	Total Delay Over All Lanes(pcuHr):	60.43	

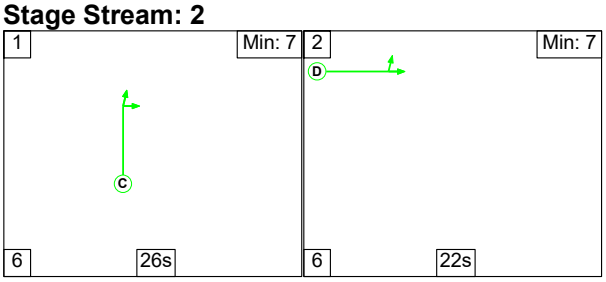
Scenario 9: '2030 Future Base + Proposed Development Sensitivity AM Peak' (FG9: '2030 Future Base + Proposed Development Sensitivity AM Peak', Plan 1: 'Network Control Plan 1')
Controller :C1 - M1/J22 A50/A511 Controller 1

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	29	18
Change Point	0	36

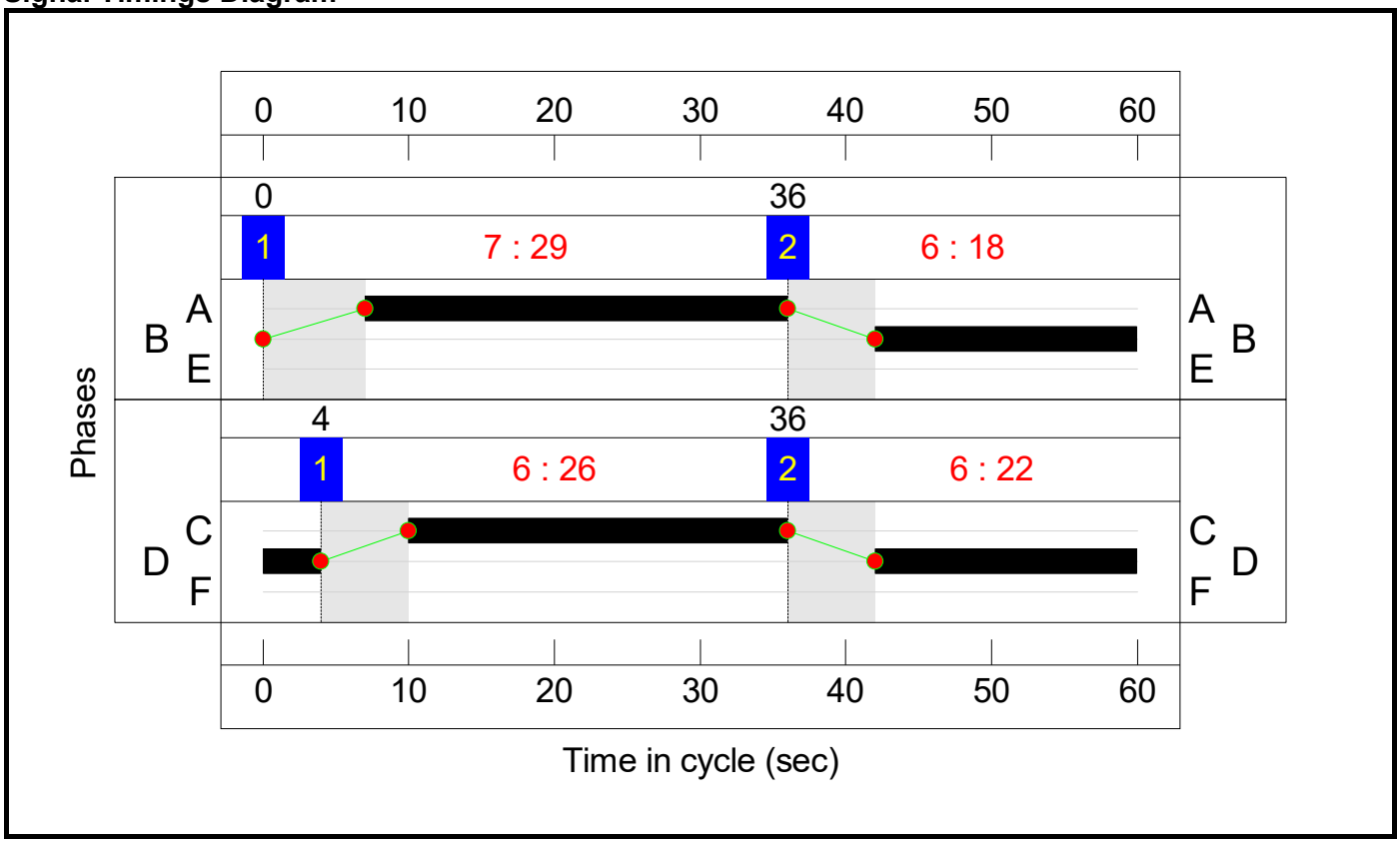
Stage Stream: 2

Stage	1	2
Duration	26	22
Change Point	4	36

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Sth Right Ahead Ahead2	Traffic	1	29	7	36
B	M1 N/B Off-slip Ahead Left Left2	Traffic	1	18	42	0
C	Circ W Right Ahead	Traffic	2	26	10	36
D	A511 E/B Ahead Left	Traffic	2	22	42	4
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

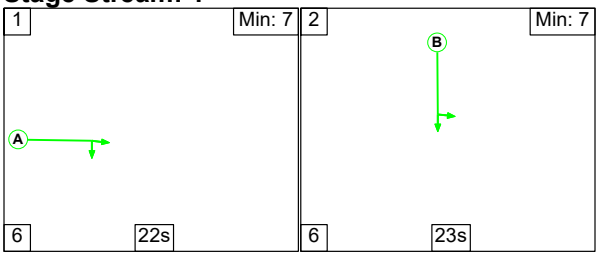
Signal Timings Diagram



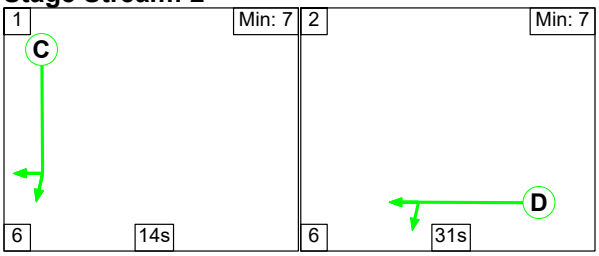
Controller :C2 - M1/J22 A50/A511 Controller 2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	22	23
Change Point	9	37

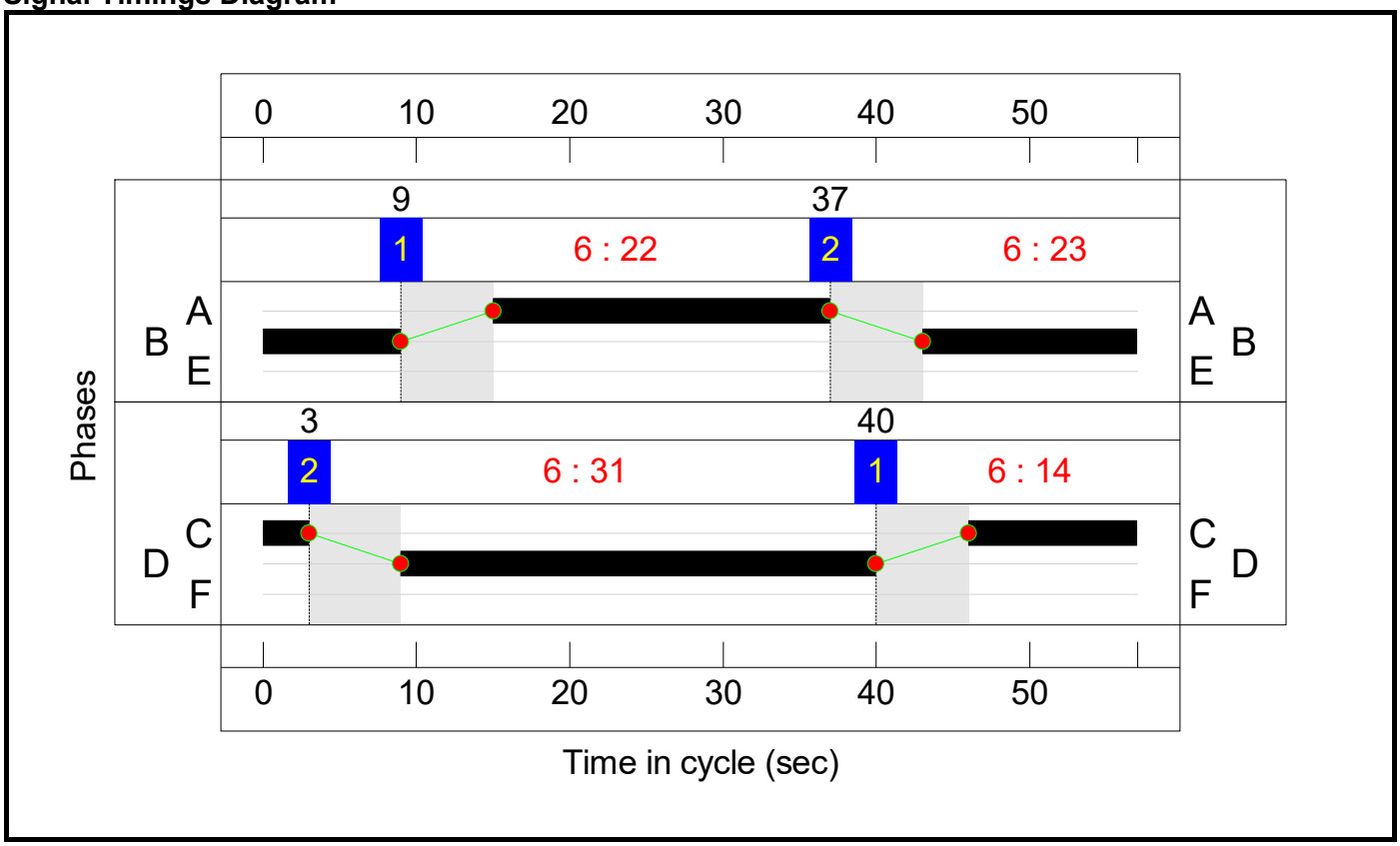
Stage Stream: 2

Stage	1	2
Duration	14	31
Change Point	40	3

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Nth Right Ahead	Traffic	1	22	15	37
B	M1 S/B Off Slip Ahead Left	Traffic	1	23	43	9
C	Circ E Right Ahead	Traffic	2	14	46	3
D	A50 W/B Ahead Left	Traffic	2	31	9	40
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

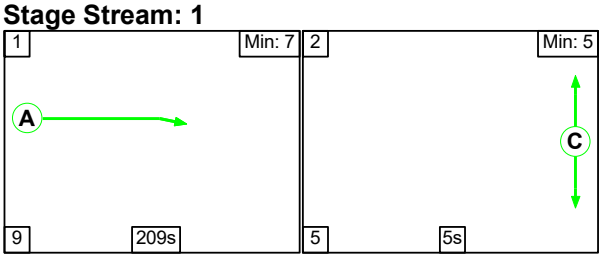
Signal Timings Diagram



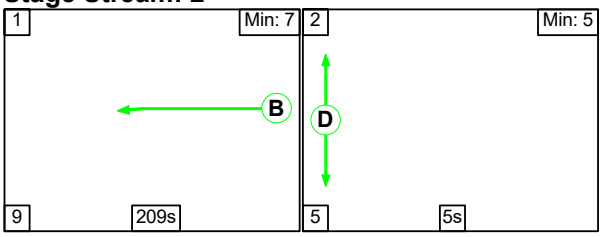
Controller :C3 - A50 East Pedestrian Crossings

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	209	5
Change Point	180	170

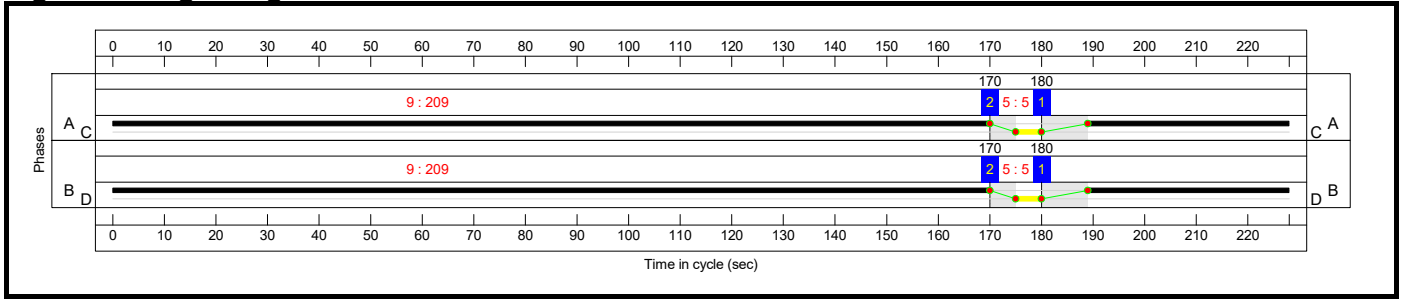
Stage Stream: 2

Stage	1	2
Duration	209	5
Change Point	180	170

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	A50 EB Exit Pedestrian Crossing Ahead	Traffic	1	209	189	170
B	A50 WB Entry Pedestrian Crossing Ahead	Traffic	2	209	189	170
C	Pedestrians across	Pedestrian	1	5	175	180
D	Pedestrians across	Pedestrian	2	5	175	180

