TECHNICAL NOTE – SIGNAL MODELLING RESPONSE

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Document Status: Draft

This document has been prepared to supplement the Transport Assessment and is submitted to PCC for their approval.

PURPOSE

The purpose of this document is to respond to comments that have been provided by Plymouth City Council (PCC) and their consultant (Andrew Lillington, of Lillington Consultancy Ltd). These comments have been made concerning the signalised junction modelling that has been undertaken in relation to the planning application which has been submitted in support of the proposed Energy from Waste Combined Heat and Power (EfW CHP) facility at North Yard, Devonport.

A number of documents are referred to within this Technical Note. Most notably, these include:

Transport Assessment, May 2011, URS Scott Wilson

Transport Assessment Appendix (Annex G), May 2011, URS Scott Wilson

Modelling Note, June 2011, URS Scott Wilson

Model Audit, June 2011, Lillington Consultancy (on behalf of Plymouth City Council)

Signal Modelling Technical Note, July 2011, URS Scott Wilson

Technical Note Comments, August 2011, Lillington Consultancy (on behalf of Plymouth City Council)

1. INTRODUCTION AND BACKGROUND

URS Scott Wilson prepared a Technical Note dated July 2011 to supplement the Transport Assessment (TA) prepared on behalf of MVV Umwelt GmbH in support of a planning application for an Energy from Waste Combined Heat and Power (EfW CHP) facility at North Yard, Devonport in May 2011.

Comments were received on the Technical Note by email dated 3rd August 2011 from Andrew Lillington, on behalf of Plymouth City Council (PCC). A meeting was subsequently held with Andrew Lillington on Monday 22nd August 2011 to discuss those comments and the resultant amendments to the junction modelling are presented within this short summary note.

Taking each of the comments in turn:

1. and 2. Queue Length Validation

Comments 1 and 2 received from Andrew Lillington relate to the queue length validation work previously presented in the TA and associated Technical Notes. As part of the model calibration and validation process, discussions with Andrew Lillington have confirmed that the observed queue data should be compared with the 'Uniform End Red Queue' output from LINSIG, in addition to the Mean Maximum Queue, as the former is expected to be more comparable to queue survey information which can be recorded on site.

Queue data has previously been obtained from site and the modelling results for the 2010 Observed scenario presented later within this Technical Note therefore include the observed, uniform end red and mean maximum queue information.

3. and 4. Saturation Flows and On Site Measurements

Comments 3 and 4 received from Andrew Lillington relate to the saturation flows which have been employed within the LINSIG modelling and the flow samples which were taken on site to assist in the calibration of the junction models.

Where possible, five measurements were taken at each of the main approaches to the junctions for the saturated period of the respective green time (e.g. the period up until which the platoon of vehicles began to disperse), during both the AM and PM peak hours.

On comparison of the observed saturation flows and those derived within LINSIG using the RR67 calculation methodology, it was noted that the observed values tended to be slightly lower than those predicted within LINSIG. This information was presented within the URS Scott Wilson Technical Note dated July 2011.

In order to utilise as much of the observed saturation flow data available as possible, the measurements from the AM and PM peak hours have been grouped together and compared against the LINSIG RR67 values. This approach has been discussed with Andrew Lillington and an overall saturation flow value comparison is presented below, for each of the TA study junctions (see **TABLES 1.1 – 1.3**). Where two saturation flow values are presented (eg. 1800 / 1950) this indicates that there are two approaches to the junction, whereby the first value represents the nearside lane and the second value represents the offside lane.

In light of this updated comparison exercise, the observed saturation flow values have been utilised within the revised LINSIG junction modelling.

TABLE 1.1 Weston Mill Drive / Carlton Terrace – Saturation Flow Values

Approach	Saturation Flow Value		
	TA Model	Observed	Final Model
Carlton Terrace	1825	2070	2070
Weston Mill Dr E	1876 / 2050	1990 / 2005	1990 / 2005
Ferndale Rd	1822	1869	1869
Weston Mill Dr W	1895 / 2031	1940 / 1955	1940 / 1955

TABLE 1.2 Wolseley Road / Weston Mill Drive – Saturation Flow Values

Approach	Saturation Flow Value		
	TA Model	Observed	Final Model
Wolseley Rd N Ahead + Left	2015	1964	1964
Wolseley Rd N Ahead + Right	2018 / 1914	1940 / 1800	1940 / 1800
Weston Mill Dr Left	1919	1980	1980
Weston Mill Dr Ahead + Left	2155	1954	1954
Weston Mill Dr Ahead + Right	2096	2109	2109
Wolseley Rd S Ahead + Left	2015	1962	1962
Wolseley Rd S Right	2005 / 2005	2011 / 2116	2011 / 2116
Dockyard Ahead + Left	1965 / 2105	1970 / 2117	1970 / 2117
Dockyard Right	2033	2130	2130

TABLE 1.3 Wolseley Road / Saltash Road – Saturation Flow Values

Approach	Saturation Flow Value		
	TA Model	Observed	Final Model
Wolseley Rd N Ahead	2015	1800	1800
Wolseley Rd N Right	2005	1941	1941
Wolseley Rd S Ahead + Left	2065	1955	1955
Wolseley Rd S Ahead	2155	2055	2055
Saltash Rd Left	1901 / 2052	1920 / 1885	1920 / 1885
Saltash Rd Right	2051	2160	2160

5. DMRB GEH Statistic Validation Method

Comment 5 received from Andrew Lillington relates to the application of the DMRB GEH statistic. The purpose of this method was simply to provide a statistical means of comparing the two sets of data.

6. Cycletime Methodology

Comment 6 received from Andrew Lillington relates to the derivation of the cycletime at the Dockyard junction in the future year scenarios. In this case, the modelled cycletime in the AM peak hour has been set at the shortest optimum cycletime common to both junctions (Dockyard and Carlton), to reflect the existing operations on street, whereby the two junctions run the same cycletimes. This approach has been retained as part of the updated modelling work presented later within this Technical Note.

7. Dockyard / Carlton Junction Interaction

Comment 7 received from Andrew Lillington refers to the interaction which can occur between the Dockyard and Carlton signalised junctions. Whilst their proximity to each other has been recognised, it is noted that the junctions do not operate within a linked network on-street.

In light of the above, it was considered that stand-alone modelling of the two junctions using LINSIG would be appropriate on the basis that common cycletimes have been employed within the modelling and that the observed and predicted queuing levels have been monitored between the two junctions.

This matter has been discussed with Andrew Lillington and it is noted that queuing interaction between the Dockyard and Carlton junctions is reported to be at its greatest in the 2014 Do Something scenario, during the PM peak. This occurs on the north / east bound approach along Weston Mill Drive when vehicles held at the Carlton junction could potentially queue back to the Dockyard junction.

In order to provide further clarity on this matter, the maximum modelled queue value for this scenario has been derived from the LINSIG modelling (refer to **TABLE 3.3** presented below) and is 24.4 pcu during the PM peak (2014 Do Something). Measurements of the available queue storage area on this link have confirmed however that the distance between the stopline at the Carlton junction and the upstream pedestrian crossing on Weston Mill Drive (to the north east of the Dockyard junction) is 75.3m. Given that there are two lanes and these have been observed to be reasonably equally used, there is therefore queue storage of 150.6m. The maximum predicted queue of 24.4 pcu equates to 146.4m of vehicles (24.4pcu x 6m), which does not exceed the available 150.6m storage area.

Furthermore, vehicles can queue across the pedestrian crossing before they block back into the Dockyard junction. The maximum available storage distance therefore has been measured to be 97.5m which across the two lanes is equivalent to 195.0m of storage. This analysis therefore confirms that vehicles queuing at the Carlton junction are not predicted to block back to the Dockyard junction.

8. Practical Reserve Capacity

Comment 8 received from Andrew Lillington relates to the Practical Reserve Capacity value displayed within the junction result tables. This point is noted and has been updated within all result tables presented herein.

2. REVIEW OF JUNCTION MODELLING

Taking each of the comments discussed above into account, Andrew Lillington has also made some minor comments regarding the specific junction models themselves. Each of these, in addition to the above, has therefore been taken into account and the amendments which have been made to the models are discussed below.

It should be noted that for the purposes of this Technical Note, LINSIG results are only presented for the 2010 Observed and 2014 Do Something scenarios, for ease of reference. For consistency with the Transport Assessment and subsequent Technical Note (July 2011), full LINSIG model outputs are provided at **APPENDIX A** of this Technical Note for all of the model scenarios (2010 Observed, 2011 Base, 2014 Do Minimum, 2014 Do Something, 2014 Do Something Maximum, 2014 Do Something plus Potential, and 2014 Do Something Maximum plus Potential).

3. WESTON MILL DRIVE / CARLTON TERRACE - VALIDATION

It has been identified that in some cases the modelled green times within the 2010 Observed model scenarios slightly exceeded the maximum green times contained within the junction controller. As such, the modelled green times for the 2010 Observed scenarios were reviewed and controller output data has also been analysed within this context.

Whilst the observed stage change timings output from the controller are marginally different than those that have been modelled within LINSIG in the AM peak, it has been identified that the observed side road timings output from the controller exceed the maximum times set within the controller specification for the same time period. The maximum and observed times according to the junction controller information for both side roads at the junction are summarised below at **TABLE 3.1**.

TABLE 3.1 Maximum and Observed Controller Times at Carlton Junction (AM)

Phase	Maximum Green Time According to Controller Spec	Observed Green Time According to Controller Output
C – Carlton Terrace	12	14
D – Ferndale Road	12	14

Following subsequent correspondence with Andrew Lillington, it has therefore been confirmed that the observed timings according to the controller outputs should be employed within the modelling for the AM peak.

The associated LINSIG model results are therefore presented below at **TABLE 3.2** and it can be noted that these are very similar to those previously presented. Changes have not been made to the timings previously modelled for the PM peak as these accord with the maximum controller settings.

Given that the changes referred to above do not relate to the future scenarios, the model results previously presented within the Technical Note (July 2011) are not effected by these amendments. However, slight amendments made to the Dockyard junction models in the future year scenarios (see **SECTION 4** below) have resulted in the future year model cycletimes being re-visited. As such, revised results for the 2014 Do Something scenario at the Carlton Terrace junction are presented below at **TABLE 3.3** whilst model outputs for all other scenarios are included at **APPENDIX A**.

TABLE 3.2 Weston Mill Drive / Carlton Terrace – 2010 Observed Model Validation

Approach	AM (0800-0900)				PM (1600-1700)			
	DoS	Obs Q	UER Q	MMQ	DoS	Obs Q	UER Q	MMQ
Carlton Terrace	56.7	6.4	4.1	5.1	44.1	3.1	2.4	2.9
Weston Mill Dr E	84.9	13.6	9.0	16.4	93.7	9.7	7.9	15.8
Ferndale Rd	91.1	7.0	4.4	8.9	86.9	6.4	4.3	7.6
Weston Mill Dr W	82.4	11.6	8.0	12.4	92.0	18.0	6.5	18.1
Cycletime (secs)	100				96			
Practical Reserve Capacity (PRC)	-1.3				-4.1			

TABLE 3.3 Weston Mill Drive / Carlton Terrace – 2014 Do Something

Approach	AM (0800-0900)		PM (1600-1700)	
	DoS	MMQ	DoS	MMQ
Carlton Terrace	54.7	3.7	48.0	3.2
Weston Mill Dr E	85.0	14.2	93.7	16.8
Ferndale Rd	79.7	5.3	94.8	10.2
Weston Mill Dr W	85.1	10.0	95.7	24.4
Cycletime (secs)	68		101	
Practical Reserve Capacity (PRC)	5.7		-6.4	

4. WOLSELEY ROAD / WESTON MILL DRIVE - VALIDATION

The model comments made specifically in relation to this junction relate to the phase minimums at J, K, L and O which should be 6 seconds, rather than 5 and additional intergreen values which should be included based on the Red Light Monitoring which is present at the junction. These amendments have therefore been incorporated into the junction models, for all of the model scenarios.

In addition, it was noted that in some cases the modelled green times within the 2010 Observed model scenarios slightly exceeded the maximum green times contained within the junction controller. As such, the modelled green times for the 2010 Observed scenarios have been reviewed to reflect these maximum settings and in addition, benefit from the review of timing data derived from the controller and provided by PCC.

The amendments referred to above have therefore been incorporated into the junction modelling and a summary of the 2010 Observed scenario results are provided below at **TABLE 4.1**, alongside the observed queue data in order to confirm the validation criteria, as discussed above.

In addition, the model results are also presented below at **TABLE 4.2** for the 2014 Do Something scenario. Model outputs for all other scenarios are included at **APPENDIX A**.

TABLE 4.1 Wolseley Road / Weston Mill Drive – 2010 Observed Model Validation

Approach	AM (0800-0900)				PM (1600-1700)			
	DoS	Obs Q	UER Q	MMQ	DoS	Obs Q	UER Q	MMQ
Wolseley Rd N Ahead + Left	61.8	7.7	6.3	8.7	76.5	6.1	4.9	7.4
Wolseley Rd N Ahead + Right	61.9	7.7	6.2	8.7	79.0	6.1	5.0	7.9
Weston Mill Dr Left	61.9	6.8	5.2	8.1	44.4	2.4	5.6	7.9
Weston Mill Dr Ahead + Left	63.0	6.8	2.3	8.6	56.3	1.3	1.5	2.2
Weston Mill Dr Ahead + Right	59.7	2.5	4.8	6.2	46.1	3.7	1.9	2.5
Wolseley Rd S Ahead + Left	56.4	8.9	5.5	7.2	84.2	13.0	9.3	16.1
Wolseley Rd S Right	49.5	7.1	5.0	6.4	83.1	12.9	9.6	16.0
Dockyard Ahead + Left	30.4	1.9	1.0	1.3	80.7	10.0	6.2	9.7
Dockyard Right	32.7	1.4	1.6	1.9	74.7	3.3	6.5	9.3
Cycletime (secs)	100				96			
Practical Reserve Capacity (PRC)	42.8				6.9			

TABLE 4.2 Wolseley Road / Weston Mill Drive – 2014 Do Something

Approach	AM (0800-0900)		PM (1600-1700)	
	DoS	MMQ	DoS	MMQ
Wolseley Rd N Ahead + Left	80.0	7.7	77.7	8.0
Wolseley Rd N Ahead + Right	87.4	9.5	81.8	8.9
Weston Mill Dr Left	75.7	6.2	51.6	10.1
Weston Mill Dr Ahead + Left	78.3	7.0	59.5	2.7
Weston Mill Dr Ahead + Right	54.8	4.3	52.1	2.9
Wolseley Rd S Ahead + Left	89.2	8.7	84.4	17.3
Wolseley Rd S Right	78.4	6.3	82.5	17.0
Dockyard Ahead + Left	27.2	1.1	83.9	10.9
Dockyard Right	24.3	1.3	81.8	11.3
Cycletime (secs)	68		101	
Practical Reserve Capacity (PRC)	0.9		6.6	

5. WOLSELEY ROAD / SALTASH ROAD - VALIDATION

The model comments made specifically in relation to this junction relate to the pedestrian crossing Phase H which should have a street phase minimum of 6, not 8 seconds. It has also been noted that Phase C is

not a filter phase and has a street phase minimum of 7, not 4 seconds and that a phase delay is present. In addition, Red Light Monitoring is present at the junction and there are therefore additional intergreens.

The amendments referred to above have been incorporated into the junction modelling and a summary of the 2010 Observed scenario results are provided below at **TABLE 5.1**, alongside the observed queue data in order to confirm the validation criteria, as discussed above.

In addition, the model results are also presented below at **TABLE 5.2** for the 2014 Do Something scenario. Model outputs for all other scenarios are included at **APPENDIX A**.

TABLE 5.1 Wolseley Road / Saltash Road – 2010 Observed Model Validation

Approach	AM (0800-0900)				PM (1600-1700)			
	DoS	Obs Q	UER Q	MMQ	DoS	Obs Q	UER Q	MMQ
Wolseley Rd N Ahead	68.2	7.1	5.6	12.1	51.4	5.3	3.6	6.0
Wolseley Rd N Right	89.9	12.5	9.2	22.0	88.4	11.2	6.0	11.9
Wolseley Rd S Ahead + Left	89.8	4.6	4.0	8.0	88.9	6.8	4.9	9.9
Wolseley Rd S Ahead	83.8	3.4	4.0	6.9	84.8	8.7	4.9	8.9
Saltash Rd Left	27.8	4.8	1.4	1.9	79.6	14.0	4.2	10.8
Saltash Rd Right	7.8	0.2	0.4	0.5	10.3	0.0	0.5	0.6
Cycletime (secs)	80				62			
Practical Reserve Capacity (PRC)	0.1				1.2			

TABLE 5.2 Wolseley Road / Saltash Road – 2014 Do Something

Approach	AM (0800-0900)		PM (1600-1700)	
	DoS	MMQ	DoS	MMQ
Wolseley Rd N Ahead	67.8	12.8	52.0	6.3
Wolseley Rd N Right	89.4	24.0	87.1	12.4
Wolseley Rd S Ahead + Left	86.1	8.0	89.9	10.7
Wolseley Rd S Ahead	81.2	7.2	86.7	9.9
Saltash Rd Left	28.7	2.0	82.6	12.8
Saltash Rd Right	9.0	0.5	11.1	0.6
Cycletime (secs)	88		65	
Practical Reserve Capacity (PRC)	0.6		0.1	

6. MODEL SUMMARY

Based on the comments received from Andrew Lillington and subsequent discussions which have taken place, the junction models for each of the three junctions (Dockyard, Carlton and Saltash) have been re-visited and updated as discussed above. The results of that analysis have been presented above for the 2010 Observed scenarios which confirm that the models have been calibrated against observed data and as such, show a good level of validation.

In most cases, the average observed queue levels tend to fall between the modelled uniform end red queue and the modelled mean maximum queue, as presented above. It is anticipated that this situation reflects the queue measurements which were recorded on site, given that the respective surveyor would have recorded the queue lengths by counting back from the stopline at the end of red. In doing so, vehicles would still have been joining the back of the queues meaning that the observed queue measurement would be likely to represent the situation between the end of red and mean maximum case.

The modelling results have also been presented herein for the updated 2014 Do Something scenarios at each of the three junctions (Dockyard, Carlton and Saltash). This analysis has confirmed that the conclusions originally set out within the Transport Assessment and accompanying appendices are valid.

Most notably, the analysis therefore confirms that each of the junctions are predicted to operate within their respective capacity thresholds in the 2014 'with development' (Do Something) scenarios, in the AM and PM peak hours. It was noted in the TA that the Carlton Terrace junction is predicted to operate in excess of its recommended capacity threshold although within its theoretical capacity threshold in both the 2014 Do Minimum and 2014 Do Something scenarios in the PM peak.

This analysis therefore indicates that a capacity issue is expected to arise at this junction in 2014, irrespective of whether the proposed development comes forward. It is noted however, that the proposed development would contribute to the extent to which the junction would exceed the recommended capacity threshold in 2014. For clarity, these modelling results have again been found to be consistent with those originally presented within the Transport Assessment and associated appendices.

Finally, the modelling has also been re-visited and updated for the Dockyard junction in the 2014 Do Something scenarios which include the incorporation of the proposed signalised site access and the associated outputs are included at **APPENDIX A**. This updated modelling has also been found to be consistent with the analysis presented within the Transport Assessment and associated appendices.

Junction model outputs for all scenarios are included with this Technical Note, at **APPENDIX A**.

7. AFTERNOON PEAK (1400-1500) SCENARIO

Finally and in addition to the above, PCC have also requested that consideration be given to the addition of development related traffic to the highway network between the hours of 1400-1500.

As such, the final versions of each of the junction models (Dockyard, Carlton and Saltash) discussed above, have been taken forward to develop 1400-1500 cases for the 2014 Do Something Scenarios and the results of this modelling are presented below at **TABLES 7.1 – 7.3**.

TABLE 7.1 Weston Mill Drive / Carlton Terrace – 2014 Do Something (1400-1500)

Approach	Afternoon (1400-1500)	
	DoS	MMQ
Carlton Terrace	37.3	1.8
Weston Mill Dr E	69.3	6.4
Ferndale Rd	56.3	2.8
Weston Mill Dr W	67.3	4.6
Cycletime (secs)	61	
Practical Reserve Capacity (PRC)	29.8	

TABLE 7.2 Wolseley Road / Weston Mill Drive – 2014 Do Something (1400-1500)

Approach	Afternoon (1400-1500)	
	DoS	MMQ
Wolseley Rd N Ahead + Left	77.2	4.8
Wolseley Rd N Ahead + Right	80.6	5.3
Weston Mill Dr Left	44.2	5.1
Weston Mill Dr Ahead + Left	45.9	2.1
Weston Mill Dr Ahead + Right	47.7	2.5
Wolseley Rd S Ahead + Left	87.7	10.1
Wolseley Rd S Right	56.9	5.0
Dockyard Ahead + Left	26.0	1.0
Dockyard Right	31.4	2.1
Cycletime (secs)	61	
Practical Reserve Capacity (PRC)	2.7	

TABLE 7.3 Wolseley Road / Saltash Road – 2014 Do Something (1400-1500)

Approach	Afternoon (1400-1500)	
	DoS	MMQ
Wolseley Rd N Ahead	63.7	6.0
Wolseley Rd N Right	89.7	8.8
Wolseley Rd S Ahead + Left	86.9	6.4
Wolseley Rd S Ahead	86.8	6.6
Saltash Rd Left	42.8	2.2
Saltash Rd Right	5.6	0.3
Cycletime (secs)	48	
Practical Reserve Capacity (PRC)	0.3	

The analysis confirms that in line with the lower background traffic flows between 1400-1500 compared to the peak network hours, the junctions operate more effectively and within the recommended capacity thresholds including the development related traffic.

The modelling has also been undertaken for the Do Something MAX and Do Something MAX plus Potential scenarios, as discussed within the Transport Assessment and associated appendices, as well as for the Dockyard junction configuration which incorporates the signalised site access. This analysis has again confirmed that the junctions can cater for the predicted levels of traffic, in all cases.

Junction model outputs for all scenarios for the 1400-1500 scenarios are included with this Technical Note, at **APPENDIX B**.

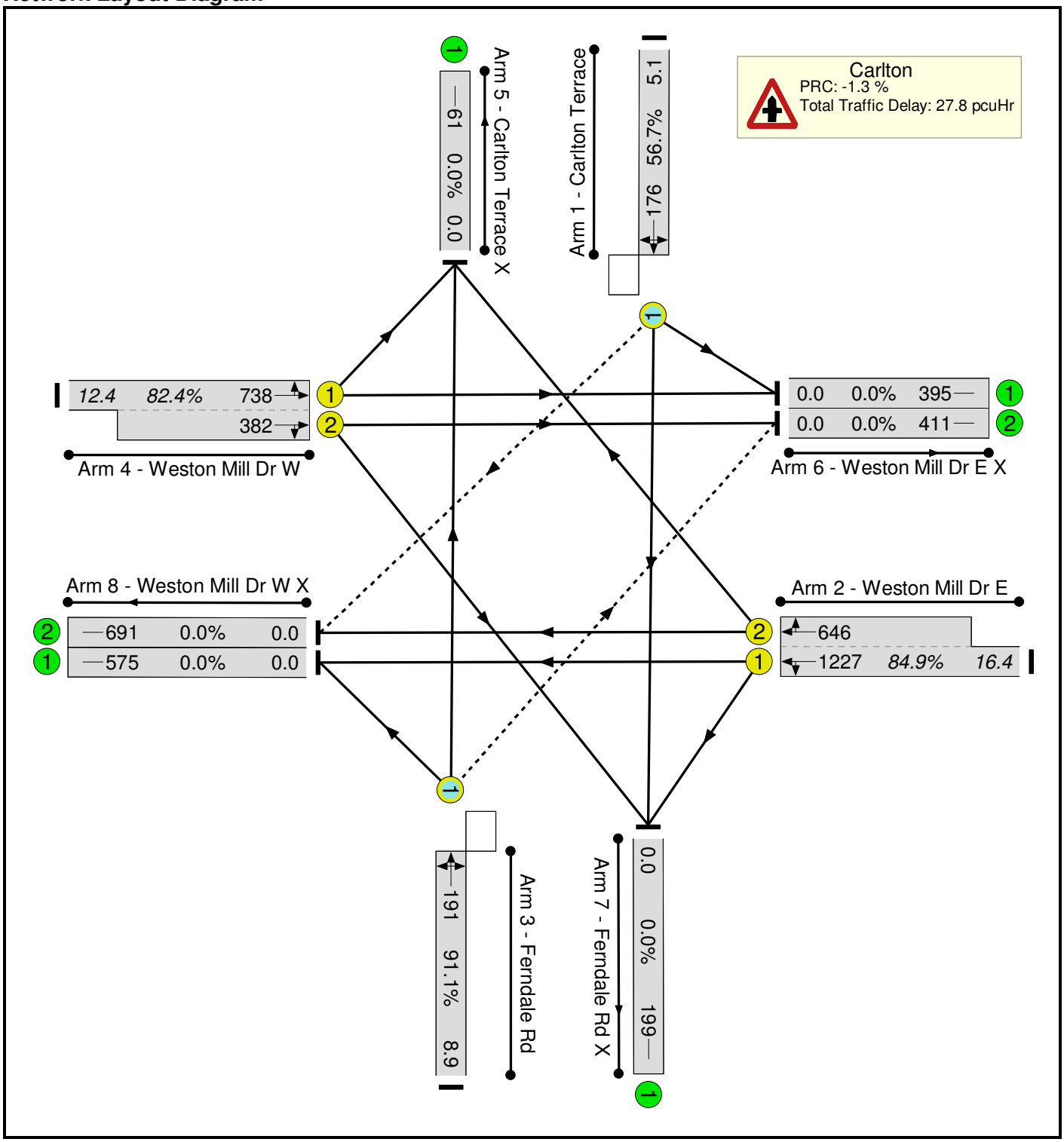
Appendix A

Weston Mill Drive / Carlton Terrace

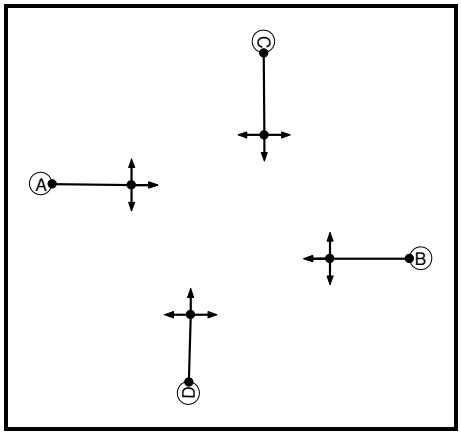
LINSIG Model Output

Scenario 1: '2010 AM Observed' (FG1: '2010 AM Observed', Plan 1: 'AM')

Network Layout Diagram

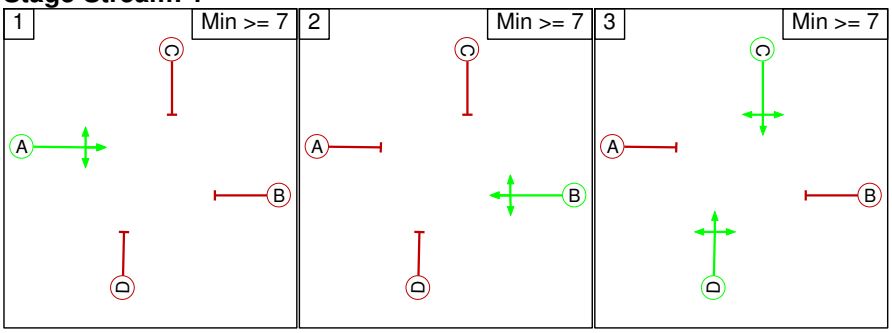


Phase Diagram

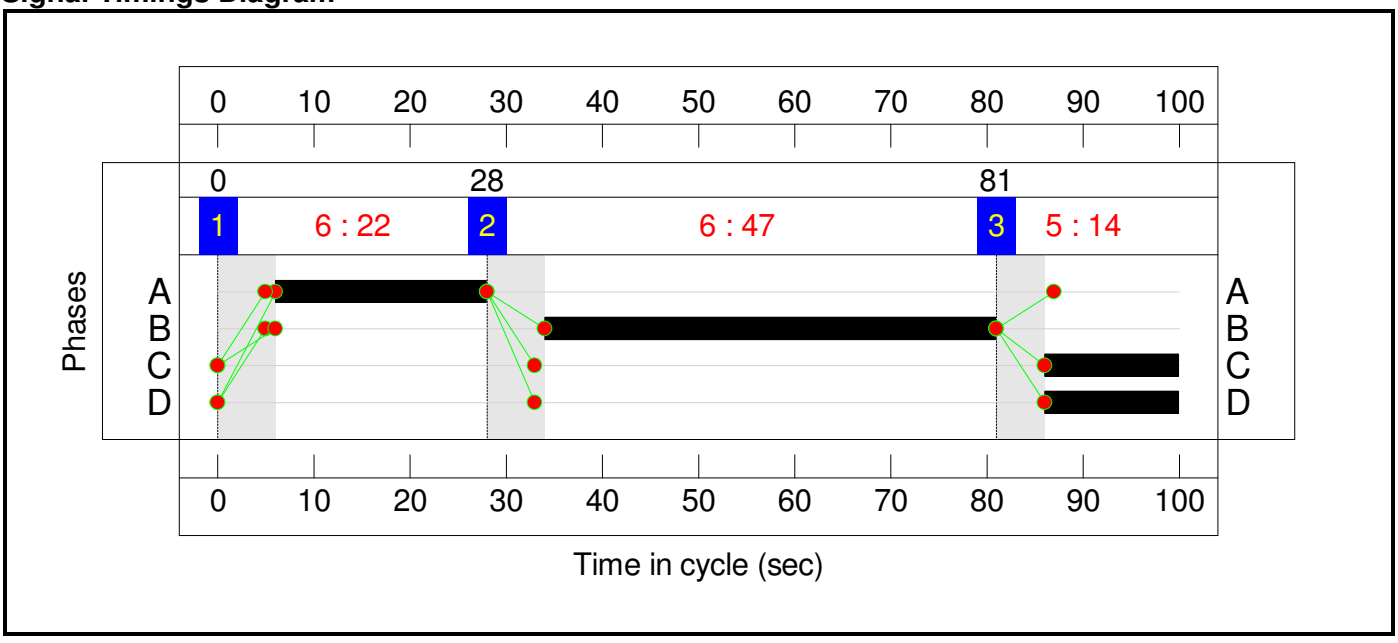


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



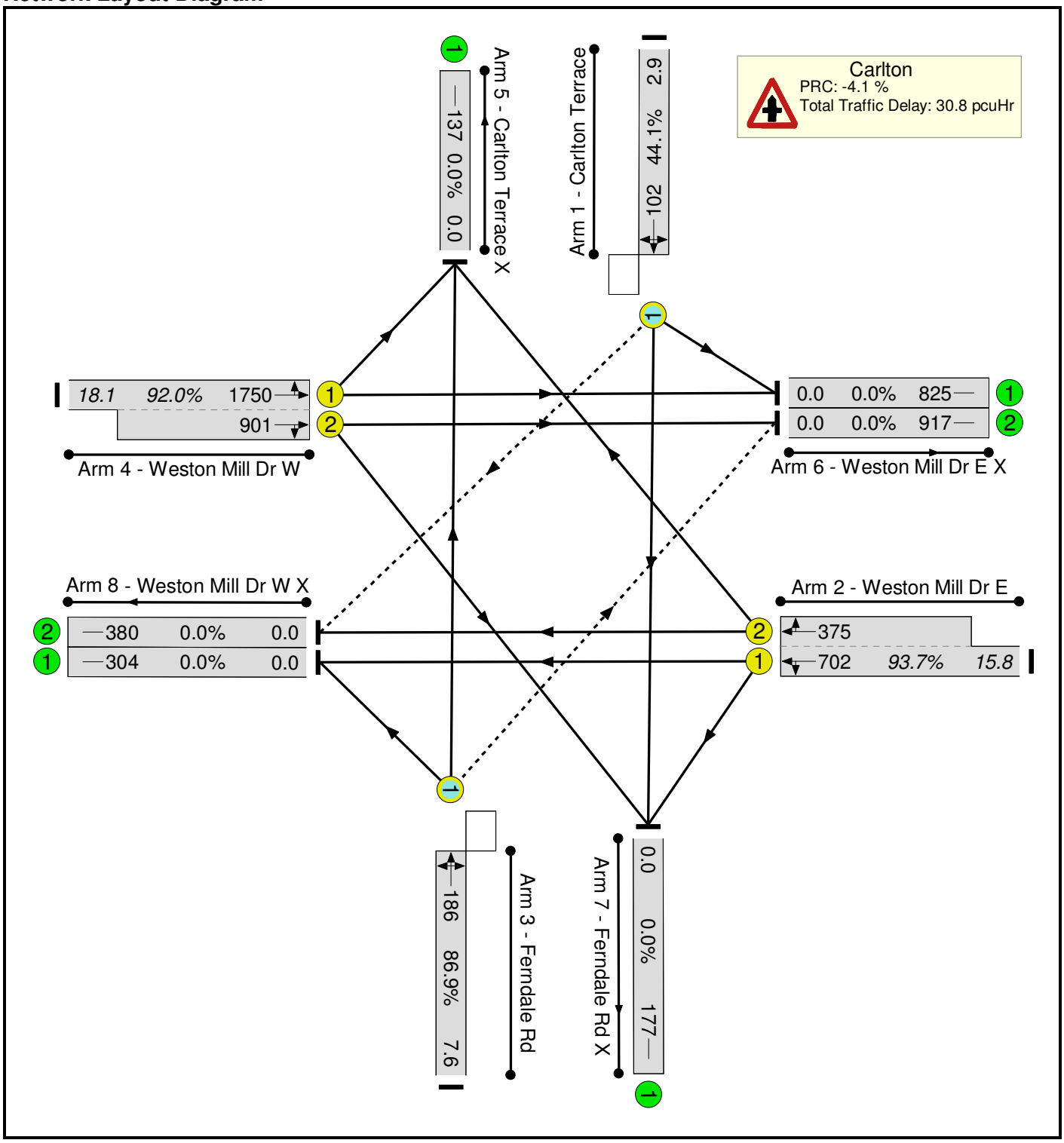
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**91.1%**	-
Carlton	-	-	-	-	-	**91.1%**	-
1/1	Carlton Terrace Left Ahead Right	C	14	86	0	56.7%	5.1
2/1+2/2	Weston Mill Dr E Right Left Ahead	B	47	34	81	84.9%	16.4
3/1	Ferndale Rd Ahead Right Left	D	14	86	0	91.1%	8.9
4/1+4/2	Weston Mill Dr W Left Ahead Right	A	22	6	28	82.4%	12.4

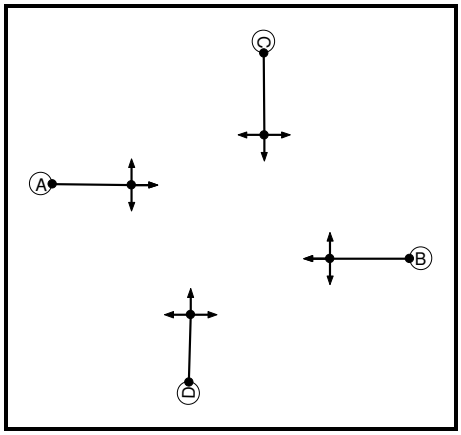
C1 Stream: 1 PRC for Signalled Lanes (%): -1.3 Total Delay for Signalled Lanes (pcuHr): 27.81
PRC Over All Lanes (%): -1.3 Total Delay Over All Lanes(pcuHr): 27.81 Cycle Time (s): 100

Scenario 2: '2010 PM Observed' (FG2: '2010 PM Observed', Plan 2: 'PM')

Network Layout Diagram

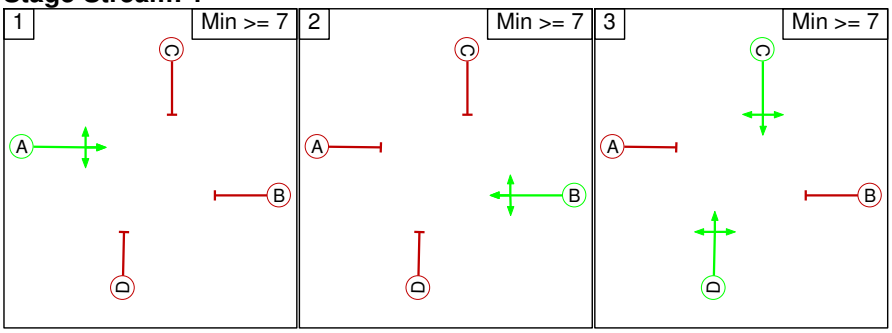


Phase Diagram

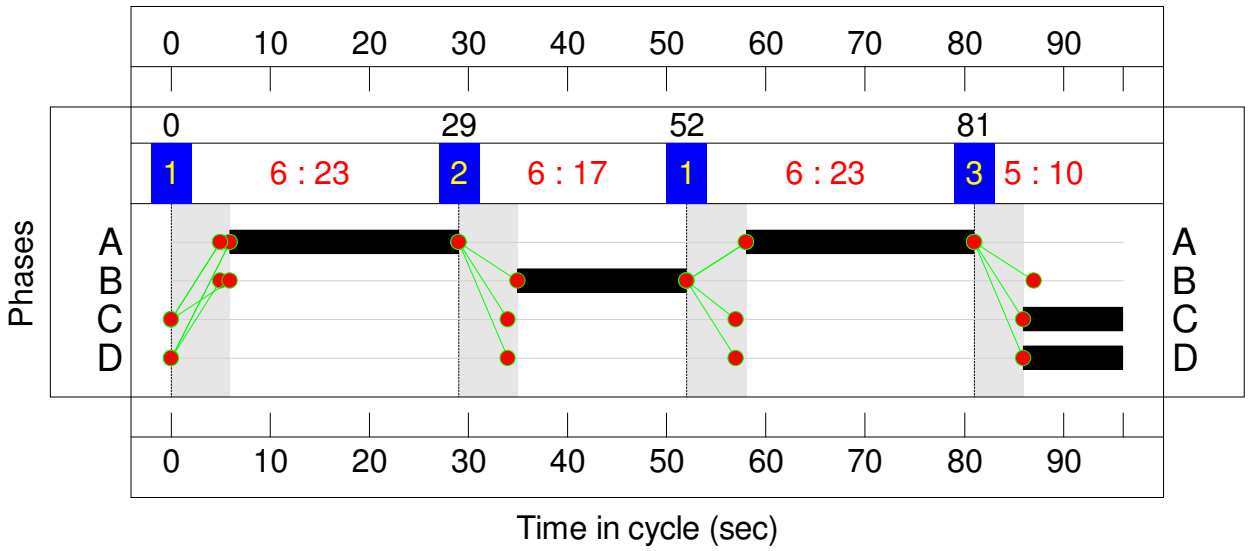


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



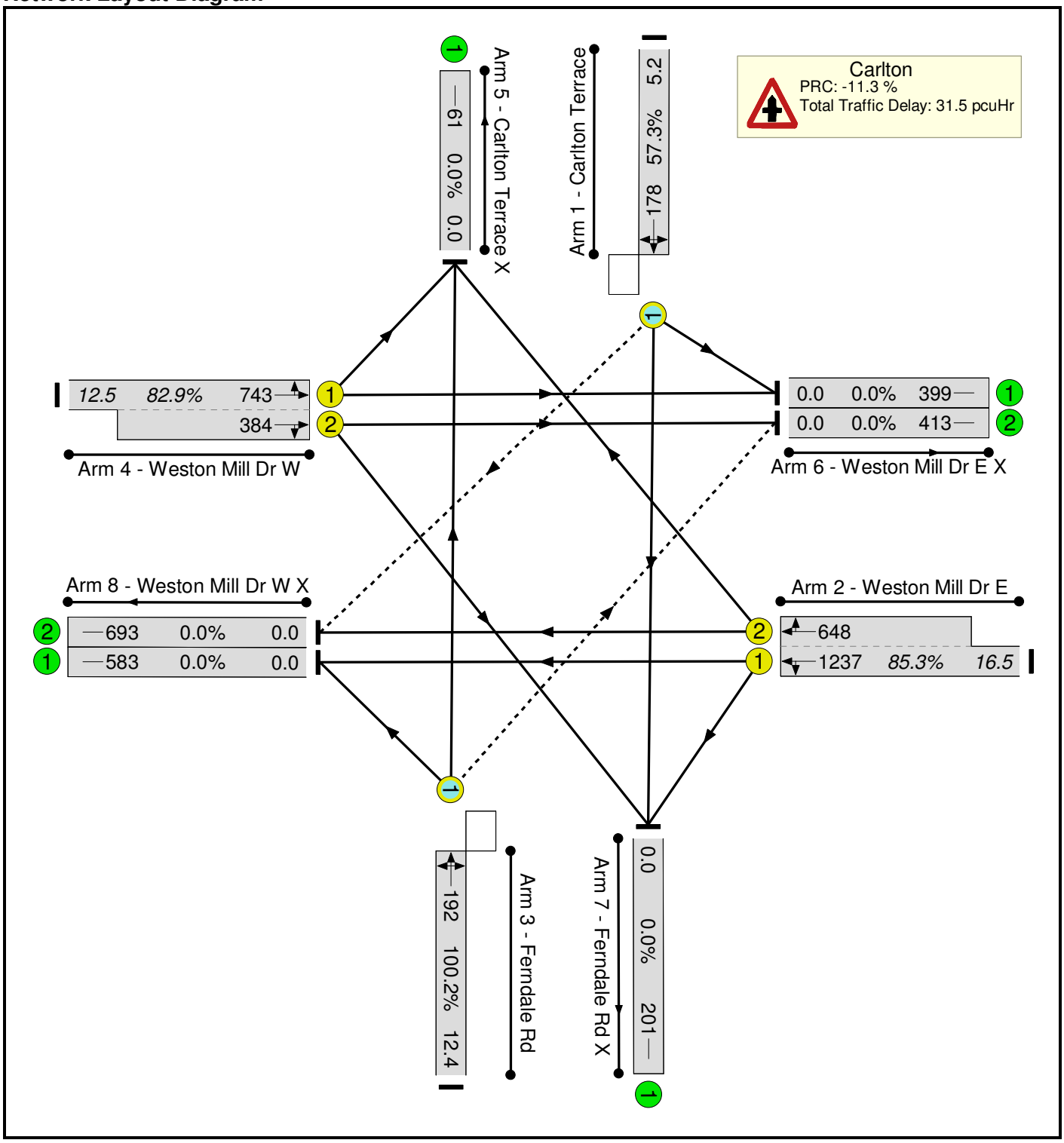
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**93.7%**	-
Carlton	-	-	-	-	-	**93.7%**	-
1/1	Carlton Terrace Left Ahead Right	C	10	86	0	44.1%	2.9
2/1+2/2	Weston Mill Dr E Right Left Ahead	B	17	35	52	93.7%	15.8
3/1	Ferndale Rd Ahead Right Left	D	10	86	0	86.9%	7.6
4/1+4/2	Weston Mill Dr W Left Ahead Right	A	46	6	29	92.0%	18.1

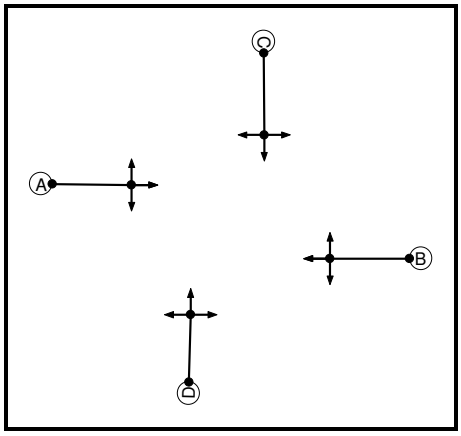
C1 Stream: 1 PRC for Signalled Lanes (%): -4.1 Total Delay for Signalled Lanes (pcuHr): 30.78
PRC Over All Lanes (%): -4.1 Total Delay Over All Lanes(pcuHr): 30.78 Cycle Time (s): 96

Scenario 3: '2011 AM Base' (FG3: '2011 AM Base', Plan 1: 'AM')

Network Layout Diagram

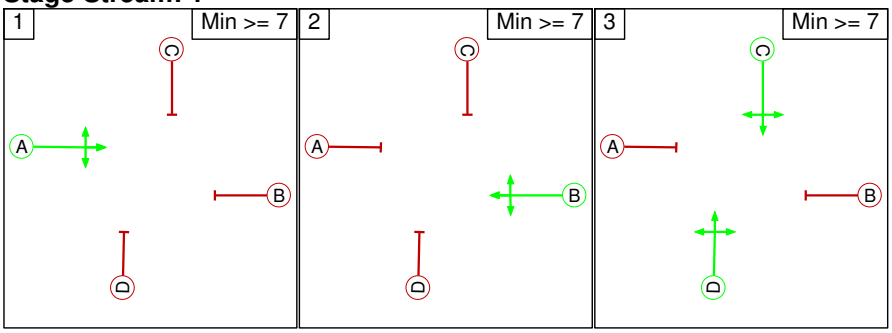


Phase Diagram

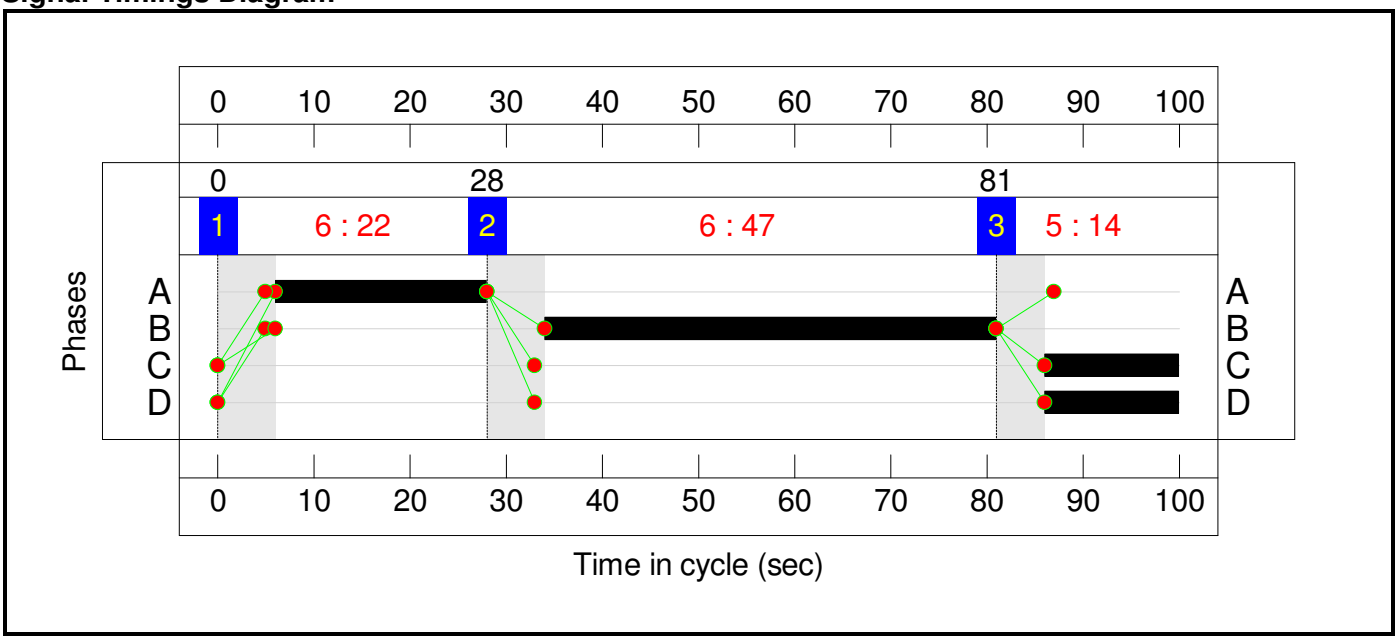


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



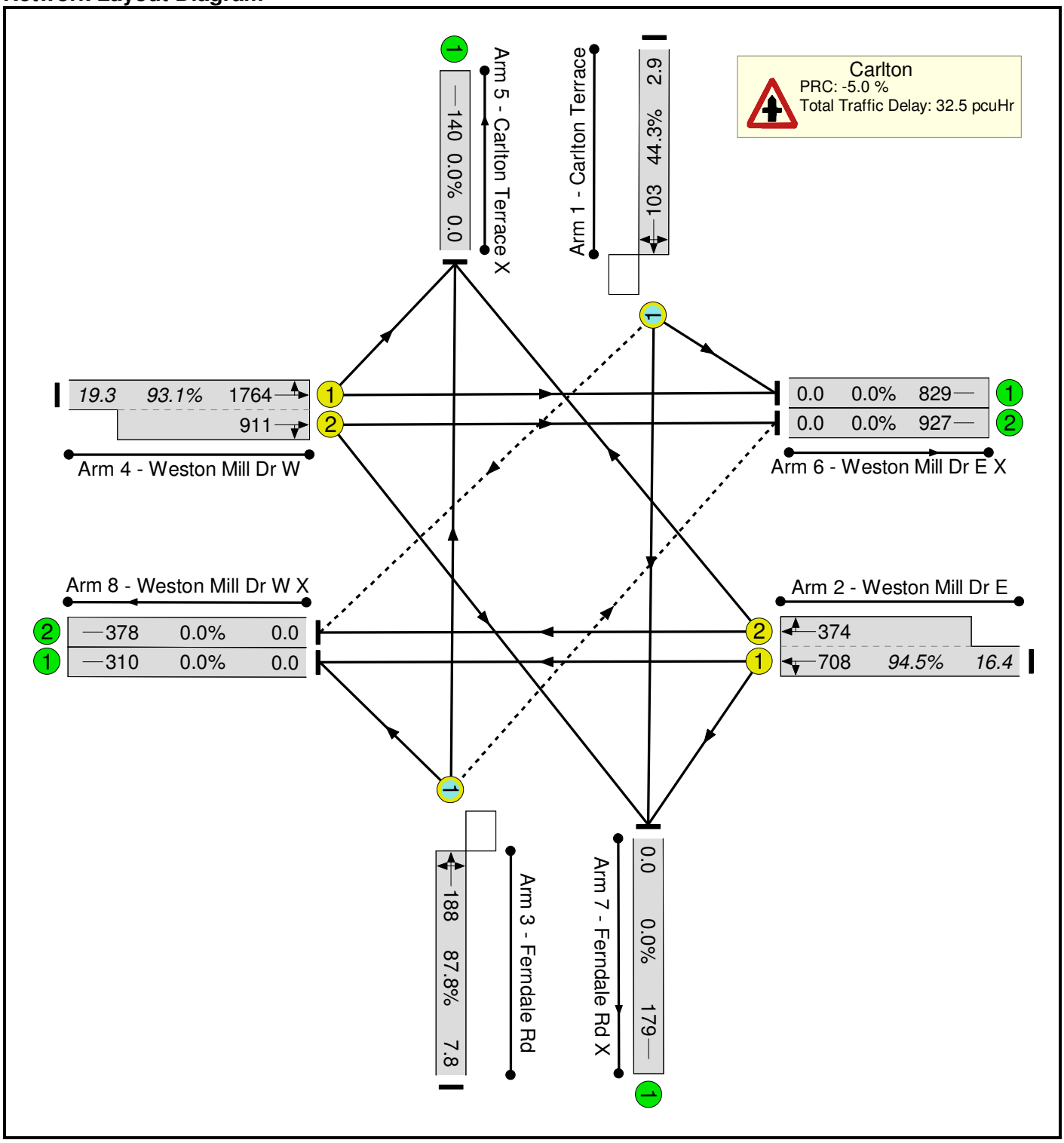
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**100.2%**	-
Carlton	-	-	-	-	-	**100.2%**	-
1/1	Carlton Terrace Left Ahead Right	C	14	86	0	57.3%	5.2
2/1+2/2	Weston Mill Dr E Right Left Ahead	B	47	34	81	85.3%	16.5
3/1	Ferndale Rd Ahead Right Left	D	14	86	0	100.2%	12.4
4/1+4/2	Weston Mill Dr W Left Ahead Right	A	22	6	28	82.9%	12.5

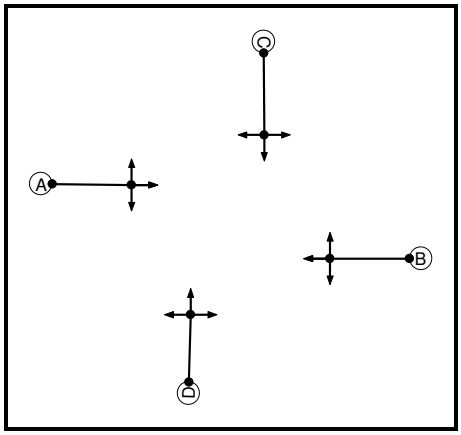
C1 Stream: 1 PRC for Signalled Lanes (%): -11.3 Total Delay for Signalled Lanes (pcuHr): 31.55
PRC Over All Lanes (%): -11.3 Total Delay Over All Lanes(pcuHr): 31.55 Cycle Time (s): 100

Scenario 4: '2011 PM Base' (FG4: '2011 PM Base', Plan 2: 'PM')

Network Layout Diagram

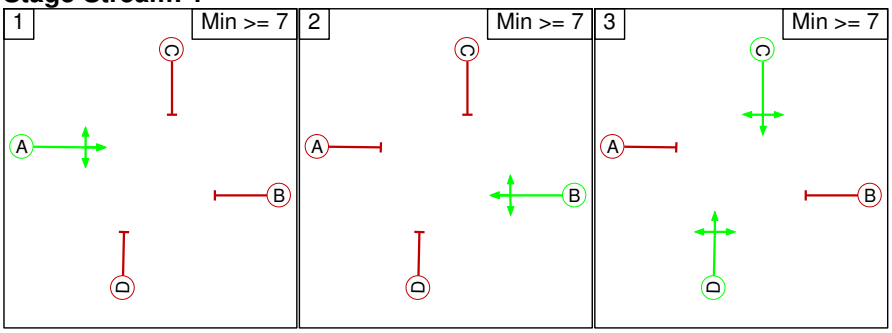


Phase Diagram

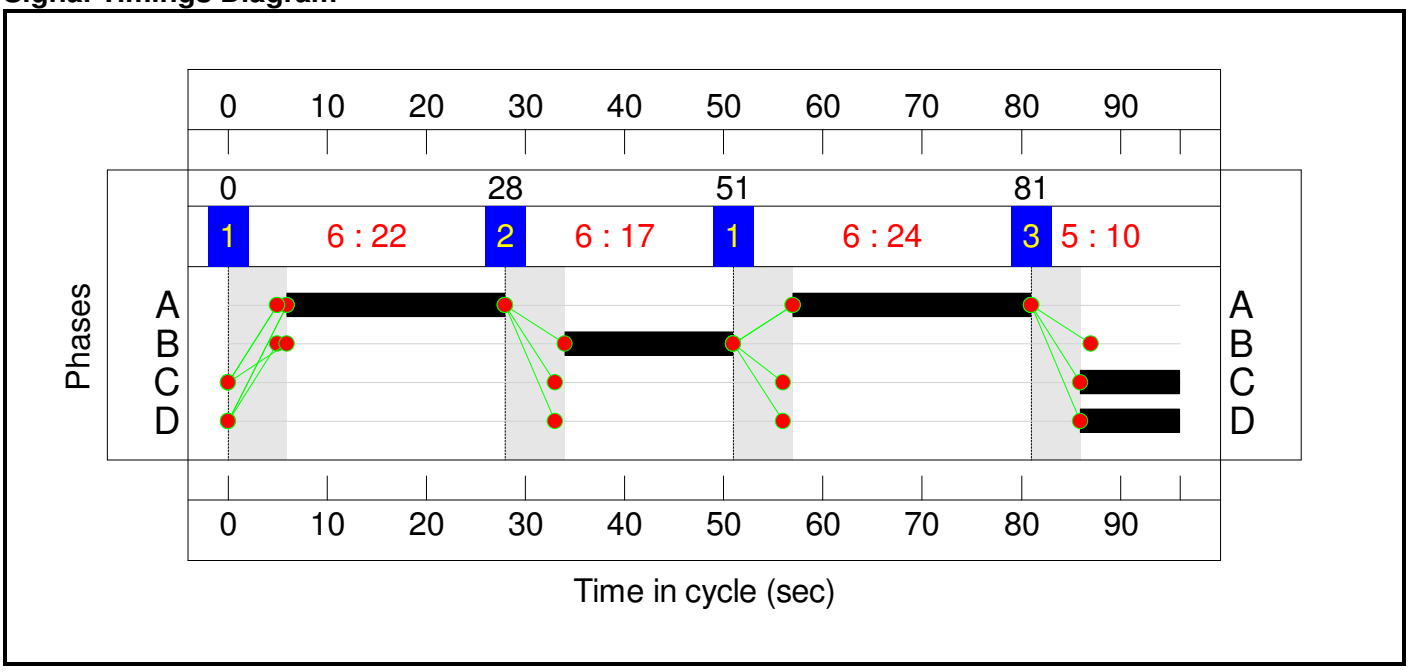


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



Network Results

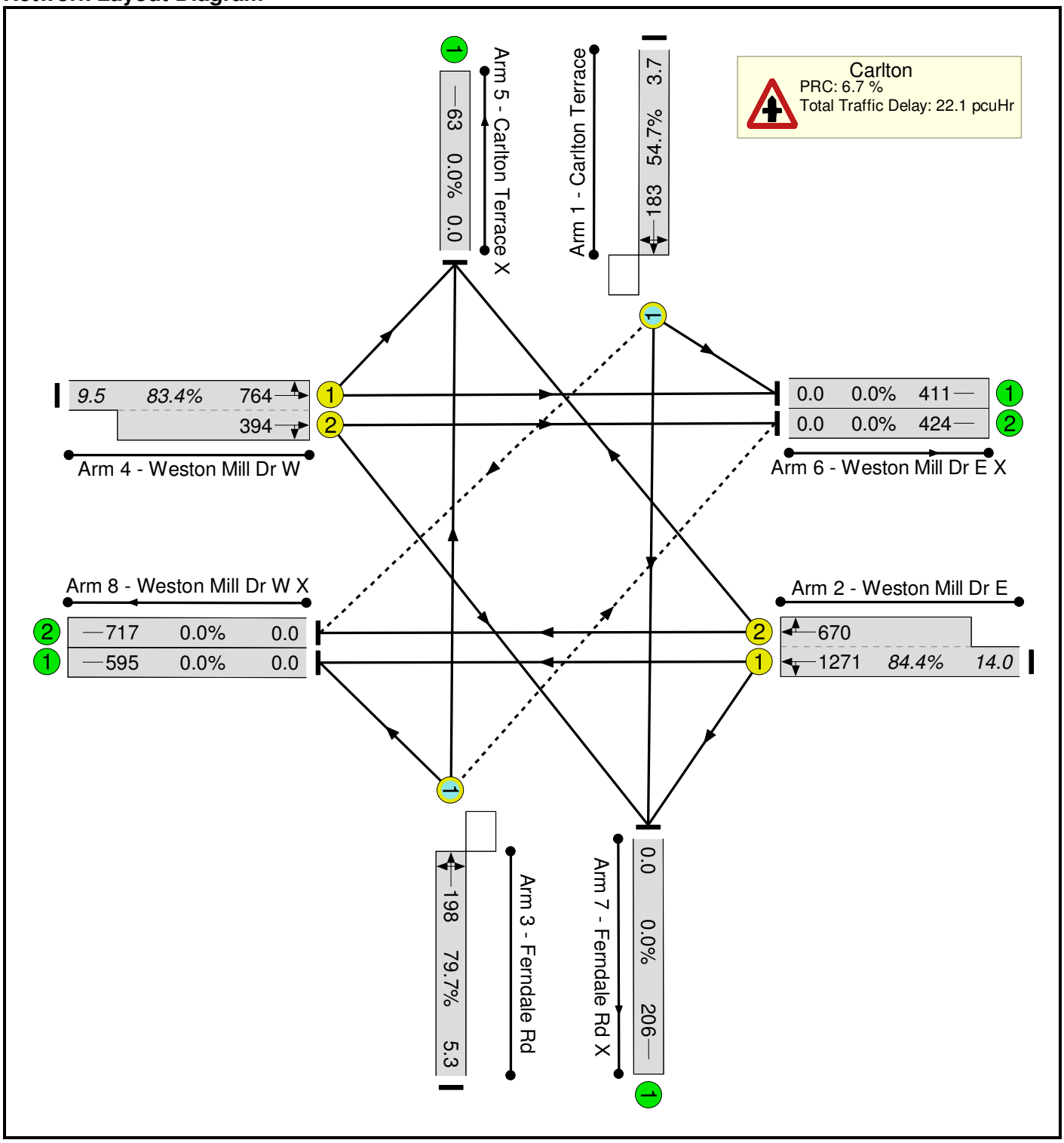
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**94.5%**	-
Carlton	-	-	-	-	-	**94.5%**	-
1/1	Carlton Terrace Left Ahead Right	C	10	86	0	44.3%	2.9
2/1+2/2	Weston Mill Dr E Right Left Ahead	B	17	34	51	94.5%	16.4
3/1	Ferndale Rd Ahead Right Left	D	10	86	0	87.8%	7.8
4/1+4/2	Weston Mill Dr W Left Ahead Right	A	46	6	28	93.1%	19.3

C1 Stream: 1 PRC for Signalled Lanes (%): -5.0 Total Delay for Signalled Lanes (pcuHr): 32.54
PRC Over All Lanes (%): -5.0 Total Delay Over All Lanes(pcuHr): 32.54 Cycle Time (s): 96

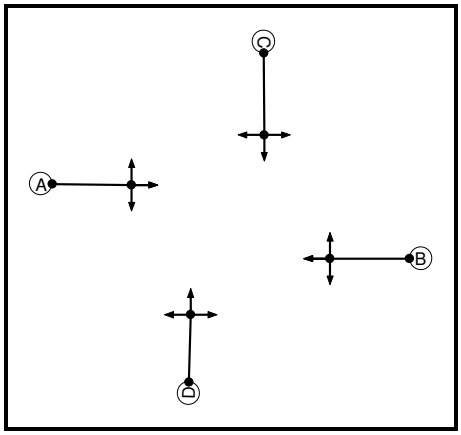
LINSIG Model Output

Scenario 1: '2014 AM Do Min' (FG1: '2014 AM Do Minimum', Plan 1: 'AM')

Network Layout Diagram

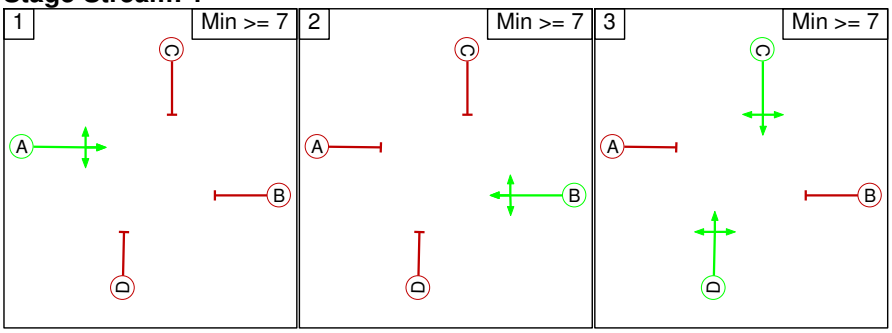


Phase Diagram

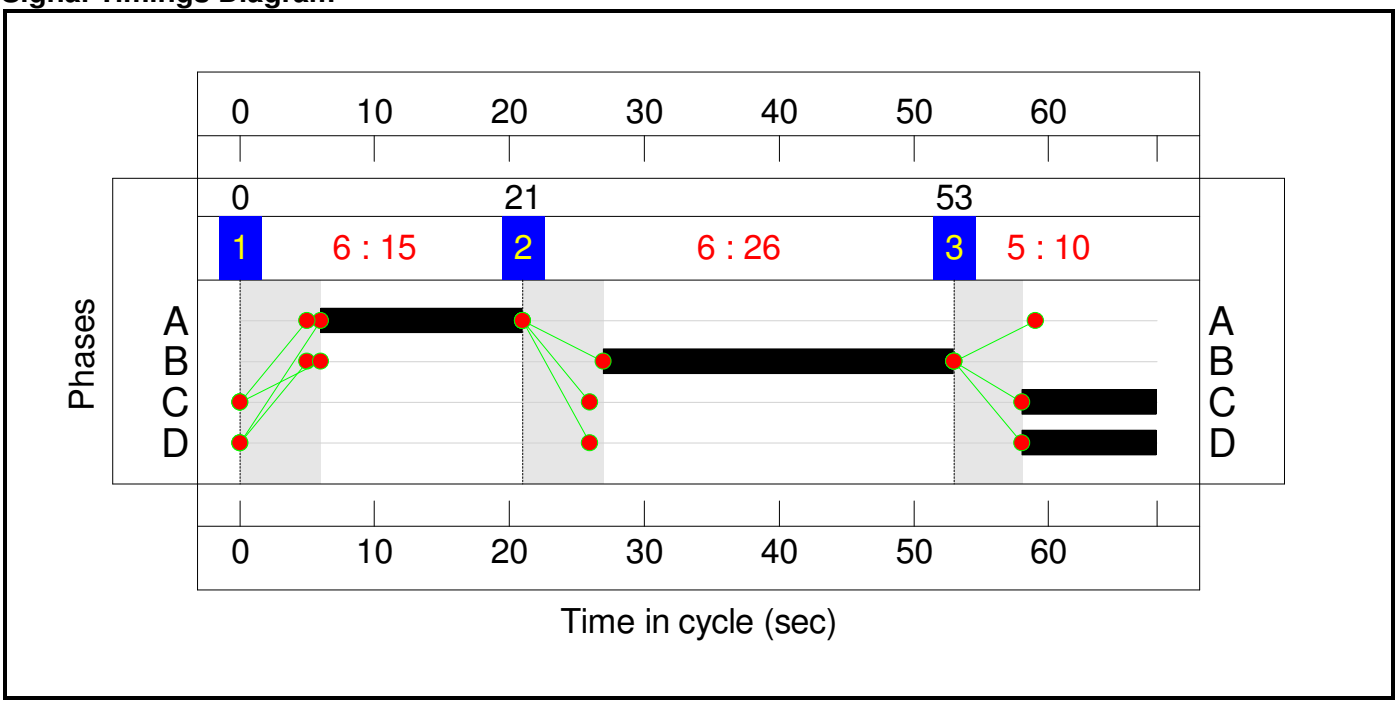


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



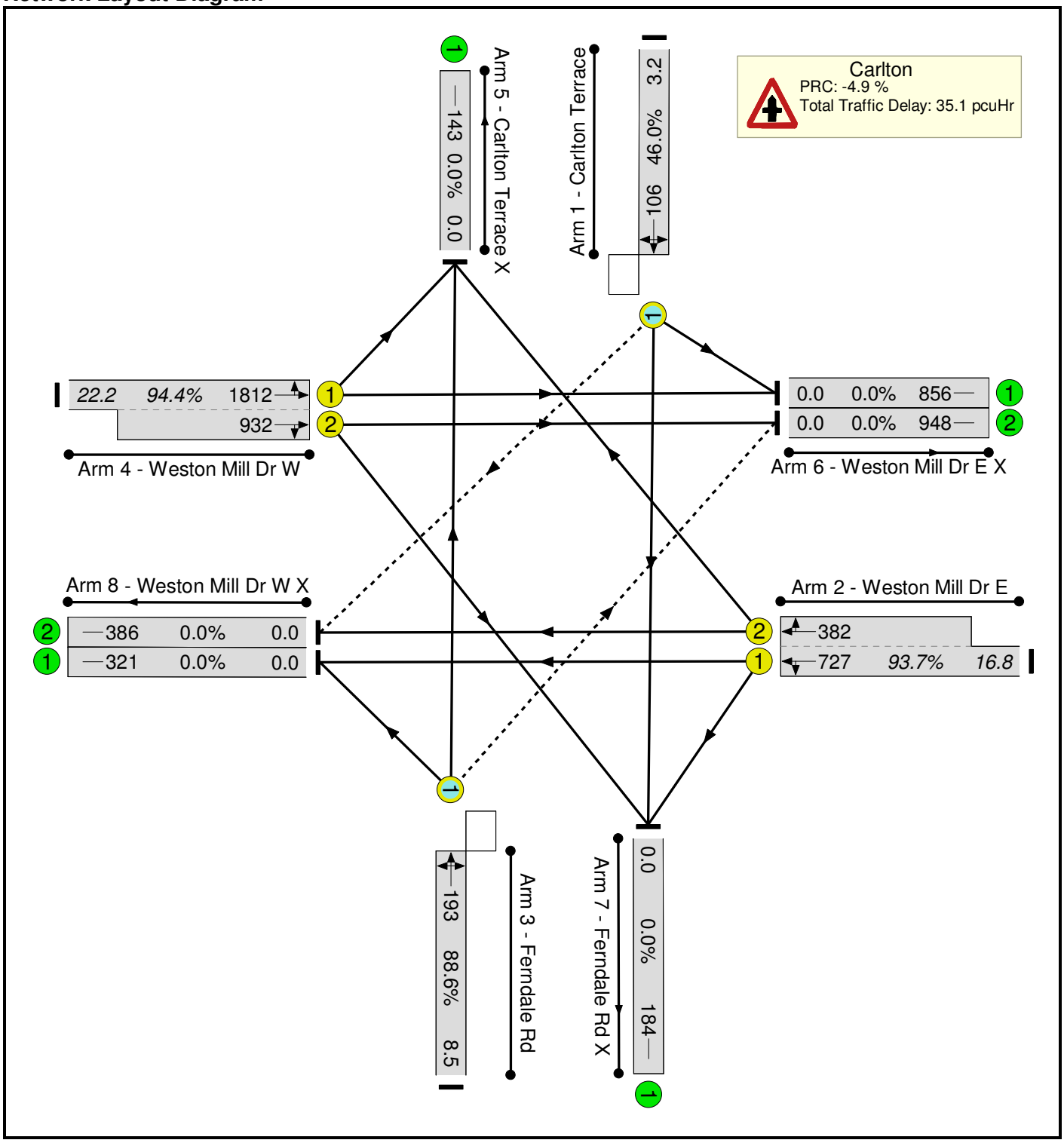
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**84.4%**	-
Carlton	-	-	-	-	-	**84.4%**	-
1/1	Carlton Terrace Left Ahead Right	C	10	58	0	54.7%	3.7
2/1+2/2	Weston Mill Dr E Right Left Ahead	B	26	27	53	84.4%	14.0
3/1	Ferndale Rd Ahead Right Left	D	10	58	0	79.7%	5.3
4/1+4/2	Weston Mill Dr W Left Ahead Right	A	15	6	21	83.4%	9.5

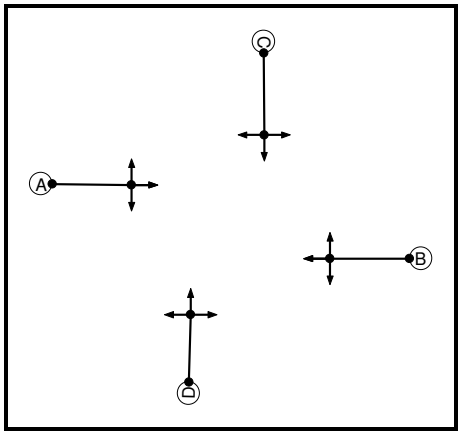
C1 Stream: 1 PRC for Signalled Lanes (%): 6.7 Total Delay for Signalled Lanes (pcuHr): 22.12
PRC Over All Lanes (%): 6.7 Total Delay Over All Lanes(pcuHr): 22.12 Cycle Time (s): 68

Scenario 2: '2014 PM Do Min' (FG2: '2014 AM Do Minimum', Plan 2: 'PM')

Network Layout Diagram

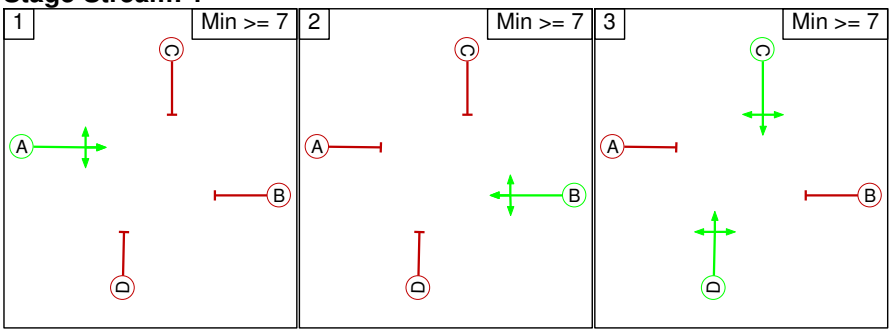


Phase Diagram

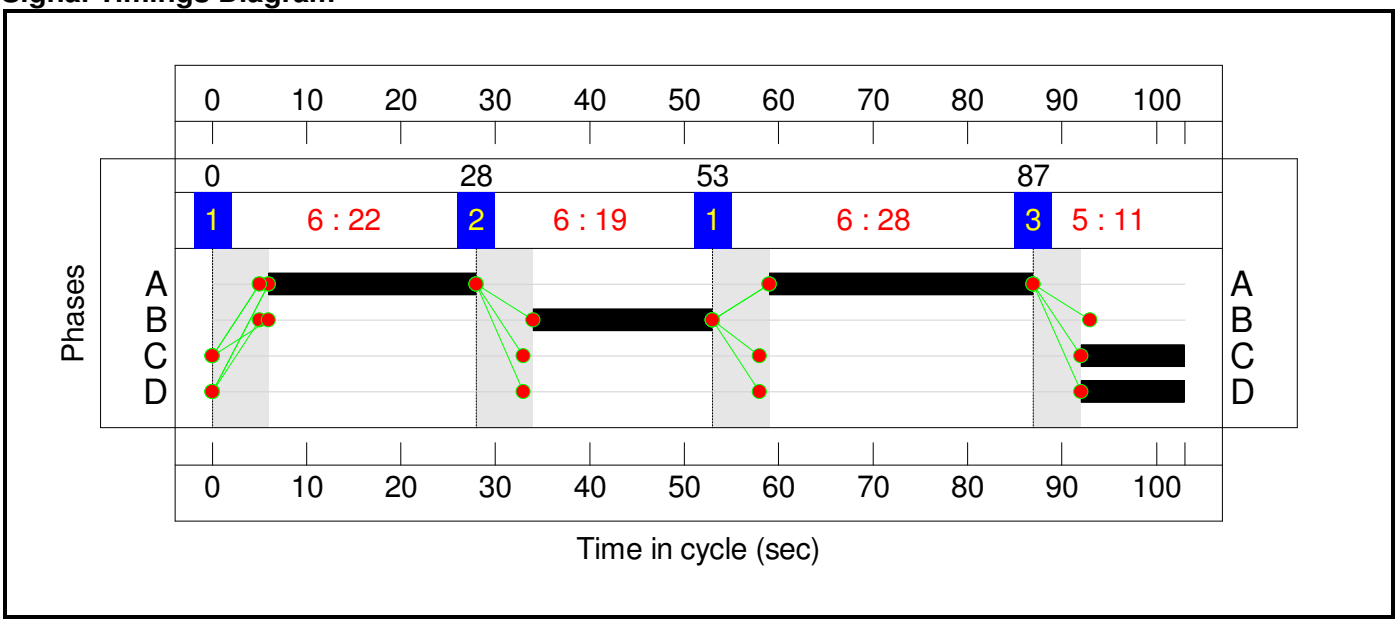


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



Network Results

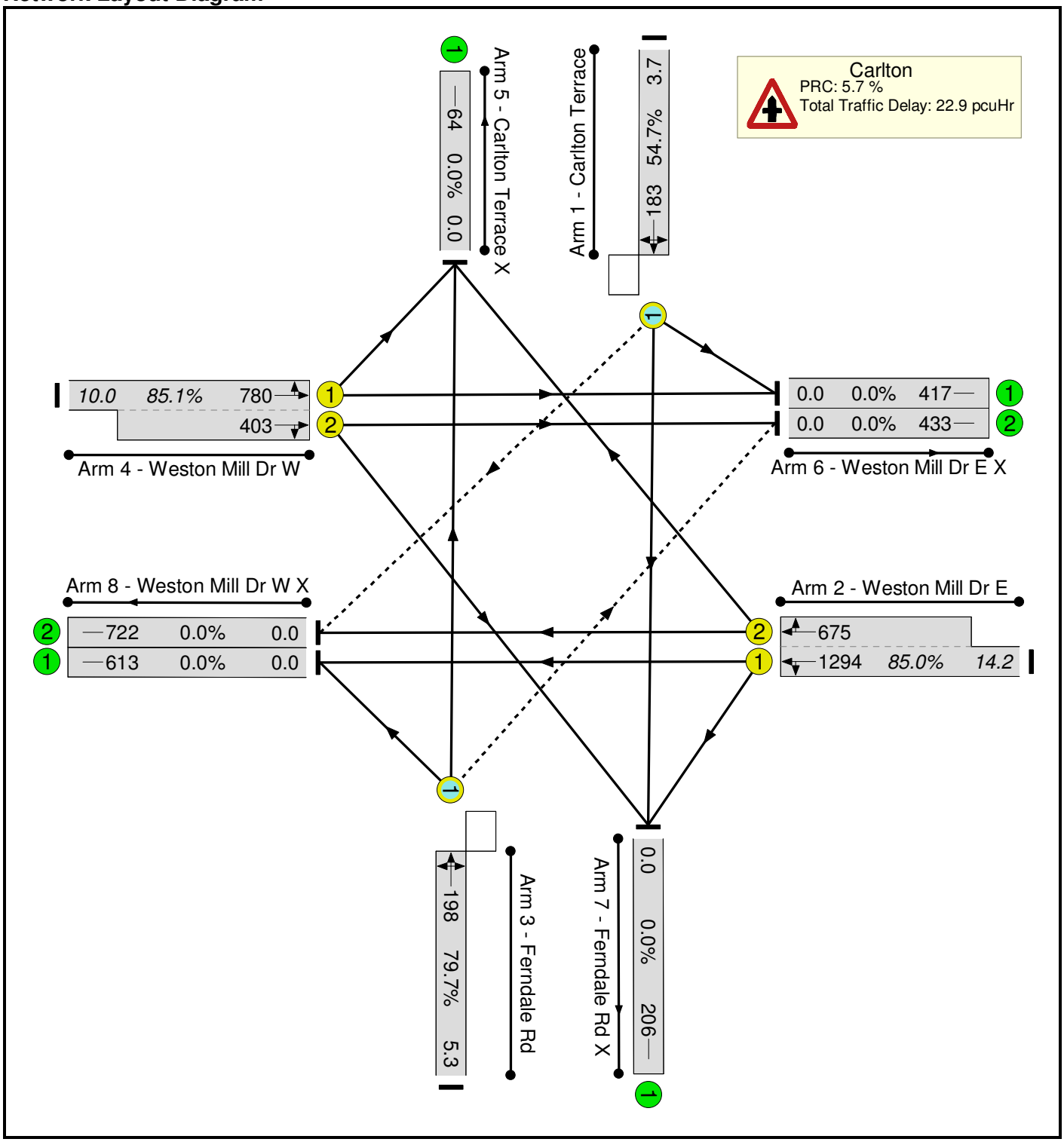
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**94.4%**	-
Carlton	-	-	-	-	-	**94.4%**	-
1/1	Carlton Terrace Left Ahead Right	C	11	92	0	46.0%	3.2
2/1+2/2	Weston Mill Dr E Right Left Ahead	B	19	34	53	93.7%	16.8
3/1	Ferndale Rd Ahead Right Left	D	11	92	0	88.6%	8.5
4/1+4/2	Weston Mill Dr W Left Ahead Right	A	50	6	28	94.4%	22.2

C1 Stream: 1 PRC for Signalled Lanes (%): -4.9 Total Delay for Signalled Lanes (pcuHr): 35.11
PRC Over All Lanes (%): -4.9 Total Delay Over All Lanes(pcuHr): 35.11 Cycle Time (s): 103

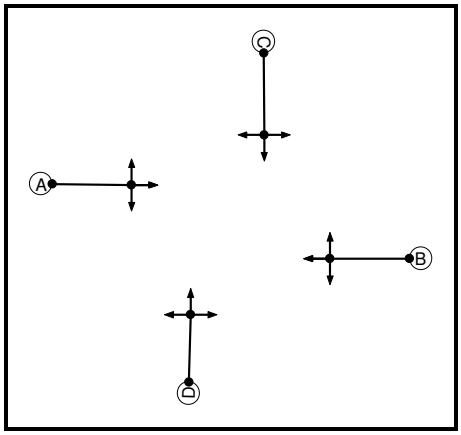
LINSIG Model Output

Scenario 1: '2014 AM Do Something' (FG1: '2014 AM Do Something', Plan 1: 'AM')

Network Layout Diagram

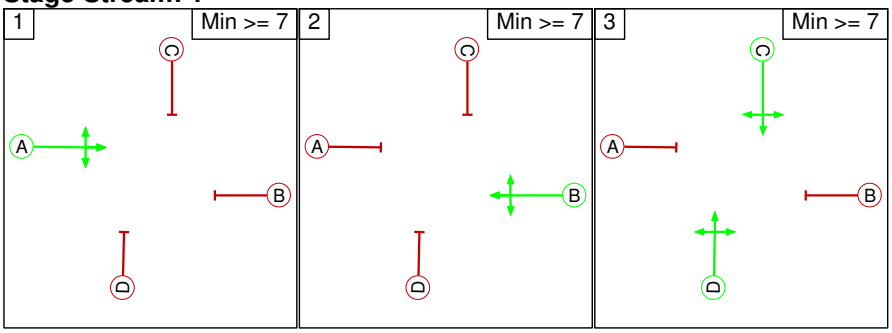


Phase Diagram

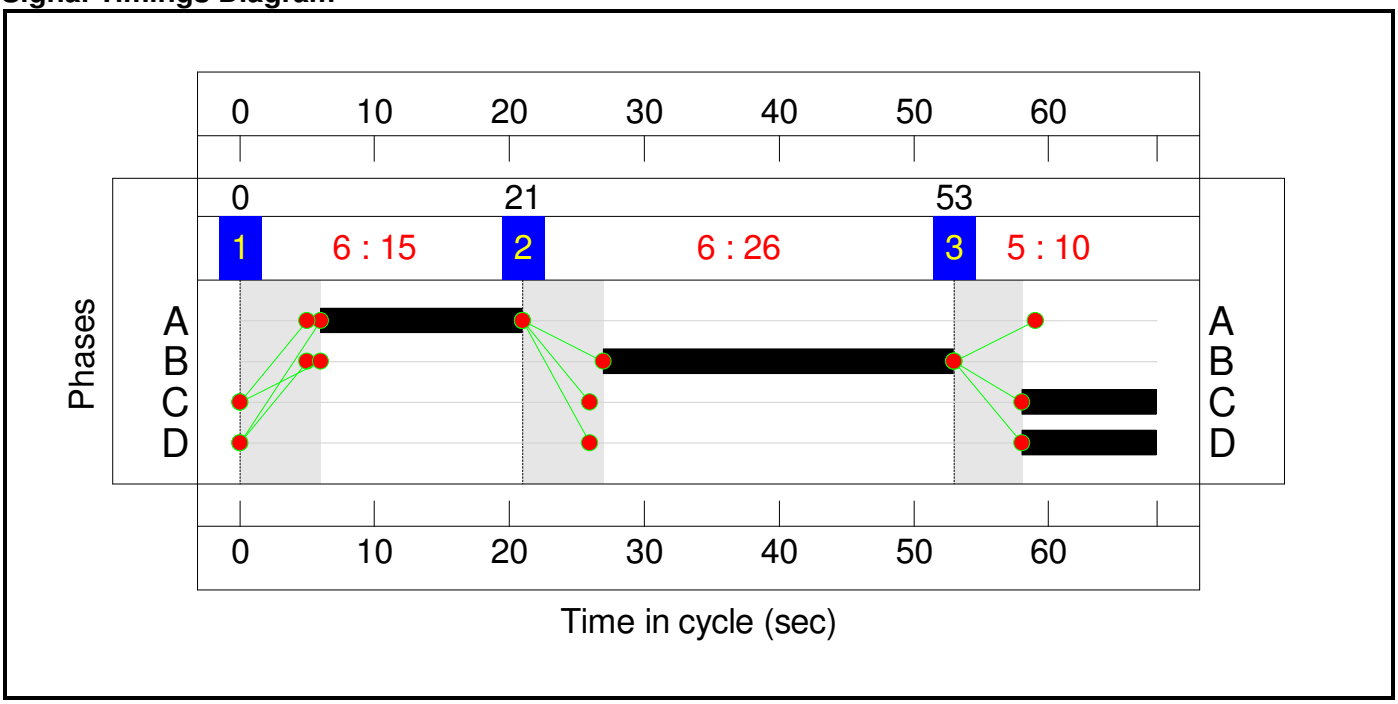


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



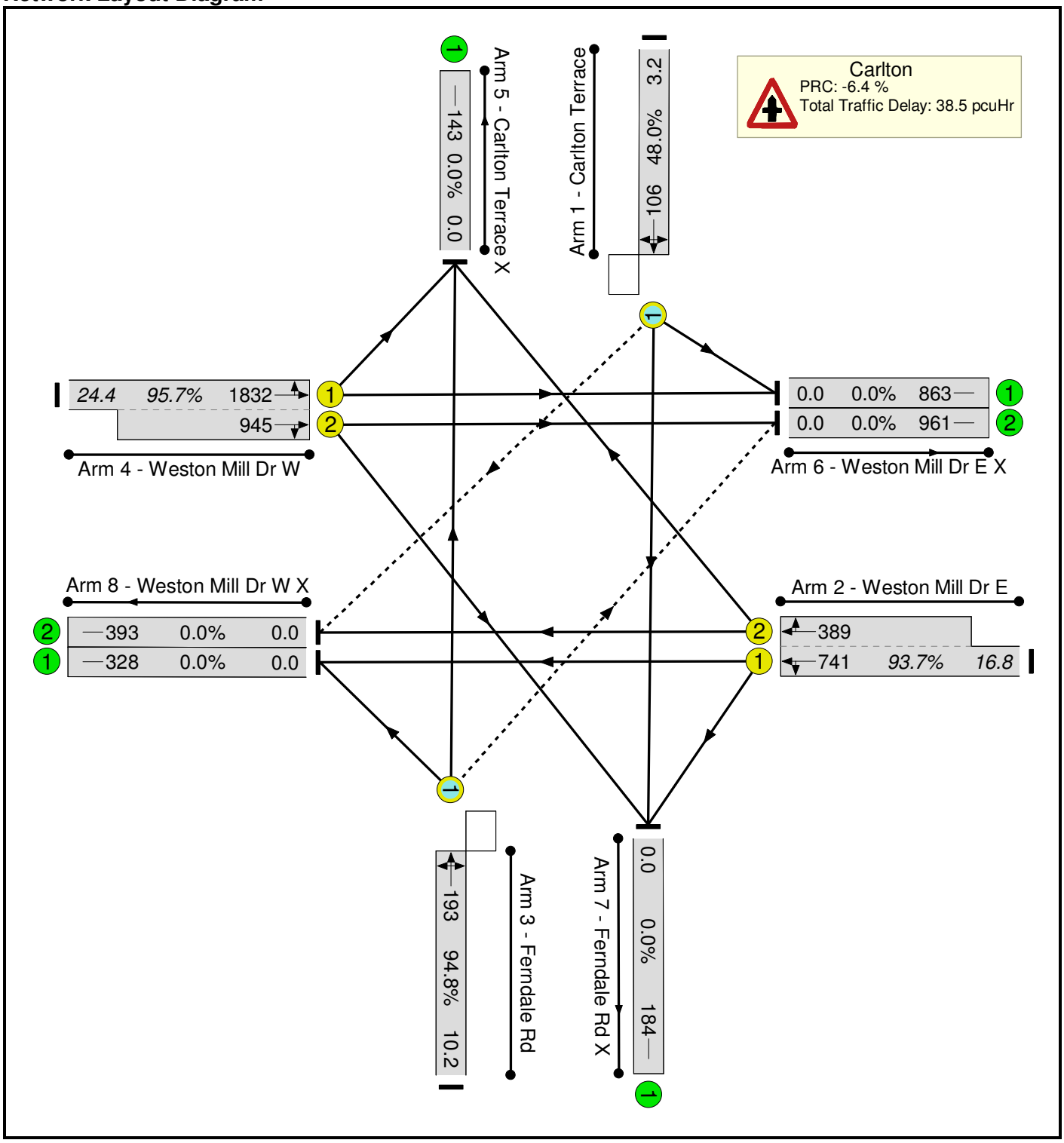
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**85.1%**	-
Carlton	-	-	-	-	-	**85.1%**	-
1/1	Carlton Terrace Left Ahead Right	C	10	58	0	54.7%	3.7
2/1+2/2	Weston Mill Dr E Right Left Ahead	B	26	27	53	85.0%	14.2
3/1	Ferndale Rd Ahead Right Left	D	10	58	0	79.7%	5.3
4/1+4/2	Weston Mill Dr W Left Ahead Right	A	15	6	21	85.1%	10.0

