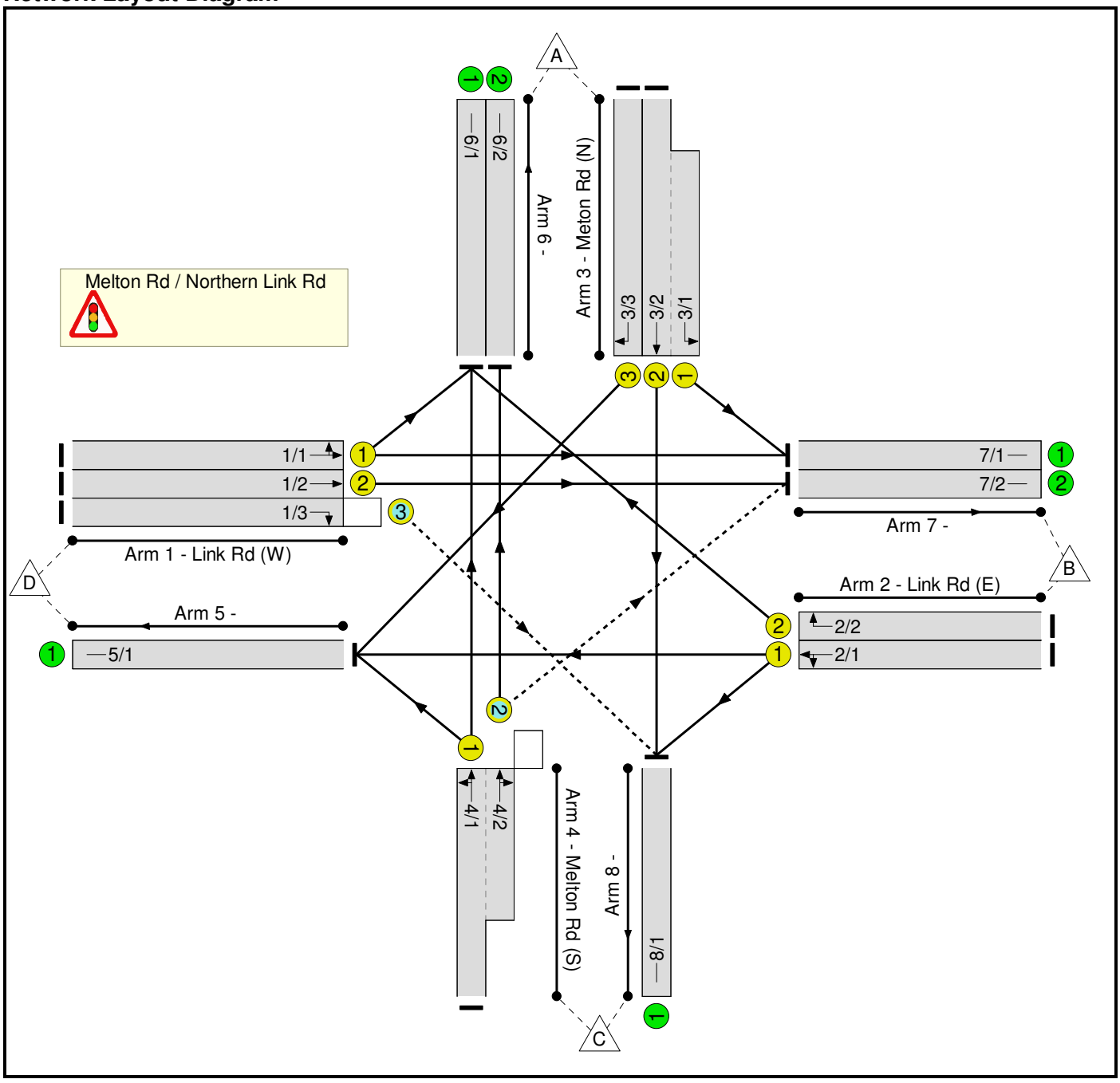
Full Input Data And Results

User and Project Details

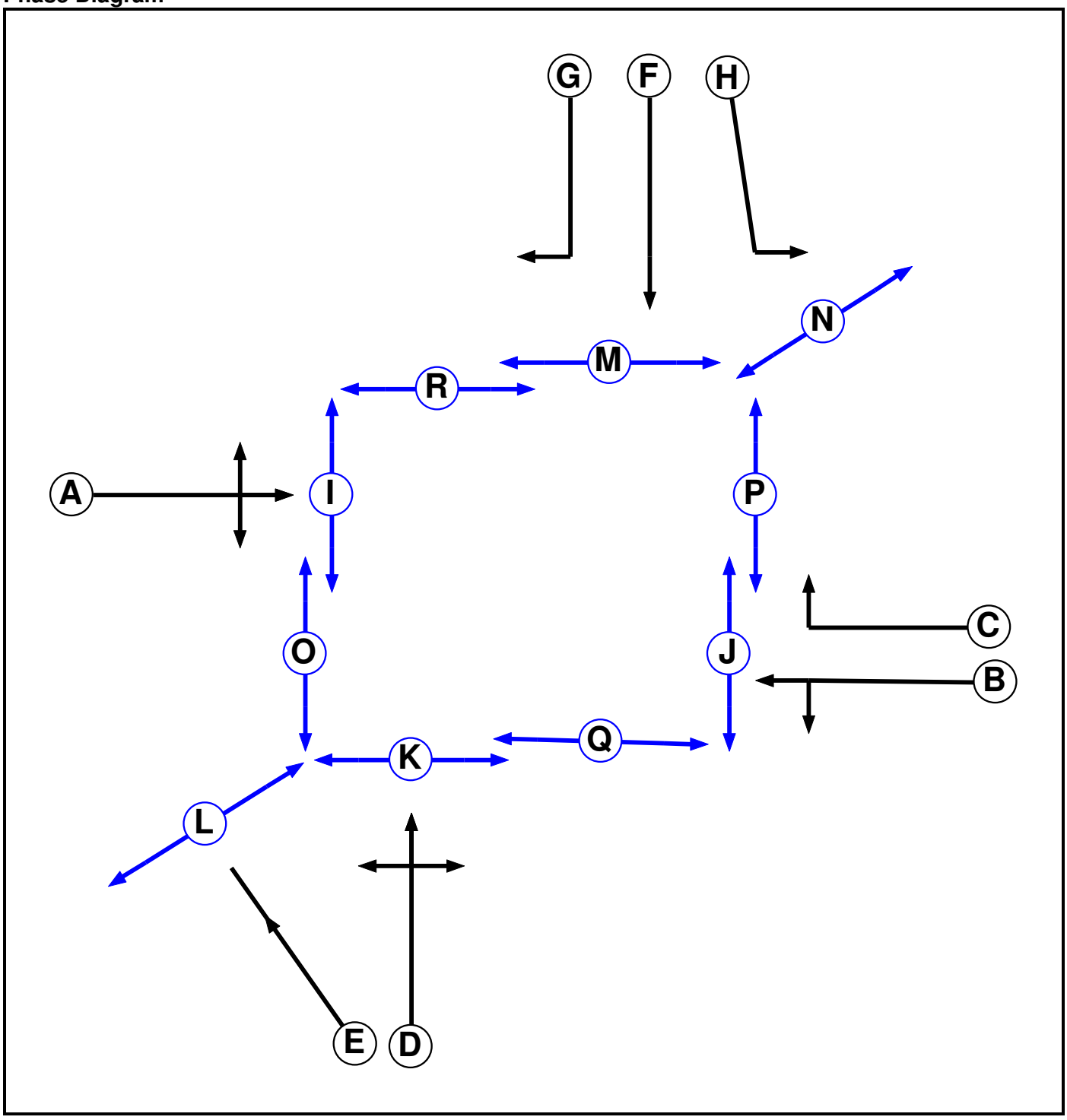
Project:	**North East Leicester SUE**
Title:	**Melton Road / Northern Link Road**
Location:	
File name:	A046980-7 Melton Road - Northern Link_3.lsg3x
Author:	
Company:	
Address:	
Notes:	Assumed pedestrian stage appeared every cycle but o/c detection running to minimum clearance.

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		-9999	7
B	Traffic		-9999	7
C	Traffic		-9999	7
D	Traffic		-9999	7
E	Traffic		-9999	7
F	Traffic		-9999	7
G	Traffic		-9999	7
H	Traffic		-9999	7
I	Pedestrian		-9999	8
J	Pedestrian		-9999	5
K	Pedestrian		-9999	7