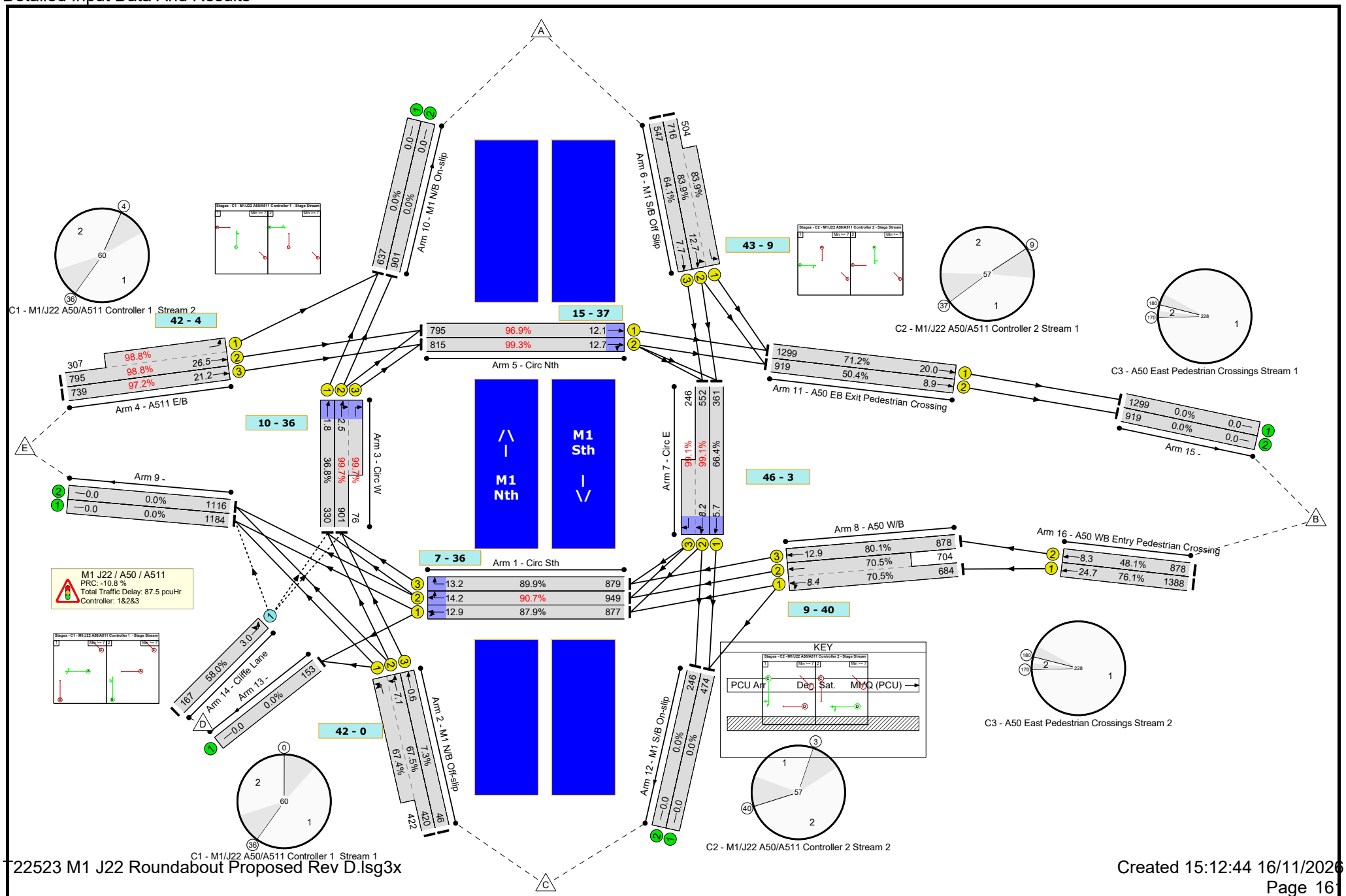
Signal Timings Diagram



Lane Green Times

Junction: M1 J22 / A50 / A511					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Circ Sth Ahead Ahead2	U	A	7	36
1/2	Circ Sth Right Ahead	U	A	7	36
1/3	Circ Sth Right	U	A	7	36
2/1	M1 N/B Off-slip Left Left2	U	B	42	0
2/2	M1 N/B Off-slip Ahead Left	U	B	42	0
2/3	M1 N/B Off-slip Ahead	U	B	42	0
3/1	Circ W Ahead	U	C	10	36
3/2	Circ W Right Ahead	U	C	10	36
3/3	Circ W Right	U	C	10	36
4/1	A511 E/B Left	U	D	42	4
4/2	A511 E/B Ahead	U	D	42	4
4/3	A511 E/B Ahead	U	D	42	4
5/1	Circ Nth Ahead	U	A	15	37
5/2	Circ Nth Right Ahead	U	A	15	37
6/1	M1 S/B Off Slip Left	U	B	43	9
6/2	M1 S/B Off Slip Ahead Left	U	B	43	9
6/3	M1 S/B Off Slip Ahead	U	B	43	9
7/1	Circ E Ahead	U	C	46	3
7/2	Circ E Right Ahead	U	C	46	3
7/3	Circ E Right	U	C	46	3
8/1	A50 W/B Ahead Left	U	D	9	40
8/2	A50 W/B Ahead	U	D	9	40
8/3	A50 W/B Ahead	U	D	9	40
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	A	189	170
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	A	189	170
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	B	189	170
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	B	189	170

Network Layout Diagram


A
B
C
D
E
M1 Nth
M1 Sth
42 - 4
15 - 37
43 - 9
10 - 36
46 - 3
7 - 36
9 - 40
42 - 0
Arm 4 - A511 E/B
Arm 5 - Circ Nth
Arm 6 - M1 S/B Off Slip
Arm 10 - M1 N/B On-slip
Arm 11 - A50 EB Exit Pedestrian Crossing
Arm 15 -
Arm 3 - Circ W
Arm 7 - Circ E
Arm 9 -
Arm 1 - Circ Sth
Arm 8 - A50 W/B
Arm 16 - A50 WB Entry Pedestrian Crossing
Arm 14 - Cliffe Lane
Arm 13 -
Arm 2 - M1 N/B Off-slip
Arm 12 - M1 S/B On-slip
C1 - M1/J22 A50/A511 Controller 1 Stream 2
C2 - M1/J22 A50/A511 Controller 2 Stream 1
C3 - A50 East Pedestrian Crossings Stream 1
C3 - A50 East Pedestrian Crossings Stream 2
C1 - M1/J22 A50/A511 Controller 1 Stream 1
C2 - M1/J22 A50/A511 Controller 2 Stream 2
M1 J22 / A50 / A511
PRC: -10.8 %
Total Traffic Delay: 87.5 pcuHr
Controller: 1&2&3
KEY
PCU Arr
Dep
Sat.
MaxQ (PCU)

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.7%**
M1 J22 / A50 / A511	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.7%**
1/1	Circ Sth Ahead Ahead2	U	1:1	N/A	C1:A		1	29	-	-	877	1995	998	87.9%
1/2	Circ Sth Right Ahead	U	1:1	N/A	C1:A		1	29	-	-	949	2093	1047	90.7%
1/3	Circ Sth Right	U	1:1	N/A	C1:A		1	29	-	-	879	1956	978	89.9%
2/2+2/1	M1 N/B Off-slip Ahead Left Left2	U	1:1	N/A	C1:B		1	18	-	-	842	1966:1977	623+626	67.5 : 67.4%
2/3	M1 N/B Off-slip Ahead	U	1:1	N/A	C1:B		1	18	-	-	46	1978	626	7.3%
3/1	Circ W Ahead	U	1:2	N/A	C1:C		1	26	-	-	330	1995	898	36.8%
3/2+3/3	Circ W Right Ahead	U	1:2	N/A	C1:C		1	26	-	-	977	2132:1995	904+76	99.7 : 99.7%
4/2+4/1	A511 E/B Ahead Left	U	1:2	N/A	C1:D		1	22	-	-	1102	2120:1966	805+311	98.8 : 98.8%
4/3	A511 E/B Ahead	U	1:2	N/A	C1:D		1	22	-	-	739	1983	760	97.2%
5/1	Circ Nth Ahead	U	2:1	N/A	C2:A		1	22	-	-	795	2034	821	96.9%
5/2	Circ Nth Right Ahead	U	2:1	N/A	C2:A		1	22	-	-	815	2034	821	99.3%
6/2+6/1	M1 S/B Off Slip Ahead Left	U	2:1	N/A	C2:B		1	23	-	-	1220	2027:2027	853+601	83.9 : 83.9%
6/3	M1 S/B Off Slip Ahead	U	2:1	N/A	C2:B		1	23	-	-	547	2027	853	64.1%
7/1	Circ E Ahead	U	2:2	N/A	C2:C		1	14	-	-	361	2065	543	66.4%
7/2+7/3	Circ E Right Ahead	U	2:2	N/A	C2:C		1	14	-	-	798	2181:2025	557+248	99.1 : 99.1%
8/1+8/2	A50 W/B Ahead Left	U	2:2	N/A	C2:D		1	31	-	-	1388	1953:2090	971+999	70.5 : 70.5%

8/3	A50 W/B Ahead	U	2:2	N/A	C2:D		1	31	-	-	878	1953	1096	80.1%
9/1		U	N/A	N/A	-		-	-	-	-	1184	Inf	Inf	0.0%
9/2		U	N/A	N/A	-		-	-	-	-	1116	Inf	Inf	0.0%
10/1	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	637	Inf	Inf	0.0%
10/2	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	901	Inf	Inf	0.0%
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	1299	1980	1824	71.2%
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	919	1980	1824	50.4%
12/1	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	474	Inf	Inf	0.0%
12/2	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	246	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	-	153	Inf	Inf	0.0%
14/1	Cliffe Lane Left Left2	O	N/A	N/A	-		-	-	-	-	167	2005	288	58.0%
15/1		U	N/A	N/A	-		-	-	-	-	1299	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	919	Inf	Inf	0.0%
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	1388	1980	1824	76.1%
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	878	1980	1824	48.1%

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	**-**	**-**	**73**	**94**	**0**	**52.6**	**34.9**	**0.0**	**87.5**	**-**	**-**	**-**	**-**	
M1 J22 / A50 / A511	**-**	**-**	**73**	**94**	**0**	**52.6**	**34.9**	**0.0**	**87.5**	**-**	**-**	**-**	**-**	
1/1	877	877	-	-	-	3.3	0.0	-	3.3	13.4	12.9	0.0	12.9	
1/2	949	949	-	-	-	3.6	0.0	-	3.6	13.7	14.2	0.0	14.2	
1/3	879	879	-	-	-	3.3	0.0	-	3.3	13.6	13.2	0.0	13.2	
2/2+2/1	842	842	-	-	-	4.2	1.0	-	5.2	22.2	6.1	1.0	7.1	
2/3	46	46	-	-	-	0.2	0.0	-	0.2	17.5	0.5	0.0	0.6	
3/1	330	330	-	-	-	0.4	0.0	-	0.4	4.4	1.8	0.0	1.8	
3/2+3/3	977	977	-	-	-	1.3	0.0	-	1.3	4.6	2.5	0.0	2.5	
4/2+4/1	1102	1102	-	-	-	5.2	13.5	-	18.7	61.1	13.0	13.5	26.5	
4/3	739	739	-	-	-	3.7	9.3	-	13.0	63.5	11.9	9.3	21.2	
5/1	795	795	-	-	-	3.7	0.0	-	3.7	16.6	12.1	0.0	12.1	
5/2	815	815	-	-	-	3.8	0.0	-	3.8	16.9	12.7	0.0	12.7	
6/2+6/1	1220	1220	-	-	-	4.7	2.5	-	7.3	21.4	10.1	2.5	12.7	
6/3	547	547	-	-	-	2.0	0.9	-	2.9	18.9	6.8	0.9	7.7	
7/1	361	361	-	-	-	2.1	0.0	-	2.1	20.6	5.7	0.0	5.7	
7/2+7/3	798	798	-	-	-	2.7	0.0	-	2.7	12.3	8.2	0.0	8.2	
8/1+8/2	1388	1388	-	-	-	3.2	1.2	-	4.4	11.4	7.2	1.2	8.4	
8/3	878	878	-	-	-	2.4	2.0	-	4.4	18.1	11.0	2.0	12.9	
9/1	1184	1184	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	1116	1116	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	637	637	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	901	901	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	1299	1299	-	-	-	0.7	1.2	-	2.0	5.5	18.8	1.2	20.0	

11/2	919	919	-	-	-	0.3	0.5	-	0.8	3.3	8.4	0.5	8.9
12/1	474	474	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	246	246	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	153	153	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1	167	167	73	94	0	0.5	0.7	-	1.2	25.0	2.3	0.7	3.0
15/1	1299	1299	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	919	919	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	1388	1388	-	-	-	0.9	1.6	-	2.5	6.5	23.1	1.6	24.7
16/2	878	878	-	-	-	0.3	0.5	-	0.8	3.2	7.8	0.5	8.3

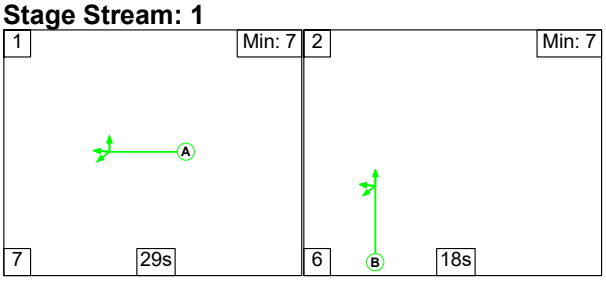
C1 - M1/J22 A50/A511 Controller 1	Stream: 1 PRC for Signalled Lanes (%):	-0.8	Total Delay for Signalled Lanes (pcuHr):	15.62
C1 - M1/J22 A50/A511 Controller 1	Stream: 2 PRC for Signalled Lanes (%):	-10.8	Total Delay for Signalled Lanes (pcuHr):	33.38
C2 - M1/J22 A50/A511 Controller 2	Stream: 1 PRC for Signalled Lanes (%):	-10.3	Total Delay for Signalled Lanes (pcuHr):	17.65
C2 - M1/J22 A50/A511 Controller 2	Stream: 2 PRC for Signalled Lanes (%):	-10.1	Total Delay for Signalled Lanes (pcuHr):	13.61
C3 - A50 East Pedestrian Crossings	Stream: 1 PRC for Signalled Lanes (%):	26.4	Total Delay for Signalled Lanes (pcuHr):	2.82
C3 - A50 East Pedestrian Crossings	Stream: 2 PRC for Signalled Lanes (%):	18.3	Total Delay for Signalled Lanes (pcuHr):	3.27
	PRC Over All Lanes (%):	-10.8	Total Delay Over All Lanes(pcuHr):	87.52

Cycle Time (s):	60
Cycle Time (s):	60
Cycle Time (s):	57
Cycle Time (s):	57
Cycle Time (s):	228
Cycle Time (s):	228

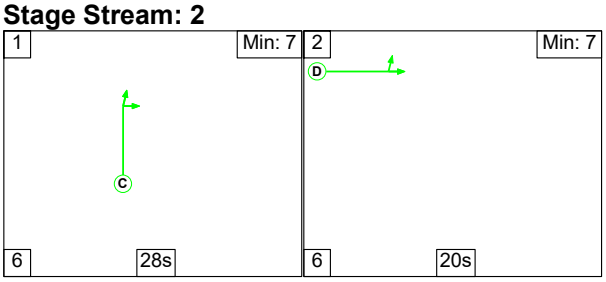
Scenario 10: '2030 Future Base + Proposed Development Sensitivity PM Peak' (FG10: '2030 Future Base + Proposed Development Sensitivity PM Peak', Plan 1: 'Network Control Plan 1')
Controller :C1 - M1/J22 A50/A511 Controller 1