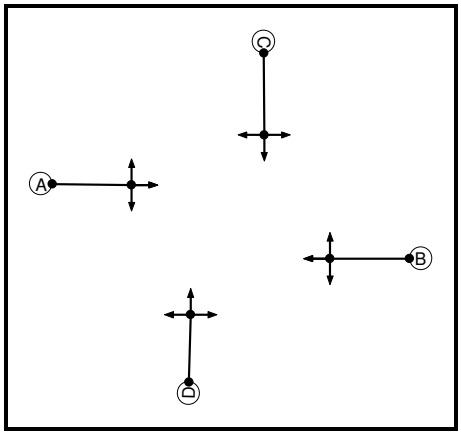
C1 Stream: 1 PRC for Signalled Lanes (%): 5.7 Total Delay for Signalled Lanes (pcuHr): 22.87
PRC Over All Lanes (%): 5.7 Total Delay Over All Lanes(pcuHr): 22.87 Cycle Time (s): 68

Scenario 2: '2014 PM Do Something' (FG2: '2014 AM Do Something', Plan 2: 'PM')

Network Layout Diagram

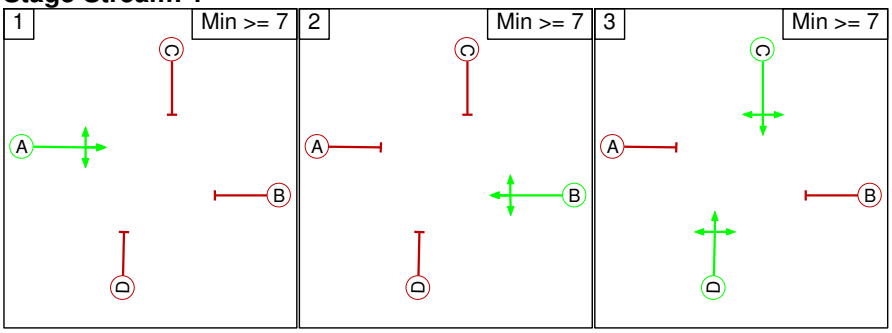


Phase Diagram

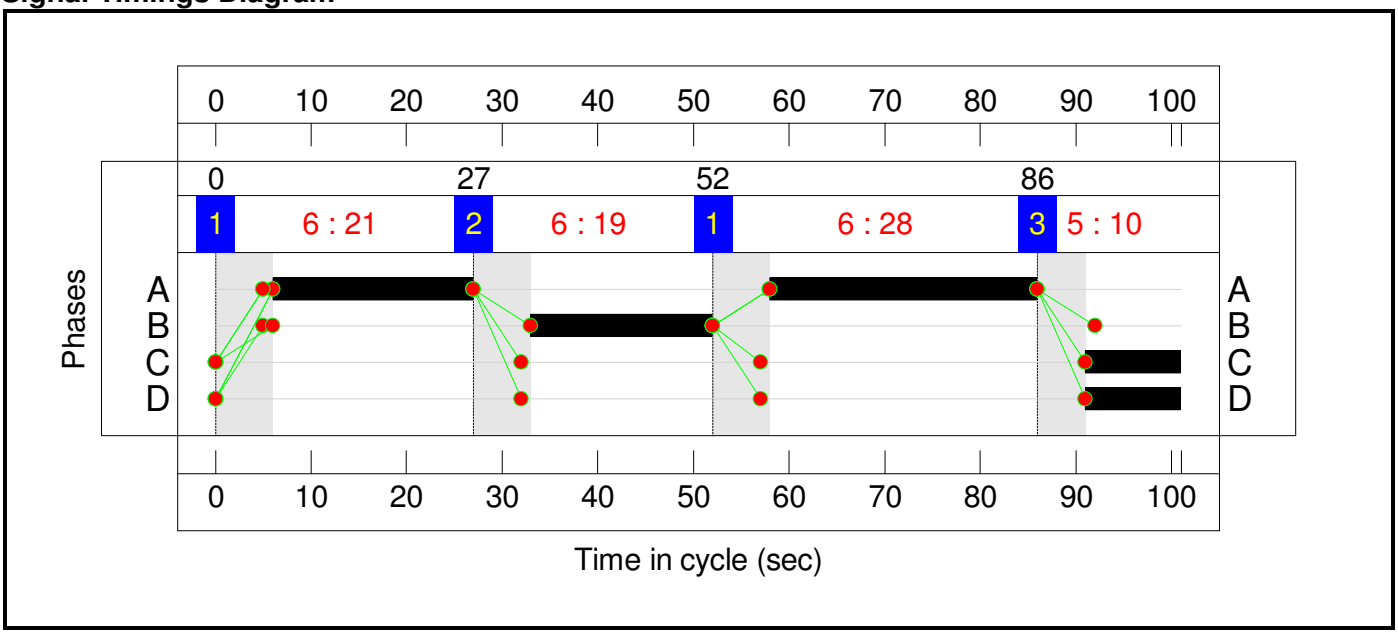


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



Network Results

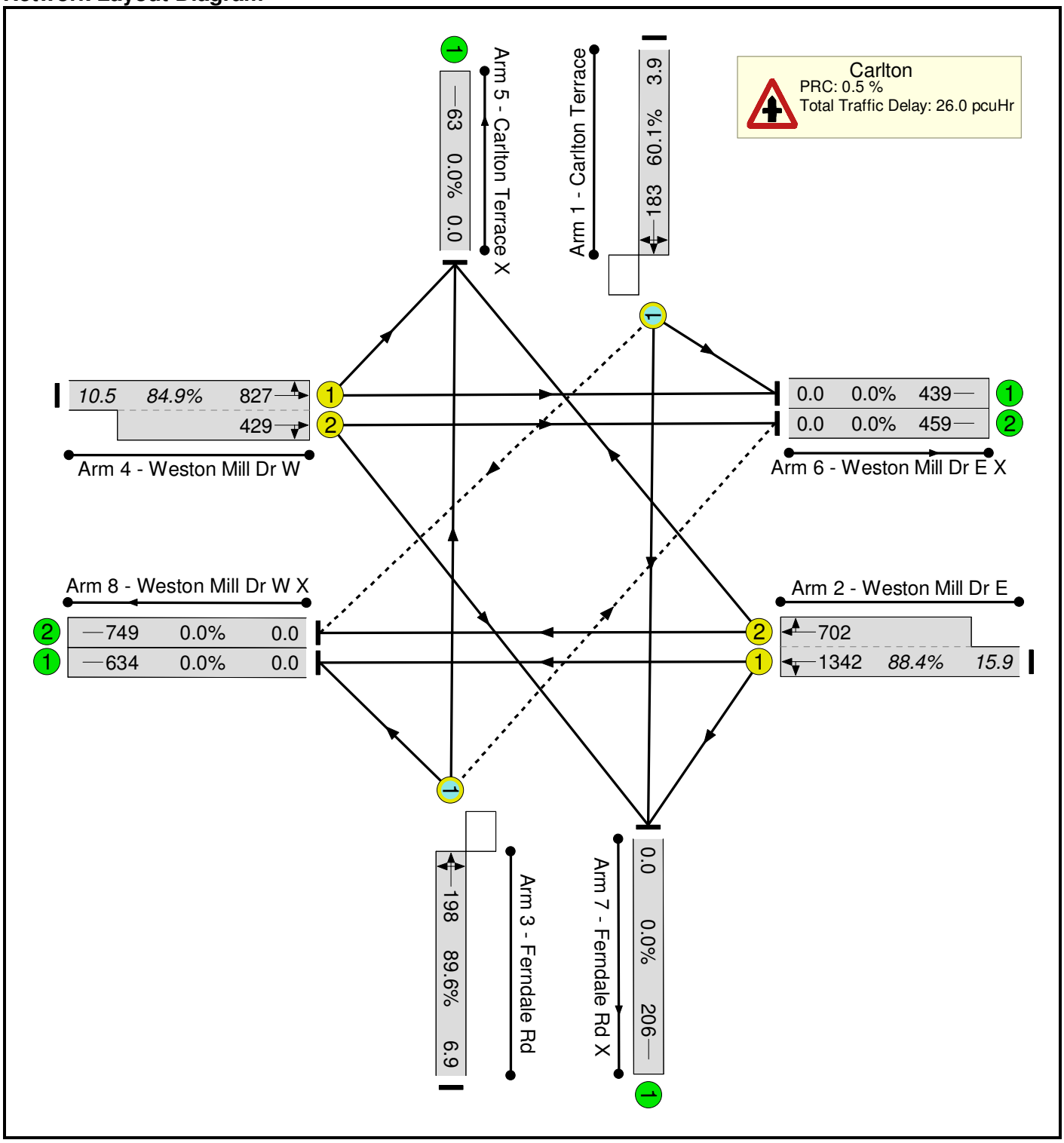
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**95.7%**	-
Carlton	-	-	-	-	-	**95.7%**	-
1/1	Carlton Terrace Left Ahead Right	C	10	91	0	48.0%	3.2
2/1+2/2	Weston Mill Dr E Right Left Ahead	B	19	33	52	93.7%	16.8
3/1	Ferndale Rd Ahead Right Left	D	10	91	0	94.8%	10.2
4/1+4/2	Weston Mill Dr W Left Ahead Right	A	49	6	27	95.7%	24.4

C1 Stream: 1 PRC for Signalled Lanes (%): -6.4 Total Delay for Signalled Lanes (pcuHr): 38.54
PRC Over All Lanes (%): -6.4 Total Delay Over All Lanes(pcuHr): 38.54 Cycle Time (s): 101

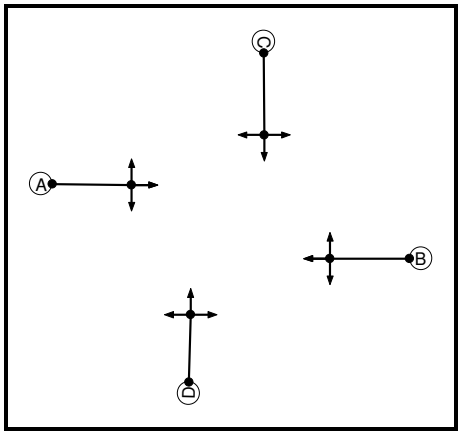
LINSIG Model Output

Scenario 1: '2014 AM Do Something MAX' (FG1: '2014 AM Do Something MAX', Plan 1: 'AM')

Network Layout Diagram

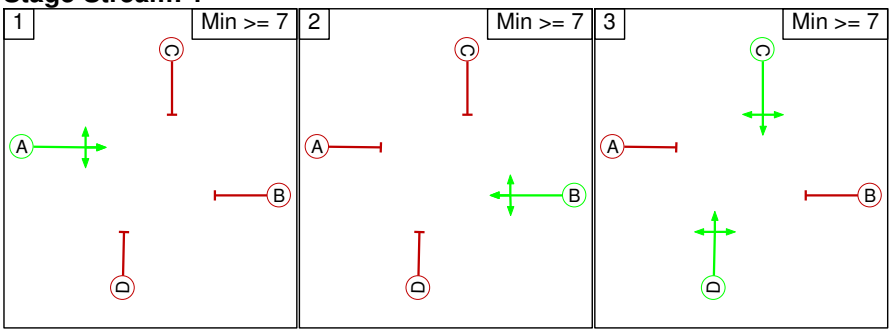


Phase Diagram

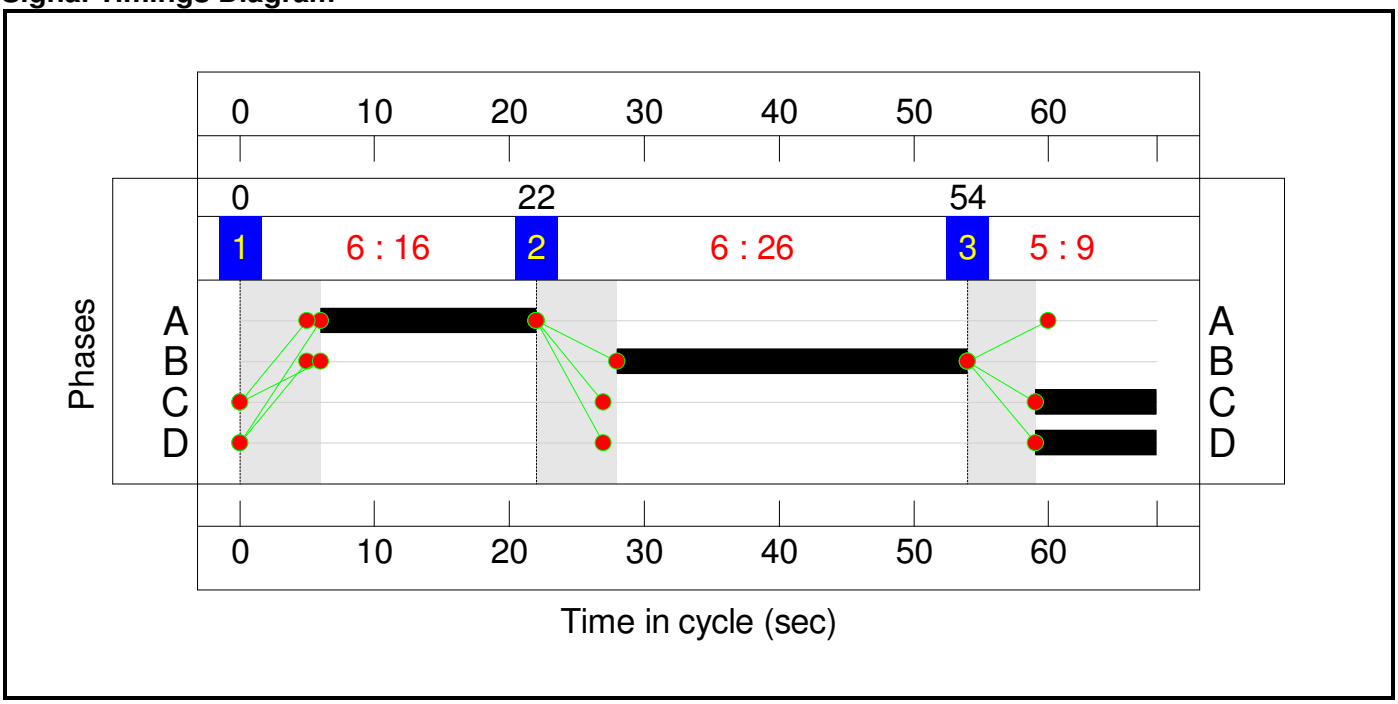


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



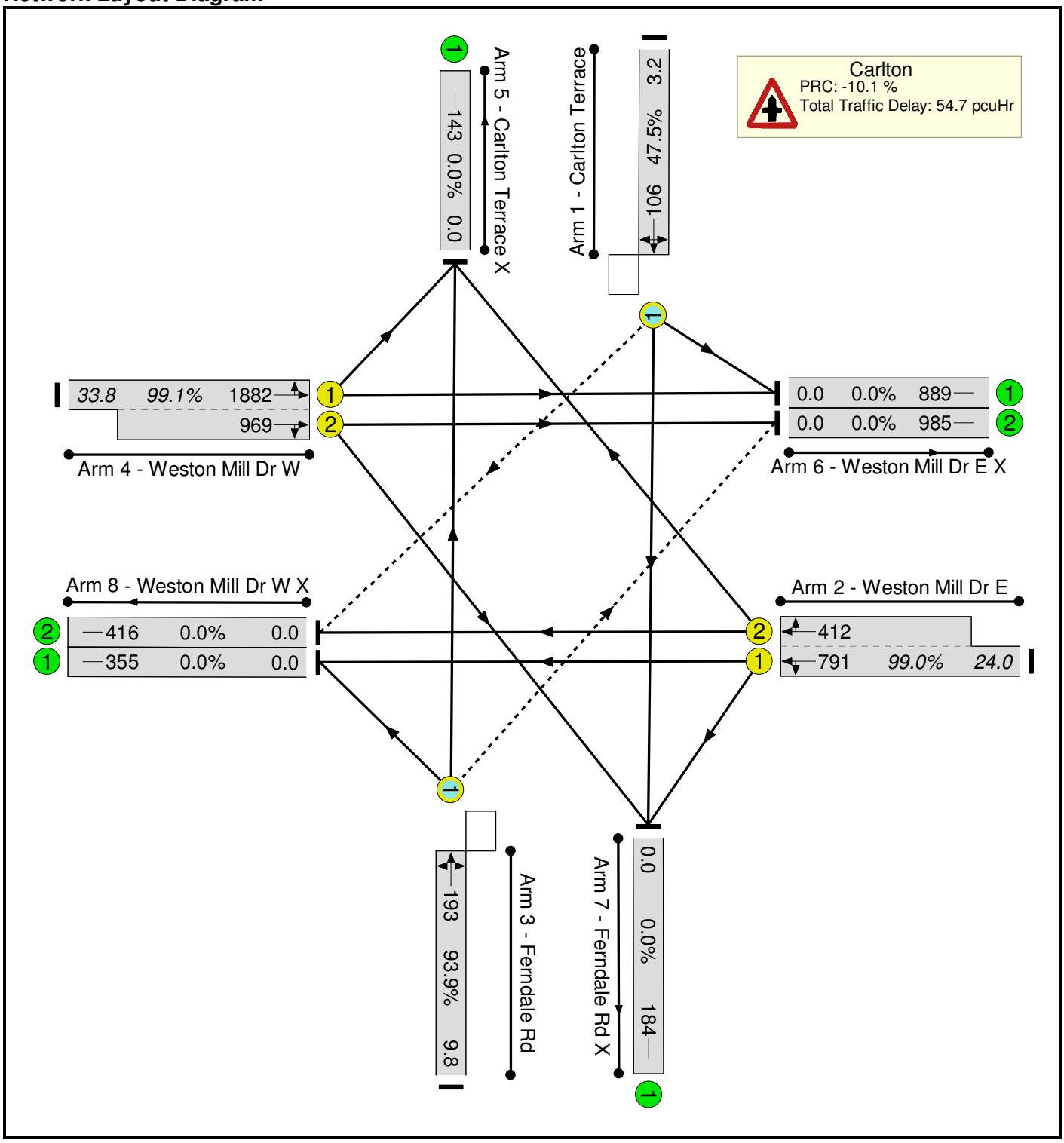
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.6%**	-
Carlton	-	-	-	-	-	**89.6%**	-
1/1	Carlton Terrace Left Ahead Right	C	9	59	0	60.1%	3.9
2/1+2/2	Weston Mill Dr E Right Left Ahead	B	26	28	54	88.4%	15.9
3/1	Ferndale Rd Ahead Right Left	D	9	59	0	89.6%	6.9
4/1+4/2	Weston Mill Dr W Left Ahead Right	A	16	6	22	84.9%	10.5

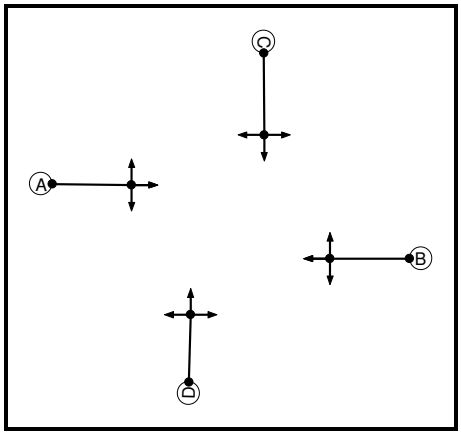
C1 Stream: 1 PRC for Signalled Lanes (%): 0.5 Total Delay for Signalled Lanes (pcuHr): 26.05
PRC Over All Lanes (%): 0.5 Total Delay Over All Lanes(pcuHr): 26.05 Cycle Time (s): 68

Scenario 2: '2014 PM Do Something MAX' (FG2: '2014 AM Do Something MAX', Plan 2: 'PM')

Network Layout Diagram

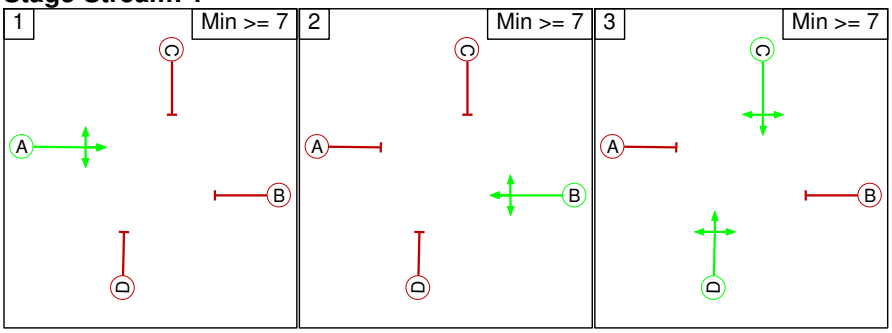


Phase Diagram

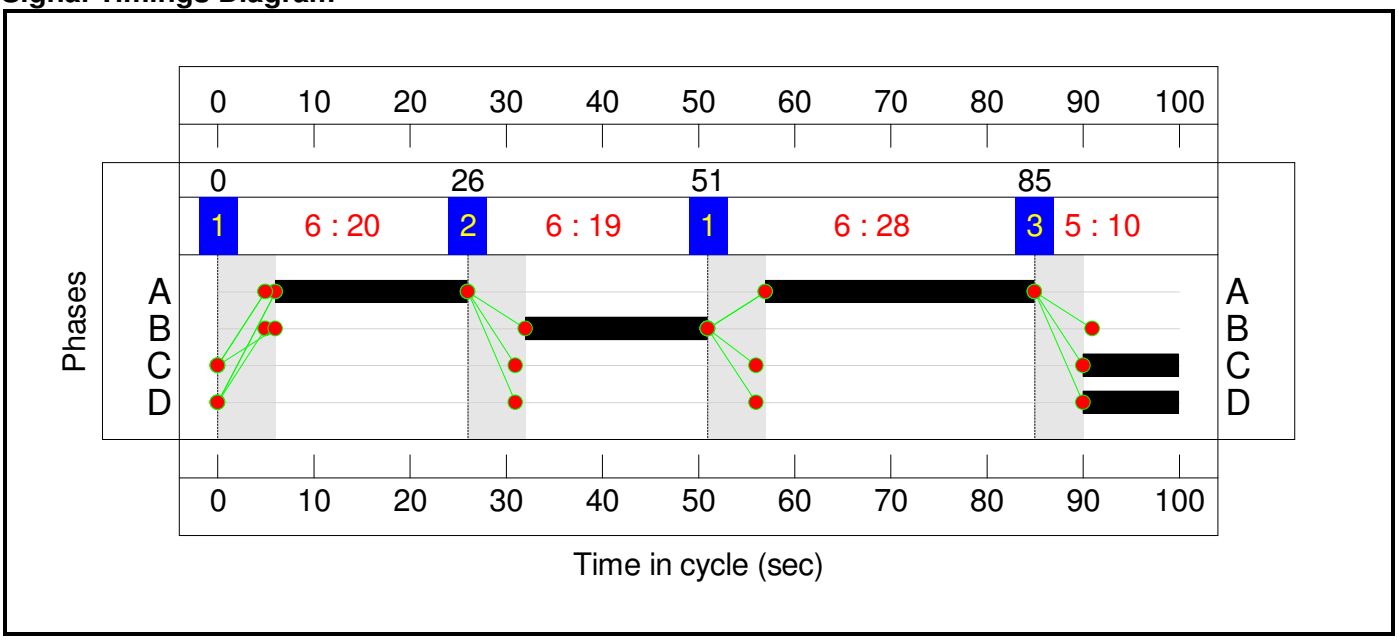


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



Network Results

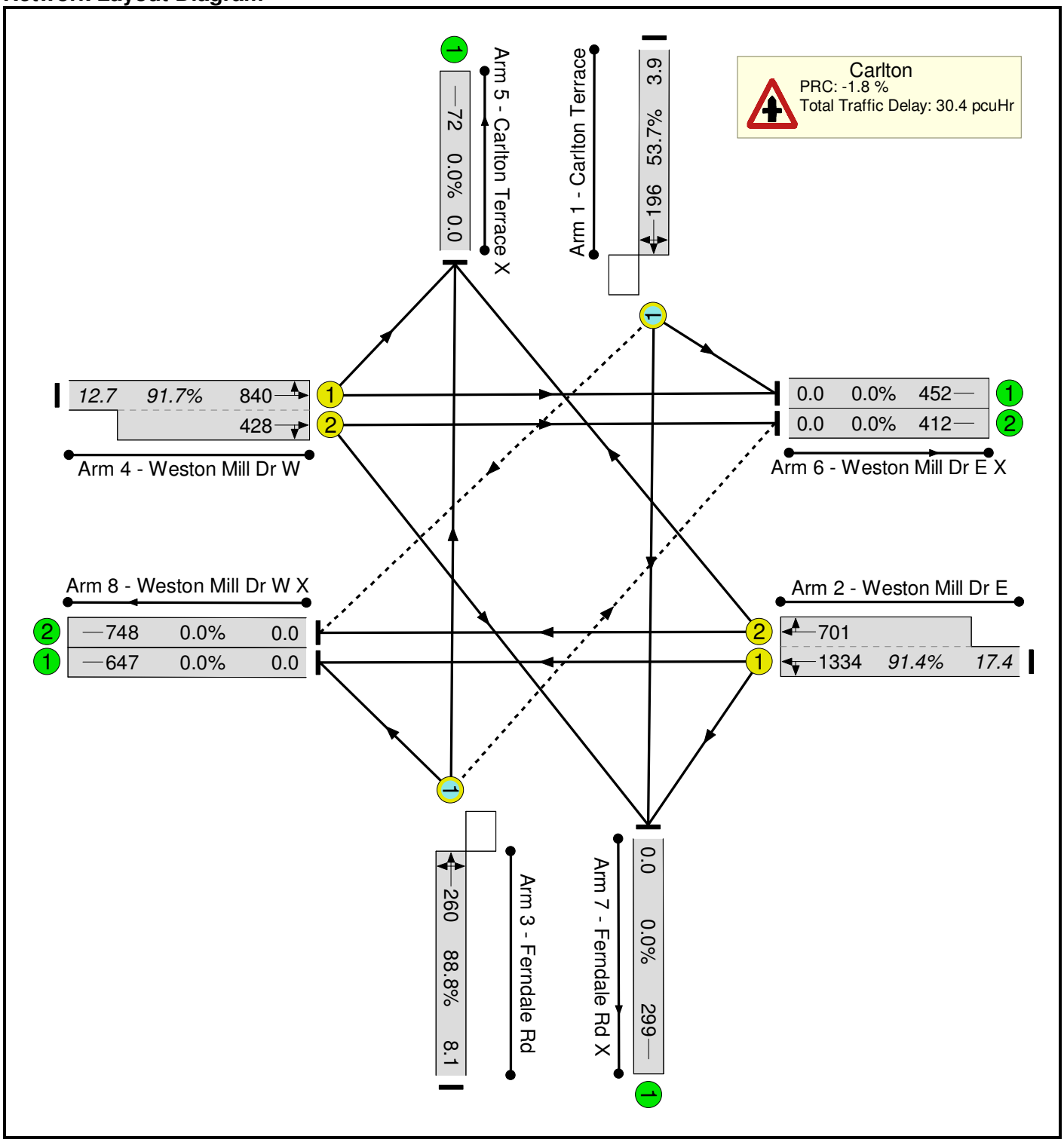
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**99.1%**	-
Carlton	-	-	-	-	-	**99.1%**	-
1/1	Carlton Terrace Left Ahead Right	C	10	90	0	47.5%	3.2
2/1+2/2	Weston Mill Dr E Right Left Ahead	B	19	32	51	99.0%	24.0
3/1	Ferndale Rd Ahead Right Left	D	10	90	0	93.9%	9.8
4/1+4/2	Weston Mill Dr W Left Ahead Right	A	48	6	26	99.1%	33.8

C1 Stream: 1 PRC for Signalled Lanes (%): -10.1 Total Delay for Signalled Lanes (pcuHr): 54.66
PRC Over All Lanes (%): -10.1 Total Delay Over All Lanes(pcuHr): 54.66 Cycle Time (s): 100

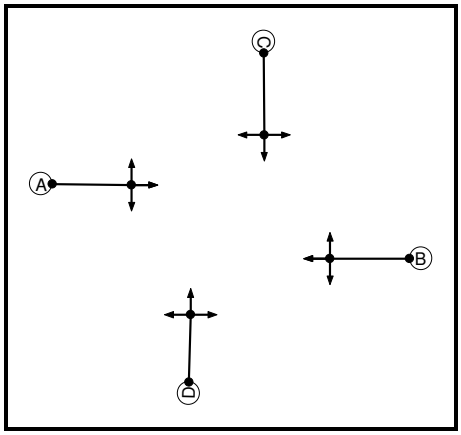
LINSIG Model Output

Scenario 1: '2014 AM Do Something plus potential' (FG1: '2014 AM Do Something plus potential', Plan 1: 'AM')

Network Layout Diagram

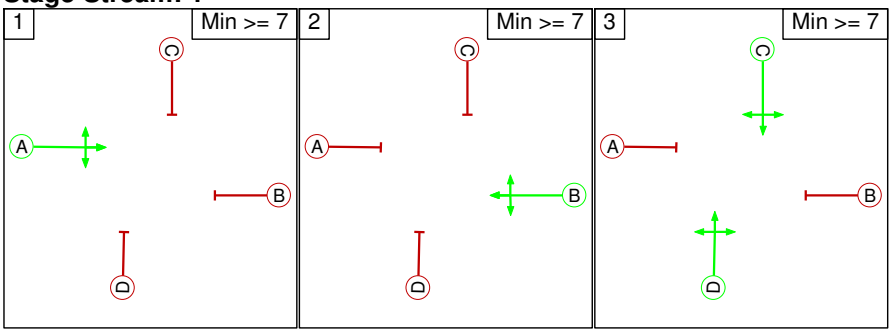


Phase Diagram

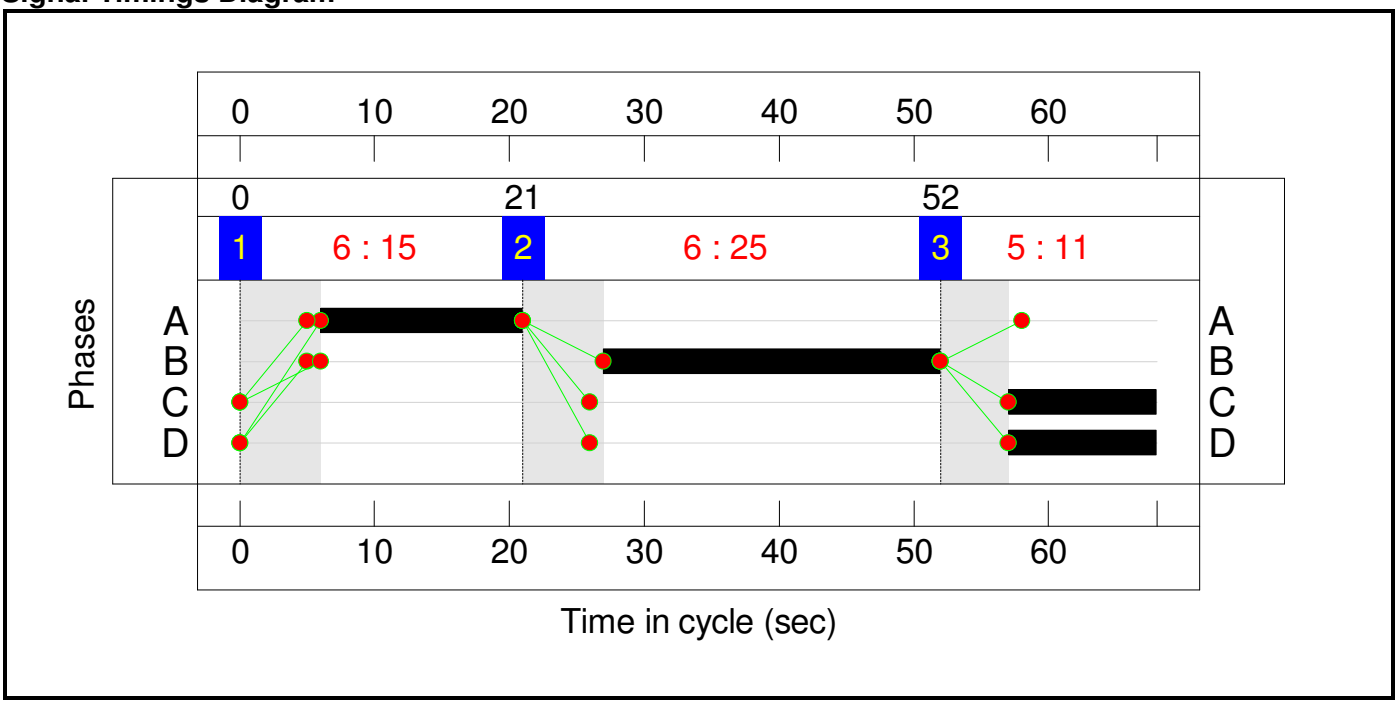


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



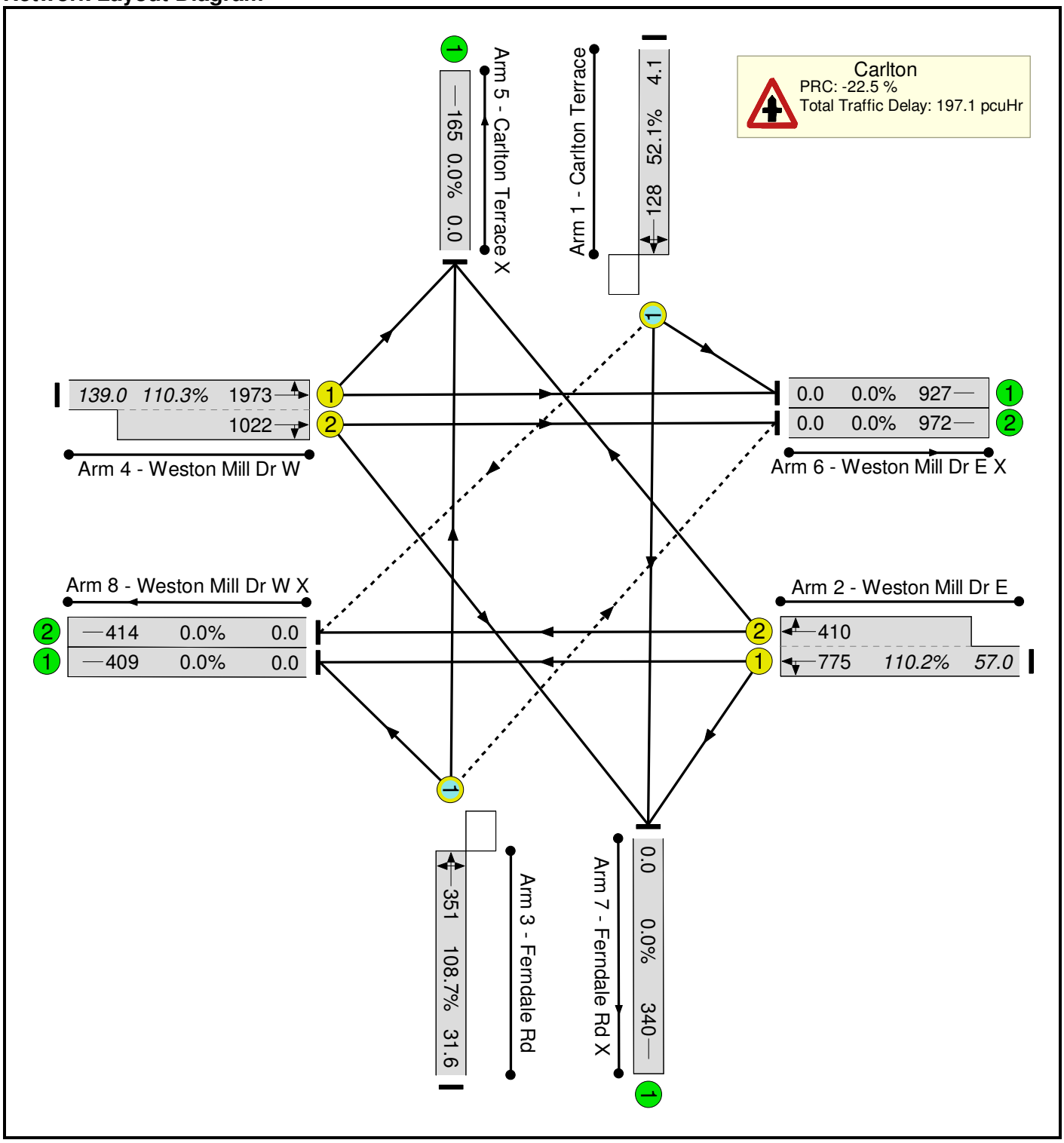
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**91.7%**	-
Carlton	-	-	-	-	-	**91.7%**	-
1/1	Carlton Terrace Left Ahead Right	C	11	57	0	53.7%	3.9
2/1+2/2	Weston Mill Dr E Right Left Ahead	B	25	27	52	91.4%	17.4
3/1	Ferndale Rd Ahead Right Left	D	11	57	0	88.8%	8.1
4/1+4/2	Weston Mill Dr W Left Ahead Right	A	15	6	21	91.7%	12.7

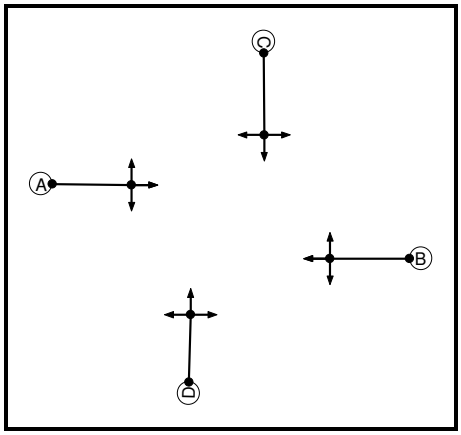
C1 Stream: 1 PRC for Signalled Lanes (%): -1.8 Total Delay for Signalled Lanes (pcuHr): 30.37
PRC Over All Lanes (%): -1.8 Total Delay Over All Lanes(pcuHr): 30.37 Cycle Time (s): 68

Scenario 2: '2014 PM Do Something plus potential' (FG2: '2014 AM Do Something plus potential', Plan 2: 'PM')

Network Layout Diagram

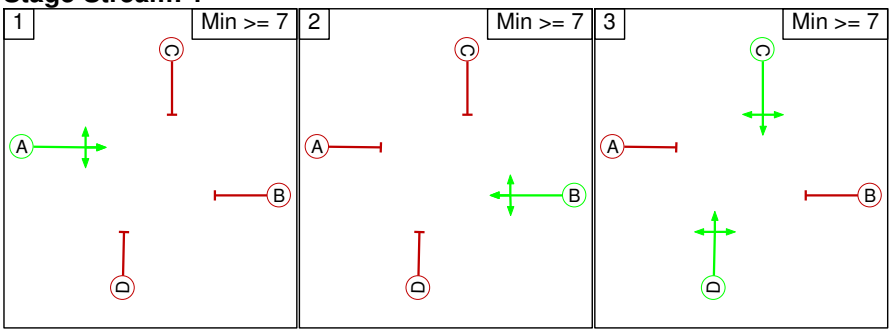


Phase Diagram

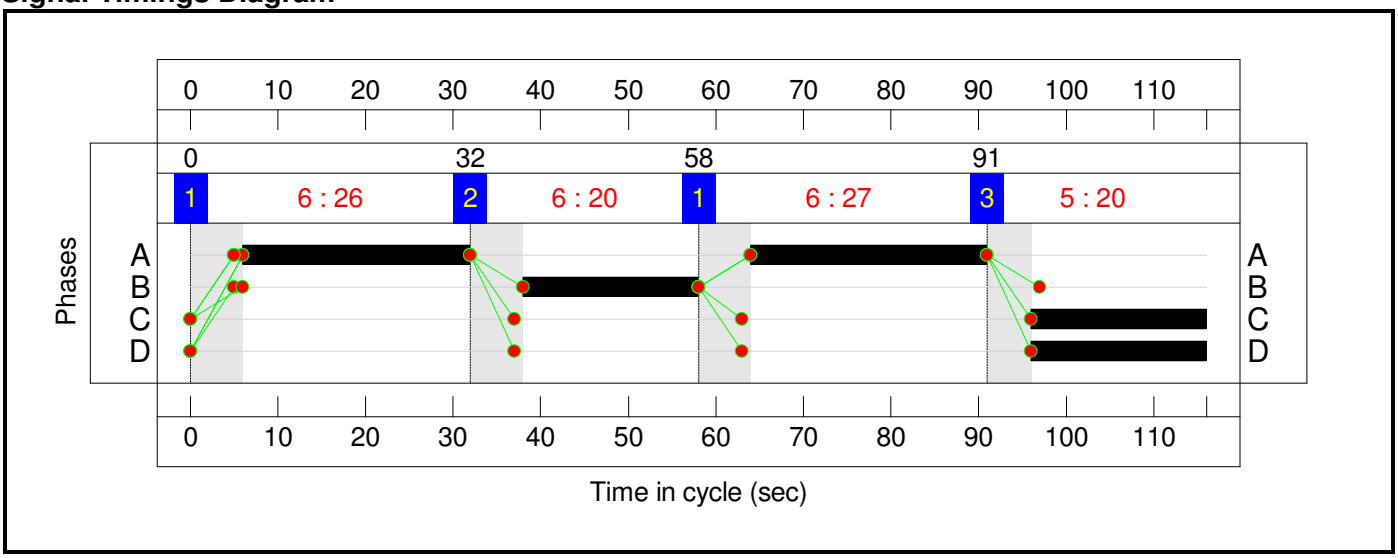


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



Network Results

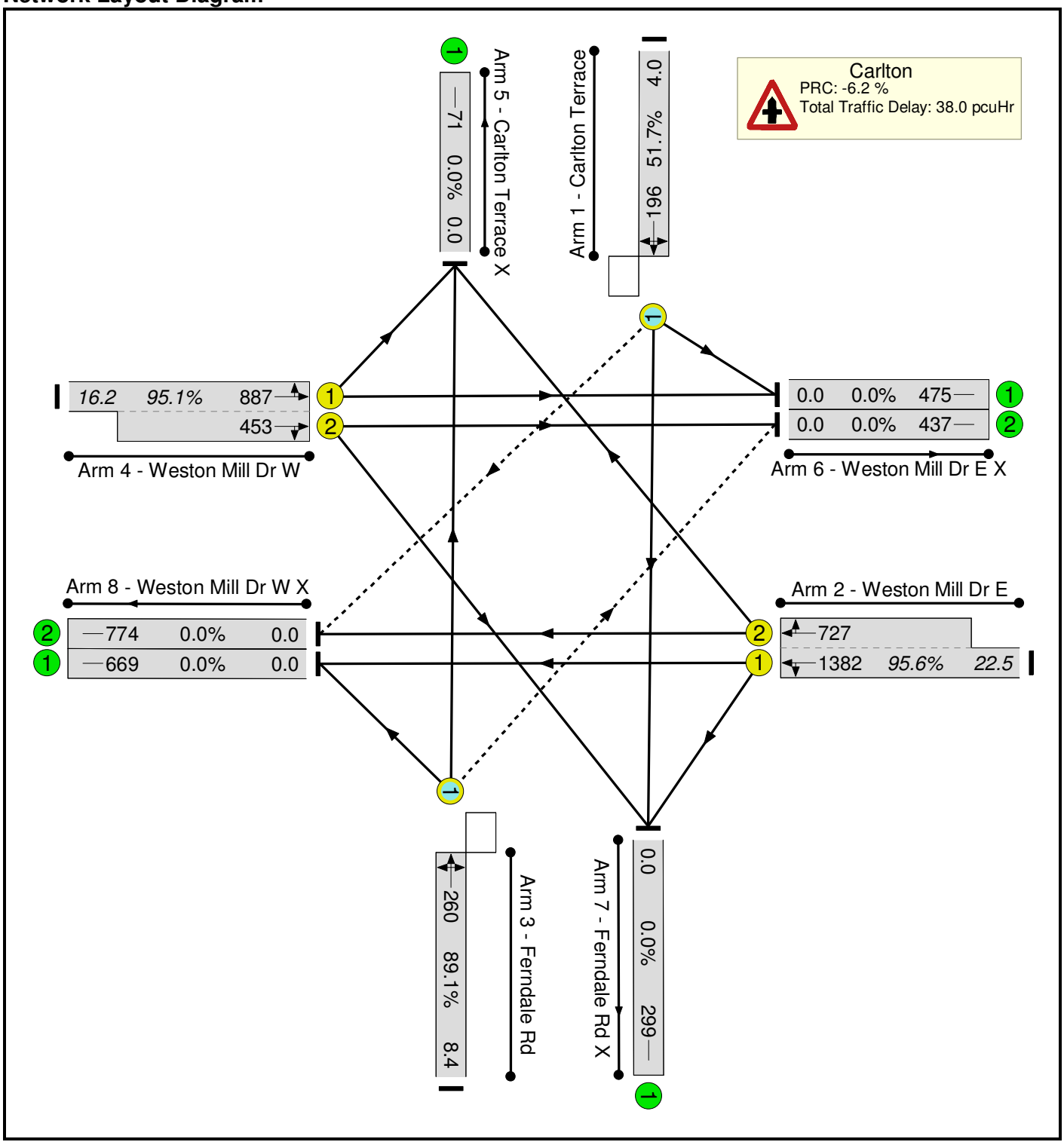
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**110.3%**	-
Carlton	-	-	-	-	-	**110.3%**	-
1/1	Carlton Terrace Left Ahead Right	C	20	96	0	52.1%	4.1
2/1+2/2	Weston Mill Dr E Right Left Ahead	B	20	38	58	110.2%	57.0
3/1	Ferndale Rd Ahead Right Left	D	20	96	0	108.7%	31.6
4/1+4/2	Weston Mill Dr W Left Ahead Right	A	53	6	32	110.3%	139.0

C1 Stream: 1 PRC for Signalled Lanes (%): -22.5 Total Delay for Signalled Lanes (pcuHr): 197.12
PRC Over All Lanes (%): -22.5 Total Delay Over All Lanes(pcuHr): 197.12 Cycle Time (s): 116

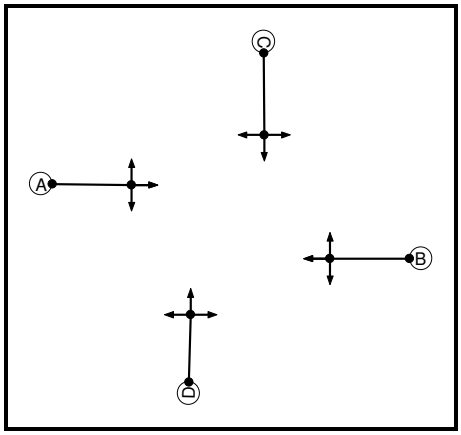
LINSIG Model Output

Scenario 1: '2014 AM Do Something MAX plus potential' (FG1: '2014 AM Do Something MAX plus potential', Plan 1: 'AM')

Network Layout Diagram

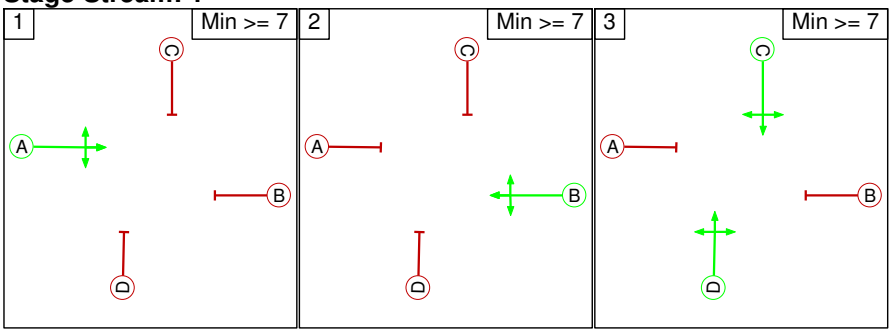


Phase Diagram

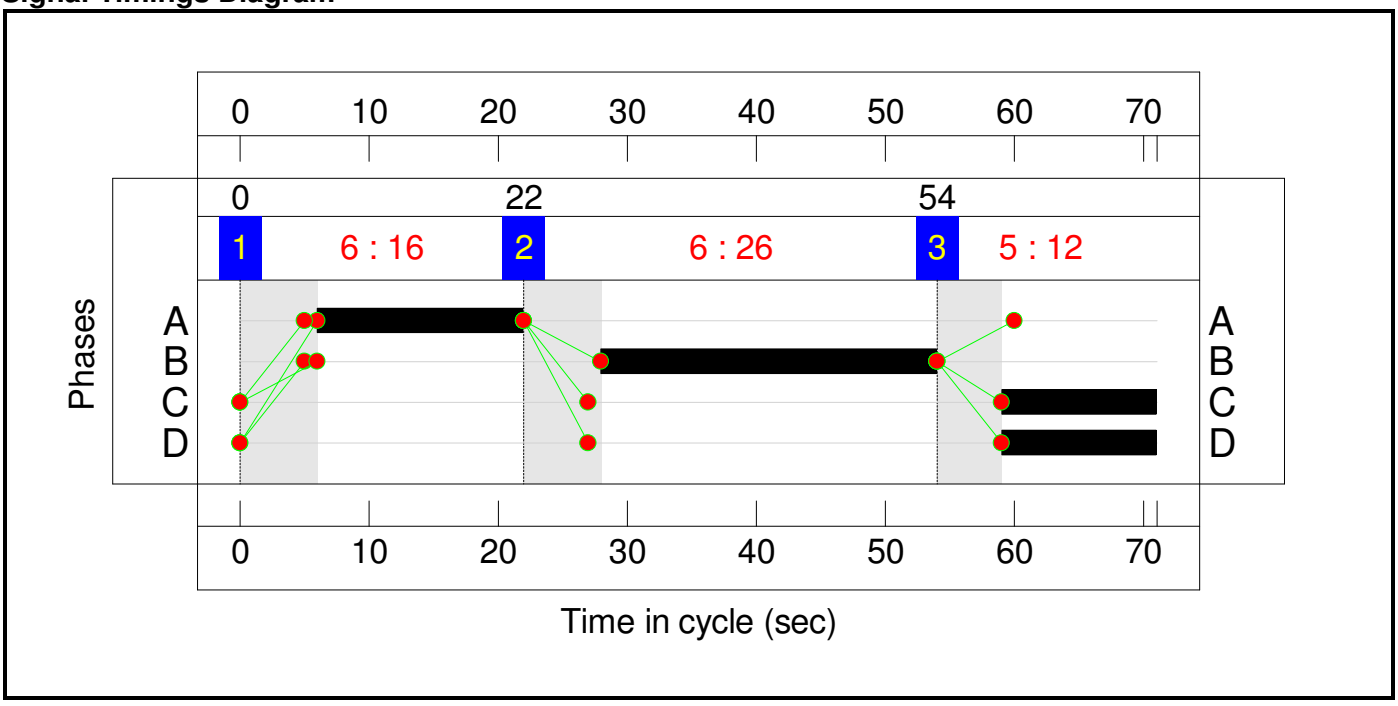


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



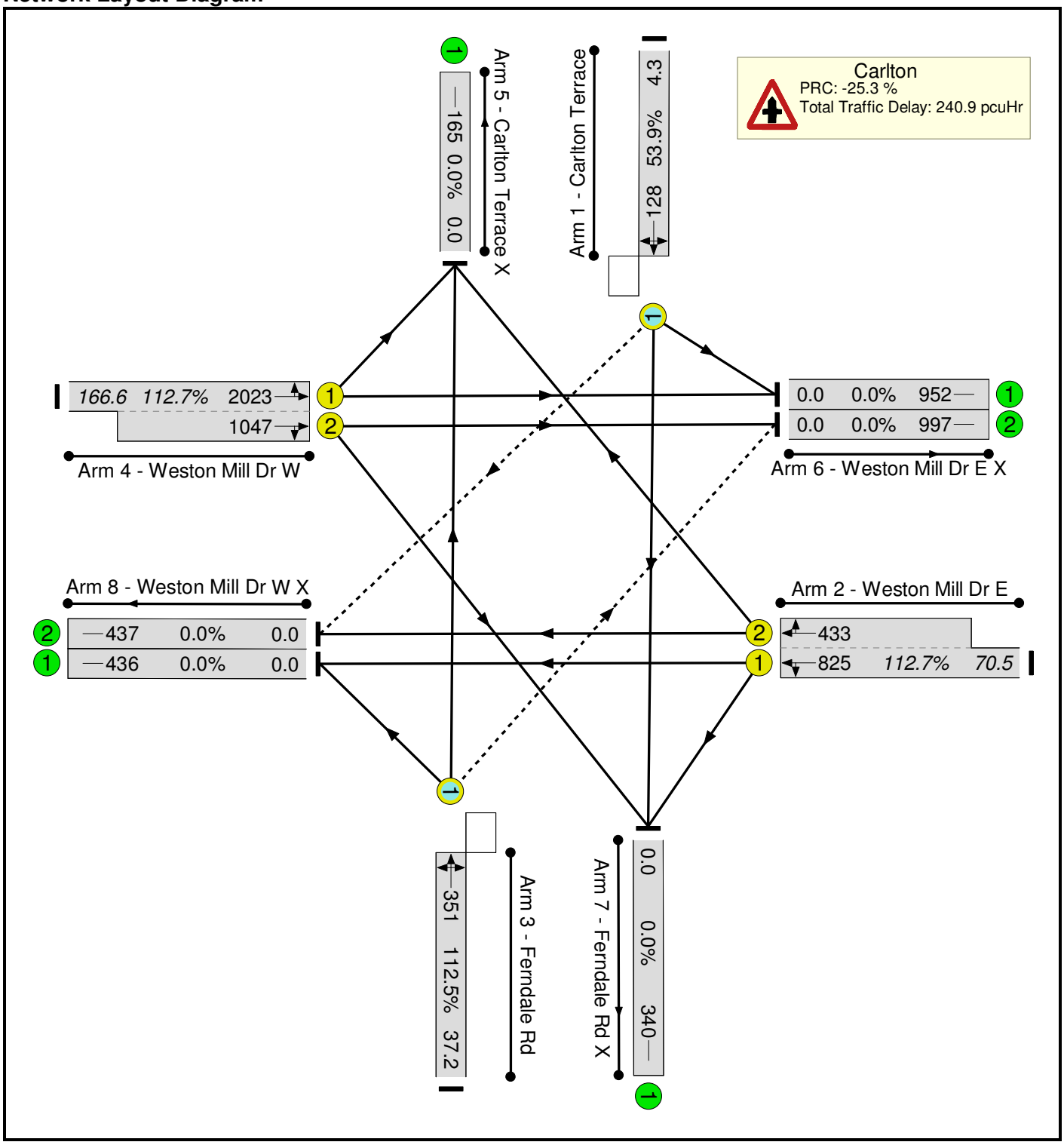
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**95.6%**	-
Carlton	-	-	-	-	-	**95.6%**	-
1/1	Carlton Terrace Left Ahead Right	C	12	59	0	51.7%	4.0
2/1+2/2	Weston Mill Dr E Right Left Ahead	B	26	28	54	95.6%	22.5
3/1	Ferndale Rd Ahead Right Left	D	12	59	0	89.1%	8.4
4/1+4/2	Weston Mill Dr W Left Ahead Right	A	16	6	22	95.1%	16.2

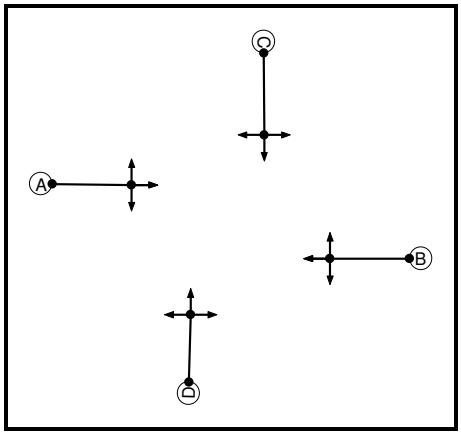
C1 Stream: 1 PRC for Signalled Lanes (%): -6.2 Total Delay for Signalled Lanes (pcuHr): 37.99
PRC Over All Lanes (%): -6.2 Total Delay Over All Lanes(pcuHr): 37.99 Cycle Time (s): 71

Scenario 2: '2014 PM Do Something MAX plus potential' (FG2: '2014 AM Do Something MAX plus potential', Plan 2: 'PM')

Network Layout Diagram

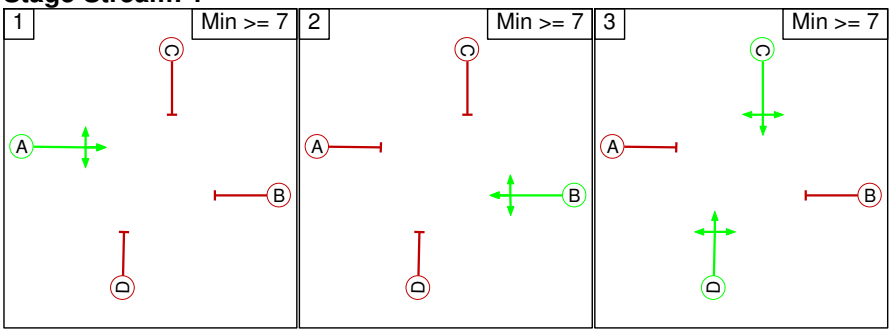


Phase Diagram

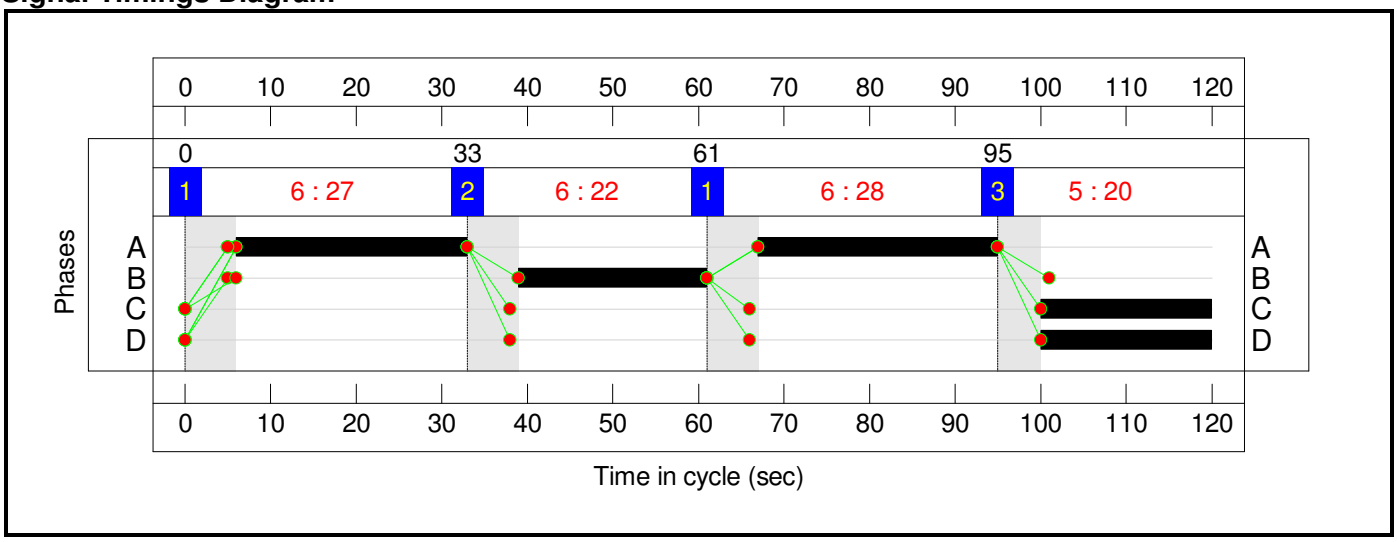


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**112.7%**	-
Carlton	-	-	-	-	-	**112.7%**	-
1/1	Carlton Terrace Left Ahead Right	C	20	100	0	53.9%	4.3
2/1+2/2	Weston Mill Dr E Right Left Ahead	B	22	39	61	112.7%	70.5
3/1	Ferndale Rd Ahead Right Left	D	20	100	0	112.5%	37.2
4/1+4/2	Weston Mill Dr W Left Ahead Right	A	55	6	33	112.7%	166.6

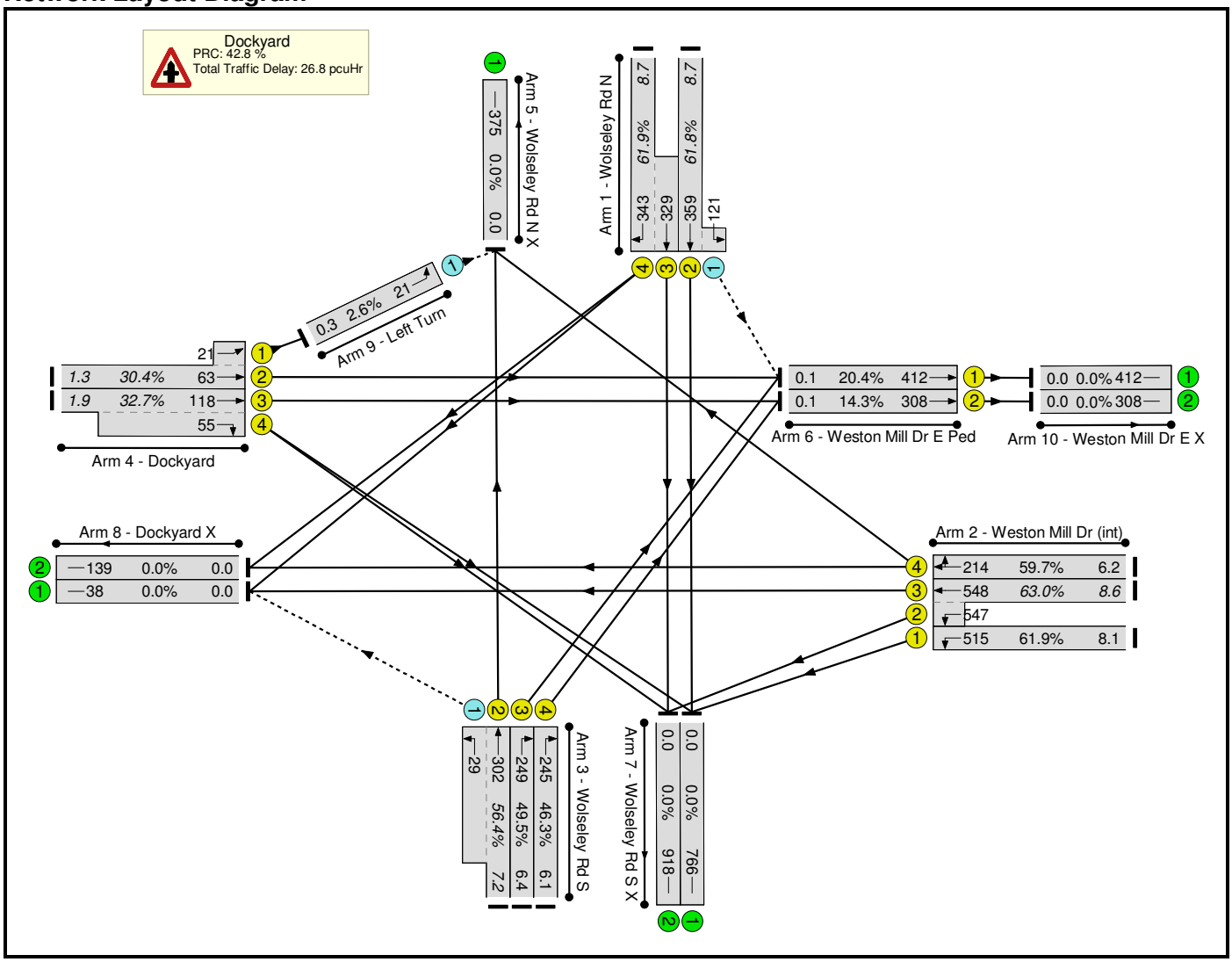
C1 Stream: 1 PRC for Signalled Lanes (%): -25.3 Total Delay for Signalled Lanes (pcuHr): 240.90
PRC Over All Lanes (%): -25.3 Total Delay Over All Lanes(pcuHr): 240.90 Cycle Time (s): 120

Wolseley Road / Weston Mill Drive

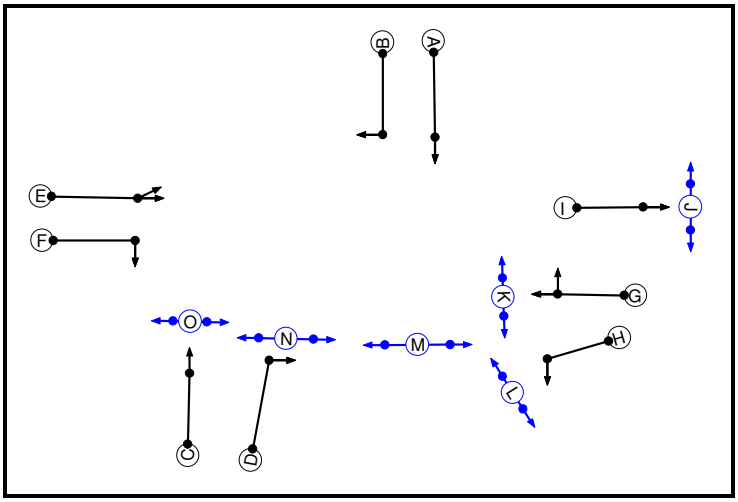
LINSIG Model Output

Scenario 1: '2010 AM Observed' (FG1: '2010 AM Observed', Plan 1: 'AM')

Network Layout Diagram

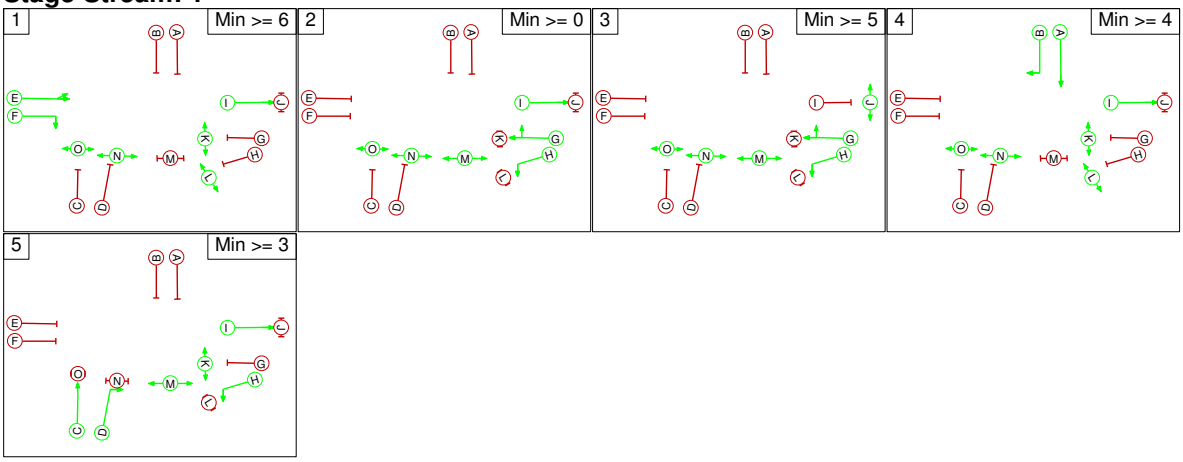


Phase Diagram

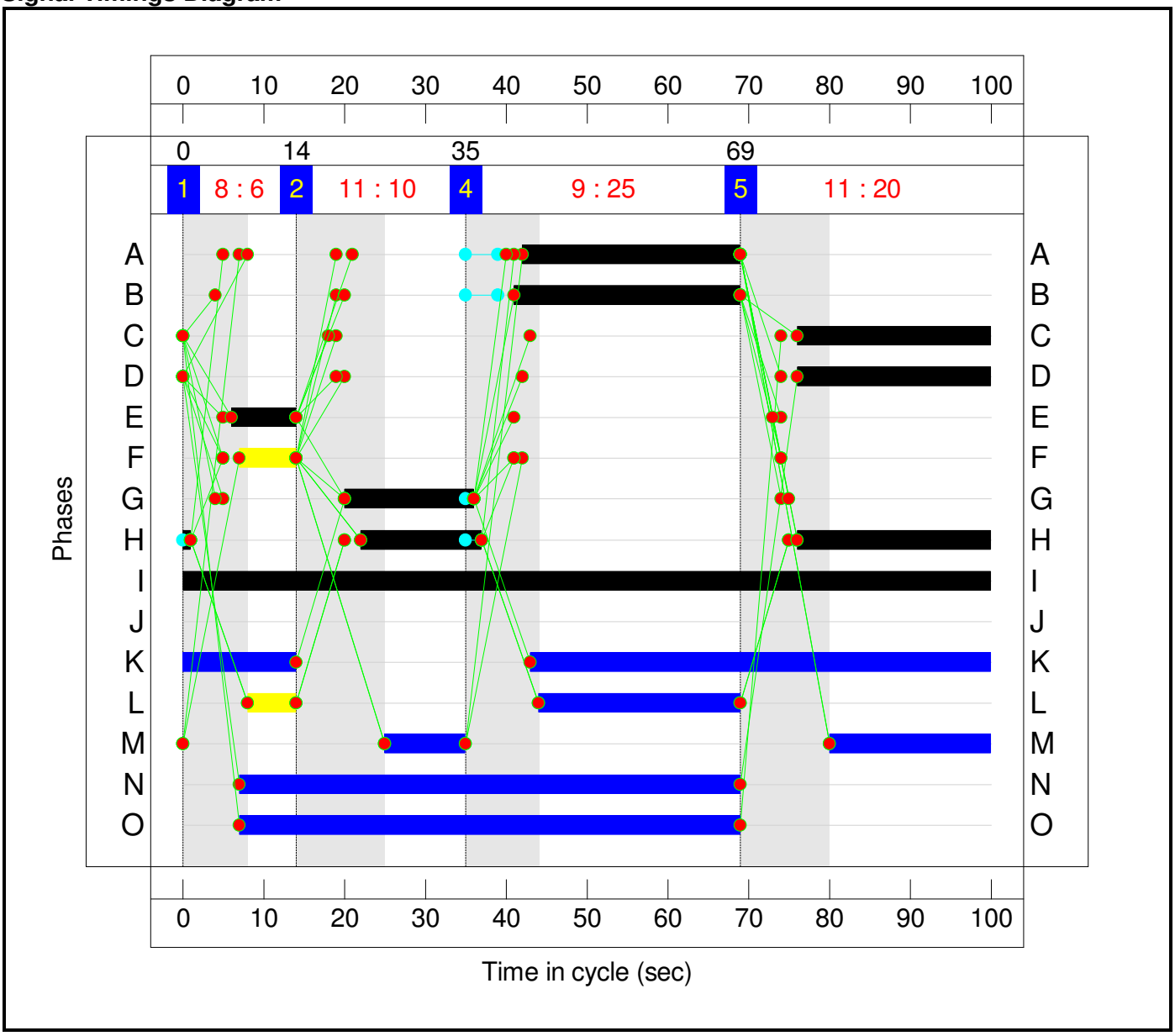


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



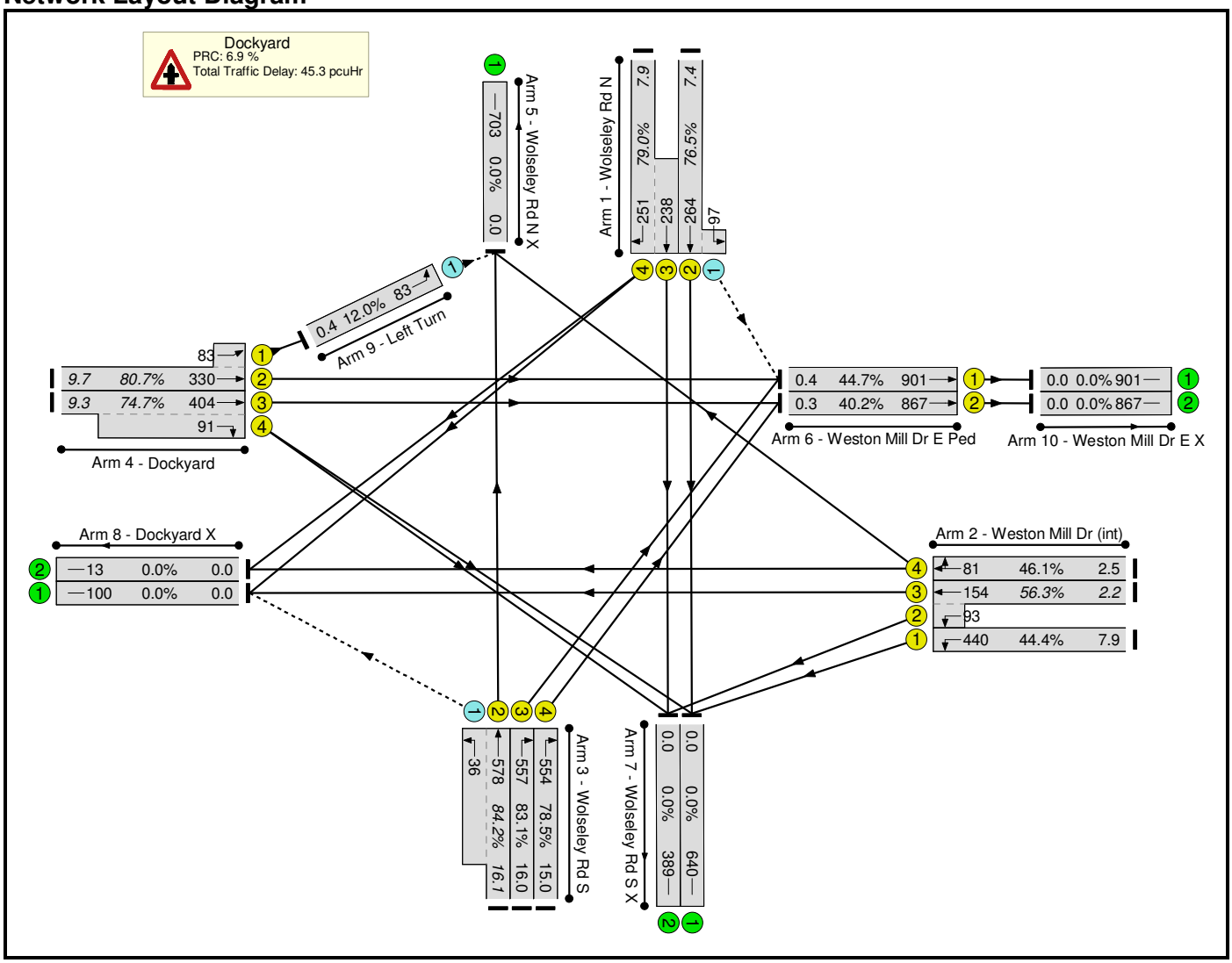
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**63.0%**	-
Dockyard	-	-	-	-	-	**63.0%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	27	42	69	61.8%	8.7
1/4+1/3	Wolseley Rd N Ahead Right	B A	28:27	41:42	69	61.9%	8.7
2/1	Weston Mill Dr (int) Left	H	40	22	37	61.9%	8.1
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	16:40	20:22	36:37	63.0%	8.6
2/4	Weston Mill Dr (int) Right Ahead	G	16	20	36	59.7%	6.2
3/2+3/1	Wolseley Rd S Ahead Left	C -	24	76	0	56.4%	7.2
3/3	Wolseley Rd S Right	D	24	76	0	49.5%	6.4
3/4	Wolseley Rd S Right	D	24	76	0	46.3%	6.1
4/2+4/1	Dockyard Ahead Ahead2	E	8	6	14	30.4%	1.3
4/3+4/4	Dockyard Ahead Right	E F	8:7	6:7	14	32.7%	1.9
6/1	Weston Mill Dr E Ped Ahead	I	100	0	100	20.4%	0.1
6/2	Weston Mill Dr E Ped Ahead	I	100	0	100	14.3%	0.1
9/1	Left Turn Left	-	-	-	-	2.6%	0.3

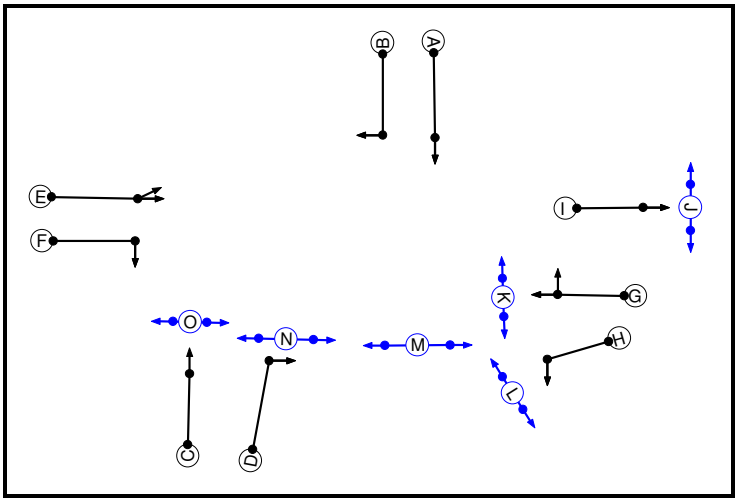
C1 Stream: 1 PRC for Signalled Lanes (%): 42.8 Total Delay for Signalled Lanes (pcuHr): 26.77
PRC Over All Lanes (%): 42.8 Total Delay Over All Lanes(pcuHr): 26.79 Cycle Time (s): 100

Scenario 2: '2010 PM Observed' (FG2: '2010 PM Observed', Plan 2: 'PM')

Network Layout Diagram

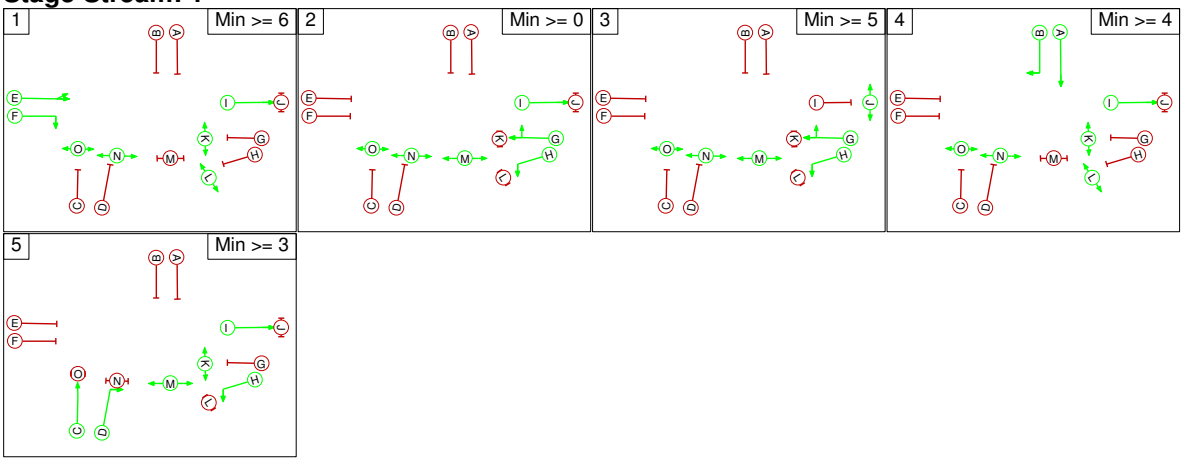


Phase Diagram

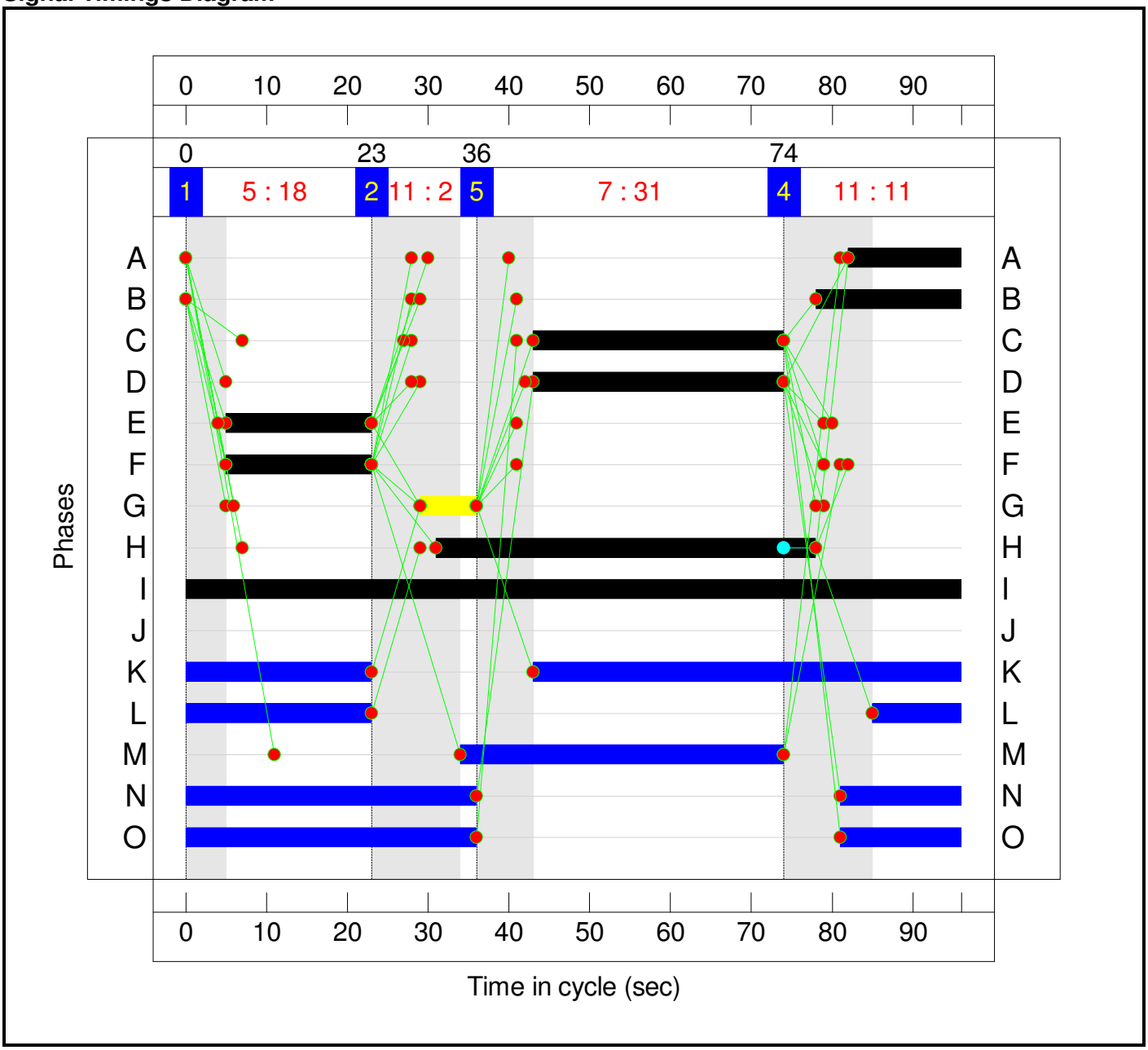


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



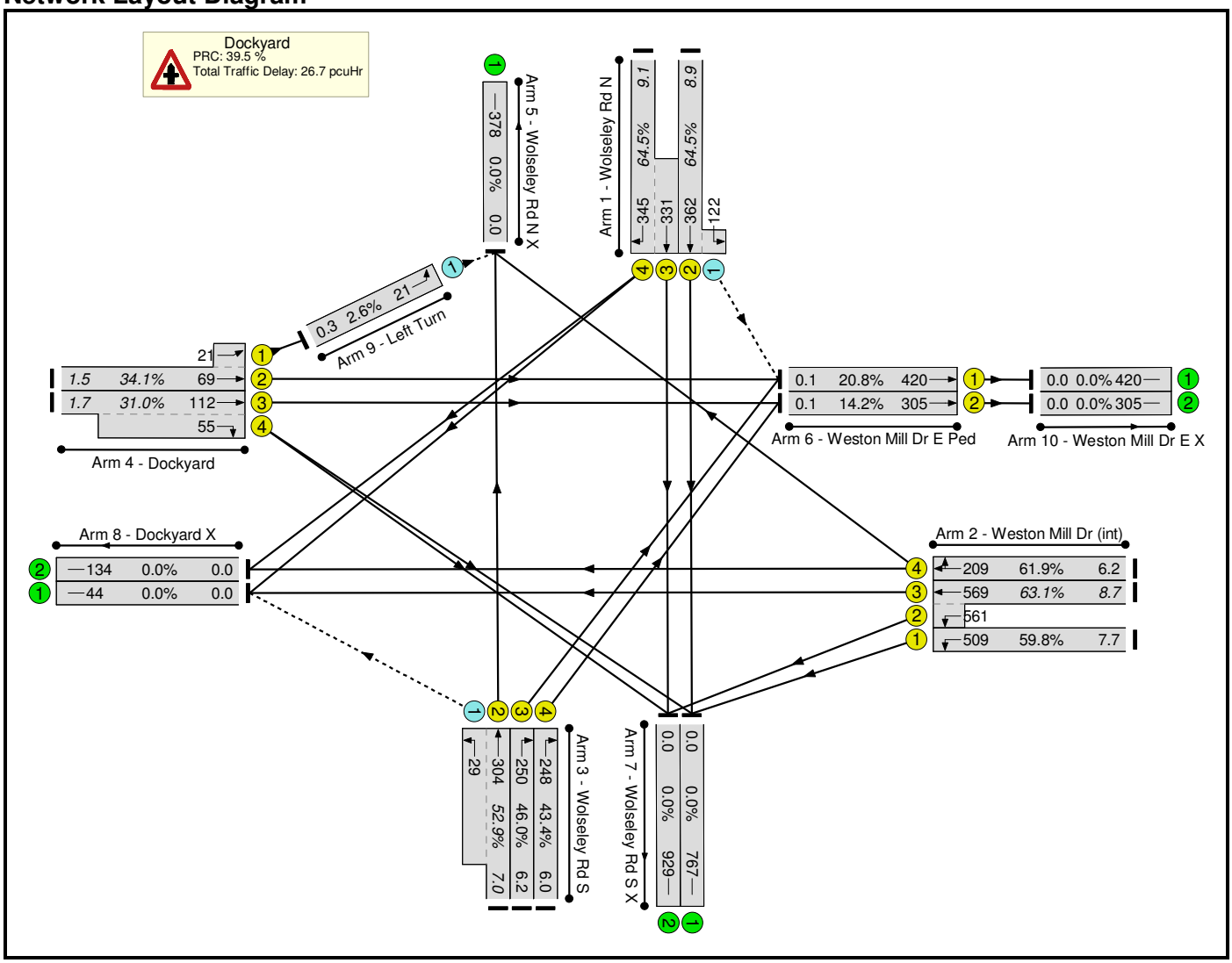
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**84.2%**	-
Dockyard	-	-	-	-	-	**84.2%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	14	82	0	76.5%	7.4
1/4+1/3	Wolseley Rd N Ahead Right	B A	18:14	78:82	0	79.0%	7.9
2/1	Weston Mill Dr (int) Left	H	47	31	78	44.4%	7.9
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	7:47	29:31	36:78	56.3%	2.2
2/4	Weston Mill Dr (int) Right Ahead	G	7	29	36	46.1%	2.5
3/2+3/1	Wolseley Rd S Ahead Left	C -	31	43	74	84.2%	16.1
3/3	Wolseley Rd S Right	D	31	43	74	83.1%	16.0
3/4	Wolseley Rd S Right	D	31	43	74	78.5%	15.0
4/2+4/1	Dockyard Ahead Ahead2	E	18	5	23	80.7%	9.7
4/3+4/4	Dockyard Ahead Right	E F	18	5	23	74.7%	9.3
6/1	Weston Mill Dr E Ped Ahead	I	96	0	96	44.7%	0.4
6/2	Weston Mill Dr E Ped Ahead	I	96	0	96	40.2%	0.3
9/1	Left Turn Left	-	-	-	-	12.0%	0.4

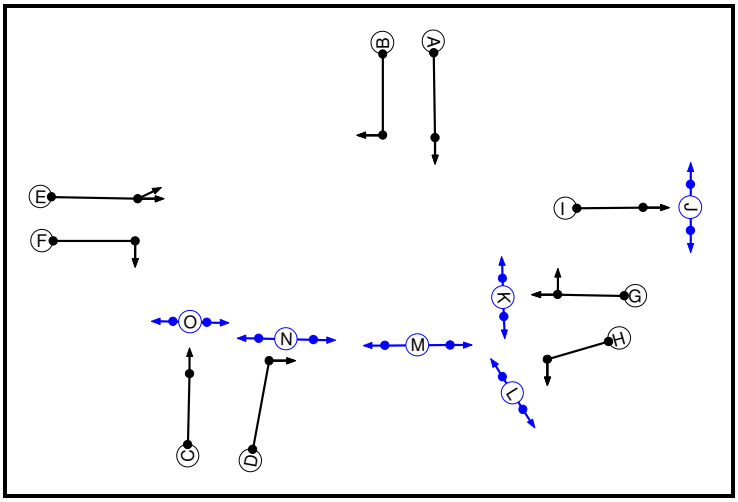
C1 Stream: 1 PRC for Signalled Lanes (%): 6.9 Total Delay for Signalled Lanes (pcuHr): 45.21
PRC Over All Lanes (%): 6.9 Total Delay Over All Lanes(pcuHr): 45.28 Cycle Time (s): 96

Scenario 3: '2011 AM Base' (FG3: '2011 AM Base', Plan 1: 'AM')