L	Pedestrian		-9999	5
M	Pedestrian		-9999	8
N	Pedestrian		-9999	5
O	Pedestrian		-9999	5
P	Pedestrian		-9999	5
Q	Pedestrian		-9999	5
R	Pedestrian		-9999	5

Full Input Data And Results

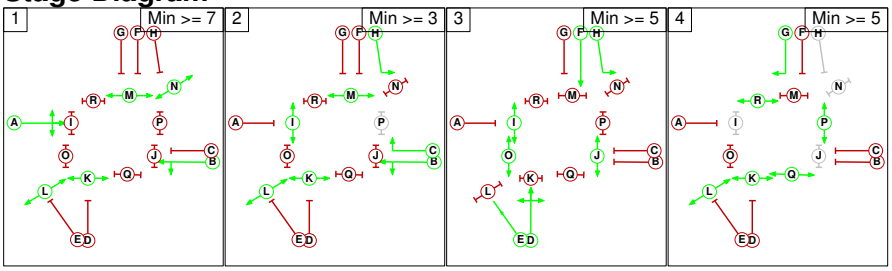
Phase Intergreens Matrix

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

Phases in Stage

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

Stage Diagram



Phase Delays

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

Full Input Data And Results

Prohibited Stage Change

From Stage	To Stage				
		1	2	3	4
	1		10	10	10
	2	10		11	9
	3	10	10		12
	4	6	6	12	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Melton Rd / Northern Link Rd

