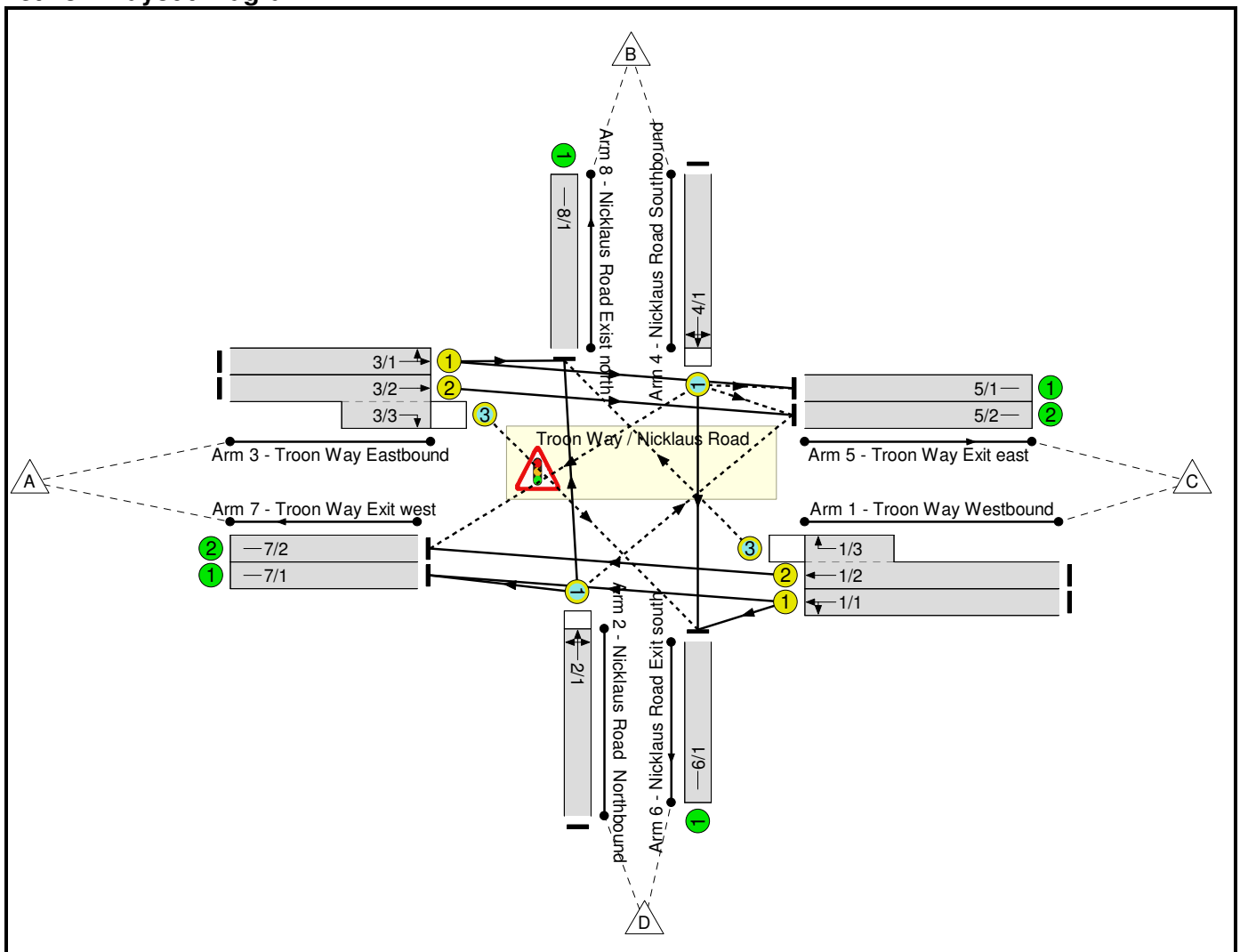


Full Input Data And Results
Full Input Data And Results

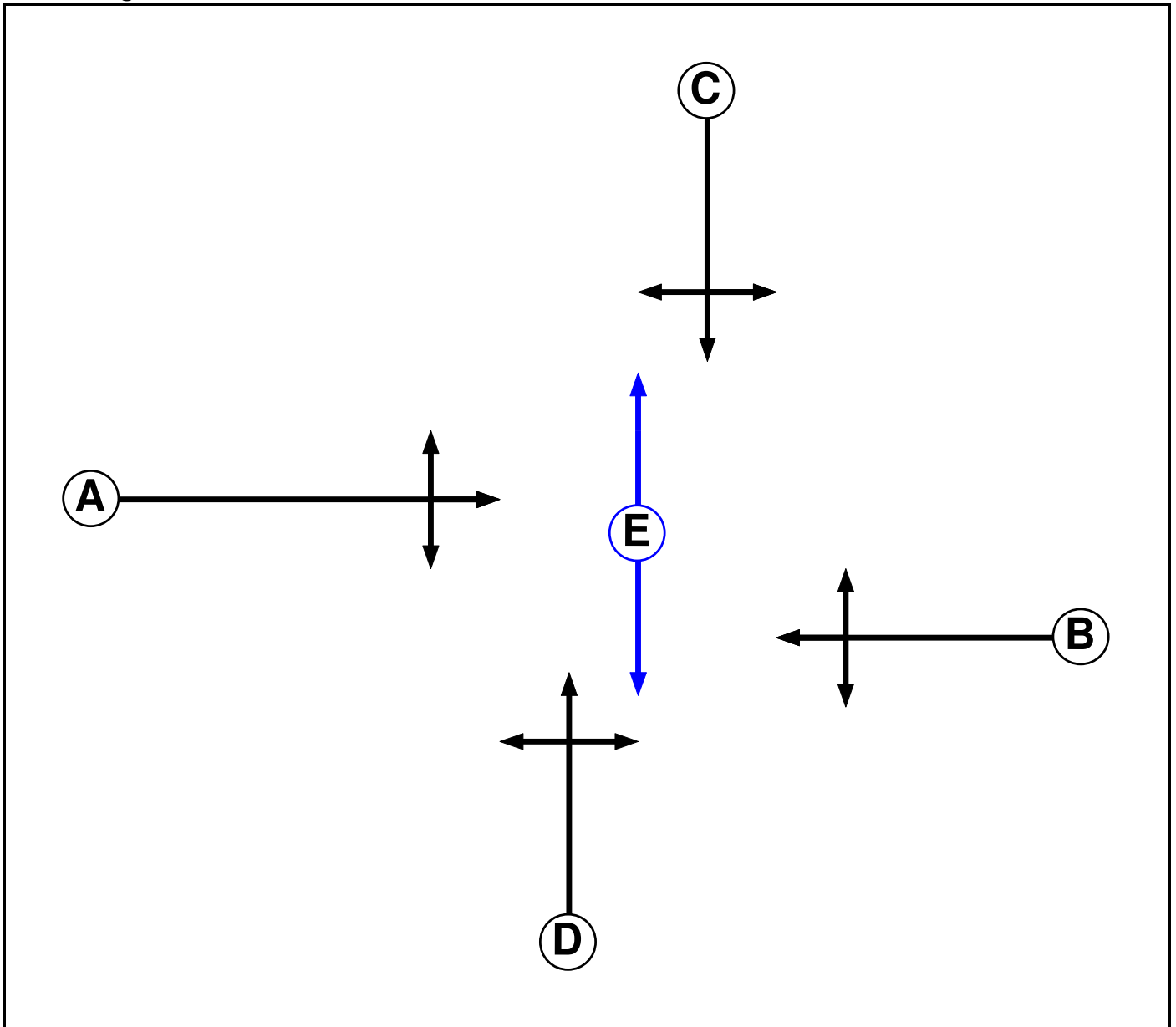
User and Project Details

Project:	A46980-7 NEoLSUE
Title:	A563 / Nicklaus Road - LCC Model
Location:	
File name:	A046980-7 [LCiC Troon Way Nicklaus With Development and Improvements].lsg3x
Author:	
Company:	
Address:	
Notes:	

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		7	7

Full Input Data And Results

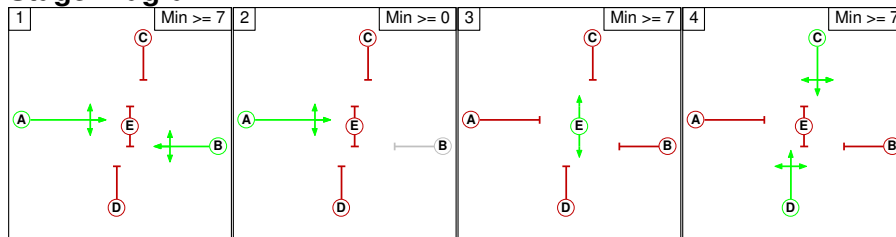
Phase Intergrens Matrix

Terminating Phase	Starting Phase				
	A	B	C	D	E
	A	-	7	7	6
	B	-	7	7	6
	C	6	6	-	6
	D	6	6	-	7
E	7	7	6	6	

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	A
3	E
4	C D

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage				
	1	2	3	4	
	1	-	0	6	7
	2	2	-	6	7
	3	7	7	-	6
4	6	6	7	-	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Troon Way / Nicklaus Road											
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 (Troon Way Westbound)	8/1 (Right)	1439	0	3/1	1.09	To 5/1 (Ahead) To 8/1 (Left)	2.00	-	0.50	2	2.00
2/1 (Nicklaus Road Northbound)	5/2 (Right)	1439	0	4/1	1.09	All	1.00	-	0.50	1	2.00
3/3 (Troon Way Eastbound)	6/1 (Right)	1439	0	1/1	1.09	To 6/1 (Left) To 7/1 (Ahead)	2.00	-	0.50	2	2.00
4/1 (Nicklaus Road Southbound)	5/1 (Left)	1439	0	2/1	1.09	All	1.00	-	0.50	1	2.00
	5/2 (Left)	1439	0	2/1	1.09	All					
	7/2 (Right)	1439	0	2/1	1.09	All					