Network Layout Diagram

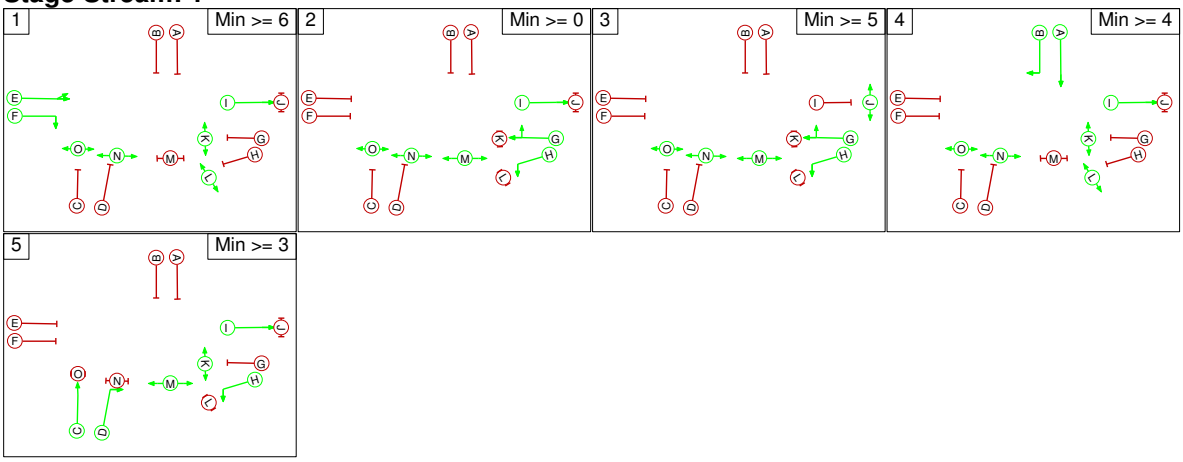


Phase Diagram

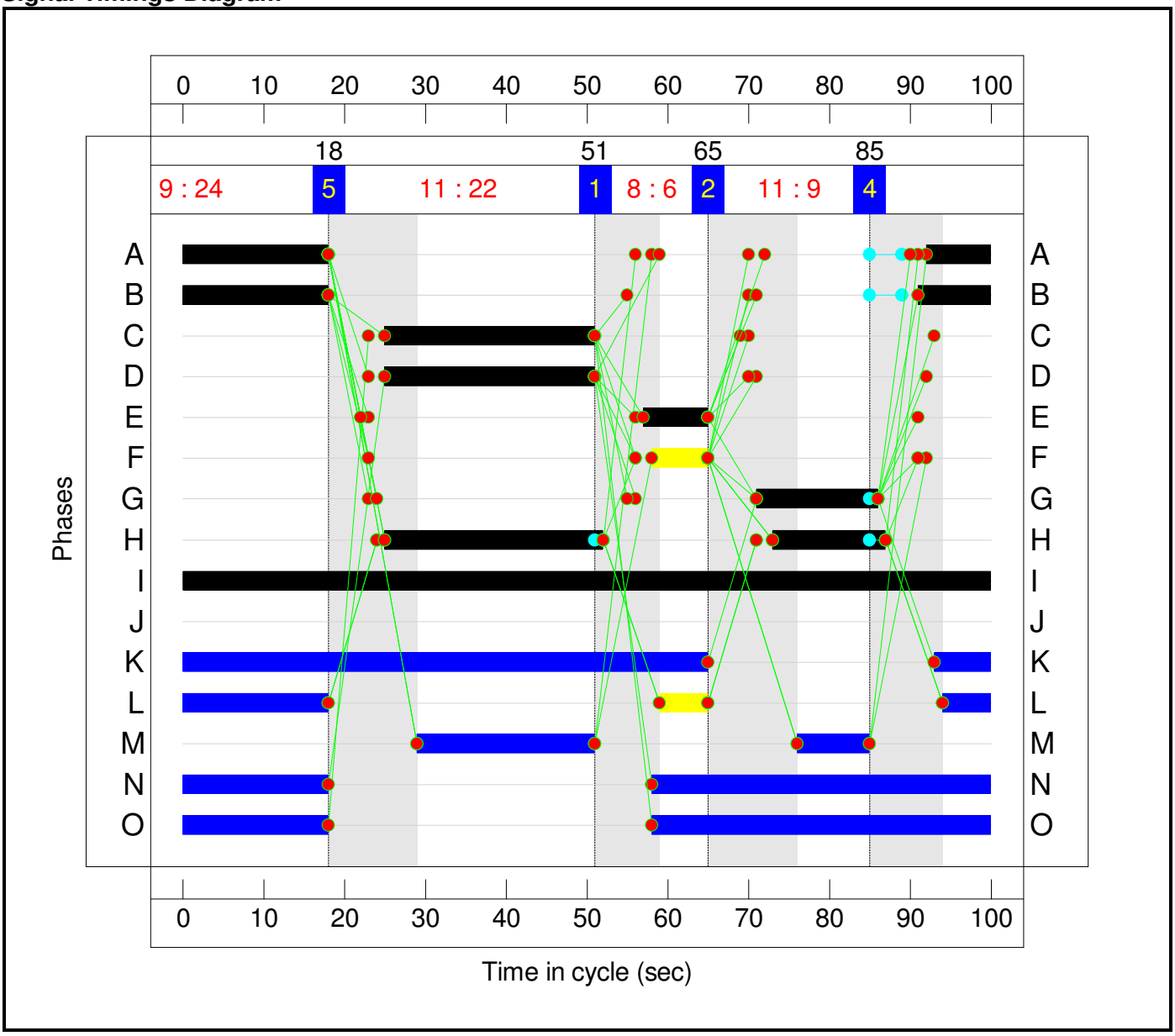


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



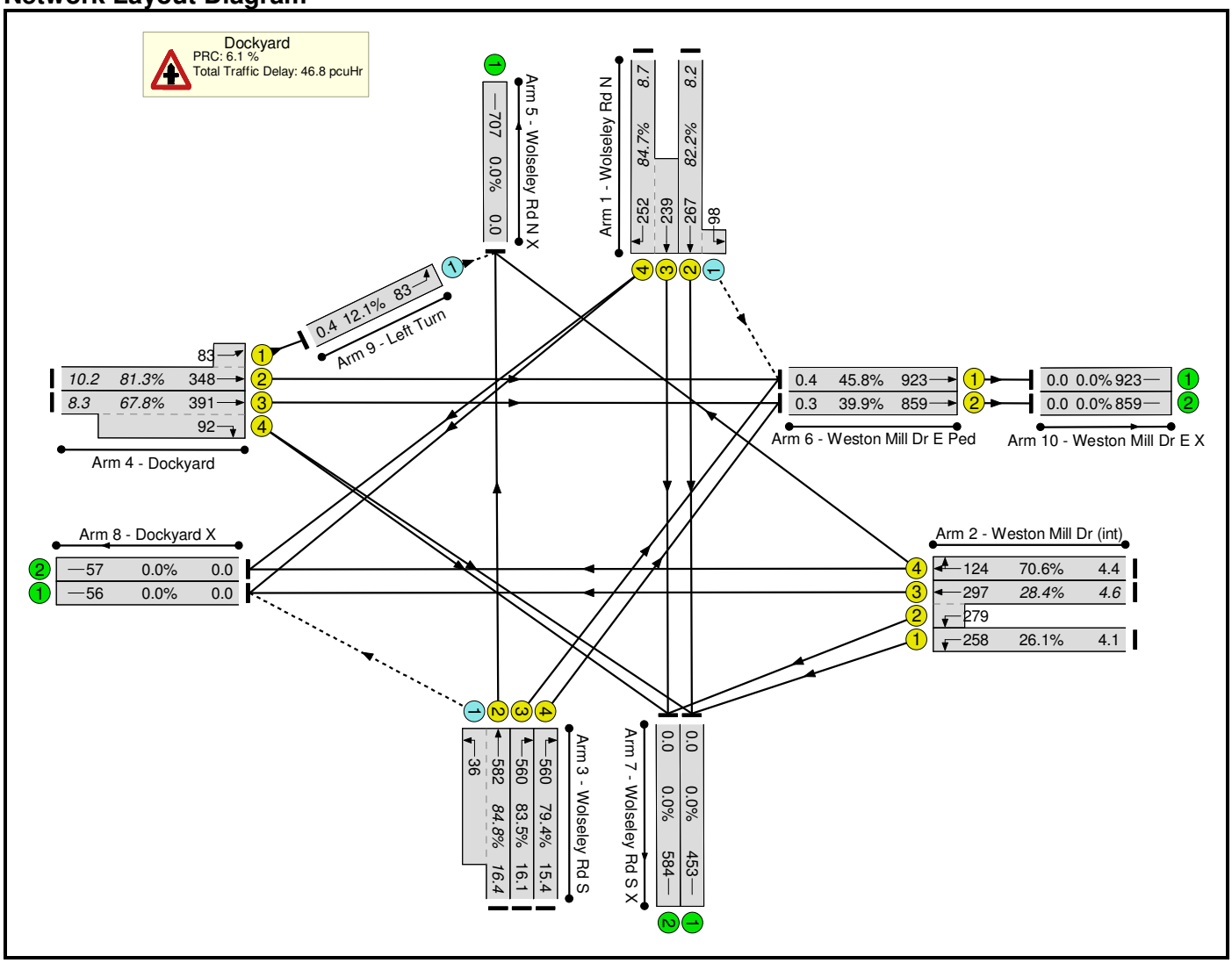
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**64.5%**	-
Dockyard	-	-	-	-	-	**64.5%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	26	92	18	64.5%	8.9
1/4+1/3	Wolseley Rd N Ahead Right	B A	27:26	91:92	18	64.5%	9.1
2/1	Weston Mill Dr (int) Left	H	41	73	87	59.8%	7.7
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	15:41	71:73	86:87	63.1%	8.7
2/4	Weston Mill Dr (int) Right Ahead	G	15	71	86	61.9%	6.2
3/2+3/1	Wolseley Rd S Ahead Left	C -	26	25	51	52.9%	7.0
3/3	Wolseley Rd S Right	D	26	25	51	46.0%	6.2
3/4	Wolseley Rd S Right	D	26	25	51	43.4%	6.0
4/2+4/1	Dockyard Ahead Ahead2	E	8	57	65	34.1%	1.5
4/3+4/4	Dockyard Ahead Right	E F	8:7	57:58	65	31.0%	1.7
6/1	Weston Mill Dr E Ped Ahead	I	100	0	100	20.8%	0.1
6/2	Weston Mill Dr E Ped Ahead	I	100	0	100	14.2%	0.1
9/1	Left Turn Left	-	-	-	-	2.6%	0.3

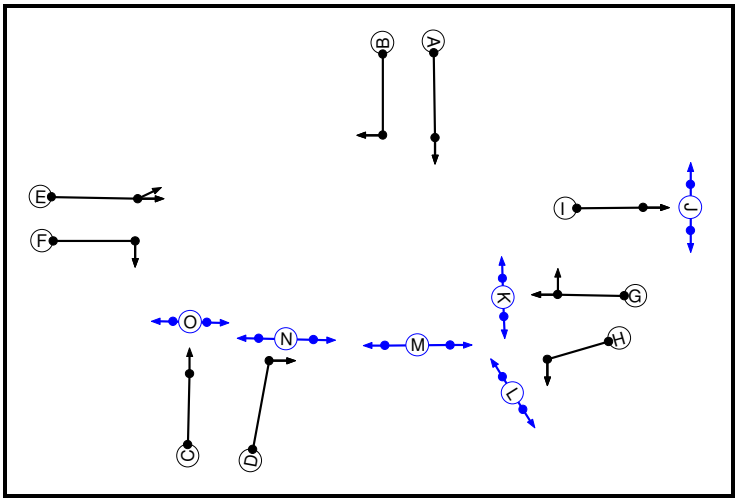
C1 Stream: 1 PRC for Signalled Lanes (%): 39.5 Total Delay for Signalled Lanes (pcuHr): 26.66
PRC Over All Lanes (%): 39.5 Total Delay Over All Lanes(pcuHr): 26.68 Cycle Time (s): 100

Scenario 4: '2011 PM Base' (FG4: '2011 PM Base ', Plan 2: 'PM')

Network Layout Diagram

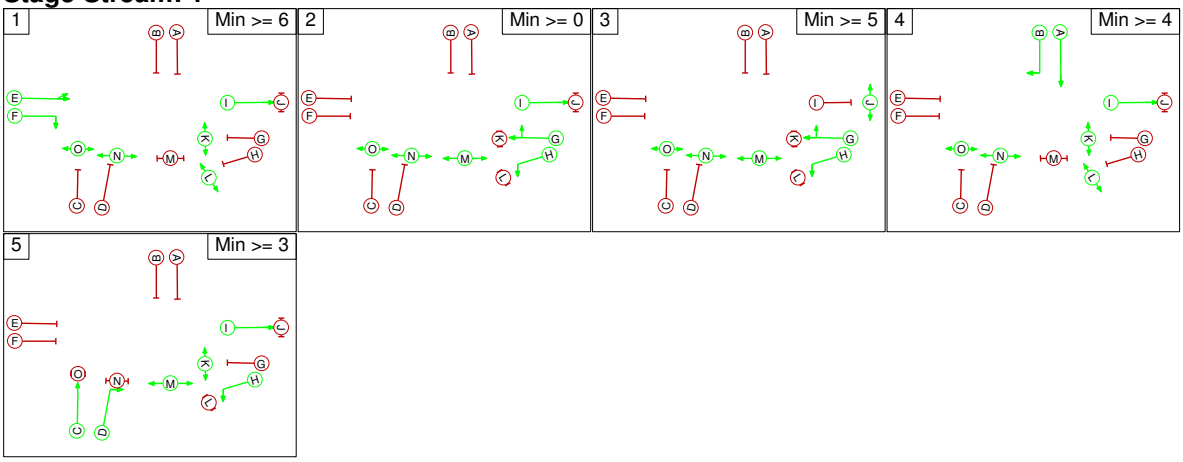


Phase Diagram

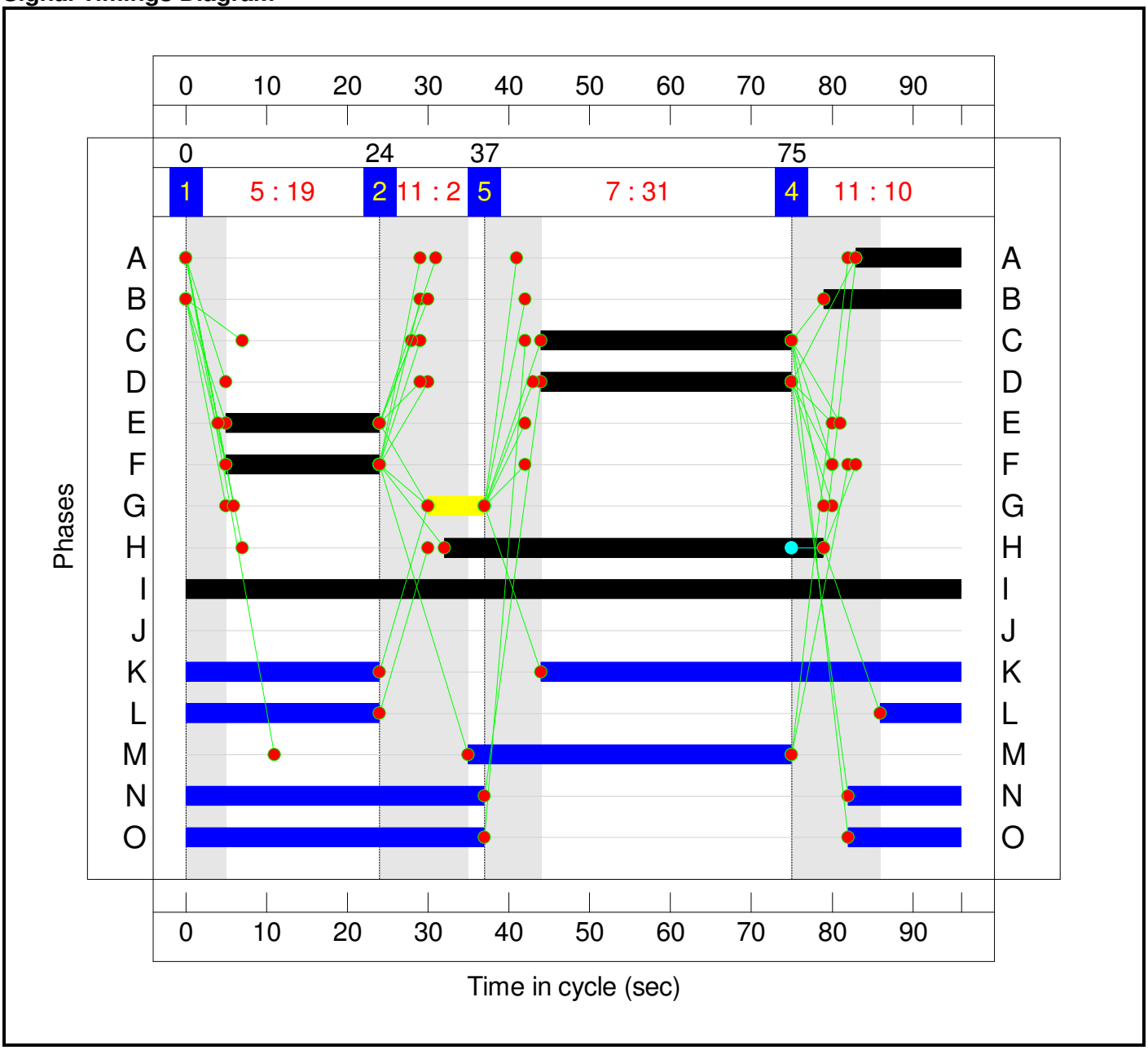


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



Network Results

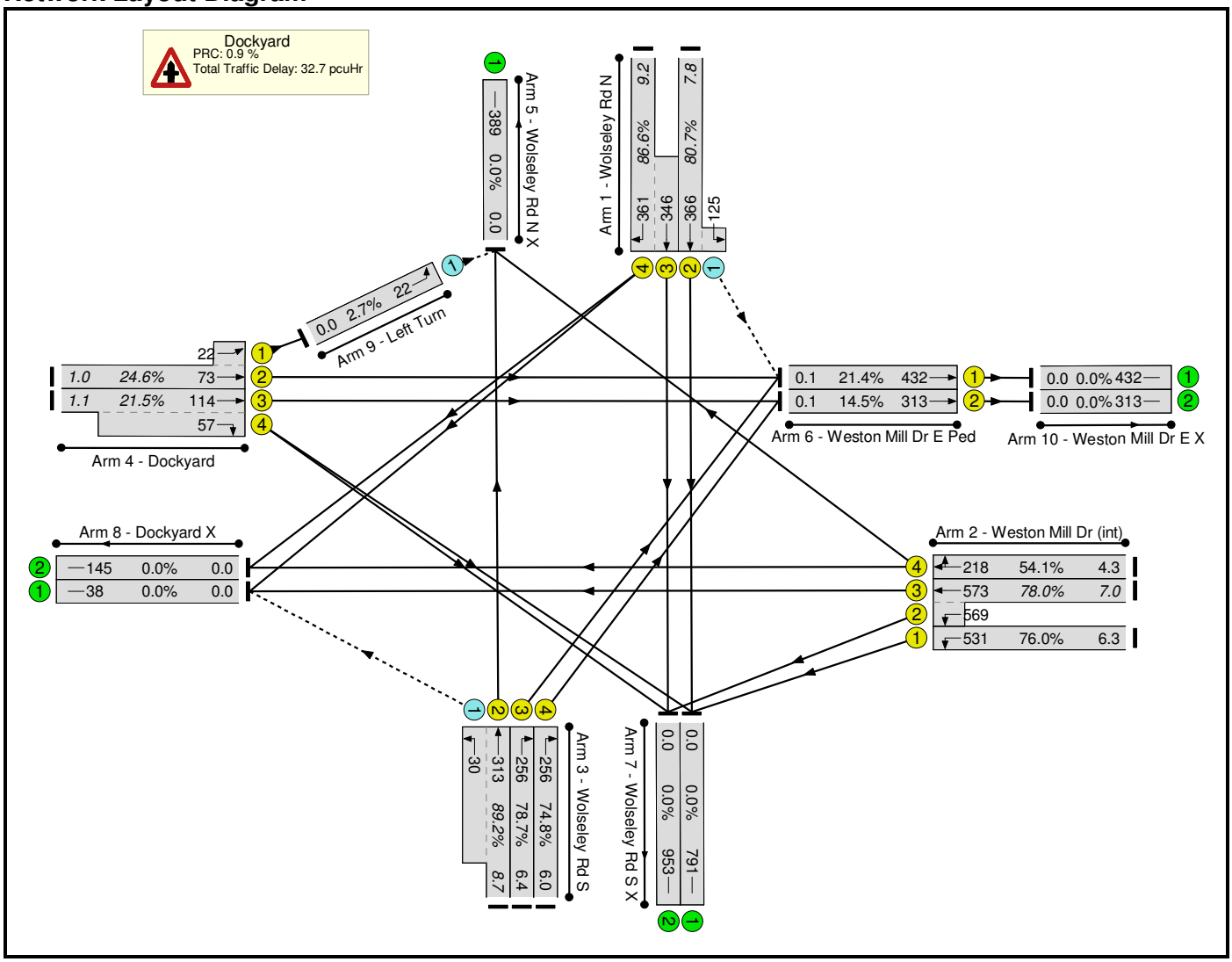
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**84.8%**	-
Dockyard	-	-	-	-	-	**84.8%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	13	83	0	82.2%	8.2
1/4+1/3	Wolseley Rd N Ahead Right	B A	17:13	79:83	0	84.7%	8.7
2/1	Weston Mill Dr (int) Left	H	47	32	79	26.1%	4.1
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	7:47	30:32	37:79	28.4%	4.6
2/4	Weston Mill Dr (int) Right Ahead	G	7	30	37	70.6%	4.4
3/2+3/1	Wolseley Rd S Ahead Left	C -	31	44	75	84.8%	16.4
3/3	Wolseley Rd S Right	D	31	44	75	83.5%	16.1
3/4	Wolseley Rd S Right	D	31	44	75	79.4%	15.4
4/2+4/1	Dockyard Ahead Ahead2	E	19	5	24	81.3%	10.2
4/3+4/4	Dockyard Ahead Right	E F	19	5	24	67.8%	8.3
6/1	Weston Mill Dr E Ped Ahead	I	96	0	96	45.8%	0.4
6/2	Weston Mill Dr E Ped Ahead	I	96	0	96	39.9%	0.3
9/1	Left Turn Left	-	-	-	-	12.1%	0.4

C1 Stream: 1 PRC for Signalled Lanes (%): 6.1 Total Delay for Signalled Lanes (pcuHr): 46.69
PRC Over All Lanes (%): 6.1 Total Delay Over All Lanes(pcuHr): 46.76 Cycle Time (s): 96

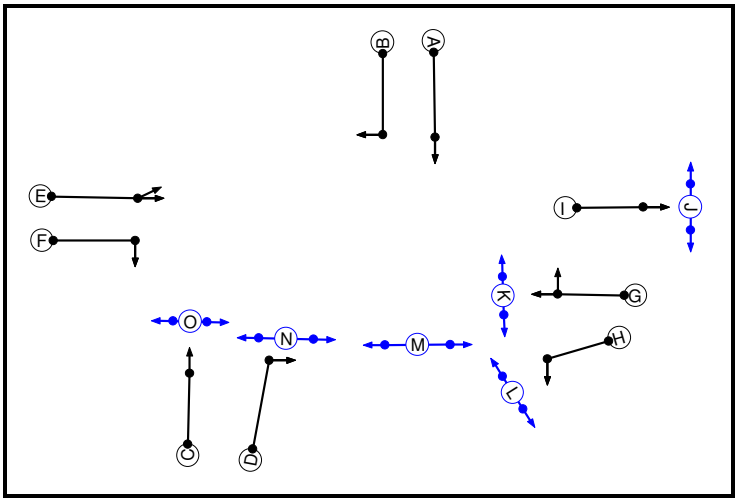
LINSIG Model Output

Scenario 1: '2014 AM Do Min' (FG1: '2014 AM Do Min', Plan 1: 'AM')

Network Layout Diagram

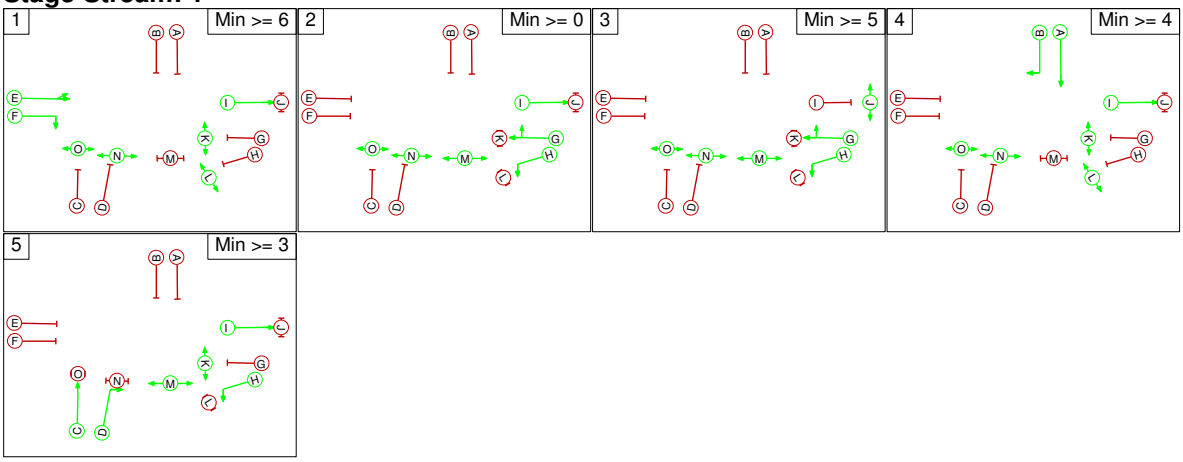


Phase Diagram

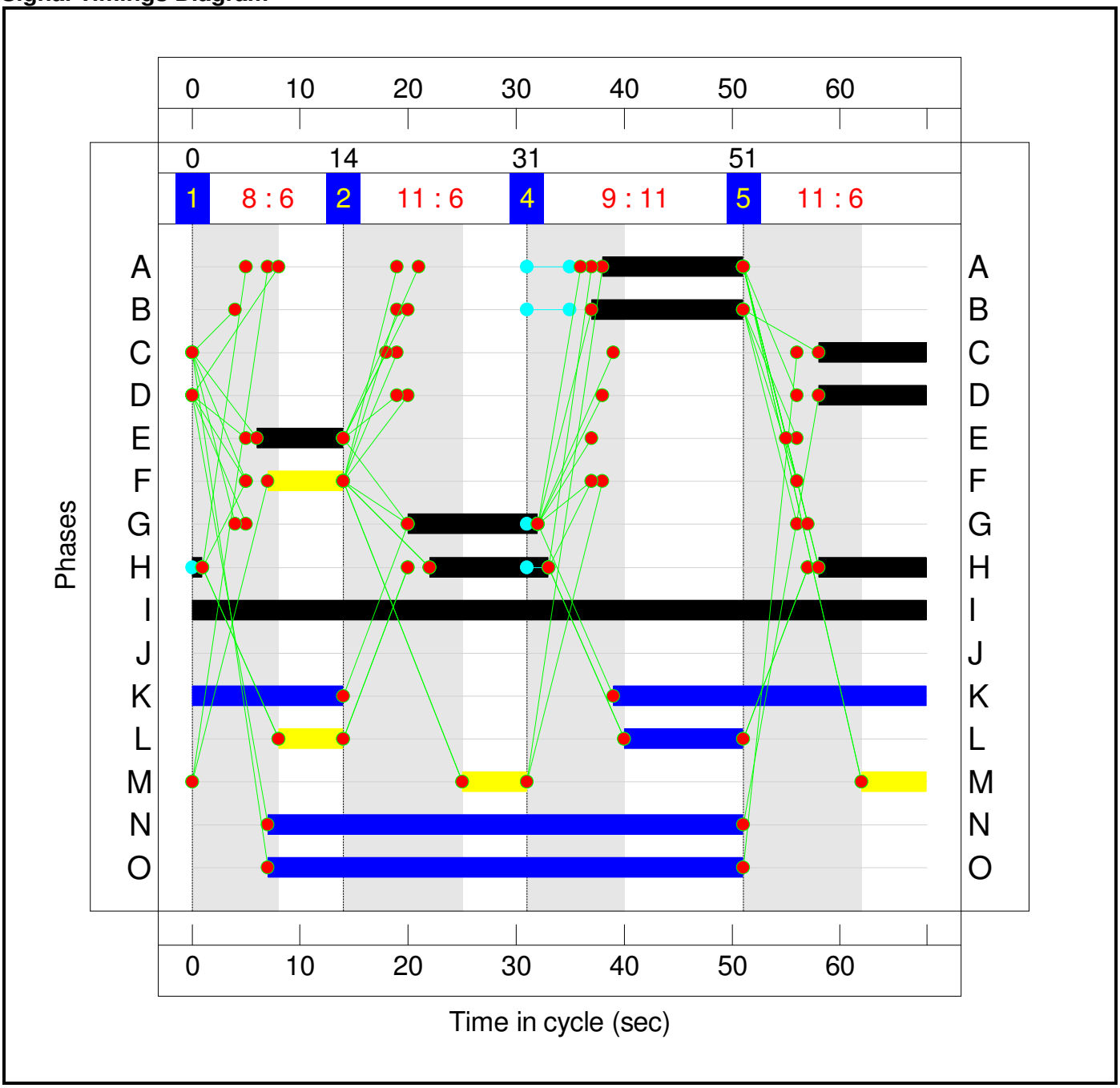


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



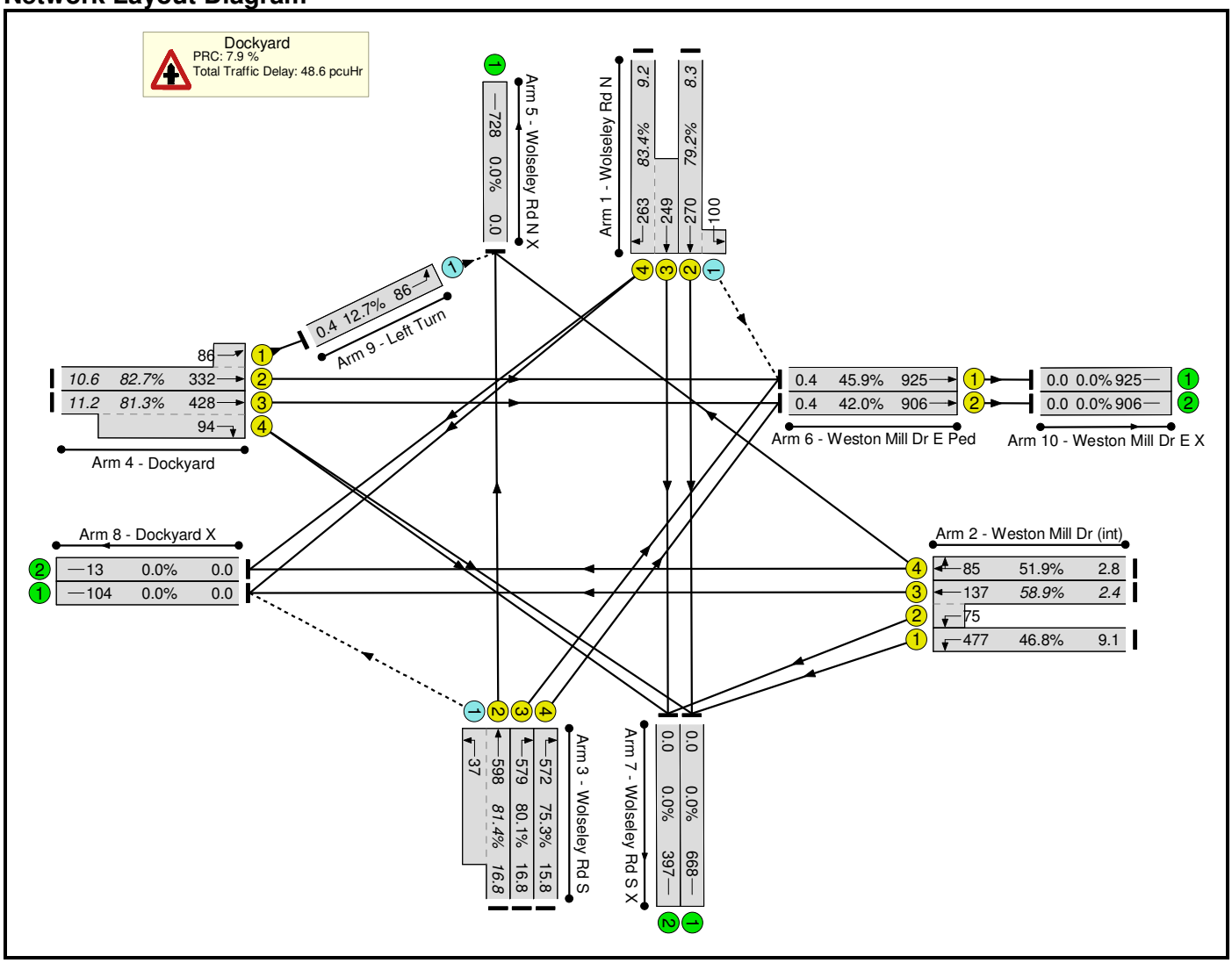
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.2%**	-
Dockyard	-	-	-	-	-	**89.2%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	13	38	51	80.7%	7.8
1/4+1/3	Wolseley Rd N Ahead Right	B A	14:13	37:38	51	86.6%	9.2
2/1	Weston Mill Dr (int) Left	H	22	22	33	76.0%	6.3
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	12:22	20:22	32:33	78.0%	7.0
2/4	Weston Mill Dr (int) Right Ahead	G	12	20	32	54.1%	4.3
3/2+3/1	Wolseley Rd S Ahead Left	C -	10	58	0	89.2%	8.7
3/3	Wolseley Rd S Right	D	10	58	0	78.7%	6.4
3/4	Wolseley Rd S Right	D	10	58	0	74.8%	6.0
4/2+4/1	Dockyard Ahead Ahead2	E	8	6	14	24.6%	1.0
4/3+4/4	Dockyard Ahead Right	E F	8:7	6:7	14	21.5%	1.1
6/1	Weston Mill Dr E Ped Ahead	I	68	0	68	21.4%	0.1
6/2	Weston Mill Dr E Ped Ahead	I	68	0	68	14.5%	0.1
9/1	Left Turn Left	-	-	-	-	2.7%	0.0

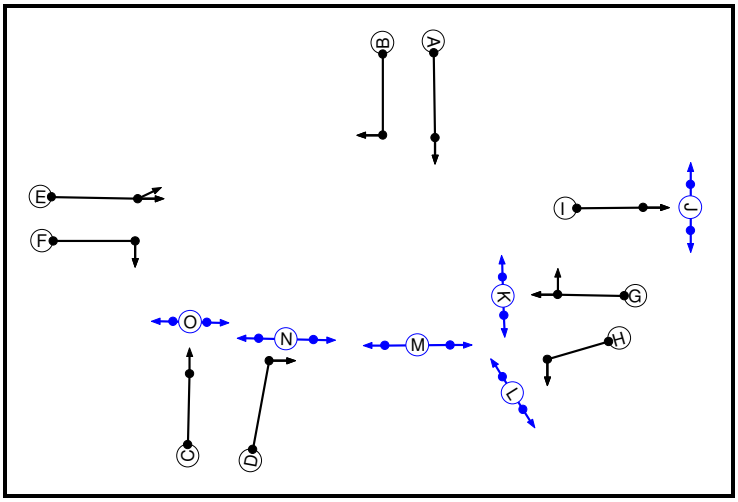
C1 Stream: 1 PRC for Signalled Lanes (%): 0.9 Total Delay for Signalled Lanes (pcuHr): 32.66
PRC Over All Lanes (%): 0.9 Total Delay Over All Lanes(pcuHr): 32.68 Cycle Time (s): 68

Scenario 2: '2014 PM Do Min' (FG2: '2014 PM Do Min', Plan 2: 'PM')

Network Layout Diagram

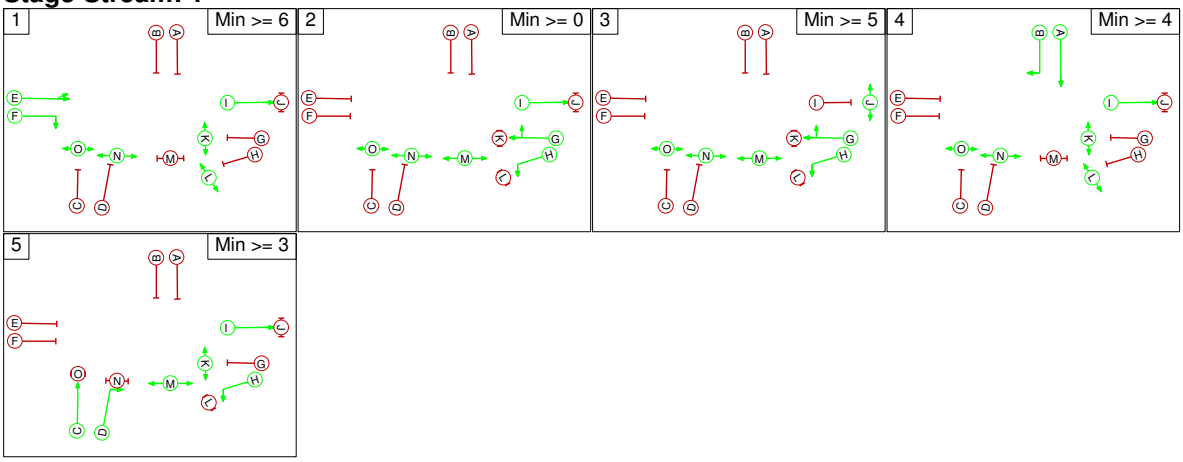


Phase Diagram

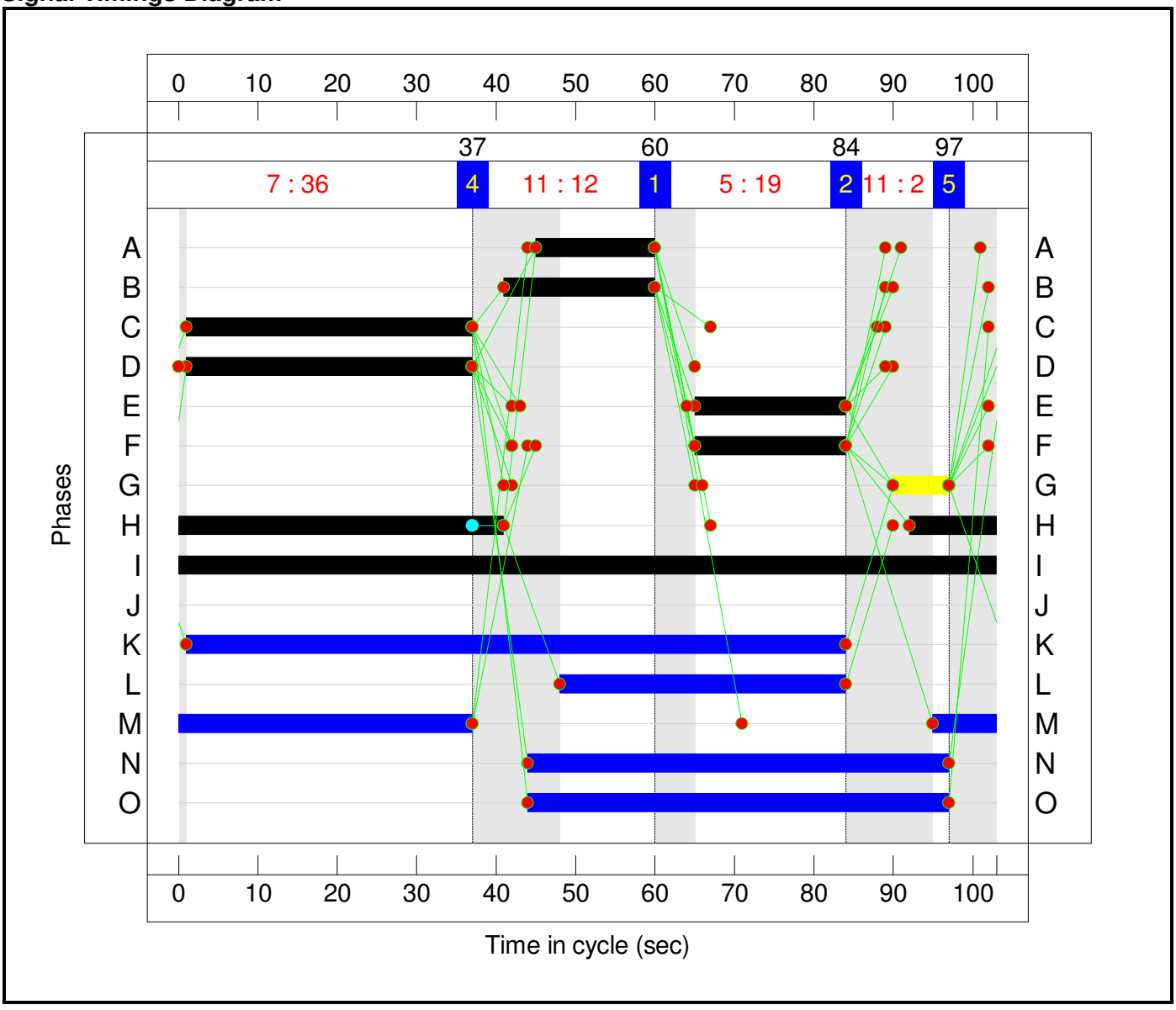


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



Network Results

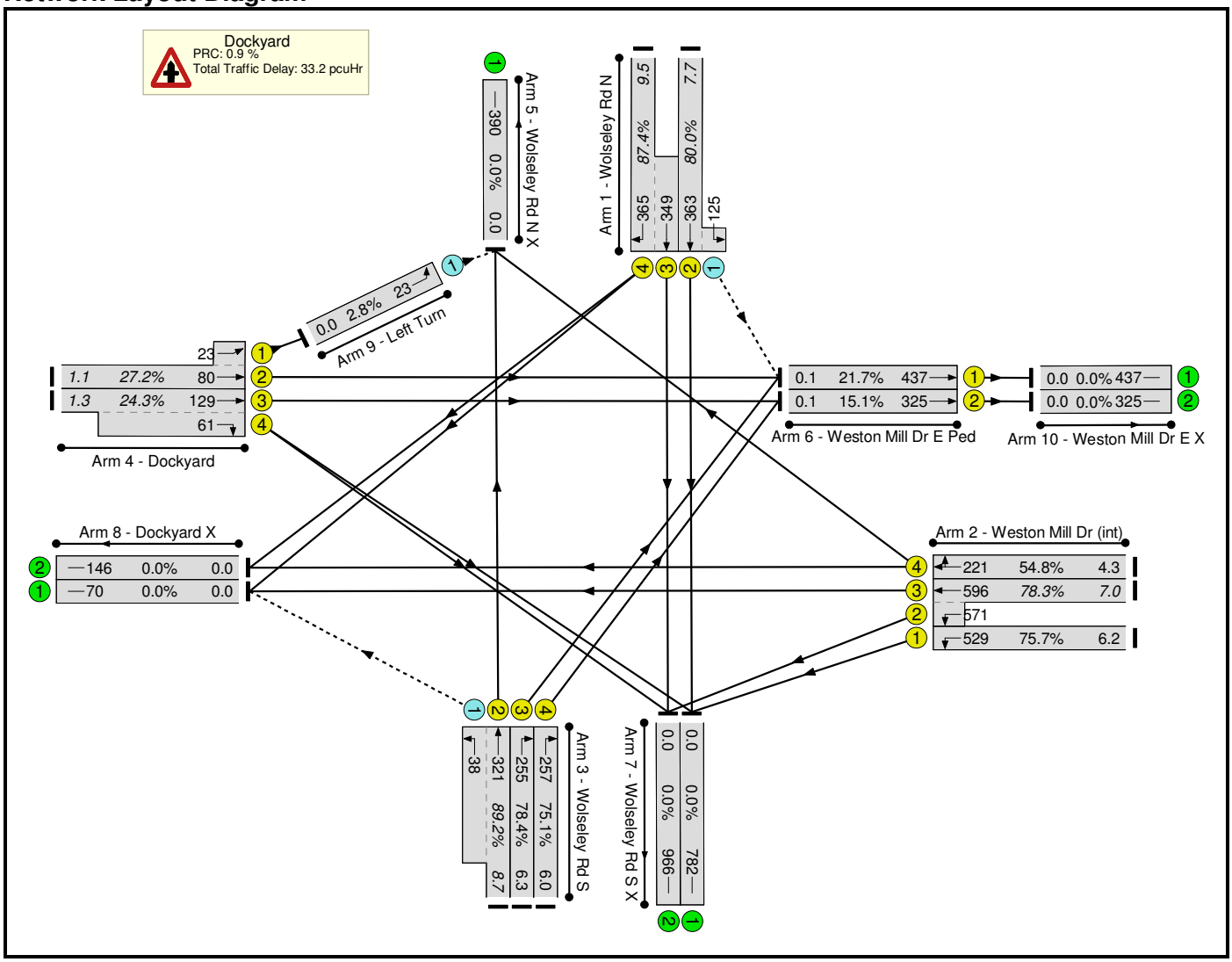
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**83.4%**	-
Dockyard	-	-	-	-	-	**83.4%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	15	45	60	79.2%	8.3
1/4+1/3	Wolseley Rd N Ahead Right	B A	19:15	41:45	60	83.4%	9.2
2/1	Weston Mill Dr (int) Left	H	52	92	41	46.8%	9.1
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	7:52	90:92	97:41	58.9%	2.4
2/4	Weston Mill Dr (int) Right Ahead	G	7	90	97	51.9%	2.8
3/2+3/1	Wolseley Rd S Ahead Left	C -	36	1	37	81.4%	16.8
3/3	Wolseley Rd S Right	D	36	1	37	80.1%	16.8
3/4	Wolseley Rd S Right	D	36	1	37	75.3%	15.8
4/2+4/1	Dockyard Ahead Ahead2	E	19	65	84	82.7%	10.6
4/3+4/4	Dockyard Ahead Right	E F	19	65	84	81.3%	11.2
6/1	Weston Mill Dr E Ped Ahead	I	103	0	103	45.9%	0.4
6/2	Weston Mill Dr E Ped Ahead	I	103	0	103	42.0%	0.4
9/1	Left Turn Left	-	-	-	-	12.7%	0.4

C1 Stream: 1 PRC for Signalled Lanes (%): 7.9 Total Delay for Signalled Lanes (pcuHr): 48.54
PRC Over All Lanes (%): 7.9 Total Delay Over All Lanes(pcuHr): 48.61 Cycle Time (s): 103

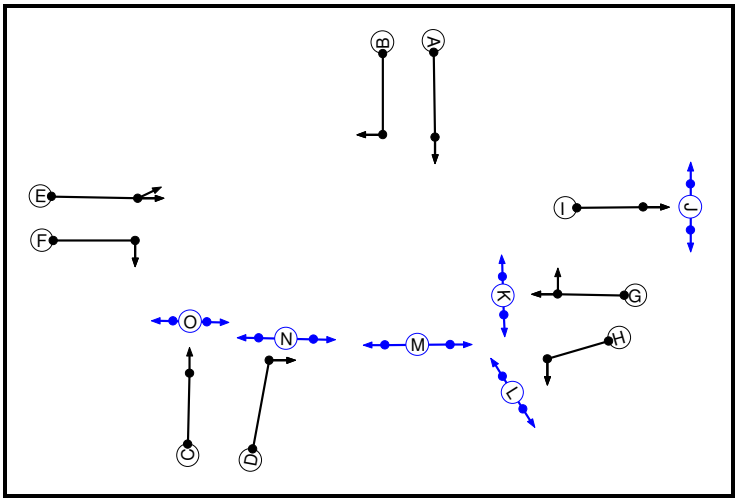
LINSIG Model Output

Scenario 1: '2014 AM Do Something' (FG1: '2014 AM Do Something', Plan 1: 'AM')

Network Layout Diagram

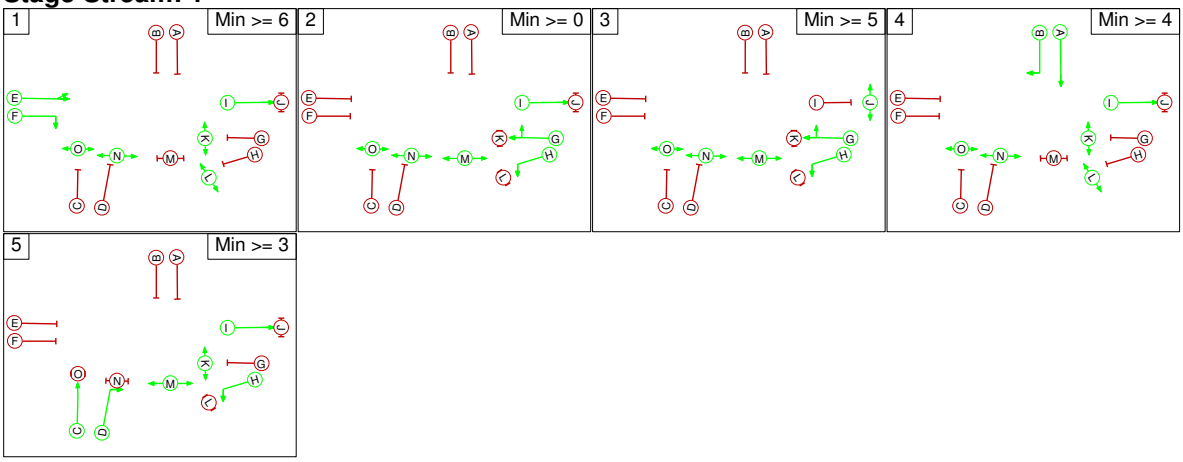


Phase Diagram

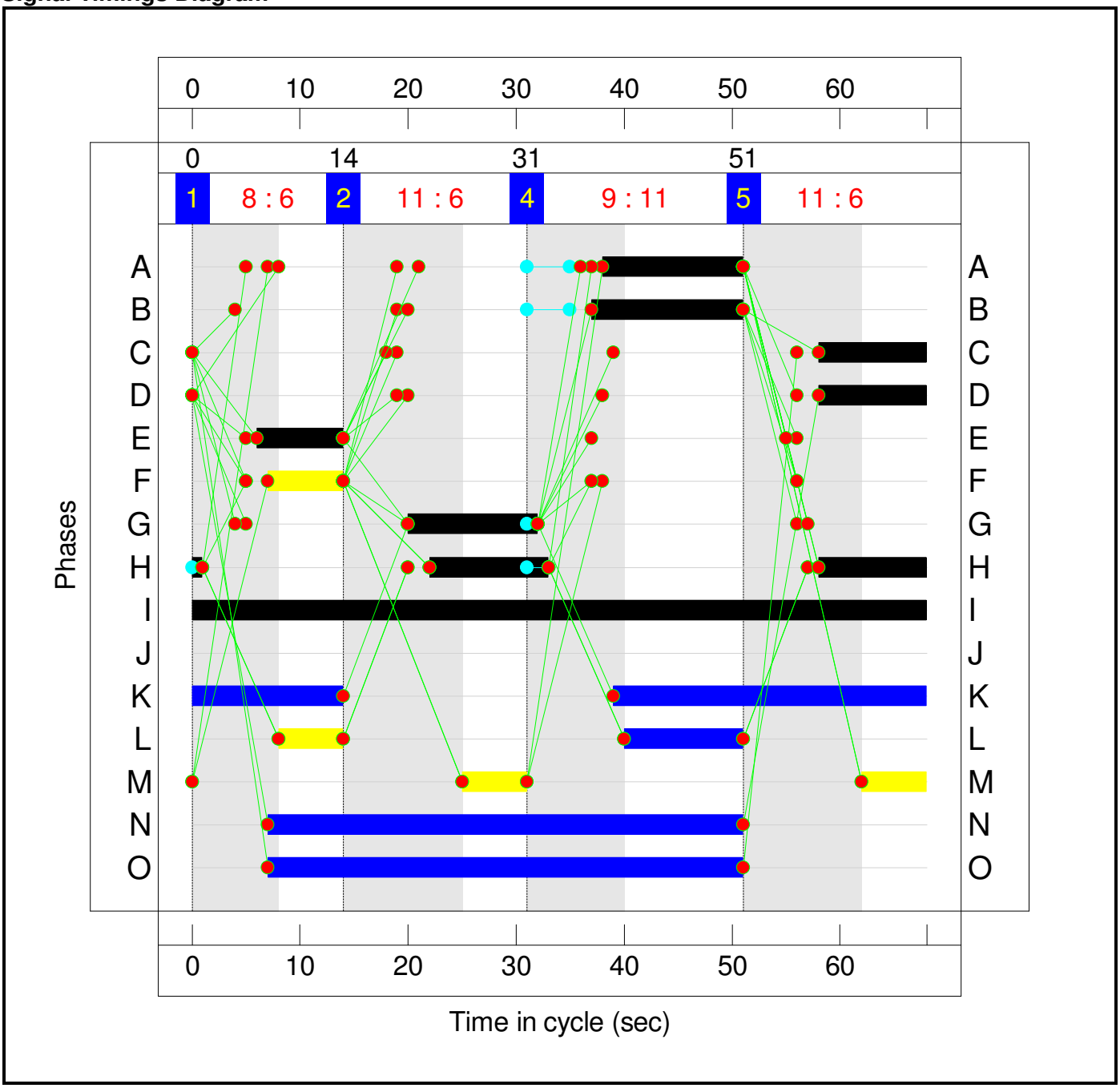


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



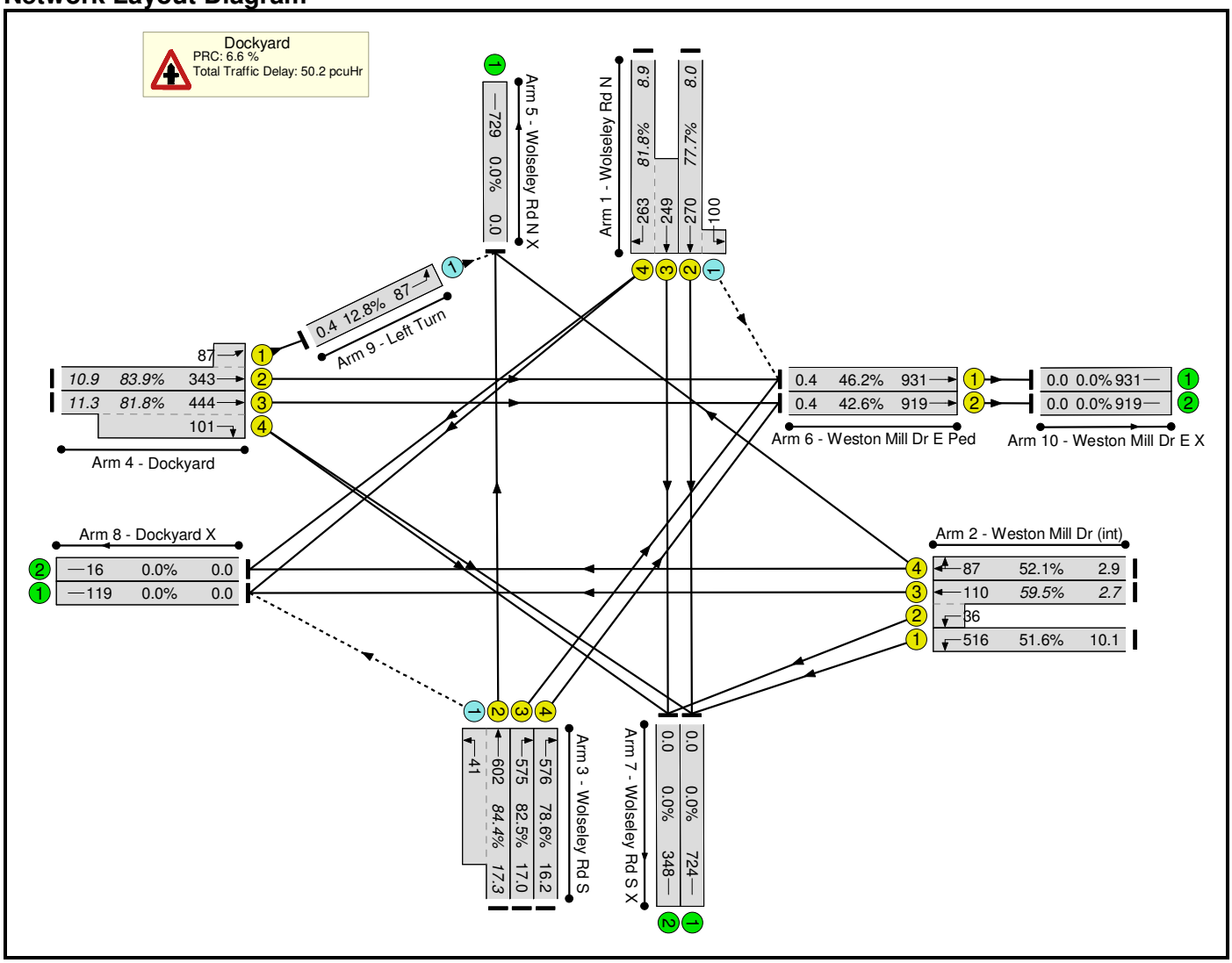
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.2%**	-
Dockyard	-	-	-	-	-	**89.2%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	13	38	51	80.0%	7.7
1/4+1/3	Wolseley Rd N Ahead Right	B A	14:13	37:38	51	87.4%	9.5
2/1	Weston Mill Dr (int) Left	H	22	22	33	75.7%	6.2
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	12:22	20:22	32:33	78.3%	7.0
2/4	Weston Mill Dr (int) Right Ahead	G	12	20	32	54.8%	4.3
3/2+3/1	Wolseley Rd S Ahead Left	C -	10	58	0	89.2%	8.7
3/3	Wolseley Rd S Right	D	10	58	0	78.4%	6.3
3/4	Wolseley Rd S Right	D	10	58	0	75.1%	6.0
4/2+4/1	Dockyard Ahead Ahead2	E	8	6	14	27.2%	1.1
4/3+4/4	Dockyard Ahead Right	E F	8:7	6:7	14	24.3%	1.3
6/1	Weston Mill Dr E Ped Ahead	I	68	0	68	21.7%	0.1
6/2	Weston Mill Dr E Ped Ahead	I	68	0	68	15.1%	0.1
9/1	Left Turn Left	-	-	-	-	2.8%	0.0

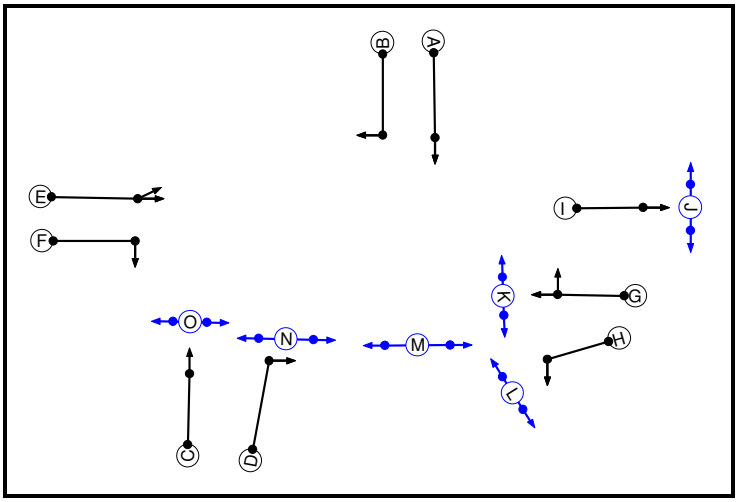
C1 Stream: 1 PRC for Signalled Lanes (%): 0.9 Total Delay for Signalled Lanes (pcuHr): 33.16
PRC Over All Lanes (%): 0.9 Total Delay Over All Lanes(pcuHr): 33.17 Cycle Time (s): 68

Scenario 2: '2014 PM Do Something' (FG2: '2014 PM Do Something', Plan 2: 'PM')

Network Layout Diagram

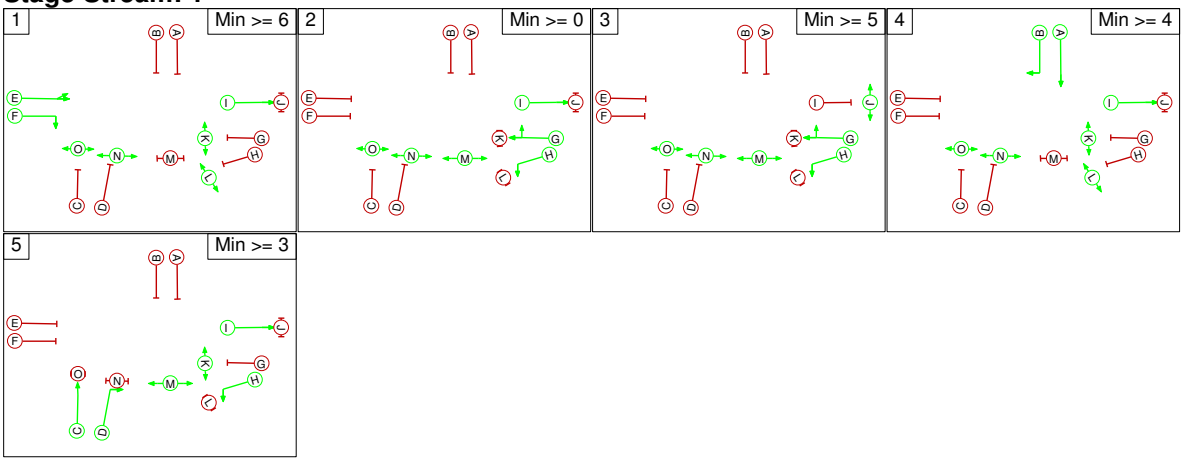


Phase Diagram

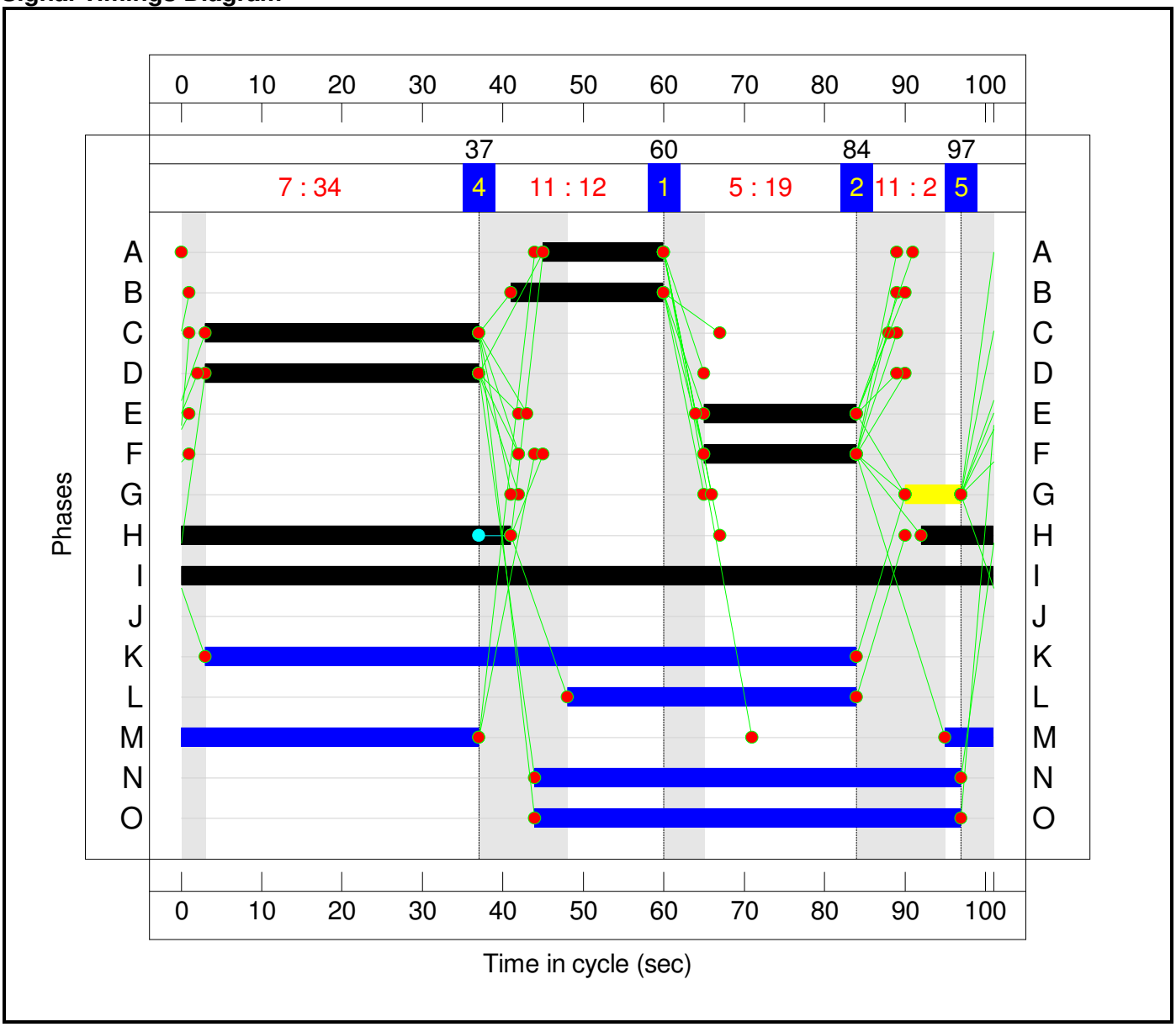


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



Network Results

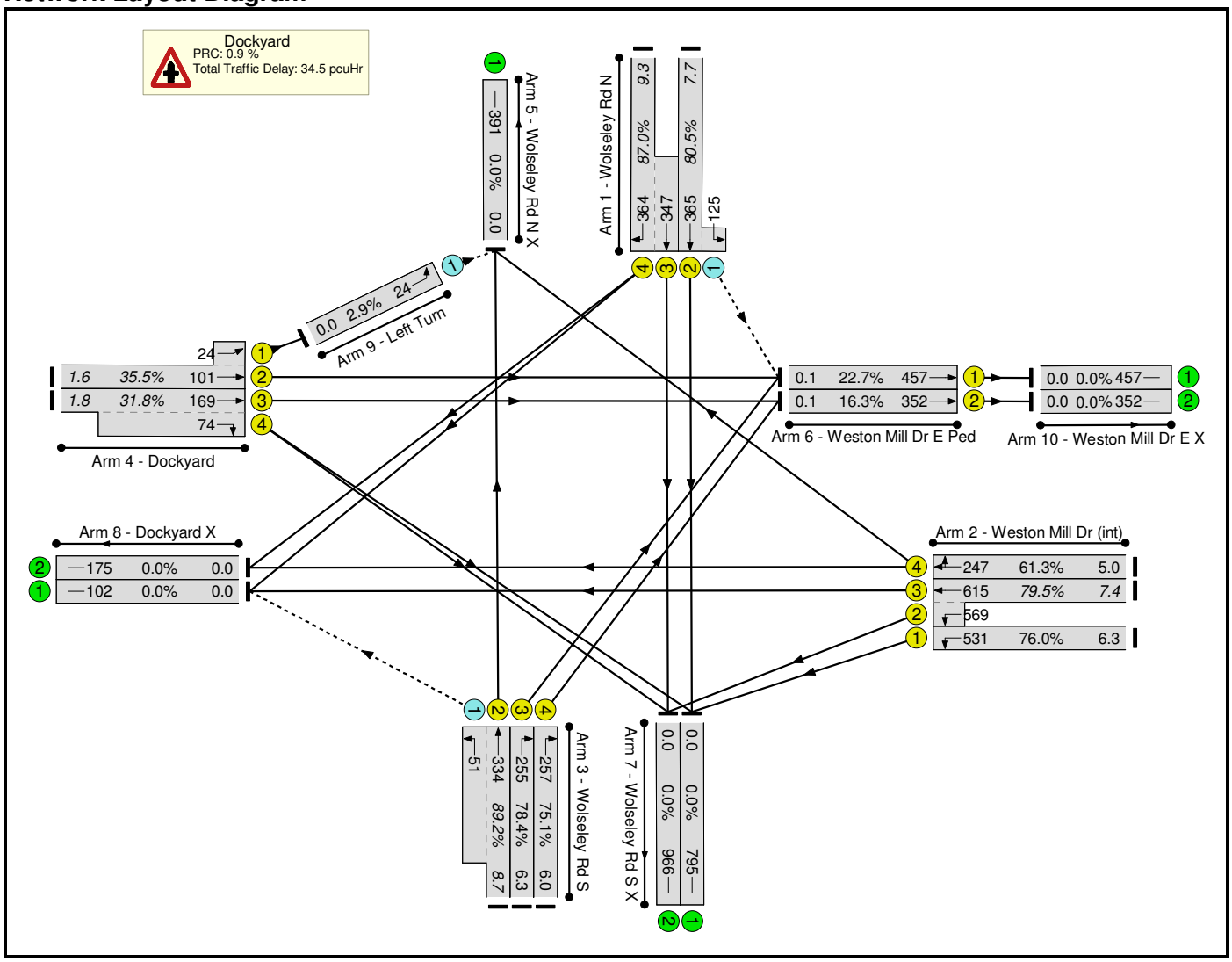
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**84.4%**	-
Dockyard	-	-	-	-	-	**84.4%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	15	45	60	77.7%	8.0
1/4+1/3	Wolseley Rd N Ahead Right	B A	19:15	41:45	60	81.8%	8.9
2/1	Weston Mill Dr (int) Left	H	50	92	41	51.6%	10.1
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	7:50	90:92	97:41	59.5%	2.7
2/4	Weston Mill Dr (int) Right Ahead	G	7	90	97	52.1%	2.9
3/2+3/1	Wolseley Rd S Ahead Left	C -	34	3	37	84.4%	17.3
3/3	Wolseley Rd S Right	D	34	3	37	82.5%	17.0
3/4	Wolseley Rd S Right	D	34	3	37	78.6%	16.2
4/2+4/1	Dockyard Ahead Ahead2	E	19	65	84	83.9%	10.9
4/3+4/4	Dockyard Ahead Right	E F	19	65	84	81.8%	11.3
6/1	Weston Mill Dr E Ped Ahead	I	101	0	101	46.2%	0.4
6/2	Weston Mill Dr E Ped Ahead	I	101	0	101	42.6%	0.4
9/1	Left Turn Left	-	-	-	-	12.8%	0.4

C1 Stream: 1 PRC for Signalled Lanes (%): 6.6 Total Delay for Signalled Lanes (pcuHr): 50.13
PRC Over All Lanes (%): 6.6 Total Delay Over All Lanes(pcuHr): 50.20 Cycle Time (s): 101

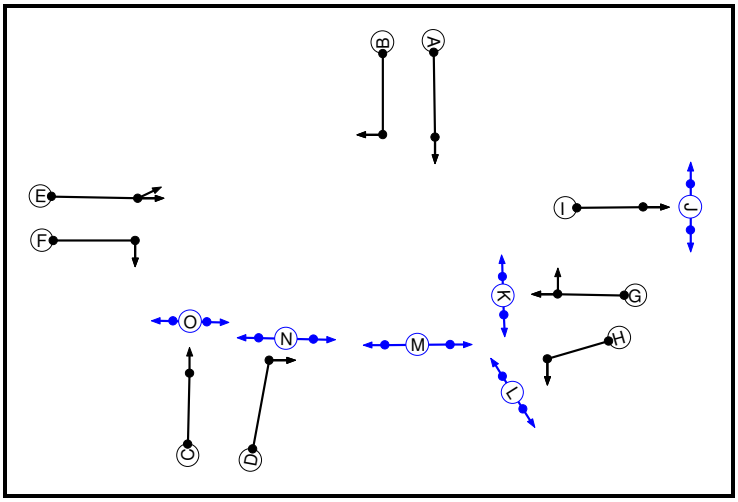
LINSIG Model Output

Scenario 1: '2014 AM Do Something MAX' (FG1: '2014 AM Do Something MAX', Plan 1: 'AM')

Network Layout Diagram

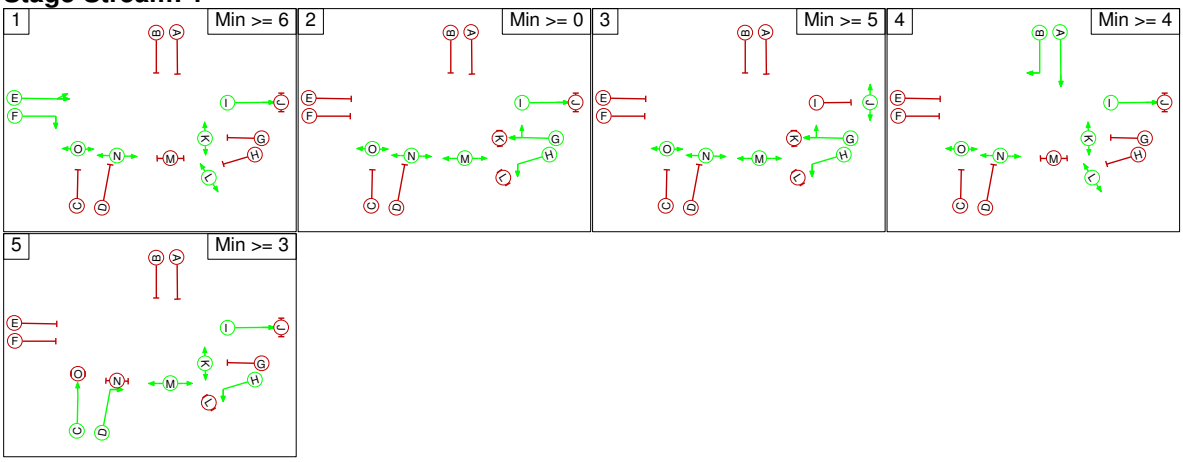


Phase Diagram

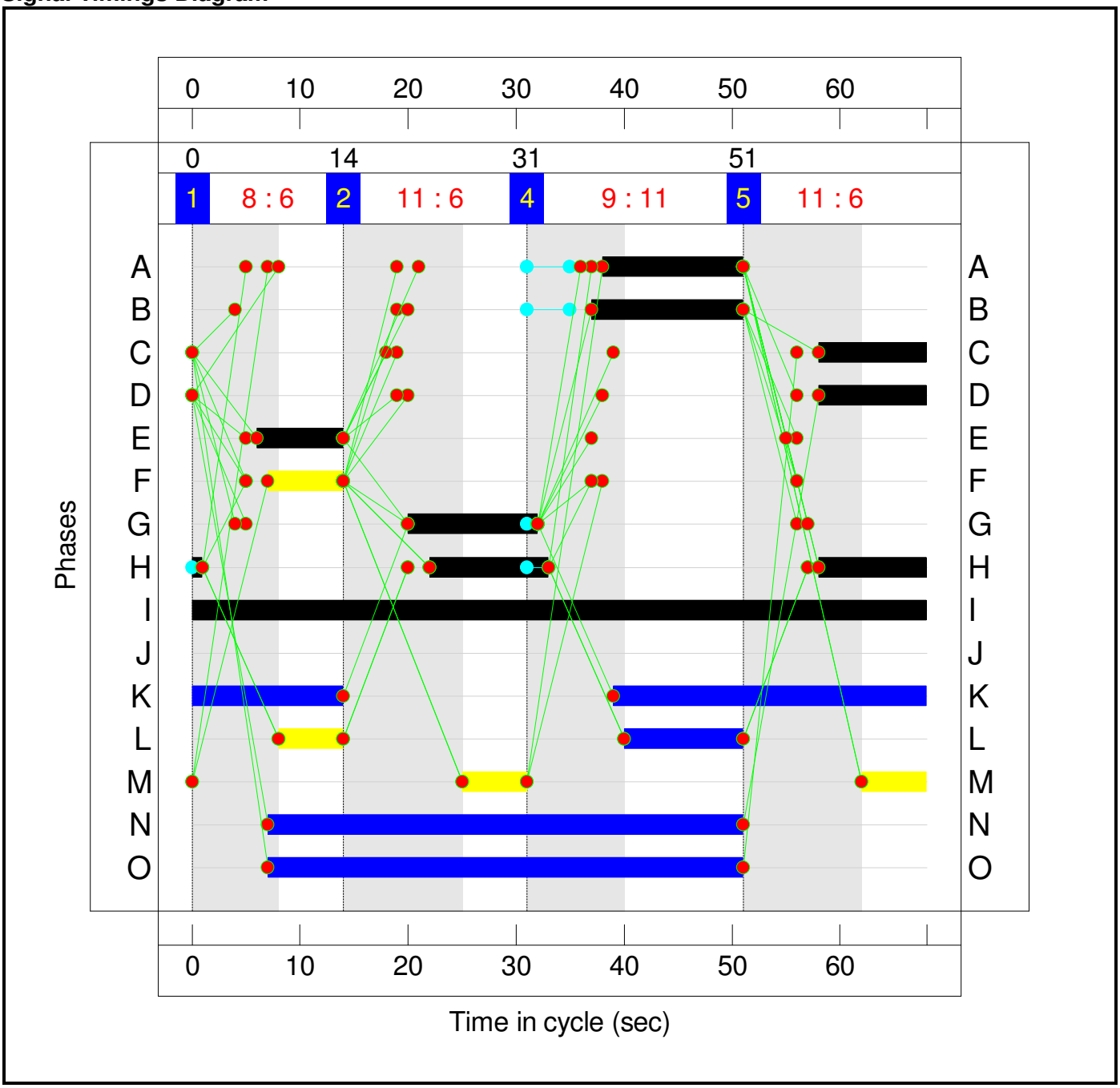


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



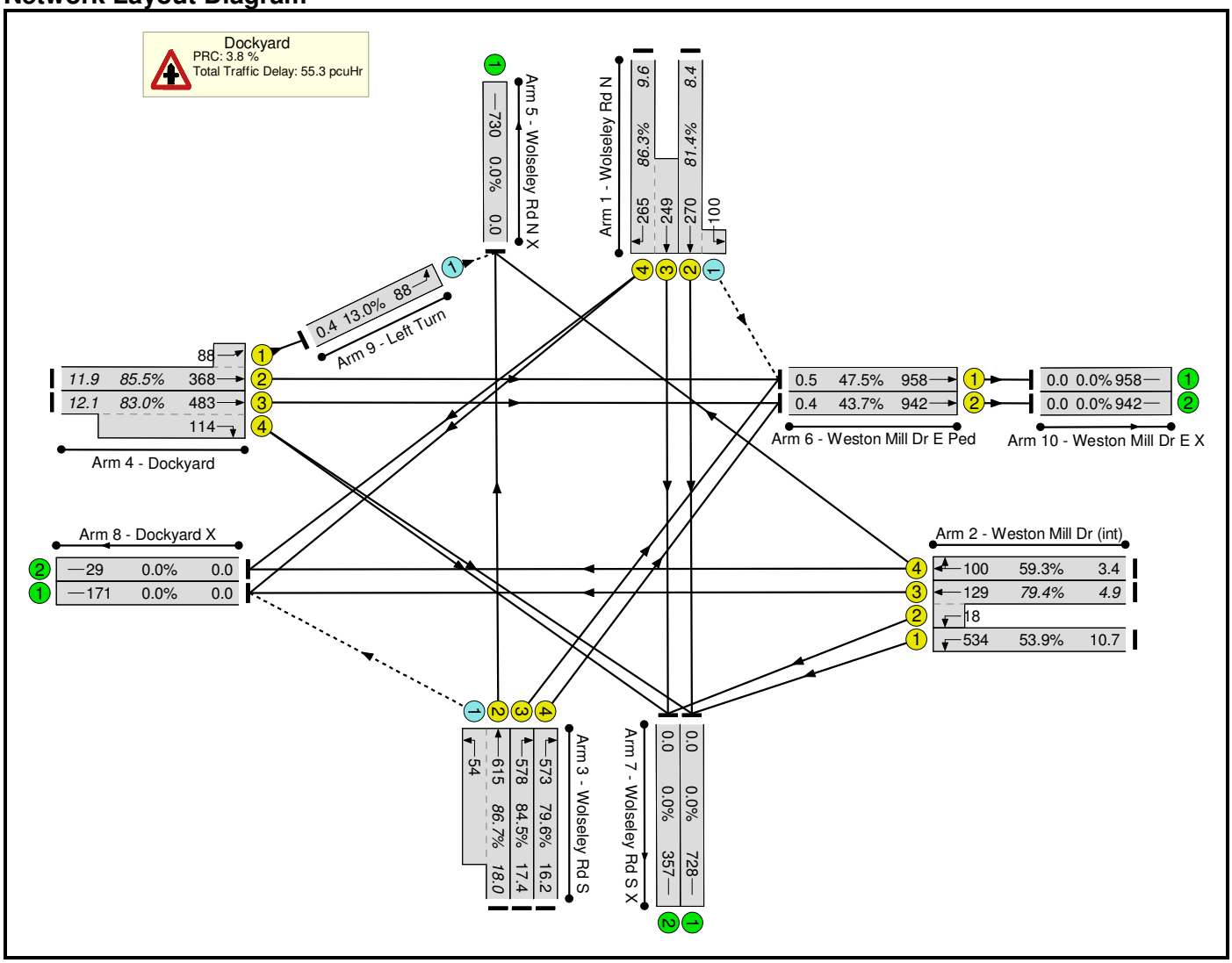
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.2%**	-
Dockyard	-	-	-	-	-	**89.2%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	13	38	51	80.5%	7.7
1/4+1/3	Wolseley Rd N Ahead Right	B A	14:13	37:38	51	87.0%	9.3
2/1	Weston Mill Dr (int) Left	H	22	22	33	76.0%	6.3
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	12:22	20:22	32:33	79.5%	7.4
2/4	Weston Mill Dr (int) Right Ahead	G	12	20	32	61.3%	5.0
3/2+3/1	Wolseley Rd S Ahead Left	C -	10	58	0	89.2%	8.7
3/3	Wolseley Rd S Right	D	10	58	0	78.4%	6.3
3/4	Wolseley Rd S Right	D	10	58	0	75.1%	6.0
4/2+4/1	Dockyard Ahead Ahead2	E	8	6	14	35.5%	1.6
4/3+4/4	Dockyard Ahead Right	E F	8:7	6:7	14	31.8%	1.8
6/1	Weston Mill Dr E Ped Ahead	I	68	0	68	22.7%	0.1
6/2	Weston Mill Dr E Ped Ahead	I	68	0	68	16.3%	0.1
9/1	Left Turn Left	-	-	-	-	2.9%	0.0

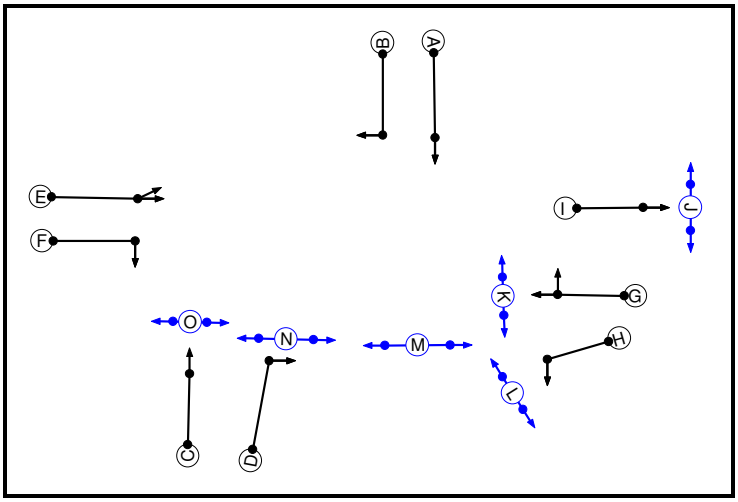
C1 Stream: 1 PRC for Signalled Lanes (%): 0.9 Total Delay for Signalled Lanes (pcuHr): 34.47
PRC Over All Lanes (%): 0.9 Total Delay Over All Lanes(pcuHr): 34.48 Cycle Time (s): 68

Scenario 2: '2014 PM Do Something MAX' (FG2: '2014 PM Do Something MAX', Plan 2: 'PM')

Network Layout Diagram

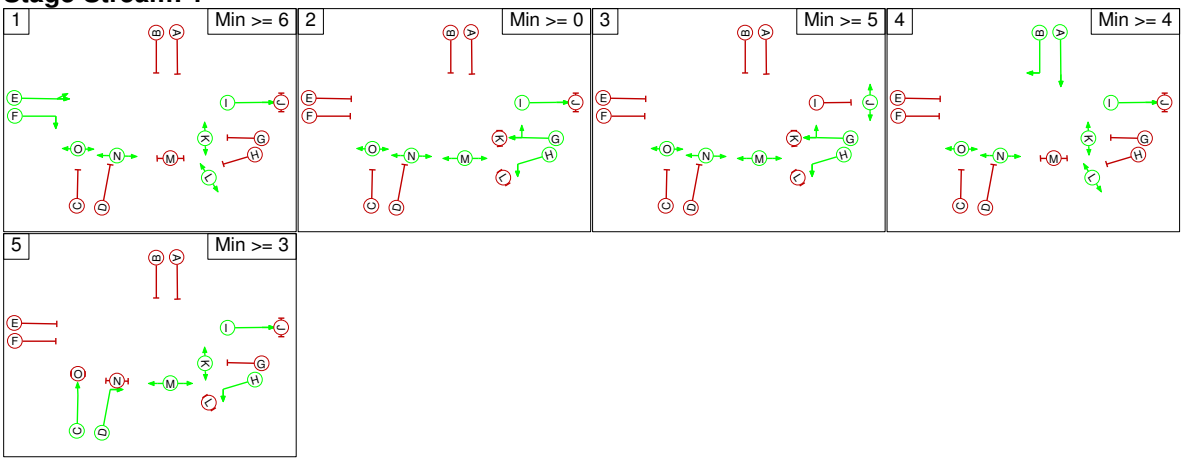


Phase Diagram

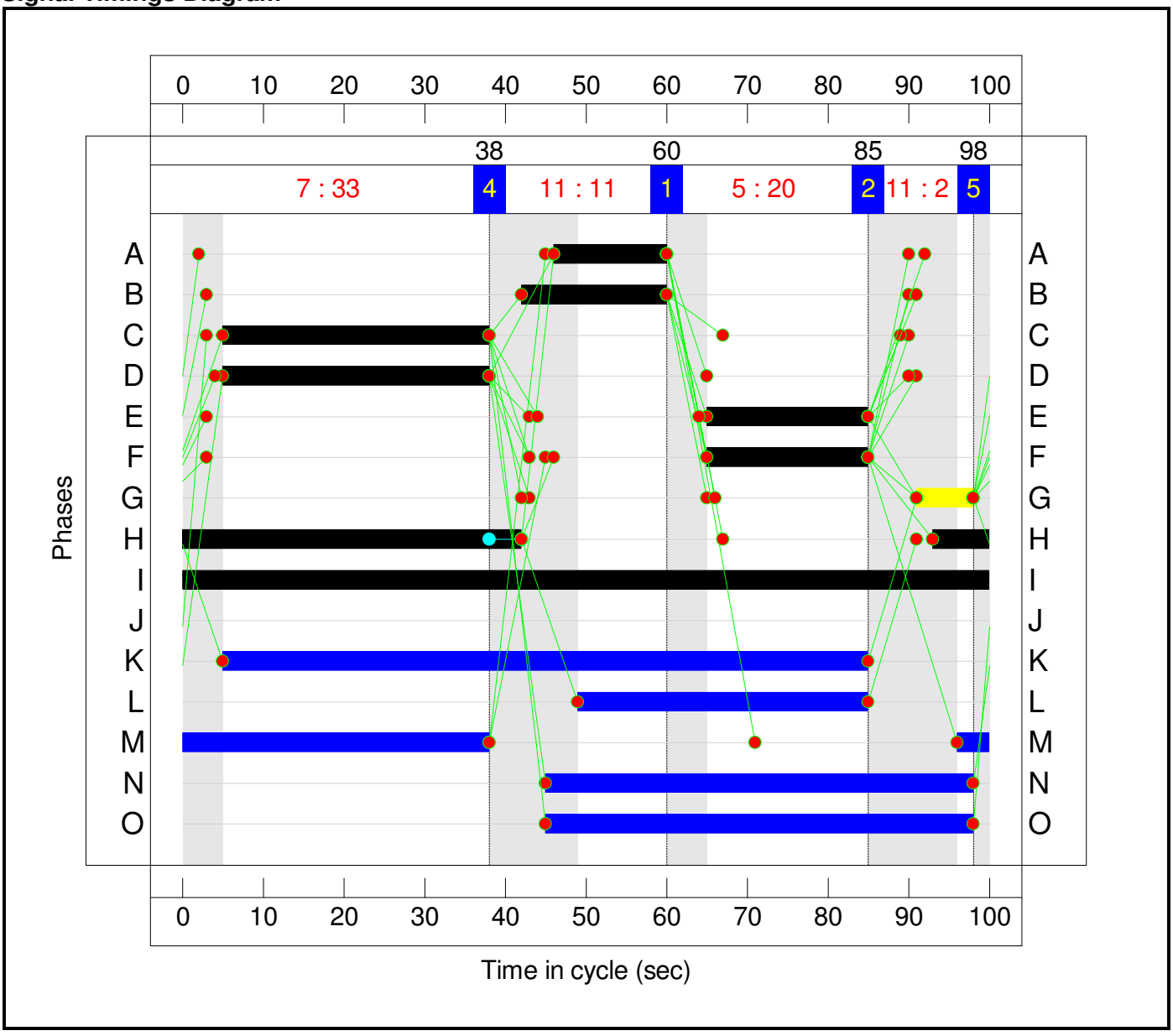


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



Network Results

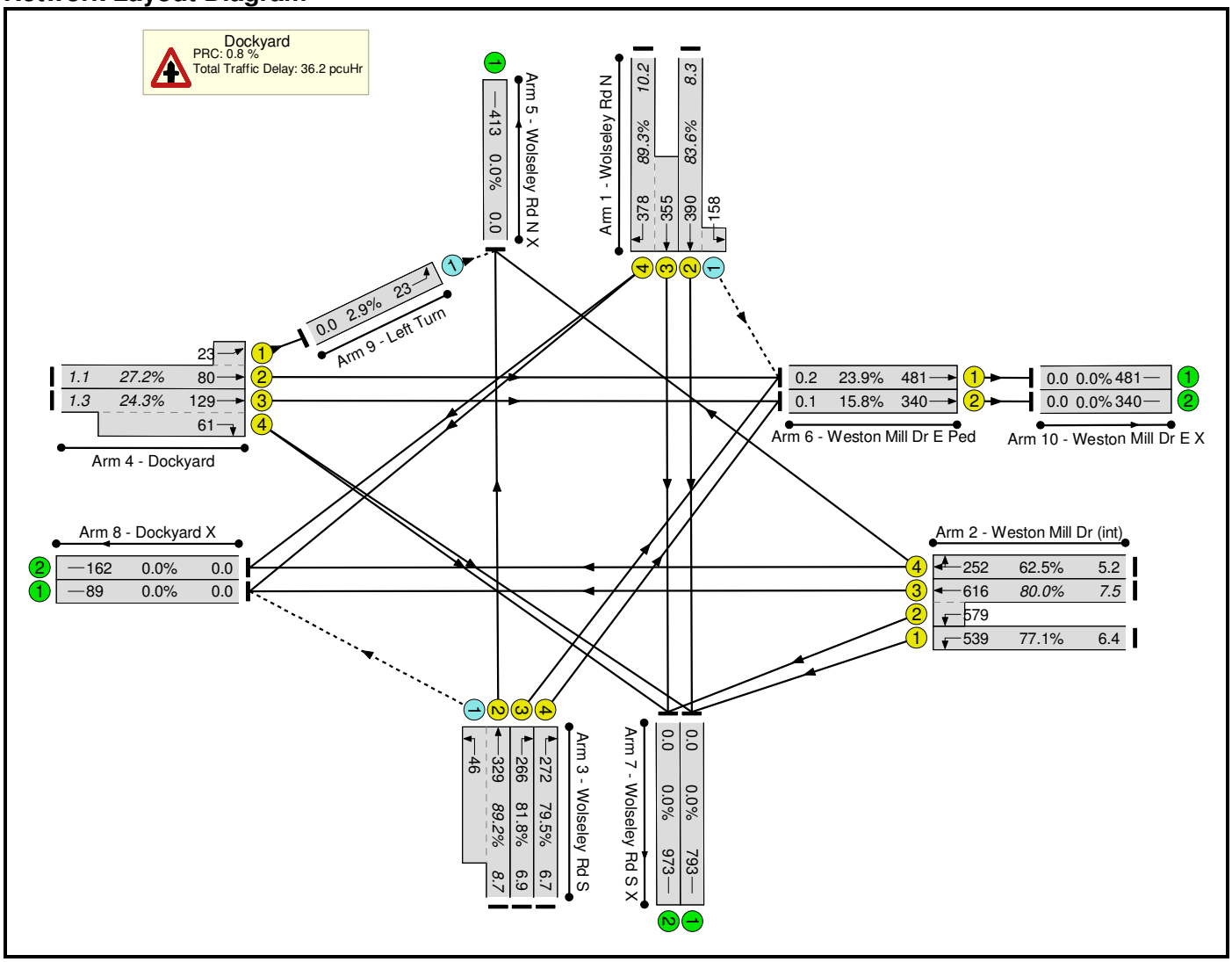
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**86.7%**	-
Dockyard	-	-	-	-	-	**86.7%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	14	46	60	81.4%	8.4
1/4+1/3	Wolseley Rd N Ahead Right	B A	18:14	42:46	60	86.3%	9.6
2/1	Weston Mill Dr (int) Left	H	49	93	42	53.9%	10.7
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	7:49	91:93	98:42	79.4%	4.9
2/4	Weston Mill Dr (int) Right Ahead	G	7	91	98	59.3%	3.4
3/2+3/1	Wolseley Rd S Ahead Left	C -	33	5	38	86.7%	18.0
3/3	Wolseley Rd S Right	D	33	5	38	84.5%	17.4
3/4	Wolseley Rd S Right	D	33	5	38	79.6%	16.2
4/2+4/1	Dockyard Ahead Ahead2	E	20	65	85	85.5%	11.9
4/3+4/4	Dockyard Ahead Right	E F	20	65	85	83.0%	12.1
6/1	Weston Mill Dr E Ped Ahead	I	100	0	100	47.5%	0.5
6/2	Weston Mill Dr E Ped Ahead	I	100	0	100	43.7%	0.4
9/1	Left Turn Left	-	-	-	-	13.0%	0.4