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/3 (Link Rd (W))	8/1 (Right)	1439	0	2/1	1.09	All	2.00	-	0.50	2	2.00
4/2 (Melton Rd (S))	7/2 (Right)	1439	0	3/3	1.09	All	2.00	2.00	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: Melton Rd / Northern Link Rd												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (Link Rd (W))	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 6 Left	10.00
											Arm 7 Ahead	Inf
1/2 (Link Rd (W))	U	A	2	3	60.0	Geom	-	3.00	0.00	N	Arm 7 Ahead	Inf
1/3 (Link Rd (W))	O	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 8 Right	20.00
2/1 (Link Rd (E))	U	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 5 Ahead	Inf
											Arm 8 Left	80.00
2/2 (Link Rd (E))	U	C	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 6 Right	14.00
3/1 (Meton Rd (N))	U	H	2	3	14.0	Geom	-	3.65	0.00	Y	Arm 7 Left	25.00
3/2 (Meton Rd (N))	U	F	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 8 Ahead	Inf
3/3 (Meton Rd (N))	U	G	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 5 Right	20.00
4/1 (Melton Rd (S))	U	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Left	25.00
											Arm 6 Ahead	Inf
4/2 (Melton Rd (S))	O	D	2	3	8.0	Geom	-	3.00	0.00	Y	Arm 6 Ahead	Inf
											Arm 7 Right	15.00
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/2	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2031 AM All Dev'	08:00	09:00	01:00	
2: '2031 PM All Dev'	17:00	18:00	01:00	

Scenario 1: '2031 AM All Dev (Stage 2 Mitigation)' (FG1: '2031 AM All Dev', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	165	715	0	880
	B	29	0	72	299	400
	C	494	23	0	16	533
	D	9	249	0	0	258
	Tot.	532	437	787	315	2071

Traffic Lane Flows

Lane	Scenario 1: 2031 AM All Dev (Stage 2 Mitigation)
Junction: Melton Rd / Northern Link Rd	
1/1	119
1/2	139
1/3	0
2/1	371
2/2	29
3/1 (short)	165
3/2 (with short)	880(In) 715(Out)
3/3	0
4/1 (with short)	533(In) 267(Out)
4/2 (short)	266
5/1	315
6/1	289
6/2	243
7/1	275
7/2	162
8/1	787

Full Input Data And Results

Lane Saturation Flows

Junction: Melton Rd / Northern Link Rd								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Link Rd (W))	3.00	0.00	Y	Arm 6 Left	10.00	7.6 %	1894	1894
				Arm 7 Ahead	Inf	92.4 %		
1/2 (Link Rd (W))	3.00	0.00	N	Arm 7 Ahead	Inf	100.0 %	2055	2055
1/3 (Link Rd (W))	3.00	0.00	Y	Arm 8 Right	20.00	0.0 %	1915	1915
2/1 (Link Rd (E))	3.65	0.00	Y	Arm 5 Ahead	Inf	80.6 %	1973	1973
				Arm 8 Left	80.00	19.4 %		
2/2 (Link Rd (E))	3.65	0.00	Y	Arm 6 Right	14.00	100.0 %	1788	1788
3/1 (Meton Rd (N))	3.65	0.00	Y	Arm 7 Left	25.00	100.0 %	1868	1868
3/2 (Meton Rd (N))	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
3/3 (Meton Rd (N))	3.65	0.00	Y	Arm 5 Right	20.00	0.0 %	1980	1980
4/1 (Melton Rd (S))	3.00	0.00	Y	Arm 5 Left	25.00	6.0 %	1908	1908
				Arm 6 Ahead	Inf	94.0 %		
4/2 (Melton Rd (S))	3.00	0.00	Y	Arm 6 Ahead	Inf	91.4 %	1899	1899
				Arm 7 Right	15.00	8.6 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2031 PM All Dev (Stage 2 Mitigation)' (FG2: '2031 PM All Dev', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	170	655	3	828
	B	31	0	27	278	336
	C	810	56	0	20	886
	D	0	367	0	0	367
	Tot.	841	593	682	301	2417

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2031 PM All Dev (Stage 2 Mitigation)
Junction: Melton Rd / Northern Link Rd	
1/1	175
1/2	192
1/3	0
2/1	305
2/2	31
3/1 (short)	170
3/2 (with short)	825(In) 655(Out)
3/3	3
4/1 (with short)	886(In) 445(Out)
4/2 (short)	441
5/1	301
6/1	456
6/2	385
7/1	345
7/2	248
8/1	682