Full Input Data And Results

Lane Input Data

Junction: Troon Way / Nicklaus Road												
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 (Troon Way Westbound)	U	B	2	3	60.0	User	2345	-	-	-	-	-
1/2 (Troon Way Westbound)	U	B	2	3	5.0	Geom	-	3.25	0.00	N	Arm 7 Ahead	Inf
1/3 (Troon Way Westbound)	O	B	2	3	5.0	Geom	-	3.25	0.00	N	Arm 8 Right	25.00
2/1 (Nicklaus Road Northbound)	O	D	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 5 Right	Inf
											Arm 7 Left	15.00
											Arm 8 Ahead	Inf
3/1 (Troon Way Eastbound)	U	A	2	3	60.0	User	2200	-	-	-	-	-
3/2 (Troon Way Eastbound)	U	A	2	3	5.0	Geom	-	3.25	0.00	N	Arm 5 Ahead	Inf
3/3 (Troon Way Eastbound)	O	A	2	3	5.0	Geom	-	3.25	0.00	N	Arm 6 Right	25.00
4/1 (Nicklaus Road Southbound)	O	C	2	3	60.0	User	1941	-	-	-	-	-
5/1 (Troon Way Exit east)	U		2	3	6.0	Inf	-	-	-	-	-	-
5/2 (Troon Way Exit east)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Nicklaus Road Exit south)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Troon Way Exit west)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/2 (Troon Way Exit west)	U		2	3	6.0	Inf	-	-	-	-	-	-
8/1 (Nicklaus Road Exist north)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'AM 2014'	08:00	09:00	01:00	
2: 'PM 2014'	17:00	18:00	01:00	
3: '2016 + Com Dev AM'	08:00	09:00	01:00	
4: '2016 + Com Dev PM'	17:00	18:00	01:00	
5: '2016 + Com Dev +Ph1 AM'	08:00	09:00	01:00	
6: '2016 + Com Dev +Ph1 PM'	17:00	18:00	01:00	
7: '2021 + Com Dev AM'	08:00	09:00	01:00	
8: '2021 + Com Dev PM'	17:00	18:00	01:00	
9: '2021 + Com Dev +Ph2 AM'	08:00	09:00	01:00	
10: '2021 + Com Dev +Ph2 PM'	17:00	18:00	01:00	
11: '2031 + Com Dev AM'	08:00	09:00	01:00	
12: '2031 + Com Dev PM'	17:00	18:00	01:00	
13: '2031 +All Dev (Stage 2 Mitigation) AM'	08:00	09:00	01:00	
14: '2031+All Dev (Stage 2 Mitigation) PM'	17:00	18:00	01:00	

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

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
	A	B	C	D	Tot.	
A	0	29	1044	54	1127	
B	67	0	75	197	339	
C	1172	51	0	95	1318	
D	116	109	61	0	286	
Tot.	1355	189	1180	346	3070	

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2014 AM
Junction: Troon Way / Nicklaus Road	
1/1	702
1/2 (with short)	616(In) 565(Out)
1/3 (short)	51
2/1	286
3/1	575
3/2 (with short)	552(In) 498(Out)
3/3 (short)	54
4/1	339
5/1	583
5/2	597
6/1	346
7/1	723
7/2	632
8/1	189

Full Input Data And Results

Lane Saturation Flows

Junction: Troon Way / Nicklaus Road								
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 (Troon Way Westbound Lane 1)	This lane uses a directly entered Saturation Flow						2345	2345
1/2 (Troon Way Westbound)	3.25	0.00	N	Arm 7 Ahead	Inf	100.0 %	2080	2080
1/3 (Troon Way Westbound)	3.25	0.00	N	Arm 8 Right	25.00	100.0 %	1962	1962
2/1 (Nicklaus Road Northbound)	4.00	0.00	Y	Arm 5 Right	Inf	21.3 %	1936	1936
				Arm 7 Left	15.00	40.6 %		
				Arm 8 Ahead	Inf	38.1 %		
3/1 (Troon Way Eastbound Lane 1)	This lane uses a directly entered Saturation Flow						2200	2200
3/2 (Troon Way Eastbound)	3.25	0.00	N	Arm 5 Ahead	Inf	100.0 %	2080	2080
3/3 (Troon Way Eastbound)	3.25	0.00	N	Arm 6 Right	25.00	100.0 %	1962	1962
4/1 (Nicklaus Road Southbound Lane 1)	This lane uses a directly entered Saturation Flow						1941	1941
5/1 (Troon Way Exit east Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Troon Way Exit east Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Nicklaus Road Exit south Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Troon Way Exit west Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (Troon Way Exit west Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Nicklaus Road Exist north Lane 1)	Infinite Saturation Flow						Inf	Inf

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

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	98	945	96	1139
	B	41	0	62	116	219
	C	1127	88	0	52	1267
	D	112	148	46	0	306
	Tot.	1280	334	1053	264	2931