C1 Stream: 1 PRC for Signalled Lanes (%): 3.8 Total Delay for Signalled Lanes (pcuHr): 55.26
PRC Over All Lanes (%): 3.8 Total Delay Over All Lanes(pcuHr): 55.34 Cycle Time (s): 100

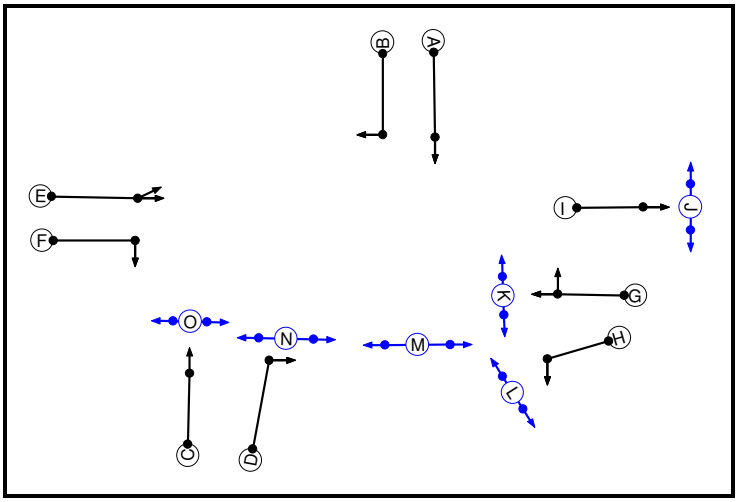
LINSIG Model Output

Scenario 1: '2014 AM Do Something plus potential' (FG1: '2014 AM Do Something plus potential', Plan 1: 'AM')

Network Layout Diagram

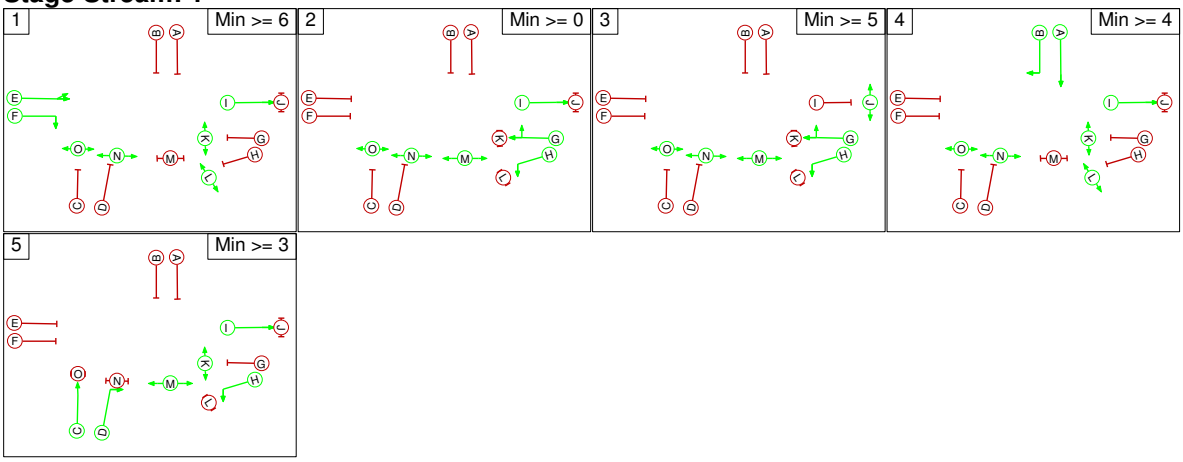


Phase Diagram

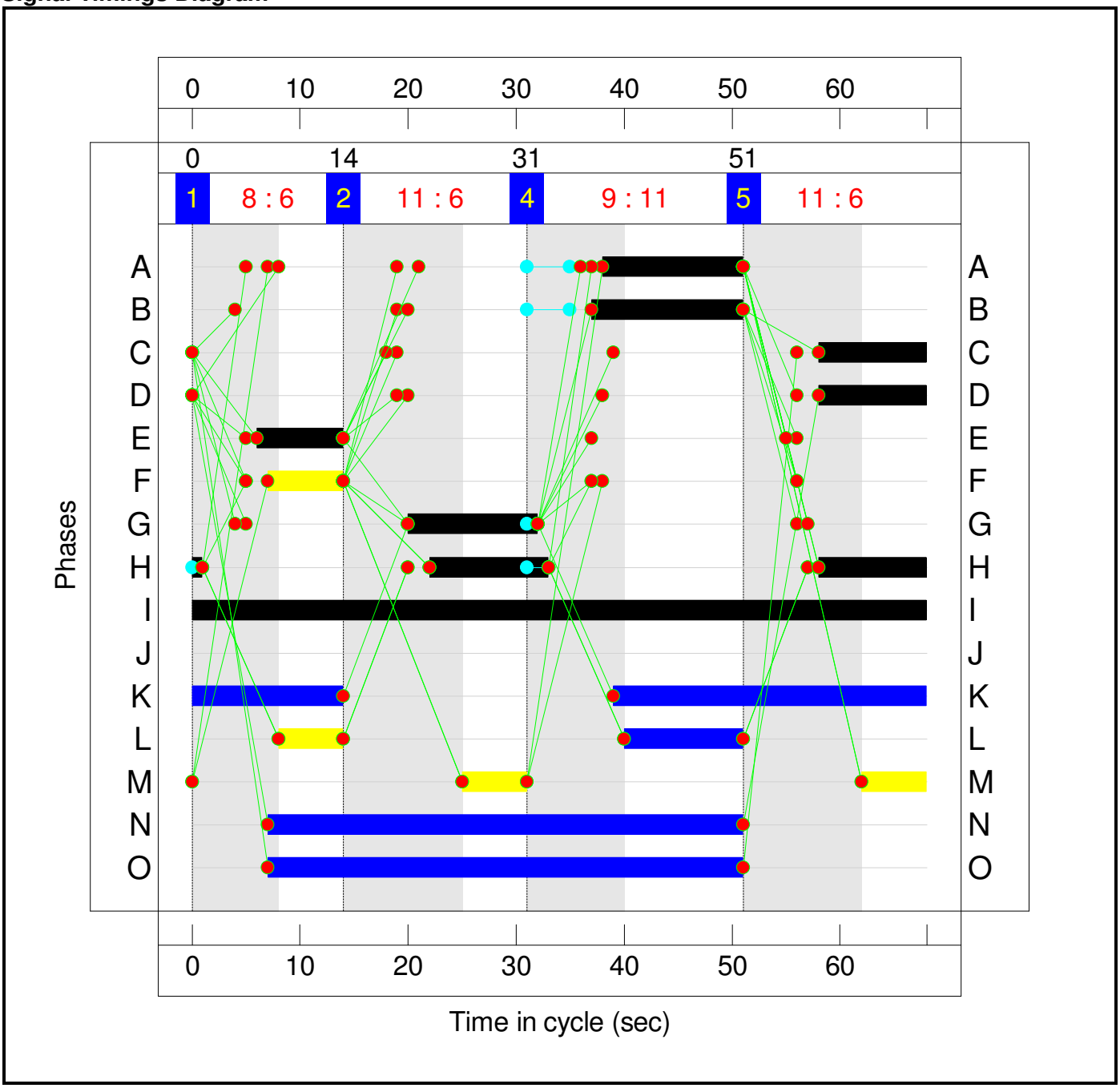


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



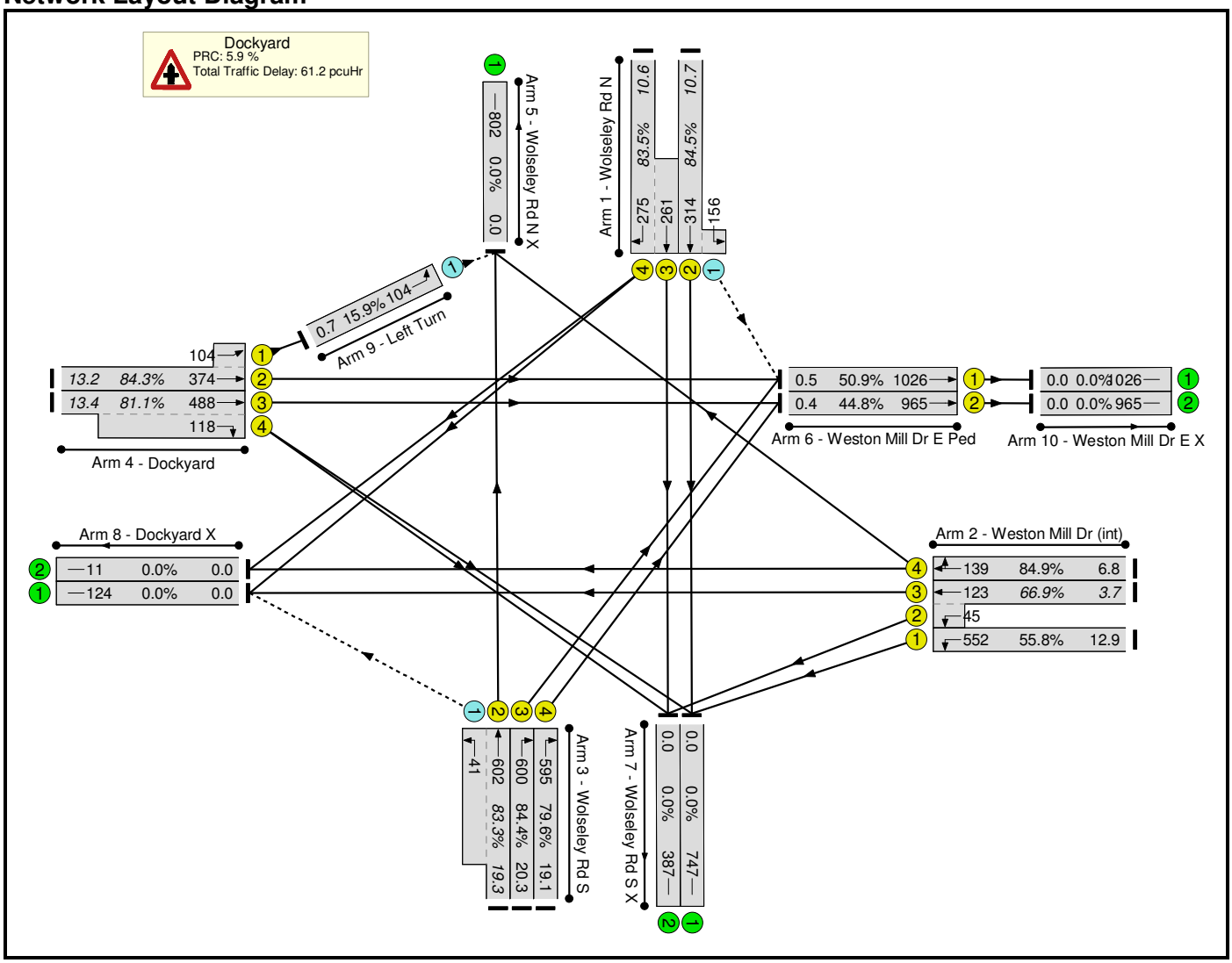
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.3%**	-
Dockyard	-	-	-	-	-	**89.3%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	13	38	51	83.6%	8.3
1/4+1/3	Wolseley Rd N Ahead Right	B A	14:13	37:38	51	89.3%	10.2
2/1	Weston Mill Dr (int) Left	H	22	22	33	77.1%	6.4
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	12:22	20:22	32:33	80.0%	7.5
2/4	Weston Mill Dr (int) Right Ahead	G	12	20	32	62.5%	5.2
3/2+3/1	Wolseley Rd S Ahead Left	C -	10	58	0	89.2%	8.7
3/3	Wolseley Rd S Right	D	10	58	0	81.8%	6.9
3/4	Wolseley Rd S Right	D	10	58	0	79.5%	6.7
4/2+4/1	Dockyard Ahead Ahead2	E	8	6	14	27.2%	1.1
4/3+4/4	Dockyard Ahead Right	E F	8:7	6:7	14	24.3%	1.3
6/1	Weston Mill Dr E Ped Ahead	I	68	0	68	23.9%	0.2
6/2	Weston Mill Dr E Ped Ahead	I	68	0	68	15.8%	0.1
9/1	Left Turn Left	-	-	-	-	2.9%	0.0

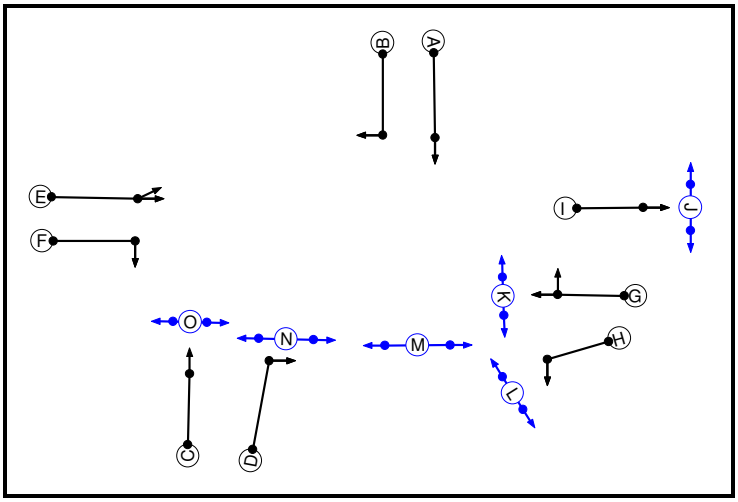
C1 Stream: 1 PRC for Signalled Lanes (%): 0.8 Total Delay for Signalled Lanes (pcuHr): 36.21
PRC Over All Lanes (%): 0.8 Total Delay Over All Lanes(pcuHr): 36.22 Cycle Time (s): 68

Scenario 2: '2014 PM Do Something plus potential' (FG2: '2014 PM Do Something plus potential', Plan 2: 'PM')

Network Layout Diagram

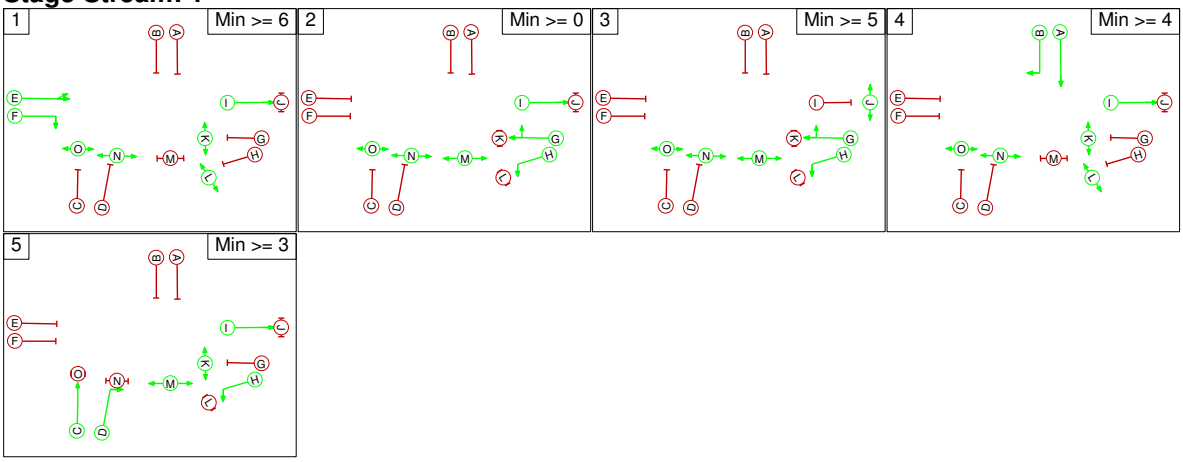


Phase Diagram

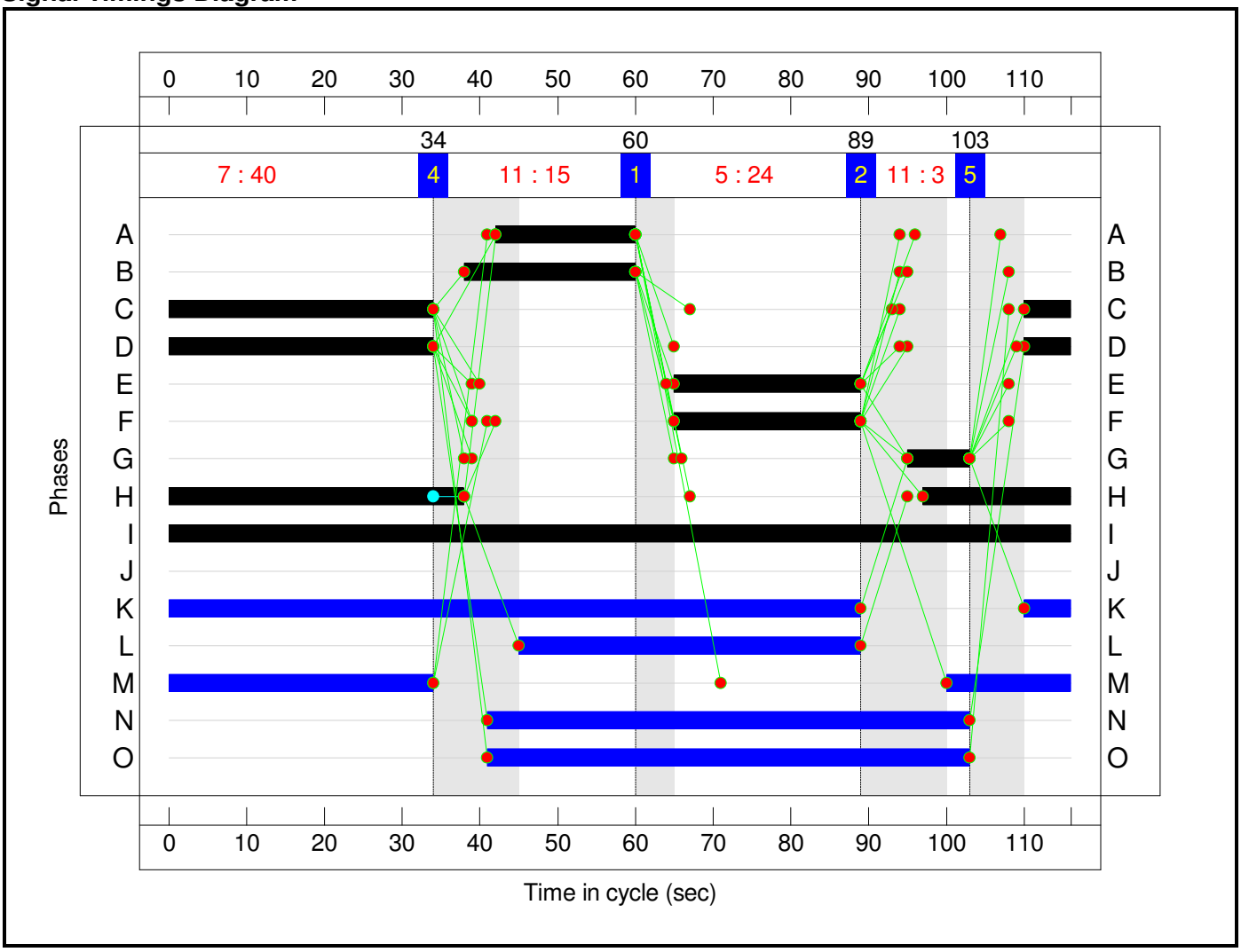


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



Network Results

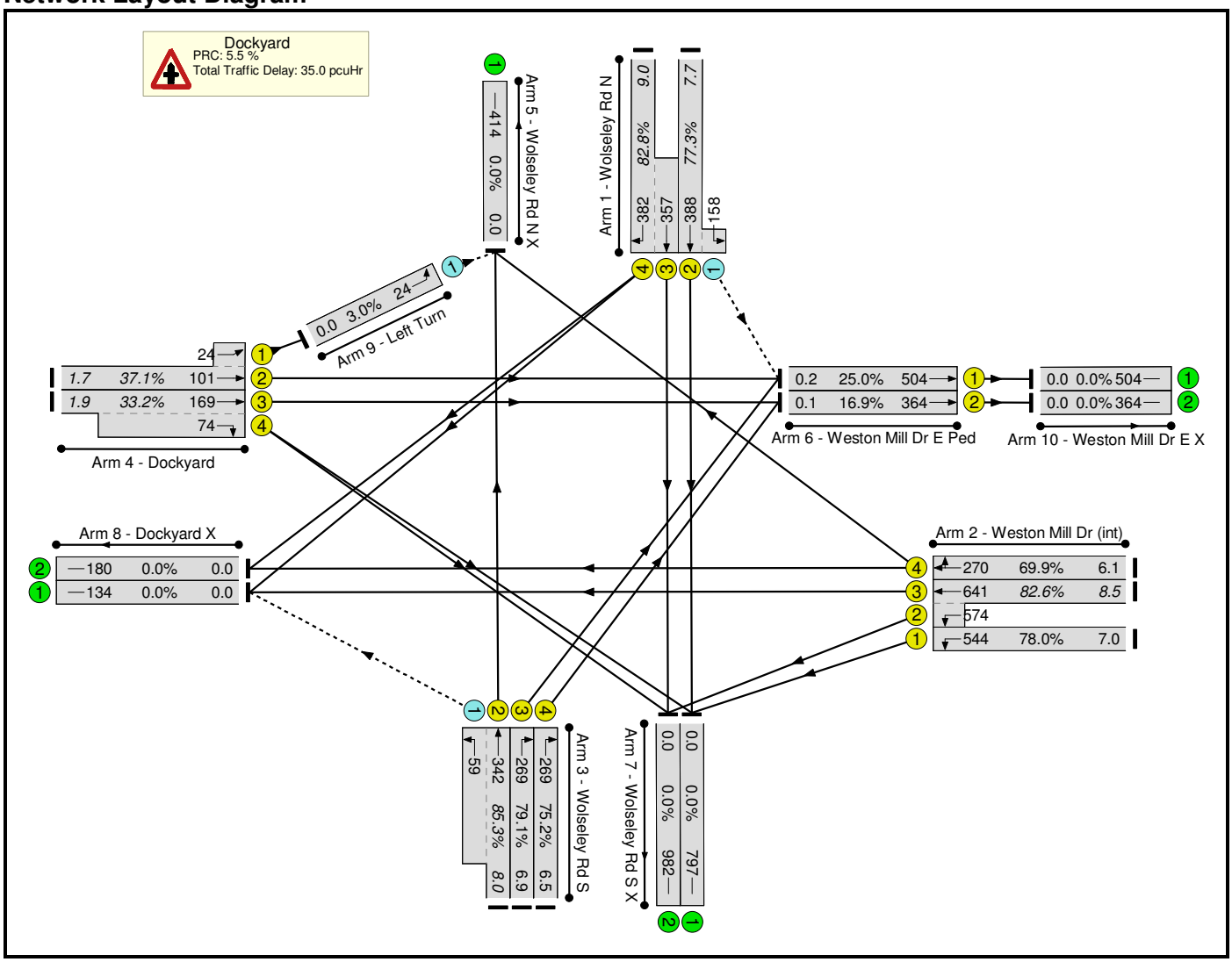
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**84.9%**	-
Dockyard	-	-	-	-	-	**84.9%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	18	42	60	84.5%	10.7
1/4+1/3	Wolseley Rd N Ahead Right	B A	22:18	38:42	60	83.5%	10.6
2/1	Weston Mill Dr (int) Left	H	57	97	38	55.8%	12.9
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	8:57	95:97	103:38	66.9%	3.7
2/4	Weston Mill Dr (int) Right Ahead	G	8	95	103	84.9%	6.8
3/2+3/1	Wolseley Rd S Ahead Left	C -	40	110	34	83.3%	19.3
3/3	Wolseley Rd S Right	D	40	110	34	84.4%	20.3
3/4	Wolseley Rd S Right	D	40	110	34	79.6%	19.1
4/2+4/1	Dockyard Ahead Ahead2	E	24	65	89	84.3%	13.2
4/3+4/4	Dockyard Ahead Right	E F	24	65	89	81.1%	13.4
6/1	Weston Mill Dr E Ped Ahead	I	116	0	116	50.9%	0.5
6/2	Weston Mill Dr E Ped Ahead	I	116	0	116	44.8%	0.4
9/1	Left Turn Left	-	-	-	-	15.9%	0.7

C1 Stream: 1 PRC for Signalled Lanes (%): 5.9 Total Delay for Signalled Lanes (pcuHr): 61.07
PRC Over All Lanes (%): 5.9 Total Delay Over All Lanes(pcuHr): 61.16 Cycle Time (s): 116

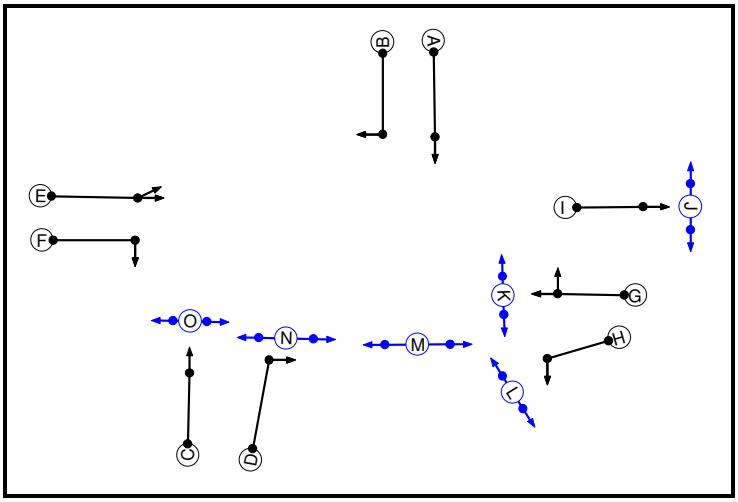
LINSIG Model Output

Scenario 1: '2014 AM Do Something MAX plus potential' (FG1: '2014 AM Do Something MAX plus potential', Plan 1: 'AM')

Network Layout Diagram

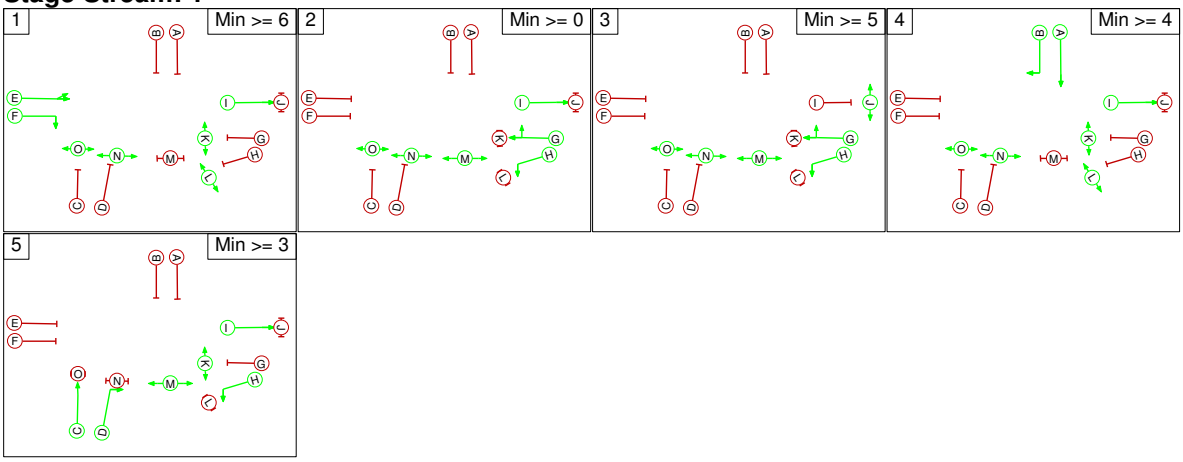


Phase Diagram

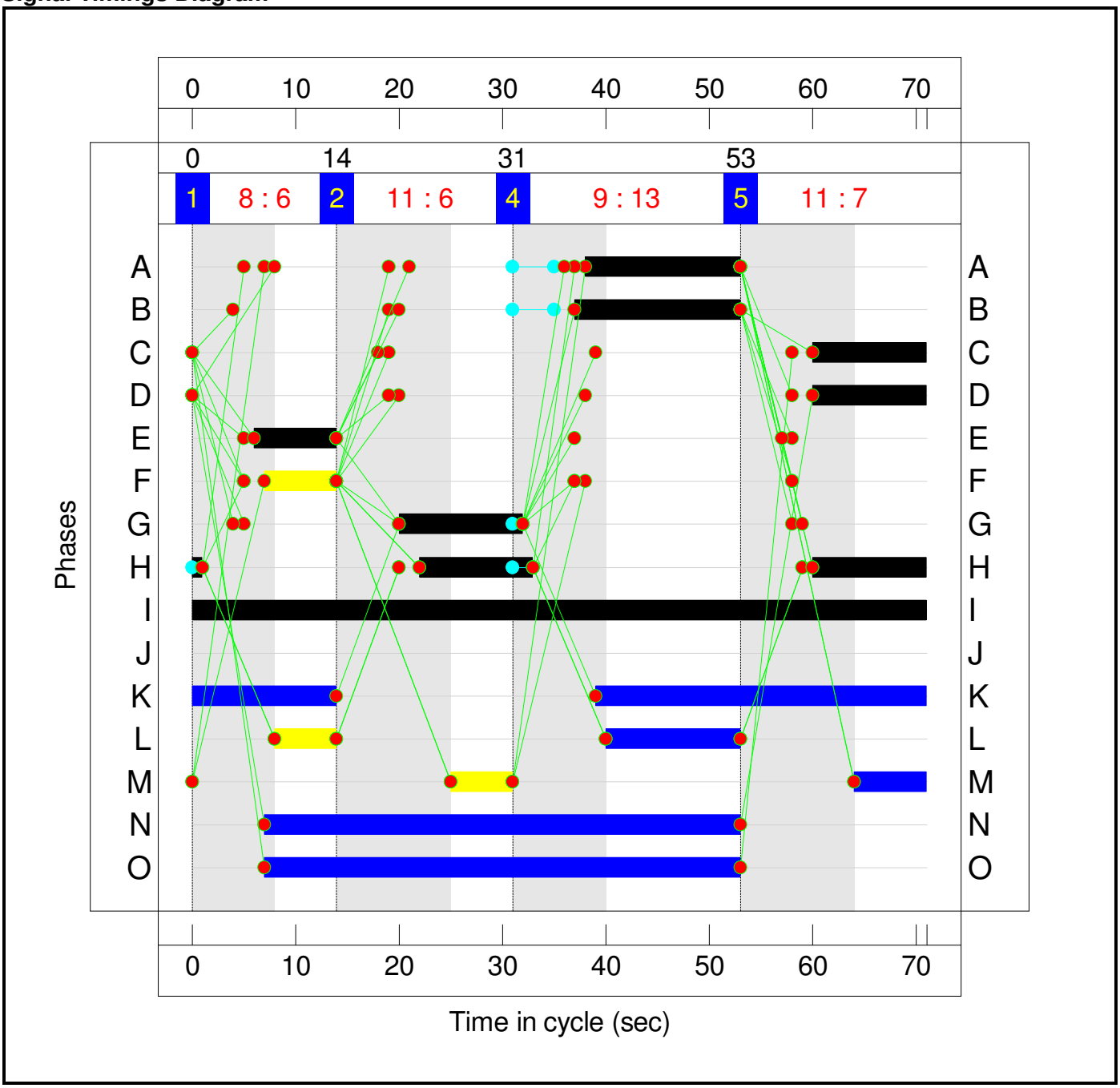


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



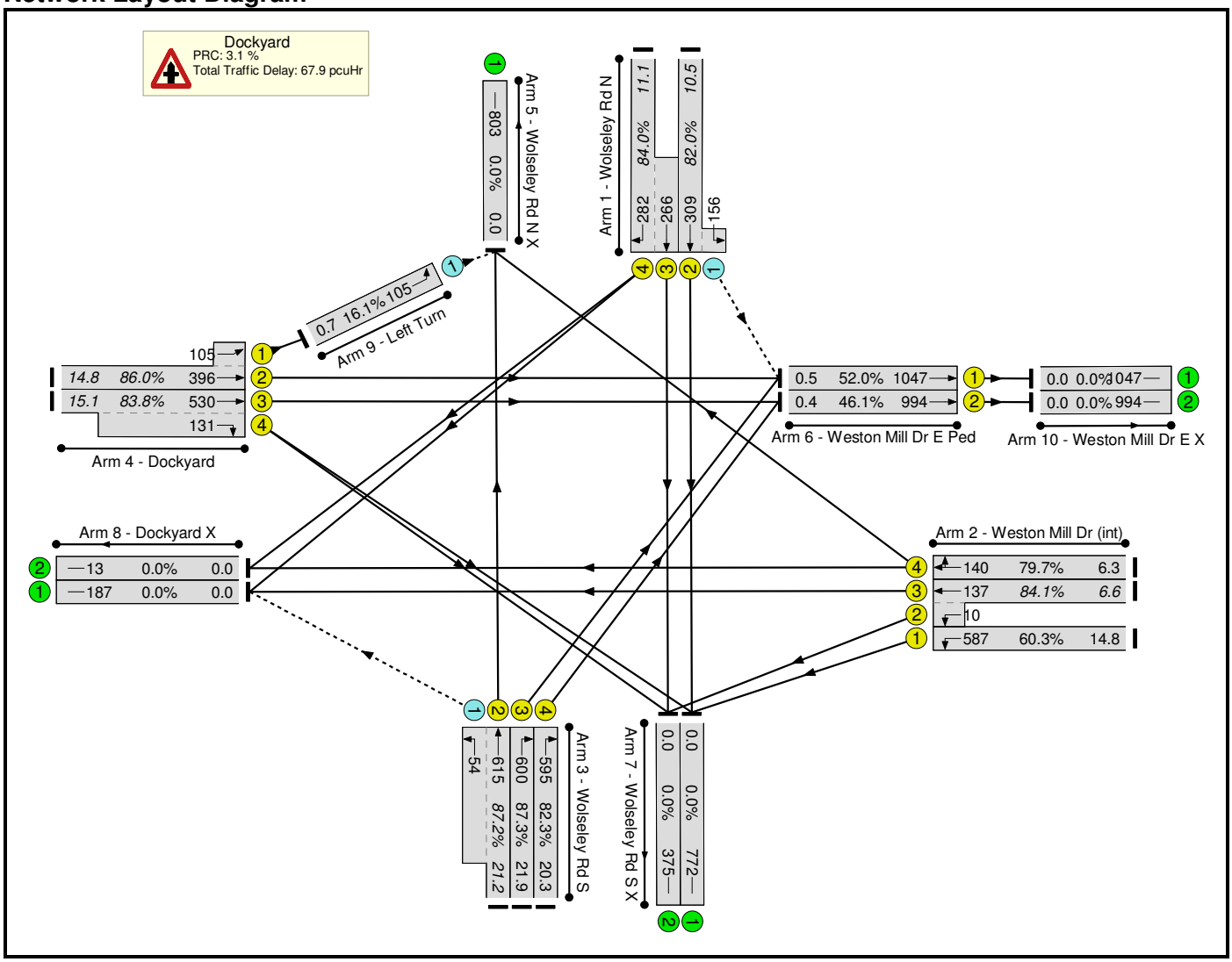
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**85.3%**	-
Dockyard	-	-	-	-	-	**85.3%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	15	38	53	77.3%	7.7
1/4+1/3	Wolseley Rd N Ahead Right	B A	16:15	37:38	53	82.8%	9.0
2/1	Weston Mill Dr (int) Left	H	23	22	33	78.0%	7.0
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	12:23	20:22	32:33	82.6%	8.5
2/4	Weston Mill Dr (int) Right Ahead	G	12	20	32	69.9%	6.1
3/2+3/1	Wolseley Rd S Ahead Left	C -	11	60	0	85.3%	8.0
3/3	Wolseley Rd S Right	D	11	60	0	79.1%	6.9
3/4	Wolseley Rd S Right	D	11	60	0	75.2%	6.5
4/2+4/1	Dockyard Ahead Ahead2	E	8	6	14	37.1%	1.7
4/3+4/4	Dockyard Ahead Right	E F	8:7	6:7	14	33.2%	1.9
6/1	Weston Mill Dr E Ped Ahead	I	71	0	71	25.0%	0.2
6/2	Weston Mill Dr E Ped Ahead	I	71	0	71	16.9%	0.1
9/1	Left Turn Left	-	-	-	-	3.0%	0.0

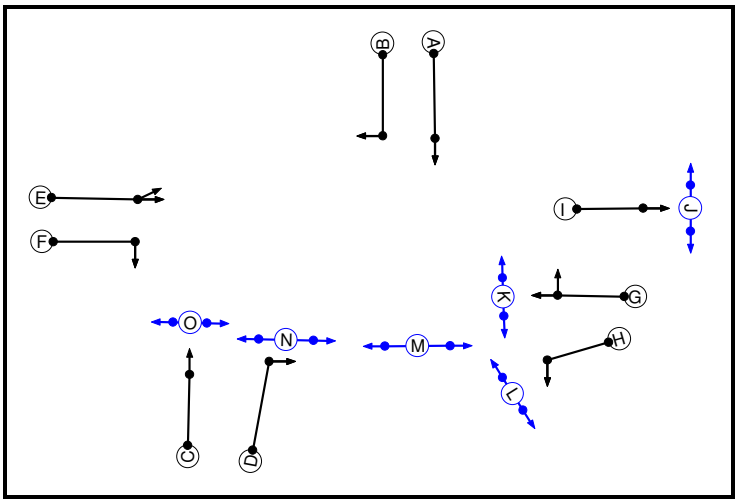
C1 Stream: 1 PRC for Signalled Lanes (%): 5.5 Total Delay for Signalled Lanes (pcuHr): 35.02
PRC Over All Lanes (%): 5.5 Total Delay Over All Lanes(pcuHr): 35.04 Cycle Time (s): 71

Scenario 2: '2014 PM Do Something MAX plus potential' (FG2: '2014 PM Do Something MAX plus potential', Plan 2: 'PM')

Network Layout Diagram

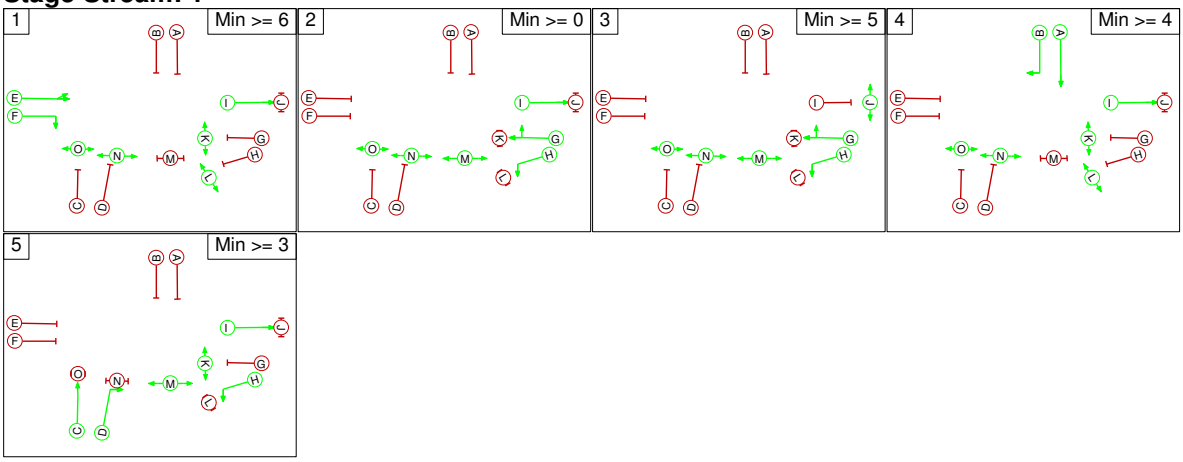


Phase Diagram

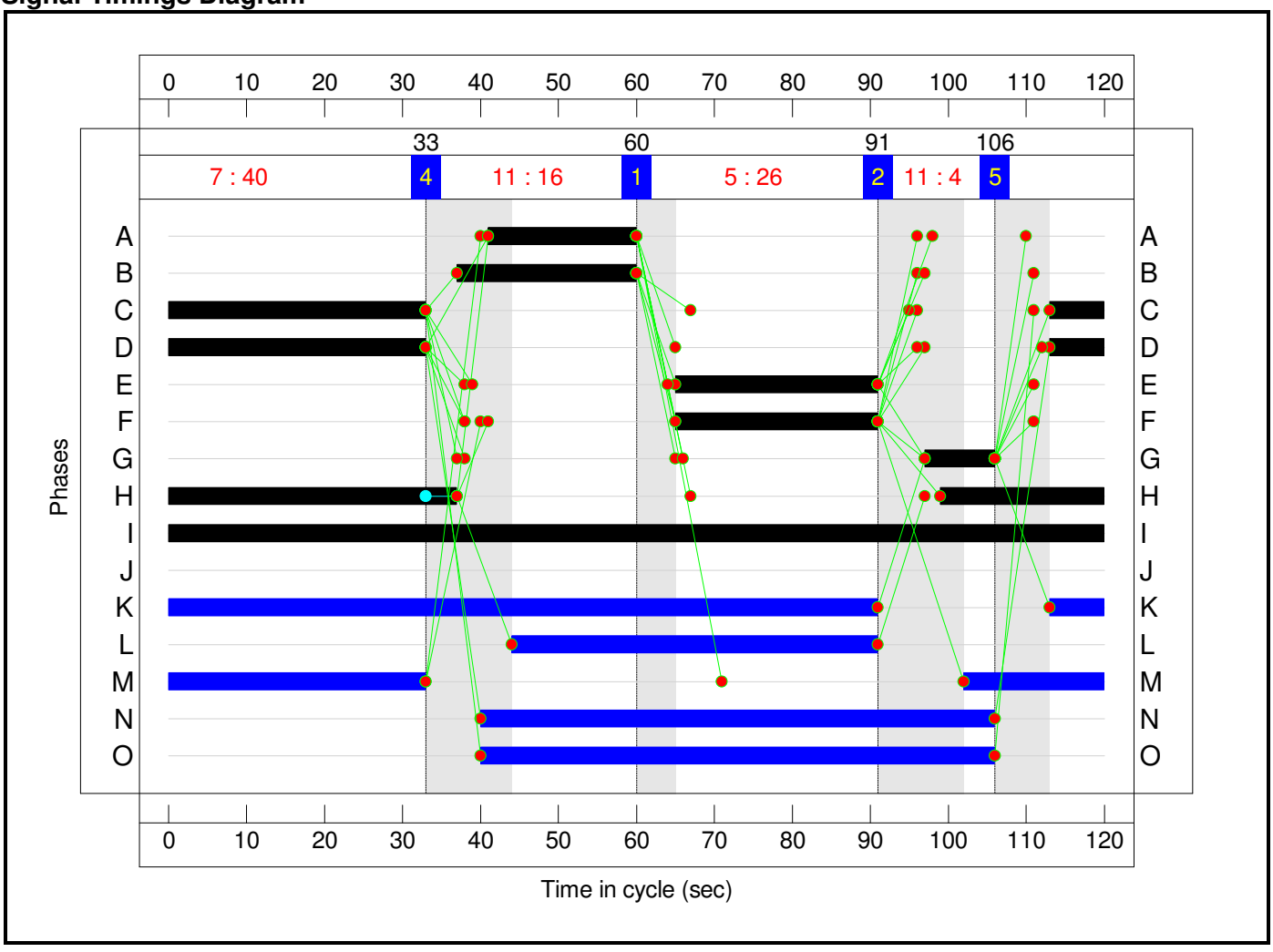


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**87.3%**	-
Dockyard	-	-	-	-	-	**87.3%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	19	41	60	82.0%	10.5
1/4+1/3	Wolseley Rd N Ahead Right	B A	23:19	37:41	60	84.0%	11.1
2/1	Weston Mill Dr (int) Left	H	58	99	37	60.3%	14.8
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	9:58	97:99	106:37	84.1%	6.6
2/4	Weston Mill Dr (int) Right Ahead	G	9	97	106	79.7%	6.3
3/2+3/1	Wolseley Rd S Ahead Left	C -	40	113	33	87.2%	21.2
3/3	Wolseley Rd S Right	D	40	113	33	87.3%	21.9
3/4	Wolseley Rd S Right	D	40	113	33	82.3%	20.3
4/2+4/1	Dockyard Ahead Ahead2	E	26	65	91	86.0%	14.8
4/3+4/4	Dockyard Ahead Right	E F	26	65	91	83.8%	15.1
6/1	Weston Mill Dr E Ped Ahead	I	120	0	120	52.0%	0.5
6/2	Weston Mill Dr E Ped Ahead	I	120	0	120	46.1%	0.4
9/1	Left Turn Left	-	-	-	-	16.1%	0.7

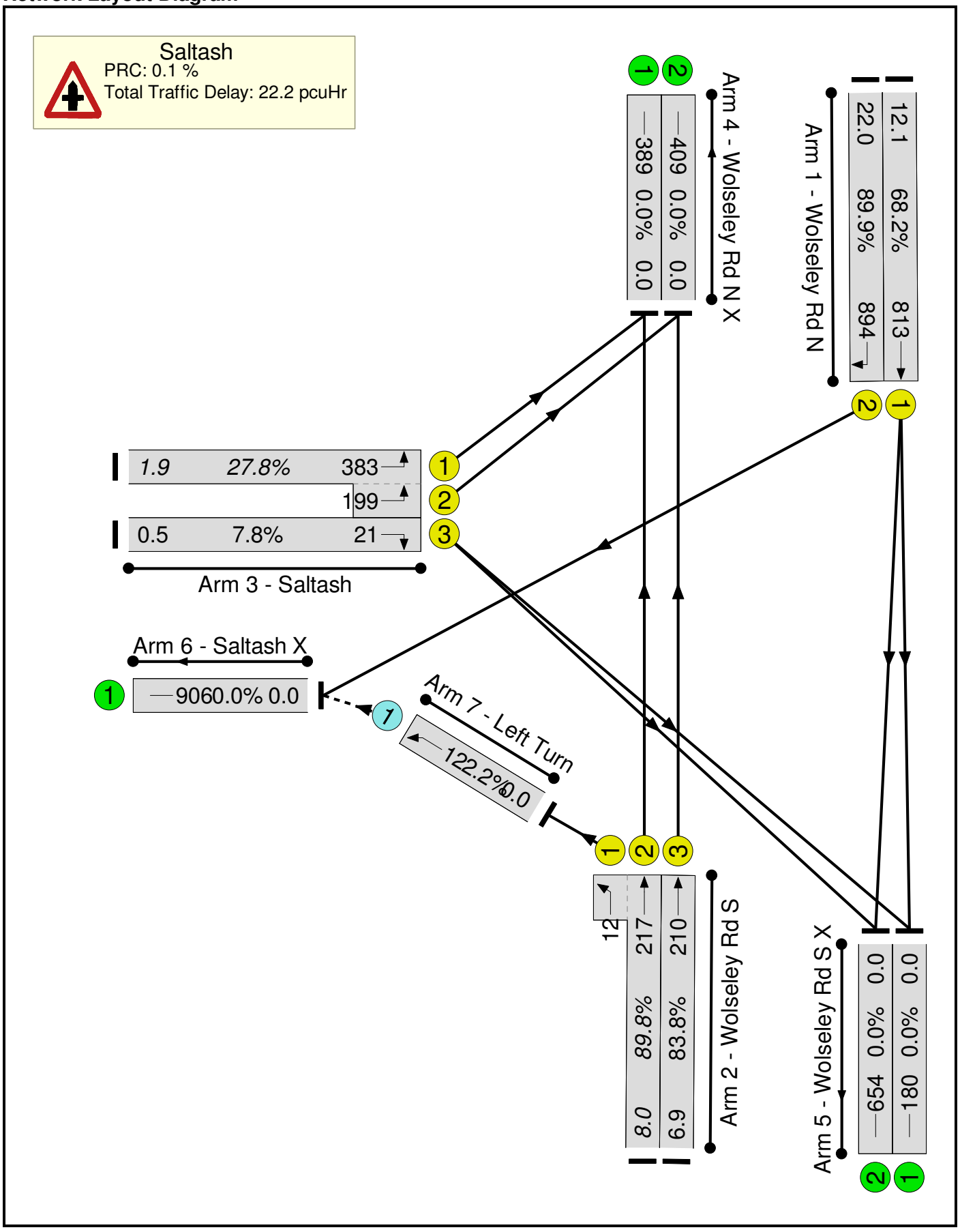
C1 Stream: 1 PRC for Signalled Lanes (%): 3.1 Total Delay for Signalled Lanes (pcuHr): 67.84
PRC Over All Lanes (%): 3.1 Total Delay Over All Lanes(pcuHr): 67.93 Cycle Time (s): 120

Wolseley Road / Saltash Road

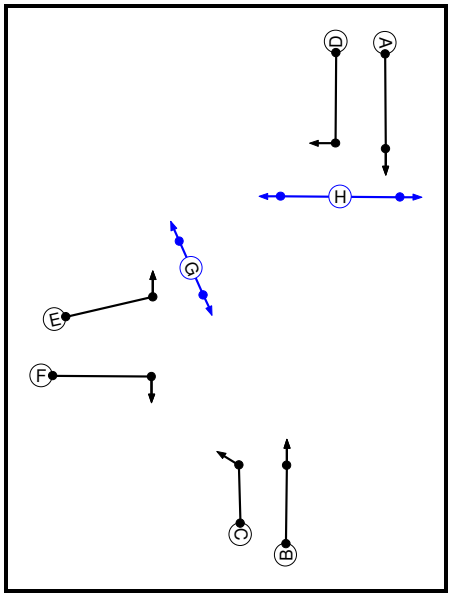
LINSIG Model Output

Scenario 1: '2010 AM Observed' (FG1: '2010 AM Observed', Plan 1: 'Network Control Plan 1')

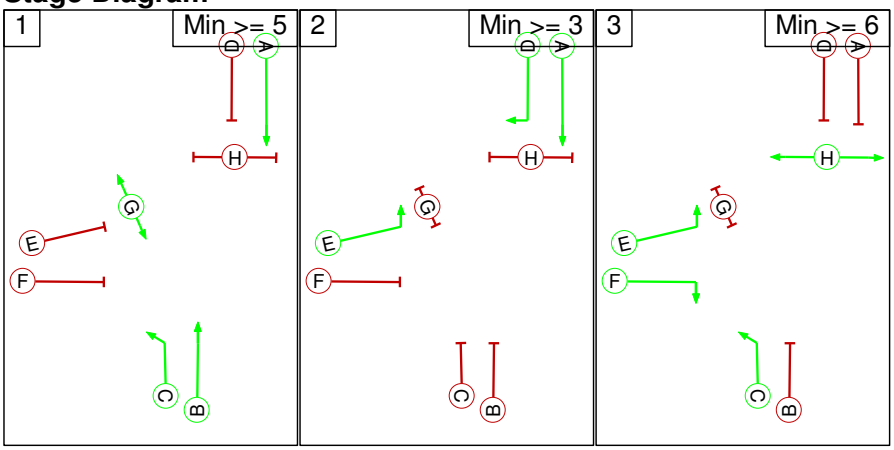
Network Layout Diagram



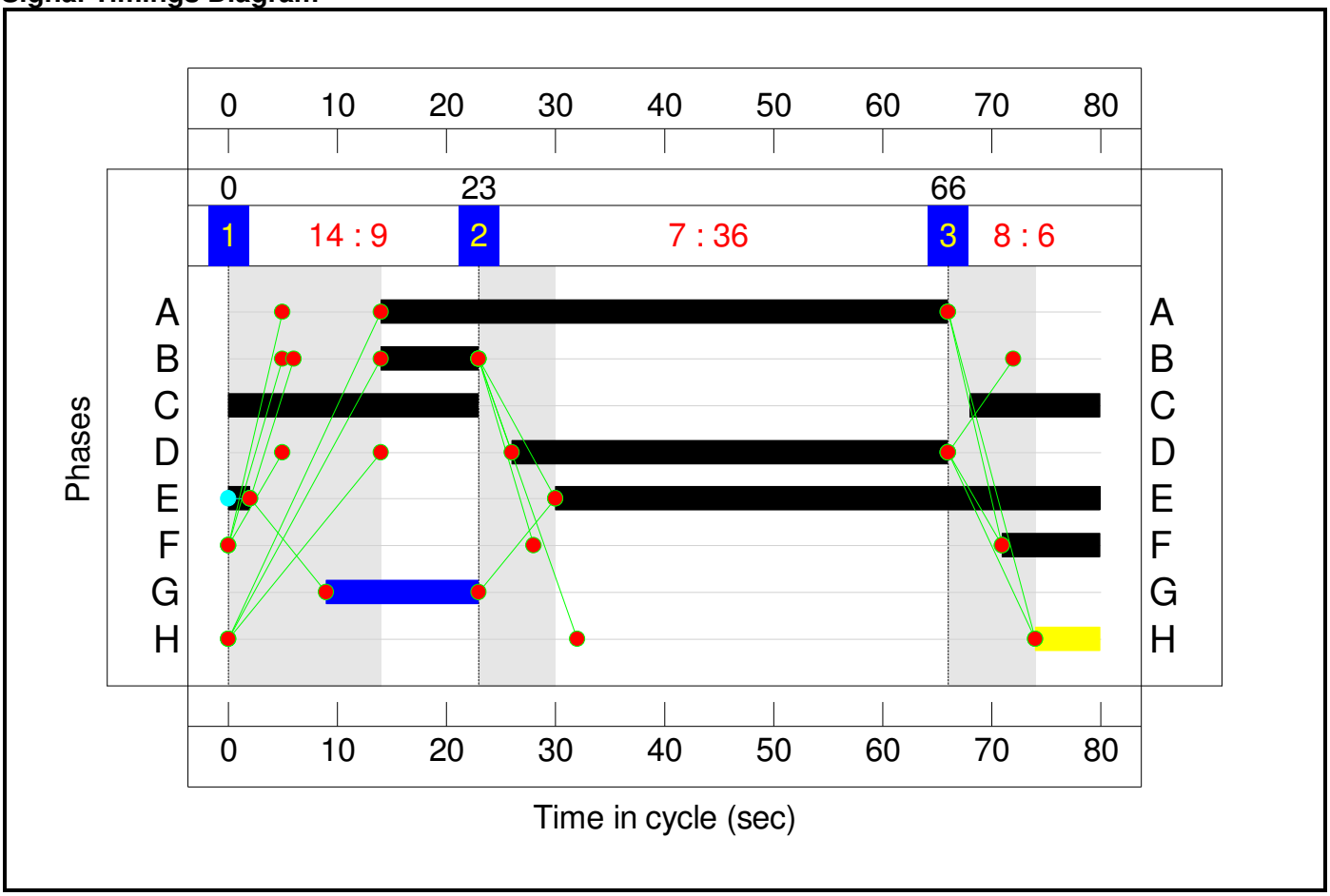
Phase Diagram



Stage Diagram



Signal Timings Diagram



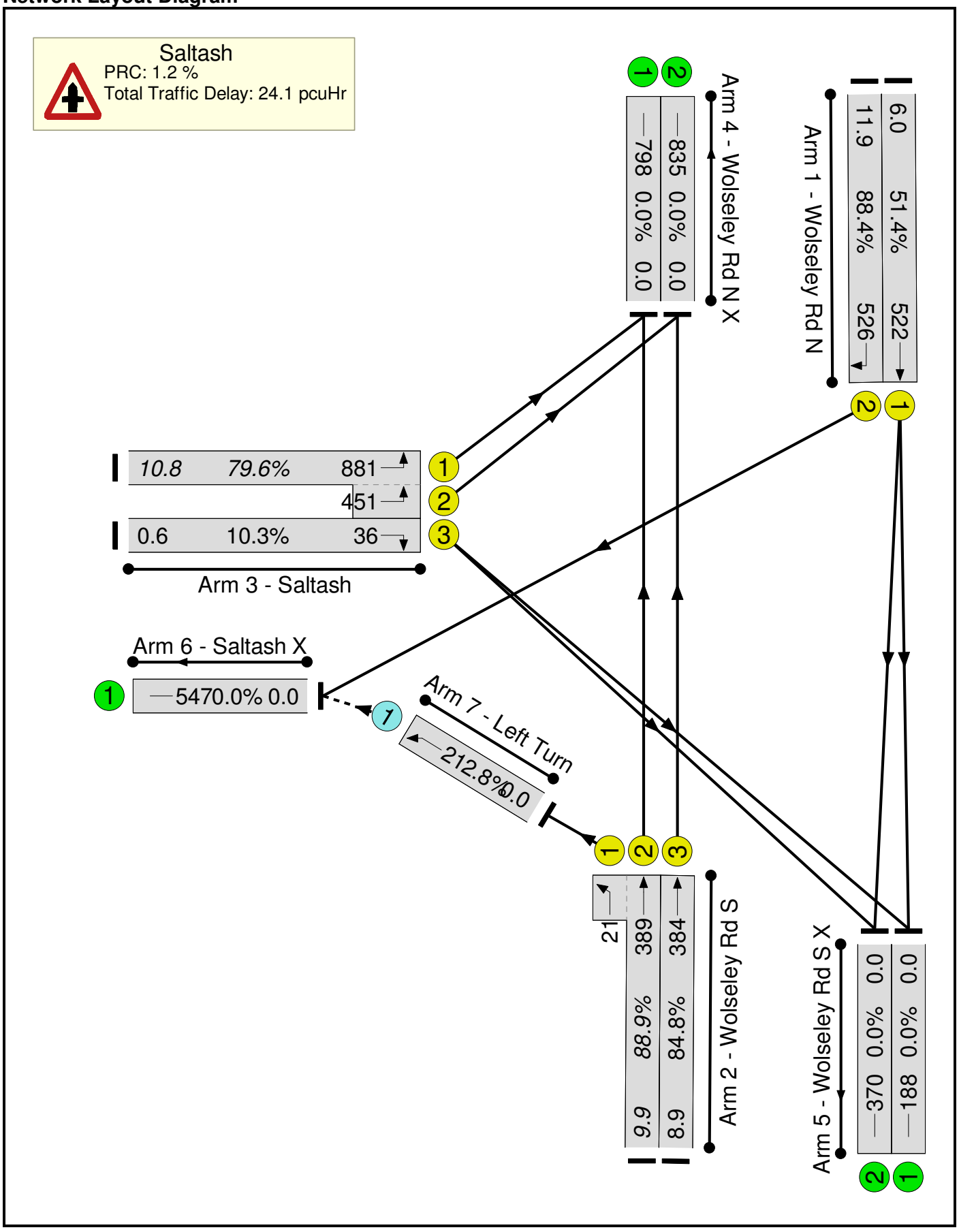
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.9%**	-
Saltash	-	-	-	-	-	**89.9%**	-
1/1	Wolseley Rd N Ahead	A	52	14	66	68.2%	12.1
1/2	Wolseley Rd N Right	D	40	26	66	89.9%	22.0
2/2+2/1	Wolseley Rd S Ahead Left	B C	9:35	14:68	23	89.8%	8.0
2/3	Wolseley Rd S Ahead	B	9	14	23	83.8%	6.9
3/1+3/2	Saltash Left	E	52	30	2	27.8%	1.9
3/3	Saltash Right	F	9	71	0	7.8%	0.5
7/1	Left Turn Ahead	-	-	-	-	2.2%	0.0

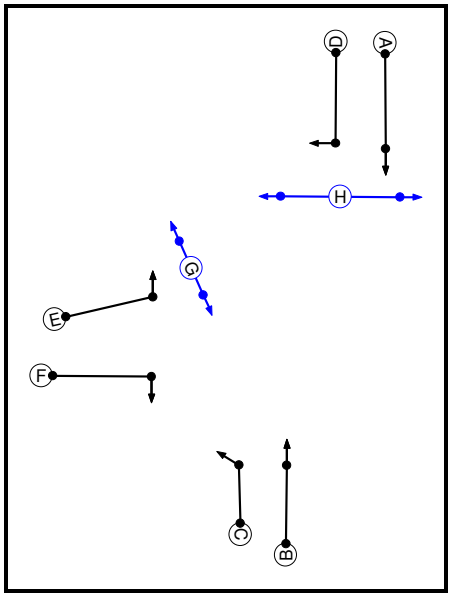
C1	PRC for Signalled Lanes (%):	0.1	Total Delay for Signalled Lanes (pcuHr):	22.18		
	PRC Over All Lanes (%):	0.1	Total Delay Over All Lanes(pcuHr):	22.19	Cycle Time (s):	80

Scenario 2: '2010 PM Observed' (FG2: '2010 PM Observed', Plan 1: 'Network Control Plan 1')

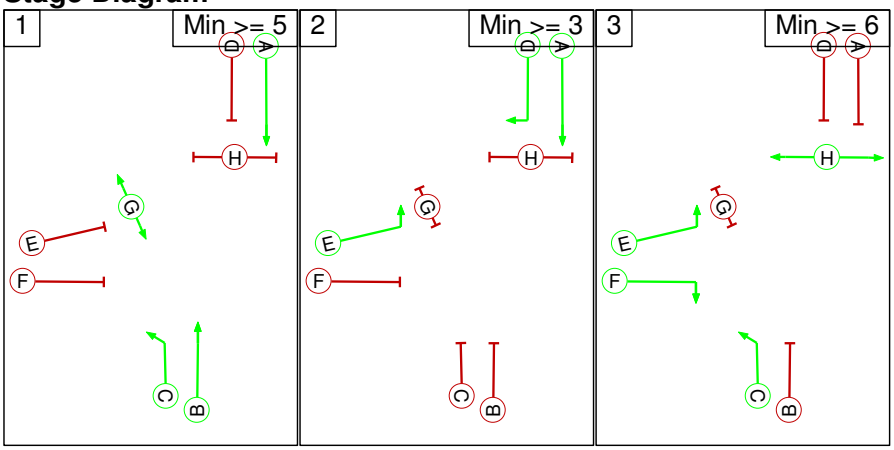
Network Layout Diagram



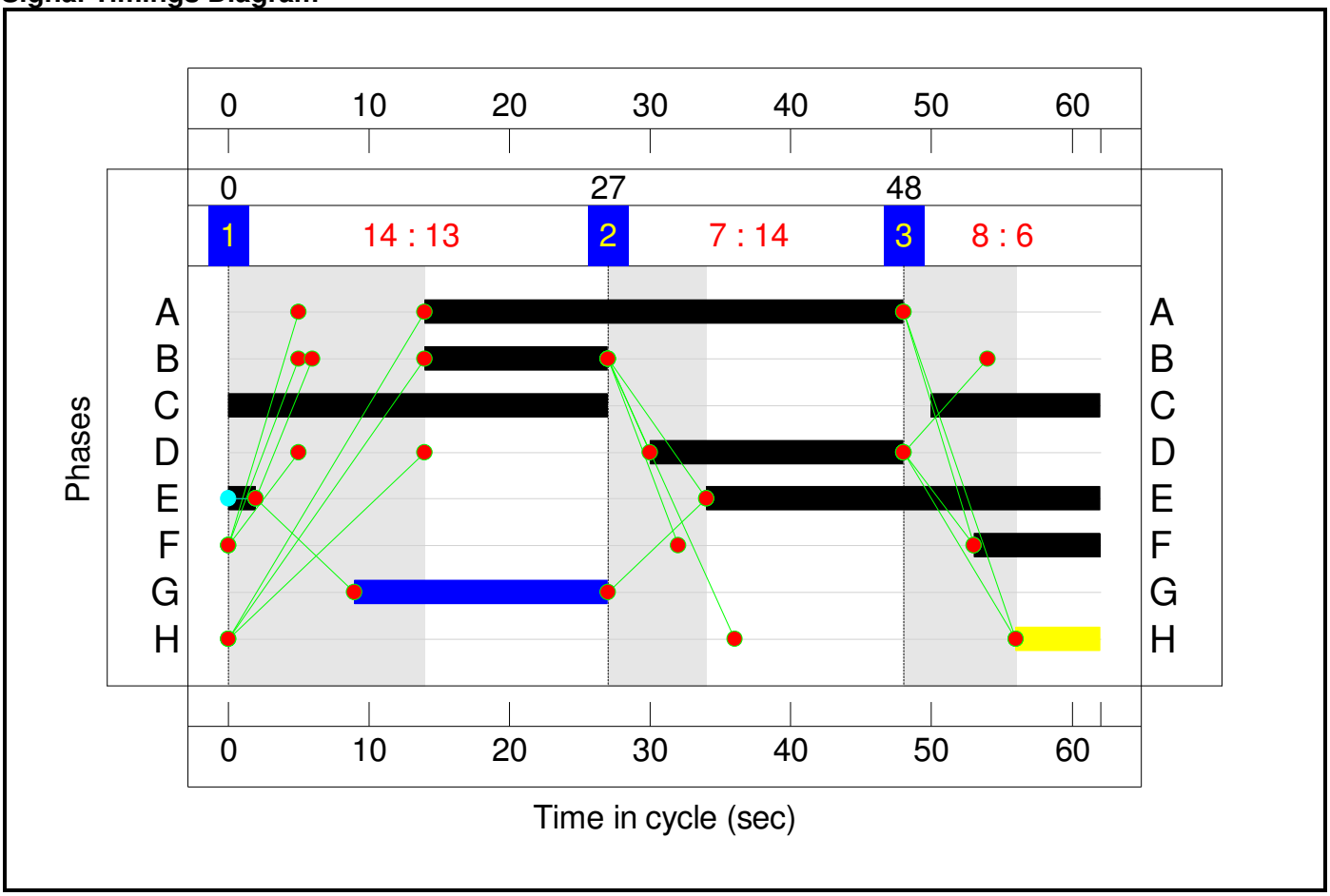
Phase Diagram



Stage Diagram



Signal Timings Diagram



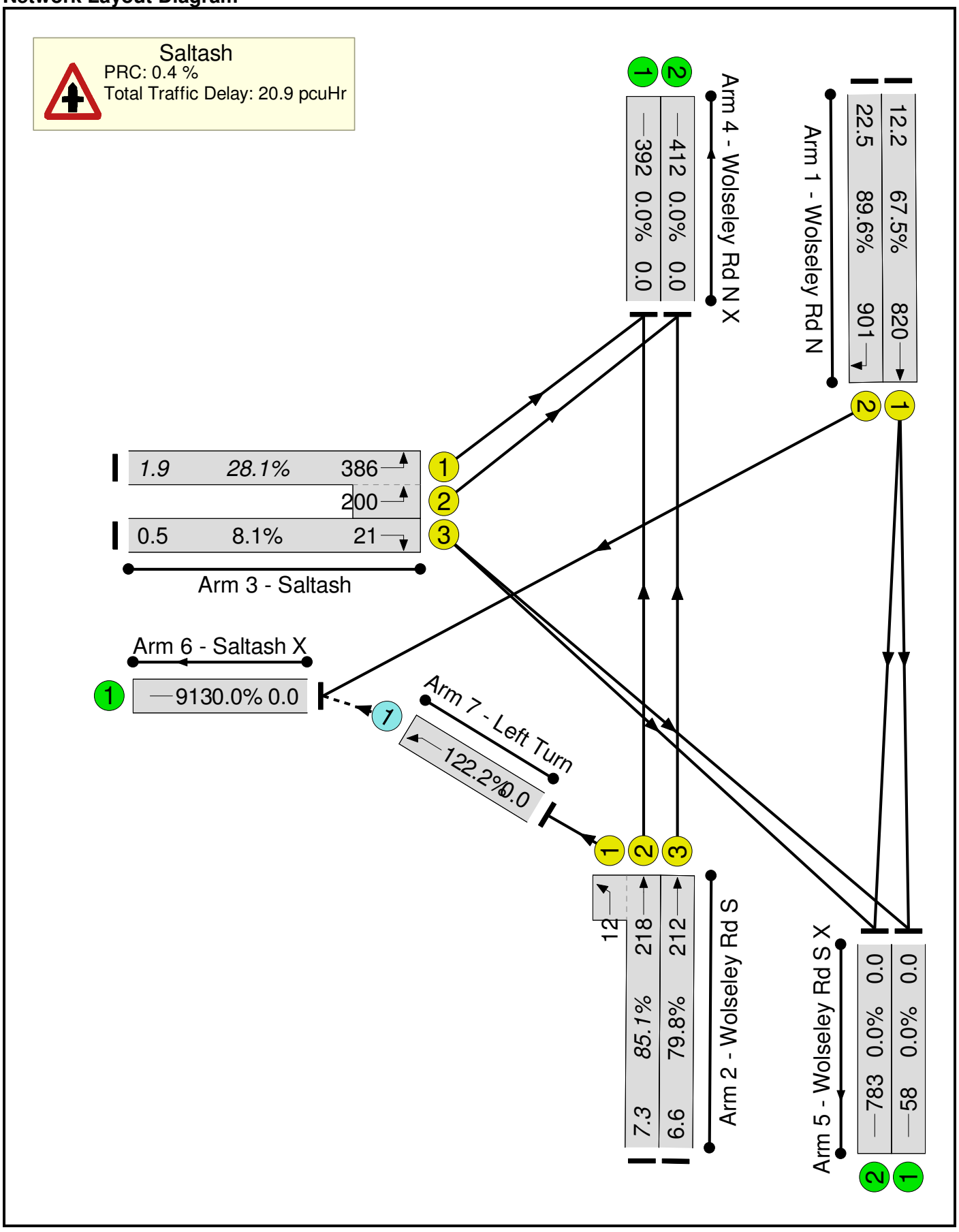
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**88.9%**	-
Saltash	-	-	-	-	-	**88.9%**	-
1/1	Wolseley Rd N Ahead	A	34	14	48	51.4%	6.0
1/2	Wolseley Rd N Right	D	18	30	48	88.4%	11.9
2/2+2/1	Wolseley Rd S Ahead Left	B C	13:39	14:50	27	88.9%	9.9
2/3	Wolseley Rd S Ahead	B	13	14	27	84.8%	8.9
3/1+3/2	Saltash Left	E	30	34	2	79.6%	10.8
3/3	Saltash Right	F	9	53	0	10.3%	0.6
7/1	Left Turn Ahead	-	-	-	-	2.8%	0.0

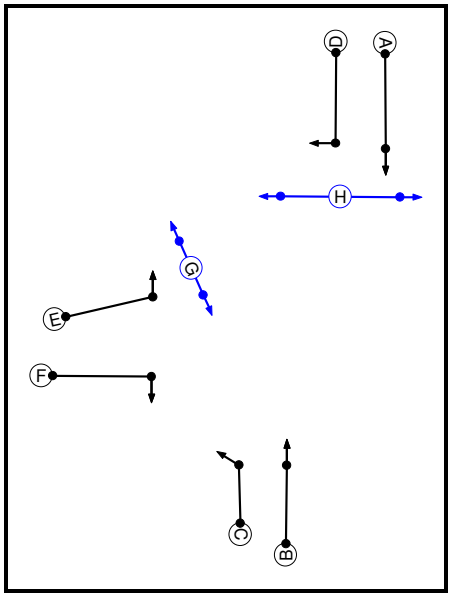
C1	PRC for Signalled Lanes (%):	1.2	Total Delay for Signalled Lanes (pcuHr):	24.09		
	PRC Over All Lanes (%):	1.2	Total Delay Over All Lanes(pcuHr):	24.11	Cycle Time (s):	62

Scenario 3: '2011 AM Base' (FG3: '2011 AM Base', Plan 1: 'Network Control Plan 1')

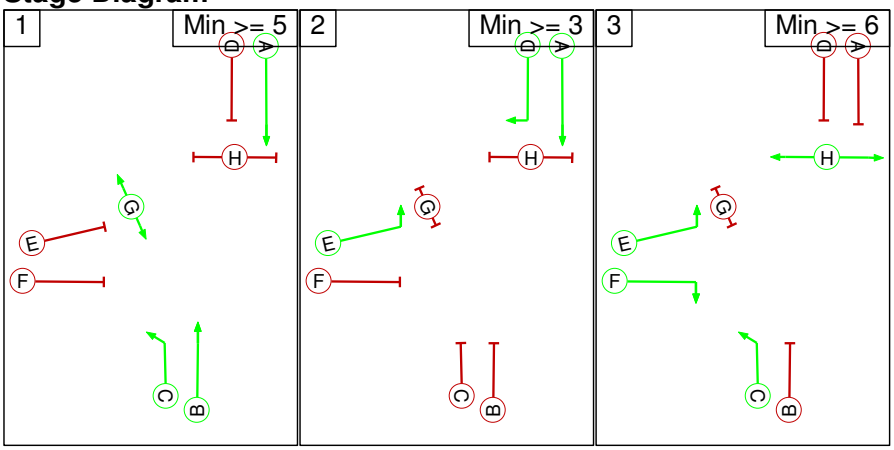
Network Layout Diagram



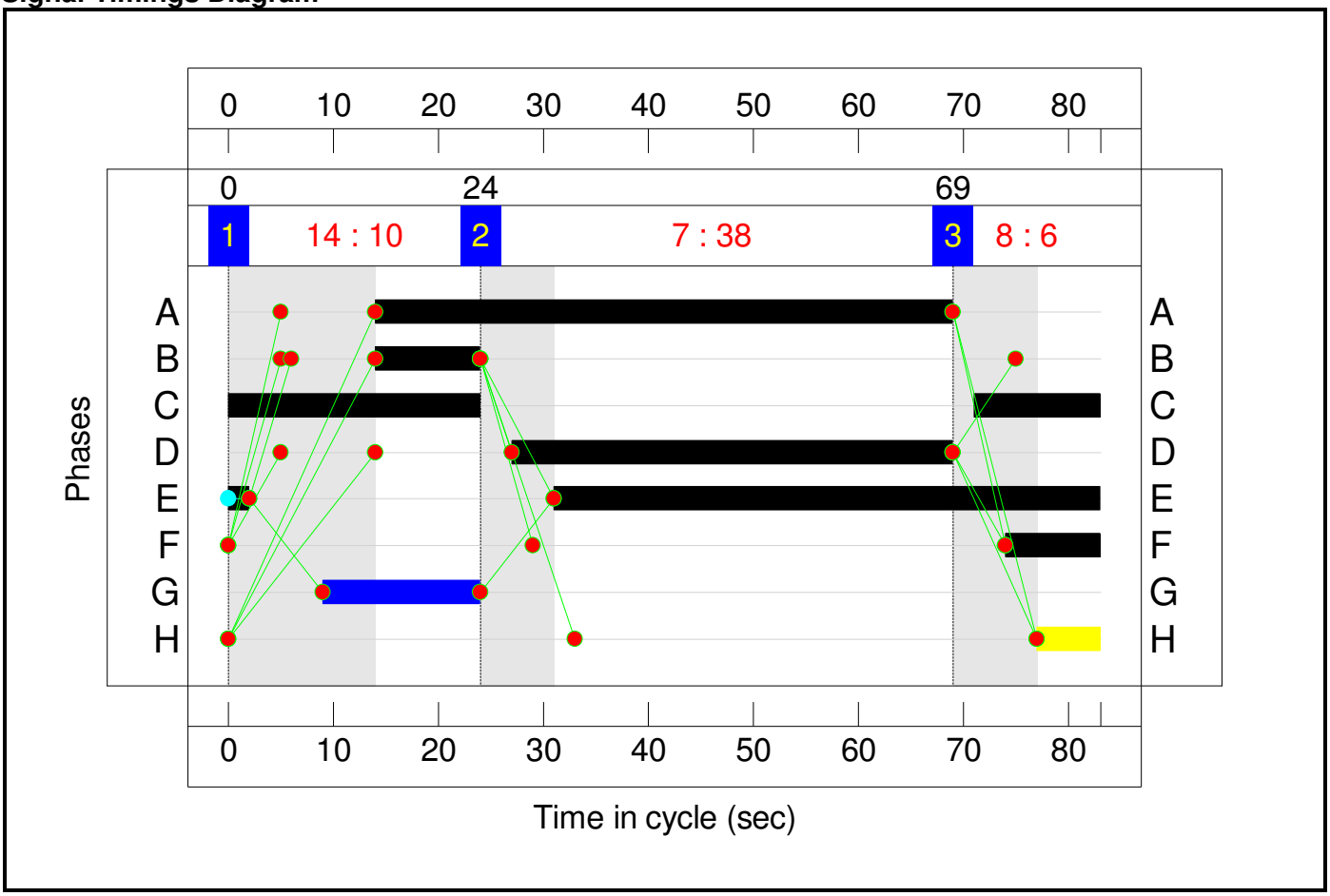
Phase Diagram



Stage Diagram



Signal Timings Diagram



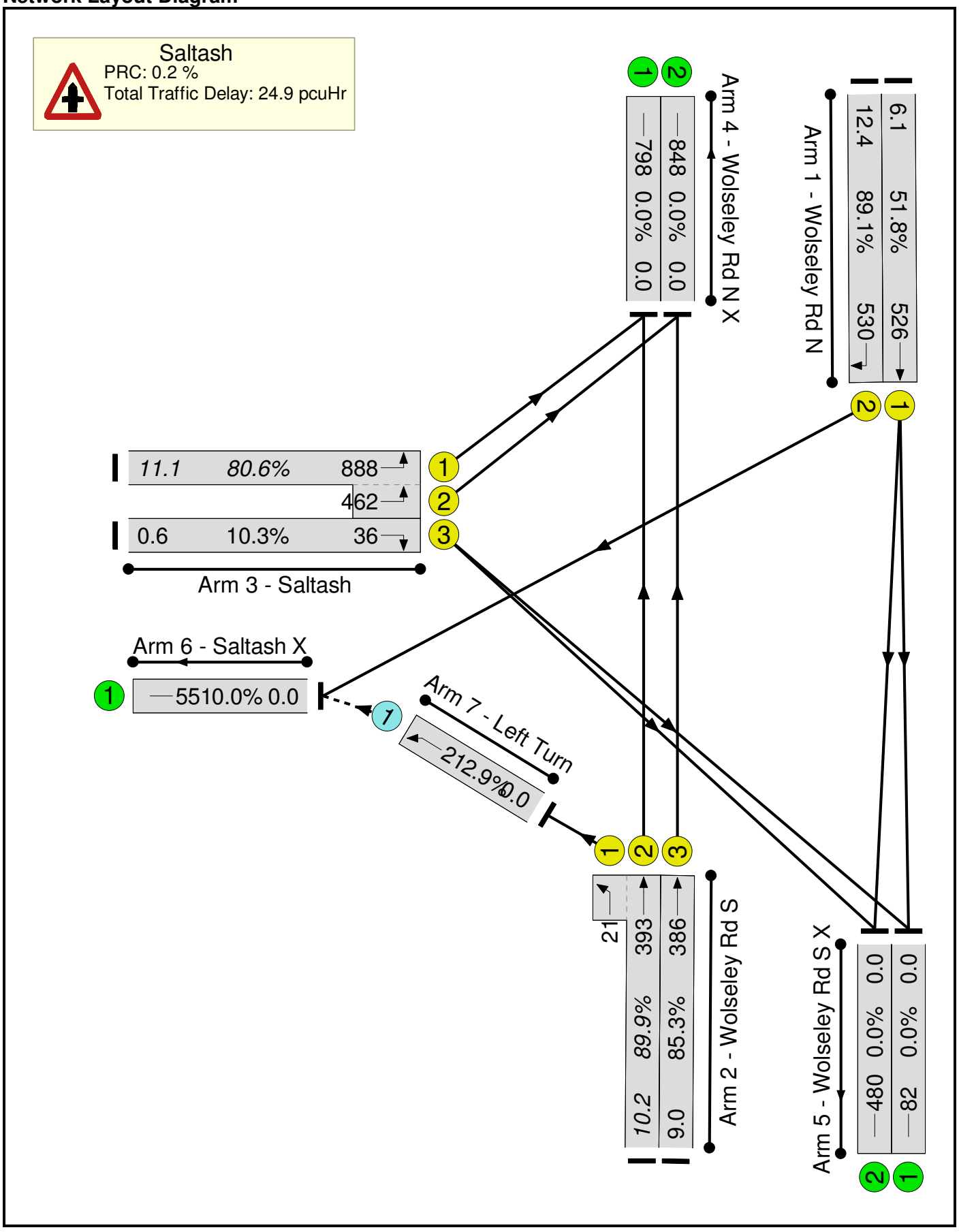
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.6%**	-
Saltash	-	-	-	-	-	**89.6%**	-
1/1	Wolseley Rd N Ahead	A	55	14	69	67.5%	12.2
1/2	Wolseley Rd N Right	D	42	27	69	89.6%	22.5
2/2+2/1	Wolseley Rd S Ahead Left	B C	10:36	14:71	24	85.1%	7.3
2/3	Wolseley Rd S Ahead	B	10	14	24	79.8%	6.6
3/1+3/2	Saltash Left	E	54	31	2	28.1%	1.9
3/3	Saltash Right	F	9	74	0	8.1%	0.5
7/1	Left Turn Ahead	-	-	-	-	2.2%	0.0

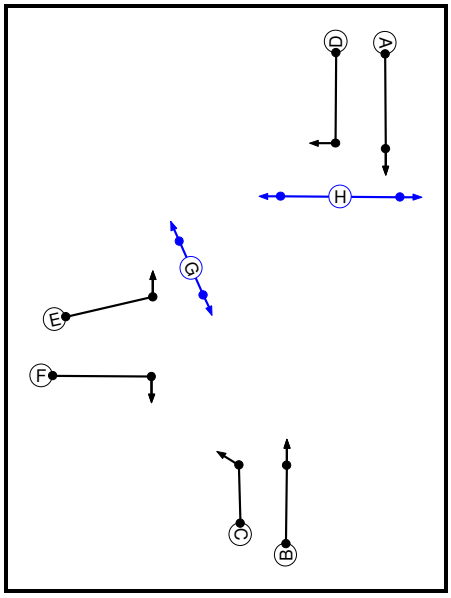
C1	PRC for Signalled Lanes (%):	0.4	Total Delay for Signalled Lanes (pcuHr):	20.88	
	PRC Over All Lanes (%):	0.4	Total Delay Over All Lanes(pcuHr):	20.89	Cycle Time (s): 83

Scenario 4: '2011 PM Base' (FG4: '2011 PM Base', Plan 1: 'Network Control Plan 1')