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	29	18
Change Point	0	36

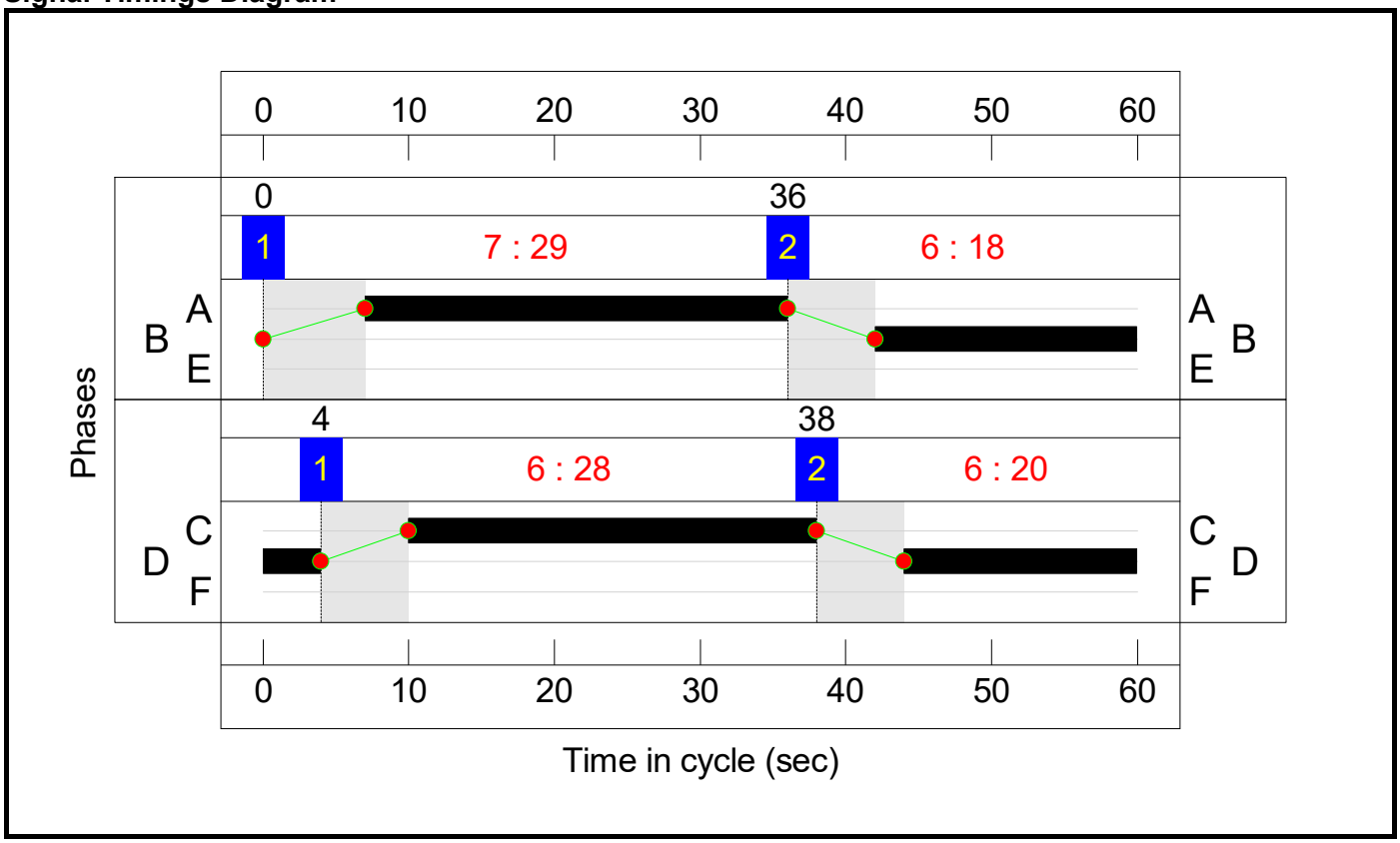
Stage Stream: 2

Stage	1	2
Duration	28	20
Change Point	4	38

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Sth Right Ahead Ahead2	Traffic	1	29	7	36
B	M1 N/B Off-slip Ahead Left Left2	Traffic	1	18	42	0
C	Circ W Right Ahead	Traffic	2	28	10	38
D	A511 E/B Ahead Left	Traffic	2	20	44	4
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

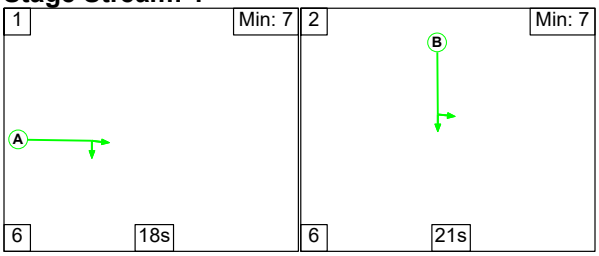
Signal Timings Diagram



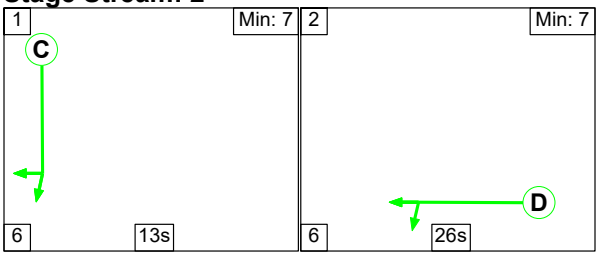
Controller :C2 - M1/J22 A50/A511 Controller 2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	18	21
Change Point	3	27

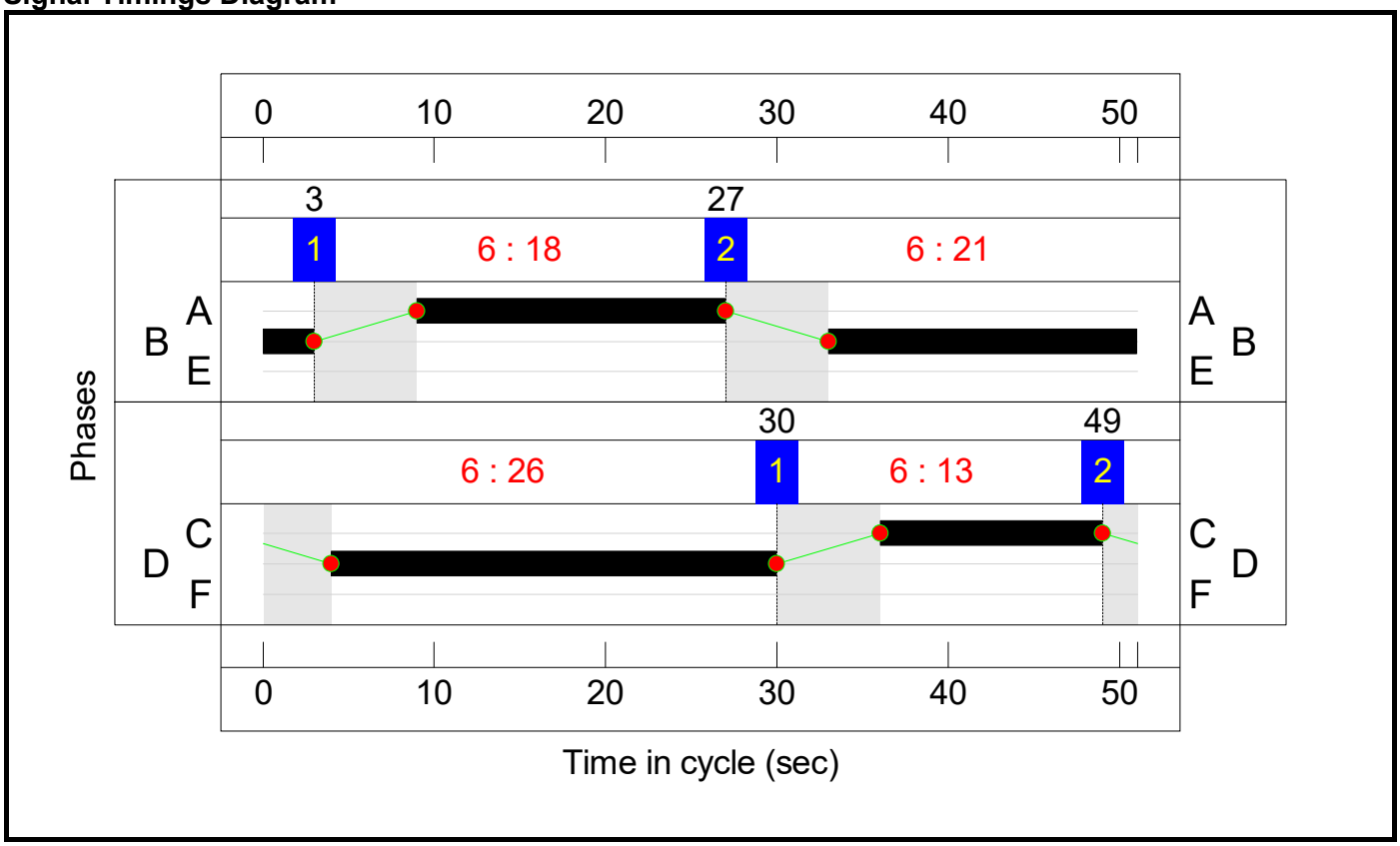
Stage Stream: 2

Stage	1	2
Duration	13	26
Change Point	30	49

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Nth Right Ahead	Traffic	1	18	9	27
B	M1 S/B Off Slip Ahead Left	Traffic	1	21	33	3
C	Circ E Right Ahead	Traffic	2	13	36	49
D	A50 W/B Ahead Left	Traffic	2	26	4	30
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

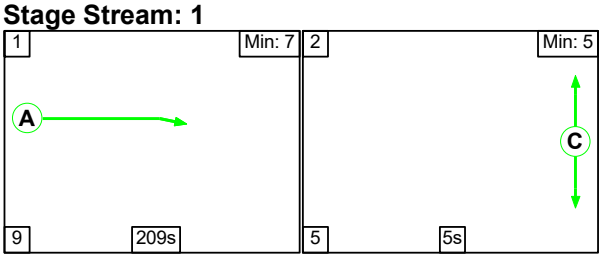
Signal Timings Diagram



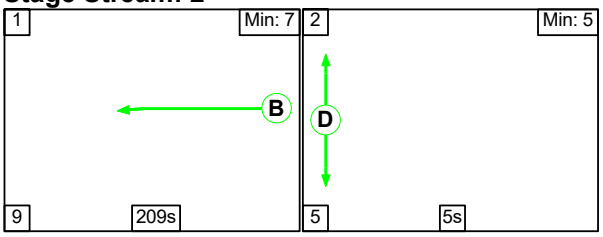
Controller :C3 - A50 East Pedestrian Crossings

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	209	5
Change Point	0	218

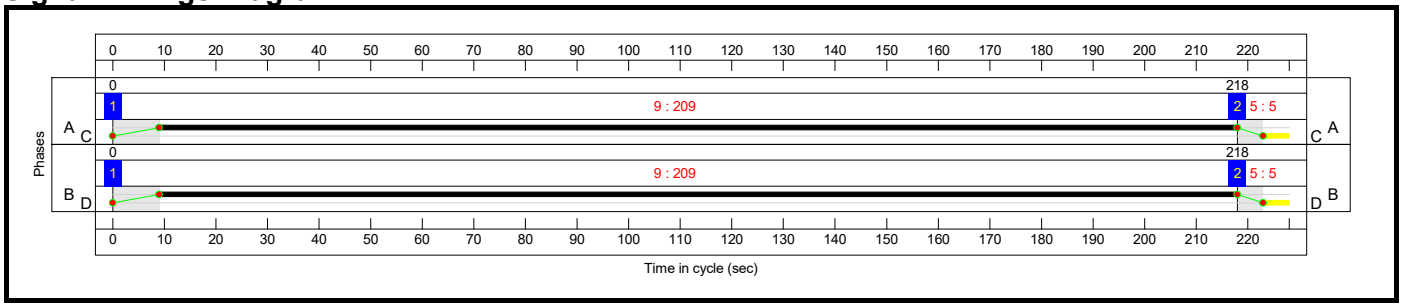
Stage Stream: 2

Stage	1	2
Duration	209	5
Change Point	0	218

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	A50 EB Exit Pedestrian Crossing Ahead	Traffic	1	209	9	218
B	A50 WB Entry Pedestrian Crossing Ahead	Traffic	2	209	9	218
C	Pedestrians across	Pedestrian	1	5	223	0
D	Pedestrians across	Pedestrian	2	5	223	0