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2014 PM
Junction: Troon Way / Nicklaus Road	
1/1	665
1/2 (with short)	602(In) 514(Out)
1/3 (short)	88
2/1	306
3/1	570
3/2 (with short)	569(In) 473(Out)
3/3 (short)	96
4/1	219
5/1	503
5/2	550
6/1	264
7/1	725
7/2	555
8/1	334

Full Input Data And Results

Lane Saturation Flows

Junction: Troon Way / Nicklaus Road								
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 (Troon Way Westbound Lane 1)	This lane uses a directly entered Saturation Flow						2345	2345
1/2 (Troon Way Westbound)	3.25	0.00	N	Arm 7 Ahead	Inf	100.0 %	2080	2080
1/3 (Troon Way Westbound)	3.25	0.00	N	Arm 8 Right	25.00	100.0 %	1962	1962
2/1 (Nicklaus Road Northbound)	4.00	0.00	Y	Arm 5 Right	Inf	15.0 %	1944	1944
				Arm 7 Left	15.00	36.6 %		
				Arm 8 Ahead	Inf	48.4 %		
3/1 (Troon Way Eastbound Lane 1)	This lane uses a directly entered Saturation Flow						2200	2200
3/2 (Troon Way Eastbound)	3.25	0.00	N	Arm 5 Ahead	Inf	100.0 %	2080	2080
3/3 (Troon Way Eastbound)	3.25	0.00	N	Arm 6 Right	25.00	100.0 %	1962	1962
4/1 (Nicklaus Road Southbound Lane 1)	This lane uses a directly entered Saturation Flow						1941	1941
5/1 (Troon Way Exit east Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Troon Way Exit east Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Nicklaus Road Exit south Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Troon Way Exit west Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (Troon Way Exit west Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Nicklaus Road Exist north Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2016 + Com Dev AM' (FG3: '2016 + Com Dev AM', Plan 1: 'Networking Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	29	1061	55	1145
	B	68	0	76	200	344
	C	1191	52	0	97	1340
	D	118	111	62	0	291
	Tot.	1377	192	1199	352	3120

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2016 + Com Dev AM
Junction: Troon Way / Nicklaus Road	
1/1	713
1/2 (with short)	627(In) 575(Out)
1/3 (short)	52
2/1	291
3/1	585
3/2 (with short)	560(In) 505(Out)
3/3 (short)	55
4/1	344
5/1	594
5/2	605
6/1	352
7/1	734
7/2	643
8/1	192

Full Input Data And Results

Lane Saturation Flows

Junction: Troon Way / Nicklaus Road								
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 (Troon Way Westbound Lane 1)	This lane uses a directly entered Saturation Flow						2345	2345
1/2 (Troon Way Westbound)	3.25	0.00	N	Arm 7 Ahead	Inf	100.0 %	2080	2080
1/3 (Troon Way Westbound)	3.25	0.00	N	Arm 8 Right	25.00	100.0 %	1962	1962
2/1 (Nicklaus Road Northbound)	4.00	0.00	Y	Arm 5 Right	Inf	21.3 %	1936	1936
				Arm 7 Left	15.00	40.5 %		
				Arm 8 Ahead	Inf	38.1 %		
3/1 (Troon Way Eastbound Lane 1)	This lane uses a directly entered Saturation Flow						2200	2200
3/2 (Troon Way Eastbound)	3.25	0.00	N	Arm 5 Ahead	Inf	100.0 %	2080	2080
3/3 (Troon Way Eastbound)	3.25	0.00	N	Arm 6 Right	25.00	100.0 %	1962	1962
4/1 (Nicklaus Road Southbound Lane 1)	This lane uses a directly entered Saturation Flow						1941	1941
5/1 (Troon Way Exit east Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Troon Way Exit east Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Nicklaus Road Exit south Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Troon Way Exit west Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (Troon Way Exit west Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Nicklaus Road Exist north Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2016 + Com Dev PM' (FG4: '2016 + Com Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	100	961	98	1159
	B	42	0	63	118	223
	C	1146	89	0	53	1288
	D	114	151	47	0	312
	Tot.	1302	340	1071	269	2982

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2016 + Com Dev PM
Junction: Troon Way / Nicklaus Road	
1/1	676
1/2 (with short)	612(In) 523(Out)
1/3 (short)	89
2/1	312
3/1	580
3/2 (with short)	579(In) 481(Out)
3/3 (short)	98
4/1	223
5/1	511
5/2	560
6/1	269
7/1	737
7/2	565
8/1	340