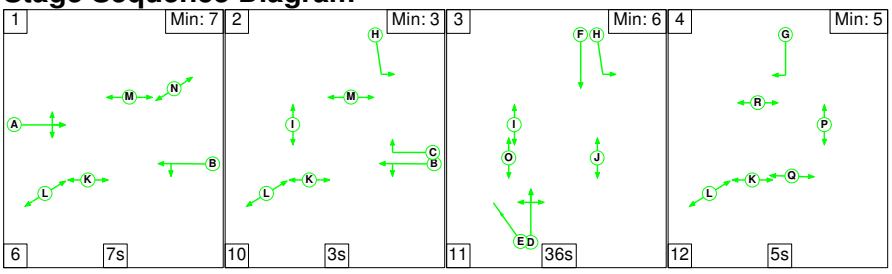
Full Input Data And Results

Lane Saturation Flows

Junction: Melton Rd / Northern Link Rd								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Link Rd (W))	3.00	0.00	Y	Arm 6 Left	10.00	0.0 %	1915	1915
				Arm 7 Ahead	Inf	100.0 %		
1/2 (Link Rd (W))	3.00	0.00	N	Arm 7 Ahead	Inf	100.0 %	2055	2055
1/3 (Link Rd (W))	3.00	0.00	Y	Arm 8 Right	20.00	0.0 %	1915	1915
2/1 (Link Rd (E))	3.65	0.00	Y	Arm 5 Ahead	Inf	91.1 %	1977	1977
				Arm 8 Left	80.00	8.9 %		
2/2 (Link Rd (E))	3.65	0.00	Y	Arm 6 Right	14.00	100.0 %	1788	1788
3/1 (Meton Rd (N))	3.65	0.00	Y	Arm 7 Left	25.00	100.0 %	1868	1868
3/2 (Meton Rd (N))	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
3/3 (Meton Rd (N))	3.65	0.00	Y	Arm 5 Right	20.00	100.0 %	1842	1842
4/1 (Melton Rd (S))	3.00	0.00	Y	Arm 5 Left	25.00	4.5 %	1910	1910
				Arm 6 Ahead	Inf	95.5 %		
4/2 (Melton Rd (S))	3.00	0.00	Y	Arm 6 Ahead	Inf	87.3 %	1891	1891
				Arm 7 Right	15.00	12.7 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2031 AM All Dev (Stage 2 Mitigation)' (FG1: '2031 AM All Dev', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