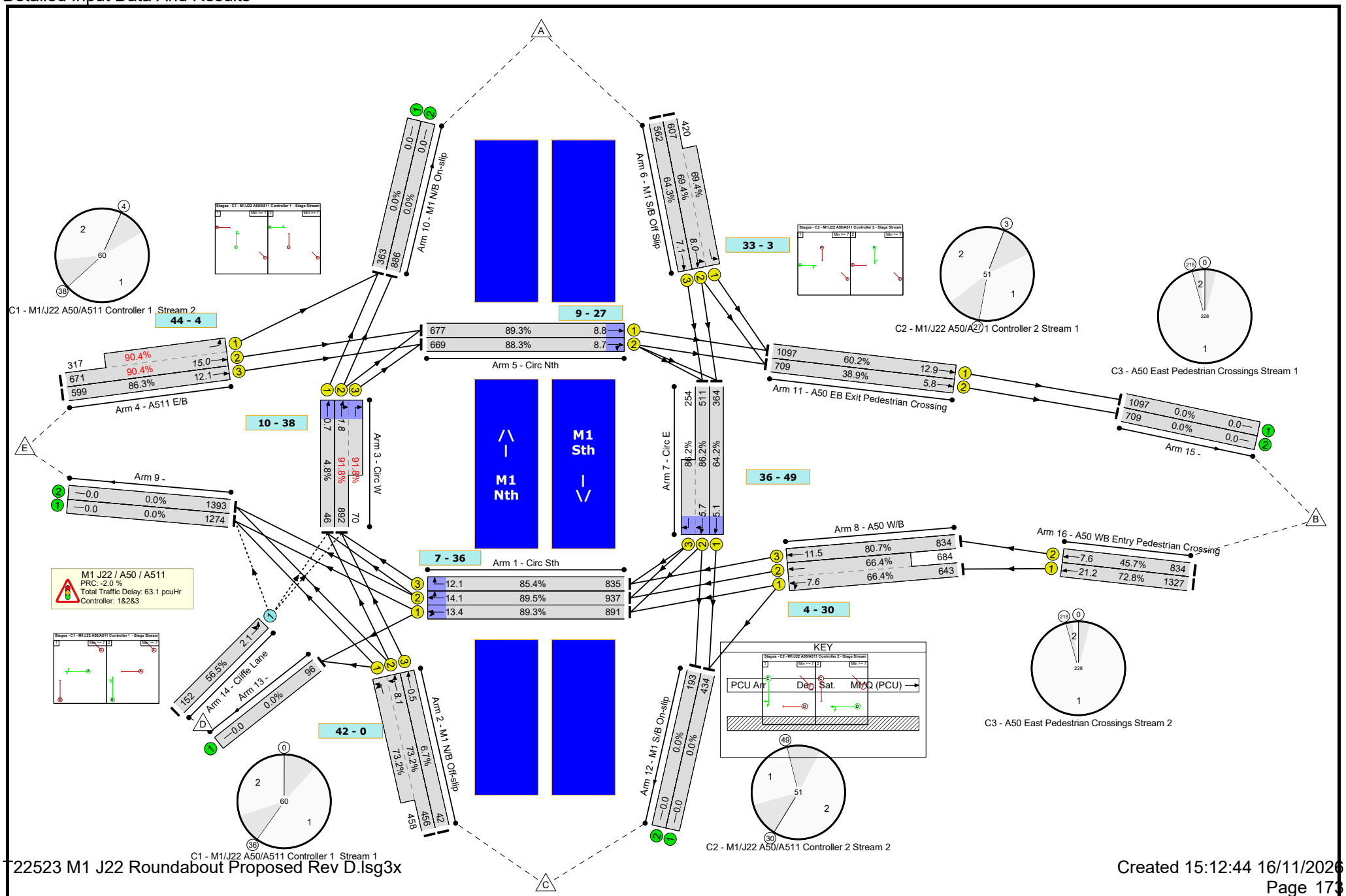
Signal Timings Diagram



Lane Green Times

Junction: M1 J22 / A50 / A511					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Circ Sth Ahead Ahead2	U	A	7	36
1/2	Circ Sth Right Ahead	U	A	7	36
1/3	Circ Sth Right	U	A	7	36
2/1	M1 N/B Off-slip Left Left2	U	B	42	0
2/2	M1 N/B Off-slip Ahead Left	U	B	42	0
2/3	M1 N/B Off-slip Ahead	U	B	42	0
3/1	Circ W Ahead	U	C	10	38
3/2	Circ W Right Ahead	U	C	10	38
3/3	Circ W Right	U	C	10	38
4/1	A511 E/B Left	U	D	44	4
4/2	A511 E/B Ahead	U	D	44	4
4/3	A511 E/B Ahead	U	D	44	4
5/1	Circ Nth Ahead	U	A	9	27
5/2	Circ Nth Right Ahead	U	A	9	27
6/1	M1 S/B Off Slip Left	U	B	33	3
6/2	M1 S/B Off Slip Ahead Left	U	B	33	3
6/3	M1 S/B Off Slip Ahead	U	B	33	3
7/1	Circ E Ahead	U	C	36	49
7/2	Circ E Right Ahead	U	C	36	49
7/3	Circ E Right	U	C	36	49
8/1	A50 W/B Ahead Left	U	D	4	30
8/2	A50 W/B Ahead	U	D	4	30
8/3	A50 W/B Ahead	U	D	4	30
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	A	9	218
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	A	9	218
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	B	9	218
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	B	9	218

Network Layout Diagram


A
B
C
D
E
M1 Nth
M1 Sth
44 - 4
9 - 27
33 - 3
10 - 38
36 - 49
7 - 36
4 - 30
42 - 0
Arm 1 - Circ Sth
Arm 2 - M1 N/B Off-slip
Arm 3 - Circ W
Arm 4 - A511 E/B
Arm 5 - Circ Nth
Arm 6 - M1 S/B Off Slip
Arm 7 - Circ E
Arm 8 - A50 W/B
Arm 9 -
Arm 10 - M1 N/B On-slip
Arm 11 - A50 EB Exit Pedestrian Crossing
Arm 12 - M1 S/B On-slip
Arm 13 -
Arm 14 - Cliffe Lane
Arm 15 -
Arm 16 - A50 WB Entry Pedestrian Crossing
M1 J22 / A50 / A511
PRC: -2.0 %
Total Traffic Delay: 63.1 pcuHr
Controller: 1&2&3
KEY
PCU Arr
Dep Sat.
MinQ (PCU)
C1 - M1/J22 A50/A511 Controller 1 Stream 2
C2 - M1/J22 A50/A511 Controller 2 Stream 1
C3 - A50 East Pedestrian Crossings Stream 1
C3 - A50 East Pedestrian Crossings Stream 2
C1 - M1/J22 A50/A511 Controller 1 Stream 1
C2 - M1/J22 A50/A511 Controller 2 Stream 2

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**91.8%**
M1 J22 / A50 / A511	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**91.8%**
1/1	Circ Sth Ahead Ahead2	U	1:1	N/A	C1:A		1	29	-	-	891	1995	998	89.3%
1/2	Circ Sth Right Ahead	U	1:1	N/A	C1:A		1	29	-	-	937	2093	1047	89.5%
1/3	Circ Sth Right	U	1:1	N/A	C1:A		1	29	-	-	835	1956	978	85.4%
2/2+2/1	M1 N/B Off-slip Ahead Left Left2	U	1:1	N/A	C1:B		1	18	-	-	914	1966:1977	623+626	73.2 : 73.2%
2/3	M1 N/B Off-slip Ahead	U	1:1	N/A	C1:B		1	18	-	-	42	1978	626	6.7%
3/1	Circ W Ahead	U	1:2	N/A	C1:C		1	28	-	-	46	1995	964	4.8%
3/2+3/3	Circ W Right Ahead	U	1:2	N/A	C1:C		1	28	-	-	962	2132:1995	972+76	91.8 : 91.8%
4/2+4/1	A511 E/B Ahead Left	U	1:2	N/A	C1:D		1	20	-	-	988	2120:1966	742+351	90.4 : 90.4%
4/3	A511 E/B Ahead	U	1:2	N/A	C1:D		1	20	-	-	599	1983	694	86.3%
5/1	Circ Nth Ahead	U	2:1	N/A	C2:A		1	18	-	-	677	2034	758	89.3%
5/2	Circ Nth Right Ahead	U	2:1	N/A	C2:A		1	18	-	-	669	2034	758	88.3%
6/2+6/1	M1 S/B Off Slip Ahead Left	U	2:1	N/A	C2:B		1	21	-	-	1027	2027:2027	874+605	69.4 : 69.4%
6/3	M1 S/B Off Slip Ahead	U	2:1	N/A	C2:B		1	21	-	-	562	2027	874	64.3%
7/1	Circ E Ahead	U	2:2	N/A	C2:C		1	13	-	-	364	2065	567	64.2%
7/2+7/3	Circ E Right Ahead	U	2:2	N/A	C2:C		1	13	-	-	765	2178:2025	593+295	86.2 : 86.2%
8/1+8/2	A50 W/B Ahead Left	U	2:2	N/A	C2:D		1	26	-	-	1327	1953:2090	968+1030	66.4 : 66.4%

8/3	A50 W/B Ahead	U	2:2	N/A	C2:D		1	26	-	-	834	1953	1034	80.7%
9/1		U	N/A	N/A	-		-	-	-	-	1274	Inf	Inf	0.0%
9/2		U	N/A	N/A	-		-	-	-	-	1393	Inf	Inf	0.0%
10/1	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	363	Inf	Inf	0.0%
10/2	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	886	Inf	Inf	0.0%
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	1097	1980	1824	60.2%
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	709	1980	1824	38.9%
12/1	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	434	Inf	Inf	0.0%
12/2	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	193	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	-	96	Inf	Inf	0.0%
14/1	Cliffe Lane Left Left2	O	N/A	N/A	-		-	-	-	-	152	2005	269	56.5%
15/1		U	N/A	N/A	-		-	-	-	-	1097	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	709	Inf	Inf	0.0%
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	1327	1980	1824	72.8%
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	834	1980	1824	45.7%

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	**-**	**-**	**69**	**83**	**0**	**45.8**	**17.2**	**0.0**	**63.1**	**-**	**-**	**-**	**-**	
M1 J22 / A50 / A511	**-**	**-**	**69**	**83**	**0**	**45.8**	**17.2**	**0.0**	**63.1**	**-**	**-**	**-**	**-**	
1/1	891	891	-	-	-	3.4	0.0	-	3.4	13.6	13.4	0.0	13.4	
1/2	937	937	-	-	-	3.5	0.0	-	3.5	13.6	14.1	0.0	14.1	
1/3	835	835	-	-	-	3.0	0.0	-	3.0	13.1	12.1	0.0	12.1	
2/2+2/1	914	914	-	-	-	4.6	1.4	-	6.0	23.6	6.7	1.4	8.1	
2/3	42	42	-	-	-	0.2	0.0	-	0.2	17.4	0.5	0.0	0.5	
3/1	46	46	-	-	-	0.2	0.0	-	0.2	12.3	0.7	0.0	0.7	
3/2+3/3	962	962	-	-	-	0.9	0.0	-	0.9	3.5	1.8	0.0	1.8	
4/2+4/1	988	988	-	-	-	4.8	4.4	-	9.1	33.3	10.6	4.4	15.0	
4/3	599	599	-	-	-	3.0	3.0	-	6.0	36.0	9.2	3.0	12.1	
5/1	677	677	-	-	-	2.8	0.0	-	2.8	15.0	8.8	0.0	8.8	
5/2	669	669	-	-	-	2.8	0.0	-	2.8	15.0	8.7	0.0	8.7	
6/2+6/1	1027	1027	-	-	-	3.2	1.1	-	4.3	15.2	6.9	1.1	8.0	
6/3	562	562	-	-	-	1.8	0.9	-	2.7	17.1	6.2	0.9	7.1	
7/1	364	364	-	-	-	1.9	0.0	-	1.9	19.0	5.1	0.0	5.1	
7/2+7/3	765	765	-	-	-	2.1	0.0	-	2.1	10.0	5.7	0.0	5.7	
8/1+8/2	1327	1327	-	-	-	3.1	1.0	-	4.1	11.1	6.7	1.0	7.6	
8/3	834	834	-	-	-	2.3	2.0	-	4.3	18.7	9.5	2.0	11.5	
9/1	1274	1274	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	1393	1393	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	363	363	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	886	886	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	1097	1097	-	-	-	0.5	0.8	-	1.2	4.1	12.2	0.8	12.9	

11/2	709	709	-	-	-	0.2	0.3	-	0.5	2.7	5.5	0.3	5.8
12/1	434	434	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	193	193	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	96	96	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1	152	152	69	83	0	0.4	0.6	-	1.1	25.1	1.4	0.6	2.1
15/1	1097	1097	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	709	709	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	1327	1327	-	-	-	0.8	1.3	-	2.1	5.8	19.9	1.3	21.2
16/2	834	834	-	-	-	0.3	0.4	-	0.7	3.0	7.2	0.4	7.6

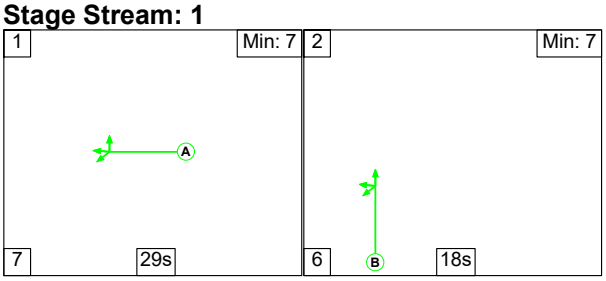
C1 - M1/J22 A50/A511 Controller 1	Stream: 1 PRC for Signalled Lanes (%):	0.5	Total Delay for Signalled Lanes (pcuHr):	16.12	Cycle Time (s): 60
C1 - M1/J22 A50/A511 Controller 1	Stream: 2 PRC for Signalled Lanes (%):	-2.0	Total Delay for Signalled Lanes (pcuHr):	16.24	Cycle Time (s): 60
C2 - M1/J22 A50/A511 Controller 2	Stream: 1 PRC for Signalled Lanes (%):	0.7	Total Delay for Signalled Lanes (pcuHr):	12.62	Cycle Time (s): 51
C2 - M1/J22 A50/A511 Controller 2	Stream: 2 PRC for Signalled Lanes (%):	4.4	Total Delay for Signalled Lanes (pcuHr):	12.45	Cycle Time (s): 51
C3 - A50 East Pedestrian Crossings	Stream: 1 PRC for Signalled Lanes (%):	49.6	Total Delay for Signalled Lanes (pcuHr):	1.77	Cycle Time (s): 228
C3 - A50 East Pedestrian Crossings	Stream: 2 PRC for Signalled Lanes (%):	23.7	Total Delay for Signalled Lanes (pcuHr):	2.83	Cycle Time (s): 228
	PRC Over All Lanes (%):	-2.0	Total Delay Over All Lanes(pcuHr):	63.08	

Scenario 11: '2036 Future Base + Proposed Development Sensitivity AM Peak' (FG11: '2036 Future Base + Proposed Development Sensitivity AM Peak', Plan 1: 'Network Control Plan 1')

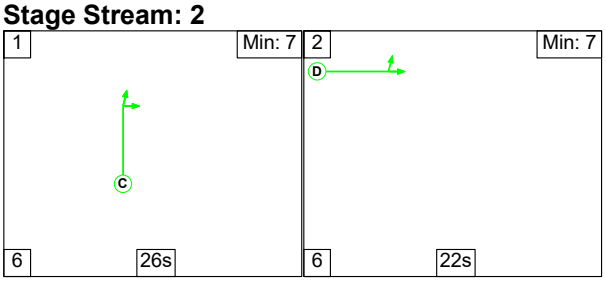
Controller :C1 - M1/J22 A50/A511 Controller 1