Full Input Data And Results

Lane Saturation Flows

Junction: Troon Way / Nicklaus Road								
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 (Troon Way Westbound Lane 1)	This lane uses a directly entered Saturation Flow						2345	2345
1/2 (Troon Way Westbound)	3.25	0.00	N	Arm 7 Ahead	Inf	100.0 %	2080	2080
1/3 (Troon Way Westbound)	3.25	0.00	N	Arm 8 Right	25.00	100.0 %	1962	1962
2/1 (Nicklaus Road Northbound)	4.00	0.00	Y	Arm 5 Right	Inf	15.1 %	1944	1944
				Arm 7 Left	15.00	36.5 %		
				Arm 8 Ahead	Inf	48.4 %		
3/1 (Troon Way Eastbound Lane 1)	This lane uses a directly entered Saturation Flow						2200	2200
3/2 (Troon Way Eastbound)	3.25	0.00	N	Arm 5 Ahead	Inf	100.0 %	2080	2080
3/3 (Troon Way Eastbound)	3.25	0.00	N	Arm 6 Right	25.00	100.0 %	1962	1962
4/1 (Nicklaus Road Southbound Lane 1)	This lane uses a directly entered Saturation Flow						1941	1941
5/1 (Troon Way Exit east Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Troon Way Exit east Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Nicklaus Road Exit south Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Troon Way Exit west Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (Troon Way Exit west Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Nicklaus Road Exist north Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2016 + Com Dev +Ph1 AM' (FG5: '2016 + Com Dev +Ph1 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	30	1047	69	1146
	B	72	0	62	204	338
	C	1201	41	0	98	1340
	D	116	114	63	0	293
	Tot.	1389	185	1172	371	3117

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2016 + Com Dev +Ph1 AM
Junction: Troon Way / Nicklaus Road	
1/1	716
1/2 (with short)	624(In) 583(Out)
1/3 (short)	41
2/1	293
3/1	581
3/2 (with short)	565(In) 496(Out)
3/3 (short)	69
4/1	338
5/1	582
5/2	590
6/1	371
7/1	734
7/2	655
8/1	185

Full Input Data And Results

Lane Saturation Flows

Junction: Troon Way / Nicklaus Road								
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 (Troon Way Westbound Lane 1)	This lane uses a directly entered Saturation Flow						2345	2345
1/2 (Troon Way Westbound)	3.25	0.00	N	Arm 7 Ahead	Inf	100.0 %	2080	2080
1/3 (Troon Way Westbound)	3.25	0.00	N	Arm 8 Right	25.00	100.0 %	1962	1962
2/1 (Nicklaus Road Northbound)	4.00	0.00	Y	Arm 5 Right	Inf	21.5 %	1938	1938
				Arm 7 Left	15.00	39.6 %		
				Arm 8 Ahead	Inf	38.9 %		
3/1 (Troon Way Eastbound Lane 1)	This lane uses a directly entered Saturation Flow						2200	2200
3/2 (Troon Way Eastbound)	3.25	0.00	N	Arm 5 Ahead	Inf	100.0 %	2080	2080
3/3 (Troon Way Eastbound)	3.25	0.00	N	Arm 6 Right	25.00	100.0 %	1962	1962
4/1 (Nicklaus Road Southbound Lane 1)	This lane uses a directly entered Saturation Flow						1941	1941
5/1 (Troon Way Exit east Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Troon Way Exit east Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Nicklaus Road Exit south Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Troon Way Exit west Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (Troon Way Exit west Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Nicklaus Road Exist north Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2016 + Com Dev +Ph1 PM' (FG6: '2016 + Com Dev +Ph1 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	111	958	97	1166
	B	42	0	56	118	216
	C	1168	91	0	50	1309
	D	119	153	42	0	314
	Tot.	1329	355	1056	265	3005

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2016 + Com Dev +Ph1 PM
Junction: Troon Way / Nicklaus Road	
1/1	687
1/2 (with short)	622(In) 531(Out)
1/3 (short)	91
2/1	314
3/1	584
3/2 (with short)	582(In) 485(Out)
3/3 (short)	97
4/1	216
5/1	501
5/2	555
6/1	265
7/1	756
7/2	573
8/1	355

Full Input Data And Results

Lane Saturation Flows

Junction: Troon Way / Nicklaus Road								
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 (Troon Way Westbound Lane 1)	This lane uses a directly entered Saturation Flow						2345	2345
1/2 (Troon Way Westbound)	3.25	0.00	N	Arm 7 Ahead	Inf	100.0 %	2080	2080
1/3 (Troon Way Westbound)	3.25	0.00	N	Arm 8 Right	25.00	100.0 %	1962	1962
2/1 (Nicklaus Road Northbound)	4.00	0.00	Y	Arm 5 Right	Inf	13.4 %	1941	1941
				Arm 7 Left	15.00	37.9 %		
				Arm 8 Ahead	Inf	48.7 %		
3/1 (Troon Way Eastbound Lane 1)	This lane uses a directly entered Saturation Flow						2200	2200
3/2 (Troon Way Eastbound)	3.25	0.00	N	Arm 5 Ahead	Inf	100.0 %	2080	2080
3/3 (Troon Way Eastbound)	3.25	0.00	N	Arm 6 Right	25.00	100.0 %	1962	1962
4/1 (Nicklaus Road Southbound Lane 1)	This lane uses a directly entered Saturation Flow						1941	1941
5/1 (Troon Way Exit east Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Troon Way Exit east Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Nicklaus Road Exit south Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Troon Way Exit west Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (Troon Way Exit west Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Nicklaus Road Exist north Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 7: '2021 + Com Dev AM' (FG7: '2021 + Com Dev AM', Plan 1: 'Networking Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	31	1115	58	1204
	B	72	0	80	210	362
	C	1251	54	0	101	1406
	D	124	116	65	0	305
	Tot.	1447	201	1260	369	3277