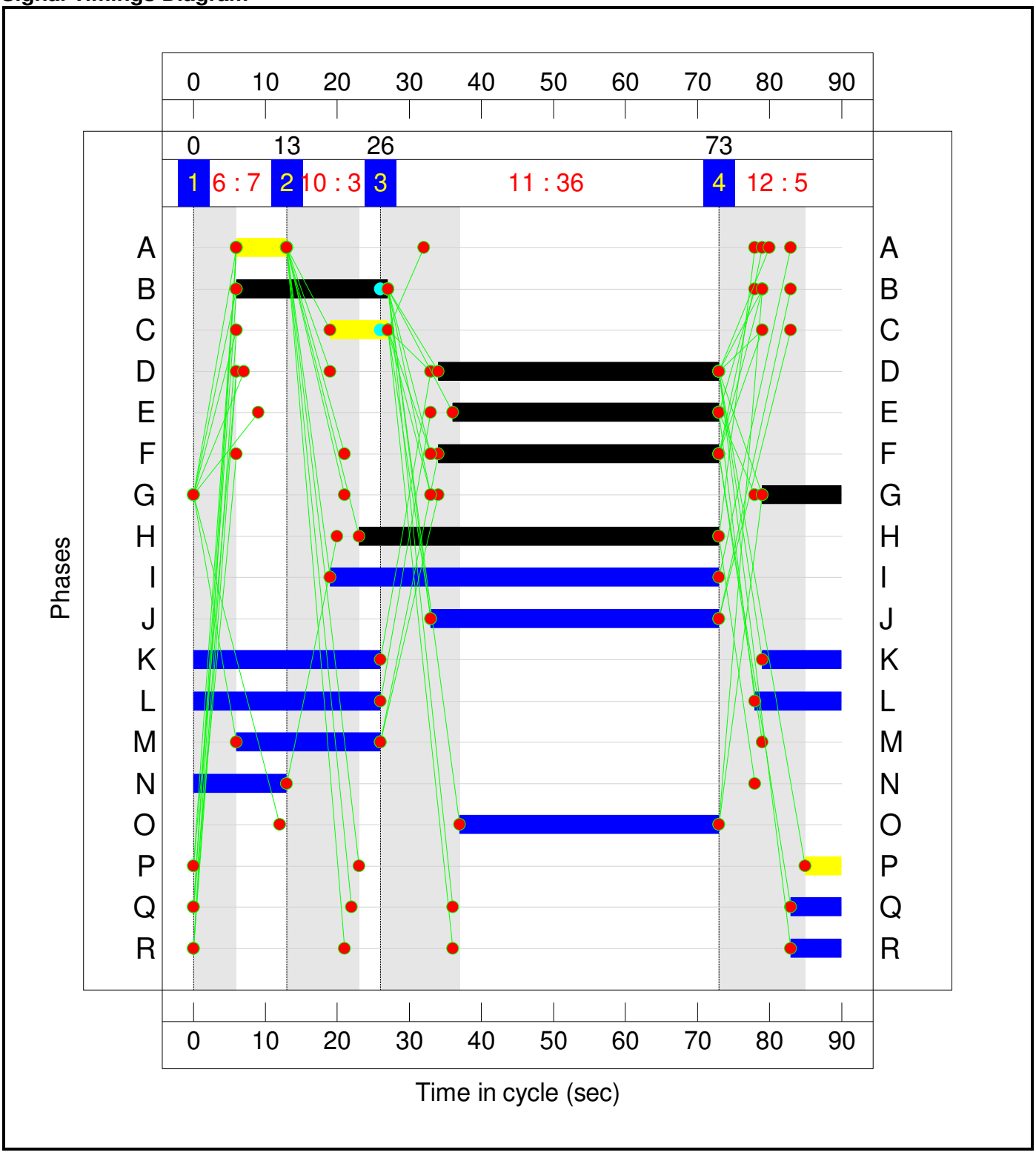


Stage Timings

Stage	1	2	3	4
Duration	7	3	36	5
Change Point	0	13	26	73

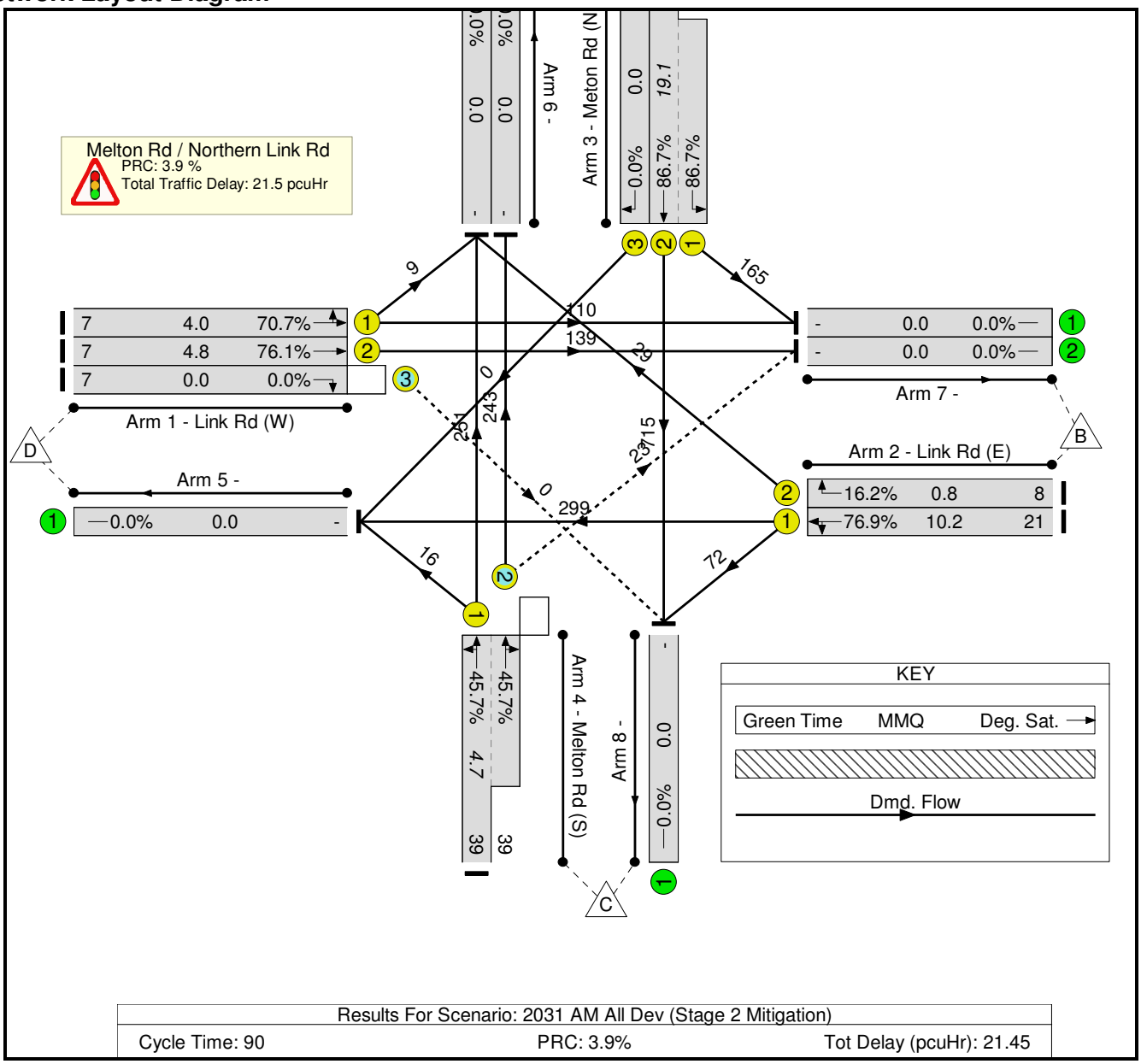
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Melton Road / Northern Link Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.7%**
Melton Rd / Northern Link Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.7%**
1/1	Link Rd (W) Left Ahead	U	N/A	N/A	A		1	7	-	119	1894	168	70.7%
1/2	Link Rd (W) Ahead	U	N/A	N/A	A		1	7	-	139	2055	183	76.1%
1/3	Link Rd (W) Right	O	N/A	N/A	A		1	7	-	0	1915	80	0.0%
2/1	Link Rd (E) Ahead Left	U	N/A	N/A	B		1	21	-	371	1973	482	76.9%
2/2	Link Rd (E) Right	U	N/A	N/A	C		1	8	-	29	1788	179	16.2%
3/2+3/1	Meton Rd (N) Left Ahead	U	N/A	N/A	F H		1	39:50	-	880	1980:1868	825+190	86.7 : 86.7%
3/3	Meton Rd (N) Right	U	N/A	N/A	G		1	11	-	0	1980	264	0.0%
4/1+4/2	Melton Rd (S) Left Ahead Right	U+O	N/A	N/A	D		1	39	-	533	1908:1899	585+583	45.7 : 45.7%
5/1		U	N/A	N/A	-		-	-	-	315	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	289	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	243	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	275	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	162	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	787	Inf	Inf	0.0%