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	29	18
Change Point	0	36

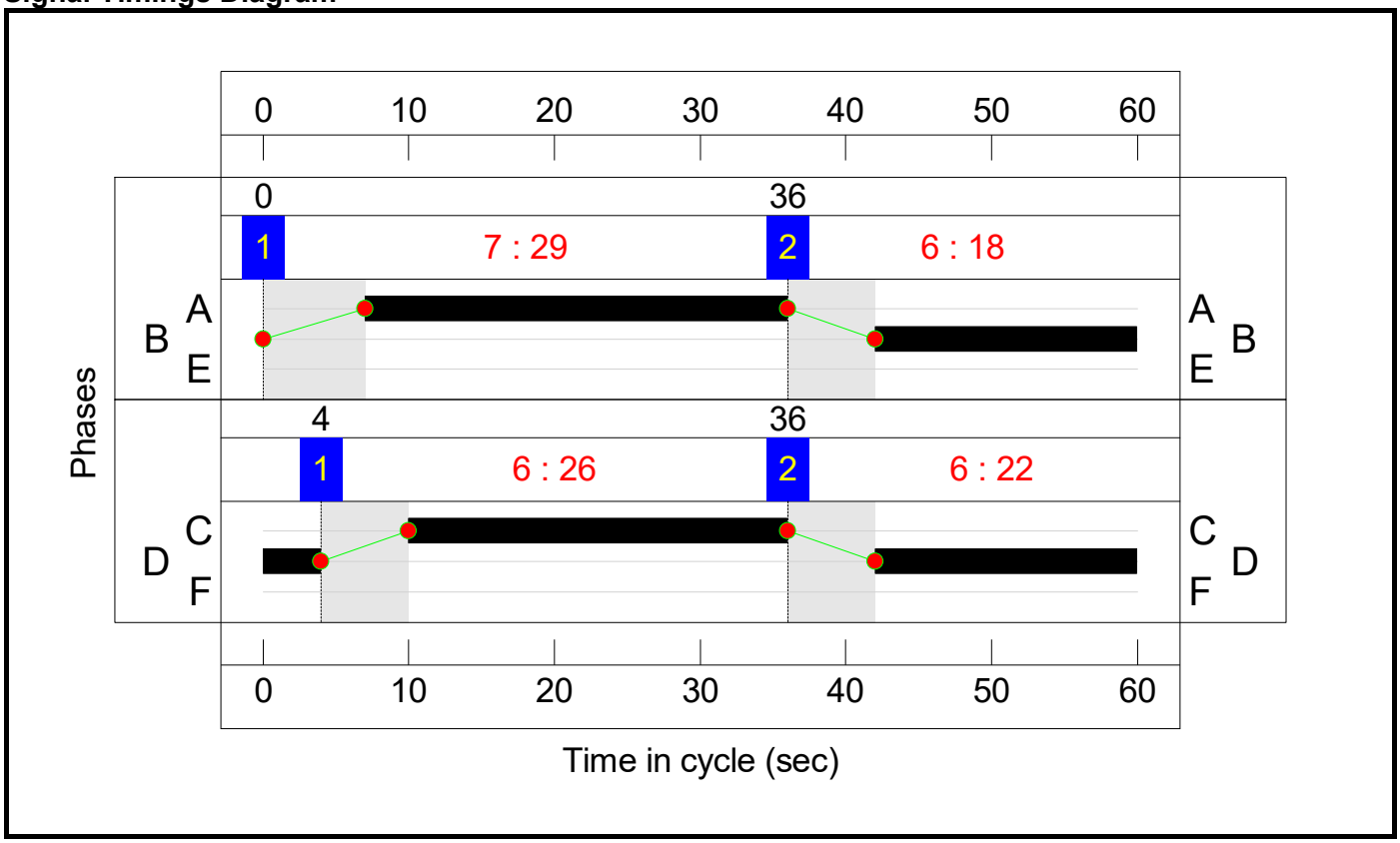
Stage Stream: 2

Stage	1	2
Duration	26	22
Change Point	4	36

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Sth Right Ahead Ahead2	Traffic	1	29	7	36
B	M1 N/B Off-slip Ahead Left Left2	Traffic	1	18	42	0
C	Circ W Right Ahead	Traffic	2	26	10	36
D	A511 E/B Ahead Left	Traffic	2	22	42	4
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

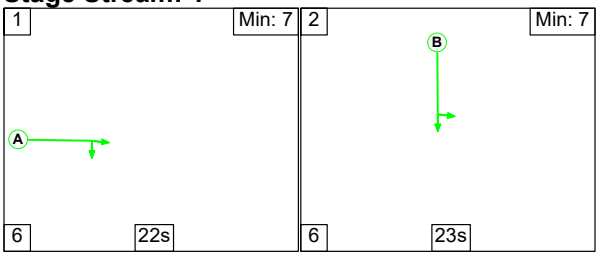
Signal Timings Diagram



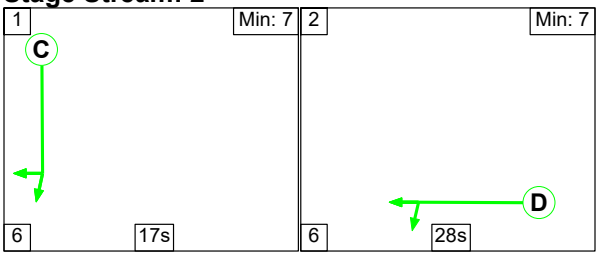
Controller :C2 - M1/J22 A50/A511 Controller 2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	22	23
Change Point	3	31

Detailed Input Data And Results

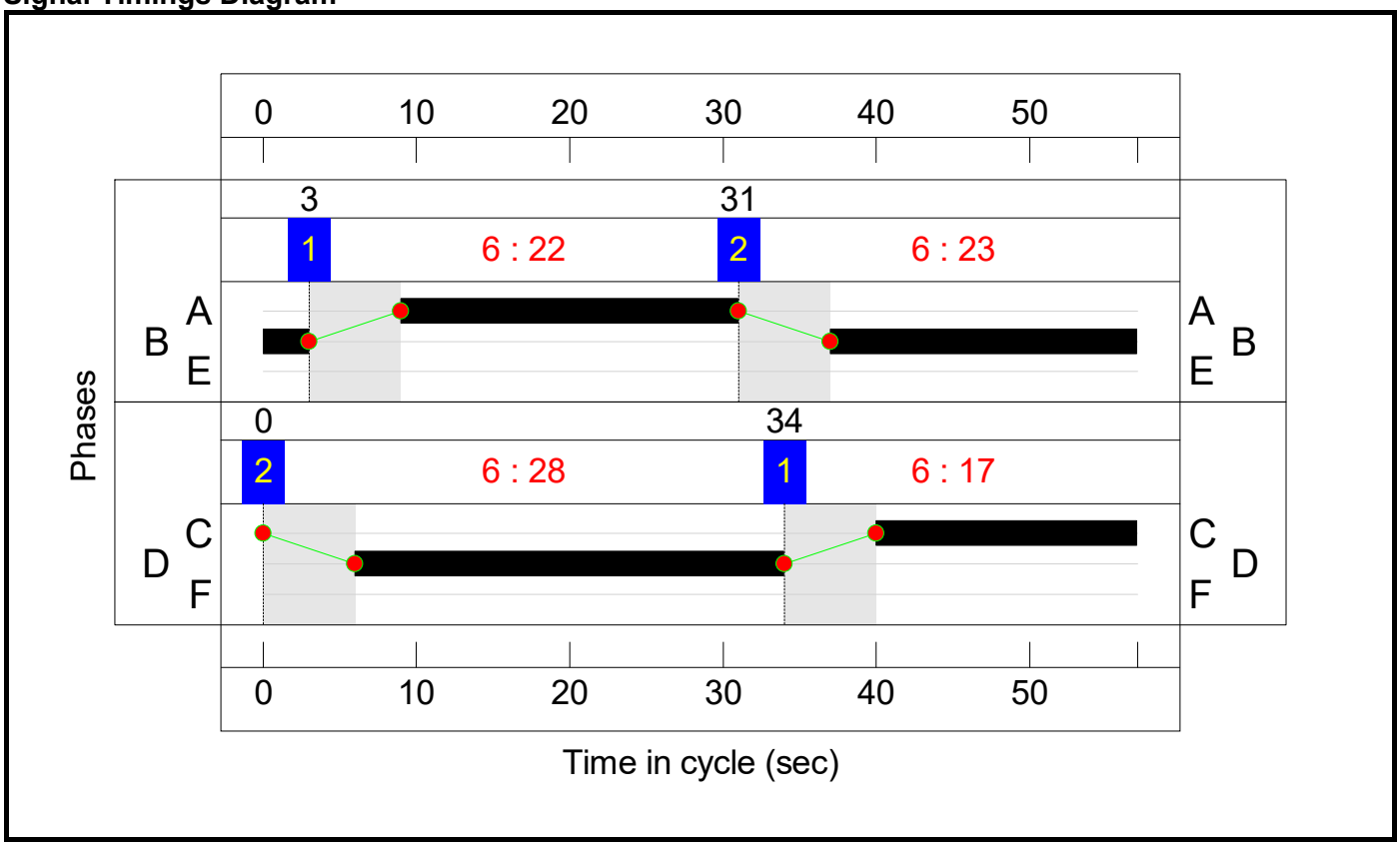
Stage Stream: 2

Stage	1	2
Duration	17	28
Change Point	34	0

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Nth Right Ahead	Traffic	1	22	9	31
B	M1 S/B Off Slip Ahead Left	Traffic	1	23	37	3
C	Circ E Right Ahead	Traffic	2	17	40	0
D	A50 W/B Ahead Left	Traffic	2	28	6	34
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

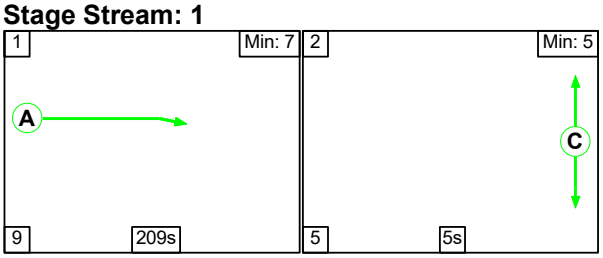
Signal Timings Diagram



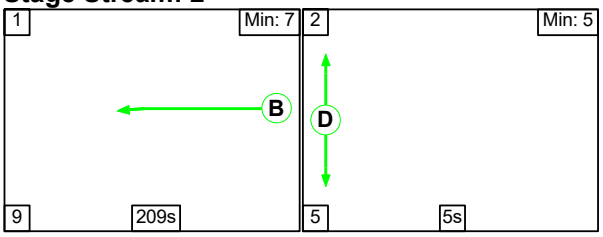
Controller :C3 - A50 East Pedestrian Crossings

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	209	5
Change Point	0	218

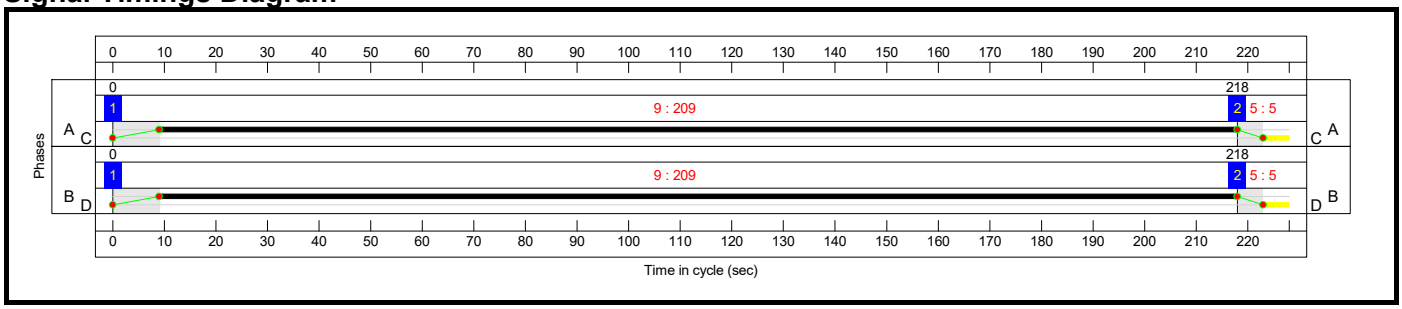
Stage Stream: 2

Stage	1	2
Duration	209	5
Change Point	0	218

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	A50 EB Exit Pedestrian Crossing Ahead	Traffic	1	209	9	218
B	A50 WB Entry Pedestrian Crossing Ahead	Traffic	2	209	9	218
C	Pedestrians across	Pedestrian	1	5	223	0
D	Pedestrians across	Pedestrian	2	5	223	0