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 2021 + Com Dev AM
Junction: Troon Way / Nicklaus Road	
1/1	747
1/2 (with short)	659(In) 605(Out)
1/3 (short)	54
2/1	305
3/1	615
3/2 (with short)	589(In) 531(Out)
3/3 (short)	58
4/1	362
5/1	624
5/2	636
6/1	369
7/1	770
7/2	677
8/1	201

Full Input Data And Results

Lane Saturation Flows

Junction: Troon Way / Nicklaus Road								
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 (Troon Way Westbound Lane 1)	This lane uses a directly entered Saturation Flow						2345	2345
1/2 (Troon Way Westbound)	3.25	0.00	N	Arm 7 Ahead	Inf	100.0 %	2080	2080
1/3 (Troon Way Westbound)	3.25	0.00	N	Arm 8 Right	25.00	100.0 %	1962	1962
2/1 (Nicklaus Road Northbound)	4.00	0.00	Y	Arm 5 Right	Inf	21.3 %	1936	1936
				Arm 7 Left	15.00	40.7 %		
				Arm 8 Ahead	Inf	38.0 %		
3/1 (Troon Way Eastbound Lane 1)	This lane uses a directly entered Saturation Flow						2200	2200
3/2 (Troon Way Eastbound)	3.25	0.00	N	Arm 5 Ahead	Inf	100.0 %	2080	2080
3/3 (Troon Way Eastbound)	3.25	0.00	N	Arm 6 Right	25.00	100.0 %	1962	1962
4/1 (Nicklaus Road Southbound Lane 1)	This lane uses a directly entered Saturation Flow						1941	1941
5/1 (Troon Way Exit east Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Troon Way Exit east Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Nicklaus Road Exit south Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Troon Way Exit west Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (Troon Way Exit west Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Nicklaus Road Exist north Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 8: '2021 + Com Dev PM' (FG8: '2021 + Com Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	105	1011	103	1219
	B	44	0	66	124	234
	C	1205	94	0	56	1355
	D	120	158	49	0	327
	Tot.	1369	357	1126	283	3135

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 2021 + Com Dev PM
Junction: Troon Way / Nicklaus Road	
1/1	712
1/2 (with short)	643(In) 549(Out)
1/3 (short)	94
2/1	327
3/1	611
3/2 (with short)	608(In) 505(Out)
3/3 (short)	103
4/1	234
5/1	539
5/2	587
6/1	283
7/1	776
7/2	593
8/1	357

Full Input Data And Results

Lane Saturation Flows

Junction: Troon Way / Nicklaus Road								
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 (Troon Way Westbound Lane 1)	This lane uses a directly entered Saturation Flow						2345	2345
1/2 (Troon Way Westbound)	3.25	0.00	N	Arm 7 Ahead	Inf	100.0 %	2080	2080
1/3 (Troon Way Westbound)	3.25	0.00	N	Arm 8 Right	25.00	100.0 %	1962	1962
2/1 (Nicklaus Road Northbound)	4.00	0.00	Y	Arm 5 Right	Inf	15.0 %	1944	1944
				Arm 7 Left	15.00	36.7 %		
				Arm 8 Ahead	Inf	48.3 %		
3/1 (Troon Way Eastbound Lane 1)	This lane uses a directly entered Saturation Flow						2200	2200
3/2 (Troon Way Eastbound)	3.25	0.00	N	Arm 5 Ahead	Inf	100.0 %	2080	2080
3/3 (Troon Way Eastbound)	3.25	0.00	N	Arm 6 Right	25.00	100.0 %	1962	1962
4/1 (Nicklaus Road Southbound Lane 1)	This lane uses a directly entered Saturation Flow						1941	1941
5/1 (Troon Way Exit east Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Troon Way Exit east Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Nicklaus Road Exit south Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Troon Way Exit west Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (Troon Way Exit west Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Nicklaus Road Exist north Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 9: '2021 + Com Dev +Ph2 AM' (FG9: '2021 + Com Dev +Ph2 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	32	1107	65	1204
	B	74	0	82	206	362
	C	1284	43	0	102	1429
	D	124	115	63	0	302
	Tot.	1482	190	1252	373	3297

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: 2021 + Com Dev +Ph2 AM
Junction: Troon Way / Nicklaus Road	
1/1	761
1/2 (with short)	668(In) 625(Out)
1/3 (short)	43
2/1	302
3/1	614
3/2 (with short)	590(In) 525(Out)
3/3 (short)	65
4/1	362
5/1	623
5/2	629
6/1	373
7/1	783
7/2	699
8/1	190