Full Input Data And Results

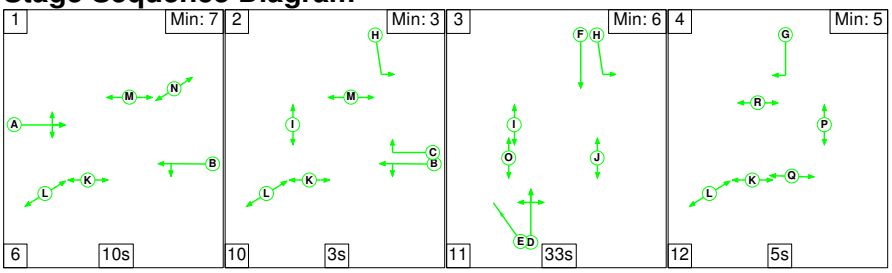
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Melton Road / Northern Link Road	**-**	**-**	**0**	**22**	**1**	**13.6**	**7.9**	**0.0**	**21.5**	**-**	**-**	**-**	**-**
Melton Rd / Northern Link Rd	**-**	**-**	**0**	**22**	**1**	**13.6**	**7.9**	**0.0**	**21.5**	**-**	**-**	**-**	**-**
1/1	119	119	-	-	-	1.3	1.2	-	2.5	74.7	2.9	1.2	4.0
1/2	139	139	-	-	-	1.5	1.5	-	3.0	78.7	3.4	1.5	4.8
1/3	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/1	371	371	-	-	-	3.3	1.6	-	4.9	47.4	8.6	1.6	10.2
2/2	29	29	-	-	-	0.3	0.1	-	0.4	49.1	0.7	0.1	0.8
3/2+3/1	880	880	-	-	-	4.8	3.1	-	7.9	32.1	16.0	3.1	19.1
3/3	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1+4/2	533	533	0	22	1	2.4	0.4	0.0	2.8	19.0	4.3	0.4	4.7
5/1	315	315	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	289	289	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	243	243	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	275	275	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	162	162	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	787	787	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 3.9 Total Delay for Signalled Lanes (pcuHr): 21.45 Cycle Time (s): 90
PRC Over All Lanes (%): 3.9 Total Delay Over All Lanes(pcuHr): 21.45

Full Input Data And Results

Scenario 2: '2031 PM All Dev (Stage 2 Mitigation)' (FG2: '2031 PM All Dev', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