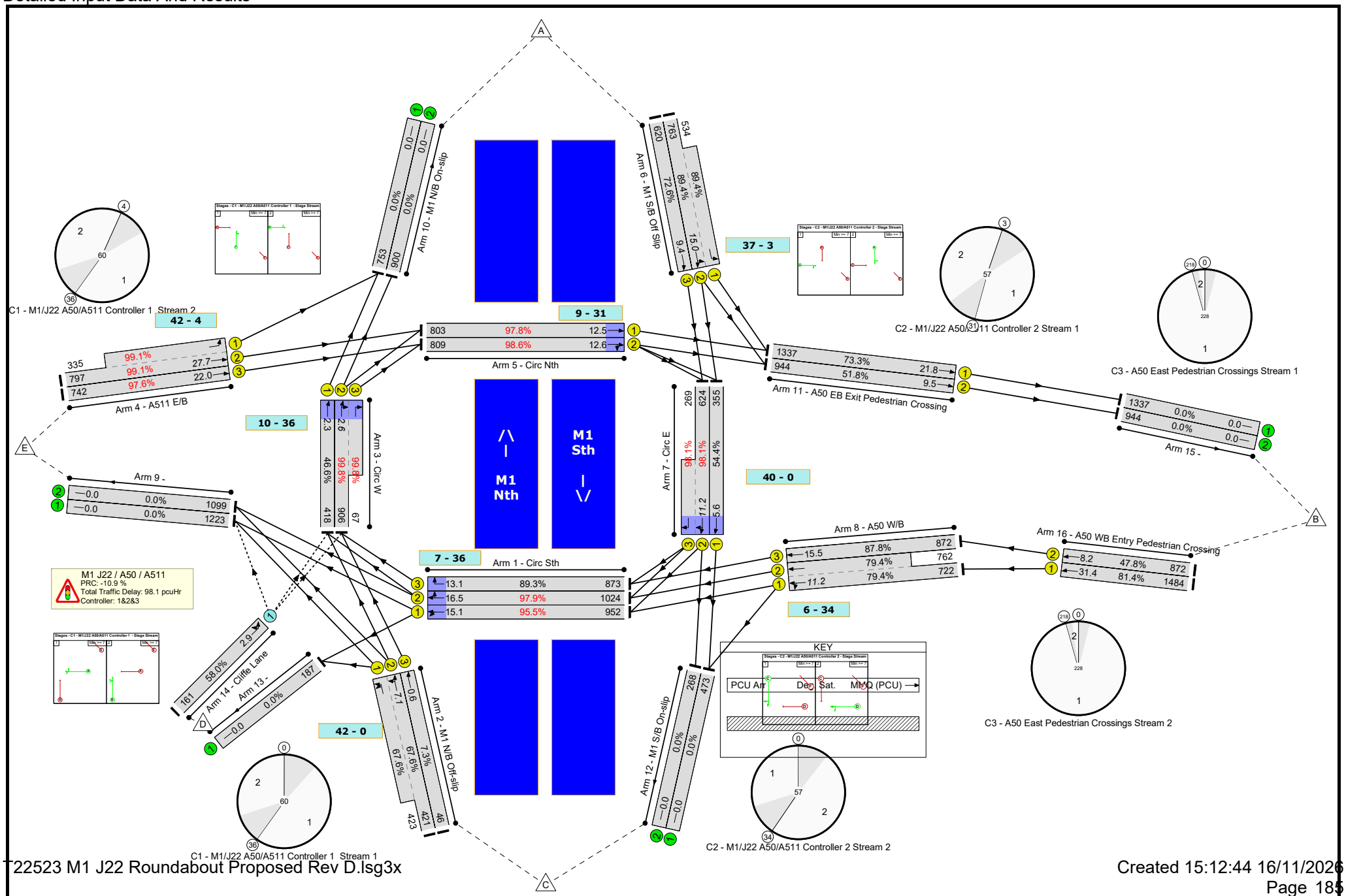
Signal Timings Diagram



Lane Green Times

Junction: M1 J22 / A50 / A511					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Circ Sth Ahead Ahead2	U	A	7	36
1/2	Circ Sth Right Ahead	U	A	7	36
1/3	Circ Sth Right	U	A	7	36
2/1	M1 N/B Off-slip Left Left2	U	B	42	0
2/2	M1 N/B Off-slip Ahead Left	U	B	42	0
2/3	M1 N/B Off-slip Ahead	U	B	42	0
3/1	Circ W Ahead	U	C	10	36
3/2	Circ W Right Ahead	U	C	10	36
3/3	Circ W Right	U	C	10	36
4/1	A511 E/B Left	U	D	42	4
4/2	A511 E/B Ahead	U	D	42	4
4/3	A511 E/B Ahead	U	D	42	4
5/1	Circ Nth Ahead	U	A	9	31
5/2	Circ Nth Right Ahead	U	A	9	31
6/1	M1 S/B Off Slip Left	U	B	37	3
6/2	M1 S/B Off Slip Ahead Left	U	B	37	3
6/3	M1 S/B Off Slip Ahead	U	B	37	3
7/1	Circ E Ahead	U	C	40	0
7/2	Circ E Right Ahead	U	C	40	0
7/3	Circ E Right	U	C	40	0
8/1	A50 W/B Ahead Left	U	D	6	34
8/2	A50 W/B Ahead	U	D	6	34
8/3	A50 W/B Ahead	U	D	6	34
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	A	9	218
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	A	9	218
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	B	9	218
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	B	9	218

Network Layout Diagram


A
B
C
D
E
C1 - M1/J22 A50/A511 Controller 1 Stream 2
42 - 4
Arm 4 - A511 E/B
335 99.1% 27.7
797 99.1% 22.0
742 97.6%
Arm 10 - M1 N/B On-slip
753 900
0.0 0.0
0.0% 0.0%
Arm 6 - M1 S/B Off Slip
620 763 534
72.6% 89.4% 89.4%
9.4 15.0
37 - 3
C2 - M1/J22 A50/A511 Controller 2 Stream 1
C3 - A50 East Pedestrian Crossings Stream 1
9 - 31
803 97.8% 12.5
809 98.6% 12.6
Arm 5 - Circ Nth
1337 73.3% 21.8
944 51.8% 9.5
Arm 11 - A50 EB Exit Pedestrian Crossing
1337 0.0% 0.0
944 0.0% 0.0
Arm 15 -
10 - 36
Arm 3 - Circ W
2.3 2.6
46.6% 99.8% 99.8%
418 906 67
/\ | M1 Nth
M1 Sth | \/
Arm 7 - Circ E
269 624 355
98.1% 98.1% 54.4%
11.2 5.6
40 - 0
Arm 9 -
0.0 0.0% 1099
0.0 0.0% 1223
7 - 36
Arm 1 - Circ Sth
13.1 89.3% 873
16.5 97.9% 1024
15.1 95.5% 952
Arm 8 - A50 W/B
15.5 87.8% 872
79.4% 762
11.2 79.4% 722
Arm 16 - A50 WB Entry Pedestrian Crossing
8.2 47.8% 872
31.4 81.4% 1484
6 - 34
M1 J22 / A50 / A511
PRC: -10.9 %
Total Traffic Delay: 98.1 pcuHr
Controller: 1&2&3
Arm 14 - Cliffe Lane
161 58.0% 2.9
Arm 13 -
0.0 0.0% 187
42 - 0
Arm 2 - M1 N/B Off-slip
7.1 0.6
67.6% 67.6% 7.3%
423 421 46
Arm 12 - M1 S/B On-slip
0.0 0.0
0.0% 0.0%
288 473
KEY
PCU Arr Dep Sat. MMQ (PCU)
C1 - M1/J22 A50/A511 Controller 1 Stream 1
C2 - M1/J22 A50/A511 Controller 2 Stream 2
C3 - A50 East Pedestrian Crossings Stream 2

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.8%**
M1 J22 / A50 / A511	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.8%**
1/1	Circ Sth Ahead Ahead2	U	1:1	N/A	C1:A		1	29	-	-	960	1995	998	95.5%
1/2	Circ Sth Right Ahead	U	1:1	N/A	C1:A		1	29	-	-	1030	2093	1047	97.9%
1/3	Circ Sth Right	U	1:1	N/A	C1:A		1	29	-	-	873	1956	978	89.3%
2/2+2/1	M1 N/B Off-slip Ahead Left Left2	U	1:1	N/A	C1:B		1	18	-	-	844	1966:1977	623+626	67.6 : 67.6%
2/3	M1 N/B Off-slip Ahead	U	1:1	N/A	C1:B		1	18	-	-	46	1978	626	7.3%
3/1	Circ W Ahead	U	1:2	N/A	C1:C		1	26	-	-	418	1995	898	46.6%
3/2+3/3	Circ W Right Ahead	U	1:2	N/A	C1:C		1	26	-	-	973	2132:1995	908+67	99.8 : 99.8%
4/2+4/1	A511 E/B Ahead Left	U	1:2	N/A	C1:D		1	22	-	-	1132	2120:1966	804+338	99.1 : 99.1%
4/3	A511 E/B Ahead	U	1:2	N/A	C1:D		1	22	-	-	742	1983	760	97.6%
5/1	Circ Nth Ahead	U	2:1	N/A	C2:A		1	22	-	-	803	2034	821	97.8%
5/2	Circ Nth Right Ahead	U	2:1	N/A	C2:A		1	22	-	-	809	2034	821	98.6%
6/2+6/1	M1 S/B Off Slip Ahead Left	U	2:1	N/A	C2:B		1	23	-	-	1297	2027:2027	853+597	89.4 : 89.4%
6/3	M1 S/B Off Slip Ahead	U	2:1	N/A	C2:B		1	23	-	-	620	2027	853	72.6%
7/1	Circ E Ahead	U	2:2	N/A	C2:C		1	17	-	-	355	2065	652	54.4%
7/2+7/3	Circ E Right Ahead	U	2:2	N/A	C2:C		1	17	-	-	893	2180:2025	636+274	98.1 : 98.1%
8/1+8/2	A50 W/B Ahead Left	U	2:2	N/A	C2:D		1	28	-	-	1484	1953:2090	909+959	79.4 : 79.4%

8/3	A50 W/B Ahead	U	2:2	N/A	C2:D		1	28	-	-	872	1953	994	87.8%
9/1		U	N/A	N/A	-		-	-	-	-	1228	Inf	Inf	0.0%
9/2		U	N/A	N/A	-		-	-	-	-	1105	Inf	Inf	0.0%
10/1	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	753	Inf	Inf	0.0%
10/2	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	900	Inf	Inf	0.0%
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	1337	1980	1824	73.3%
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	944	1980	1824	51.8%
12/1	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	473	Inf	Inf	0.0%
12/2	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	268	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	-	190	Inf	Inf	0.0%
14/1	Cliffe Lane Left Left2	O	N/A	N/A	-		-	-	-	-	161	2005	278	58.0%
15/1		U	N/A	N/A	-		-	-	-	-	1337	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	944	Inf	Inf	0.0%
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	1484	1980	1824	81.4%
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	872	1980	1824	47.8%

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	**-**	**-**	**68**	**93**	**0**	**57.0**	**41.1**	**0.0**	**98.1**	**-**	**-**	**-**	**-**	
M1 J22 / A50 / A511	**-**	**-**	**68**	**93**	**0**	**57.0**	**41.1**	**0.0**	**98.1**	**-**	**-**	**-**	**-**	
1/1	952	952	-	-	-	3.8	0.0	-	3.8	14.4	15.1	0.0	15.1	
1/2	1024	1024	-	-	-	4.2	0.0	-	4.2	14.7	16.5	0.0	16.5	
1/3	873	873	-	-	-	3.3	0.0	-	3.3	13.5	13.1	0.0	13.1	
2/2+2/1	844	844	-	-	-	4.2	1.0	-	5.2	22.3	6.1	1.0	7.1	
2/3	46	46	-	-	-	0.2	0.0	-	0.2	17.5	0.5	0.0	0.6	
3/1	418	418	-	-	-	0.5	0.0	-	0.5	4.4	2.3	0.0	2.3	
3/2+3/3	973	973	-	-	-	1.2	0.0	-	1.2	4.4	2.6	0.0	2.6	
4/2+4/1	1132	1132	-	-	-	5.3	14.4	-	19.8	62.8	13.3	14.4	27.7	
4/3	742	742	-	-	-	3.8	9.8	-	13.6	65.9	12.2	9.8	22.0	
5/1	803	803	-	-	-	3.7	0.0	-	3.7	16.8	12.5	0.0	12.5	
5/2	809	809	-	-	-	3.8	0.0	-	3.8	16.8	12.6	0.0	12.6	
6/2+6/1	1297	1297	-	-	-	5.2	4.0	-	9.2	25.5	11.0	4.0	15.0	
6/3	620	620	-	-	-	2.4	1.3	-	3.7	21.4	8.1	1.3	9.4	
7/1	355	355	-	-	-	2.0	0.0	-	2.0	20.6	5.6	0.0	5.6	
7/2+7/3	893	879	-	-	-	2.8	0.0	-	2.8	11.3	11.2	0.0	11.2	
8/1+8/2	1484	1484	-	-	-	4.5	1.9	-	6.4	15.5	9.3	1.9	11.2	
8/3	872	872	-	-	-	3.0	3.4	-	6.4	26.4	12.1	3.4	15.5	
9/1	1223	1223	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	1099	1099	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	753	753	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	900	900	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	1337	1337	-	-	-	0.8	1.4	-	2.2	5.9	20.4	1.4	21.8	

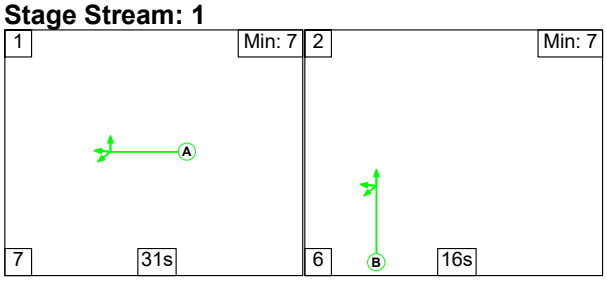
11/2	944	944	-	-	-	0.4	0.5	-	0.9	3.4	8.9	0.5	9.5
12/1	473	473	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	268	268	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	187	187	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/1	161	161	68	93	0	0.5	0.7	-	1.2	26.5	2.2	0.7	2.9
15/1	1337	1337	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	944	944	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	1484	1484	-	-	-	1.2	2.2	-	3.3	8.1	29.3	2.2	31.4
16/2	872	872	-	-	-	0.3	0.5	-	0.8	3.2	7.8	0.5	8.2

C1 - M1/J22 A50/A511 Controller 1	Stream: 1 PRC for Signalled Lanes (%):	-8.7	Total Delay for Signalled Lanes (pcuHr):	16.70	Cycle Time (s): 60
C1 - M1/J22 A50/A511 Controller 1	Stream: 2 PRC for Signalled Lanes (%):	-10.9	Total Delay for Signalled Lanes (pcuHr):	35.04	Cycle Time (s): 60
C2 - M1/J22 A50/A511 Controller 2	Stream: 1 PRC for Signalled Lanes (%):	-9.5	Total Delay for Signalled Lanes (pcuHr):	20.39	Cycle Time (s): 57
C2 - M1/J22 A50/A511 Controller 2	Stream: 2 PRC for Signalled Lanes (%):	-9.0	Total Delay for Signalled Lanes (pcuHr):	17.63	Cycle Time (s): 57
C3 - A50 East Pedestrian Crossings	Stream: 1 PRC for Signalled Lanes (%):	22.8	Total Delay for Signalled Lanes (pcuHr):	3.07	Cycle Time (s): 228
C3 - A50 East Pedestrian Crossings	Stream: 2 PRC for Signalled Lanes (%):	10.6	Total Delay for Signalled Lanes (pcuHr):	4.09	Cycle Time (s): 228
	PRC Over All Lanes (%):	-10.9	Total Delay Over All Lanes(pcuHr):	98.10	

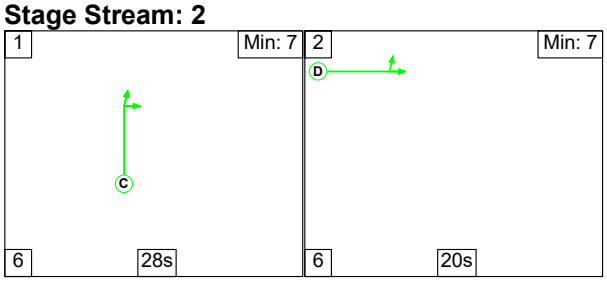
Scenario 12: '2036 Future Base + Proposed Development Sensitivity PM Peak' (FG12: '2036 Future Base + Proposed Development Sensitivity PM Peak', Plan 1: 'Network Control Plan 1')
Controller :C1 - M1/J22 A50/A511 Controller 1