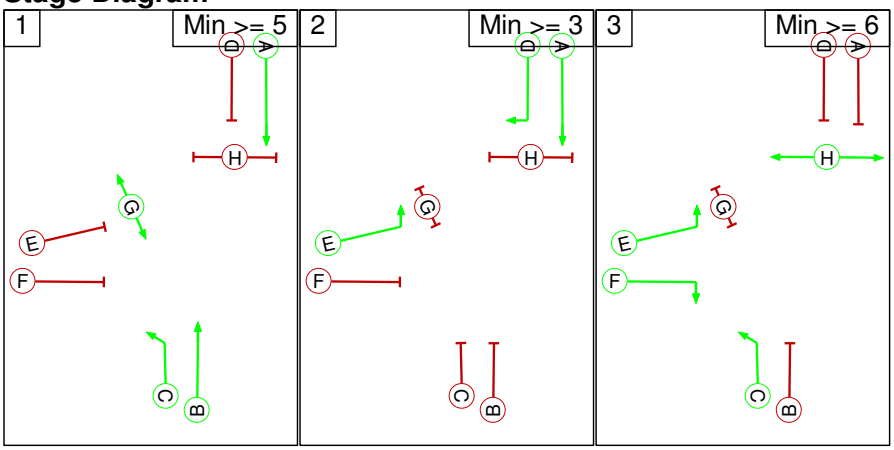
Network Layout Diagram



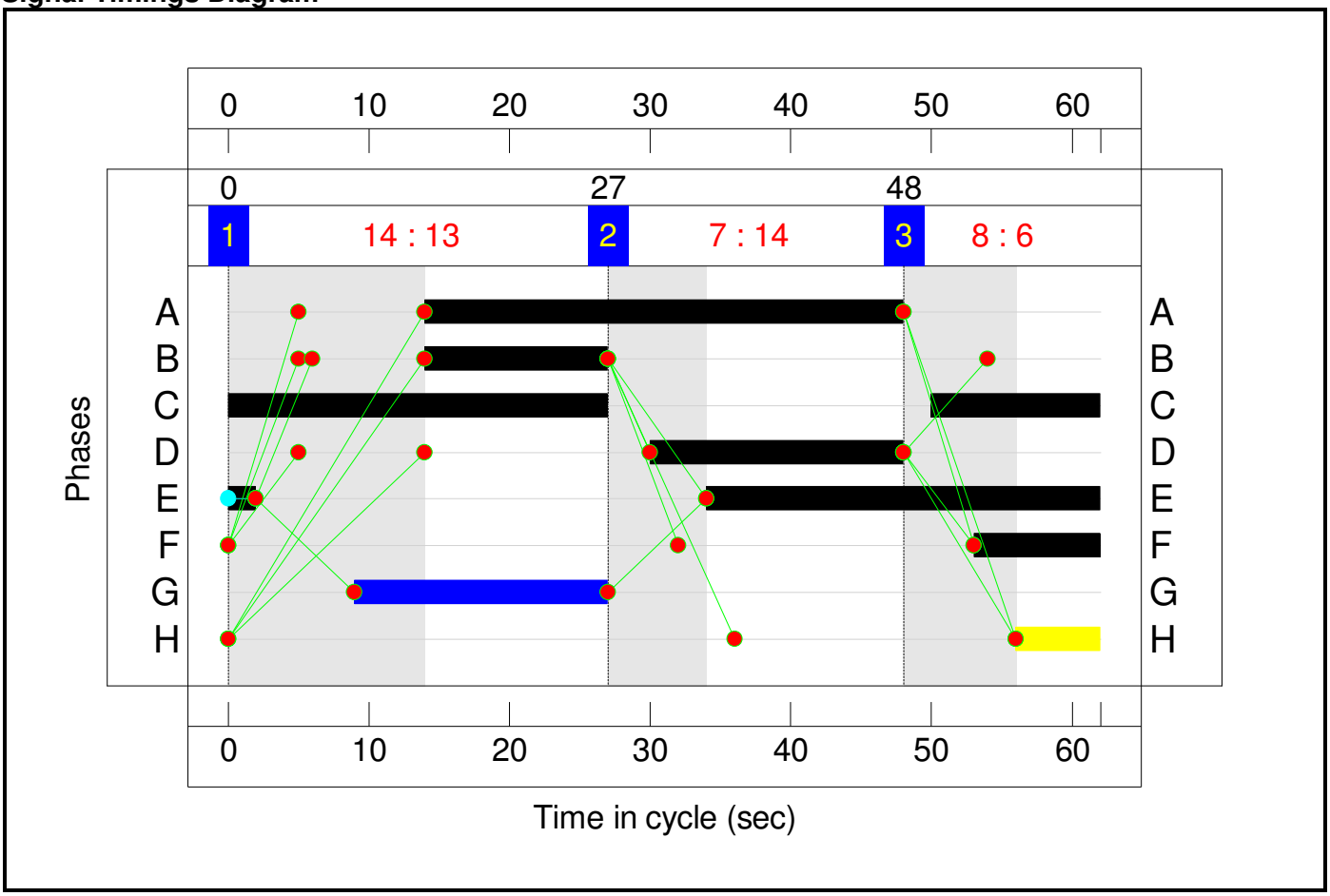
Phase Diagram



Stage Diagram



Signal Timings Diagram



Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.9%**	-
Saltash	-	-	-	-	-	**89.9%**	-
1/1	Wolseley Rd N Ahead	A	34	14	48	51.8%	6.1
1/2	Wolseley Rd N Right	D	18	30	48	89.1%	12.4
2/2+2/1	Wolseley Rd S Ahead Left	B C	13:39	14:50	27	89.9%	10.2
2/3	Wolseley Rd S Ahead	B	13	14	27	85.3%	9.0
3/1+3/2	Saltash Left	E	30	34	2	80.6%	11.1
3/3	Saltash Right	F	9	53	0	10.3%	0.6
7/1	Left Turn Ahead	-	-	-	-	2.9%	0.0

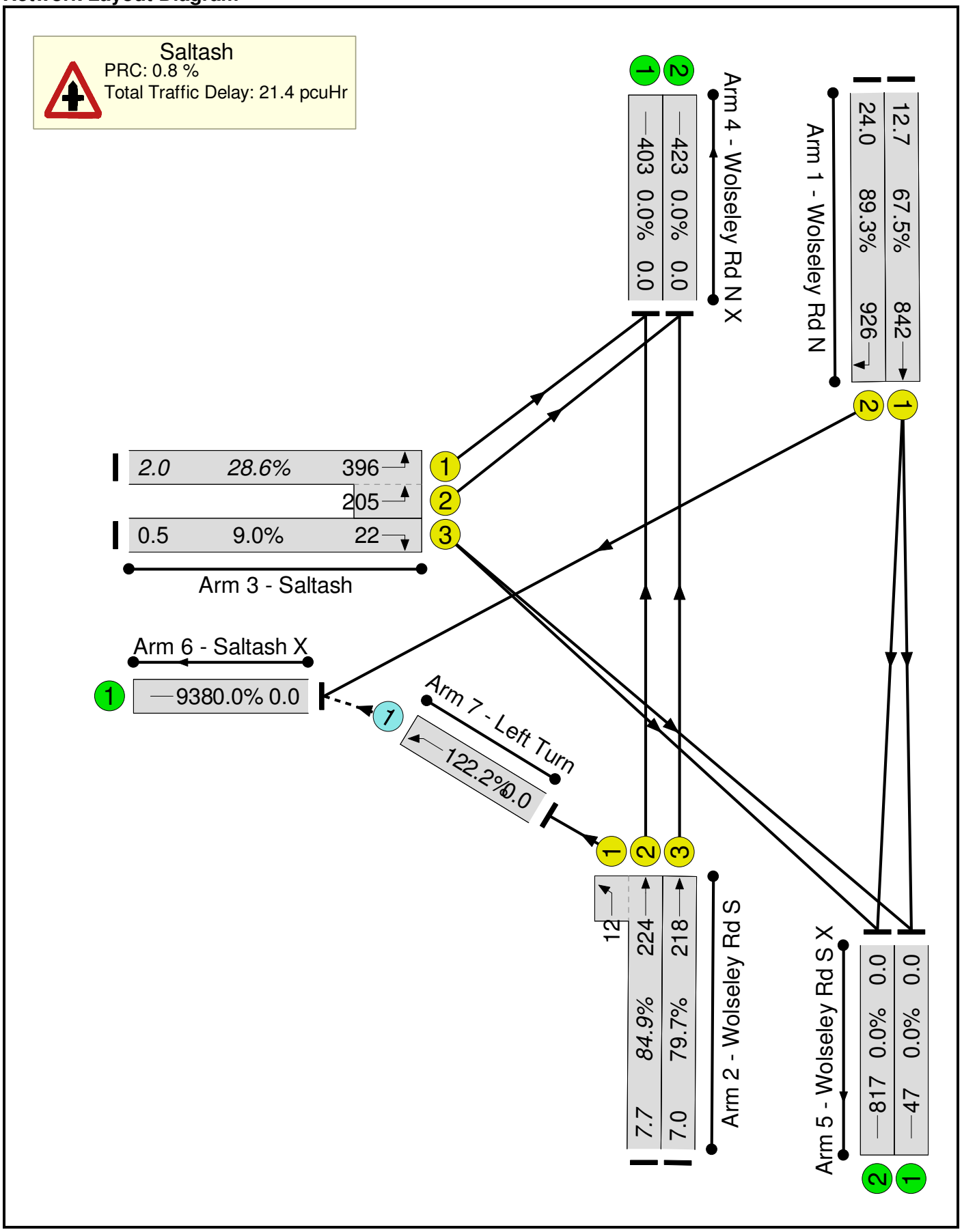
C1

PRC for Signalled Lanes (%): 0.2
PRC Over All Lanes (%): 0.2
Total Delay for Signalled Lanes (pcuHr): 24.93
Total Delay Over All Lanes(pcuHr): 24.95
Cycle Time (s): 62

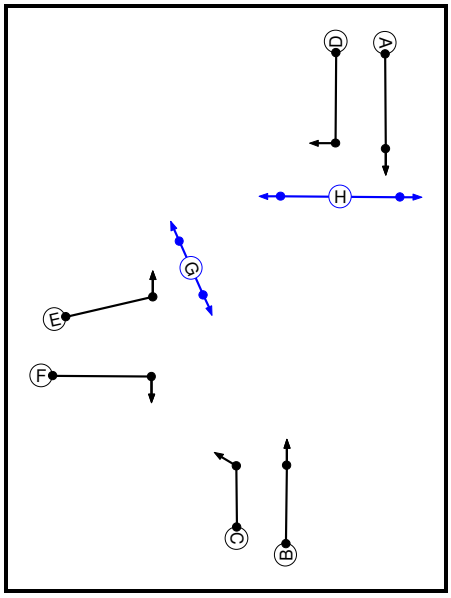
LINSIG Model Output

Scenario 1: '2014 AM Do Min' (FG1: '2014 AM Do Min', Plan 1: 'Network Control Plan 1')

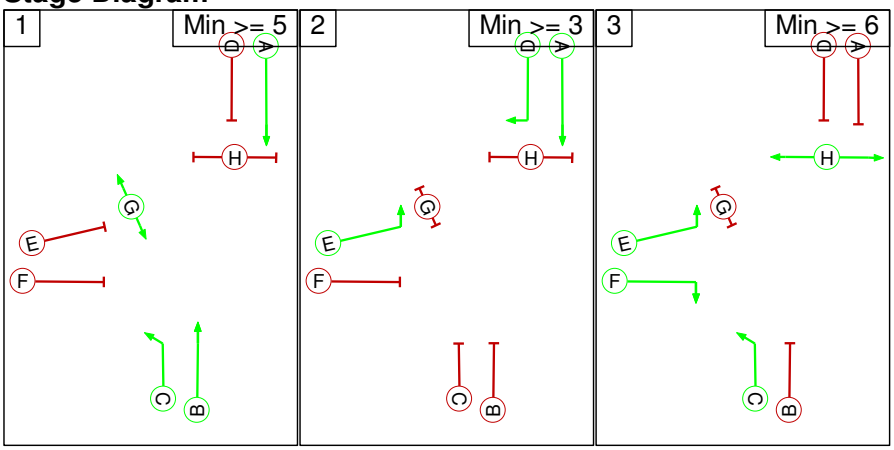
Network Layout Diagram



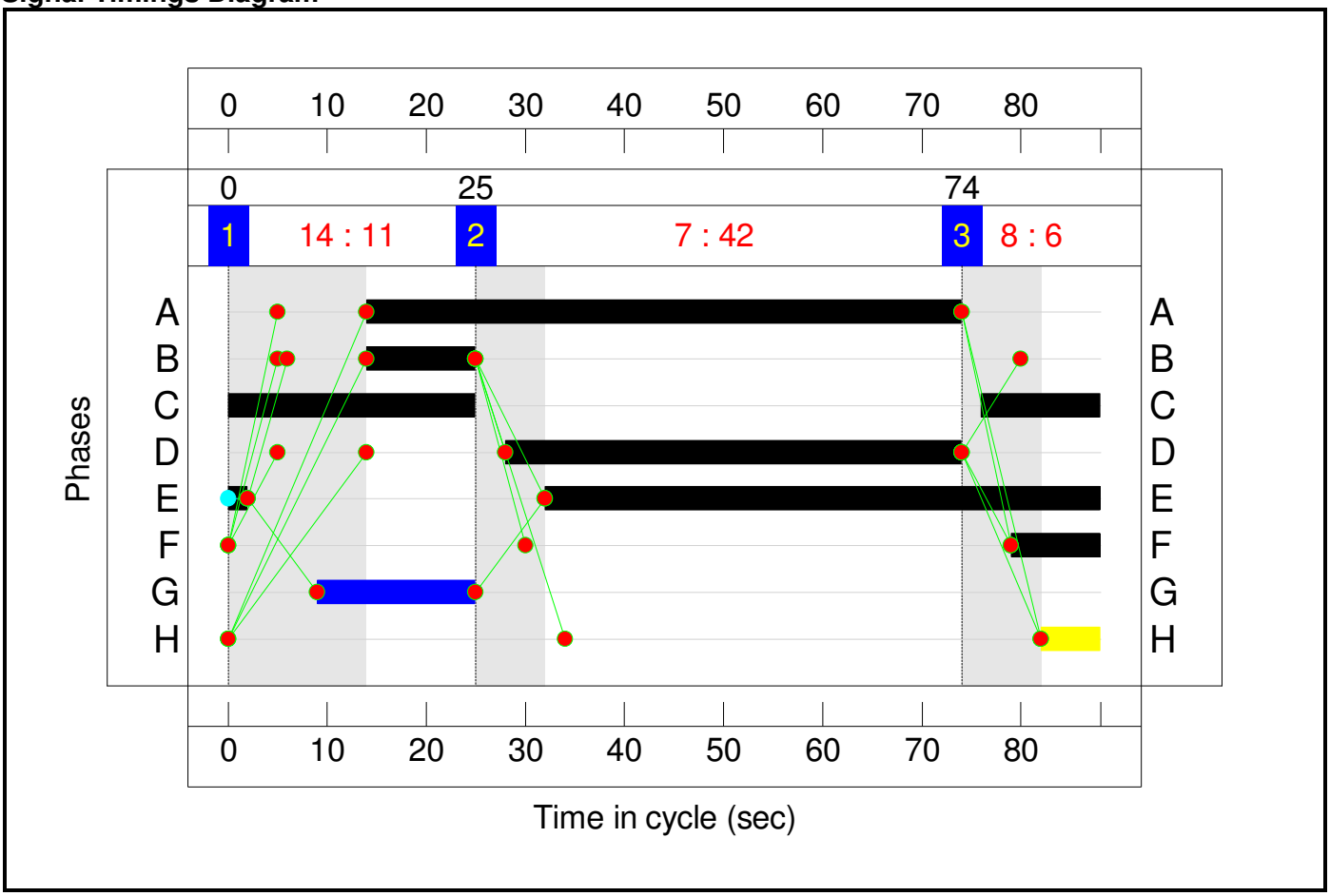
Phase Diagram



Stage Diagram



Signal Timings Diagram



Network Results

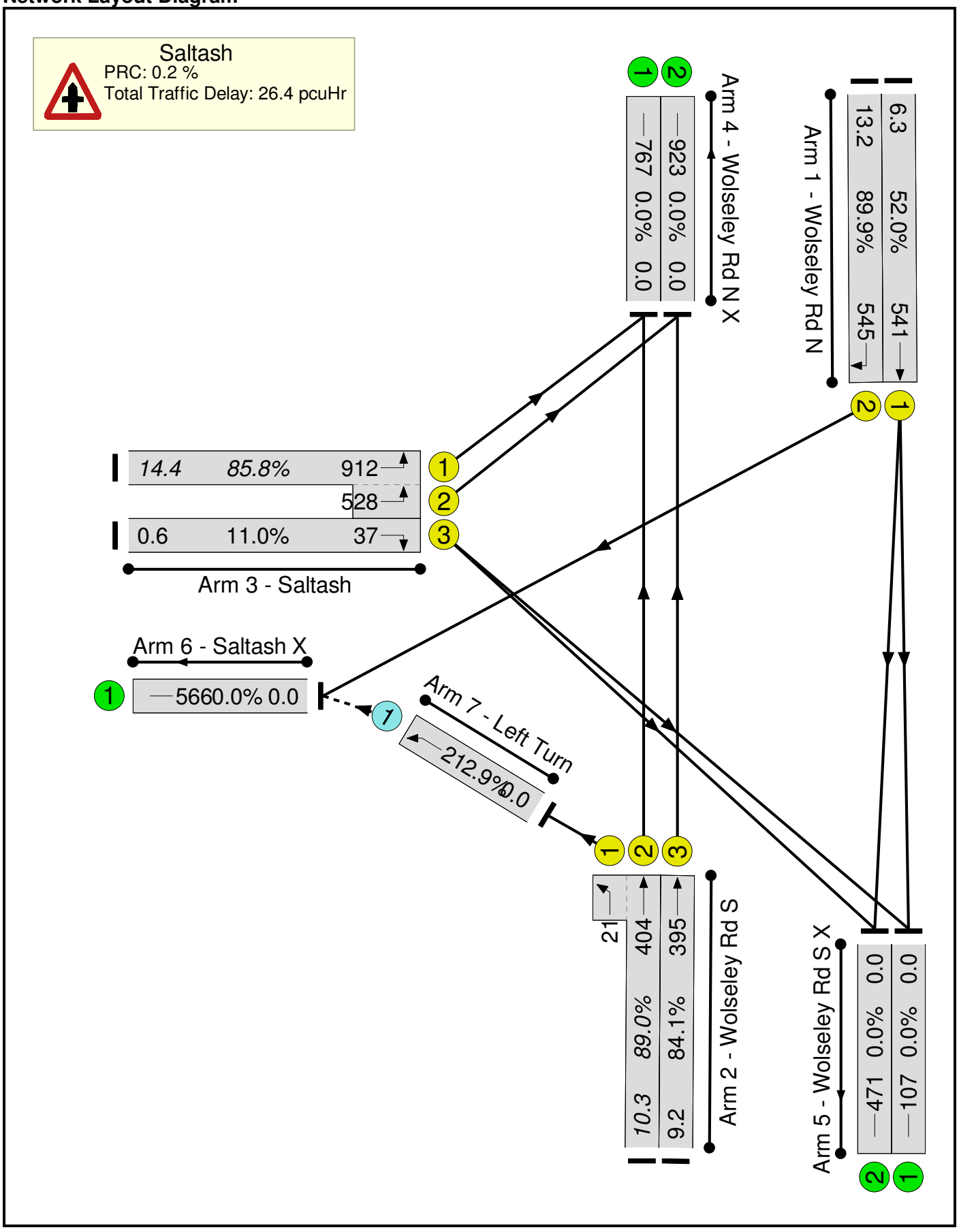
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.3%**	-
Saltash	-	-	-	-	-	**89.3%**	-
1/1	Wolseley Rd N Ahead	A	60	14	74	67.5%	12.7
1/2	Wolseley Rd N Right	D	46	28	74	89.3%	24.0
2/2+2/1	Wolseley Rd S Ahead Left	B C	11:37	14:76	25	84.9%	7.7
2/3	Wolseley Rd S Ahead	B	11	14	25	79.7%	7.0
3/1+3/2	Saltash Left	E	58	32	2	28.6%	2.0
3/3	Saltash Right	F	9	79	0	9.0%	0.5
7/1	Left Turn Ahead	-	-	-	-	2.2%	0.0

C1

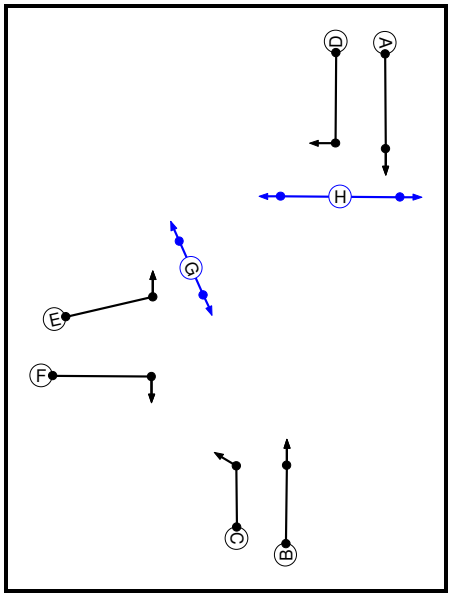
PRC for Signalled Lanes (%): 0.8
PRC Over All Lanes (%): 0.8
Total Delay for Signalled Lanes (pcuHr): 21.36
Total Delay Over All Lanes(pcuHr): 21.37
Cycle Time (s): 88

Scenario 2: '2014 PM Do Min' (FG2: '2014 PM Do Min', Plan 1: 'Network Control Plan 1')

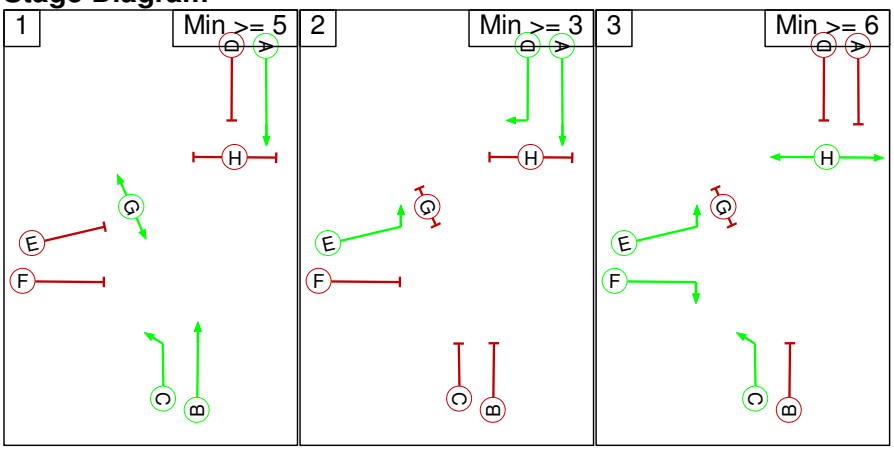
Network Layout Diagram



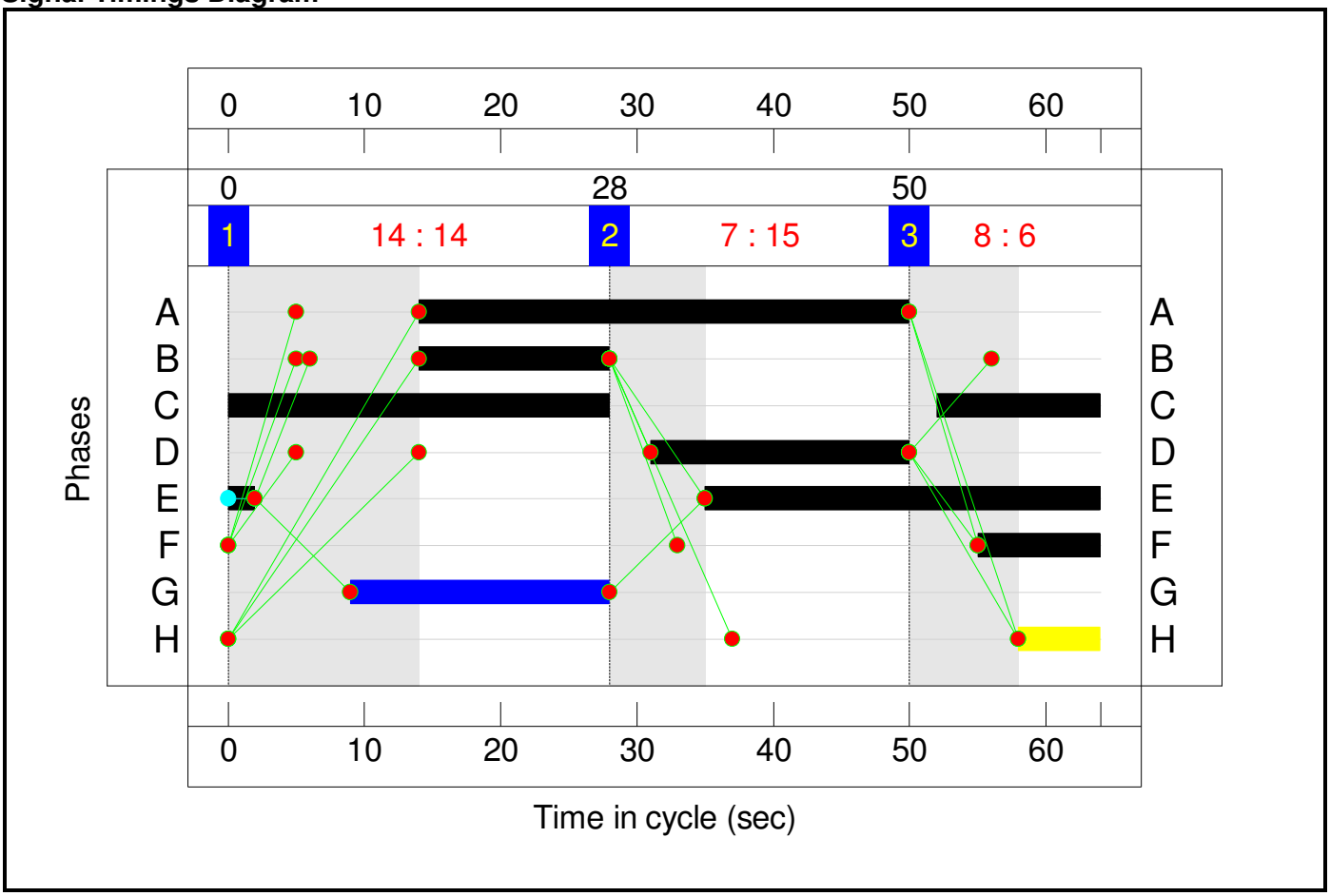
Phase Diagram



Stage Diagram



Signal Timings Diagram



Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.9%**	-
Saltash	-	-	-	-	-	**89.9%**	-
1/1	Wolseley Rd N Ahead	A	36	14	50	52.0%	6.3
1/2	Wolseley Rd N Right	D	19	31	50	89.9%	13.2
2/2+2/1	Wolseley Rd S Ahead Left	B C	14:40	14:52	28	89.0%	10.3
2/3	Wolseley Rd S Ahead	B	14	14	28	84.1%	9.2
3/1+3/2	Saltash Left	E	31	35	2	85.8%	14.4
3/3	Saltash Right	F	9	55	0	11.0%	0.6
7/1	Left Turn Ahead	-	-	-	-	2.9%	0.0

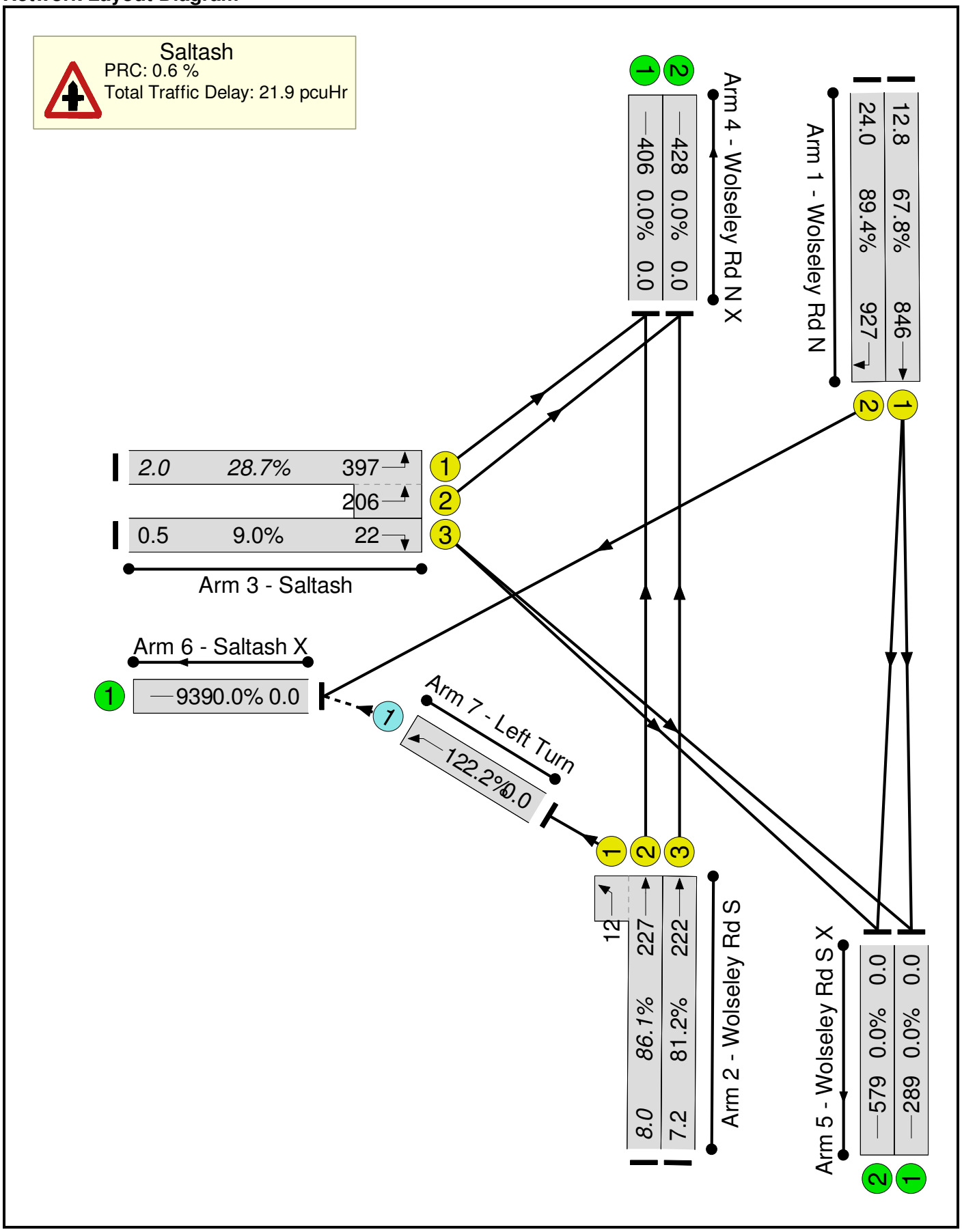
C1

PRC for Signalled Lanes (%): 0.2
PRC Over All Lanes (%): 0.2
Total Delay for Signalled Lanes (pcuHr): 26.41
Total Delay Over All Lanes(pcuHr): 26.42
Cycle Time (s): 64

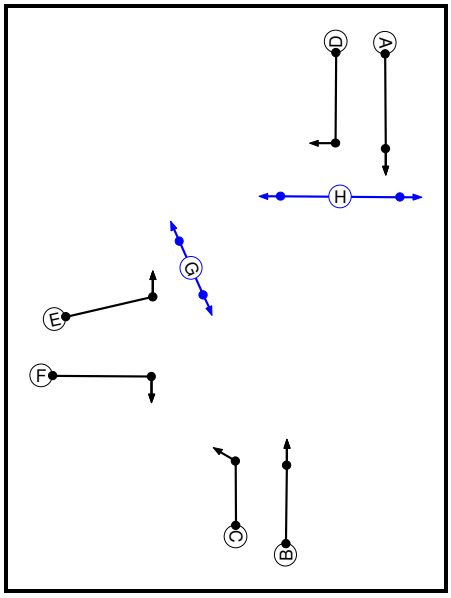
LINSIG Model Output

Scenario 1: '2014 AM Do Something' (FG1: '2014 AM Do Something', Plan 1: 'Network Control Plan 1')

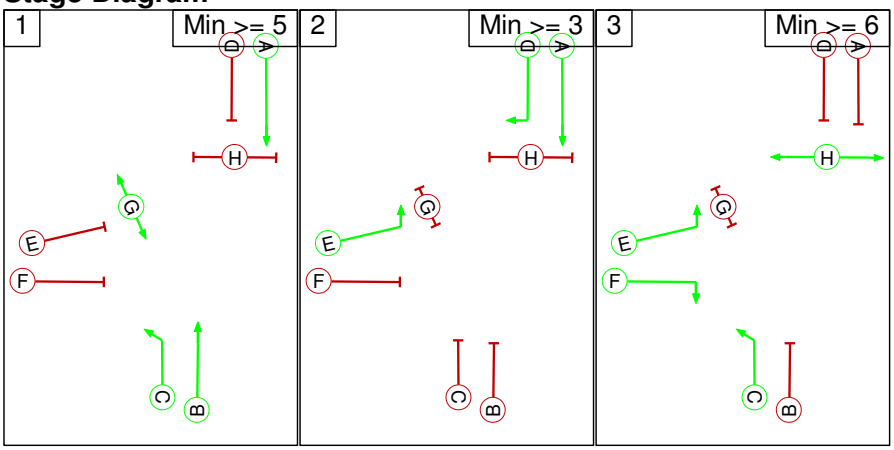
Network Layout Diagram



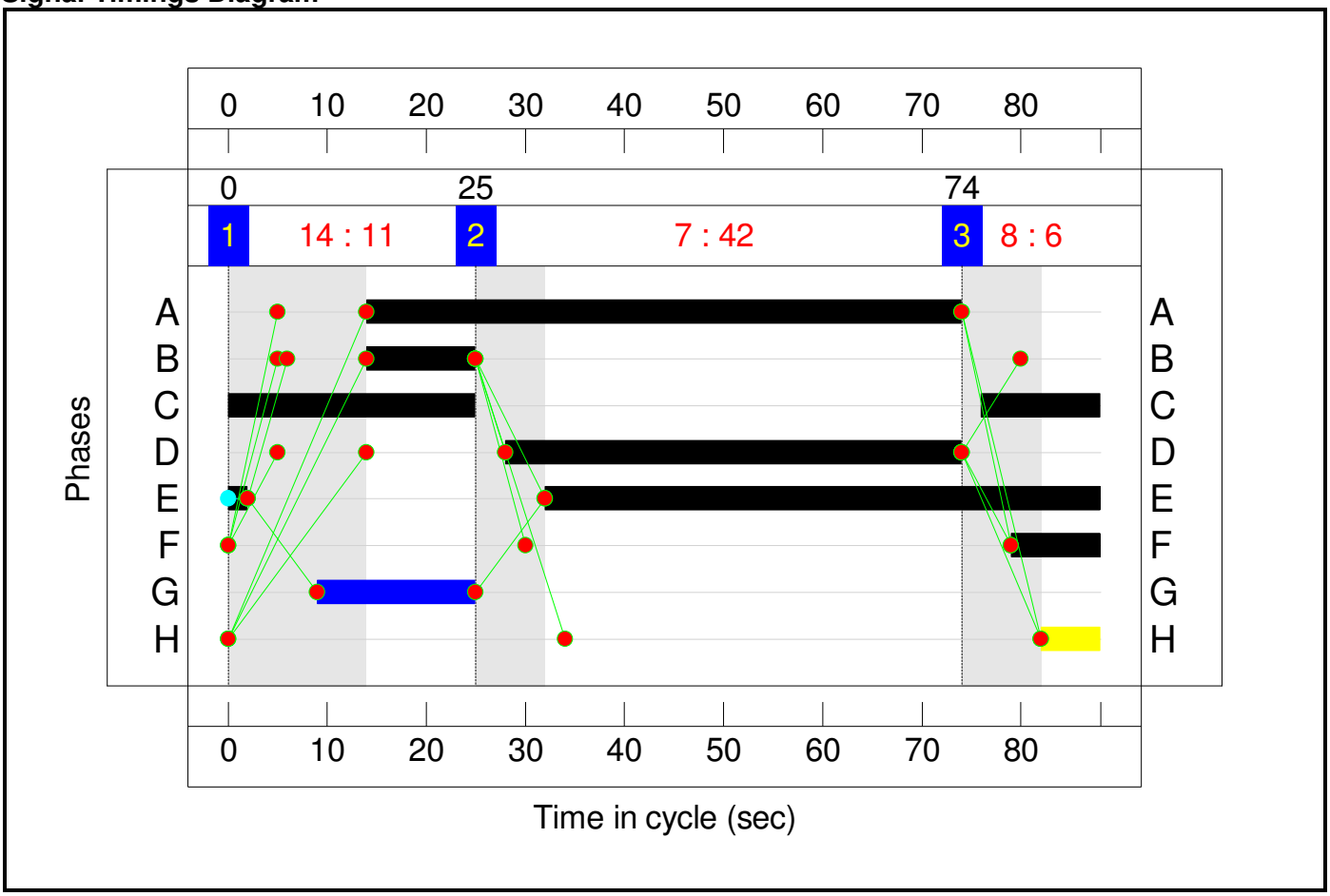
Phase Diagram



Stage Diagram



Signal Timings Diagram



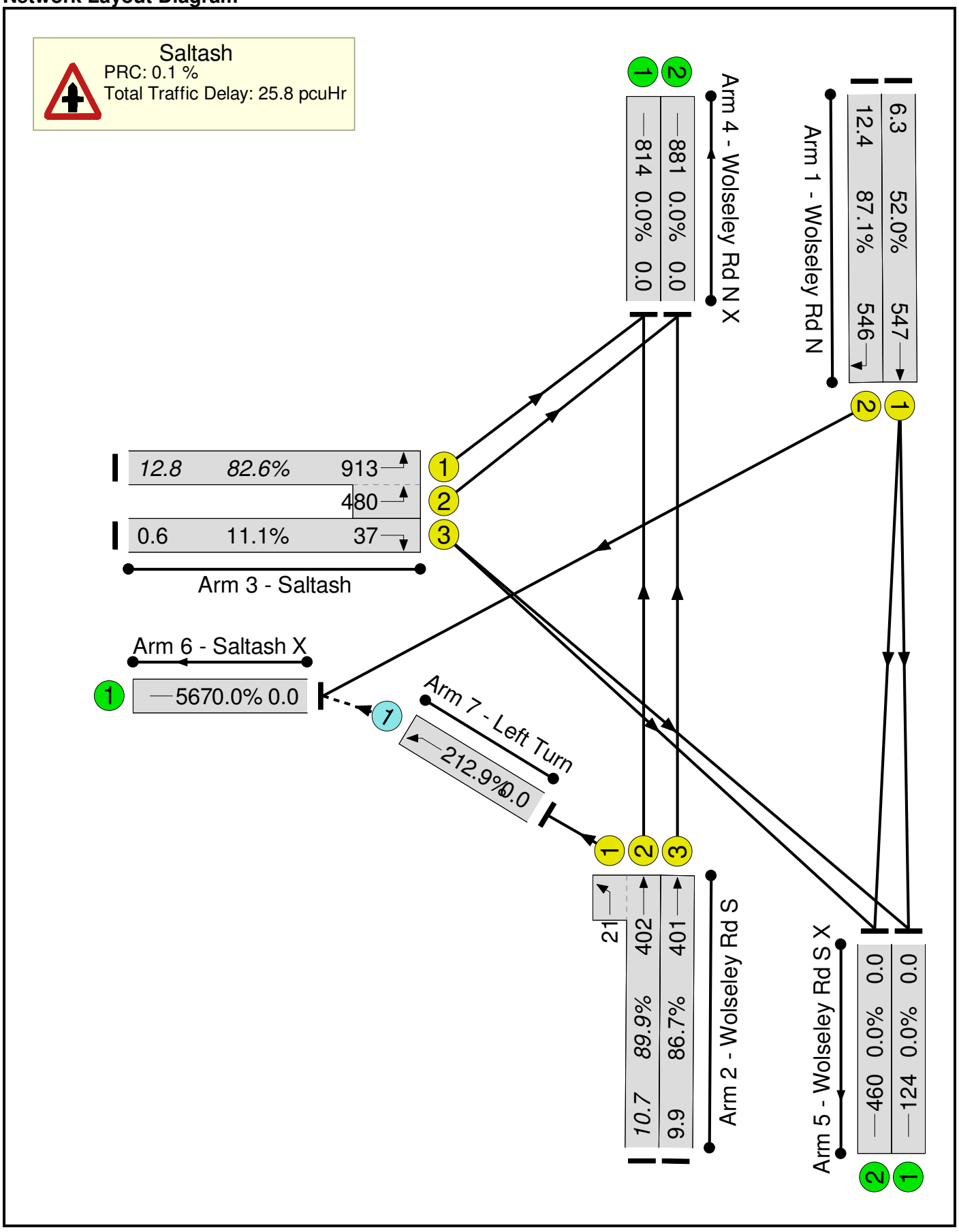
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.4%**	-
Saltash	-	-	-	-	-	**89.4%**	-
1/1	Wolseley Rd N Ahead	A	60	14	74	67.8%	12.8
1/2	Wolseley Rd N Right	D	46	28	74	89.4%	24.0
2/2+2/1	Wolseley Rd S Ahead Left	B C	11:37	14:76	25	86.1%	8.0
2/3	Wolseley Rd S Ahead	B	11	14	25	81.2%	7.2
3/1+3/2	Saltash Left	E	58	32	2	28.7%	2.0
3/3	Saltash Right	F	9	79	0	9.0%	0.5
7/1	Left Turn Ahead	-	-	-	-	2.2%	0.0

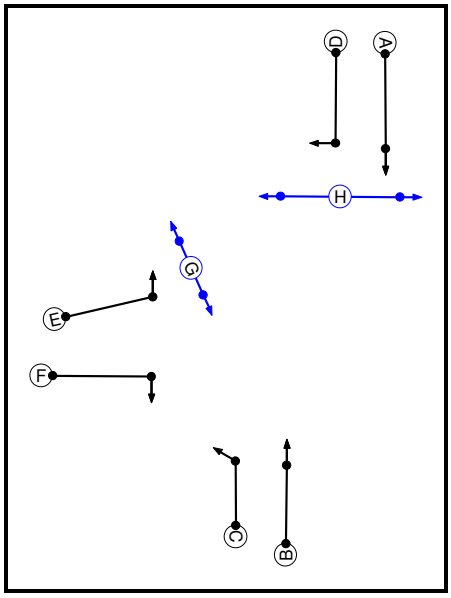
C1	PRC for Signalled Lanes (%):	0.6	Total Delay for Signalled Lanes (pcuHr):	21.87	
	PRC Over All Lanes (%):	0.6	Total Delay Over All Lanes(pcuHr):	21.88	Cycle Time (s): 88

Scenario 2: '2014 PM Do Something' (FG2: '2014 PM Do Something', Plan 1: 'Network Control Plan 1')

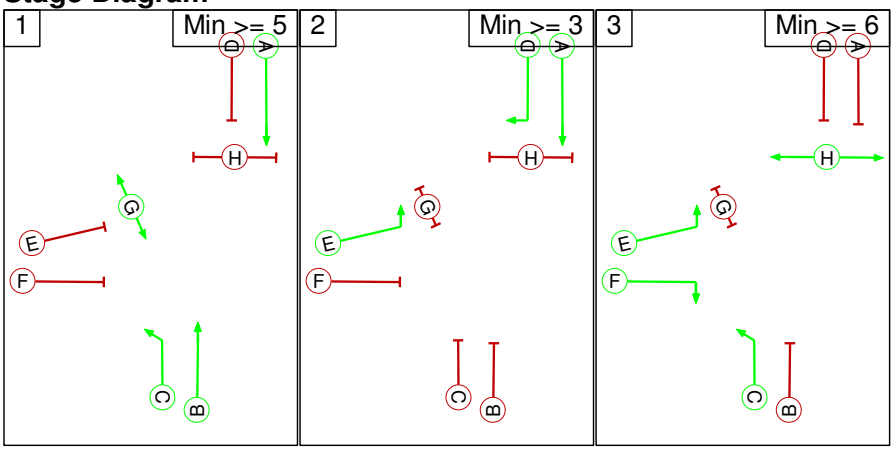
Network Layout Diagram



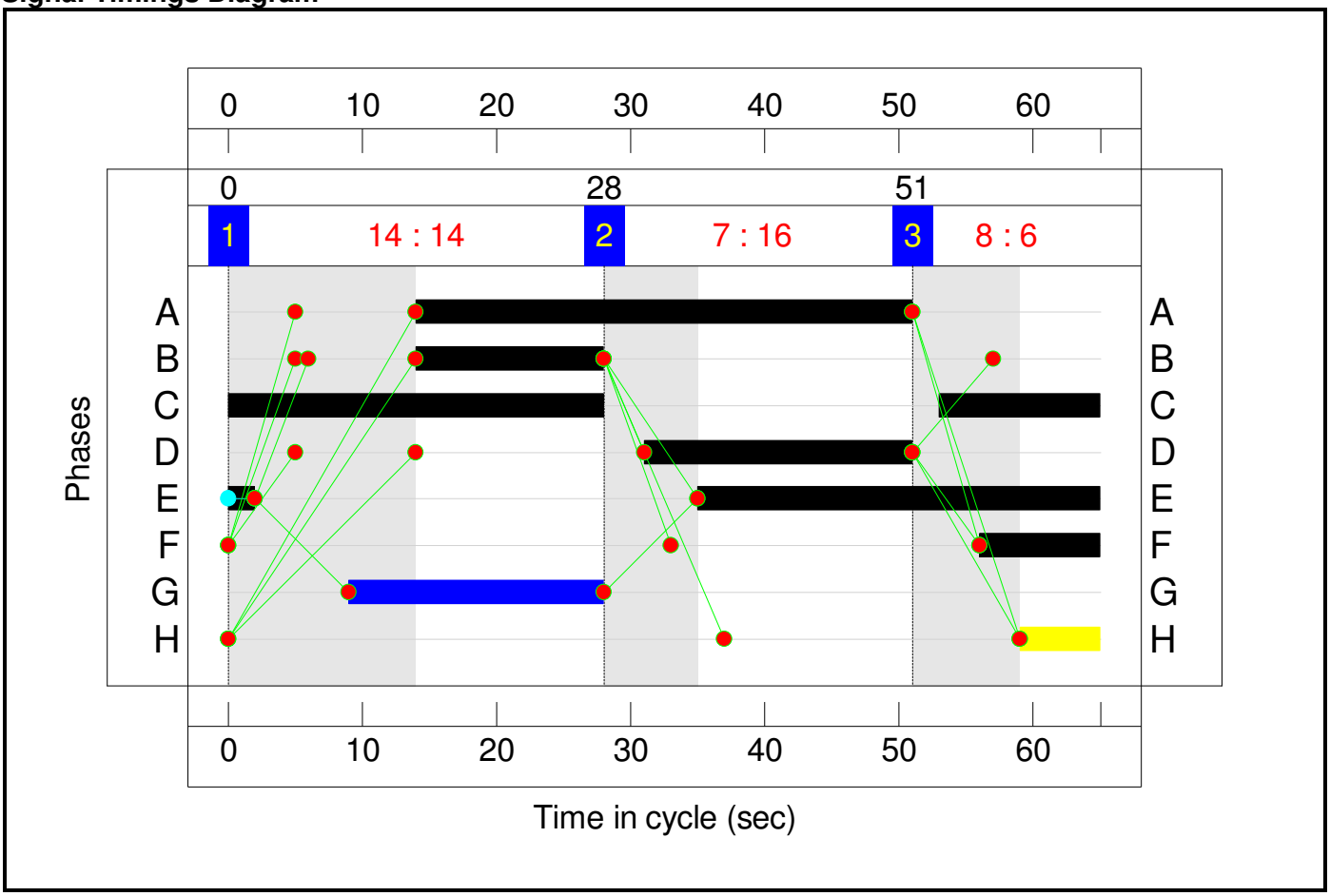
Phase Diagram



Stage Diagram



Signal Timings Diagram



Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.9%**	-
Saltash	-	-	-	-	-	**89.9%**	-
1/1	Wolseley Rd N Ahead	A	37	14	51	52.0%	6.3
1/2	Wolseley Rd N Right	D	20	31	51	87.1%	12.4
2/2+2/1	Wolseley Rd S Ahead Left	B C	14:40	14:53	28	89.9%	10.7
2/3	Wolseley Rd S Ahead	B	14	14	28	86.7%	9.9
3/1+3/2	Saltash Left	E	32	35	2	82.6%	12.8
3/3	Saltash Right	F	9	56	0	11.1%	0.6
7/1	Left Turn Ahead	-	-	-	-	2.9%	0.0

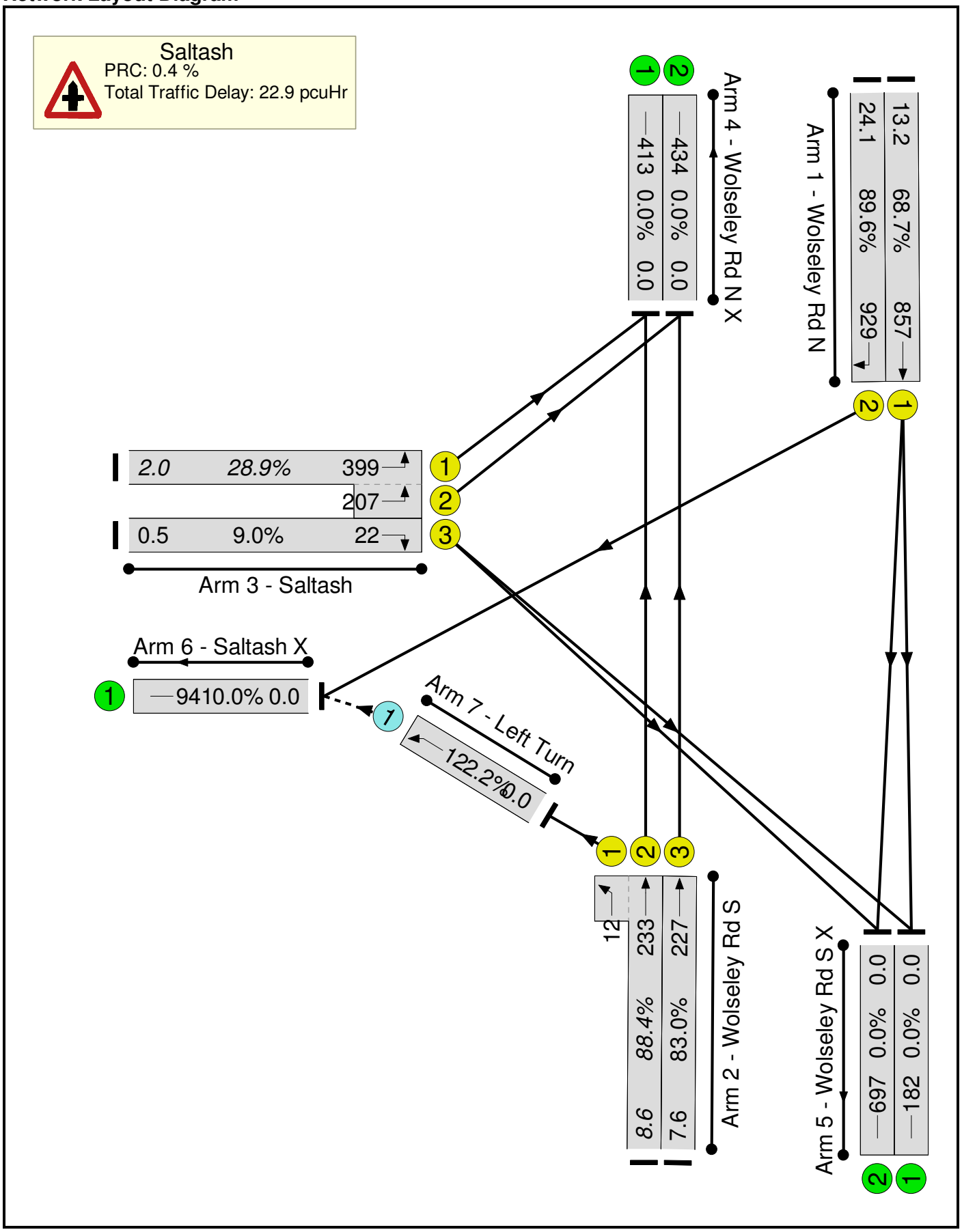
C1

PRC for Signalled Lanes (%): 0.1
PRC Over All Lanes (%): 0.1
Total Delay for Signalled Lanes (pcuHr): 25.74
Total Delay Over All Lanes(pcuHr): 25.75
Cycle Time (s): 65

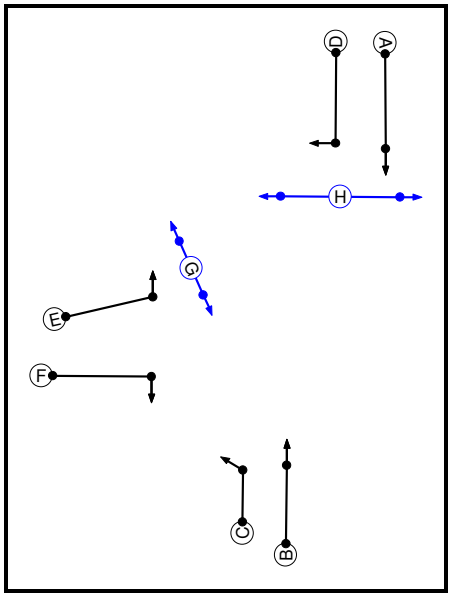
LINSIG Model Output

Scenario 1: '2014 AM Do Something MAX' (FG1: '2014 AM Do Something MAX', Plan 1: 'Network Control Plan 1')

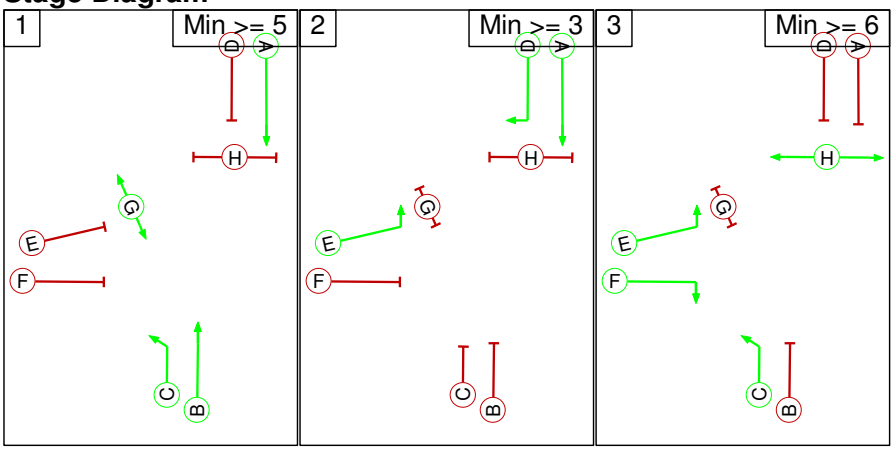
Network Layout Diagram



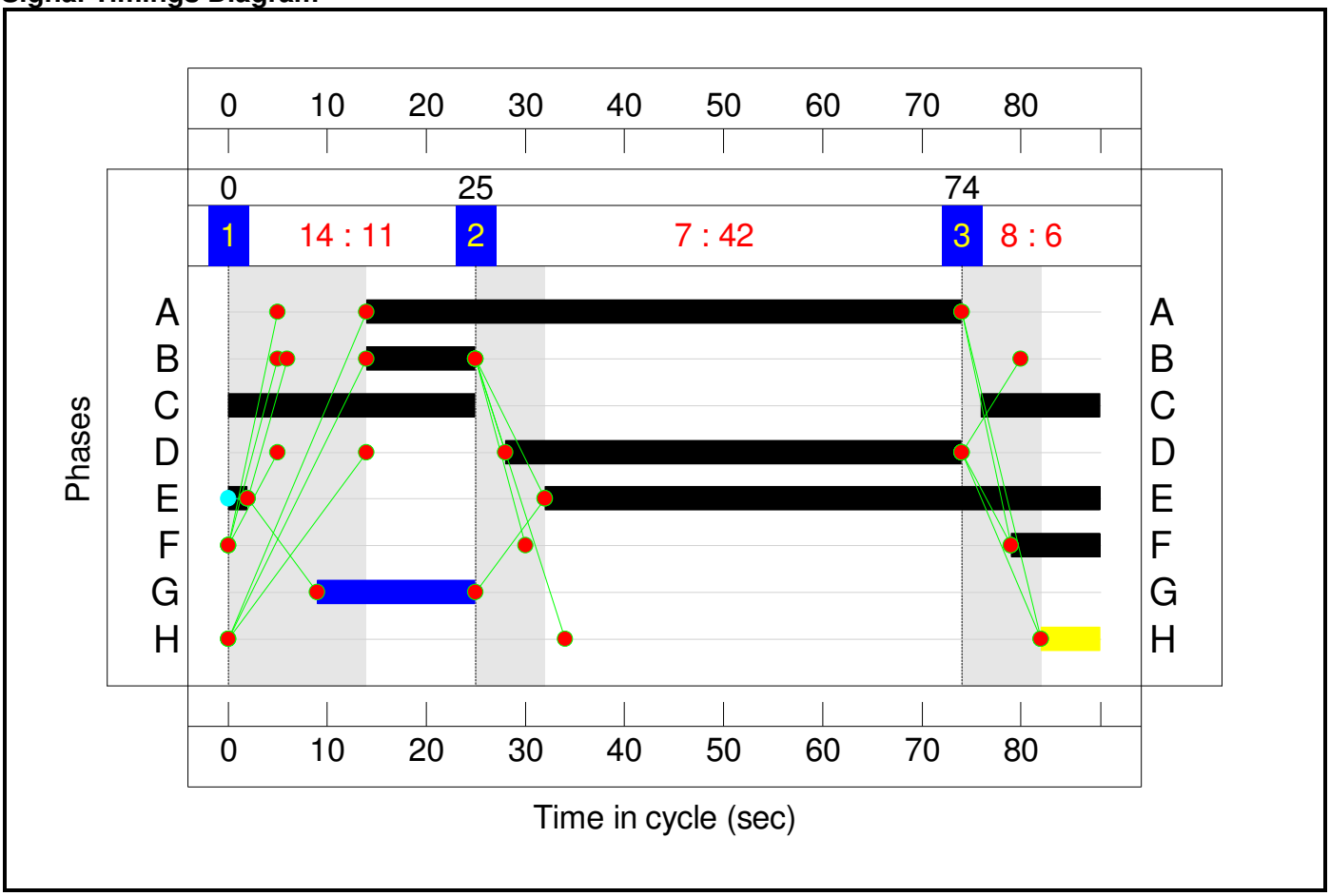
Phase Diagram



Stage Diagram



Signal Timings Diagram



Network Results

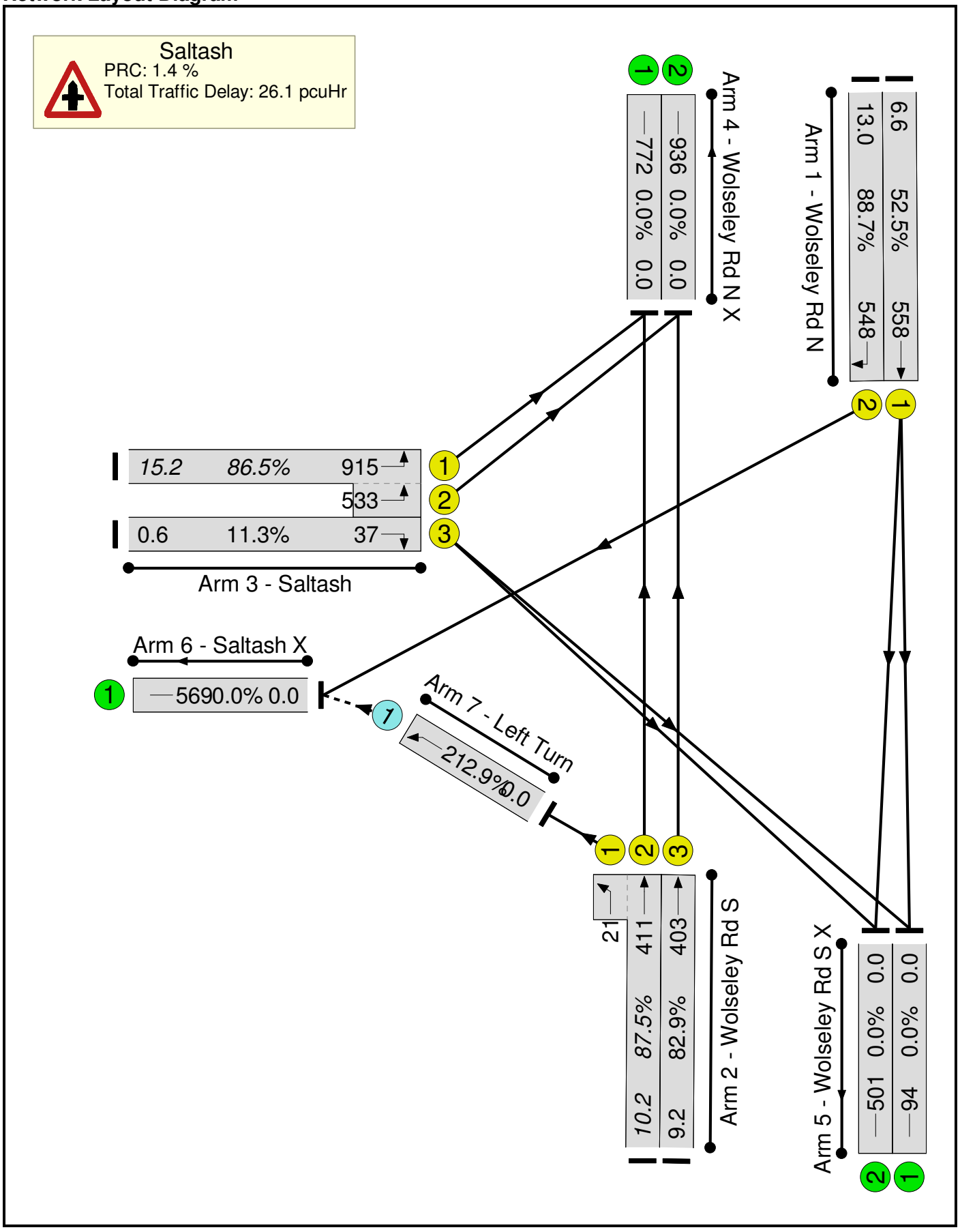
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.6%**	-
Saltash	-	-	-	-	-	**89.6%**	-
1/1	Wolseley Rd N Ahead	A	60	14	74	68.7%	13.2
1/2	Wolseley Rd N Right	D	46	28	74	89.6%	24.1
2/2+2/1	Wolseley Rd S Ahead Left	B C	11:37	14:76	25	88.4%	8.6
2/3	Wolseley Rd S Ahead	B	11	14	25	83.0%	7.6
3/1+3/2	Saltash Left	E	58	32	2	28.9%	2.0
3/3	Saltash Right	F	9	79	0	9.0%	0.5
7/1	Left Turn Ahead	-	-	-	-	2.2%	0.0

C1

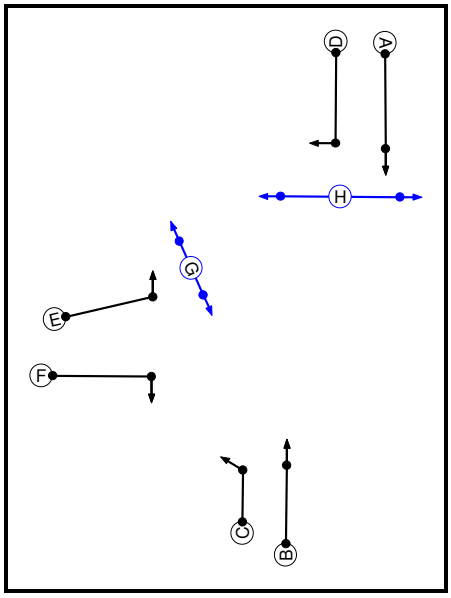
PRC for Signalled Lanes (%): 0.4
PRC Over All Lanes (%): 0.4
Total Delay for Signalled Lanes (pcuHr): 22.88
Total Delay Over All Lanes(pcuHr): 22.89
Cycle Time (s): 88

Scenario 2: '2014 PM Do Something MAX' (FG2: '2014 PM Do Something MAX', Plan 1: 'Network Control Plan 1')

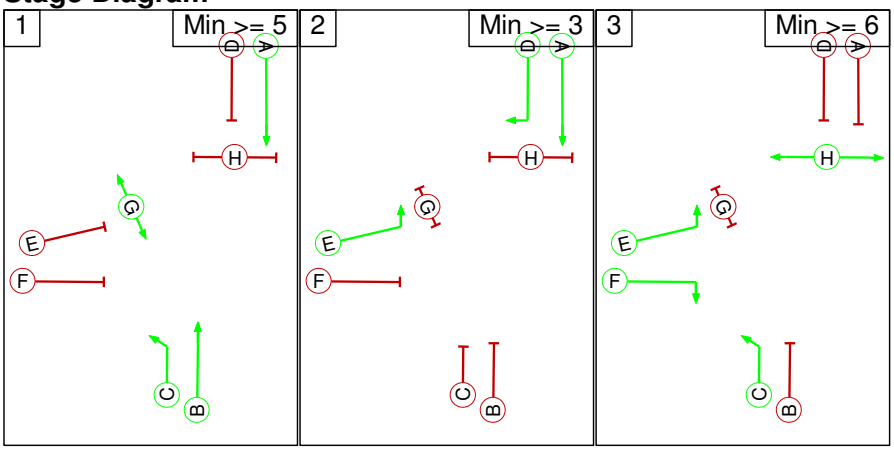
Network Layout Diagram



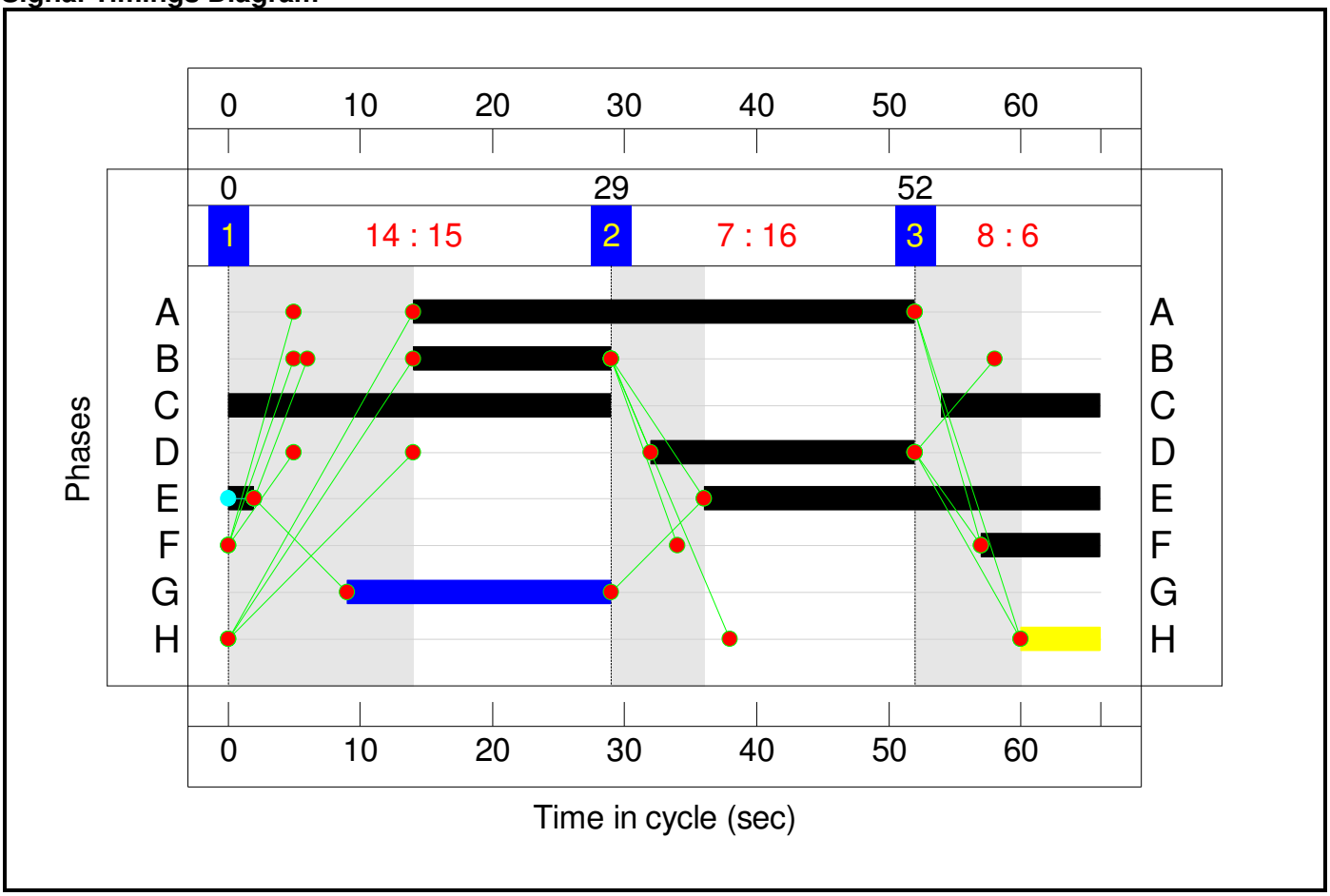
Phase Diagram



Stage Diagram



Signal Timings Diagram



Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**88.7%**	-
Saltash	-	-	-	-	-	**88.7%**	-
1/1	Wolseley Rd N Ahead	A	38	14	52	52.5%	6.6
1/2	Wolseley Rd N Right	D	20	32	52	88.7%	13.0
2/2+2/1	Wolseley Rd S Ahead Left	B C	15:41	14:54	29	87.5%	10.2
2/3	Wolseley Rd S Ahead	B	15	14	29	82.9%	9.2
3/1+3/2	Saltash Left	E	32	36	2	86.5%	15.2
3/3	Saltash Right	F	9	57	0	11.3%	0.6
7/1	Left Turn Ahead	-	-	-	-	2.9%	0.0

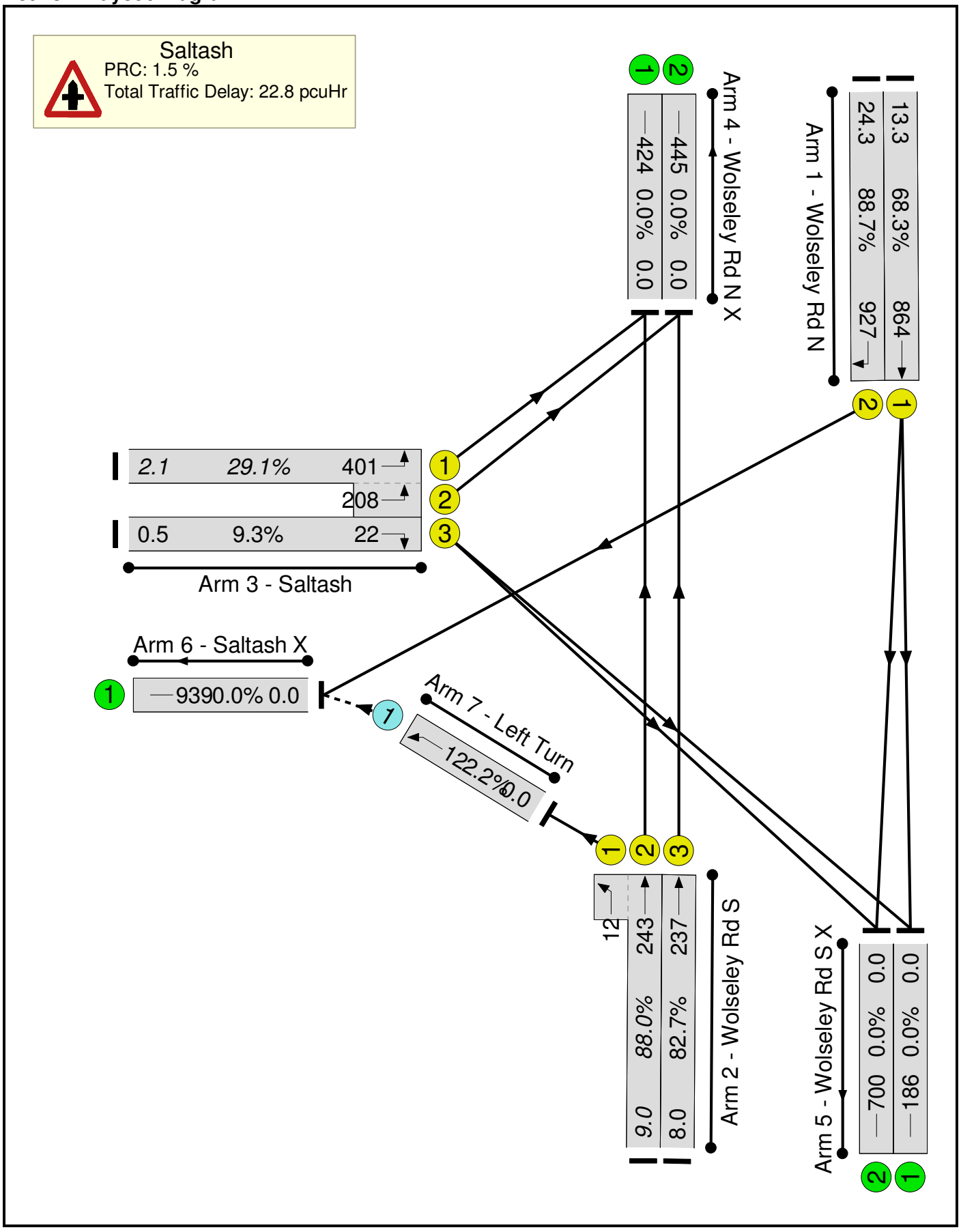
C1

PRC for Signalled Lanes (%): 1.4
PRC Over All Lanes (%): 1.4
Total Delay for Signalled Lanes (pcuHr): 26.10
Total Delay Over All Lanes(pcuHr): 26.11
Cycle Time (s): 66

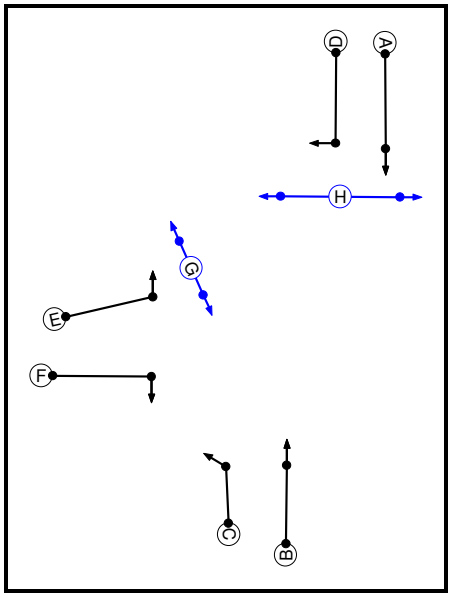
LINSIG Model Output

Scenario 1: '2014 AM Do Something plus potential' (FG1: '2014 AM Do Something plus potential', Plan 1: 'Network Control Plan 1')

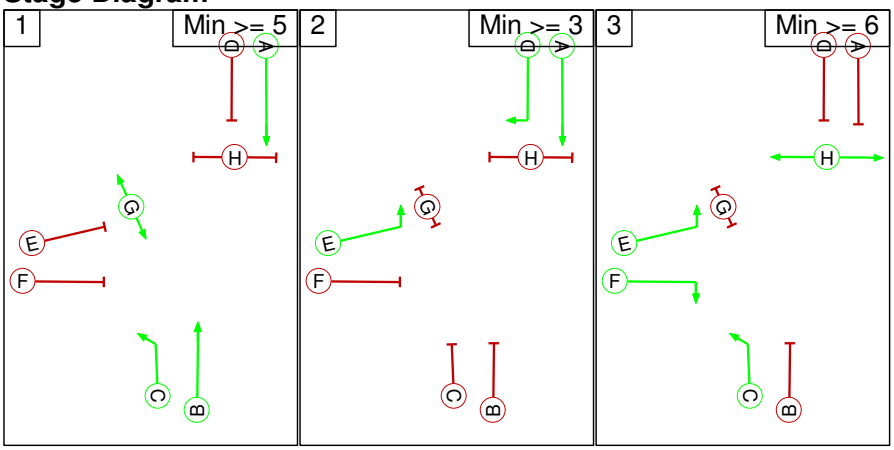
Network Layout Diagram



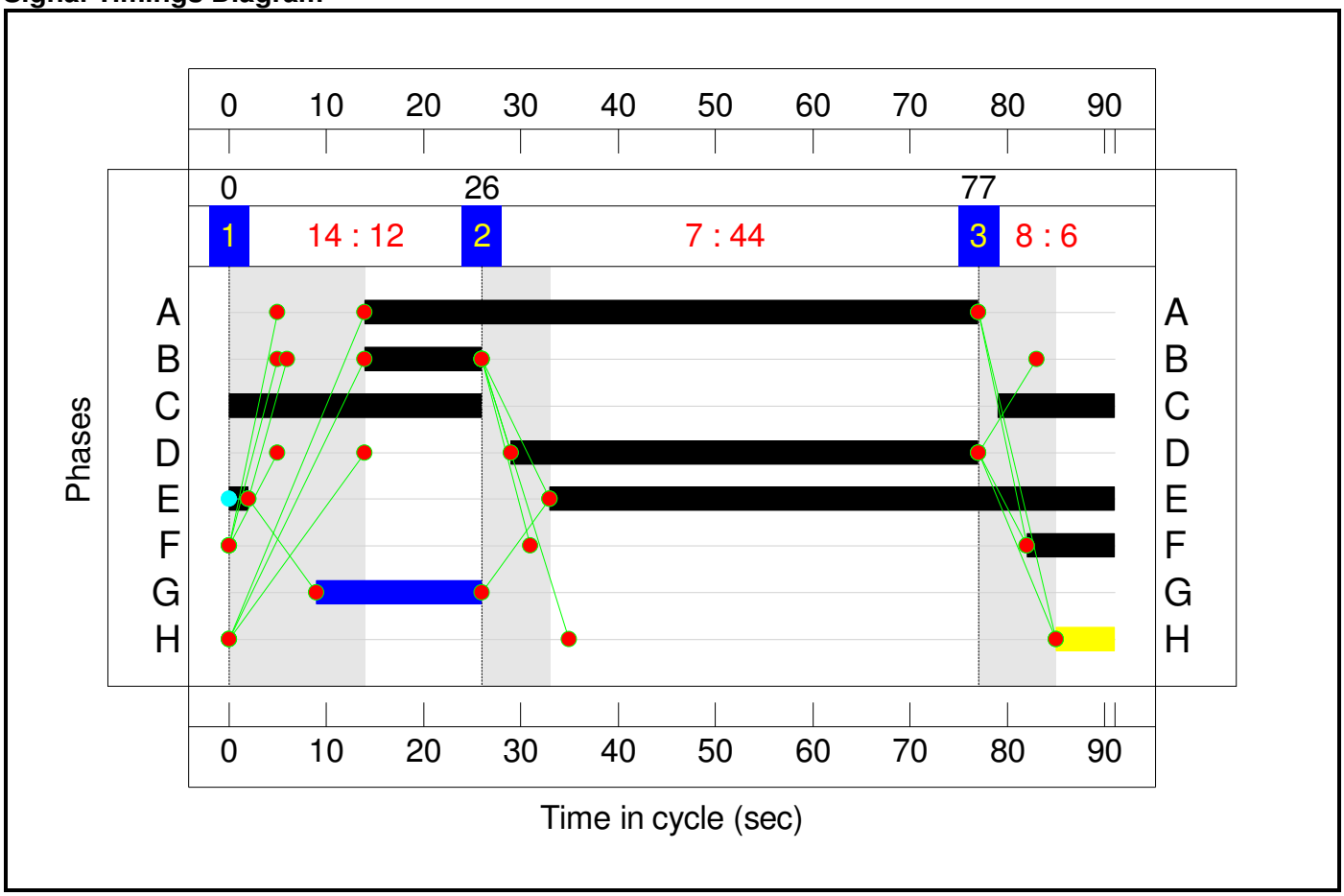
Phase Diagram



Stage Diagram



Signal Timings Diagram



Network Results

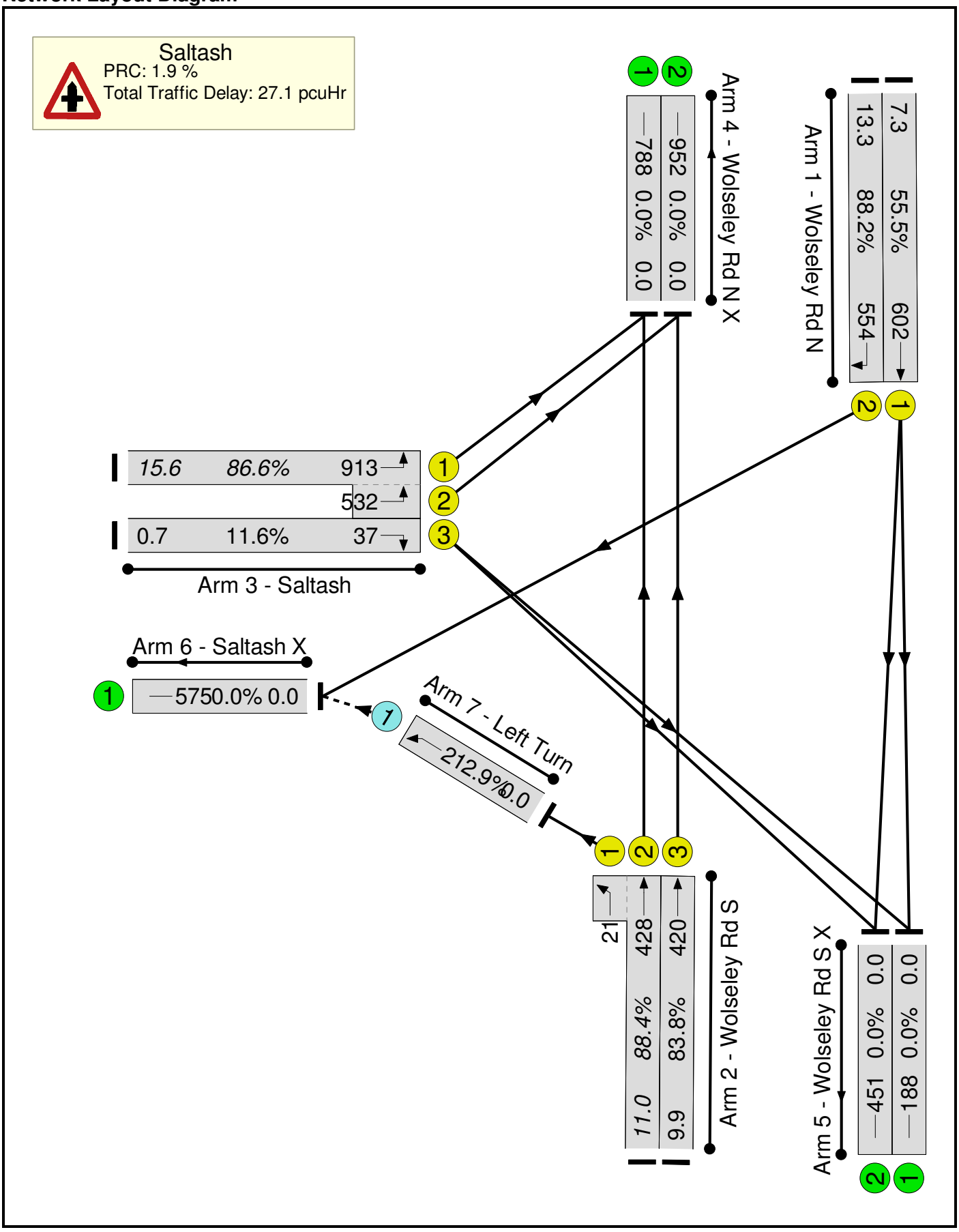
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**88.7%**	-
Saltash	-	-	-	-	-	**88.7%**	-
1/1	Wolseley Rd N Ahead	A	63	14	77	68.3%	13.3
1/2	Wolseley Rd N Right	D	48	29	77	88.7%	24.3
2/2+2/1	Wolseley Rd S Ahead Left	B C	12:38	14:79	26	88.0%	9.0
2/3	Wolseley Rd S Ahead	B	12	14	26	82.7%	8.0
3/1+3/2	Saltash Left	E	60	33	2	29.1%	2.1
3/3	Saltash Right	F	9	82	0	9.3%	0.5
7/1	Left Turn Ahead	-	-	-	-	2.2%	0.0

C1

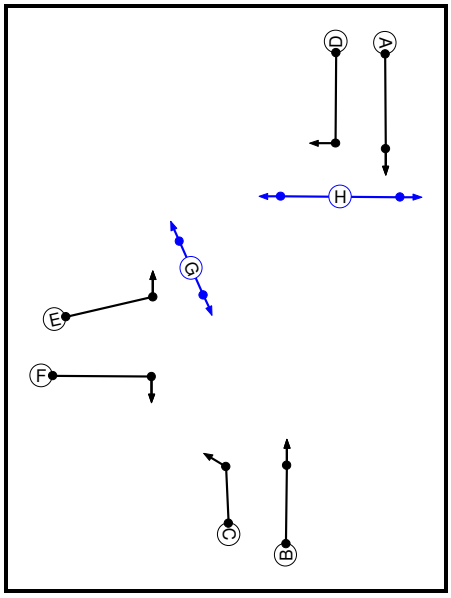
PRC for Signalled Lanes (%): 1.5
PRC Over All Lanes (%): 1.5
Total Delay for Signalled Lanes (pcuHr): 22.82
Total Delay Over All Lanes(pcuHr): 22.83
Cycle Time (s): 91

Scenario 2: '2014 PM Do Something plus potential' (FG2: '2014 PM Do Something plus potential', Plan 1: 'Network Control Plan 1')

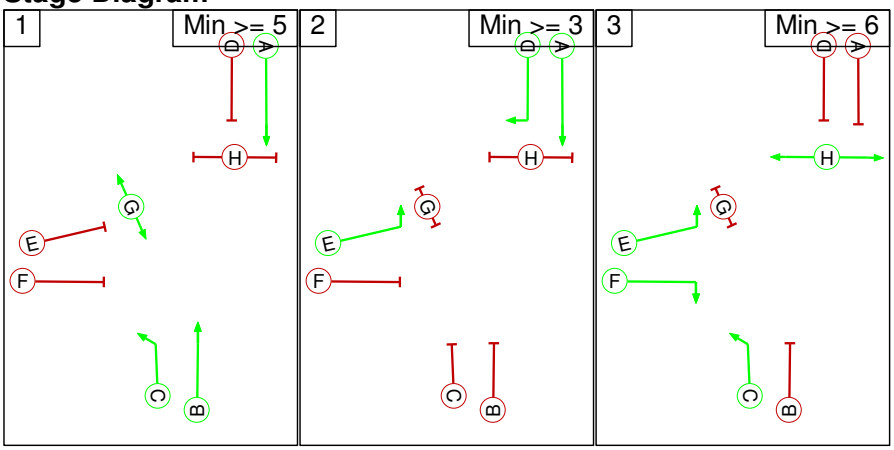
Network Layout Diagram



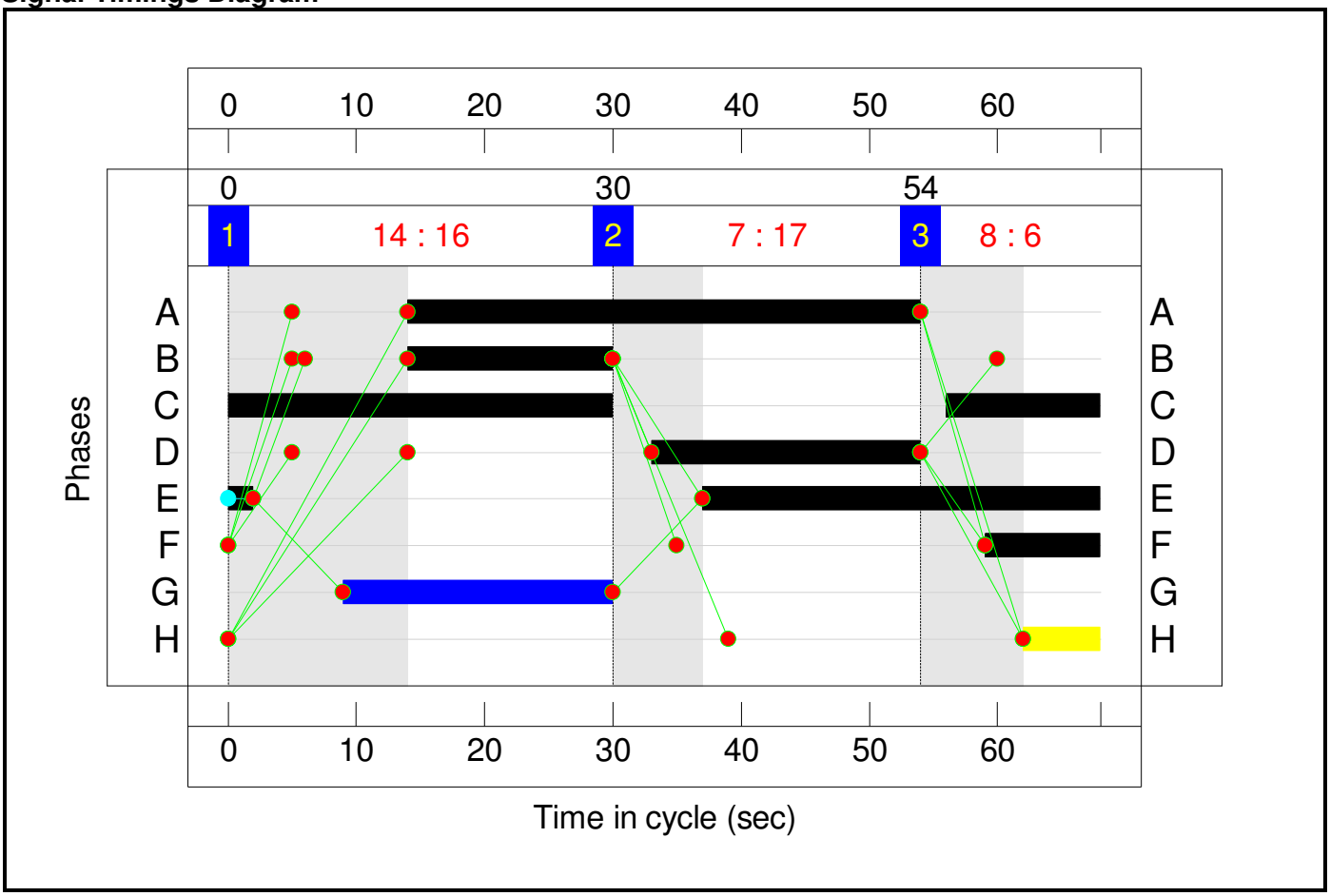
Phase Diagram



Stage Diagram



Signal Timings Diagram



Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**88.4%**	-
Saltash	-	-	-	-	-	**88.4%**	-
1/1	Wolseley Rd N Ahead	A	40	14	54	55.5%	7.3
1/2	Wolseley Rd N Right	D	21	33	54	88.2%	13.3
2/2+2/1	Wolseley Rd S Ahead Left	B C	16:42	14:56	30	88.4%	11.0
2/3	Wolseley Rd S Ahead	B	16	14	30	83.8%	9.9
3/1+3/2	Saltash Left	E	33	37	2	86.6%	15.6
3/3	Saltash Right	F	9	59	0	11.6%	0.7
7/1	Left Turn Ahead	-	-	-	-	2.9%	0.0