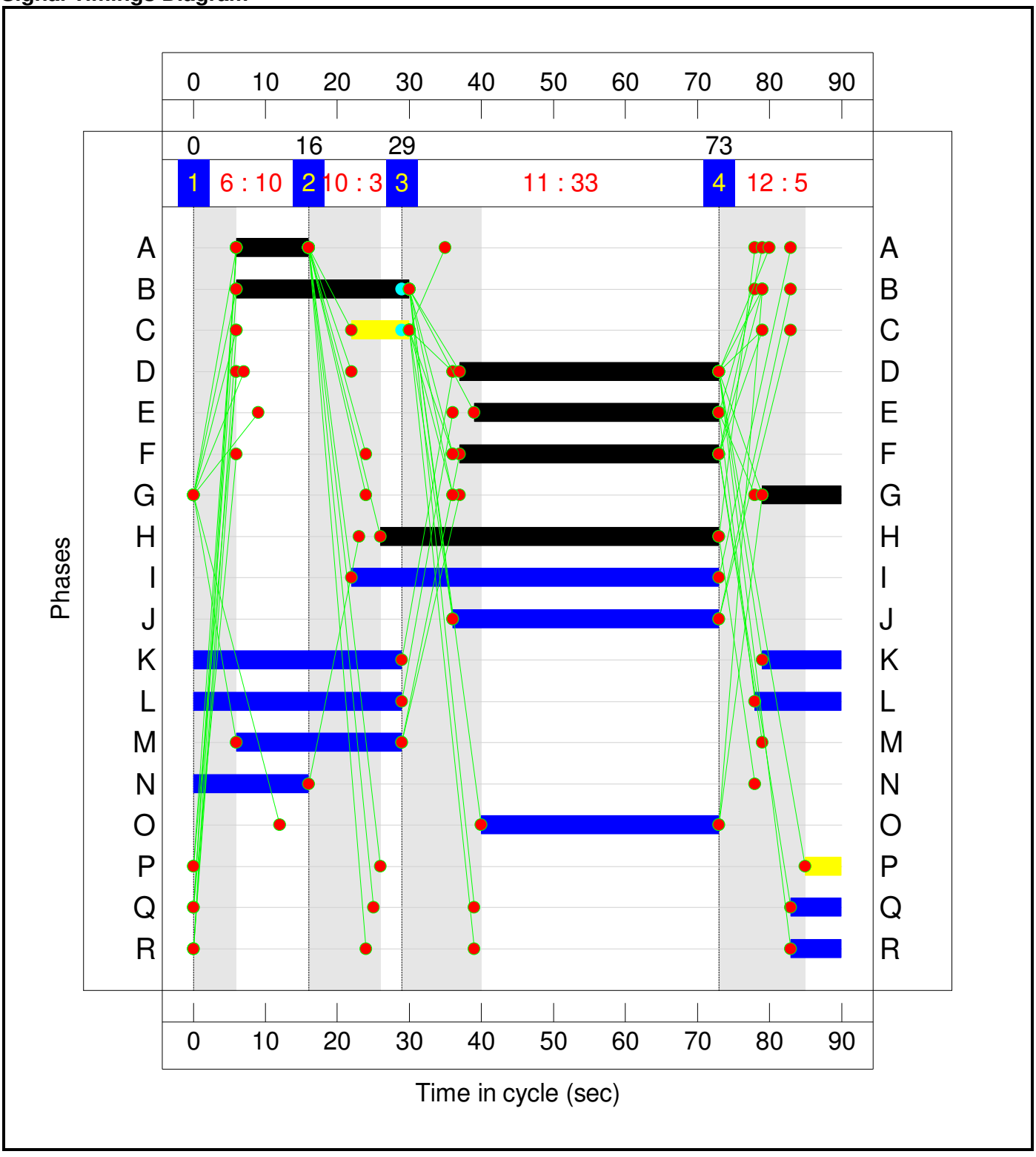


Stage Timings

Stage	1	2	3	4
Duration	10	3	33	5
Change Point	0	16	29	73

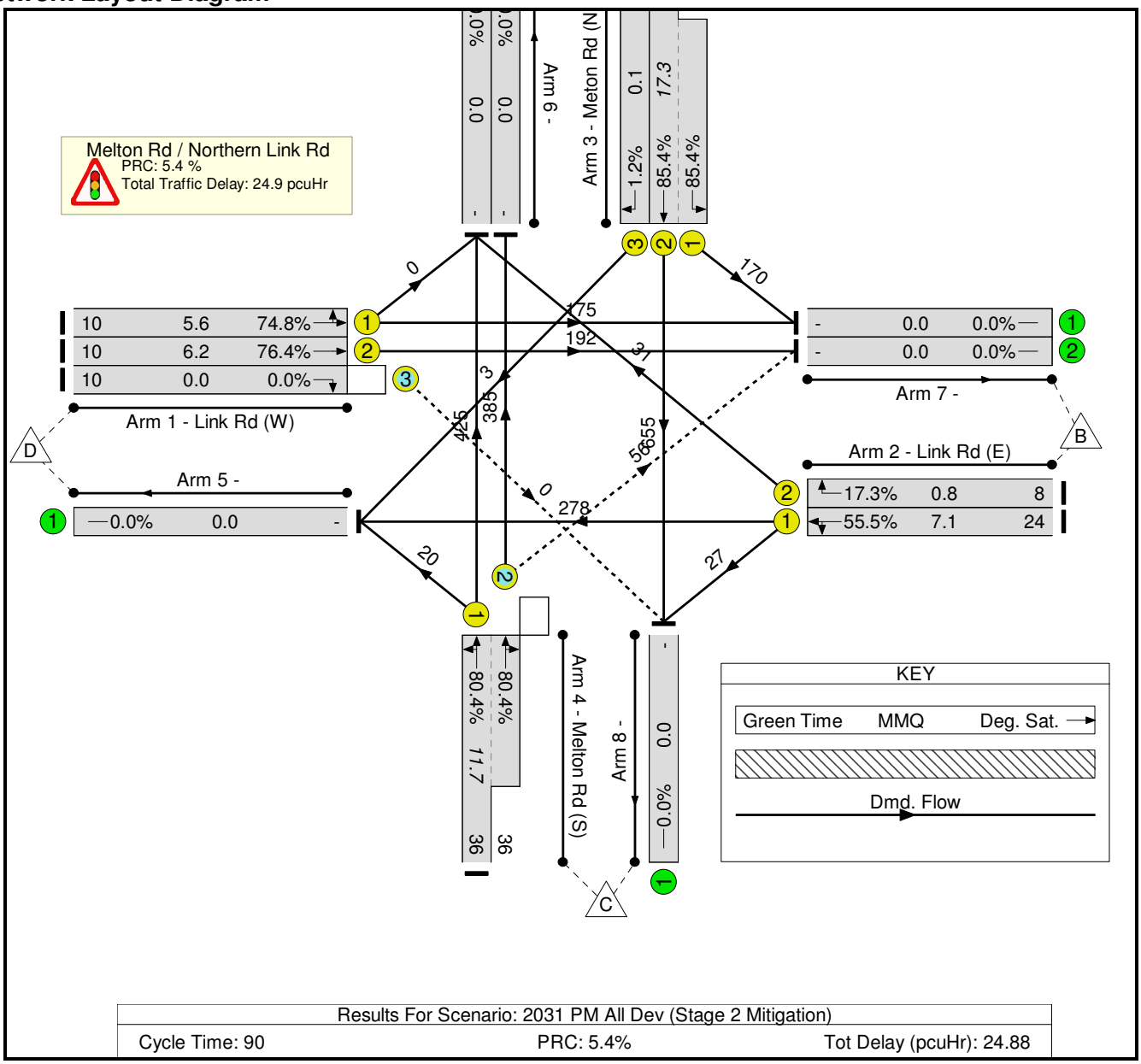
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Melton Road / Northern Link Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.4%**
Melton Rd / Northern Link Rd	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.4%**
1/1	Link Rd (W) Left Ahead	U	N/A	N/A	A		1	10	-	175	1915	234	74.8%
1/2	Link Rd (W) Ahead	U	N/A	N/A	A		1	10	-	192	2055	251	76.4%
1/3	Link Rd (W) Right	O	N/A	N/A	A		1	10	-	0	1915	80	0.0%
2/1	Link Rd (E) Ahead Left	U	N/A	N/A	B		1	24	-	305	1977	549	55.5%
2/2	Link Rd (E) Right	U	N/A	N/A	C		1	8	-	31	1788	179	17.3%
3/2+3/1	Meton Rd (N) Left Ahead	U	N/A	N/A	F H		1	36:47	-	825	1980:1868	767+199	85.4 : 85.4%
3/3	Meton Rd (N) Right	U	N/A	N/A	G		1	11	-	3	1842	246	1.2%
4/1+4/2	Melton Rd (S) Left Ahead Right	U+O	N/A	N/A	D		1	36	-	886	1910:1891	553+548	80.4 : 80.4%
5/1		U	N/A	N/A	-		-	-	-	301	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	456	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	385	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	345	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	248	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	