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	31	16
Change Point	0	38

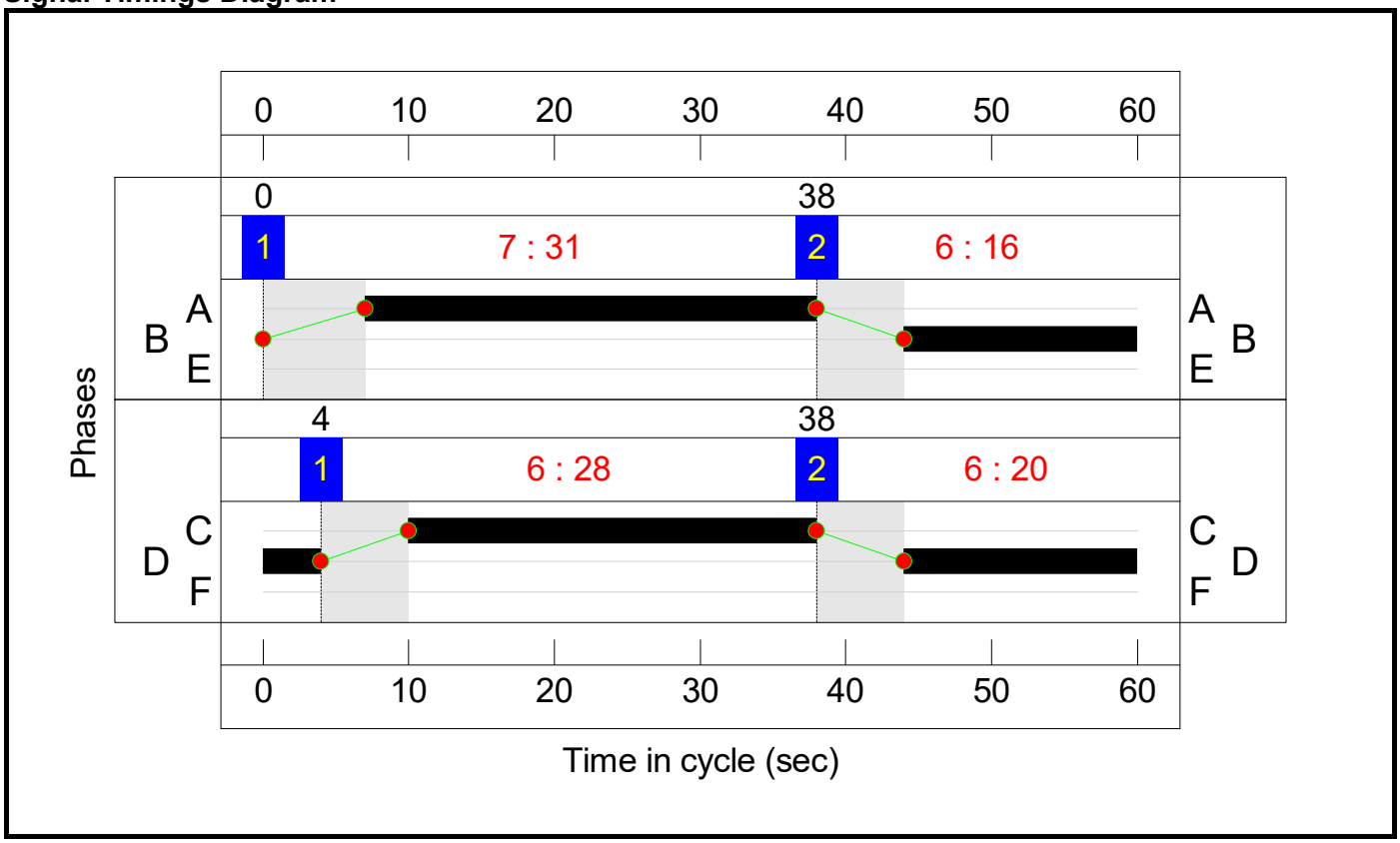
Stage Stream: 2

Stage	1	2
Duration	28	20
Change Point	4	38

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Sth Right Ahead Ahead2	Traffic	1	31	7	38
B	M1 N/B Off-slip Ahead Left Left2	Traffic	1	16	44	0
C	Circ W Right Ahead	Traffic	2	28	10	38
D	A511 E/B Ahead Left	Traffic	2	20	44	4
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

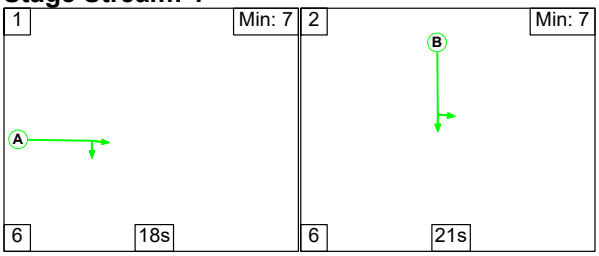
Signal Timings Diagram



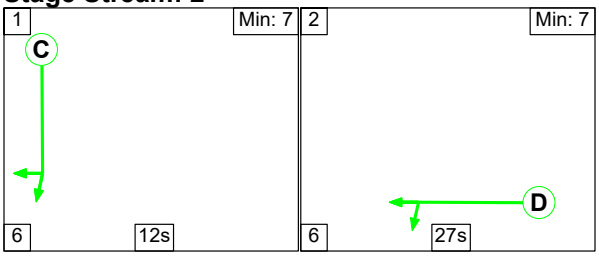
Controller :C2 - M1/J22 A50/A511 Controller 2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	18	21
Change Point	50	23

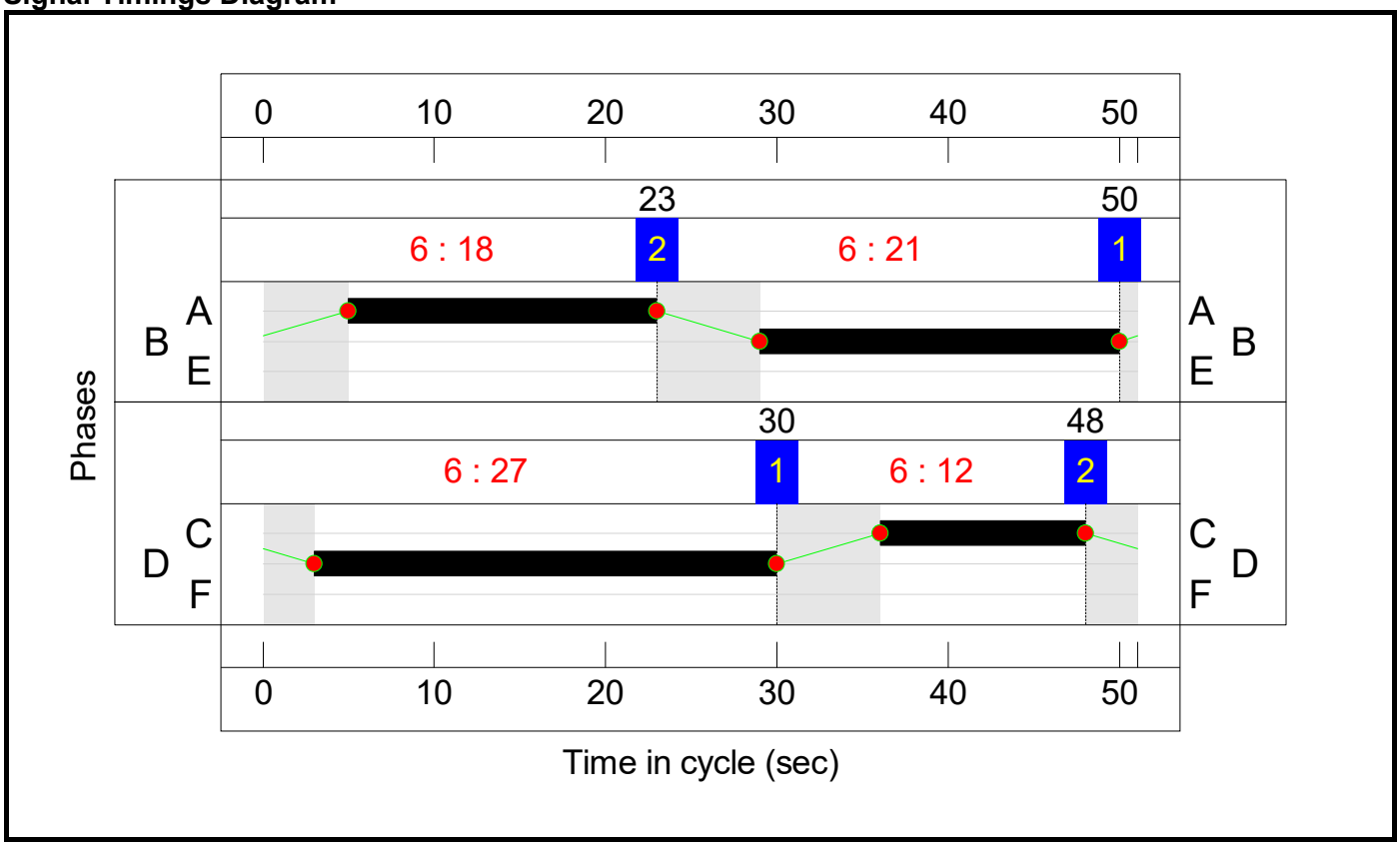
Stage Stream: 2

Stage	1	2
Duration	12	27
Change Point	30	48

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	Circ Nth Right Ahead	Traffic	1	18	5	23
B	M1 S/B Off Slip Ahead Left	Traffic	1	21	29	50
C	Circ E Right Ahead	Traffic	2	12	36	48
D	A50 W/B Ahead Left	Traffic	2	27	3	30
E	Dummy Dummy O/N revert Stream 1	Dummy	1			
F	Dummy Dummy O/N revert Stream 2	Dummy	2			

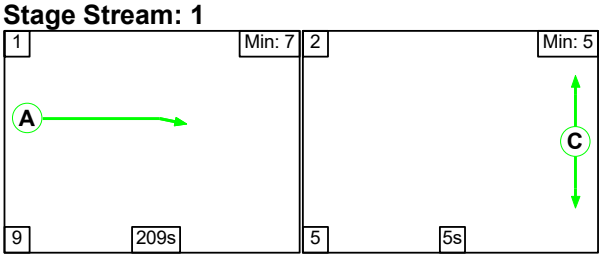
Signal Timings Diagram



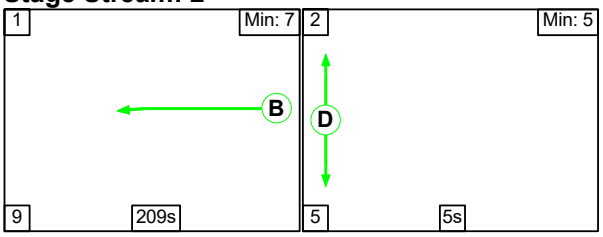
Controller :C3 - A50 East Pedestrian Crossings

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	209	5
Change Point	0	218

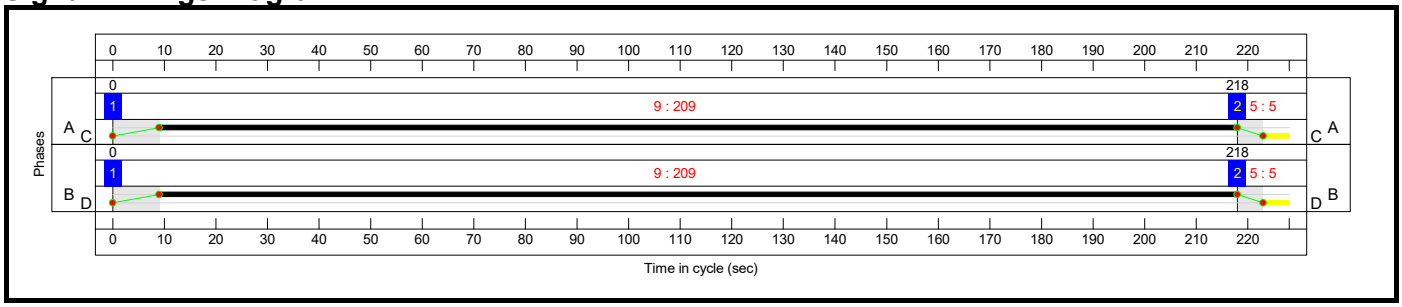
Stage Stream: 2

Stage	1	2
Duration	209	5
Change Point	0	218

Phase Timings

Phase Name	Description	Phase	Stage Stream	Green Period 1		
				Total Green	Start Time	End Time
A	A50 EB Exit Pedestrian Crossing Ahead	Traffic	1	209	9	218
B	A50 WB Entry Pedestrian Crossing Ahead	Traffic	2	209	9	218
C	Pedestrians across	Pedestrian	1	5	223	0
D	Pedestrians across	Pedestrian	2	5	223	0