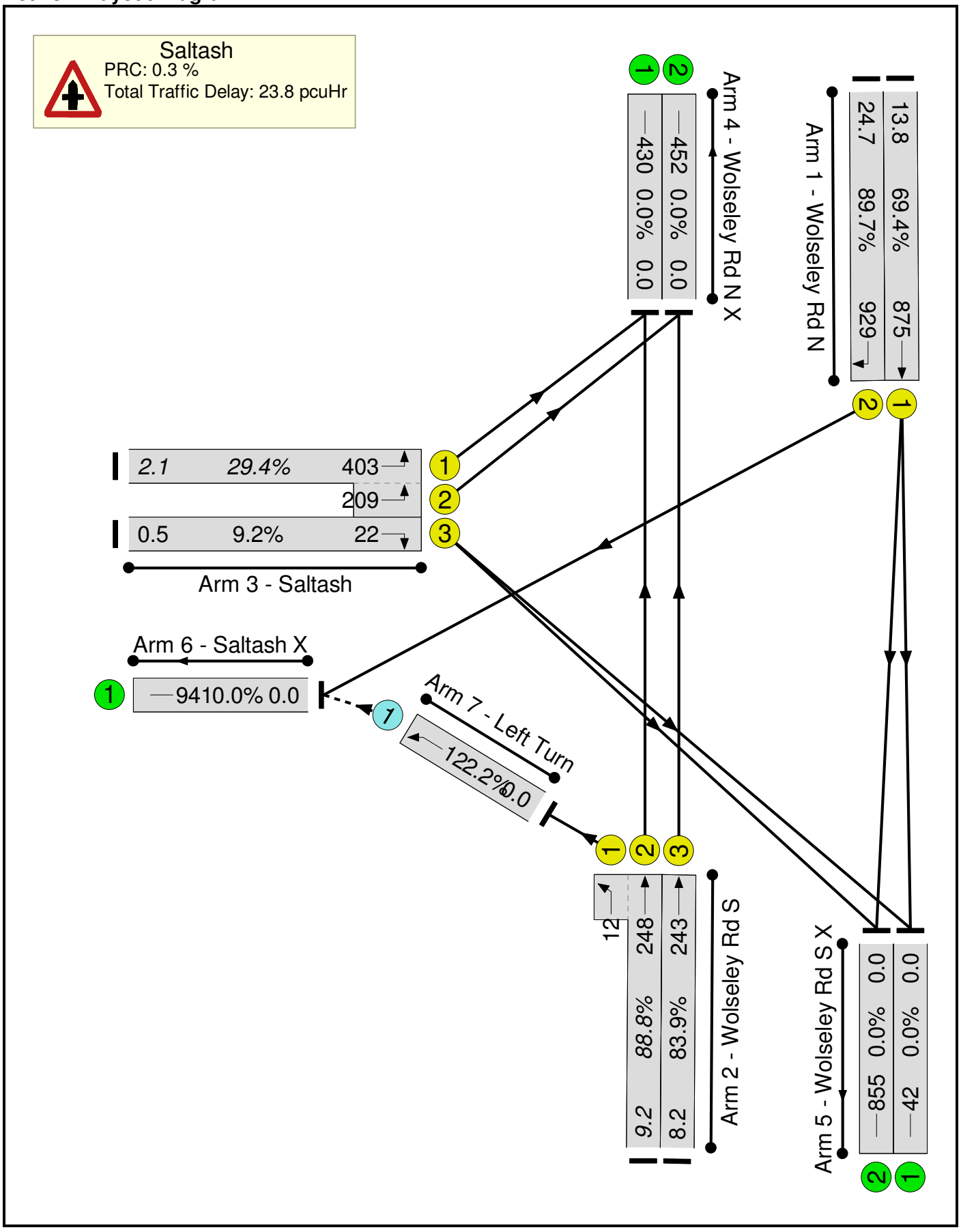
C1

PRC for Signalled Lanes (%): 1.9
PRC Over All Lanes (%): 1.9
Total Delay for Signalled Lanes (pcuHr): 27.08
Total Delay Over All Lanes(pcuHr): 27.09
Cycle Time (s): 68

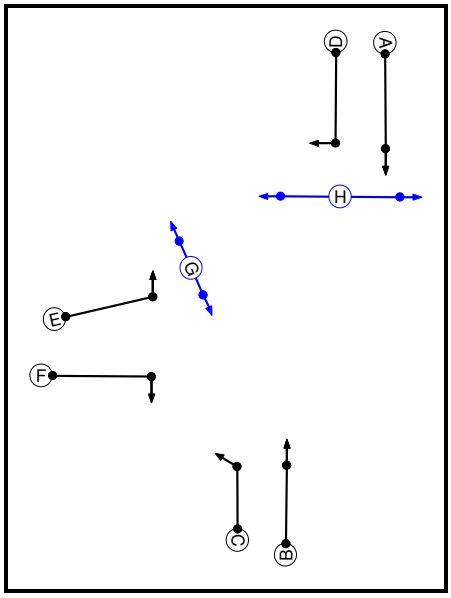
LINSIG Model Output

Scenario 1: '2014 AM Do Something MAX plus potential' (FG1: '2014 AM Do Something MAX plus potential', Plan 1: 'Network Control Plan 1')

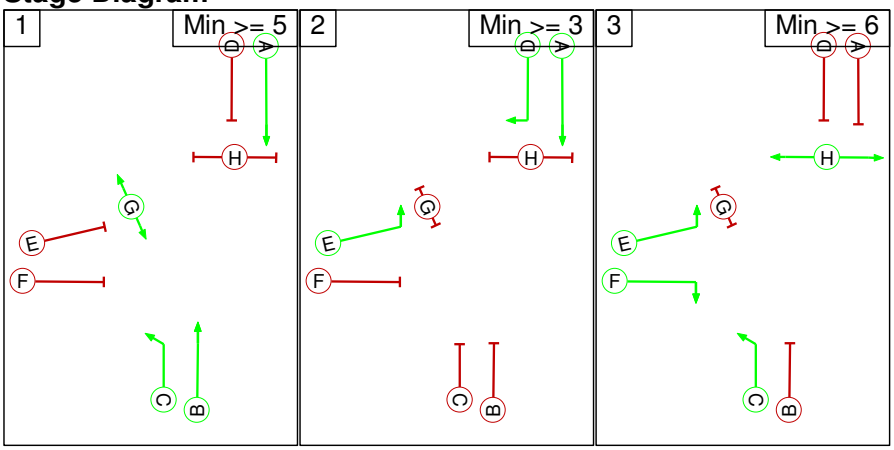
Network Layout Diagram



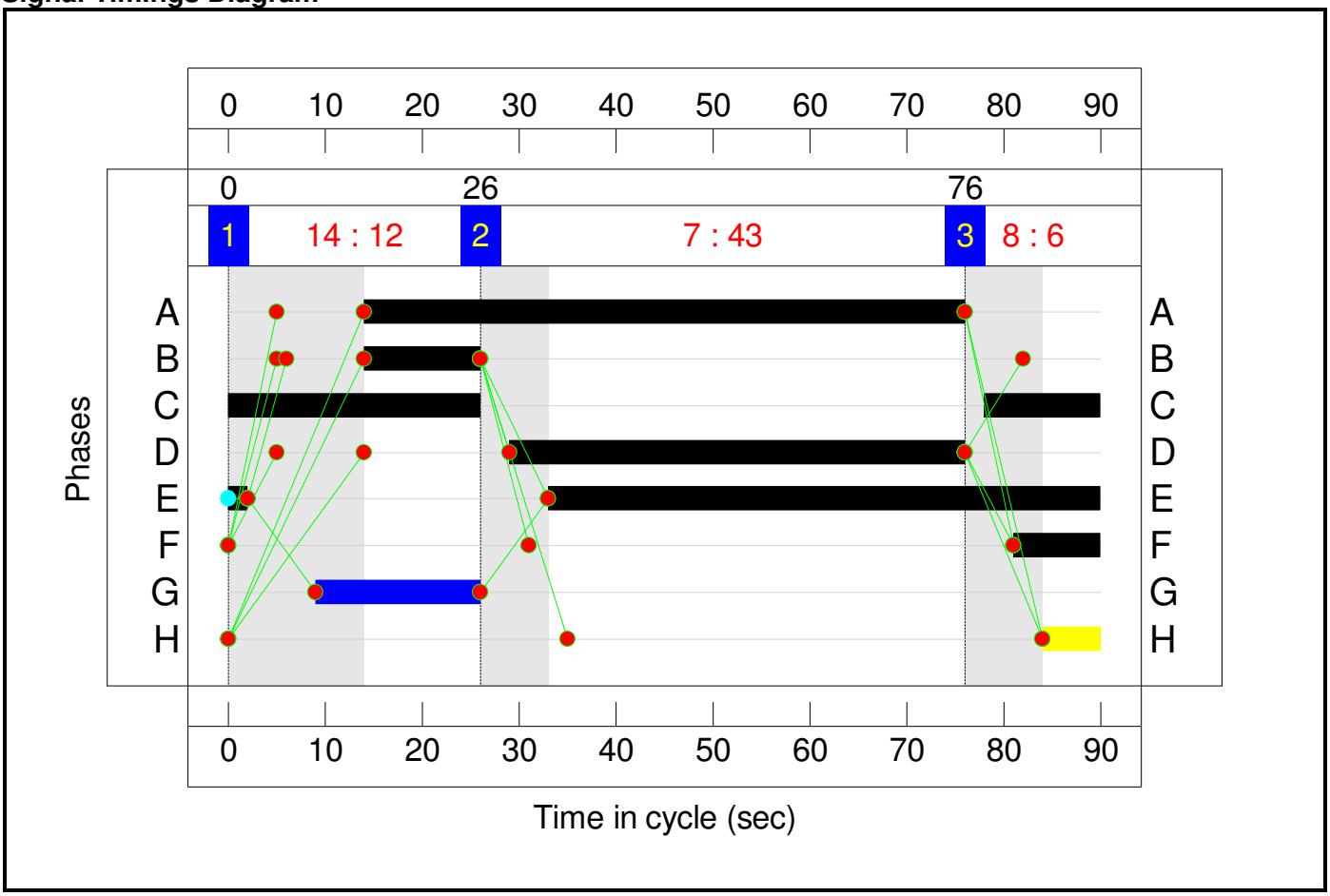
Phase Diagram



Stage Diagram



Signal Timings Diagram



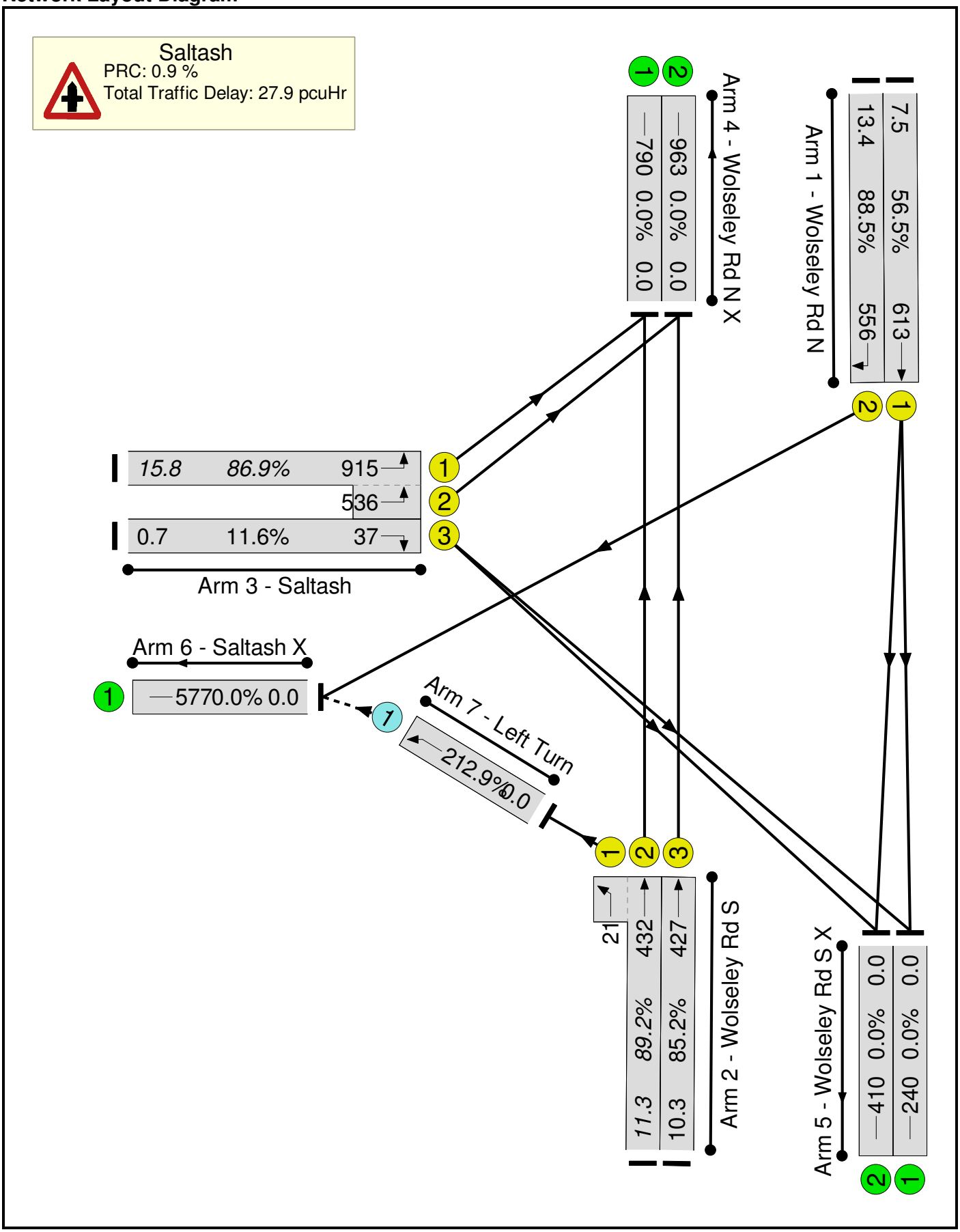
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.7%**	-
Saltash	-	-	-	-	-	**89.7%**	-
1/1	Wolseley Rd N Ahead	A	62	14	76	69.4%	13.8
1/2	Wolseley Rd N Right	D	47	29	76	89.7%	24.7
2/2+2/1	Wolseley Rd S Ahead Left	B C	12:38	14:78	26	88.8%	9.2
2/3	Wolseley Rd S Ahead	B	12	14	26	83.9%	8.2
3/1+3/2	Saltash Left	E	59	33	2	29.4%	2.1
3/3	Saltash Right	F	9	81	0	9.2%	0.5
7/1	Left Turn Ahead	-	-	-	-	2.2%	0.0

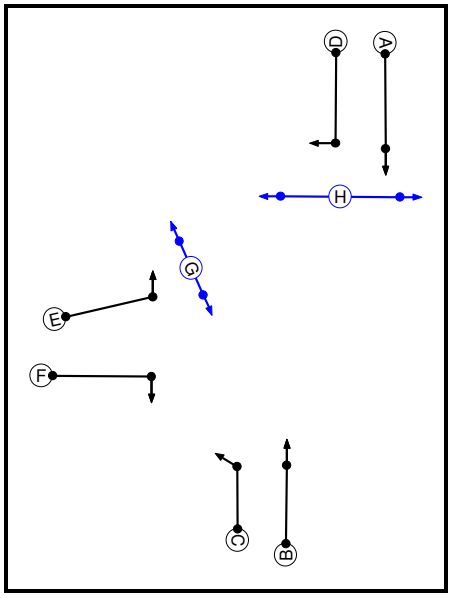
C1	PRC for Signalled Lanes (%):	0.3	Total Delay for Signalled Lanes (pcuHr):	23.82	
	PRC Over All Lanes (%):	0.3	Total Delay Over All Lanes(pcuHr):	23.83	Cycle Time (s): 90

Scenario 2: '2014 PM Do Something MAX plus potential' (FG2: '2014 PM Do Something MAX plus potential', Plan 1: 'Network Control Plan 1')

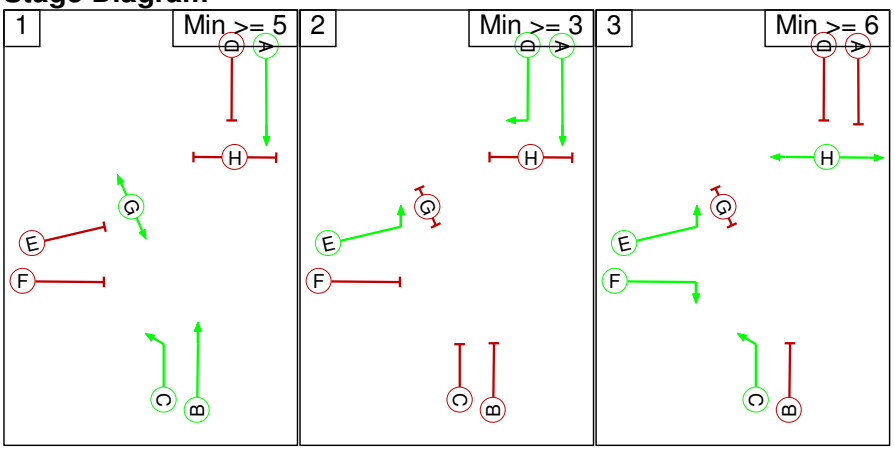
Network Layout Diagram



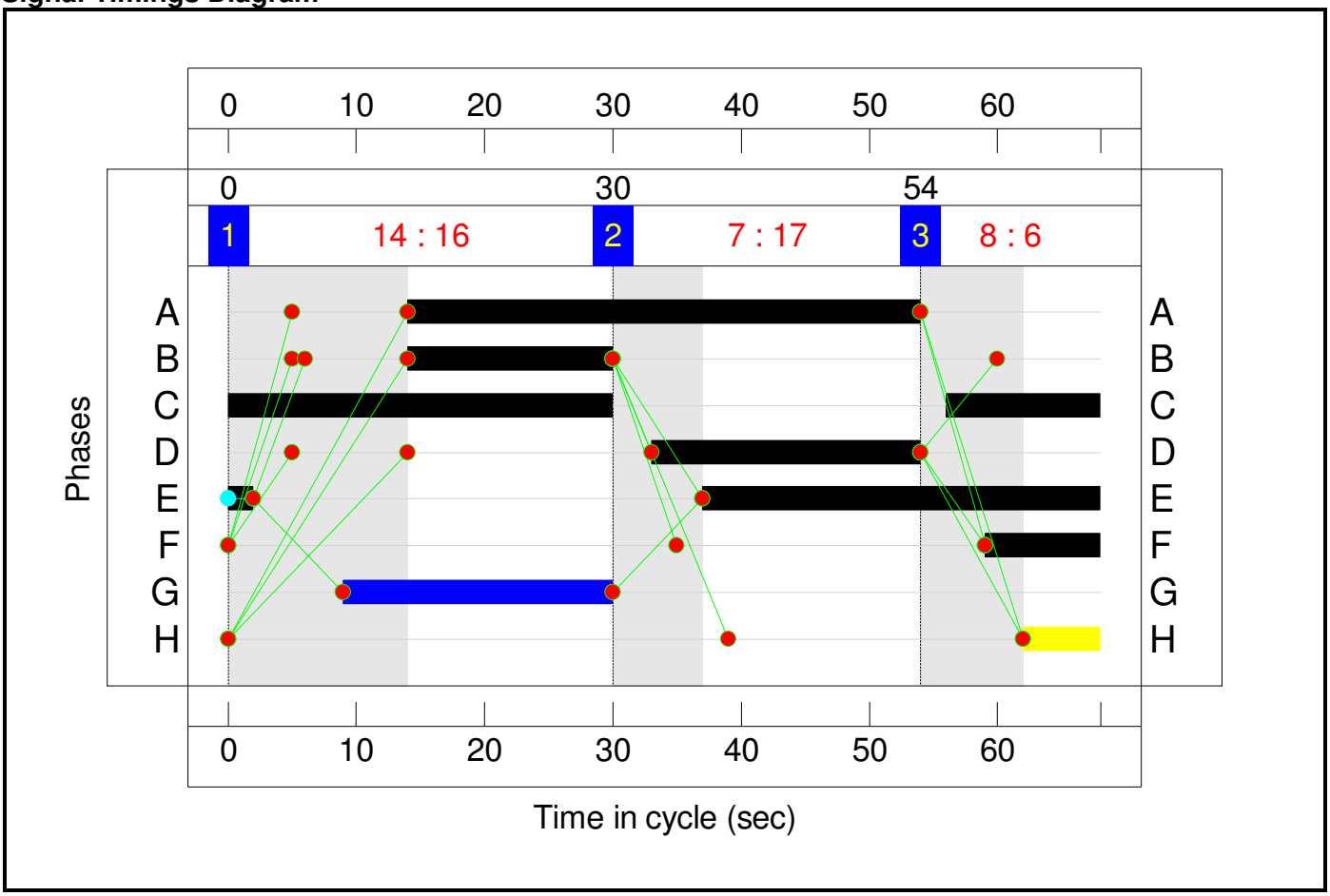
Phase Diagram



Stage Diagram



Signal Timings Diagram



Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.2%**	-
Saltash	-	-	-	-	-	**89.2%**	-
1/1	Wolseley Rd N Ahead	A	40	14	54	56.5%	7.5
1/2	Wolseley Rd N Right	D	21	33	54	88.5%	13.4
2/2+2/1	Wolseley Rd S Ahead Left	B C	16:42	14:56	30	89.2%	11.3
2/3	Wolseley Rd S Ahead	B	16	14	30	85.2%	10.3
3/1+3/2	Saltash Left	E	33	37	2	86.9%	15.8
3/3	Saltash Right	F	9	59	0	11.6%	0.7
7/1	Left Turn Ahead	-	-	-	-	2.9%	0.0

C1

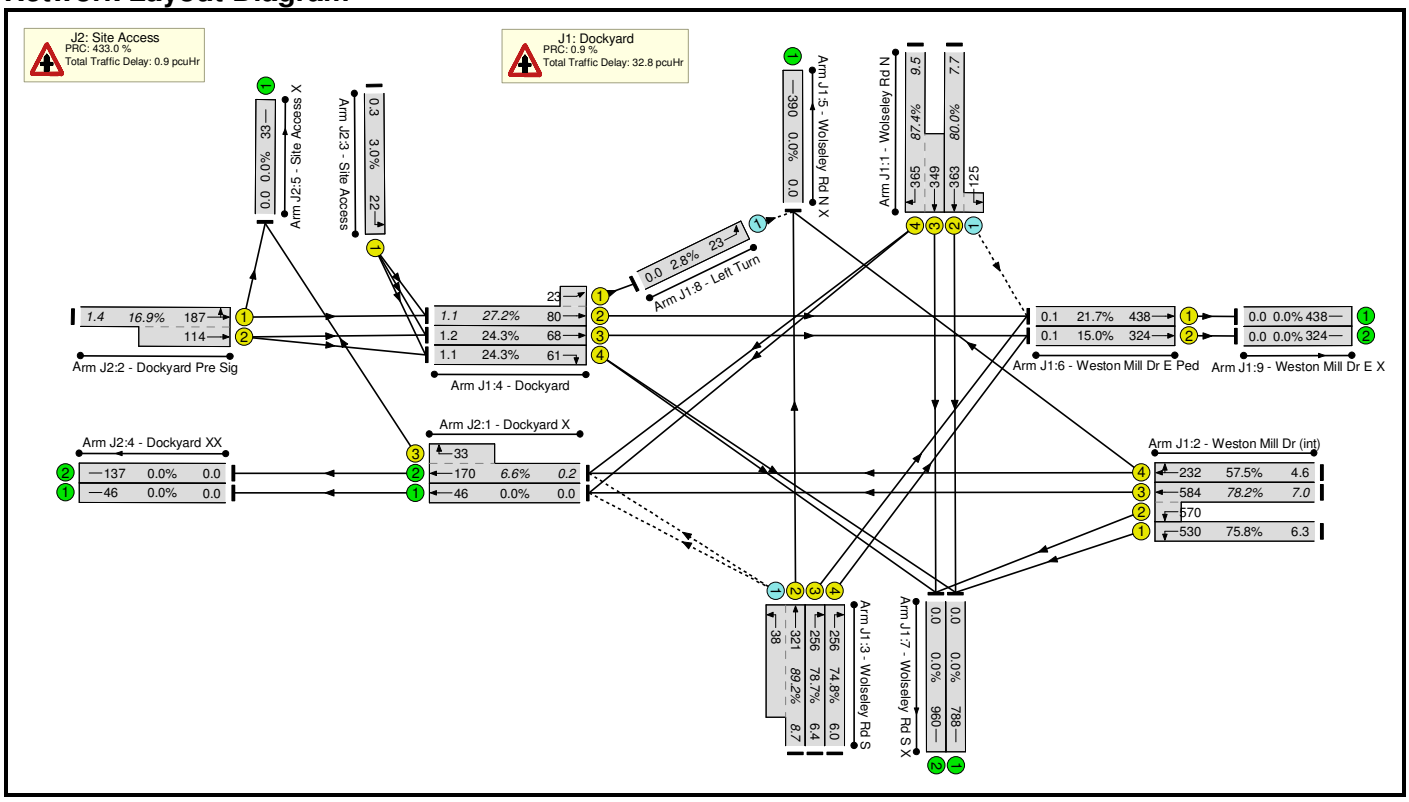
PRC for Signalled Lanes (%): 0.9
PRC Over All Lanes (%): 0.9
Total Delay for Signalled Lanes (pcuHr): 27.93
Total Delay Over All Lanes(pcuHr): 27.94
Cycle Time (s): 68

Wolseley Road / Weston Mill Drive / Site Access

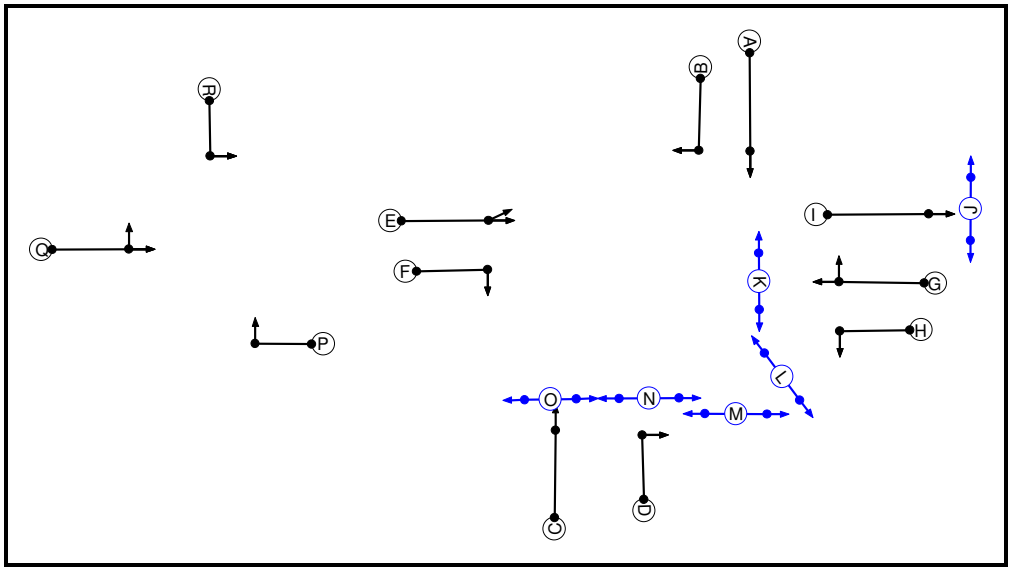
LINSIG Model Output

Scenario 1: '2014 AM Do Something' (FG1: '2014 AM Do Something', Plan 1: 'AM')

Network Layout Diagram

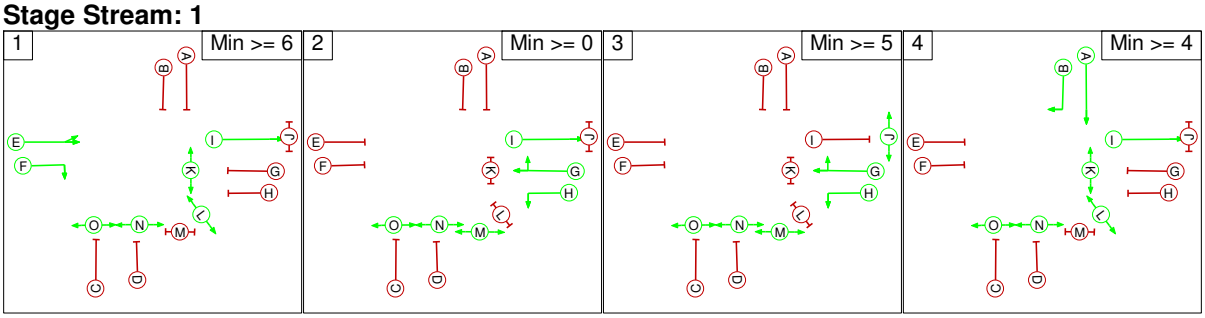


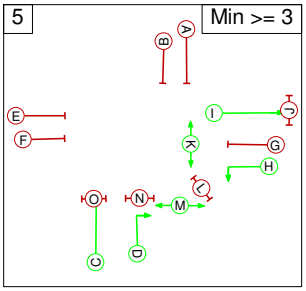
Phase Diagram



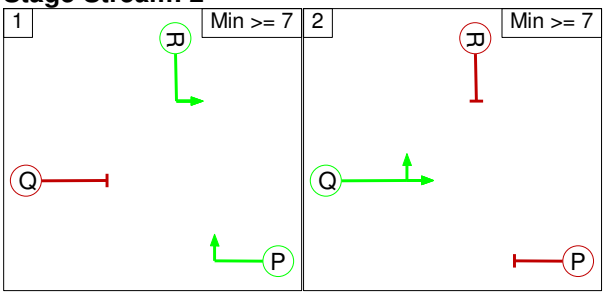
Stage Diagram

Stage Stream: 1

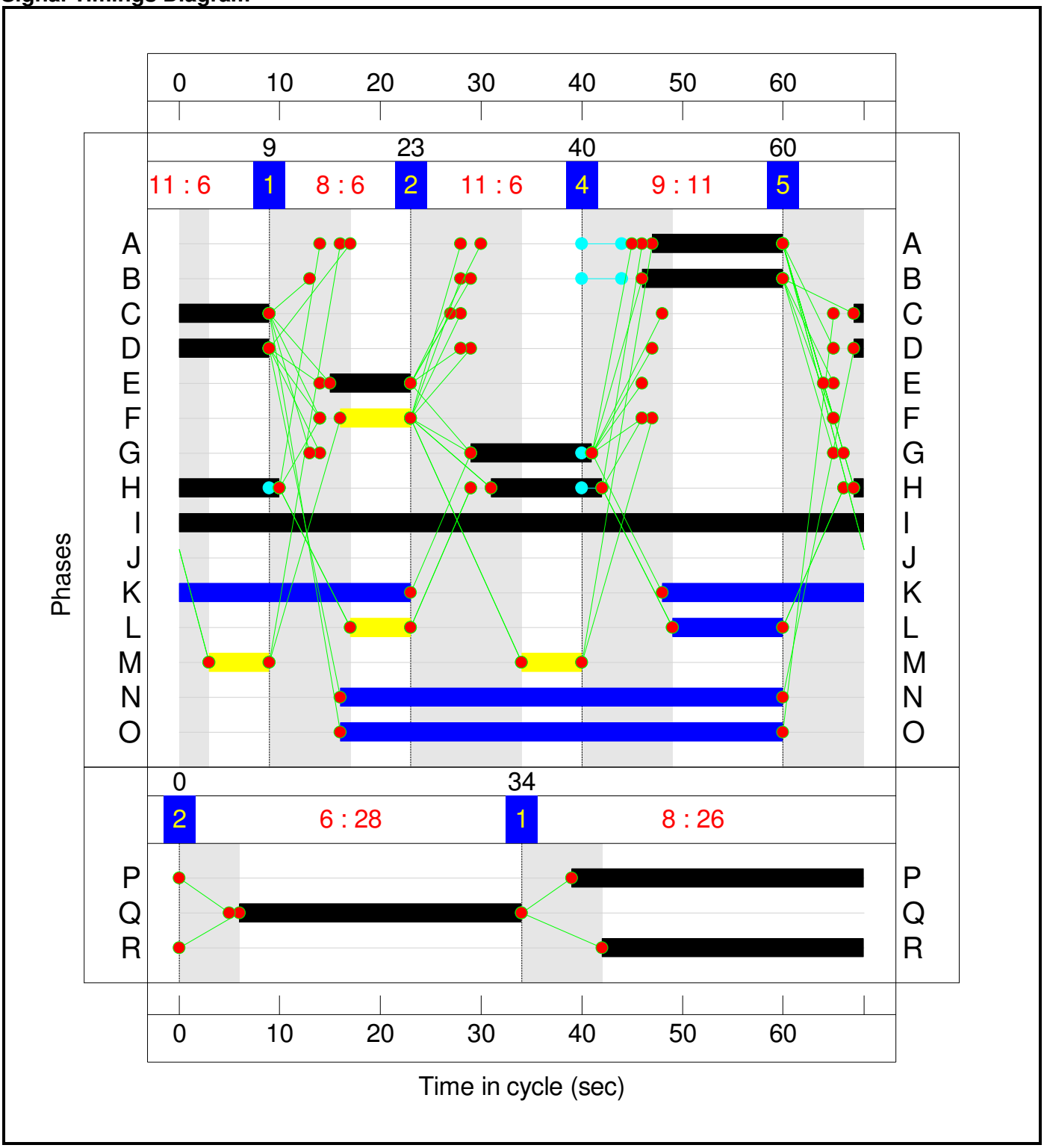




Stage Stream: 2



Signal Timings Diagram



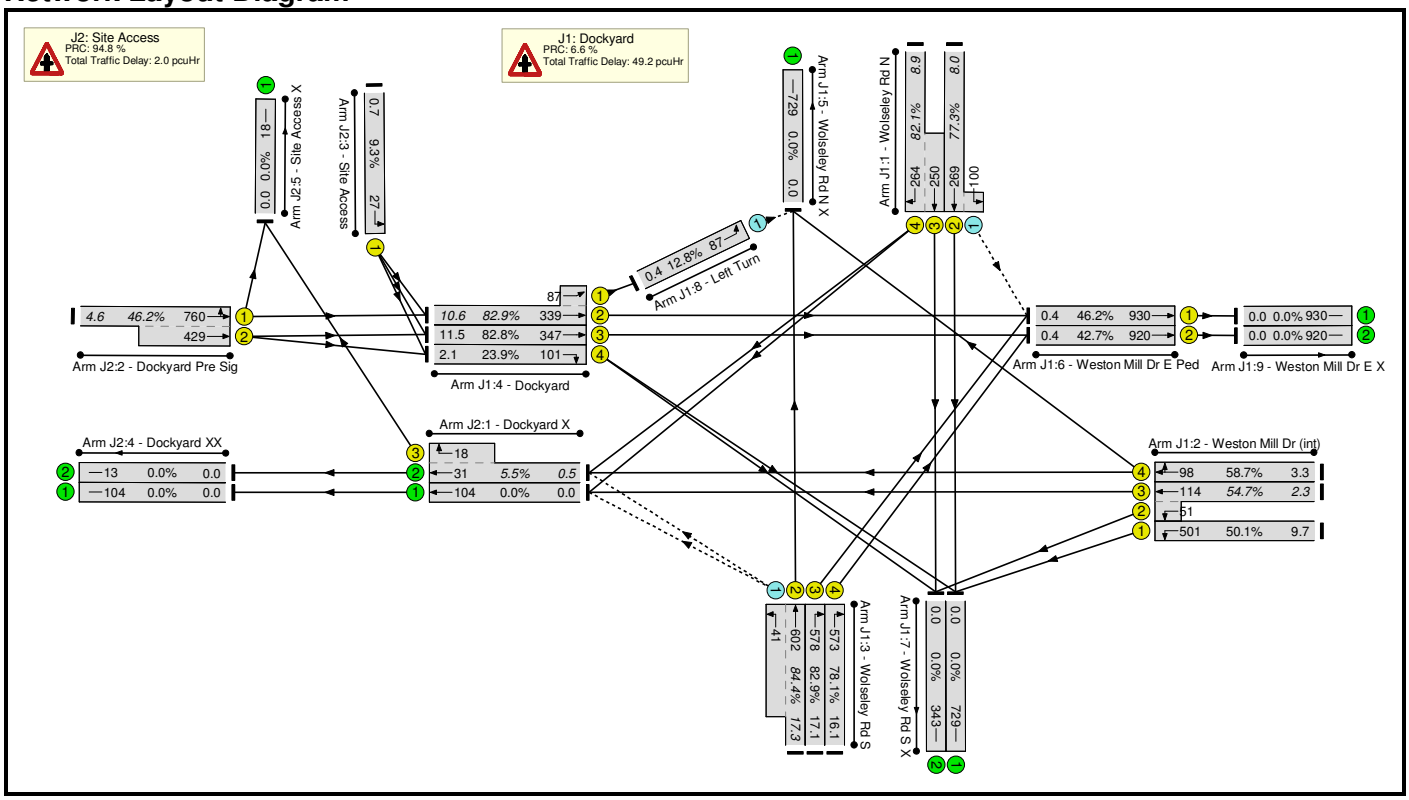
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.2%**	-
J1: Dockyard	-	-	-	-	-	**89.2%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	13	47	60	80.0%	7.7
1/4+1/3	Wolseley Rd N Ahead Right	B A	14:13	46:47	60	87.4%	9.5
2/1	Weston Mill Dr (int) Left	H	22	31	42	75.8%	6.3
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	12:22	29:31	41:42	78.2%	7.0
2/4	Weston Mill Dr (int) Right Ahead	G	12	29	41	57.5%	4.6
3/2+3/1	Wolseley Rd S Ahead Left	C -	10	67	9	89.2%	8.7
3/3	Wolseley Rd S Right	D	10	67	9	78.7%	6.4
3/4	Wolseley Rd S Right	D	10	67	9	74.8%	6.0
4/2+4/1	Dockyard Ahead Ahead2	E	8	15	23	27.2%	1.1
4/3	Dockyard Ahead	E	8	15	23	24.3%	1.2
4/4	Dockyard Right	F	7	16	23	24.3%	1.1
6/1	Weston Mill Dr E Ped Ahead	I	68	0	68	21.7%	0.1
6/2	Weston Mill Dr E Ped Ahead	I	68	0	68	15.0%	0.1
8/1	Left Turn Left	-	-	-	-	2.8%	0.0
J2: Site Access	-	-	-	-	-	**16.9%**	-
2/1+2/2	Dockyard Pre Sig Ahead Left	Q	28	6	34	16.9%	1.4
3/1	Site Access Left	R	26	42	0	3.0%	0.3

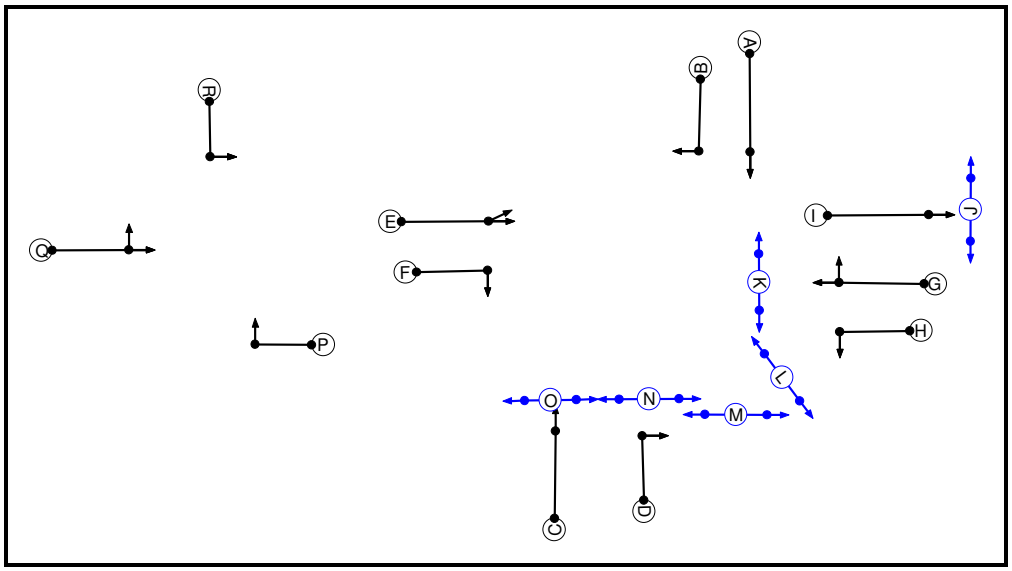
C1	Stream: 1 PRC for Signalled Lanes (%):	0.9	Total Delay for Signalled Lanes (pcuHr):	32.82	
C1	Stream: 2 PRC for Signalled Lanes (%):	433.0	Total Delay for Signalled Lanes (pcuHr):	0.81	
	PRC Over All Lanes (%):	0.9	Total Delay Over All Lanes(pcuHr):	33.71	Cycle Time (s): 68

Scenario 2: '2014 PM Do Something' (FG2: '2014 PM Do Something', Plan 2: 'PM')

Network Layout Diagram

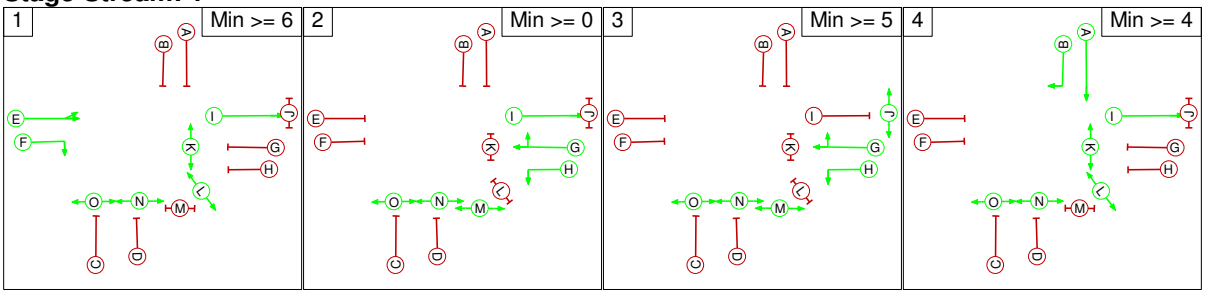


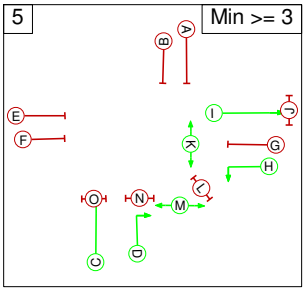
Phase Diagram



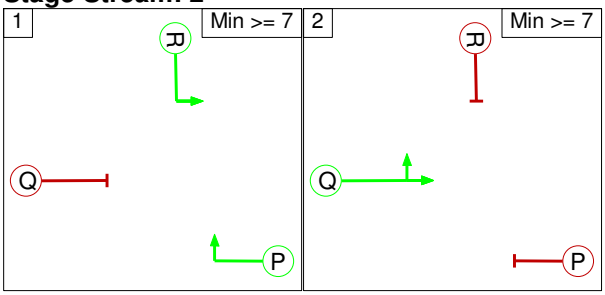
Stage Diagram

Stage Stream: 1

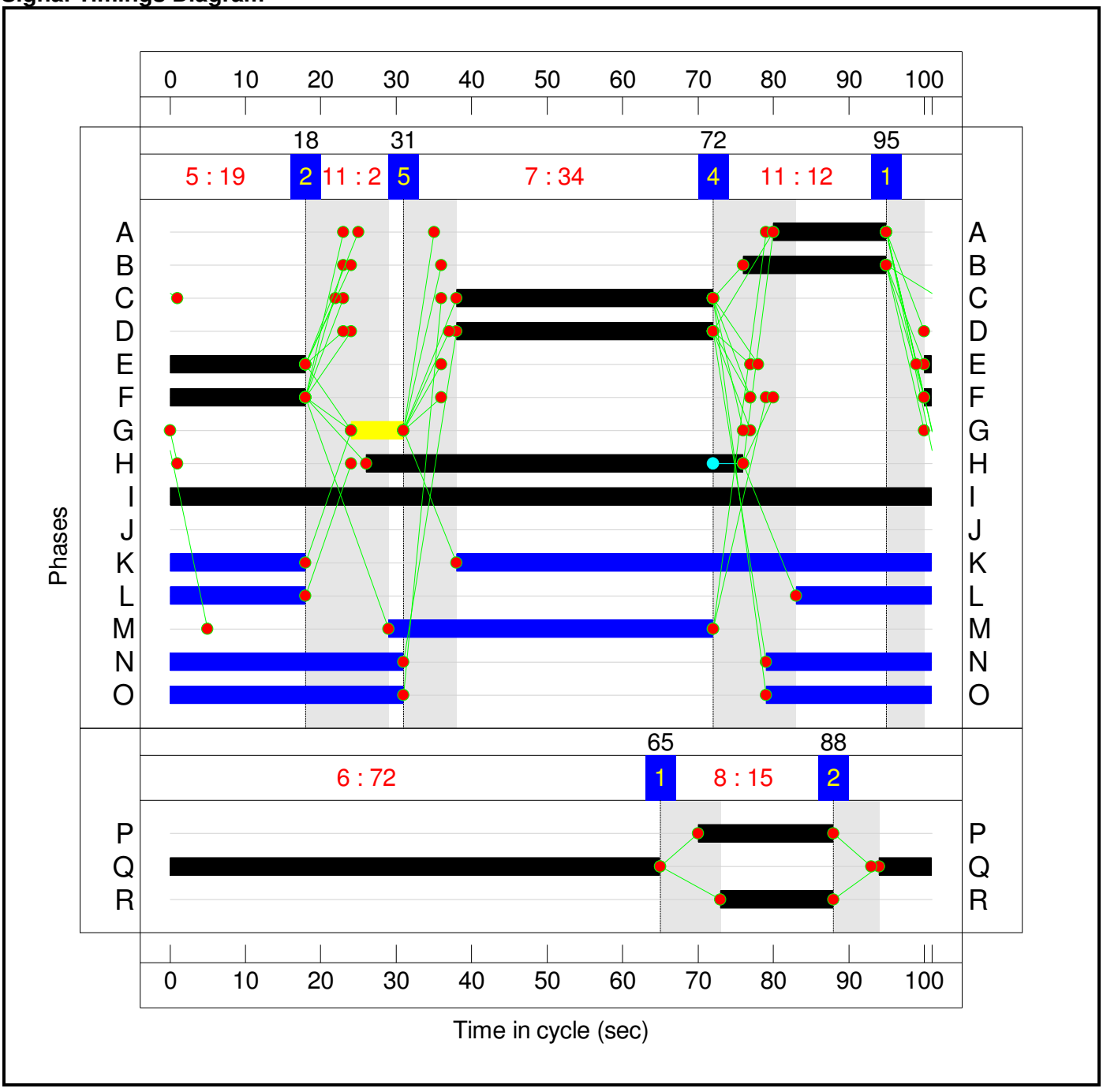




Stage Stream: 2



Signal Timings Diagram



Network Results

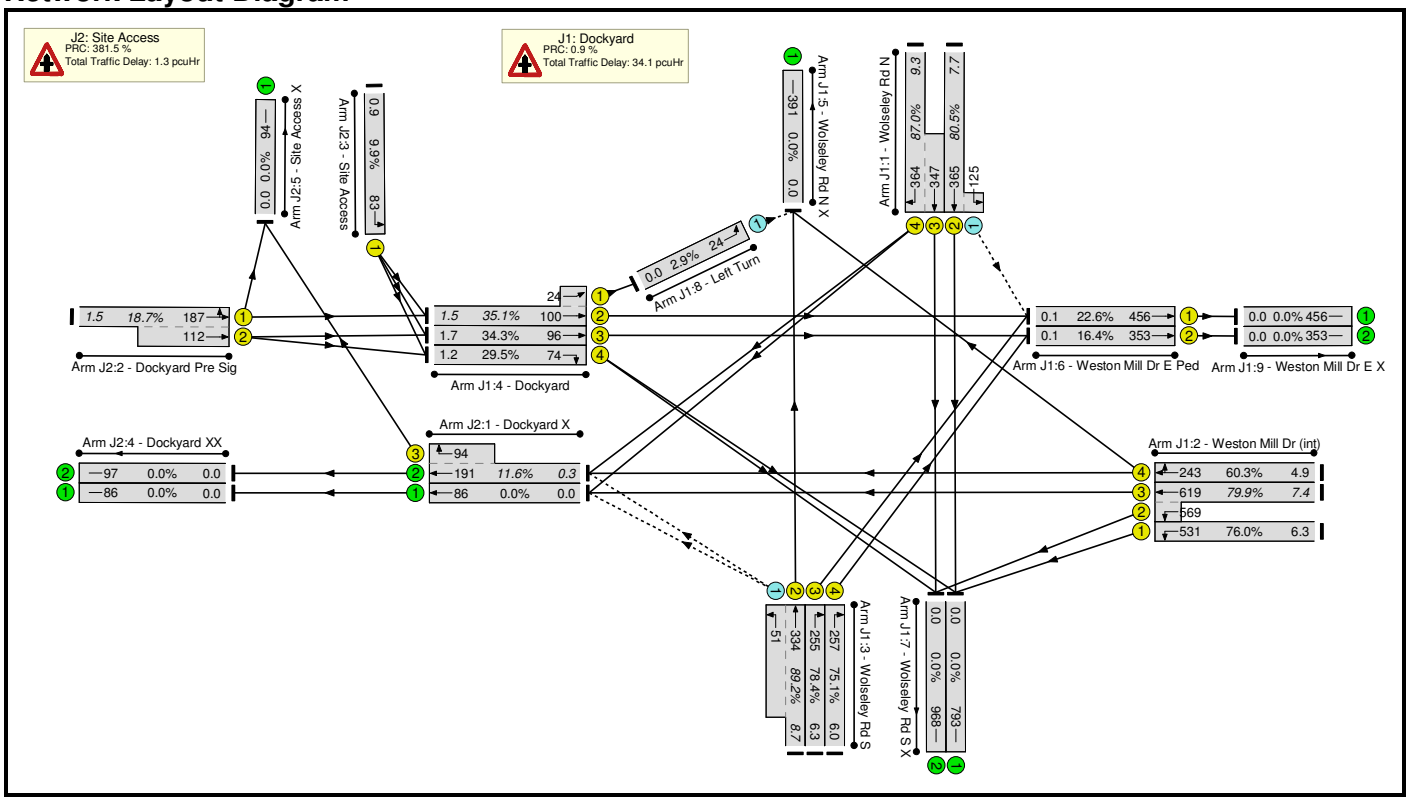
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**84.4%**	-
J1: Dockyard	-	-	-	-	-	**84.4%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	15	80	95	77.3%	8.0
1/4+1/3	Wolseley Rd N Ahead Right	B A	19:15	76:80	95	82.1%	8.9
2/1	Weston Mill Dr (int) Left	H	50	26	76	50.1%	9.7
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	7:50	24:26	31:76	54.7%	2.3
2/4	Weston Mill Dr (int) Right Ahead	G	7	24	31	58.7%	3.3
3/2+3/1	Wolseley Rd S Ahead Left	C -	34	38	72	84.4%	17.3
3/3	Wolseley Rd S Right	D	34	38	72	82.9%	17.1
3/4	Wolseley Rd S Right	D	34	38	72	78.1%	16.1
4/2+4/1	Dockyard Ahead Ahead2	E	19	100	18	82.9%	10.6
4/3	Dockyard Ahead	E	19	100	18	82.8%	11.5
4/4	Dockyard Right	F	19	100	18	23.9%	2.1
6/1	Weston Mill Dr E Ped Ahead	I	101	0	101	46.2%	0.4
6/2	Weston Mill Dr E Ped Ahead	I	101	0	101	42.7%	0.4
8/1	Left Turn Left	-	-	-	-	12.8%	0.4
J2: Site Access	-	-	-	-	-	**46.2%**	-
2/1+2/2	Dockyard Pre Sig Ahead Left	Q	72	94	65	46.2%	4.6
3/1	Site Access Left	R	15	73	88	9.3%	0.7

C1	Stream: 1 PRC for Signalled Lanes (%):	6.6	Total Delay for Signalled Lanes (pcuHr):	49.14	
C1	Stream: 2 PRC for Signalled Lanes (%):	94.8	Total Delay for Signalled Lanes (pcuHr):	1.77	
	PRC Over All Lanes (%):	6.6	Total Delay Over All Lanes(pcuHr):	51.19	Cycle Time (s): 101

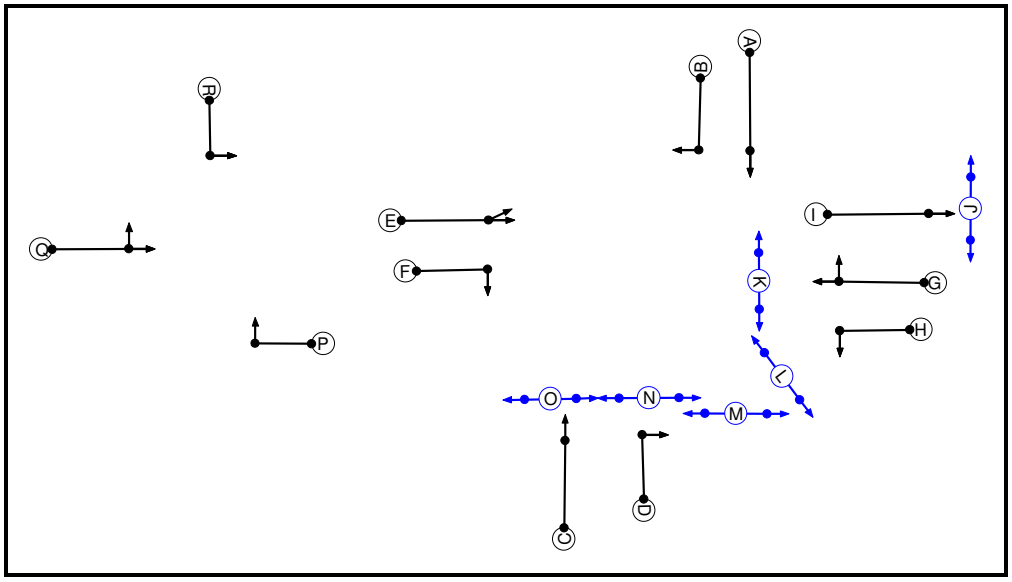
LINSIG Model Output

Scenario 1: '2014 AM Do Something MAX' (FG1: '2014 AM Do Something MAX', Plan 1: 'AM')

Network Layout Diagram

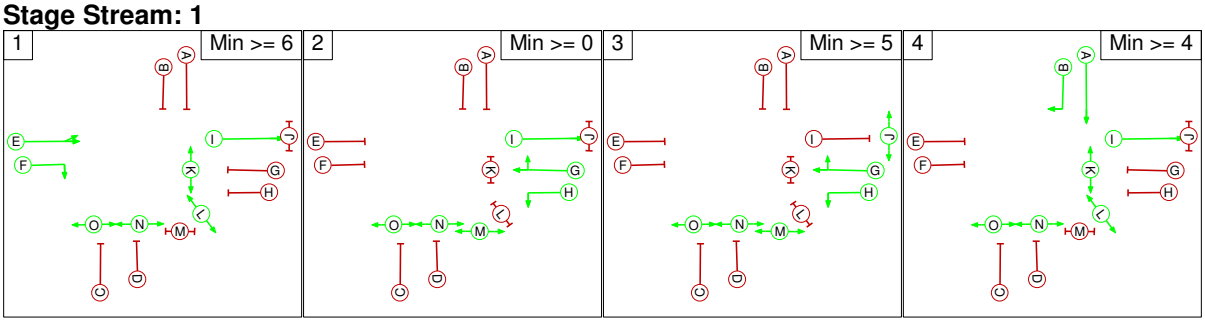


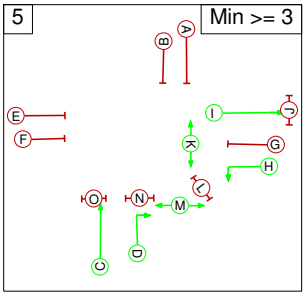
Phase Diagram



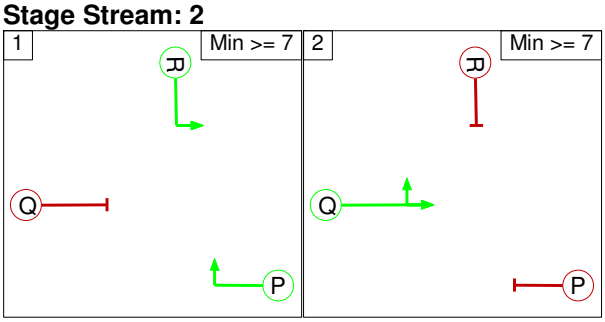
Stage Diagram

Stage Stream: 1

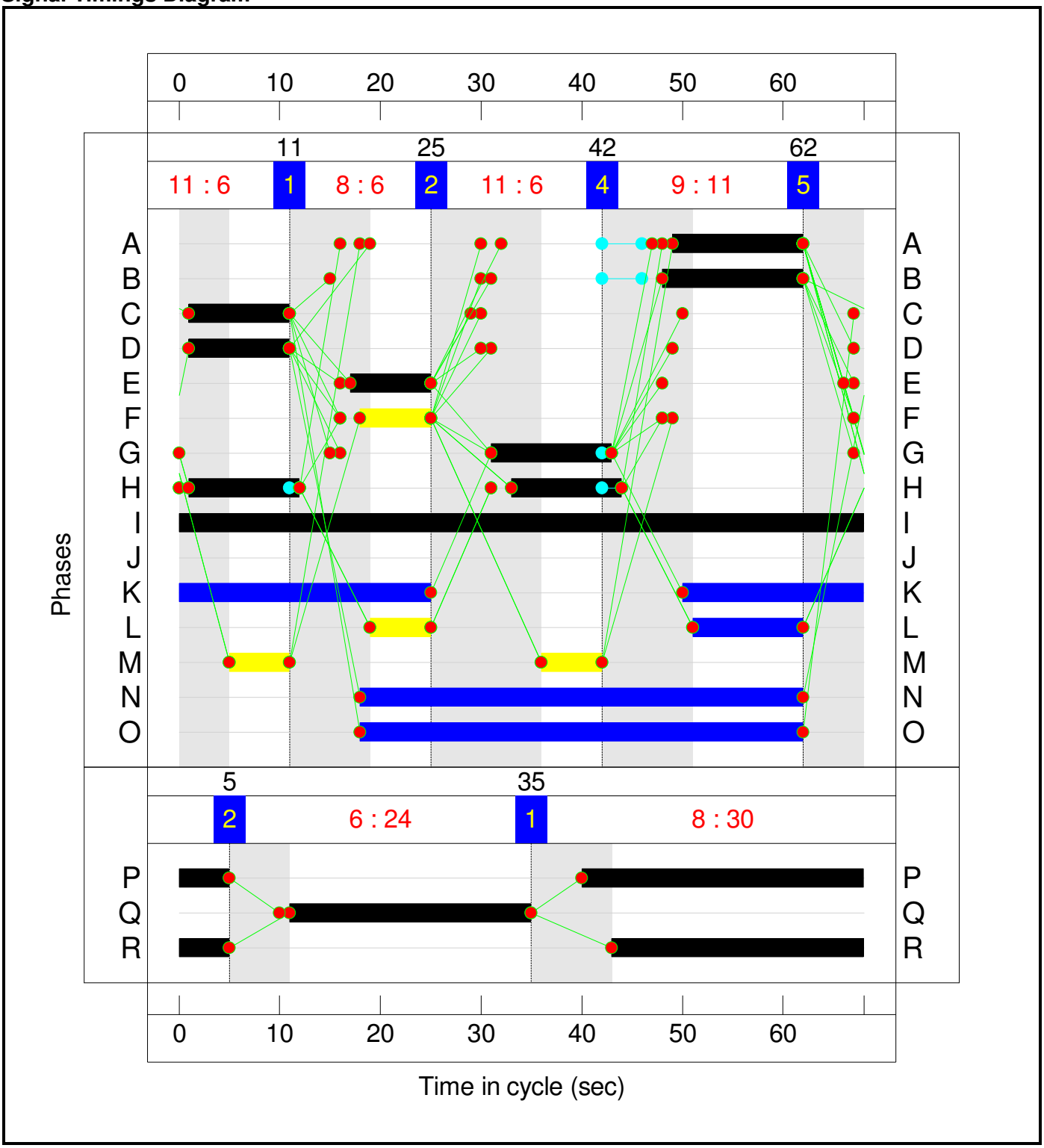




Stage Stream: 2



Signal Timings Diagram



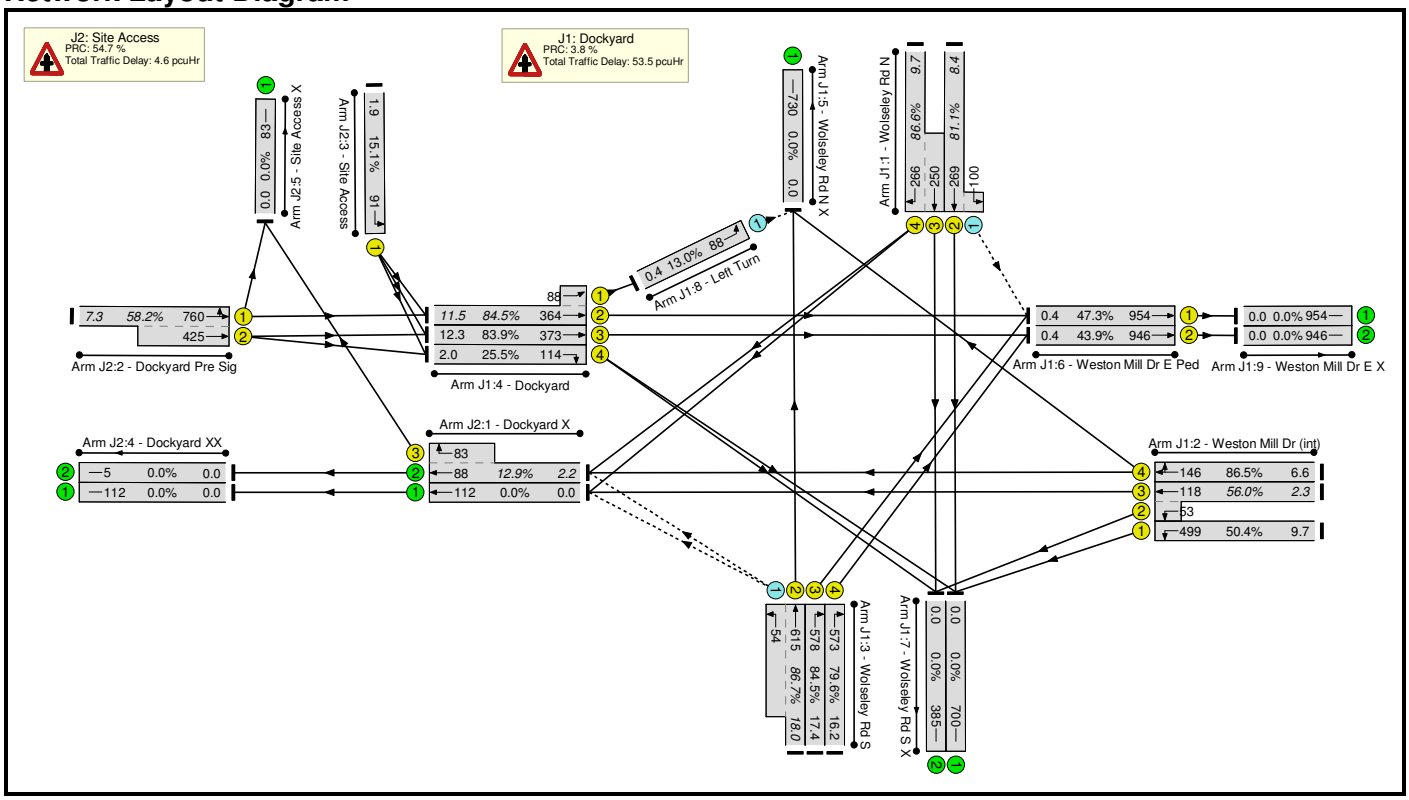
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.2%**	-
J1: Dockyard	-	-	-	-	-	**89.2%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	13	49	62	80.5%	7.7
1/4+1/3	Wolseley Rd N Ahead Right	B A	14:13	48:49	62	87.0%	9.3
2/1	Weston Mill Dr (int) Left	H	22	33	44	76.0%	6.3
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	12:22	31:33	43:44	79.9%	7.4
2/4	Weston Mill Dr (int) Right Ahead	G	12	31	43	60.3%	4.9
3/2+3/1	Wolseley Rd S Ahead Left	C -	10	1	11	89.2%	8.7
3/3	Wolseley Rd S Right	D	10	1	11	78.4%	6.3
3/4	Wolseley Rd S Right	D	10	1	11	75.1%	6.0
4/2+4/1	Dockyard Ahead Ahead2	E	8	17	25	35.1%	1.5
4/3	Dockyard Ahead	E	8	17	25	34.3%	1.7
4/4	Dockyard Right	F	7	18	25	29.5%	1.2
6/1	Weston Mill Dr E Ped Ahead	I	68	0	68	22.6%	0.1
6/2	Weston Mill Dr E Ped Ahead	I	68	0	68	16.4%	0.1
8/1	Left Turn Left	-	-	-	-	2.9%	0.0
J2: Site Access	-	-	-	-	-	**18.7%**	-
2/1+2/2	Dockyard Pre Sig Ahead Left	Q	24	11	35	18.7%	1.5
3/1	Site Access Left	R	30	43	5	9.9%	0.9

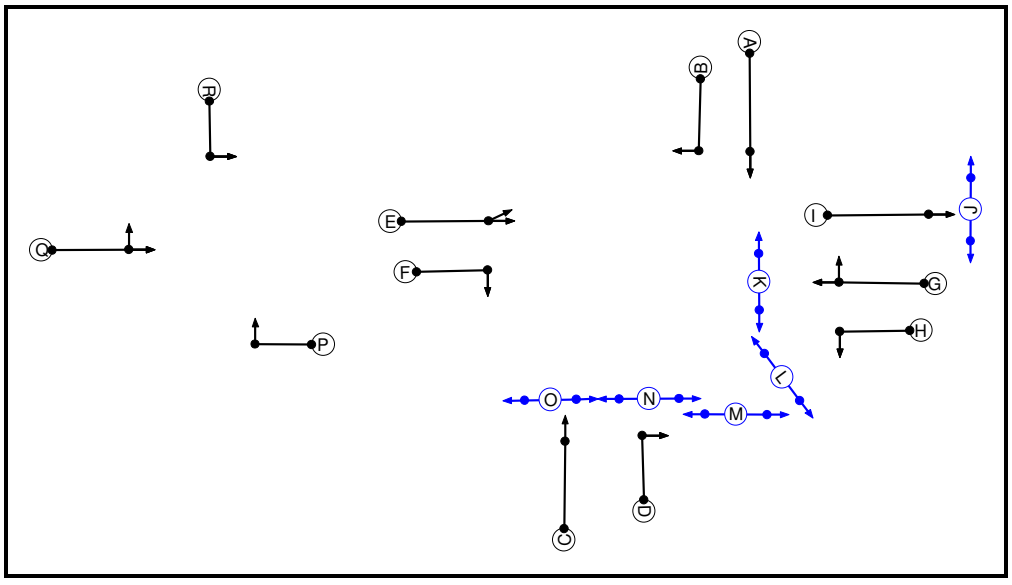
C1	Stream: 1 PRC for Signalled Lanes (%):	0.9	Total Delay for Signalled Lanes (pcuHr):	34.06	
C1	Stream: 2 PRC for Signalled Lanes (%):	381.5	Total Delay for Signalled Lanes (pcuHr):	1.16	
	PRC Over All Lanes (%):	0.9	Total Delay Over All Lanes(pcuHr):	35.35	Cycle Time (s): 68

Scenario 2: '2014 PM Do Something MAX' (FG2: '2014 PM Do Something MAX', Plan 2: 'PM')

Network Layout Diagram

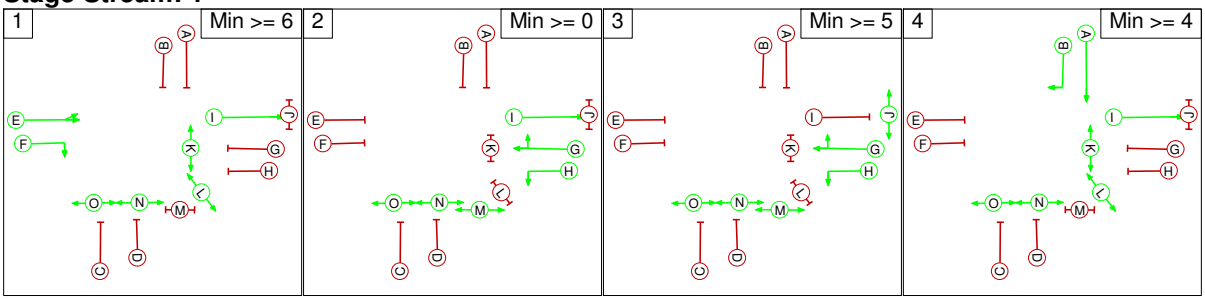


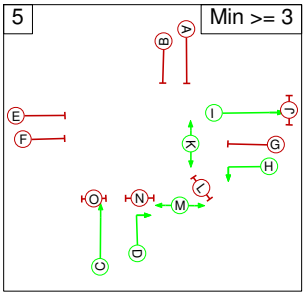
Phase Diagram



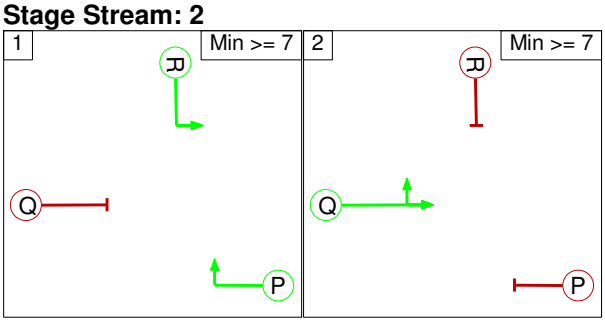
Stage Diagram

Stage Stream: 1

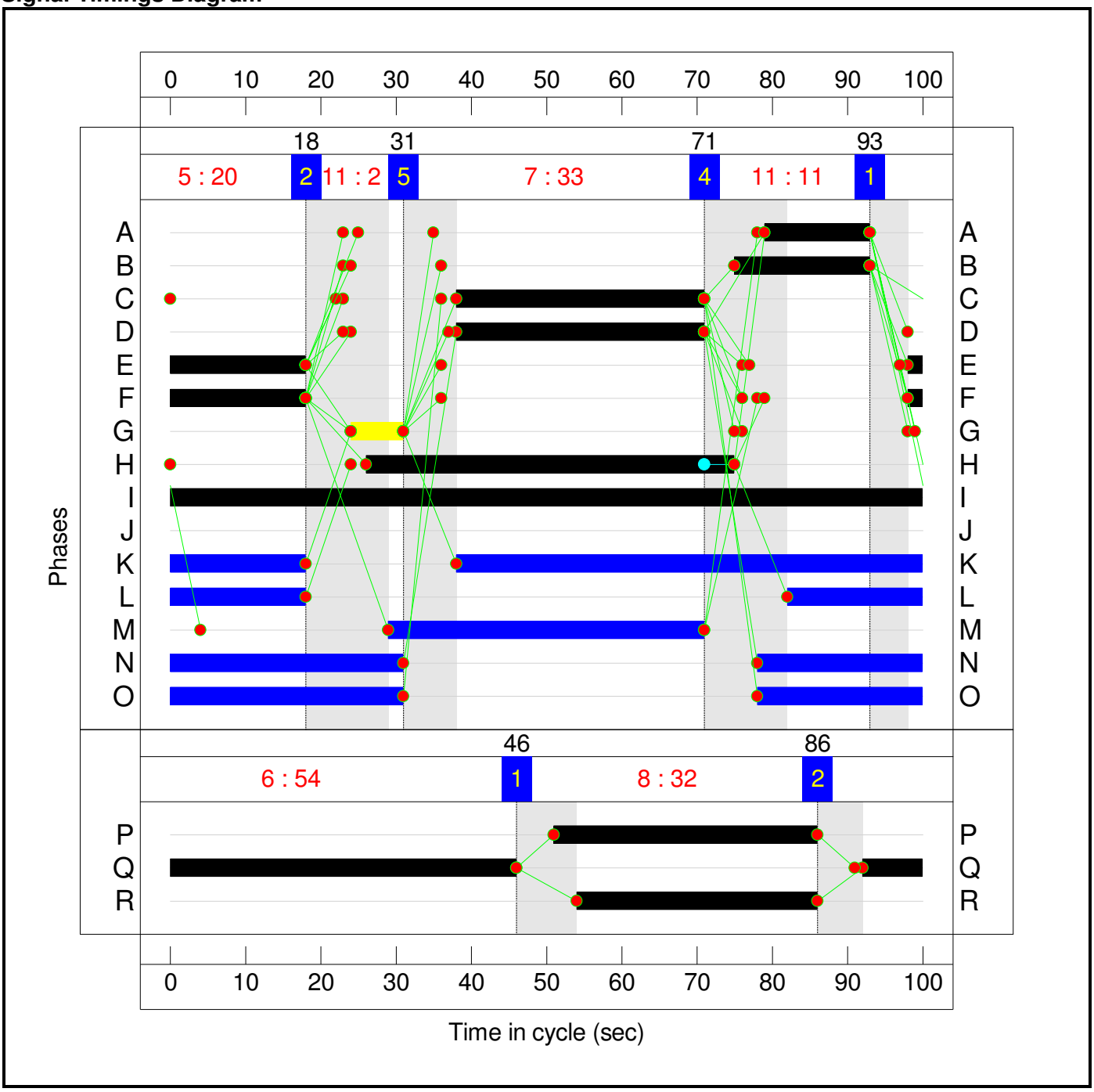




Stage Stream: 2



Signal Timings Diagram



Network Results

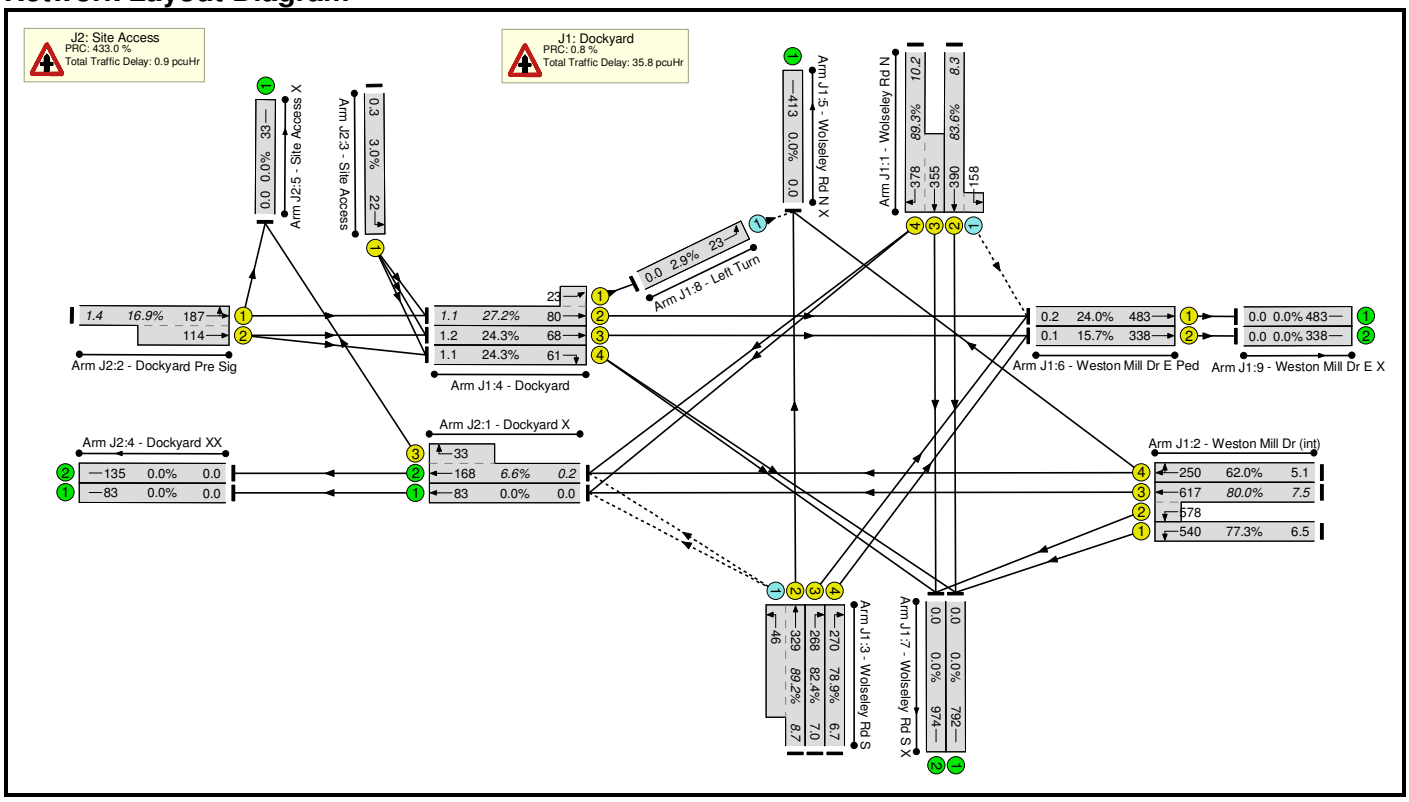
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**86.7%**	-
J1: Dockyard	-	-	-	-	-	**86.7%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	14	79	93	81.1%	8.4
1/4+1/3	Wolseley Rd N Ahead Right	B A	18:14	75:79	93	86.6%	9.7
2/1	Weston Mill Dr (int) Left	H	49	26	75	50.4%	9.7
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	7:49	24:26	31:75	56.0%	2.3
2/4	Weston Mill Dr (int) Right Ahead	G	7	24	31	86.5%	6.6
3/2+3/1	Wolseley Rd S Ahead Left	C -	33	38	71	86.7%	18.0
3/3	Wolseley Rd S Right	D	33	38	71	84.5%	17.4
3/4	Wolseley Rd S Right	D	33	38	71	79.6%	16.2
4/2+4/1	Dockyard Ahead Ahead2	E	20	98	18	84.5%	11.5
4/3	Dockyard Ahead	E	20	98	18	83.9%	12.3
4/4	Dockyard Right	F	20	98	18	25.5%	2.0
6/1	Weston Mill Dr E Ped Ahead	I	100	0	100	47.3%	0.4
6/2	Weston Mill Dr E Ped Ahead	I	100	0	100	43.9%	0.4
8/1	Left Turn Left	-	-	-	-	13.0%	0.4
J2: Site Access	-	-	-	-	-	**58.2%**	-
2/1+2/2	Dockyard Pre Sig Ahead Left	Q	54	92	46	58.2%	7.3
3/1	Site Access Left	R	32	54	86	15.1%	1.9

C1	Stream: 1 PRC for Signalled Lanes (%):	3.8	Total Delay for Signalled Lanes (pcuHr):	53.42	
C1	Stream: 2 PRC for Signalled Lanes (%):	54.7	Total Delay for Signalled Lanes (pcuHr):	4.03	
	PRC Over All Lanes (%):	3.8	Total Delay Over All Lanes(pcuHr):	58.05	Cycle Time (s): 100

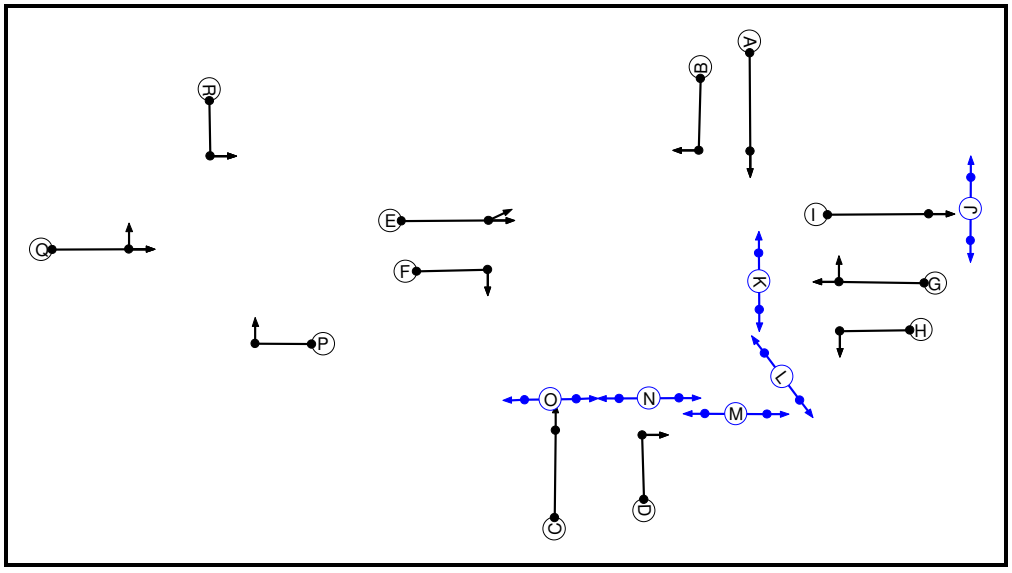
LINSIG Model Output

Scenario 1: '2014 AM Do Something' (FG1: '2014 AM Do Something', Plan 1: 'AM')

Network Layout Diagram

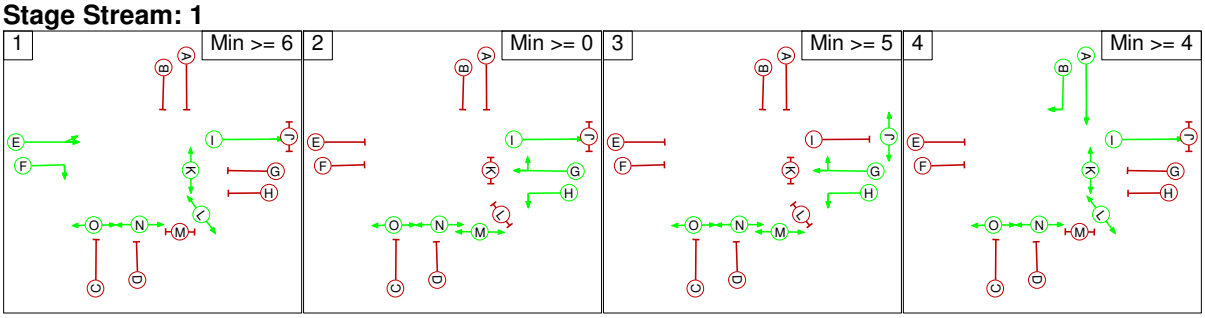


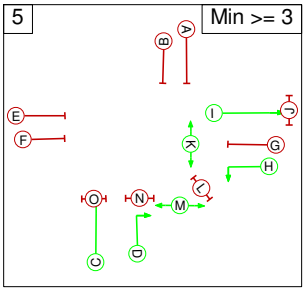
Phase Diagram



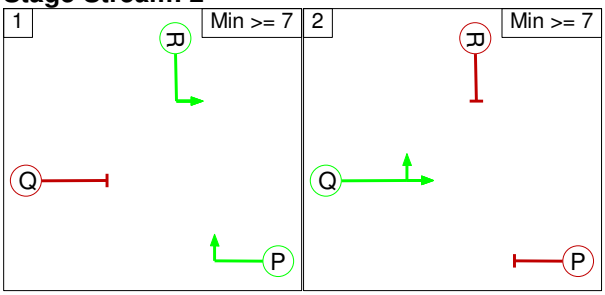
Stage Diagram

Stage Stream: 1

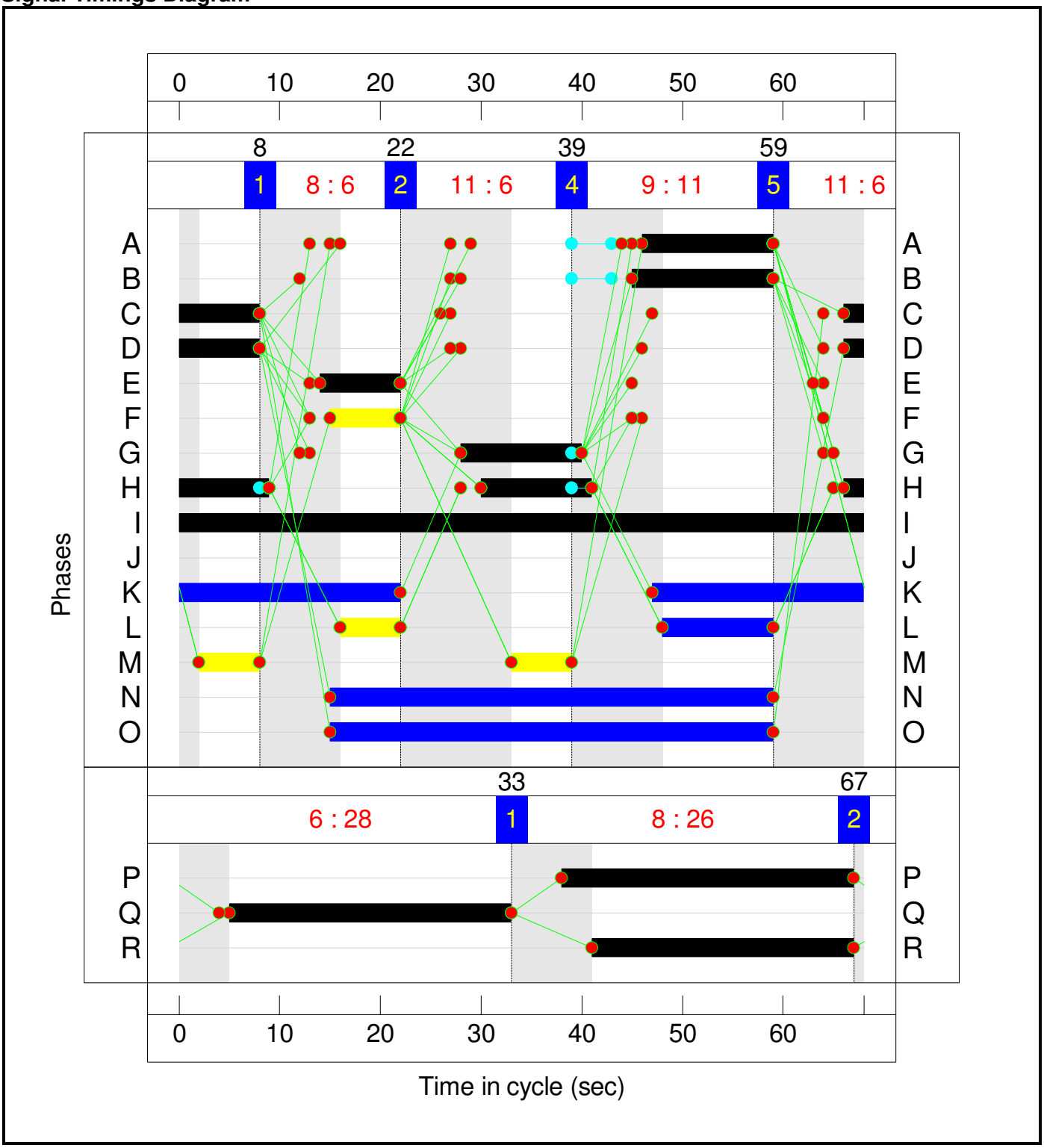




Stage Stream: 2



Signal Timings Diagram



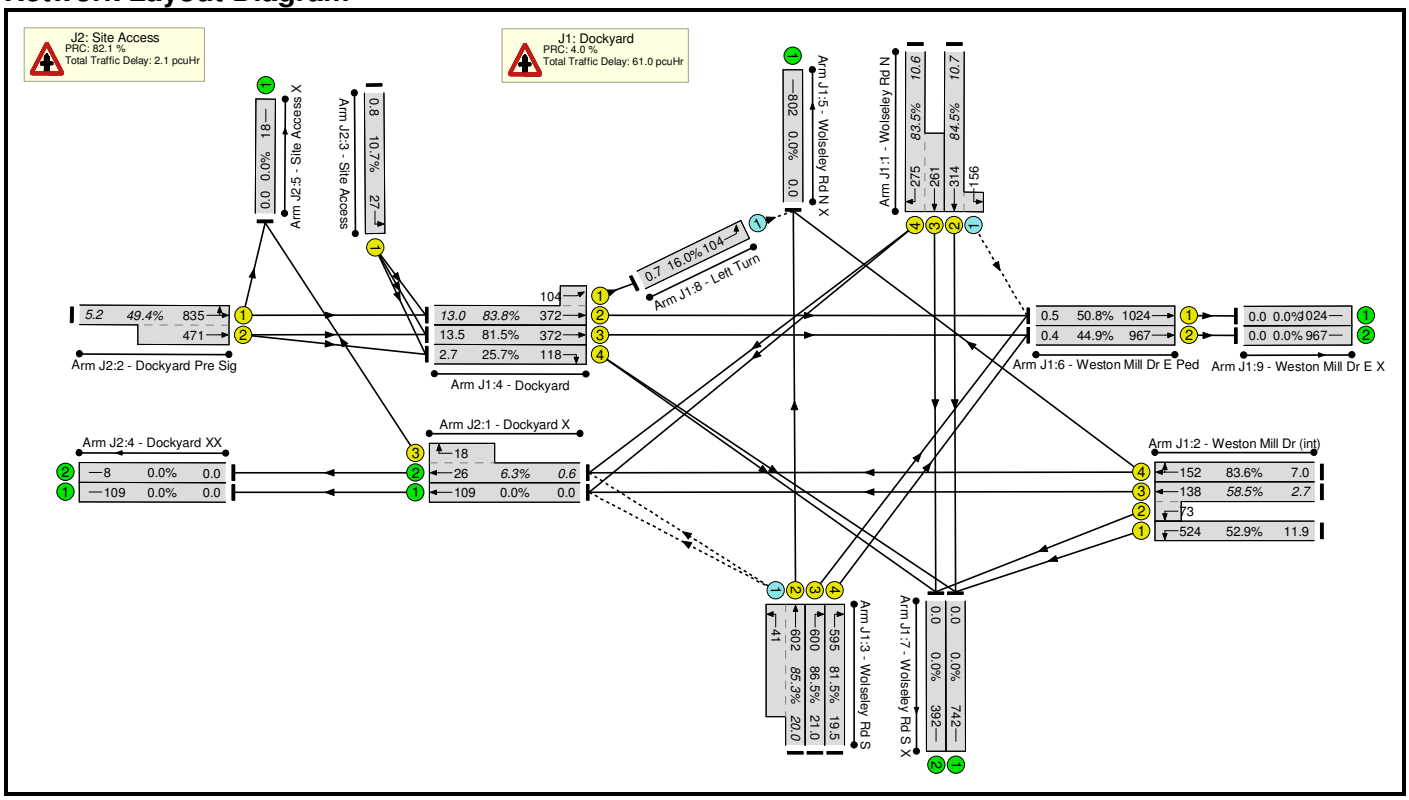
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.3%**	-
J1: Dockyard	-	-	-	-	-	**89.3%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	13	46	59	83.6%	8.3
1/4+1/3	Wolseley Rd N Ahead Right	B A	14:13	45:46	59	89.3%	10.2
2/1	Weston Mill Dr (int) Left	H	22	30	41	77.3%	6.5
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	12:22	28:30	40:41	80.0%	7.5
2/4	Weston Mill Dr (int) Right Ahead	G	12	28	40	62.0%	5.1
3/2+3/1	Wolseley Rd S Ahead Left	C -	10	66	8	89.2%	8.7
3/3	Wolseley Rd S Right	D	10	66	8	82.4%	7.0
3/4	Wolseley Rd S Right	D	10	66	8	78.9%	6.7
4/2+4/1	Dockyard Ahead Ahead2	E	8	14	22	27.2%	1.1
4/3	Dockyard Ahead	E	8	14	22	24.3%	1.2
4/4	Dockyard Right	F	7	15	22	24.3%	1.1
6/1	Weston Mill Dr E Ped Ahead	I	68	0	68	24.0%	0.2
6/2	Weston Mill Dr E Ped Ahead	I	68	0	68	15.7%	0.1
8/1	Left Turn Left	-	-	-	-	2.9%	0.0
J2: Site Access	-	-	-	-	-	**16.9%**	-
2/1+2/2	Dockyard Pre Sig Ahead Left	Q	28	5	33	16.9%	1.4
3/1	Site Access Left	R	26	41	67	3.0%	0.3