682	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Melton Road / Northern Link Road	**-**	**-**	**0**	**55**	**1**	**16.4**	**8.5**	**0.0**	**24.9**	**-**	**-**	**-**	**-**
Melton Rd / Northern Link Rd	**-**	**-**	**0**	**55**	**1**	**16.4**	**8.5**	**0.0**	**24.9**	**-**	**-**	**-**	**-**
1/1	175	175	-	-	-	1.9	1.4	-	3.3	67.2	4.2	1.4	5.6
1/2	192	192	-	-	-	2.0	1.5	-	3.6	67.2	4.6	1.5	6.2
1/3	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/1	305	305	-	-	-	2.4	0.6	-	3.0	35.1	6.4	0.6	7.1
2/2	31	31	-	-	-	0.3	0.1	-	0.4	49.3	0.7	0.1	0.8
3/2+3/1	825	825	-	-	-	4.8	2.8	-	7.6	33.0	14.5	2.8	17.3
3/3	3	3	-	-	-	0.0	0.0	-	0.0	41.7	0.1	0.0	0.1
4/1+4/2	886	886	0	55	1	5.0	2.0	0.0	7.0	28.6	9.7	2.0	11.7
5/1	301	301	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	456	456	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	385	385	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	345	345	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	248	248	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	682	682	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 5.4 Total Delay for Signalled Lanes (pcuHr): 24.88 Cycle Time (s): 90
PRC Over All Lanes (%): 5.4 Total Delay Over All Lanes(pcuHr): 24.88