Full Input Data And Results

Lane Saturation Flows

Junction: Troon Way / Nicklaus Road								
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 (Troon Way Westbound Lane 1)	This lane uses a directly entered Saturation Flow						2345	2345
1/2 (Troon Way Westbound)	3.25	0.00	N	Arm 7 Ahead	Inf	100.0 %	2080	2080
1/3 (Troon Way Westbound)	3.25	0.00	N	Arm 8 Right	25.00	100.0 %	1962	1962
2/1 (Nicklaus Road Northbound)	4.00	0.00	Y	Arm 5 Right	Inf	20.9 %	1936	1936
				Arm 7 Left	15.00	41.1 %		
				Arm 8 Ahead	Inf	38.1 %		
3/1 (Troon Way Eastbound Lane 1)	This lane uses a directly entered Saturation Flow						2200	2200
3/2 (Troon Way Eastbound)	3.25	0.00	N	Arm 5 Ahead	Inf	100.0 %	2080	2080
3/3 (Troon Way Eastbound)	3.25	0.00	N	Arm 6 Right	25.00	100.0 %	1962	1962
4/1 (Nicklaus Road Southbound Lane 1)	This lane uses a directly entered Saturation Flow						1941	1941
5/1 (Troon Way Exit east Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Troon Way Exit east Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Nicklaus Road Exit south Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Troon Way Exit west Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (Troon Way Exit west Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Nicklaus Road Exist north Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 10: '2021 + Com Dev +Ph2 PM' (FG10: '2021 + Com Dev +Ph2 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	104	1009	101	1214
	B	44	0	56	123	223
	C	1211	92	0	45	1348
	D	122	160	45	0	327
	Tot.	1377	356	1110	269	3112

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 10: 2021 + Com Dev +Ph2 PM
Junction: Troon Way / Nicklaus Road	
1/1	708
1/2 (with short)	640(In) 548(Out)
1/3 (short)	92
2/1	327
3/1	607
3/2 (with short)	607(In) 506(Out)
3/3 (short)	101
4/1	223
5/1	531
5/2	579
6/1	269
7/1	785
7/2	592
8/1	356

Full Input Data And Results

Lane Saturation Flows

Junction: Troon Way / Nicklaus Road								
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 (Troon Way Westbound Lane 1)	This lane uses a directly entered Saturation Flow						2345	2345
1/2 (Troon Way Westbound)	3.25	0.00	N	Arm 7 Ahead	Inf	100.0 %	2080	2080
1/3 (Troon Way Westbound)	3.25	0.00	N	Arm 8 Right	25.00	100.0 %	1962	1962
2/1 (Nicklaus Road Northbound)	4.00	0.00	Y	Arm 5 Right	Inf	13.8 %	1943	1943
				Arm 7 Left	15.00	37.3 %		
				Arm 8 Ahead	Inf	48.9 %		
3/1 (Troon Way Eastbound Lane 1)	This lane uses a directly entered Saturation Flow						2200	2200
3/2 (Troon Way Eastbound)	3.25	0.00	N	Arm 5 Ahead	Inf	100.0 %	2080	2080
3/3 (Troon Way Eastbound)	3.25	0.00	N	Arm 6 Right	25.00	100.0 %	1962	1962
4/1 (Nicklaus Road Southbound Lane 1)	This lane uses a directly entered Saturation Flow						1941	1941
5/1 (Troon Way Exit east Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Troon Way Exit east Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Nicklaus Road Exit south Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Troon Way Exit west Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (Troon Way Exit west Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Nicklaus Road Exist north Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 11: '2031 + Com Dev AM' (FG11: '2031 + Com Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	33	1206	62	1301
	B	78	0	87	230	395
	C	1353	59	0	110	1522
	D	140	127	71	0	338
	Tot.	1571	219	1364	402	3556

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 11: 2031 + Com Dev AM
Junction: Troon Way / Nicklaus Road	
1/1	804
1/2 (with short)	718(In) 659(Out)
1/3 (short)	59
2/1	338
3/1	665
3/2 (with short)	636(In) 574(Out)
3/3 (short)	62
4/1	395
5/1	675
5/2	689
6/1	402
7/1	834
7/2	737
8/1	219

Full Input Data And Results

Lane Saturation Flows

Junction: Troon Way / Nicklaus Road								
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 (Troon Way Westbound Lane 1)	This lane uses a directly entered Saturation Flow						2345	2345
1/2 (Troon Way Westbound)	3.25	0.00	N	Arm 7 Ahead	Inf	100.0 %	2080	2080
1/3 (Troon Way Westbound)	3.25	0.00	N	Arm 8 Right	25.00	100.0 %	1962	1962
2/1 (Nicklaus Road Northbound)	4.00	0.00	Y	Arm 5 Right	Inf	21.0 %	1935	1935
				Arm 7 Left	15.00	41.4 %		
				Arm 8 Ahead	Inf	37.6 %		
3/1 (Troon Way Eastbound Lane 1)	This lane uses a directly entered Saturation Flow						2200	2200
3/2 (Troon Way Eastbound)	3.25	0.00	N	Arm 5 Ahead	Inf	100.0 %	2080	2080
3/3 (Troon Way Eastbound)	3.25	0.00	N	Arm 6 Right	25.00	100.0 %	1962	1962
4/1 (Nicklaus Road Southbound Lane 1)	This lane uses a directly entered Saturation Flow						1941	1941
5/1 (Troon Way Exit east Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Troon Way Exit east Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Nicklaus Road Exit south Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Troon Way Exit west Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (Troon Way Exit west Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Nicklaus Road Exist north Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 12: '2031 + Com Dev PM' (FG12: '2031 + Com Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	114	1098	112	1324
	B	48	0	73	136	257
	C	1309	102	0	60	1471
	D	136	173	54	0	363
	Tot.	1493	389	1225	308	3415