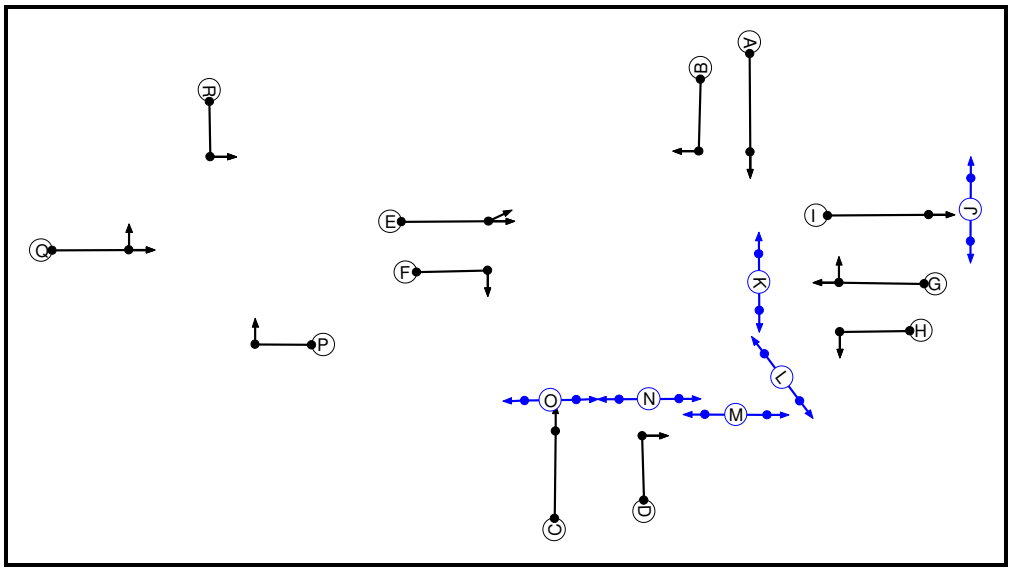
C1	Stream: 1 PRC for Signalled Lanes (%):	0.8	Total Delay for Signalled Lanes (pcuHr):	35.81	
C1	Stream: 2 PRC for Signalled Lanes (%):	433.0	Total Delay for Signalled Lanes (pcuHr):	0.81	
	PRC Over All Lanes (%):	0.8	Total Delay Over All Lanes(pcuHr):	36.69	Cycle Time (s): 68

Scenario 2: '2014 PM Do Something' (FG2: '2014 PM Do Something', Plan 2: 'PM')

Network Layout Diagram

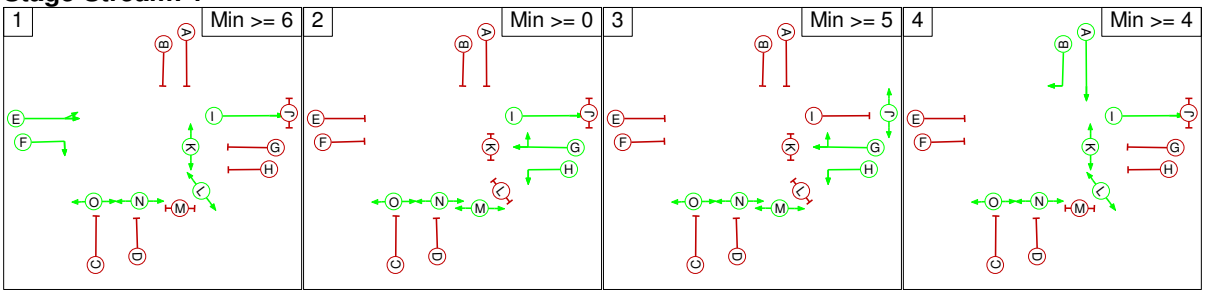


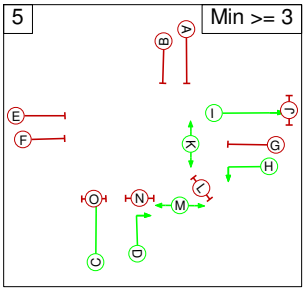
Phase Diagram



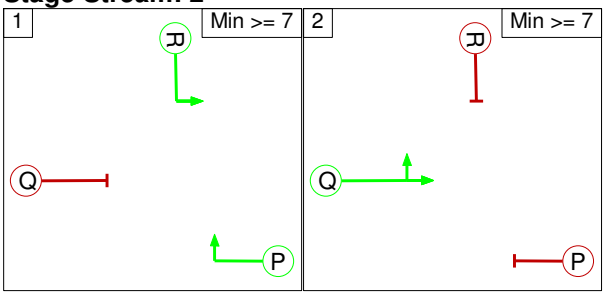
Stage Diagram

Stage Stream: 1

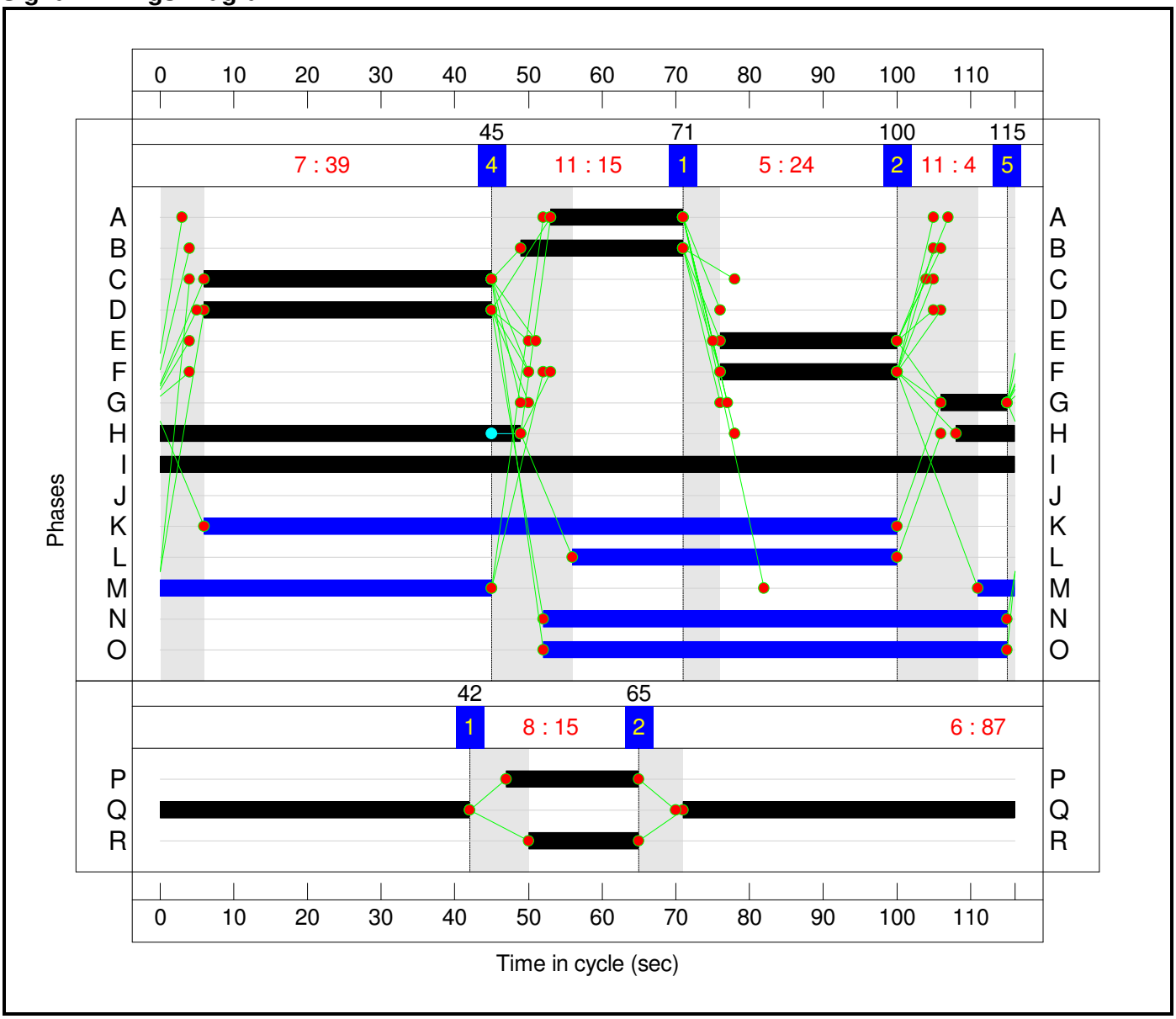




Stage Stream: 2



Signal Timings Diagram



Network Results

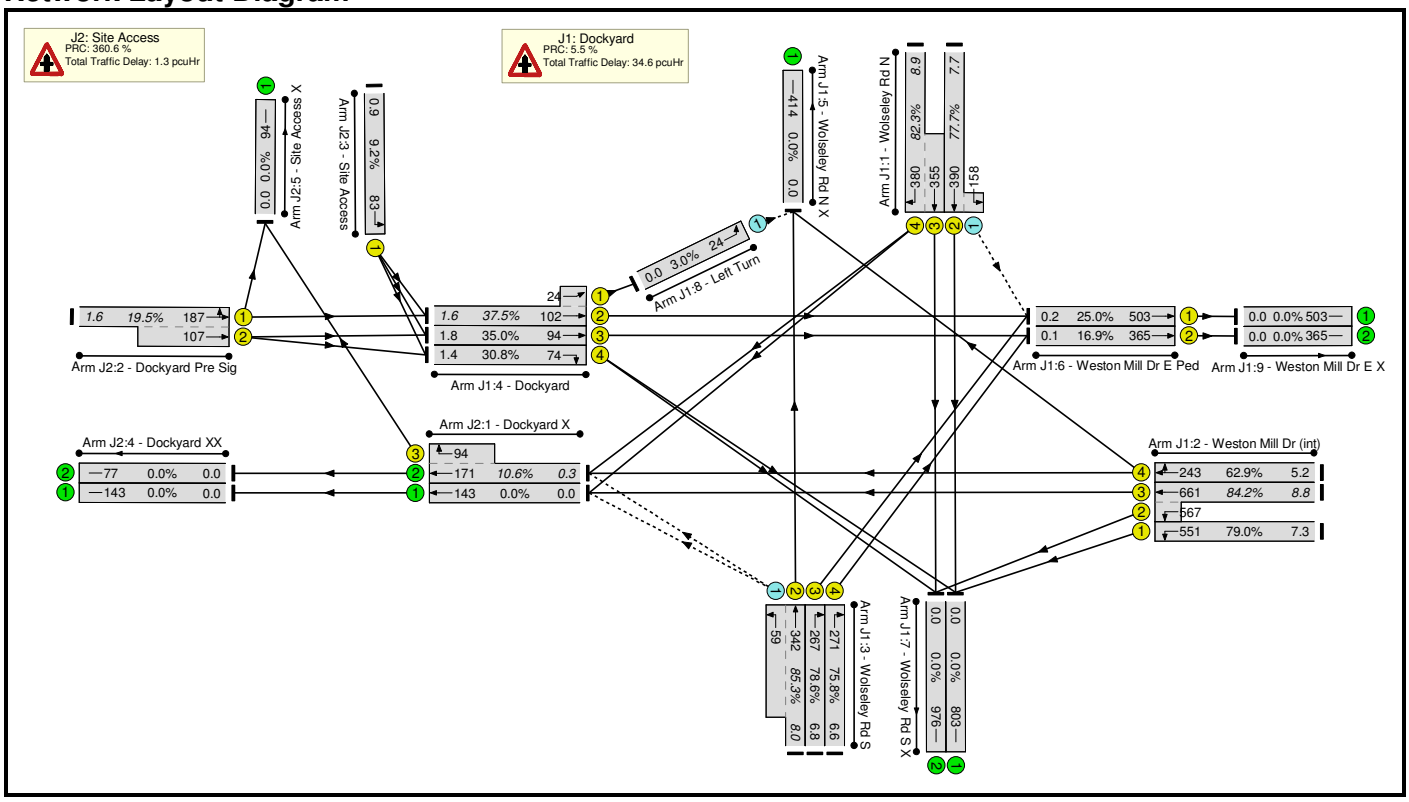
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**86.5%**	-
J1: Dockyard	-	-	-	-	-	**86.5%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	18	53	71	84.5%	10.7
1/4+1/3	Wolseley Rd N Ahead Right	B A	22:18	49:53	71	83.5%	10.6
2/1	Weston Mill Dr (int) Left	H	57	108	49	52.9%	11.9
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	9:57	106:108	115:49	58.5%	2.7
2/4	Weston Mill Dr (int) Right Ahead	G	9	106	115	83.6%	7.0
3/2+3/1	Wolseley Rd S Ahead Left	C -	39	6	45	85.3%	20.0
3/3	Wolseley Rd S Right	D	39	6	45	86.5%	21.0
3/4	Wolseley Rd S Right	D	39	6	45	81.5%	19.5
4/2+4/1	Dockyard Ahead Ahead2	E	24	76	100	83.8%	13.0
4/3	Dockyard Ahead	E	24	76	100	81.5%	13.5
4/4	Dockyard Right	F	24	76	100	25.7%	2.7
6/1	Weston Mill Dr E Ped Ahead	I	116	0	116	50.8%	0.5
6/2	Weston Mill Dr E Ped Ahead	I	116	0	116	44.9%	0.4
8/1	Left Turn Left	-	-	-	-	16.0%	0.7
J2: Site Access	-	-	-	-	-	**49.4%**	-
2/1+2/2	Dockyard Pre Sig Ahead Left	Q	87	71	42	49.4%	5.2
3/1	Site Access Left	R	15	50	65	10.7%	0.8

C1	Stream: 1 PRC for Signalled Lanes (%):	4.0	Total Delay for Signalled Lanes (pcuHr):	60.93	
C1	Stream: 2 PRC for Signalled Lanes (%):	82.1	Total Delay for Signalled Lanes (pcuHr):	1.87	
	PRC Over All Lanes (%):	4.0	Total Delay Over All Lanes(pcuHr):	63.14	Cycle Time (s): 116

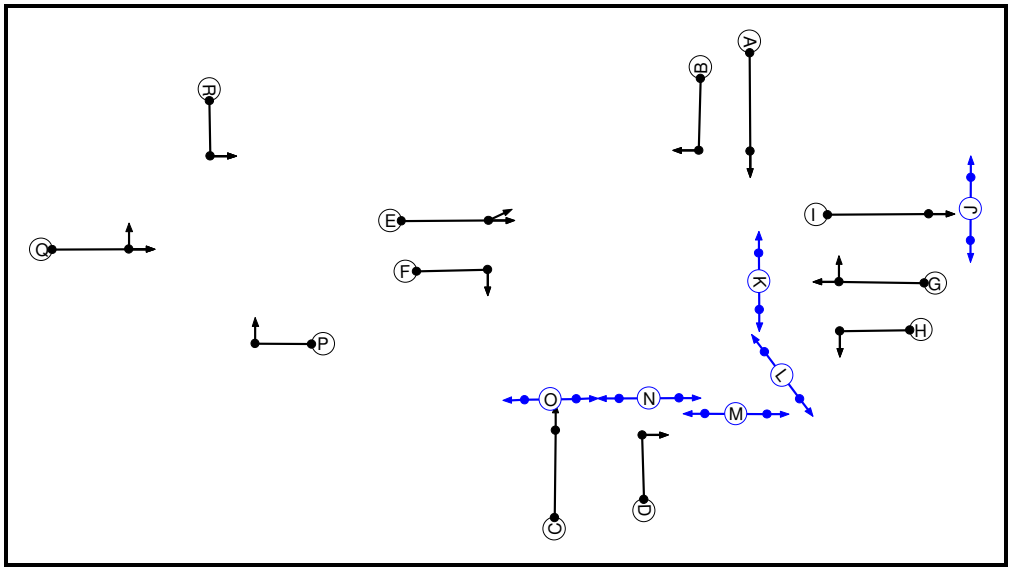
LINSIG Model Output

Scenario 1: '2014 AM Do Something MAX' (FG1: '2014 AM Do Something MAX', Plan 1: 'AM')

Network Layout Diagram

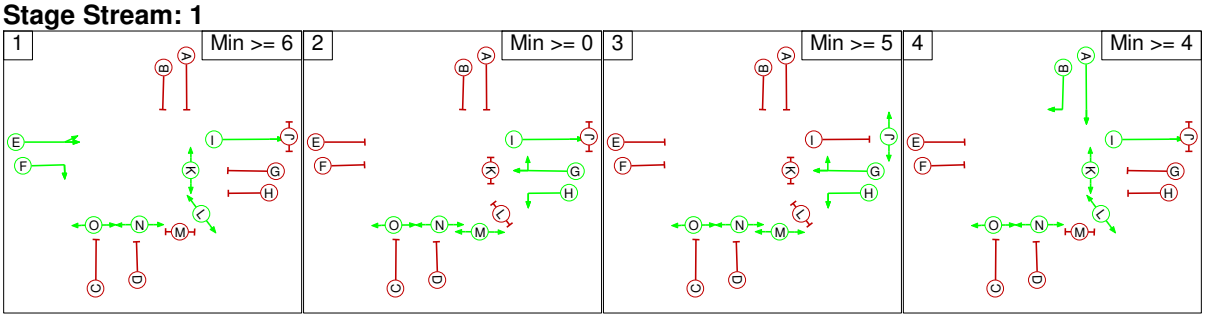


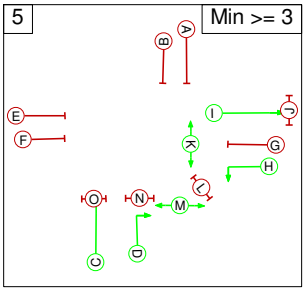
Phase Diagram



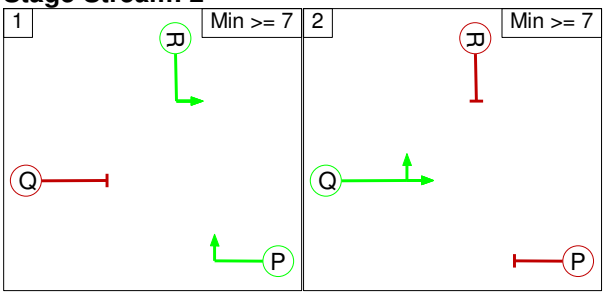
Stage Diagram

Stage Stream: 1

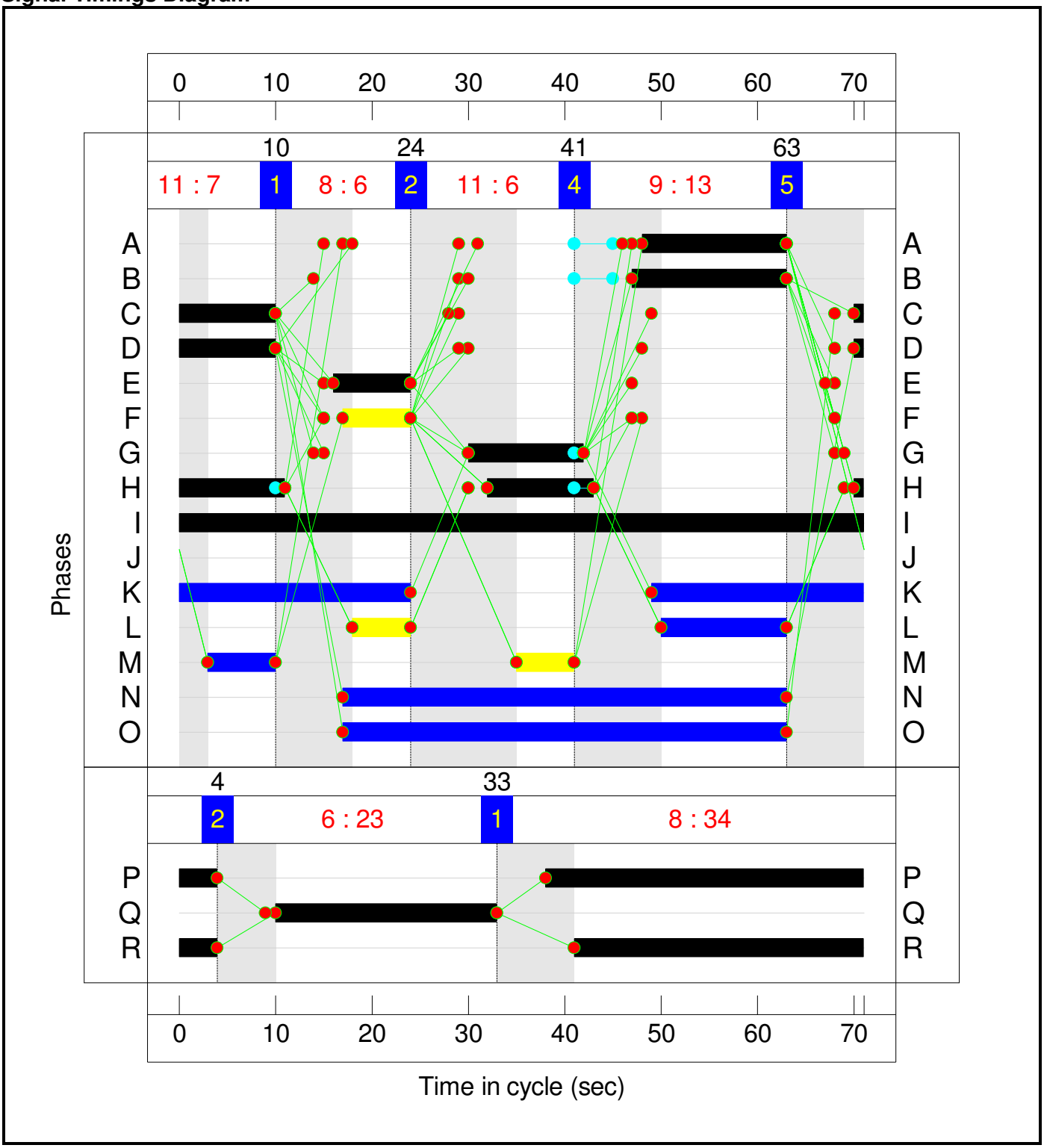




Stage Stream: 2



Signal Timings Diagram



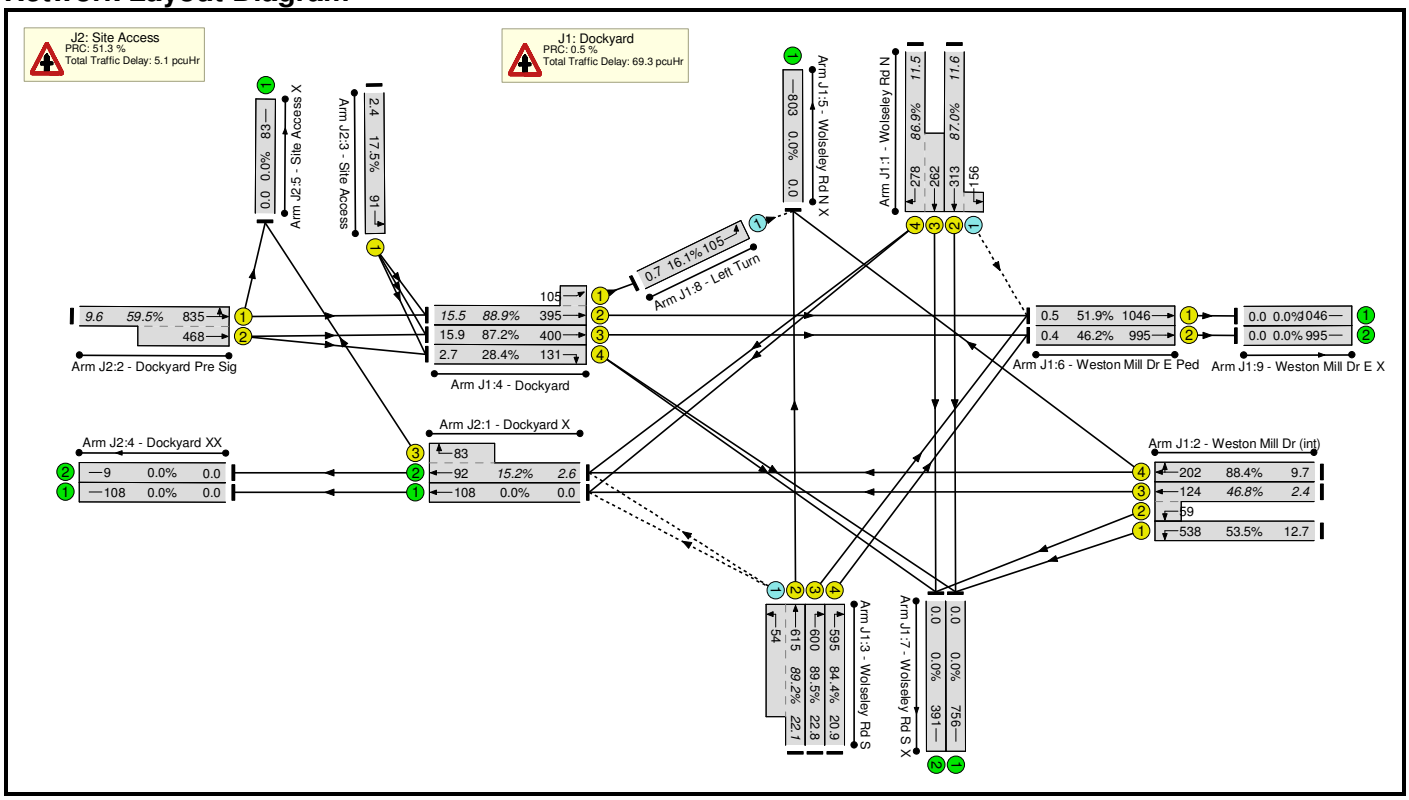
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**85.3%**	-
J1: Dockyard	-	-	-	-	-	**85.3%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	15	48	63	77.7%	7.7
1/4+1/3	Wolseley Rd N Ahead Right	B A	16:15	47:48	63	82.3%	8.9
2/1	Weston Mill Dr (int) Left	H	23	32	43	79.0%	7.3
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	12:23	30:32	42:43	84.2%	8.8
2/4	Weston Mill Dr (int) Right Ahead	G	12	30	42	62.9%	5.2
3/2+3/1	Wolseley Rd S Ahead Left	C -	11	70	10	85.3%	8.0
3/3	Wolseley Rd S Right	D	11	70	10	78.6%	6.8
3/4	Wolseley Rd S Right	D	11	70	10	75.8%	6.6
4/2+4/1	Dockyard Ahead Ahead2	E	8	16	24	37.5%	1.6
4/3	Dockyard Ahead	E	8	16	24	35.0%	1.8
4/4	Dockyard Right	F	7	17	24	30.8%	1.4
6/1	Weston Mill Dr E Ped Ahead	I	71	0	71	25.0%	0.2
6/2	Weston Mill Dr E Ped Ahead	I	71	0	71	16.9%	0.1
8/1	Left Turn Left	-	-	-	-	3.0%	0.0
J2: Site Access	-	-	-	-	-	**19.5%**	-
2/1+2/2	Dockyard Pre Sig Ahead Left	Q	23	10	33	19.5%	1.6
3/1	Site Access Left	R	34	41	4	9.2%	0.9

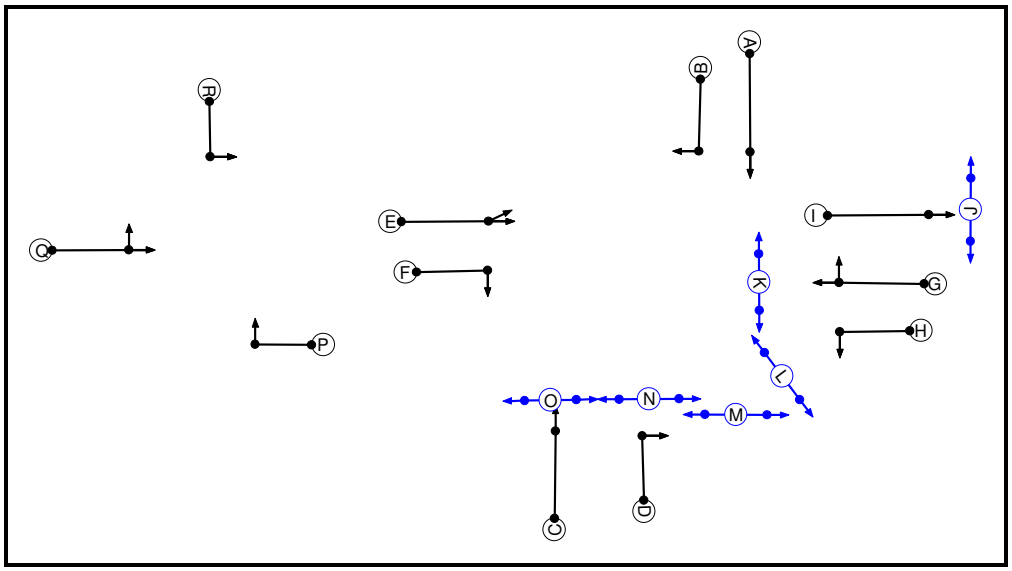
C1	Stream: 1 PRC for Signalled Lanes (%):	5.5	Total Delay for Signalled Lanes (pcuHr):	34.55	
C1	Stream: 2 PRC for Signalled Lanes (%):	360.6	Total Delay for Signalled Lanes (pcuHr):	1.24	
	PRC Over All Lanes (%):	5.5	Total Delay Over All Lanes(pcuHr):	35.91	Cycle Time (s): 71

Scenario 2: '2014 PM Do Something MAX' (FG2: '2014 PM Do Something MAX', Plan 2: 'PM')

Network Layout Diagram

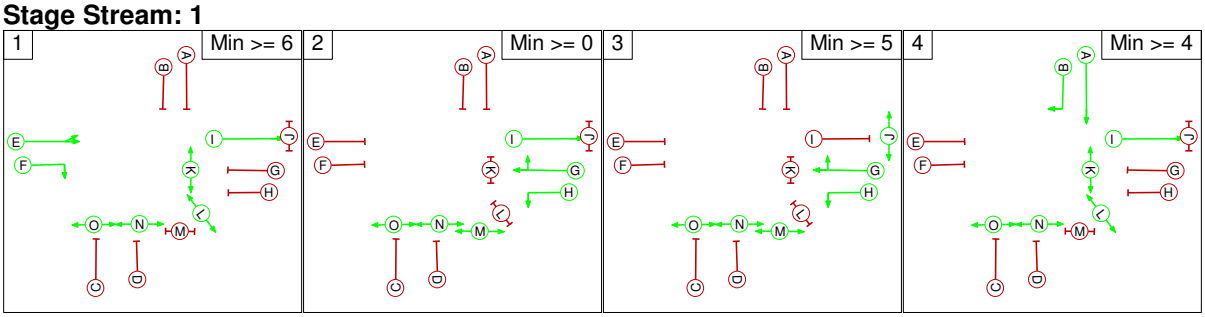


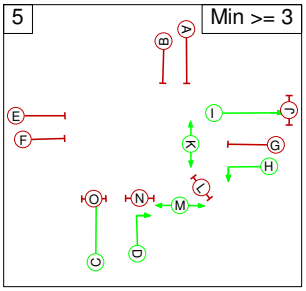
Phase Diagram



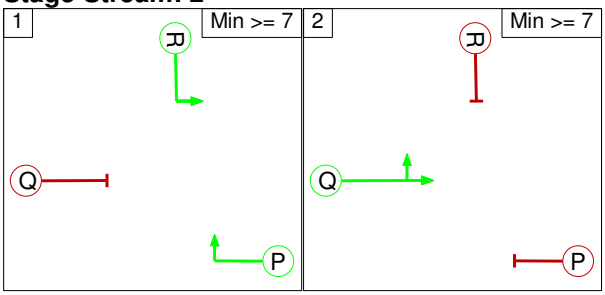
Stage Diagram

Stage Stream: 1

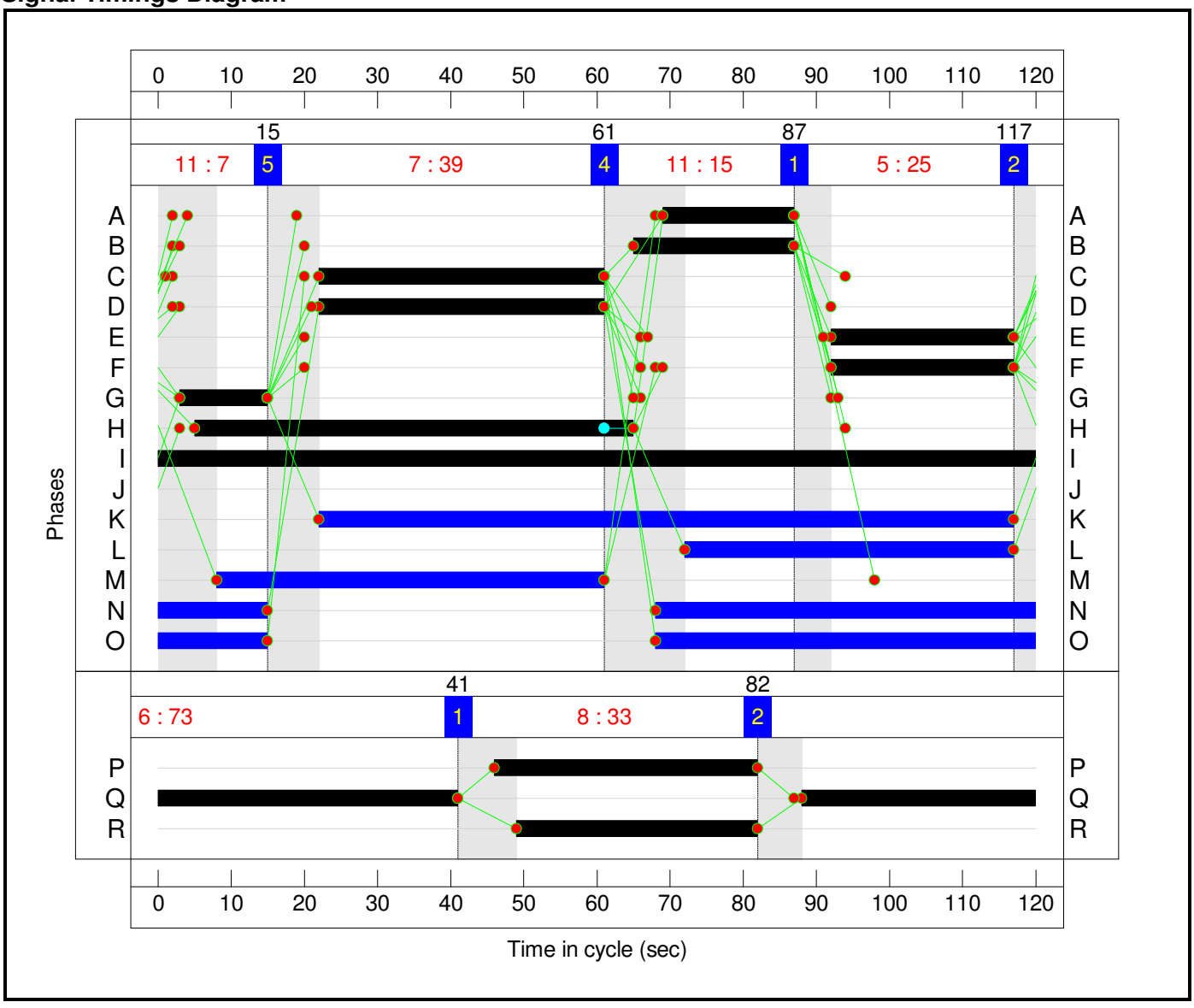




Stage Stream: 2



Signal Timings Diagram



Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.5%**	-
J1: Dockyard	-	-	-	-	-	**89.5%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	18	69	87	87.0%	11.6
1/4+1/3	Wolseley Rd N Ahead Right	B A	22:18	65:69	87	86.9%	11.5
2/1	Weston Mill Dr (int) Left	H	60	5	65	53.5%	12.7
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	12:60	3:5	15:65	46.8%	2.4
2/4	Weston Mill Dr (int) Right Ahead	G	12	3	15	88.4%	9.7
3/2+3/1	Wolseley Rd S Ahead Left	C -	39	22	61	89.2%	22.1
3/3	Wolseley Rd S Right	D	39	22	61	89.5%	22.8
3/4	Wolseley Rd S Right	D	39	22	61	84.4%	20.9
4/2+4/1	Dockyard Ahead Ahead2	E	25	92	117	88.9%	15.5
4/3	Dockyard Ahead	E	25	92	117	87.2%	15.9
4/4	Dockyard Right	F	25	92	117	28.4%	2.7
6/1	Weston Mill Dr E Ped Ahead	I	120	0	120	51.9%	0.5
6/2	Weston Mill Dr E Ped Ahead	I	120	0	120	46.2%	0.4
8/1	Left Turn Left	-	-	-	-	16.1%	0.7
J2: Site Access	-	-	-	-	-	**59.5%**	-
2/1+2/2	Dockyard Pre Sig Ahead Left	Q	73	88	41	59.5%	9.6
3/1	Site Access Left	R	33	49	82	17.5%	2.4

C1	Stream: 1 PRC for Signalled Lanes (%):	0.5	Total Delay for Signalled Lanes (pcuHr):	69.19	
C1	Stream: 2 PRC for Signalled Lanes (%):	51.3	Total Delay for Signalled Lanes (pcuHr):	4.27	
	PRC Over All Lanes (%):	0.5	Total Delay Over All Lanes(pcuHr):	74.35	Cycle Time (s): 120

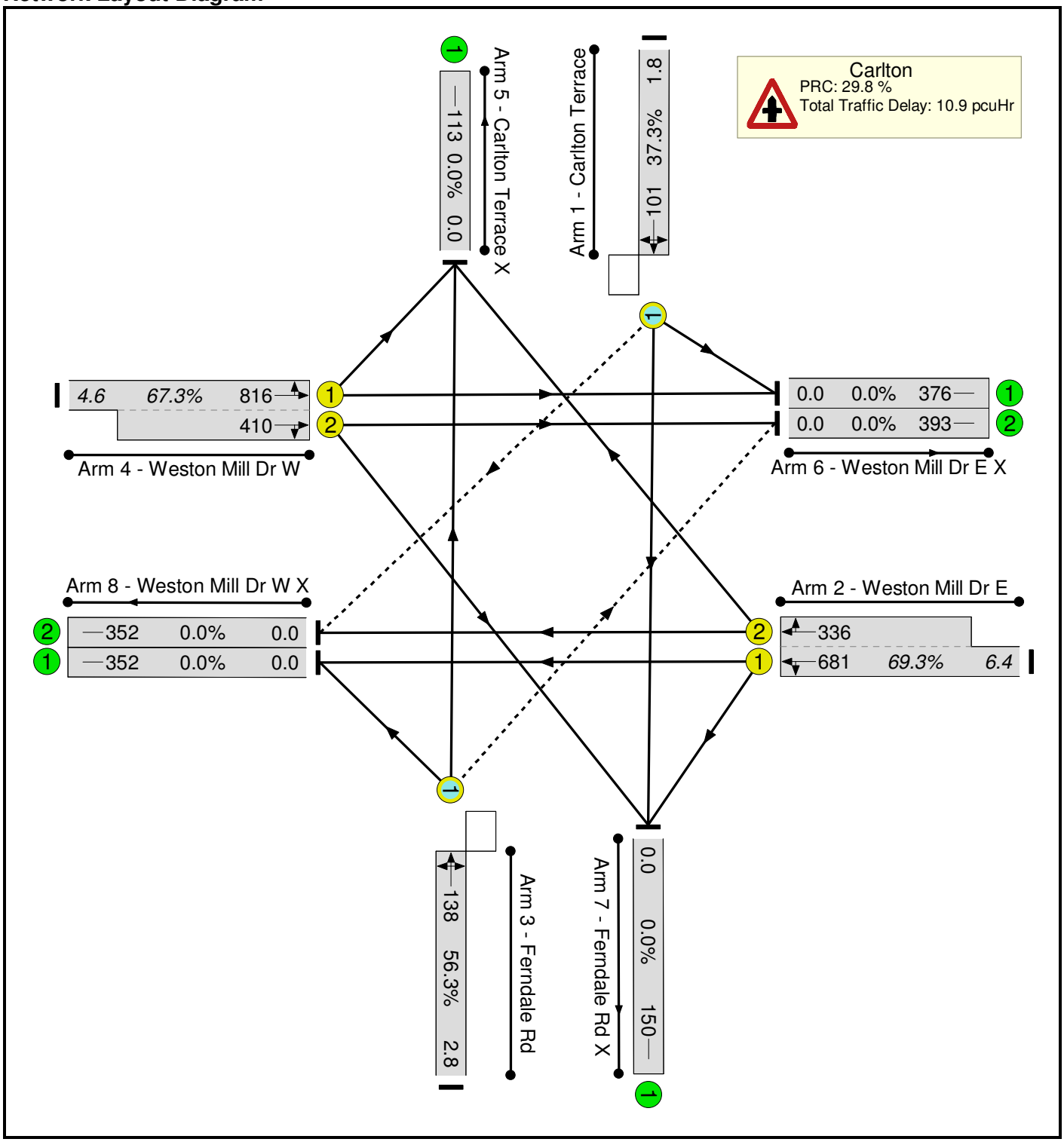
Appendix B

Weston Mill Drive / Carlton Terrace

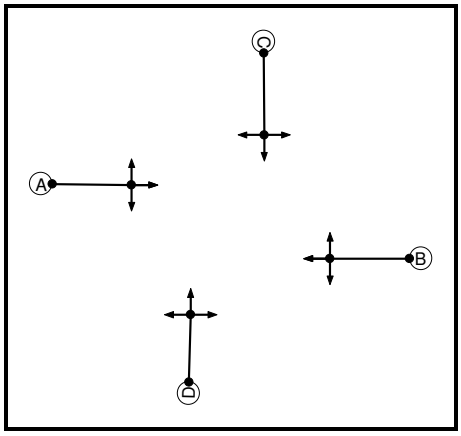
LINSIG Model Output

Scenario 1: '2014 1400-1500 Do Something' (FG1: '2014 1400-1500 Do Something', Plan 1: '1400-1500')

Network Layout Diagram

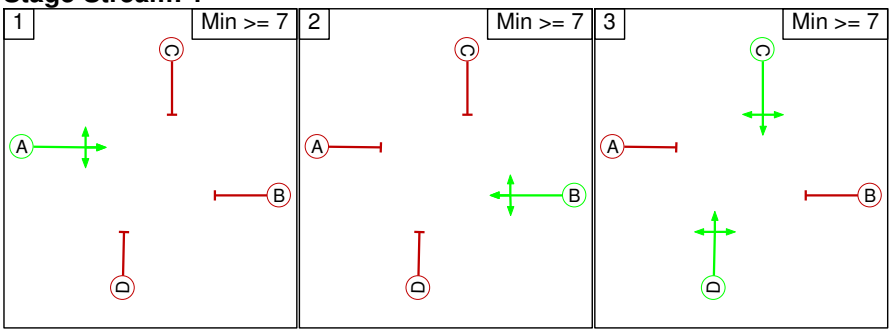


Phase Diagram

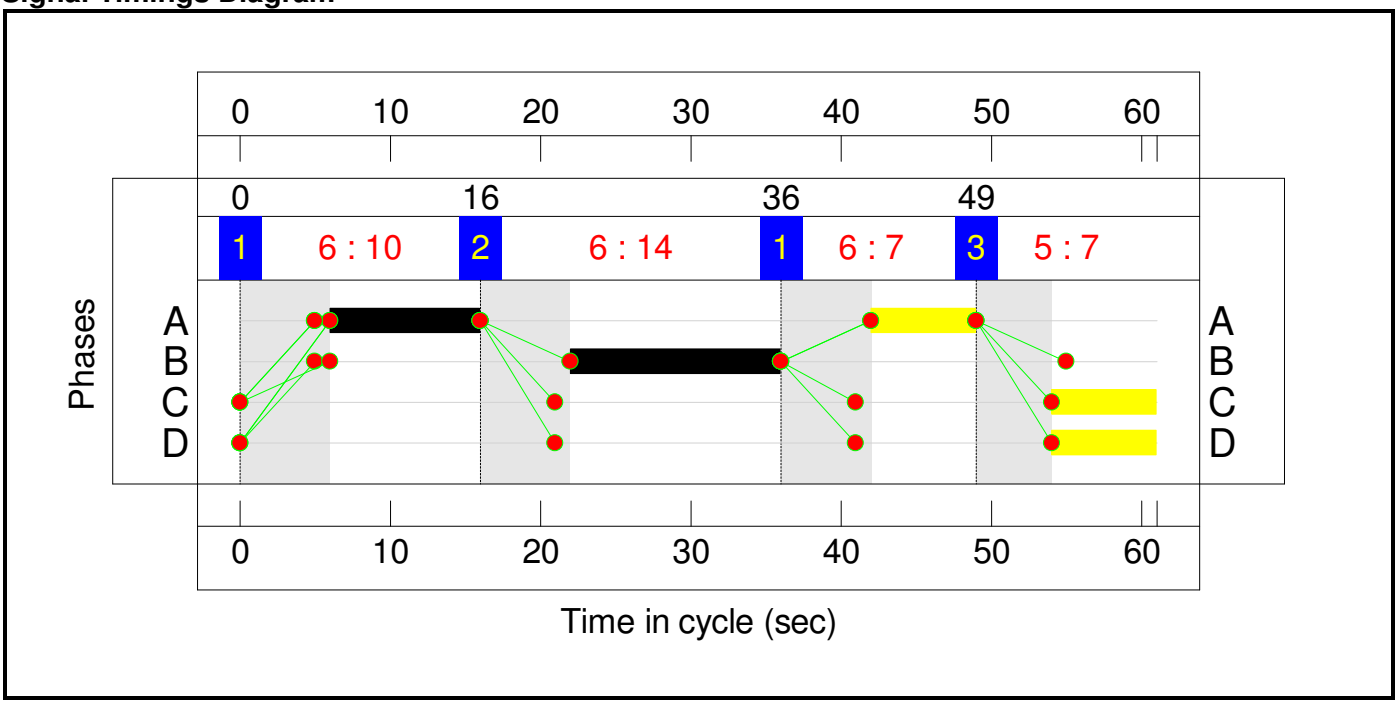


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



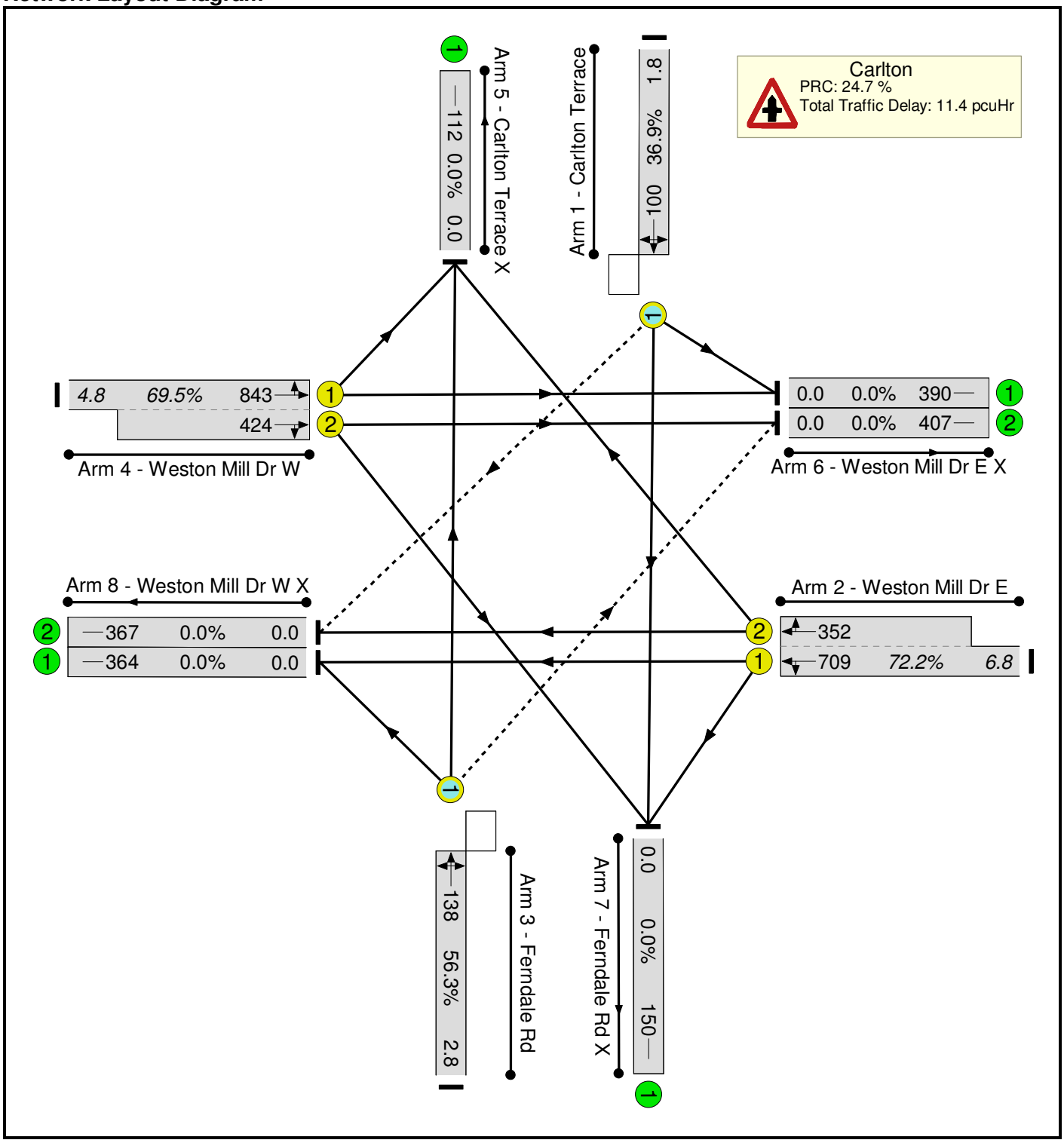
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**69.3%**	-
Carlton	-	-	-	-	-	**69.3%**	-
1/1	Carlton Terrace Left Ahead Right	C	7	54	0	37.3%	1.8
2/1+2/2	Weston Mill Dr E Right Left Ahead	B	14	22	36	69.3%	6.4
3/1	Ferndale Rd Ahead Right Left	D	7	54	0	56.3%	2.8
4/1+4/2	Weston Mill Dr W Left Ahead Right	A	17	6	16	67.3%	4.6

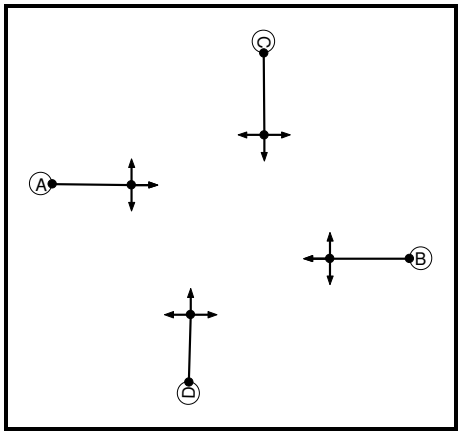
C1 Stream: 1 PRC for Signalled Lanes (%): 29.8 Total Delay for Signalled Lanes (pcuHr): 10.88
PRC Over All Lanes (%): 29.8 Total Delay Over All Lanes(pcuHr): 10.88 Cycle Time (s): 61

Scenario 2: '2014 1400-1500 Do Something MAX' (FG2: '2014 1400-1500 Do Something MAX', Plan 1: '1400-1500')

Network Layout Diagram

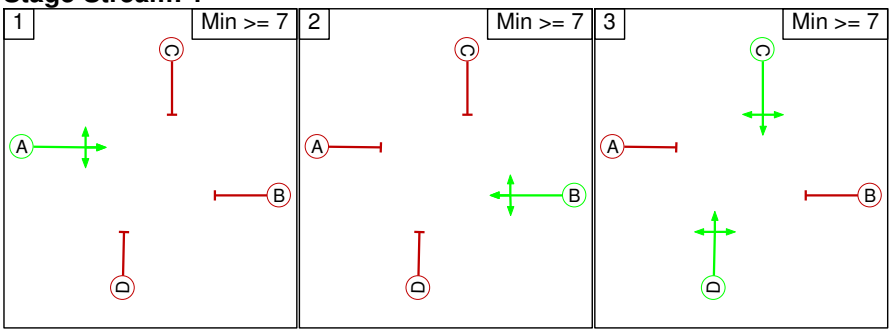


Phase Diagram

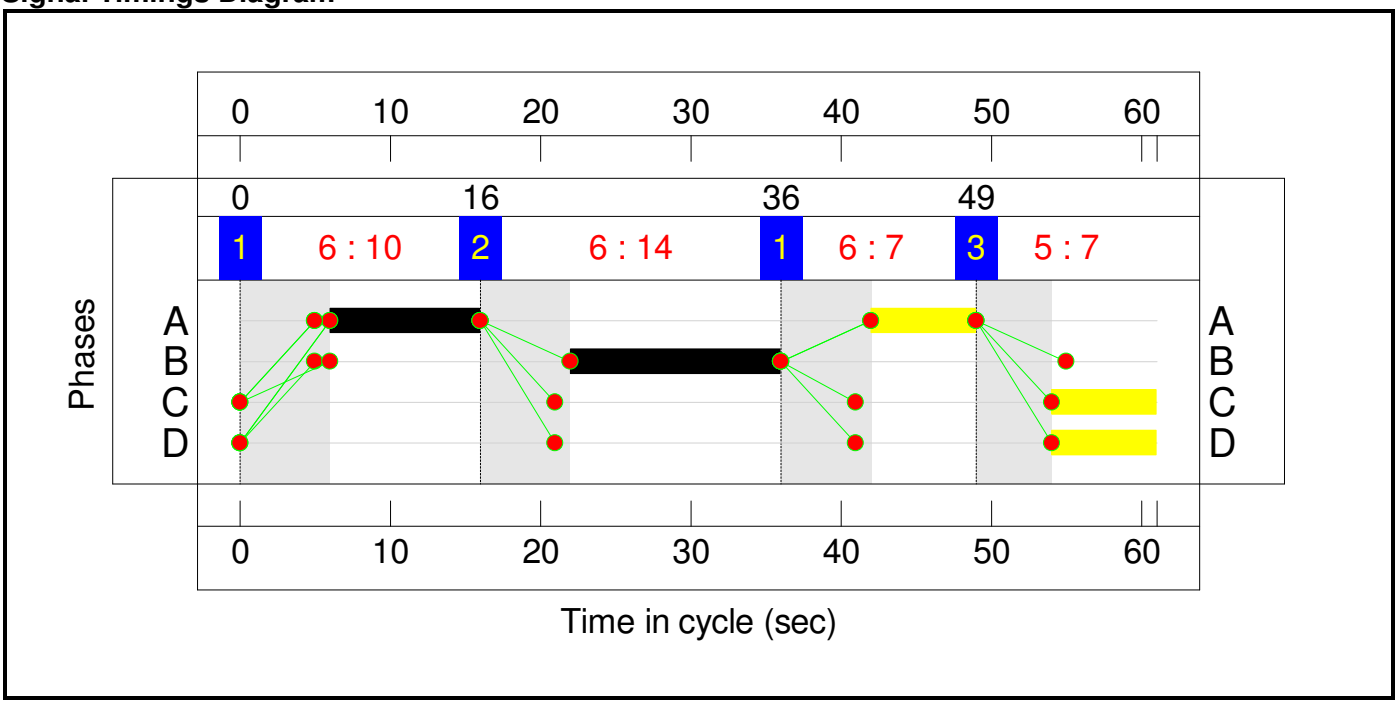


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



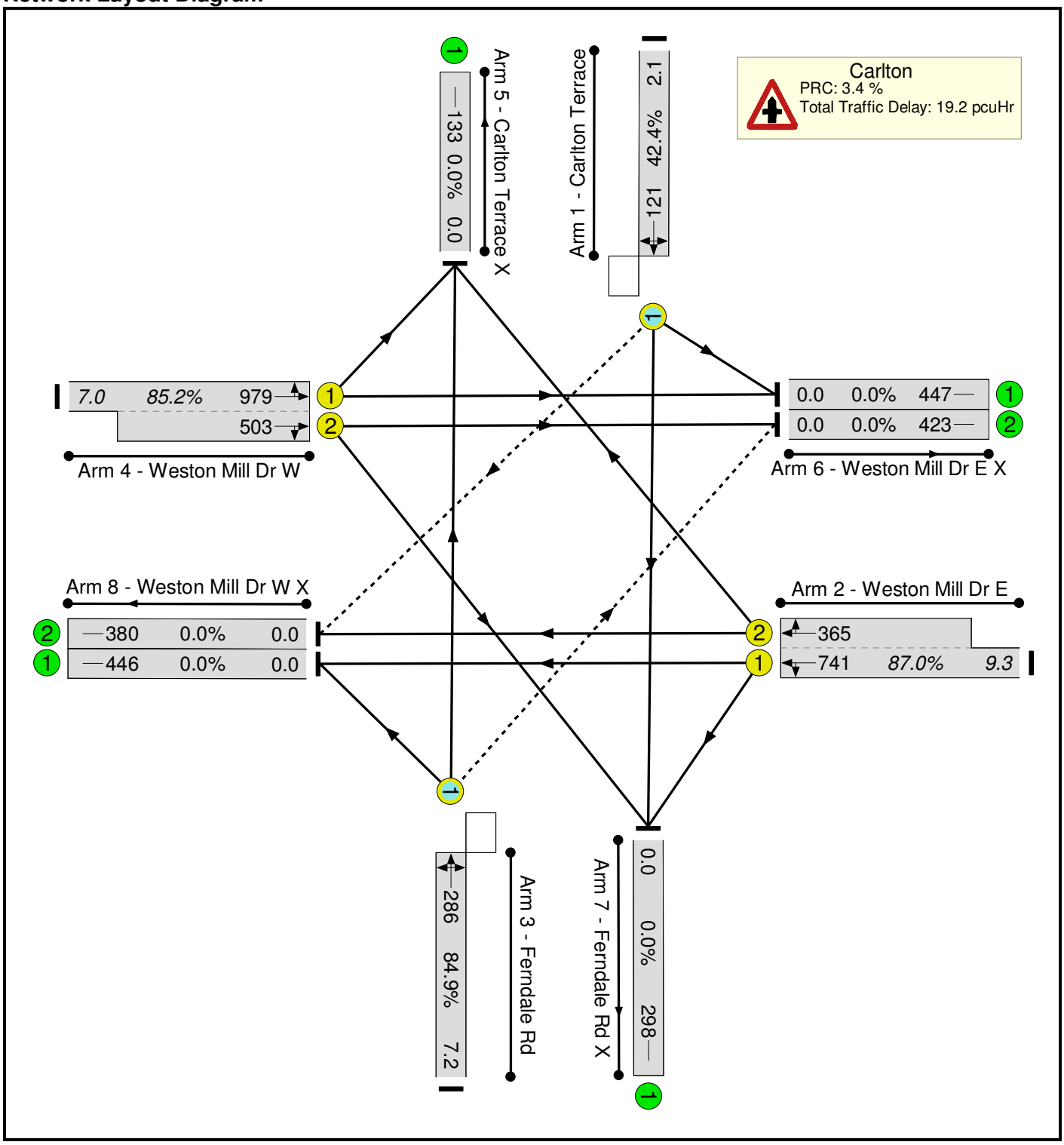
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**72.2%**	-
Carlton	-	-	-	-	-	**72.2%**	-
1/1	Carlton Terrace Left Ahead Right	C	7	54	0	36.9%	1.8
2/1+2/2	Weston Mill Dr E Right Left Ahead	B	14	22	36	72.2%	6.8
3/1	Ferndale Rd Ahead Right Left	D	7	54	0	56.3%	2.8
4/1+4/2	Weston Mill Dr W Left Ahead Right	A	17	6	16	69.5%	4.8

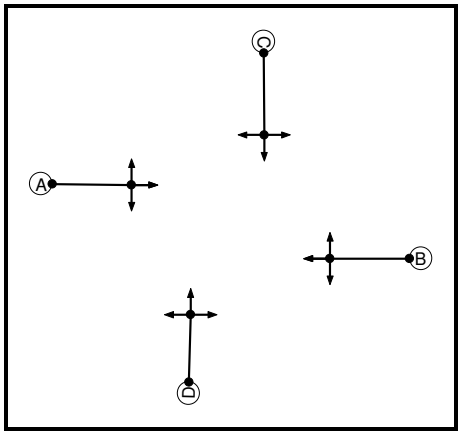
C1 Stream: 1 PRC for Signalled Lanes (%): 24.7 Total Delay for Signalled Lanes (pcuHr): 11.42
PRC Over All Lanes (%): 24.7 Total Delay Over All Lanes(pcuHr): 11.42 Cycle Time (s): 61

Scenario 3: '2014 1400-1500 Do Something MAX plus Potential' (FG3: '2014 1400-1500 Do Something MAX plus Potential', Plan 1: '1400-1500')

Network Layout Diagram

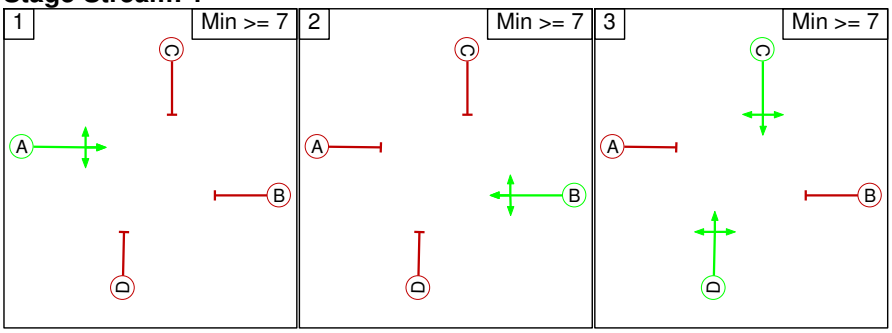


Phase Diagram

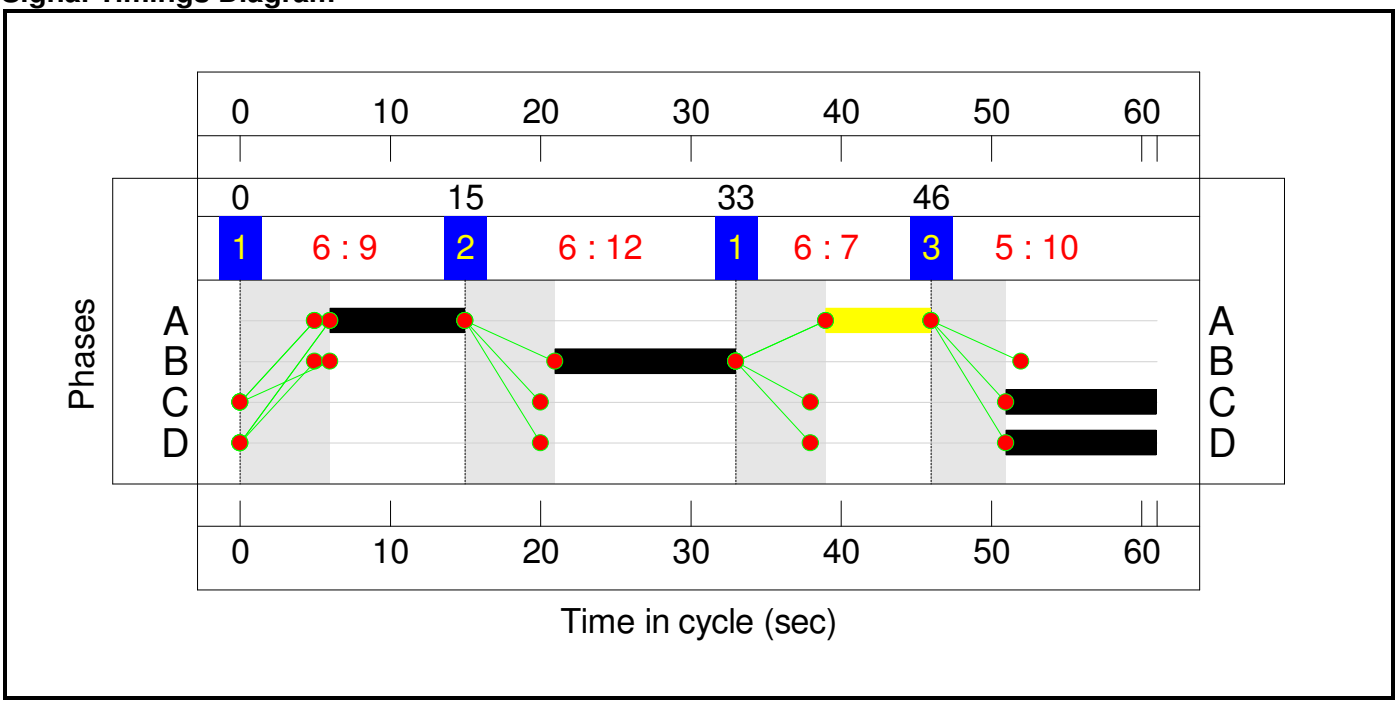


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**87.0%**	-
Carlton	-	-	-	-	-	**87.0%**	-
1/1	Carlton Terrace Left Ahead Right	C	10	51	0	42.4%	2.1
2/1+2/2	Weston Mill Dr E Right Left Ahead	B	12	21	33	87.0%	9.3
3/1	Ferndale Rd Ahead Right Left	D	10	51	0	84.9%	7.2
4/1+4/2	Weston Mill Dr W Left Ahead Right	A	16	6	15	85.2%	7.0

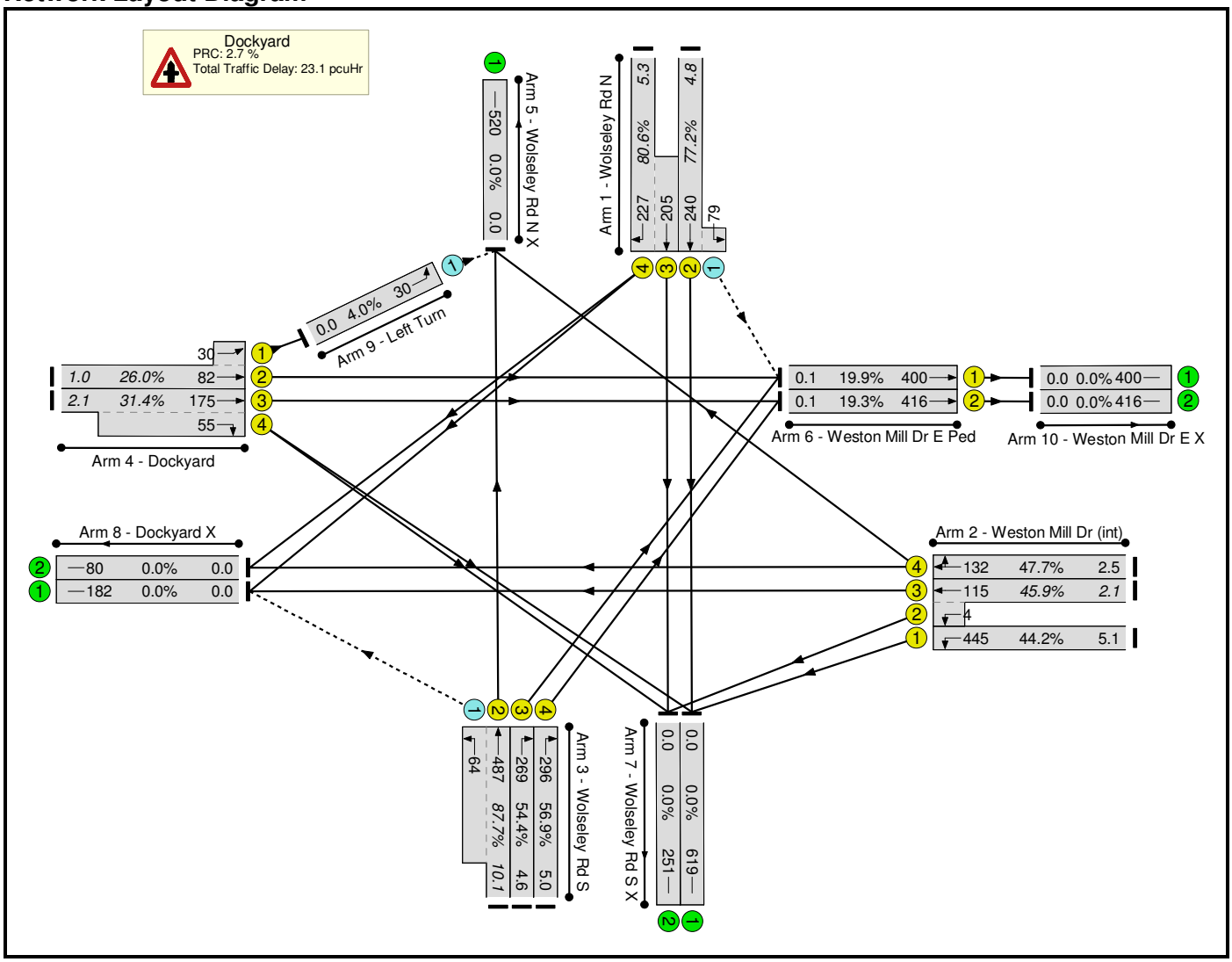
C1 Stream: 1 PRC for Signalled Lanes (%): 3.4 Total Delay for Signalled Lanes (pcuHr): 19.19
PRC Over All Lanes (%): 3.4 Total Delay Over All Lanes(pcuHr): 19.19 Cycle Time (s): 61

Wolseley Road / Weston Mill Drive

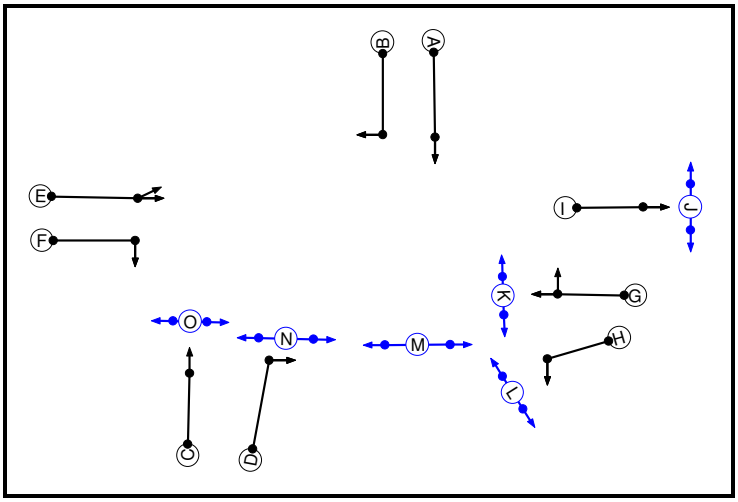
LINSIG Model Output

Scenario 1: '2014 1400-1500 Do Something' (FG1: '2014 1400-1500 Do Something', Plan 1: '1400-1500')

Network Layout Diagram

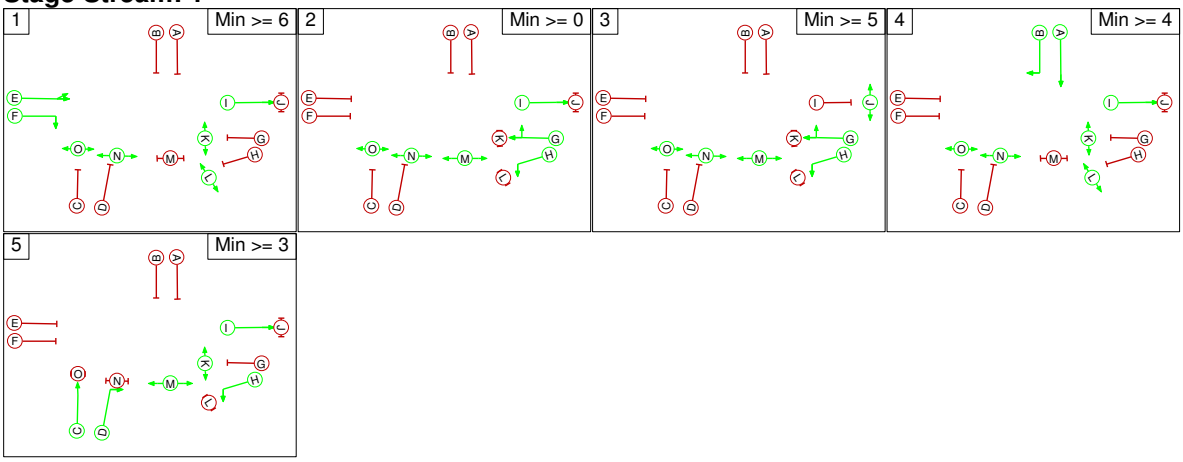


Phase Diagram

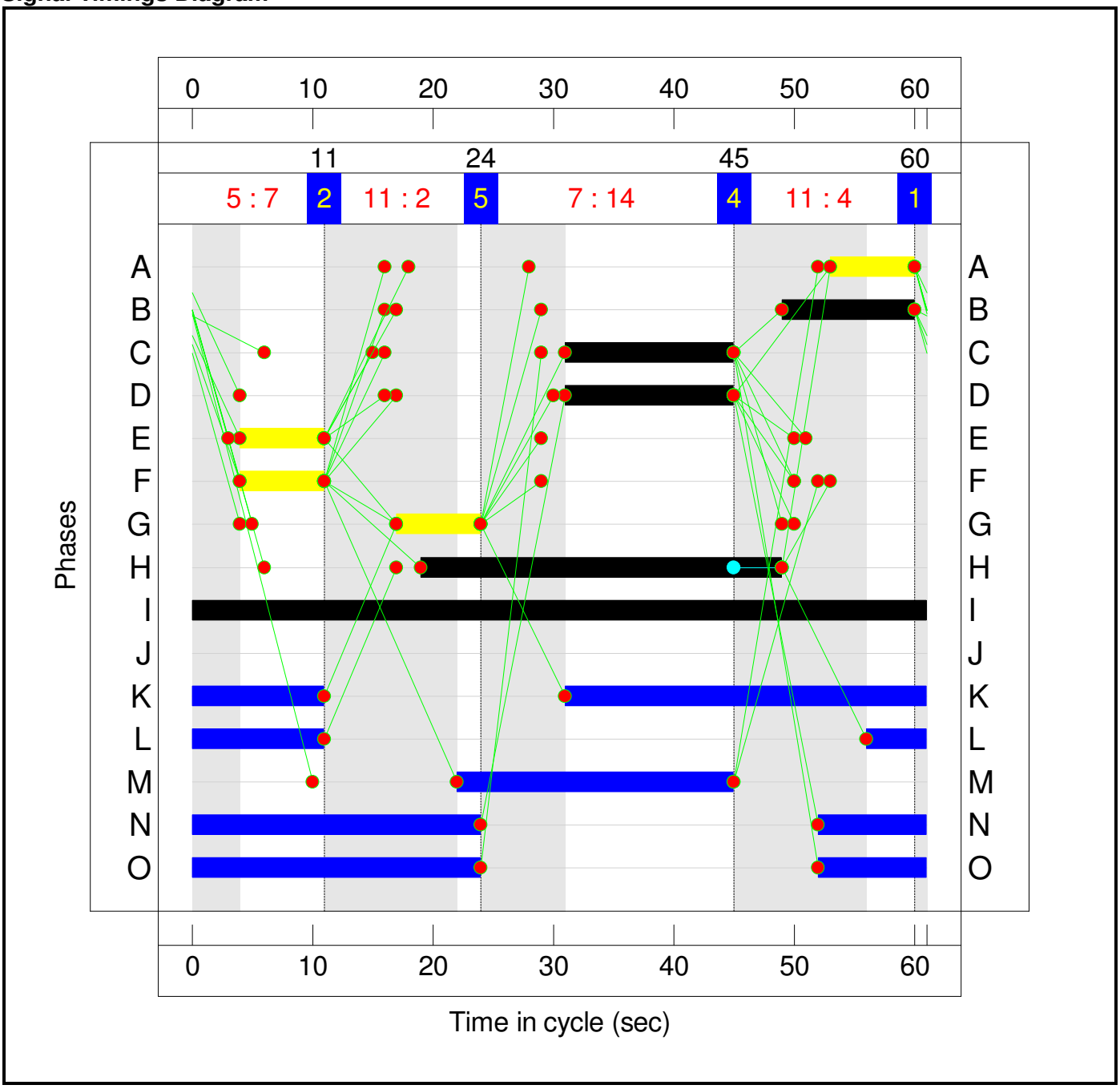


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



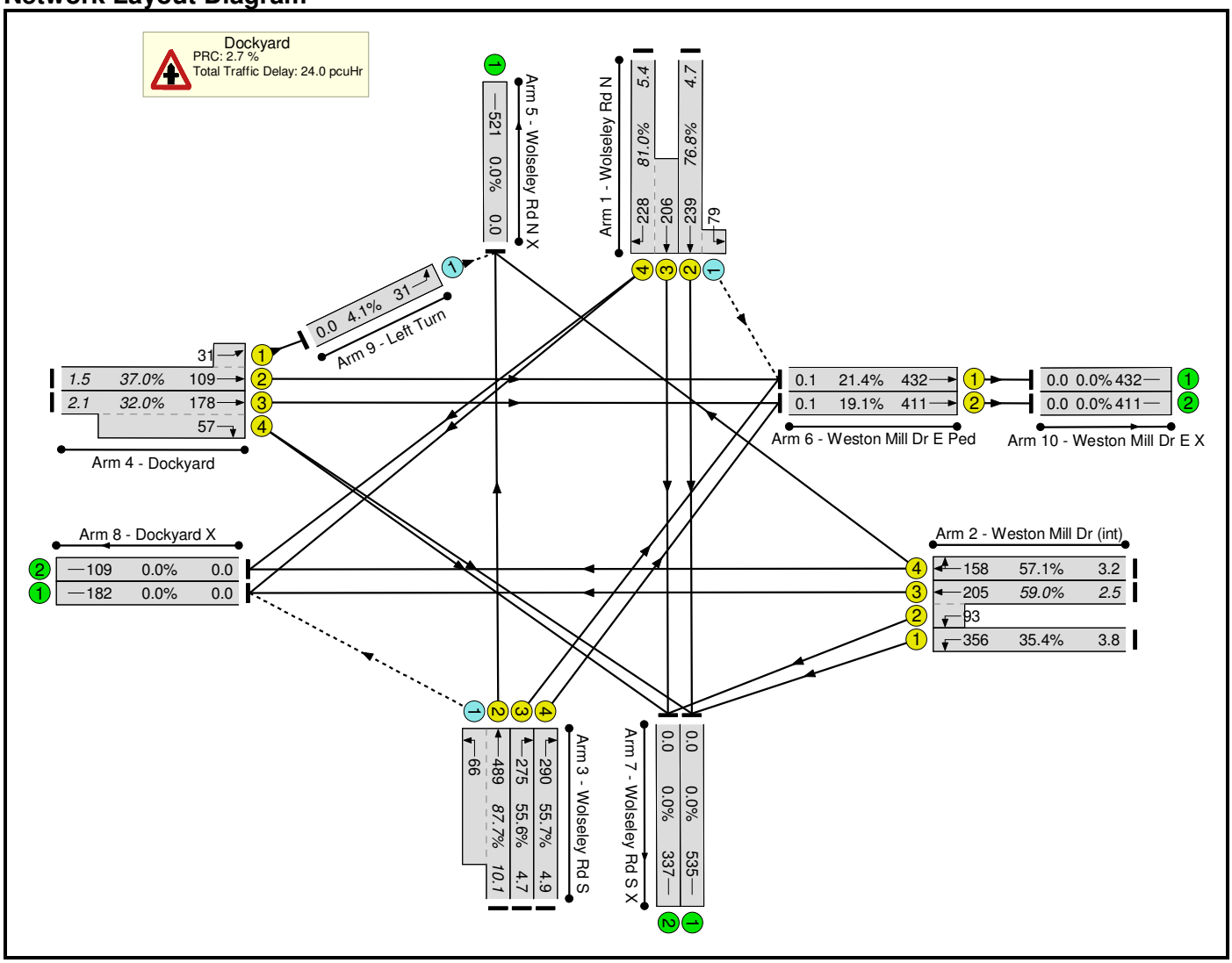
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**87.7%**	-
Dockyard	-	-	-	-	-	**87.7%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	7	53	60	77.2%	4.8
1/4+1/3	Wolseley Rd N Ahead Right	B A	11:7	49:53	60	80.6%	5.3
2/1	Weston Mill Dr (int) Left	H	30	19	49	44.2%	5.1
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	7:30	17:19	24:49	45.9%	2.1
2/4	Weston Mill Dr (int) Right Ahead	G	7	17	24	47.7%	2.5
3/2+3/1	Wolseley Rd S Ahead Left	C -	14	31	45	87.7%	10.1
3/3	Wolseley Rd S Right	D	14	31	45	54.4%	4.6
3/4	Wolseley Rd S Right	D	14	31	45	56.9%	5.0
4/2+4/1	Dockyard Ahead Ahead2	E	7	4	11	26.0%	1.0
4/3+4/4	Dockyard Ahead Right	E F	7	4	11	31.4%	2.1
6/1	Weston Mill Dr E Ped Ahead	I	61	0	61	19.9%	0.1
6/2	Weston Mill Dr E Ped Ahead	I	61	0	61	19.3%	0.1
9/1	Left Turn Left	-	-	-	-	4.0%	0.0

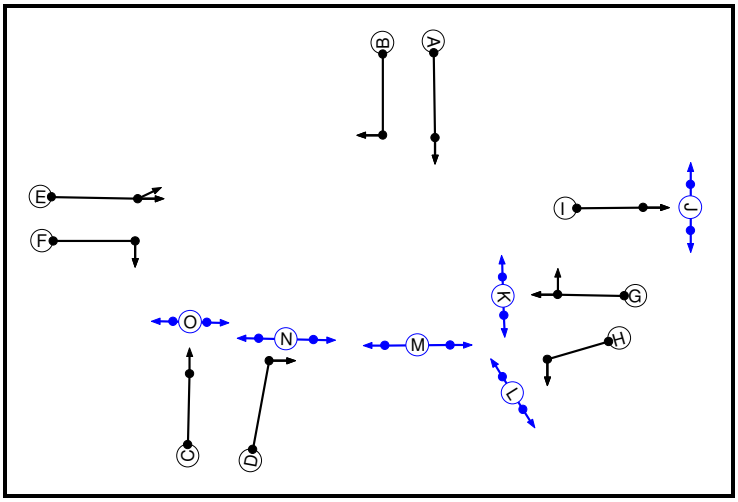
C1 Stream: 1 PRC for Signalled Lanes (%): 2.7 Total Delay for Signalled Lanes (pcuHr): 23.10
PRC Over All Lanes (%): 2.7 Total Delay Over All Lanes(pcuHr): 23.12 Cycle Time (s): 61

Scenario 2: '2014 1400-1500 Do Something MAX' (FG2: '2014 1400-1500 Do Something MAX', Plan 1: '1400-1500')