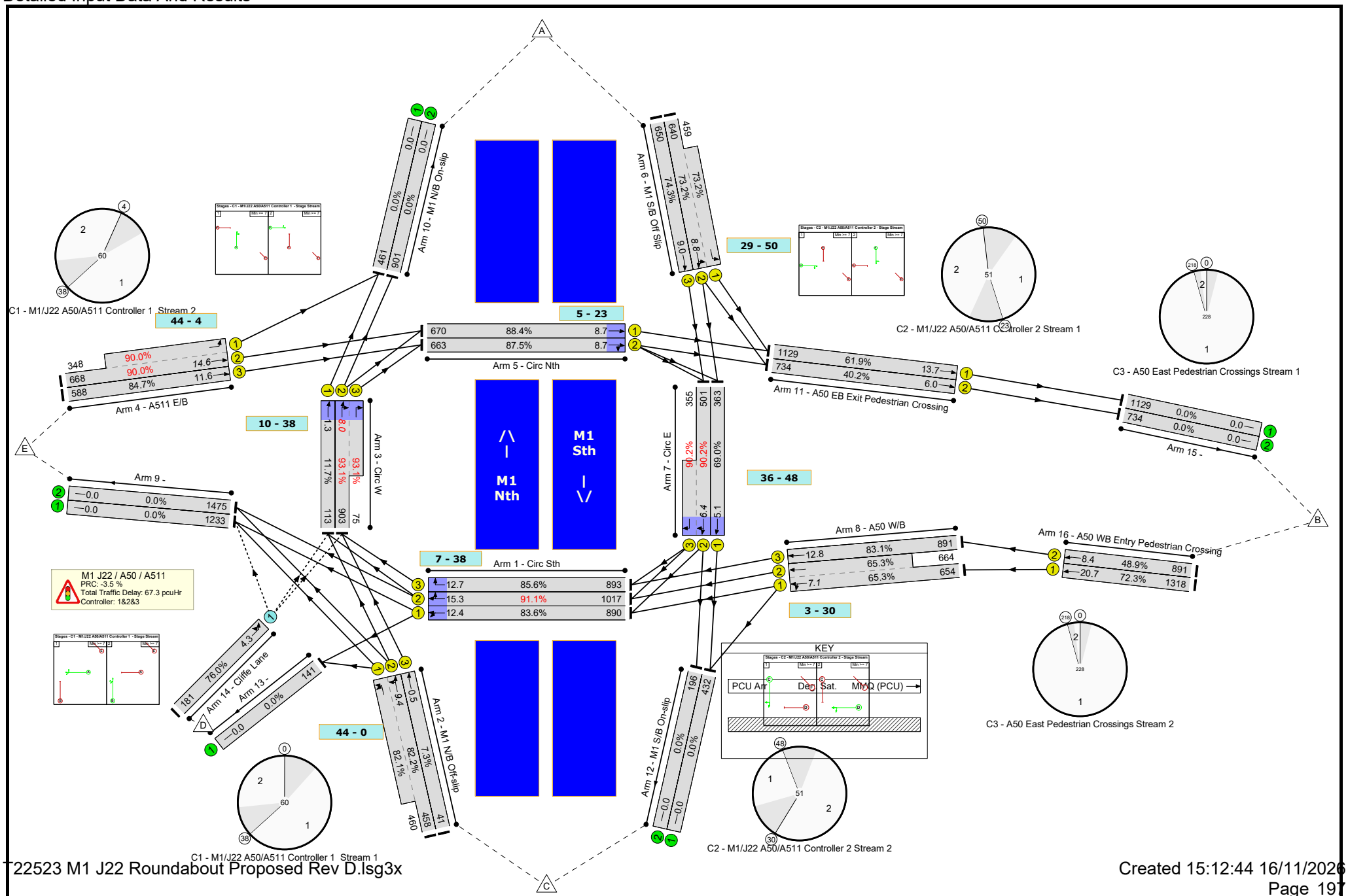
Signal Timings Diagram



Lane Green Times

Junction: M1 J22 / A50 / A511					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	Circ Sth Ahead Ahead2	U	A	7	38
1/2	Circ Sth Right Ahead	U	A	7	38
1/3	Circ Sth Right	U	A	7	38
2/1	M1 N/B Off-slip Left Left2	U	B	44	0
2/2	M1 N/B Off-slip Ahead Left	U	B	44	0
2/3	M1 N/B Off-slip Ahead	U	B	44	0
3/1	Circ W Ahead	U	C	10	38
3/2	Circ W Right Ahead	U	C	10	38
3/3	Circ W Right	U	C	10	38
4/1	A511 E/B Left	U	D	44	4
4/2	A511 E/B Ahead	U	D	44	4
4/3	A511 E/B Ahead	U	D	44	4
5/1	Circ Nth Ahead	U	A	5	23
5/2	Circ Nth Right Ahead	U	A	5	23
6/1	M1 S/B Off Slip Left	U	B	29	50
6/2	M1 S/B Off Slip Ahead Left	U	B	29	50
6/3	M1 S/B Off Slip Ahead	U	B	29	50
7/1	Circ E Ahead	U	C	36	48
7/2	Circ E Right Ahead	U	C	36	48
7/3	Circ E Right	U	C	36	48
8/1	A50 W/B Ahead Left	U	D	3	30
8/2	A50 W/B Ahead	U	D	3	30
8/3	A50 W/B Ahead	U	D	3	30
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	A	9	218
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	A	9	218
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	B	9	218
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	B	9	218

Network Layout Diagram


A
B
C
D
E
C1 - M1/J22 A50/A511 Controller 1 Stream 2
44 - 4
Arm 4 - A511 E/B
348 90.0% 14.6
668 90.0%
588 84.7% 11.6
Arm 10 - M1 N/B On-slip
461 901
0.0 0.0
0.0% 0.0%
5 - 23
670 88.4% 8.7
663 87.5% 8.7
Arm 5 - Circ Nth
Arm 6 - M1 S/B Off Slip
650 640 459
74.3% 73.2% 73.2%
9.0 8.8
29 - 50
C2 - M1/J22 A50/A511 Controller 2 Stream 1
C3 - A50 East Pedestrian Crossings Stream 1
Arm 11 - A50 EB Exit Pedestrian Crossing
1129 61.9% 13.7
734 40.2% 6.0
Arm 15 -
1129 0.0% 0.0
734 0.0% 0.0
10 - 38
Arm 3 - Circ W
1.3 8.0
11.7% 93.1% 93.1%
113 903 75
/\ | M1 Nth
M1 Sth | \/
Arm 7 - Circ E
355 501 363
90.2% 90.2% 69.0%
6.4 5.1
36 - 48
Arm 9 -
0.0 0.0% 1475
0.0 0.0% 1233
7 - 38
Arm 1 - Circ Sth
12.7 85.6% 893
15.3 91.1% 1017
12.4 83.6% 890
Arm 8 - A50 W/B
12.8 83.1% 891
65.3% 664
7.1 65.3% 654
3 - 30
Arm 16 - A50 WB Entry Pedestrian Crossing
8.4 48.9% 891
20.7 72.3% 1318
M1 J22 / A50 / A511
PRC: -3.5 %
Total Traffic Delay: 67.3 pcuHr
Controller: 1&2&3
Arm 14 - Cliffe Lane
181 76.0% 4.3
Arm 13 -
0.0 0.0% 141
44 - 0
Arm 2 - M1 N/B Off-slip
9.4 0.5
82.1% 82.2% 7.3%
460 458 41
Arm 12 - M1 S/B On-slip
196 432
0.0% 0.0%
0.0 0.0
KEY
PCU Arr Dep Sat. MMQ (PCU)
C1 - M1/J22 A50/A511 Controller 1 Stream 1
C2 - M1/J22 A50/A511 Controller 2 Stream 2
C3 - A50 East Pedestrian Crossings Stream 2

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)	Bonus Green	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**93.1%**
M1 J22 / A50 / A511	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**93.1%**
1/1	Circ Sth Ahead Ahead2	U	1:1	N/A	C1:A		1	31	-	-	890	1995	1064	83.6%
1/2	Circ Sth Right Ahead	U	1:1	N/A	C1:A		1	31	-	-	1017	2093	1116	91.1%
1/3	Circ Sth Right	U	1:1	N/A	C1:A		1	31	-	-	893	1956	1043	85.6%
2/2+2/1	M1 N/B Off-slip Ahead Left Left2	U	1:1	N/A	C1:B		1	16	-	-	918	1966:1977	557+560	82.2 : 82.1%
2/3	M1 N/B Off-slip Ahead	U	1:1	N/A	C1:B		1	16	-	-	41	1978	560	7.3%
3/1	Circ W Ahead	U	1:2	N/A	C1:C		1	28	-	-	113	1995	964	11.7%
3/2+3/3	Circ W Right Ahead	U	1:2	N/A	C1:C		1	28	-	-	978	2132:1995	970+81	93.1 : 93.1%
4/2+4/1	A511 E/B Ahead Left	U	1:2	N/A	C1:D		1	20	-	-	1016	2120:1966	742+387	90.0 : 90.0%
4/3	A511 E/B Ahead	U	1:2	N/A	C1:D		1	20	-	-	588	1983	694	84.7%
5/1	Circ Nth Ahead	U	2:1	N/A	C2:A		1	18	-	-	670	2034	758	88.4%
5/2	Circ Nth Right Ahead	U	2:1	N/A	C2:A		1	18	-	-	663	2034	758	87.5%
6/2+6/1	M1 S/B Off Slip Ahead Left	U	2:1	N/A	C2:B		1	21	-	-	1099	2027:2027	874+627	73.2 : 73.2%
6/3	M1 S/B Off Slip Ahead	U	2:1	N/A	C2:B		1	21	-	-	650	2027	874	74.3%
7/1	Circ E Ahead	U	2:2	N/A	C2:C		1	12	-	-	363	2065	526	69.0%
7/2+7/3	Circ E Right Ahead	U	2:2	N/A	C2:C		1	12	-	-	856	2178:2025	555+393	90.2 : 90.2%
8/1+8/2	A50 W/B Ahead Left	U	2:2	N/A	C2:D		1	27	-	-	1318	1953:2090	1001+1017	65.3 : 65.3%

8/3	A50 W/B Ahead	U	2:2	N/A	C2:D		1	27	-	-	891	1953	1072	83.1%
9/1		U	N/A	N/A	-		-	-	-	-	1233	Inf	Inf	0.0%
9/2		U	N/A	N/A	-		-	-	-	-	1475	Inf	Inf	0.0%
10/1	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	461	Inf	Inf	0.0%
10/2	M1 N/B On-slip	U	N/A	N/A	-		-	-	-	-	901	Inf	Inf	0.0%
11/1	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	1129	1980	1824	61.9%
11/2	A50 EB Exit Pedestrian Crossing Ahead	U	3:1	N/A	C3:A		1	209	-	-	734	1980	1824	40.2%
12/1	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	432	Inf	Inf	0.0%
12/2	M1 S/B On-slip	U	N/A	N/A	-		-	-	-	-	196	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	-	141	Inf	Inf	0.0%
14/1	Cliffe Lane Left Left2	O	N/A	N/A	-		-	-	-	-	181	2005	238	76.0%
15/1		U	N/A	N/A	-		-	-	-	-	1129	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	734	Inf	Inf	0.0%
16/1	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	1318	1980	1824	72.3%
16/2	A50 WB Entry Pedestrian Crossing Ahead	U	3:2	N/A	C3:B		1	209	-	-	891	1980	1824	48.9%

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	**-**	**-**	**60**	**121**	**0**	**47.6**	**19.7**	**0.0**	**67.3**	**-**	**-**	**-**	**-**	
M1 J22 / A50 / A511	**-**	**-**	**60**	**121**	**0**	**47.6**	**19.7**	**0.0**	**67.3**	**-**	**-**	**-**	**-**	
1/1	890	890	-	-	-	2.9	0.0	-	2.9	11.8	12.4	0.0	12.4	
1/2	1017	1017	-	-	-	3.6	0.0	-	3.6	12.7	15.3	0.0	15.3	
1/3	893	893	-	-	-	3.0	0.0	-	3.0	12.0	12.7	0.0	12.7	
2/2+2/1	918	918	-	-	-	5.1	2.3	-	7.4	28.9	7.2	2.3	9.4	
2/3	41	41	-	-	-	0.2	0.0	-	0.2	19.2	0.5	0.0	0.5	
3/1	113	113	-	-	-	0.3	0.0	-	0.3	9.4	1.3	0.0	1.3	
3/2+3/3	978	978	-	-	-	1.0	0.0	-	1.0	3.8	8.0	0.0	8.0	
4/2+4/1	1016	1016	-	-	-	4.9	4.2	-	9.1	32.3	10.4	4.2	14.6	
4/3	588	588	-	-	-	2.9	2.6	-	5.6	34.2	9.0	2.6	11.6	
5/1	670	670	-	-	-	2.8	0.0	-	2.8	15.0	8.7	0.0	8.7	
5/2	663	663	-	-	-	2.7	0.0	-	2.7	14.9	8.7	0.0	8.7	
6/2+6/1	1099	1099	-	-	-	3.5	1.4	-	4.9	15.9	7.5	1.4	8.8	
6/3	650	650	-	-	-	2.2	1.4	-	3.6	20.1	7.6	1.4	9.0	
7/1	363	363	-	-	-	2.3	0.0	-	2.3	23.0	5.1	0.0	5.1	
7/2+7/3	856	856	-	-	-	2.4	0.0	-	2.4	10.0	6.4	0.0	6.4	
8/1+8/2	1318	1318	-	-	-	2.8	0.9	-	3.8	10.3	6.2	0.9	7.1	
8/3	891	891	-	-	-	2.4	2.4	-	4.8	19.2	10.4	2.4	12.8	
9/1	1233	1233	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	1475	1475	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/1	461	461	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
10/2	901	901	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
11/1	1129	1129	-	-	-	0.5	0.8	-	1.3	4.2	12.9	0.8	13.7	

11/2	734	734	-	-	-	0.2	0.3	-	0.6	2.8	5.7	0.3	6.0	
12/1	432	432	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/2	196	196	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
13/1	141	141	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
14/1	181	181	60	121	0	0.7	1.5	-	2.2	43.6	2.8	1.5	4.3	
15/1	1129	1129	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	734	734	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	1318	1318	-	-	-	0.8	1.3	-	2.1	5.7	19.4	1.3	20.7	
16/2	891	891	-	-	-	0.3	0.5	-	0.8	3.2	7.9	0.5	8.4	

C1 - M1/J22 A50/A511 Controller 1	Stream: 1 PRC for Signalled Lanes (%):	-1.2	Total Delay for Signalled Lanes (pcuHr):	17.08
C1 - M1/J22 A50/A511 Controller 1	Stream: 2 PRC for Signalled Lanes (%):	-3.5	Total Delay for Signalled Lanes (pcuHr):	16.03
C2 - M1/J22 A50/A511 Controller 2	Stream: 1 PRC for Signalled Lanes (%):	1.8	Total Delay for Signalled Lanes (pcuHr):	14.01
C2 - M1/J22 A50/A511 Controller 2	Stream: 2 PRC for Signalled Lanes (%):	-0.3	Total Delay for Signalled Lanes (pcuHr):	13.21
C3 - A50 East Pedestrian Crossings	Stream: 1 PRC for Signalled Lanes (%):	45.4	Total Delay for Signalled Lanes (pcuHr):	1.90
C3 - A50 East Pedestrian Crossings	Stream: 2 PRC for Signalled Lanes (%):	24.5	Total Delay for Signalled Lanes (pcuHr):	2.87
	PRC Over All Lanes (%):	-3.5	Total Delay Over All Lanes(pcuHr):	67.30

Cycle Time (s):	60
Cycle Time (s):	60
Cycle Time (s):	51
Cycle Time (s):	51
Cycle Time (s):	228
Cycle Time (s):	228