Network Layout Diagram

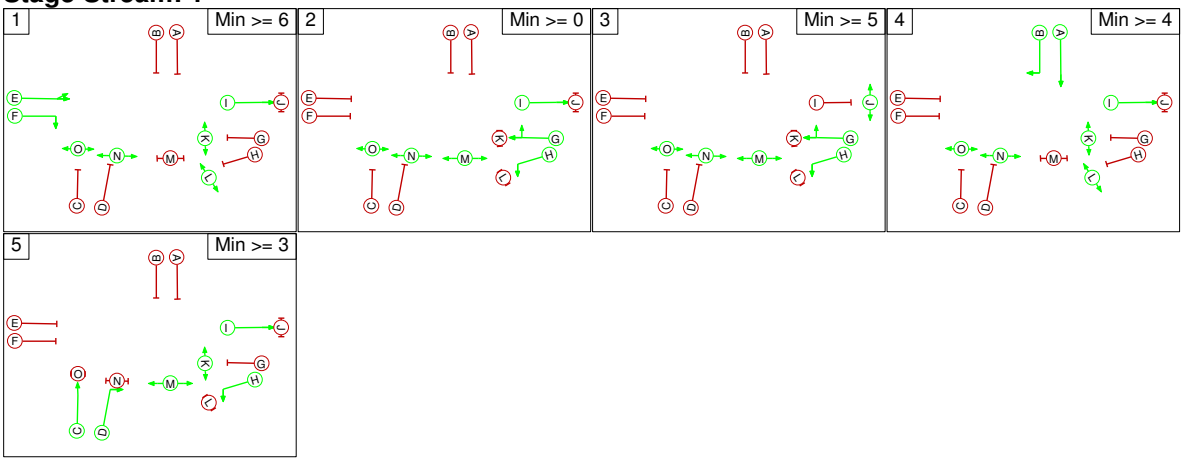


Phase Diagram

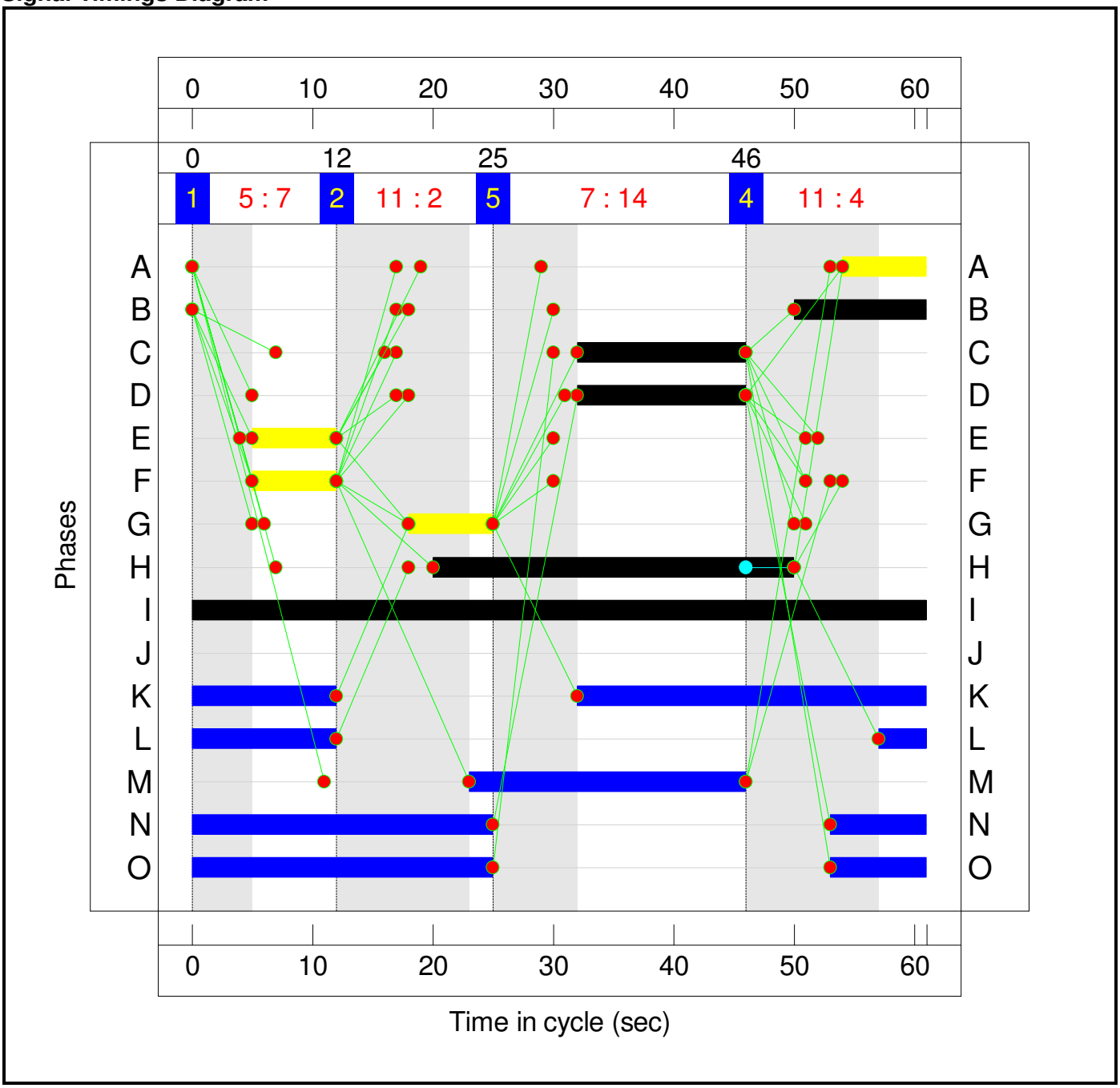


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



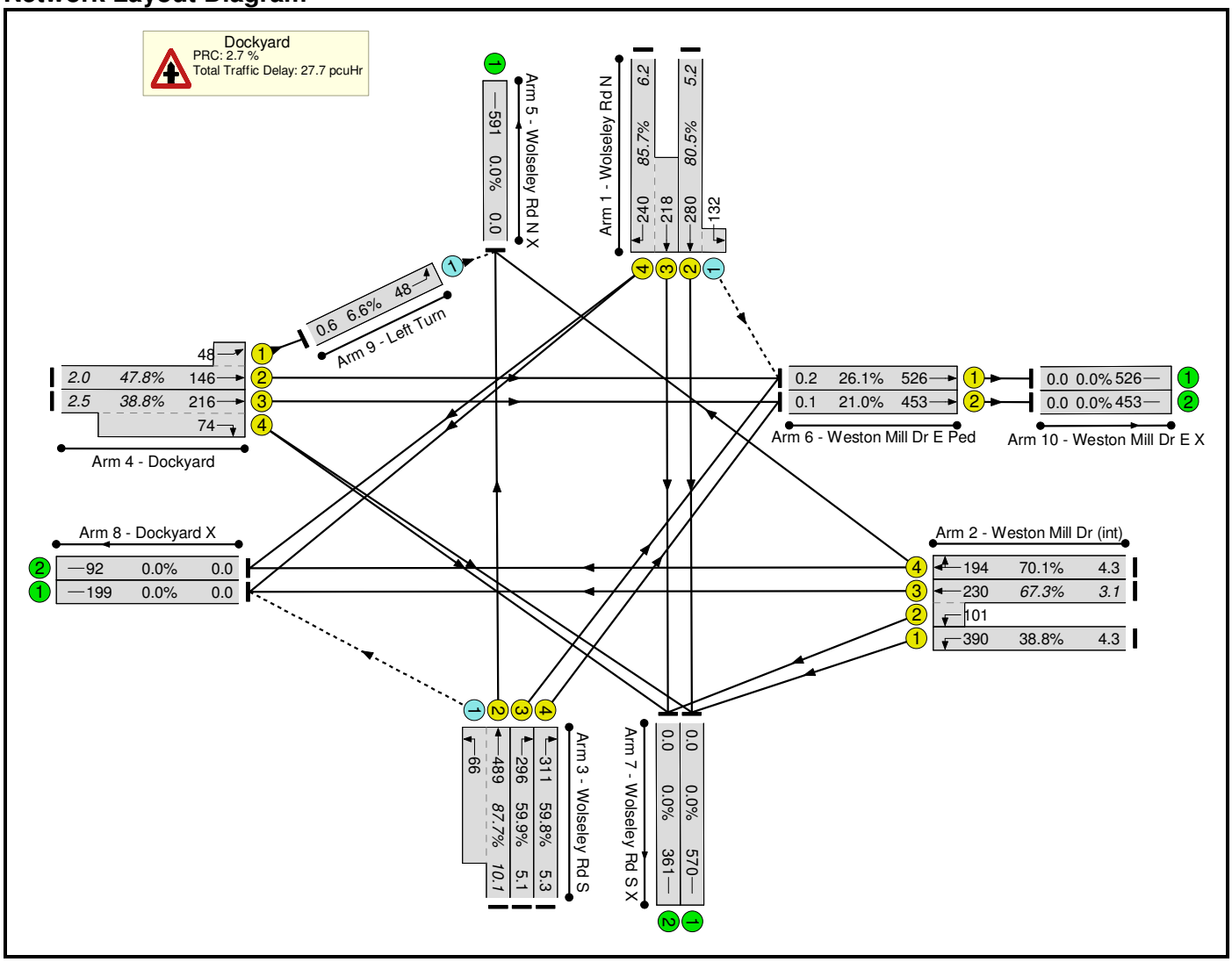
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**87.7%**	-
Dockyard	-	-	-	-	-	**87.7%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	7	54	0	76.8%	4.7
1/4+1/3	Wolseley Rd N Ahead Right	B A	11:7	50:54	0	81.0%	5.4
2/1	Weston Mill Dr (int) Left	H	30	20	50	35.4%	3.8
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	7:30	18:20	25:50	59.0%	2.5
2/4	Weston Mill Dr (int) Right Ahead	G	7	18	25	57.1%	3.2
3/2+3/1	Wolseley Rd S Ahead Left	C -	14	32	46	87.7%	10.1
3/3	Wolseley Rd S Right	D	14	32	46	55.6%	4.7
3/4	Wolseley Rd S Right	D	14	32	46	55.7%	4.9
4/2+4/1	Dockyard Ahead Ahead2	E	7	5	12	37.0%	1.5
4/3+4/4	Dockyard Ahead Right	E F	7	5	12	32.0%	2.1
6/1	Weston Mill Dr E Ped Ahead	I	61	0	61	21.4%	0.1
6/2	Weston Mill Dr E Ped Ahead	I	61	0	61	19.1%	0.1
9/1	Left Turn Left	-	-	-	-	4.1%	0.0

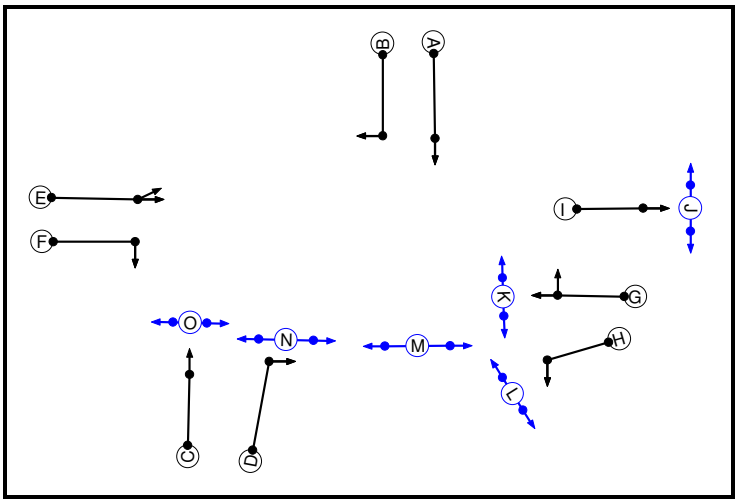
C1 Stream: 1 PRC for Signalled Lanes (%): 2.7 Total Delay for Signalled Lanes (pcuHr): 23.93
PRC Over All Lanes (%): 2.7 Total Delay Over All Lanes(pcuHr): 23.95 Cycle Time (s): 61

Scenario 3: '2014 1400-1500 Do Something MAX plus Potential' (FG3: '2014 1400-1500 Do Something MAX plus Potential', Plan 1: '1400-1500')

Network Layout Diagram

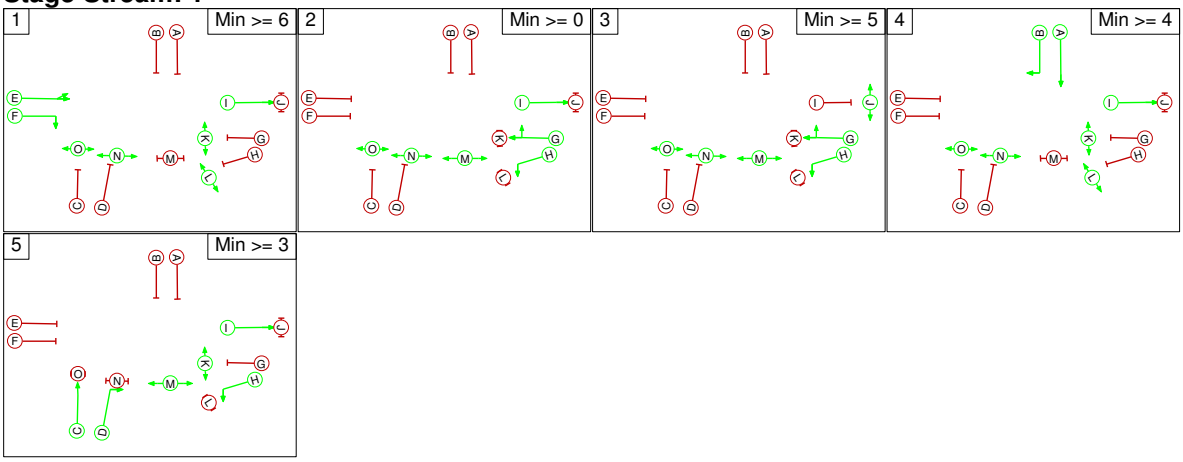


Phase Diagram

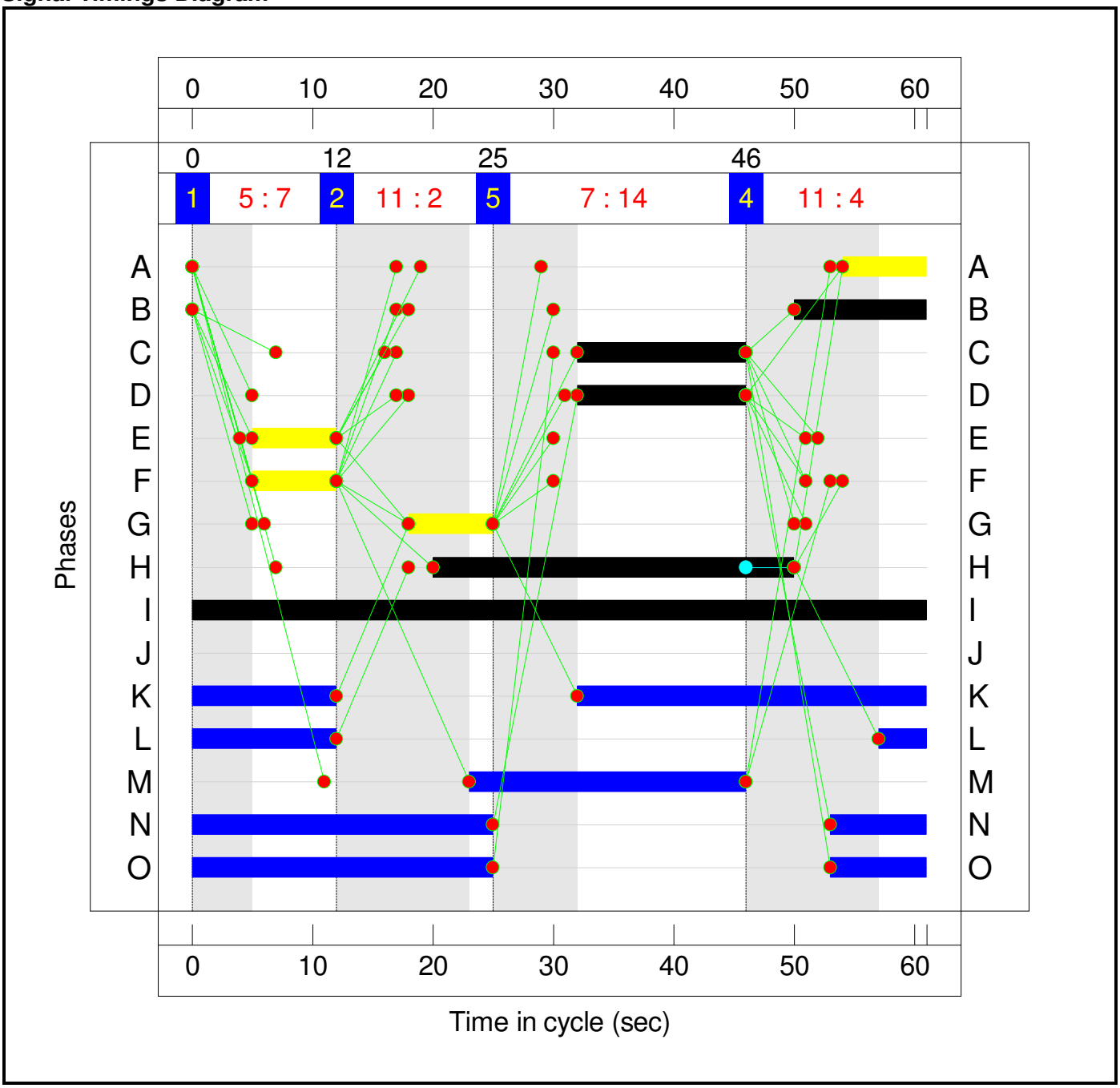


Stage Diagram

Stage Stream: 1



Signal Timings Diagram



Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**87.7%**	-
Dockyard	-	-	-	-	-	**87.7%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	7	54	0	80.5%	5.2
1/4+1/3	Wolseley Rd N Ahead Right	B A	11:7	50:54	0	85.7%	6.2
2/1	Weston Mill Dr (int) Left	H	30	20	50	38.8%	4.3
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	7:30	18:20	25:50	67.3%	3.1
2/4	Weston Mill Dr (int) Right Ahead	G	7	18	25	70.1%	4.3
3/2+3/1	Wolseley Rd S Ahead Left	C -	14	32	46	87.7%	10.1
3/3	Wolseley Rd S Right	D	14	32	46	59.9%	5.1
3/4	Wolseley Rd S Right	D	14	32	46	59.8%	5.3
4/2+4/1	Dockyard Ahead Ahead2	E	7	5	12	47.8%	2.0
4/3+4/4	Dockyard Ahead Right	E F	7	5	12	38.8%	2.5
6/1	Weston Mill Dr E Ped Ahead	I	61	0	61	26.1%	0.2
6/2	Weston Mill Dr E Ped Ahead	I	61	0	61	21.0%	0.1
9/1	Left Turn Left	-	-	-	-	6.6%	0.6

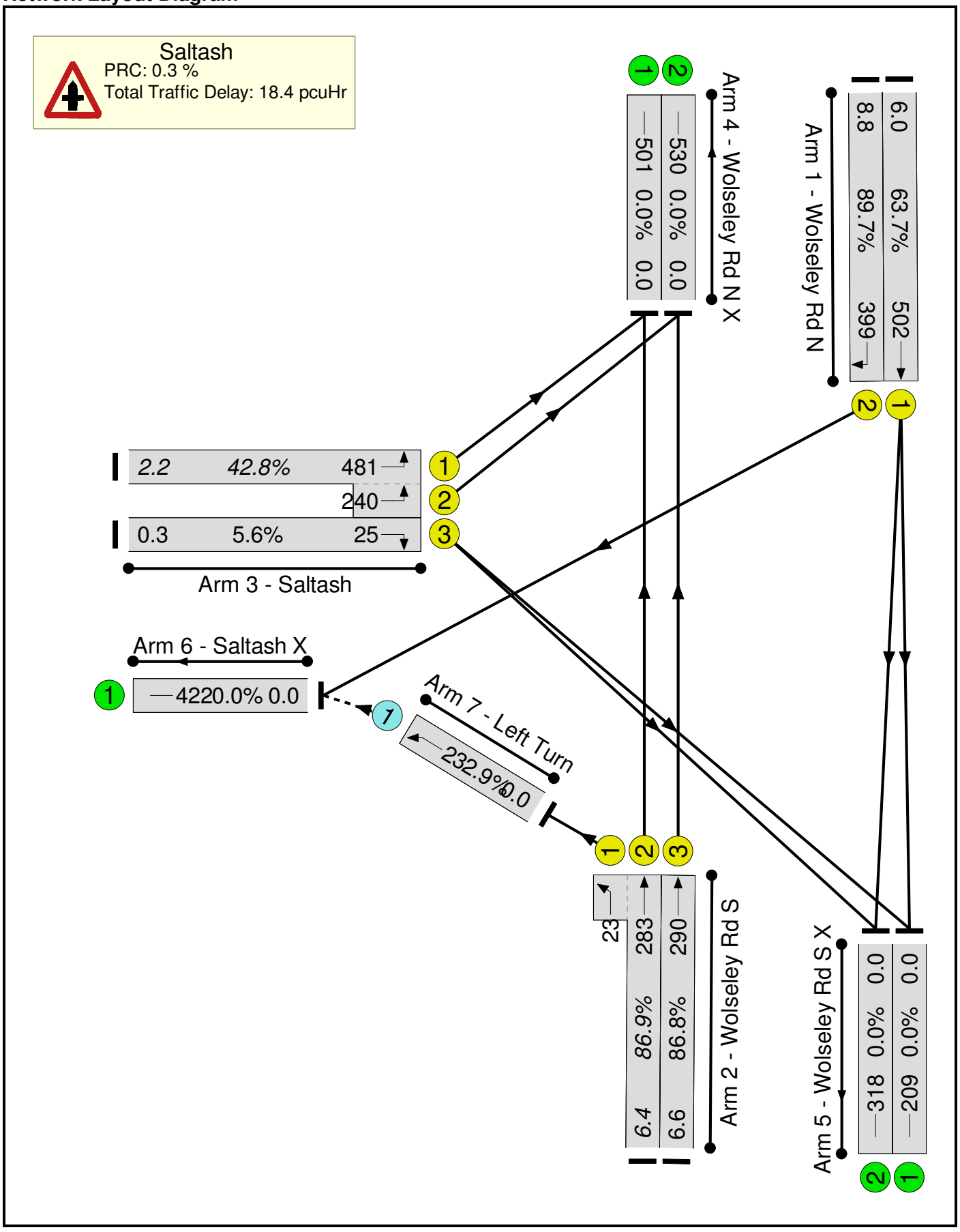
C1 Stream: 1 PRC for Signalled Lanes (%): 2.7 Total Delay for Signalled Lanes (pcuHr): 27.69
PRC Over All Lanes (%): 2.7 Total Delay Over All Lanes(pcuHr): 27.72 Cycle Time (s): 61

Wolseley Road / Saltash Road

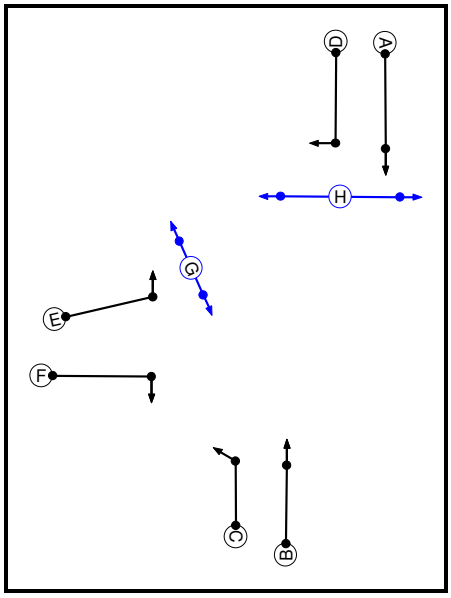
LINSIG Model Output

Scenario 1: '2014 1400-1500 Do Something' (FG1: '2014 1400-1500 Do Something', Plan 1: '1400-1500')

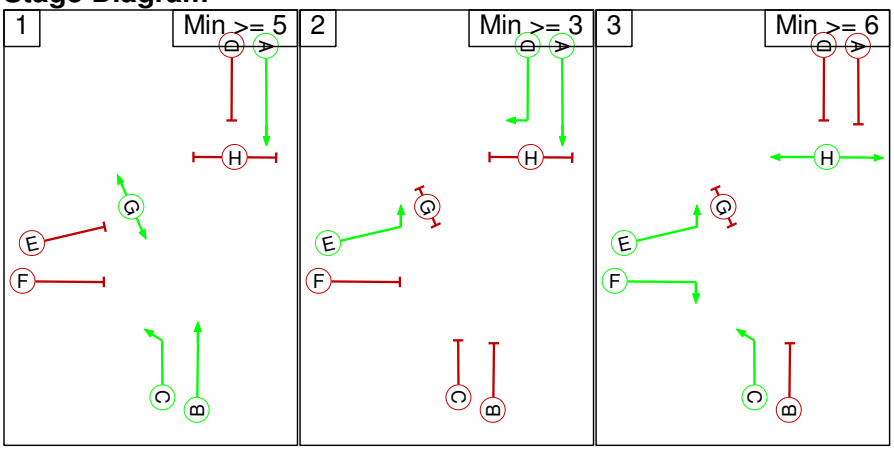
Network Layout Diagram



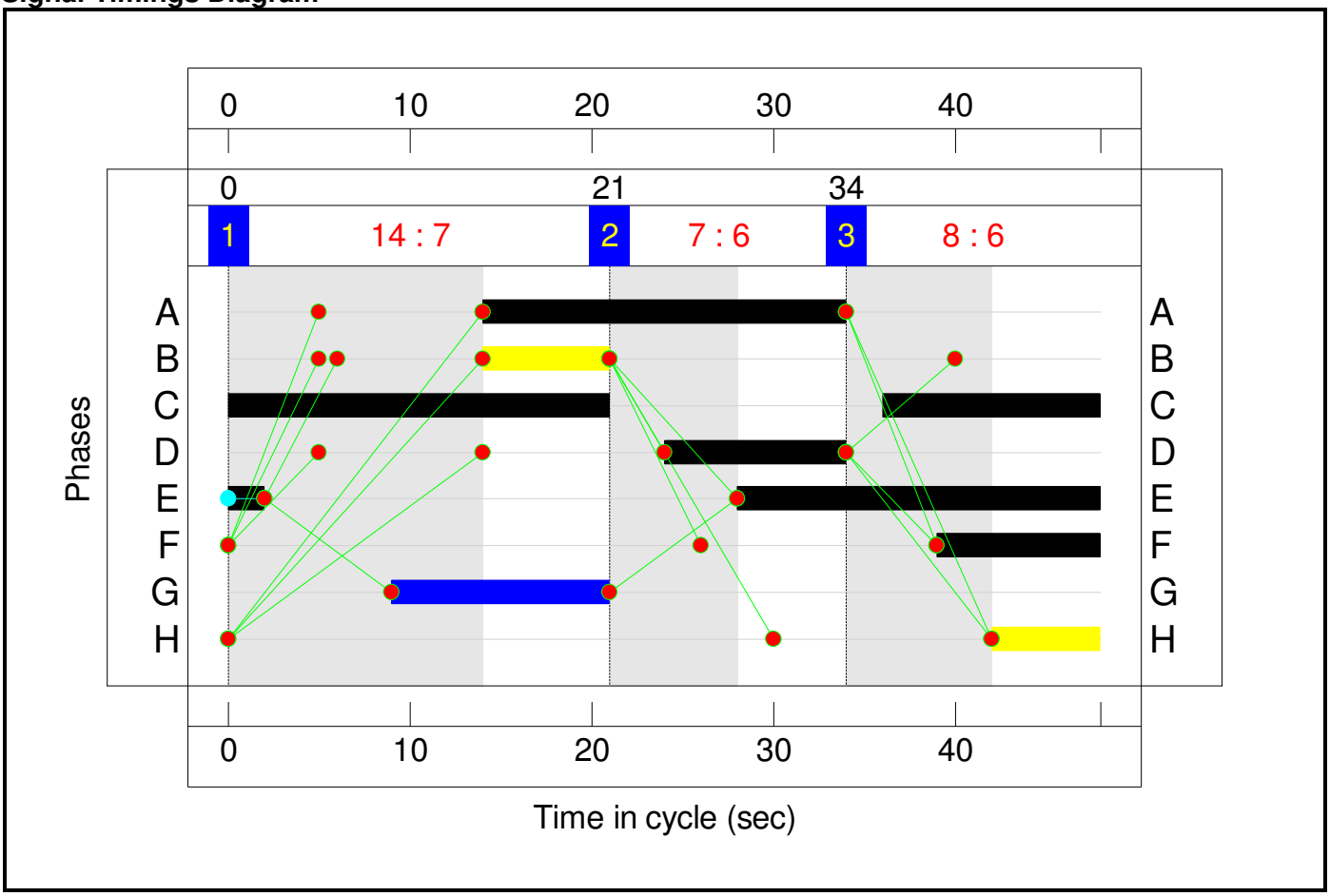
Phase Diagram



Stage Diagram



Signal Timings Diagram



Network Results

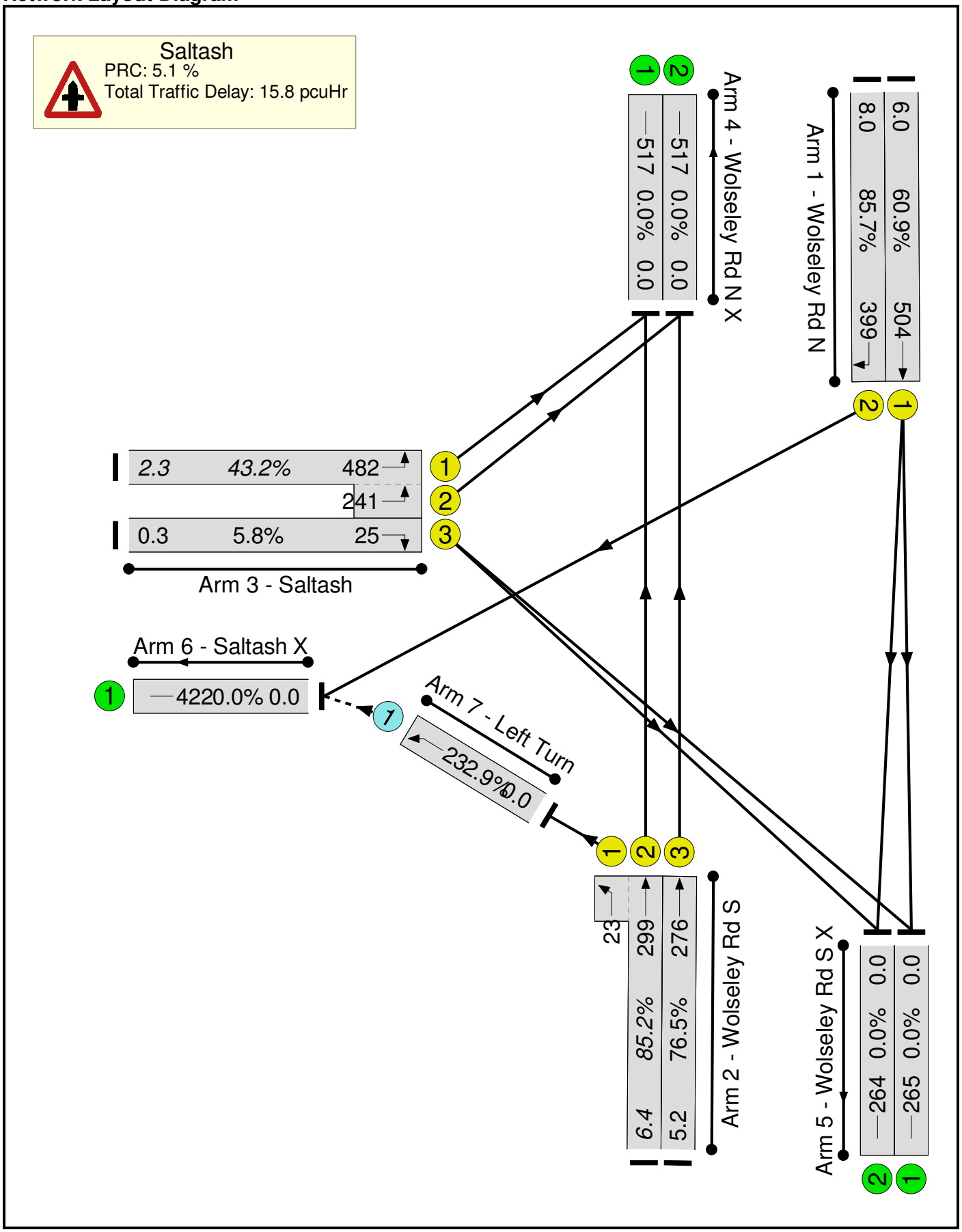
Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.7%**	-
Saltash	-	-	-	-	-	**89.7%**	-
1/1	Wolseley Rd N Ahead	A	20	14	34	63.7%	6.0
1/2	Wolseley Rd N Right	D	10	24	34	89.7%	8.8
2/2+2/1	Wolseley Rd S Ahead Left	B C	7:33	14:36	21	86.9%	6.4
2/3	Wolseley Rd S Ahead	B	7	14	21	86.8%	6.6
3/1+3/2	Saltash Left	E	22	28	2	42.8%	2.2
3/3	Saltash Right	F	9	39	0	5.6%	0.3
7/1	Left Turn Ahead	-	-	-	-	2.9%	0.0

C1

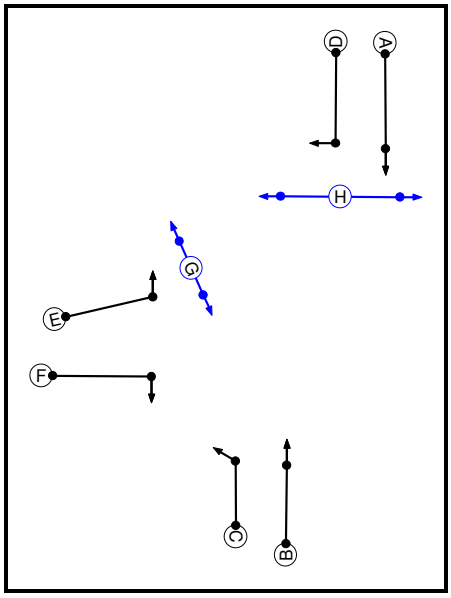
PRC for Signalled Lanes (%): 0.3
PRC Over All Lanes (%): 0.3
Total Delay for Signalled Lanes (pcuHr): 18.41
Total Delay Over All Lanes(pcuHr): 18.43
Cycle Time (s): 48

Scenario 2: '2014 1400-1500 Do Something MAX' (FG2: '2014 1400-1500 Do Something MAX', Plan 1: '1400-1500')

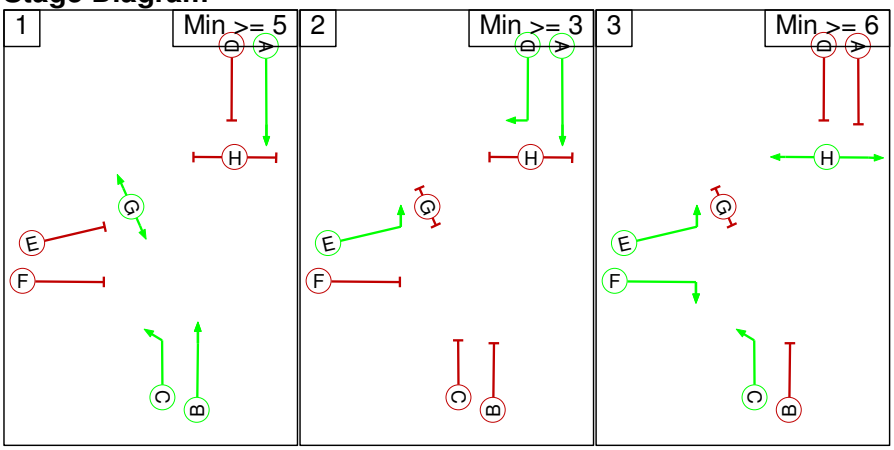
Network Layout Diagram



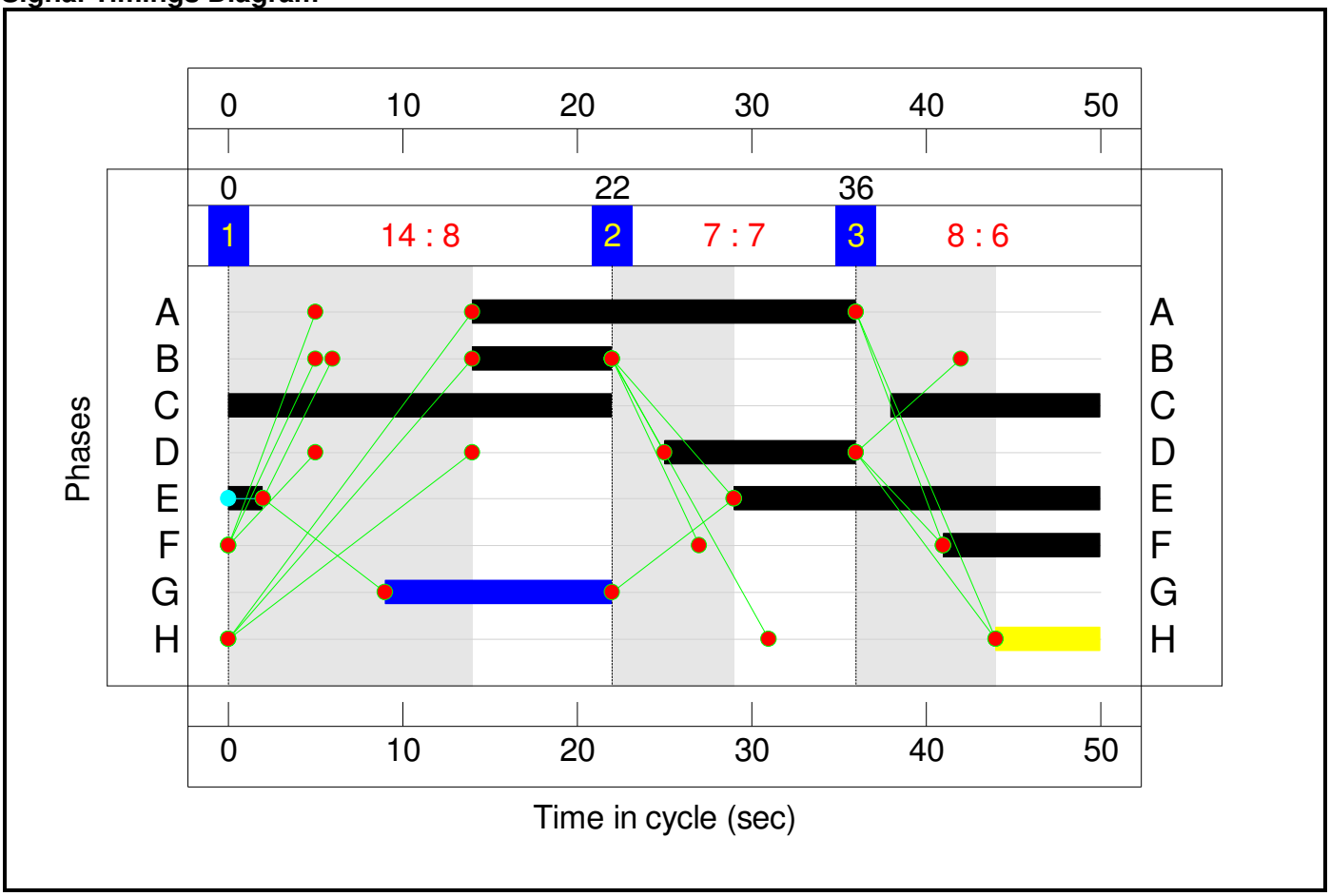
Phase Diagram



Stage Diagram



Signal Timings Diagram



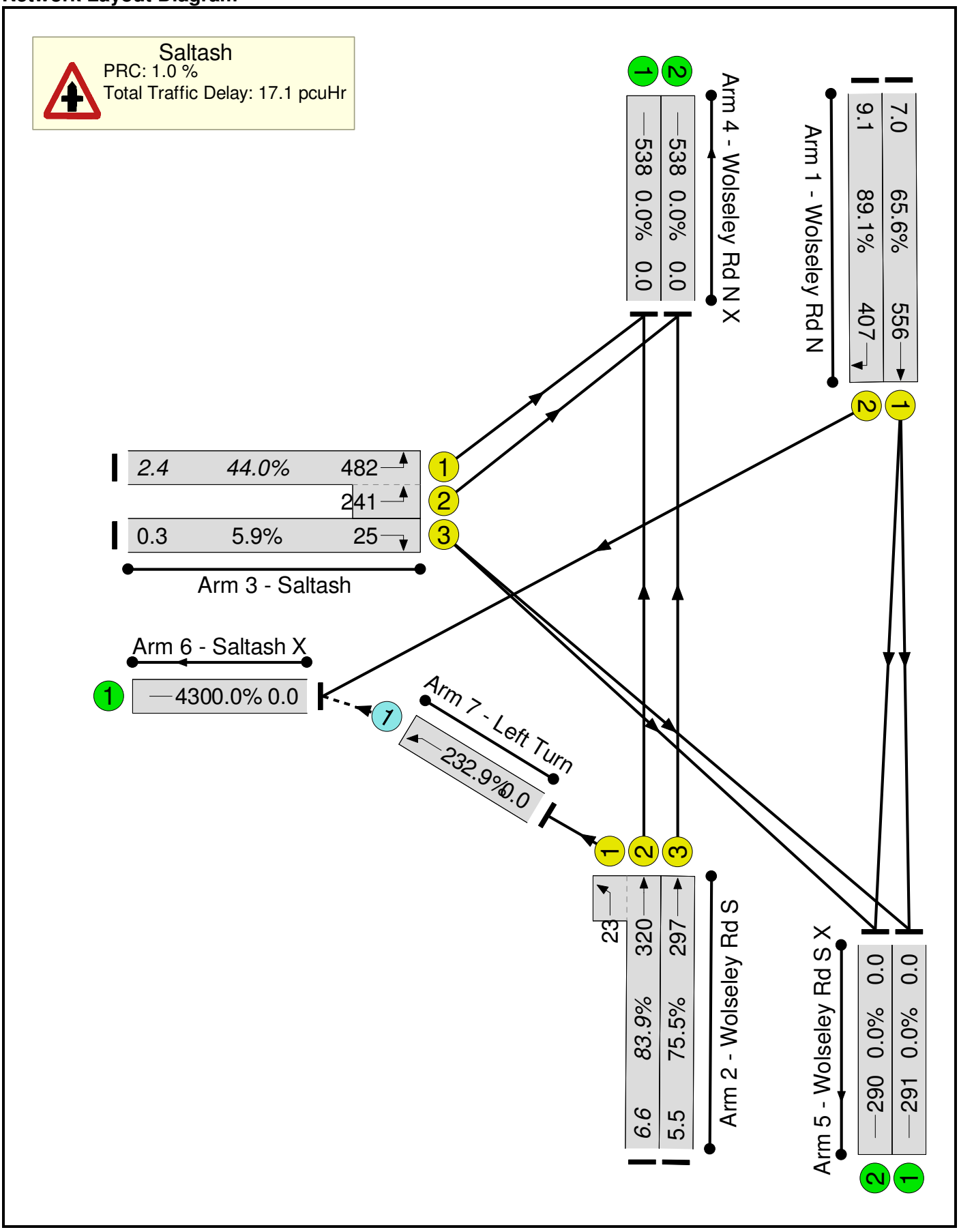
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**85.7%**	-
Saltash	-	-	-	-	-	**85.7%**	-
1/1	Wolseley Rd N Ahead	A	22	14	36	60.9%	6.0
1/2	Wolseley Rd N Right	D	11	25	36	85.7%	8.0
2/2+2/1	Wolseley Rd S Ahead Left	B C	8:34	14:38	22	85.2%	6.4
2/3	Wolseley Rd S Ahead	B	8	14	22	76.5%	5.2
3/1+3/2	Saltash Left	E	23	29	2	43.2%	2.3
3/3	Saltash Right	F	9	41	0	5.8%	0.3
7/1	Left Turn Ahead	-	-	-	-	2.9%	0.0

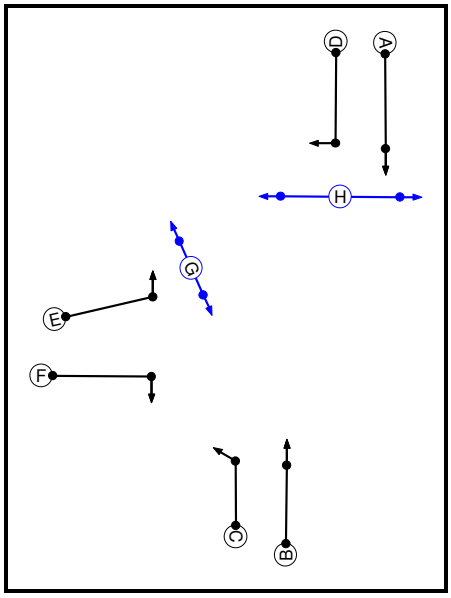
C1	PRC for Signalled Lanes (%):	5.1	Total Delay for Signalled Lanes (pcuHr):	15.77			
	PRC Over All Lanes (%):	5.1	Total Delay Over All Lanes(pcuHr):	15.78	Cycle Time (s):	50	

Scenario 3: '2014 1400-1500 Do Something MAX plus Potential' (FG3: '2014 1400-1500 Do Something MAX plus Potential', Plan 1: '1400-1500')

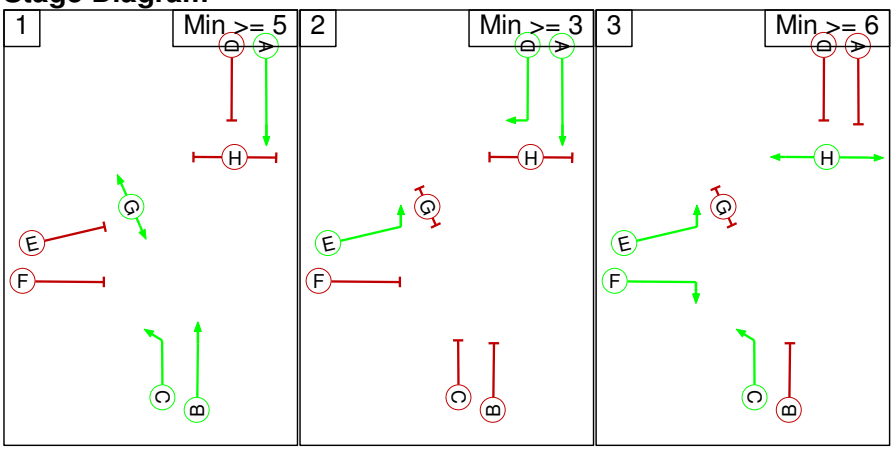
Network Layout Diagram



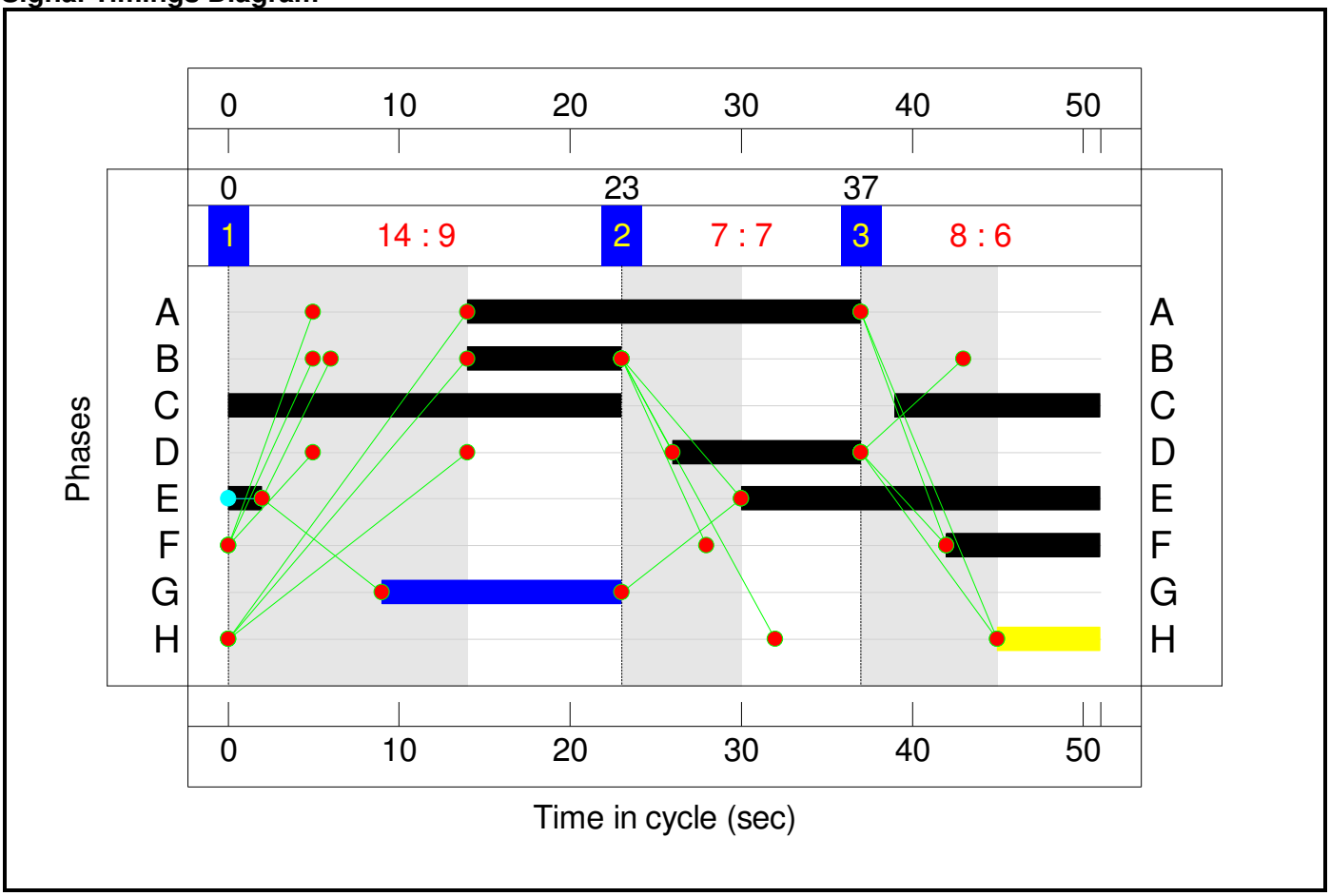
Phase Diagram



Stage Diagram



Signal Timings Diagram



Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**89.1%**	-
Saltash	-	-	-	-	-	**89.1%**	-
1/1	Wolseley Rd N Ahead	A	23	14	37	65.6%	7.0
1/2	Wolseley Rd N Right	D	11	26	37	89.1%	9.1
2/2+2/1	Wolseley Rd S Ahead Left	B C	9:35	14:39	23	83.9%	6.6
2/3	Wolseley Rd S Ahead	B	9	14	23	75.5%	5.5
3/1+3/2	Saltash Left	E	23	30	2	44.0%	2.4
3/3	Saltash Right	F	9	42	0	5.9%	0.3
7/1	Left Turn Ahead	-	-	-	-	2.9%	0.0

C1

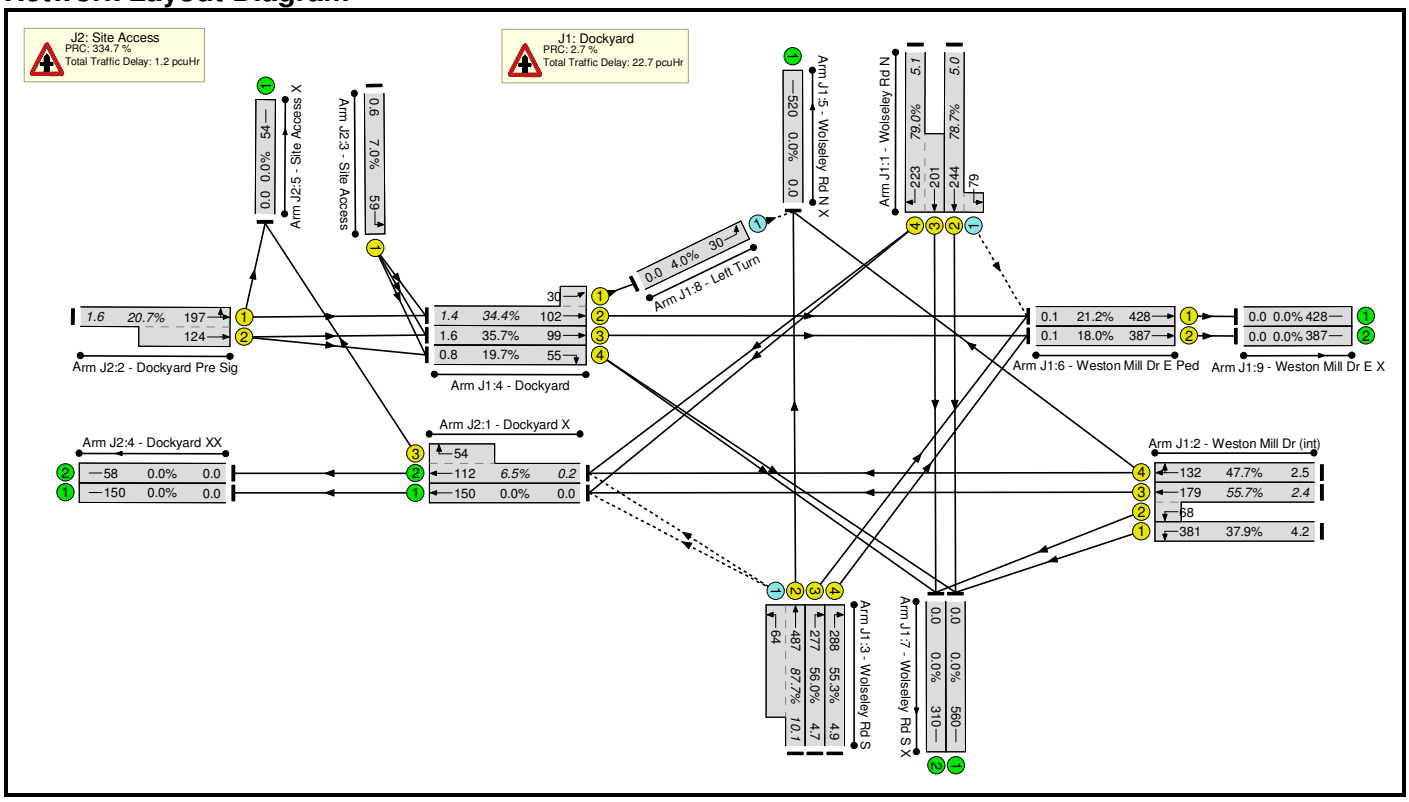
PRC for Signalled Lanes (%): 1.0
PRC Over All Lanes (%): 1.0
Total Delay for Signalled Lanes (pcuHr): 17.08
Total Delay Over All Lanes(pcuHr): 17.09
Cycle Time (s): 51

Wolseley Road / Weston Mill Drive / Site Access

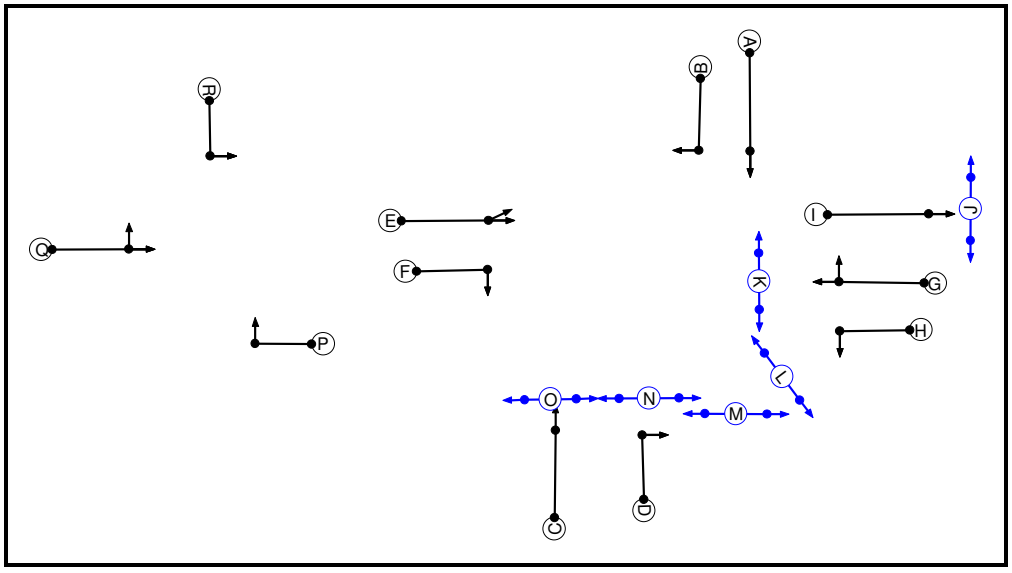
LINSIG Model Output

Scenario 1: '2014 1400-1500 Do Something' (FG1: '2014 1400-1500 Do Something', Plan 1: '1400-1500')

Network Layout Diagram

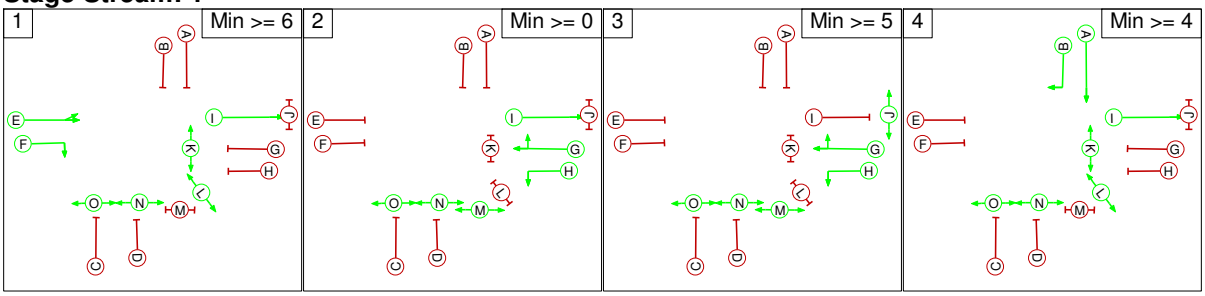


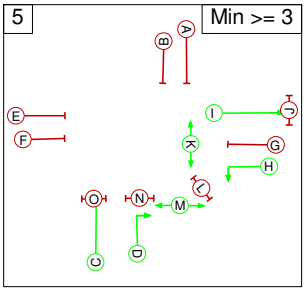
Phase Diagram



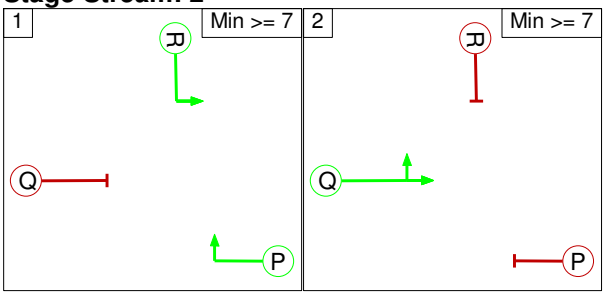
Stage Diagram

Stage Stream: 1

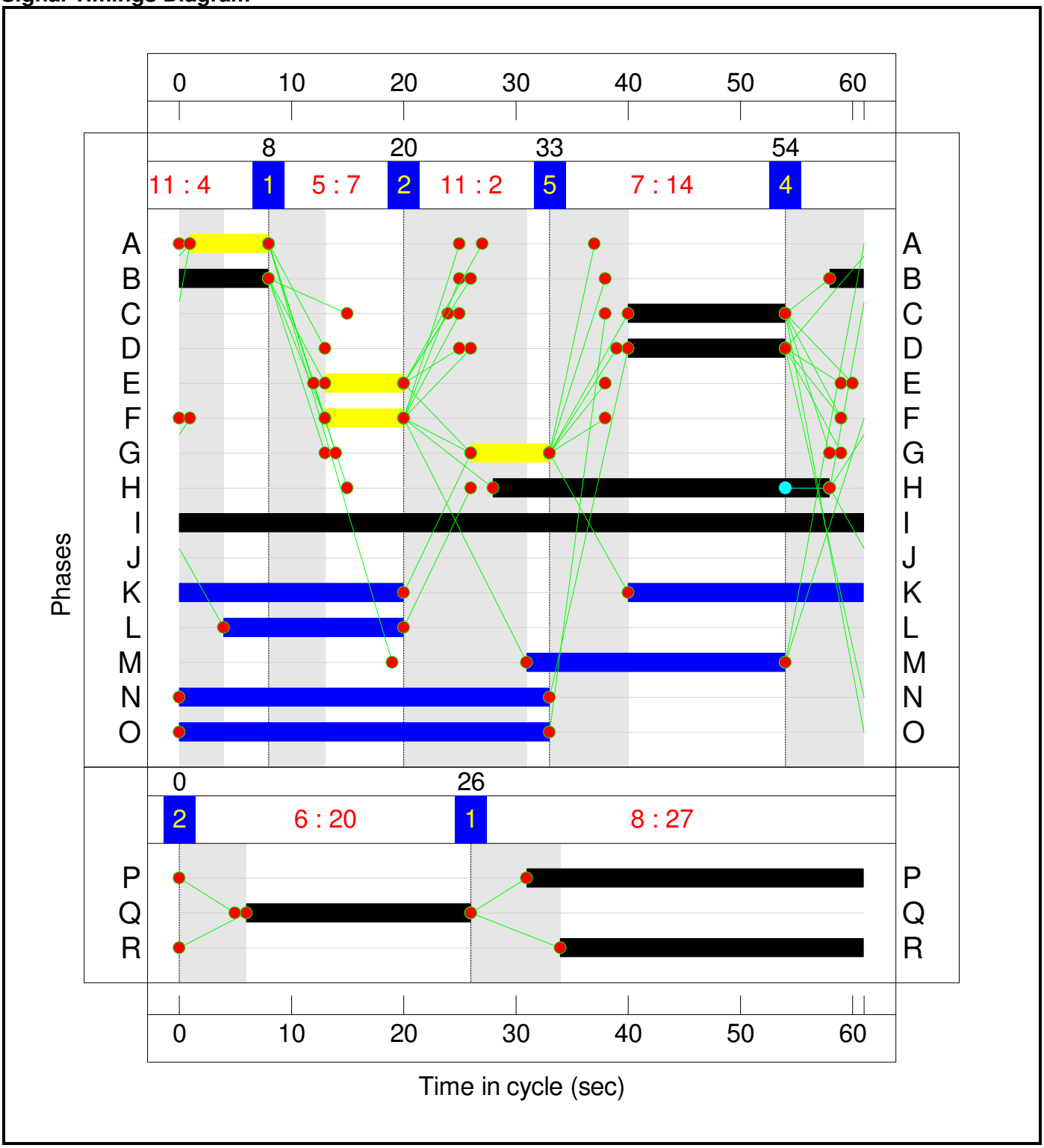




Stage Stream: 2



Signal Timings Diagram



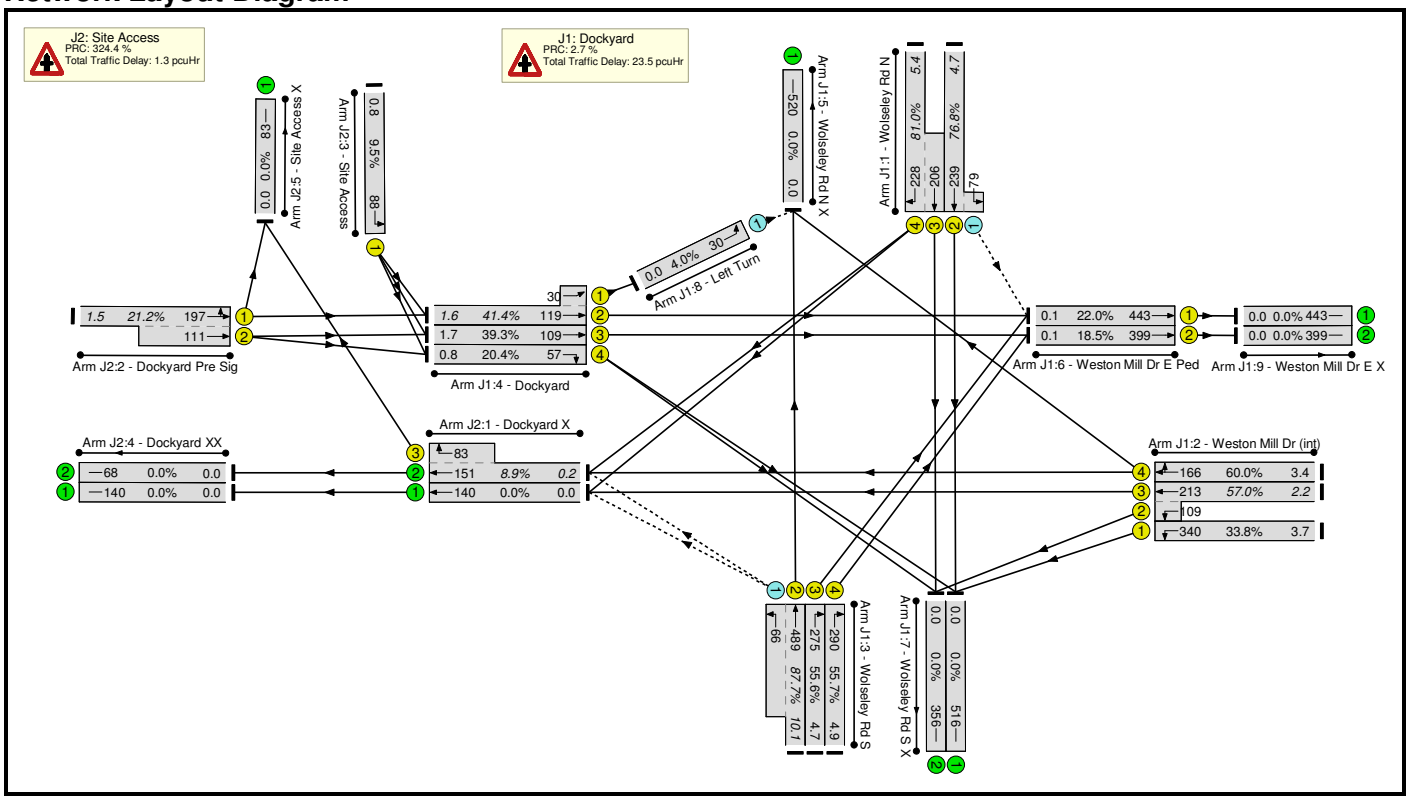
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**87.7%**	-
J1: Dockyard	-	-	-	-	-	**87.7%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	7	1	8	78.7%	5.0
1/4+1/3	Wolseley Rd N Ahead Right	B A	11:7	58:1	8	79.0%	5.1
2/1	Weston Mill Dr (int) Left	H	30	28	58	37.9%	4.2
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	7:30	26:28	33:58	55.7%	2.4
2/4	Weston Mill Dr (int) Right Ahead	G	7	26	33	47.7%	2.5
3/2+3/1	Wolseley Rd S Ahead Left	C -	14	40	54	87.7%	10.1
3/3	Wolseley Rd S Right	D	14	40	54	56.0%	4.7
3/4	Wolseley Rd S Right	D	14	40	54	55.3%	4.9
4/2+4/1	Dockyard Ahead Ahead2	E	7	13	20	34.4%	1.4
4/3	Dockyard Ahead	E	7	13	20	35.7%	1.6
4/4	Dockyard Right	F	7	13	20	19.7%	0.8
6/1	Weston Mill Dr E Ped Ahead	I	61	0	61	21.2%	0.1
6/2	Weston Mill Dr E Ped Ahead	I	61	0	61	18.0%	0.1
8/1	Left Turn Left	-	-	-	-	4.0%	0.0
J2: Site Access	-	-	-	-	-	**20.7%**	-
2/1+2/2	Dockyard Pre Sig Ahead Left	Q	20	6	26	20.7%	1.6
3/1	Site Access Left	R	27	34	0	7.0%	0.6

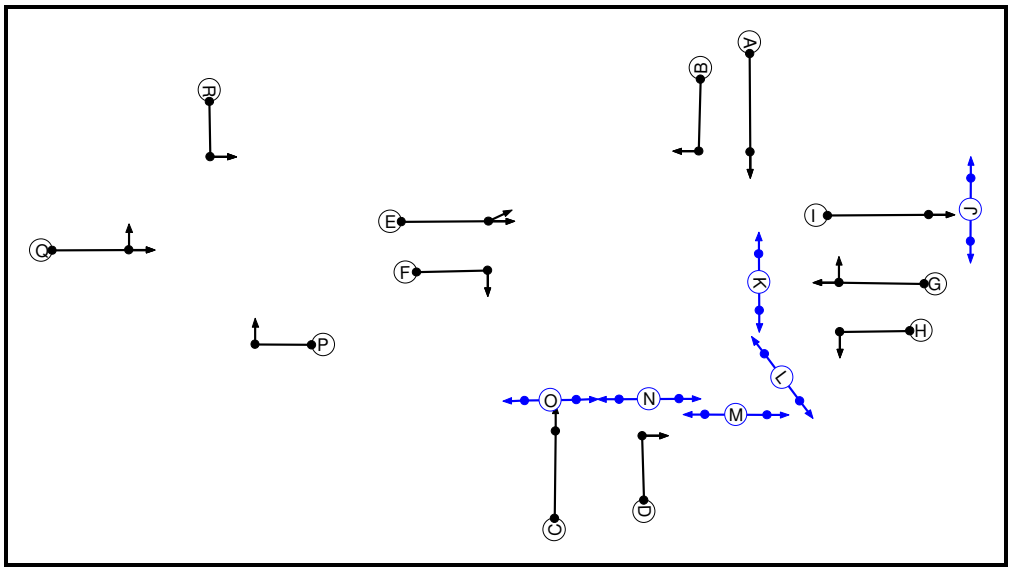
C1	Stream: 1 PRC for Signalled Lanes (%):	2.7	Total Delay for Signalled Lanes (pcuHr):	22.71	
C1	Stream: 2 PRC for Signalled Lanes (%):	334.7	Total Delay for Signalled Lanes (pcuHr):	1.08	
	PRC Over All Lanes (%):	2.7	Total Delay Over All Lanes(pcuHr):	23.89	Cycle Time (s): 61

Scenario 2: '2014 1400-1500 Do Something MAX' (FG2: '2014 1400-1500 Do Something MAX', Plan 1: '1400-1500')

Network Layout Diagram

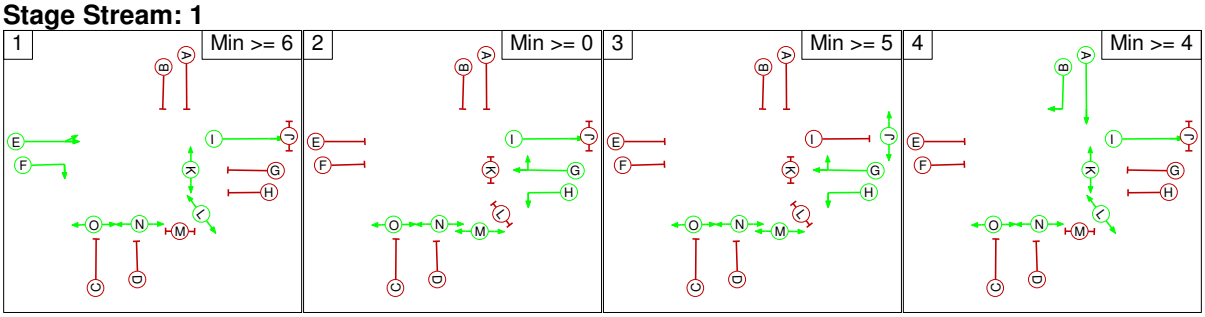


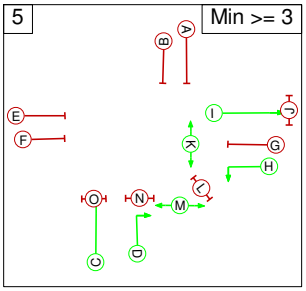
Phase Diagram



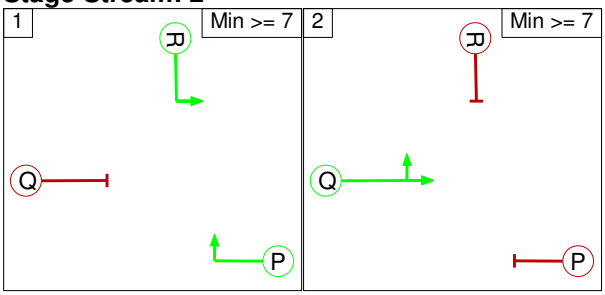
Stage Diagram

Stage Stream: 1

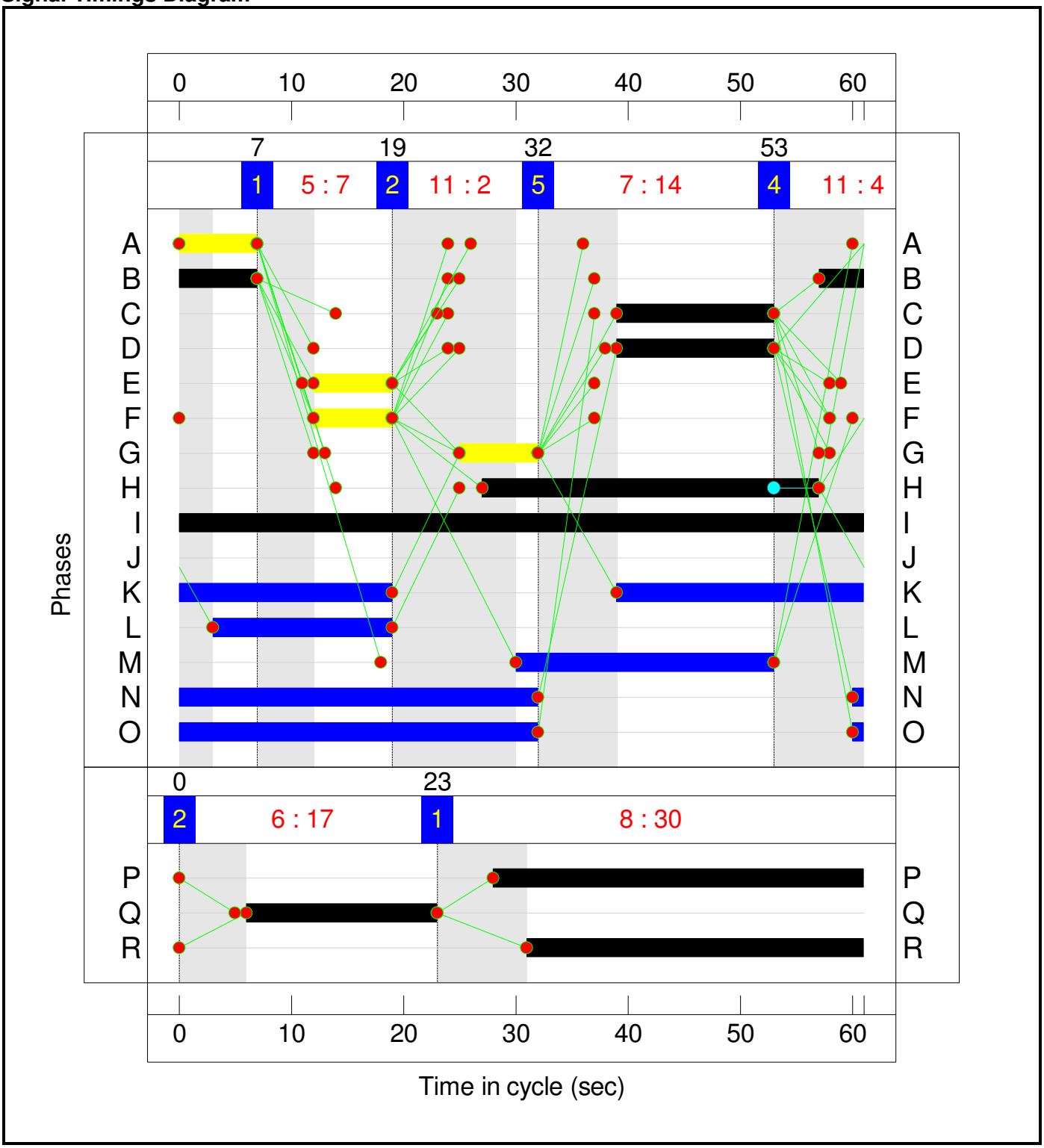




Stage Stream: 2



Signal Timings Diagram



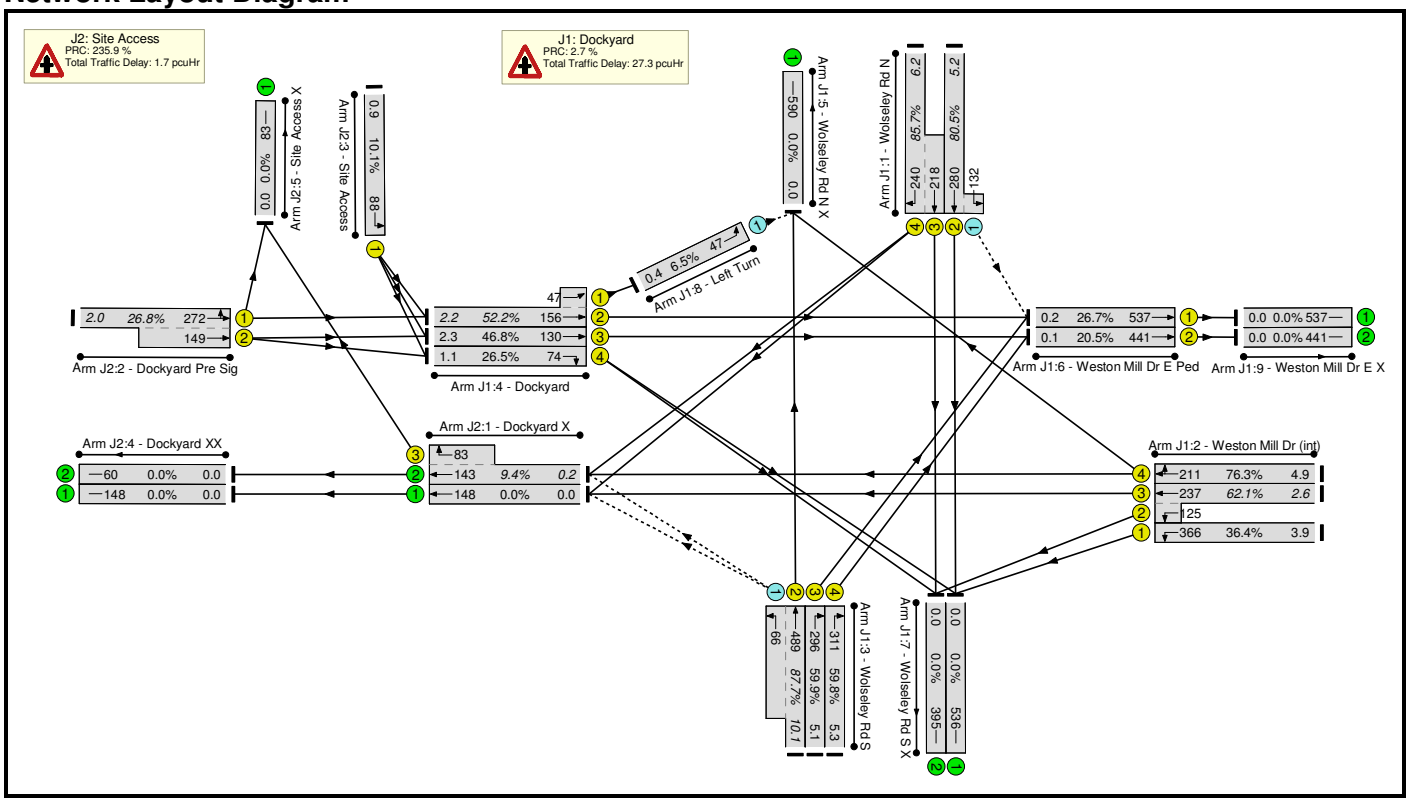
Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**87.7%**	-
J1: Dockyard	-	-	-	-	-	**87.7%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	7	0	7	76.8%	4.7
1/4+1/3	Wolseley Rd N Ahead Right	B A	11:7	57:0	7	81.0%	5.4
2/1	Weston Mill Dr (int) Left	H	30	27	57	33.8%	3.7
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	7:30	25:27	32:57	57.0%	2.2
2/4	Weston Mill Dr (int) Right Ahead	G	7	25	32	60.0%	3.4
3/2+3/1	Wolseley Rd S Ahead Left	C -	14	39	53	87.7%	10.1
3/3	Wolseley Rd S Right	D	14	39	53	55.6%	4.7
3/4	Wolseley Rd S Right	D	14	39	53	55.7%	4.9
4/2+4/1	Dockyard Ahead Ahead2	E	7	12	19	41.4%	1.6
4/3	Dockyard Ahead	E	7	12	19	39.3%	1.7
4/4	Dockyard Right	F	7	12	19	20.4%	0.8
6/1	Weston Mill Dr E Ped Ahead	I	61	0	61	22.0%	0.1
6/2	Weston Mill Dr E Ped Ahead	I	61	0	61	18.5%	0.1
8/1	Left Turn Left	-	-	-	-	4.0%	0.0
J2: Site Access	-	-	-	-	-	**21.2%**	-
2/1+2/2	Dockyard Pre Sig Ahead Left	Q	17	6	23	21.2%	1.5
3/1	Site Access Left	R	30	31	0	9.5%	0.8

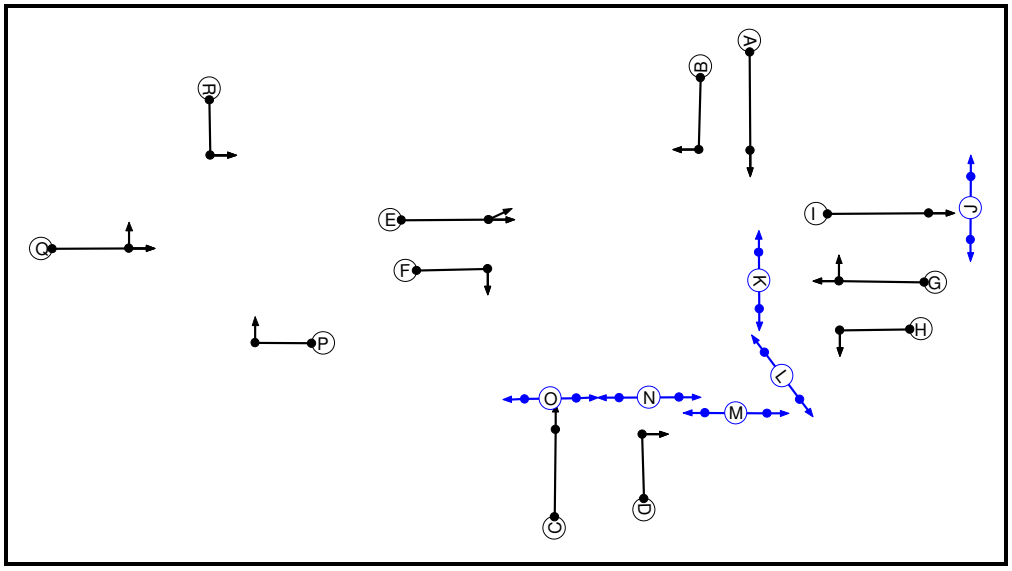
C1	Stream: 1 PRC for Signalled Lanes (%):	2.7	Total Delay for Signalled Lanes (pcuHr):	23.48	
C1	Stream: 2 PRC for Signalled Lanes (%):	324.4	Total Delay for Signalled Lanes (pcuHr):	1.25	
	PRC Over All Lanes (%):	2.7	Total Delay Over All Lanes(pcuHr):	24.84	Cycle Time (s): 61

Scenario 3: '2014 Do Something MAX plus Potential' (FG3: '2014 1400-1500 Do Something MAX plus Potential', Plan 1: '1400-1500')

Network Layout Diagram

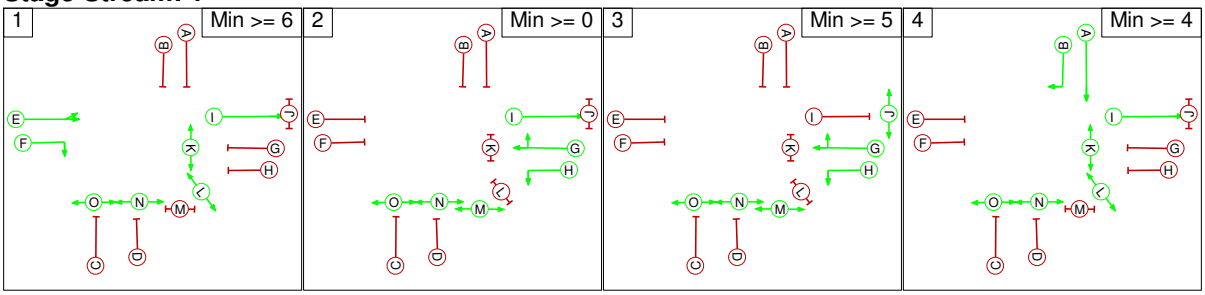


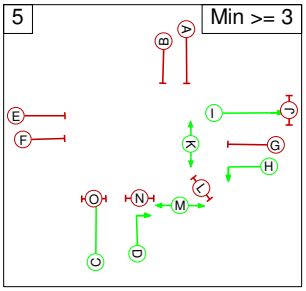
Phase Diagram



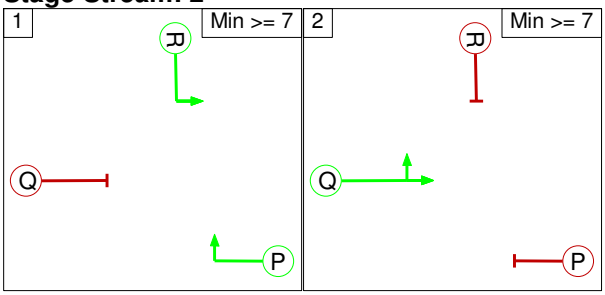
Stage Diagram

Stage Stream: 1

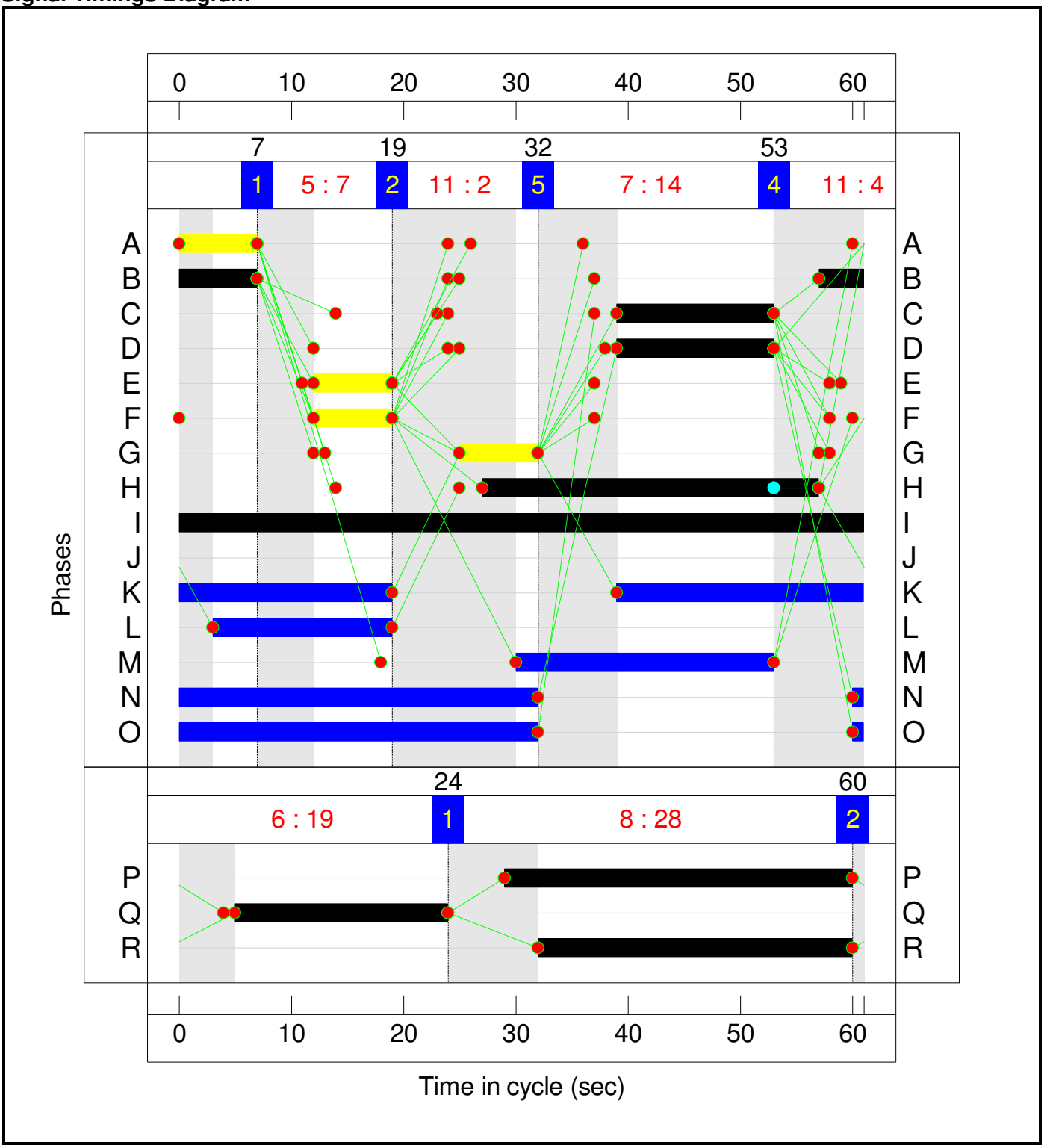




Stage Stream: 2



Signal Timings Diagram



Network Results

Item	Lane Description	Full Phase	Total Green (s)	Start Green (s)	End Green (s)	Deg Sat (%)	Mean Max Queue (pcu)
Network	-	-	-	-	-	**87.7%**	-
J1: Dockyard	-	-	-	-	-	**87.7%**	-
1/2+1/1	Wolseley Rd N Left Ahead	A -	7	0	7	80.5%	5.2
1/4+1/3	Wolseley Rd N Ahead Right	B A	11:7	57:0	7	85.7%	6.2
2/1	Weston Mill Dr (int) Left	H	30	27	57	36.4%	3.9
2/3+2/2	Weston Mill Dr (int) Left Ahead	G H	7:30	25:27	32:57	62.1%	2.6
2/4	Weston Mill Dr (int) Right Ahead	G	7	25	32	76.3%	4.9
3/2+3/1	Wolseley Rd S Ahead Left	C -	14	39	53	87.7%	10.1
3/3	Wolseley Rd S Right	D	14	39	53	59.9%	5.1
3/4	Wolseley Rd S Right	D	14	39	53	59.8%	5.3
4/2+4/1	Dockyard Ahead Ahead2	E	7	12	19	52.2%	2.2
4/3	Dockyard Ahead	E	7	12	19	46.8%	2.3
4/4	Dockyard Right	F	7	12	19	26.5%	1.1
6/1	Weston Mill Dr E Ped Ahead	I	61	0	61	26.7%	0.2
6/2	Weston Mill Dr E Ped Ahead	I	61	0	61	20.5%	0.1
8/1	Left Turn Left	-	-	-	-	6.5%	0.4
J2: Site Access	-	-	-	-	-	**26.8%**	-
2/1+2/2	Dockyard Pre Sig Ahead Left	Q	19	5	24	26.8%	2.0
3/1	Site Access Left	R	28	32	60	10.1%	0.9

C1	Stream: 1 PRC for Signalled Lanes (%):	2.7	Total Delay for Signalled Lanes (pcuHr):	27.25	
C1	Stream: 2 PRC for Signalled Lanes (%):	235.9	Total Delay for Signalled Lanes (pcuHr):	1.57	
	PRC Over All Lanes (%):	2.7	Total Delay Over All Lanes(pcuHr):	28.96	Cycle Time (s): 61