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 12: 2031 + Com Dev PM
Junction: Troon Way / Nicklaus Road	
1/1	773
1/2 (with short)	698(In) 596(Out)
1/3 (short)	102
2/1	363
3/1	674
3/2 (with short)	650(In) 538(Out)
3/3 (short)	112
4/1	257
5/1	596
5/2	629
6/1	308
7/1	849
7/2	644
8/1	389

Full Input Data And Results

Lane Saturation Flows

Junction: Troon Way / Nicklaus Road								
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 (Troon Way Westbound Lane 1)	This lane uses a directly entered Saturation Flow						2345	2345
1/2 (Troon Way Westbound)	3.25	0.00	N	Arm 7 Ahead	Inf	100.0 %	2080	2080
1/3 (Troon Way Westbound)	3.25	0.00	N	Arm 8 Right	25.00	100.0 %	1962	1962
2/1 (Nicklaus Road Northbound)	4.00	0.00	Y	Arm 5 Right	Inf	14.9 %	1942	1942
				Arm 7 Left	15.00	37.5 %		
				Arm 8 Ahead	Inf	47.7 %		
3/1 (Troon Way Eastbound Lane 1)	This lane uses a directly entered Saturation Flow						2200	2200
3/2 (Troon Way Eastbound)	3.25	0.00	N	Arm 5 Ahead	Inf	100.0 %	2080	2080
3/3 (Troon Way Eastbound)	3.25	0.00	N	Arm 6 Right	25.00	100.0 %	1962	1962
4/1 (Nicklaus Road Southbound Lane 1)	This lane uses a directly entered Saturation Flow						1941	1941
5/1 (Troon Way Exit east Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Troon Way Exit east Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Nicklaus Road Exit south Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Troon Way Exit west Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (Troon Way Exit west Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Nicklaus Road Exist north Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 13: '2031 +All Dev (Stage 2 Mitigation) AM' (FG13: '2031 +All Dev (Stage 2 Mitigation) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
	A	B	C	D	Tot.	
A	0	30	1198	64	1292	
B	75	0	81	237	393	
C	1371	51	0	115	1537	
D	145	124	68	0	337	
Tot.	1591	205	1347	416	3559	

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 13: 2031 +All Dev (Stage 2 Mitigation) AM
Junction: Troon Way / Nicklaus Road	
1/1	813
1/2 (with short)	724(In) 673(Out)
1/3 (short)	51
2/1	337
3/1	660
3/2 (with short)	632(In) 568(Out)
3/3 (short)	64
4/1	393
5/1	670
5/2	677
6/1	416
7/1	843
7/2	748
8/1	205

Full Input Data And Results

Lane Saturation Flows

Junction: Troon Way / Nicklaus Road								
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 (Troon Way Westbound Lane 1)	This lane uses a directly entered Saturation Flow						2345	2345
1/2 (Troon Way Westbound)	3.25	0.00	N	Arm 7 Ahead	Inf	100.0 %	2080	2080
1/3 (Troon Way Westbound)	3.25	0.00	N	Arm 8 Right	25.00	100.0 %	1962	1962
2/1 (Nicklaus Road Northbound)	4.00	0.00	Y	Arm 5 Right	Inf	20.2 %	1932	1932
				Arm 7 Left	15.00	43.0 %		
				Arm 8 Ahead	Inf	36.8 %		
3/1 (Troon Way Eastbound Lane 1)	This lane uses a directly entered Saturation Flow						2200	2200
3/2 (Troon Way Eastbound)	3.25	0.00	N	Arm 5 Ahead	Inf	100.0 %	2080	2080
3/3 (Troon Way Eastbound)	3.25	0.00	N	Arm 6 Right	25.00	100.0 %	1962	1962
4/1 (Nicklaus Road Southbound Lane 1)	This lane uses a directly entered Saturation Flow						1941	1941
5/1 (Troon Way Exit east Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Troon Way Exit east Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Nicklaus Road Exit south Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Troon Way Exit west Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (Troon Way Exit west Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Nicklaus Road Exist north Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 14: '2031 +All Dev (Stage 2 Mitigation) PM' (FG14: '2031+All Dev (Stage 2 Mitigation) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	101	1124	113	1338
	B	43	0	67	142	252
	C	1304	102	0	61	1467
	D	142	172	52	0	366
	Tot.	1489	375	1243	316	3423

Full Input Data And Results

Traffic Lane Flows

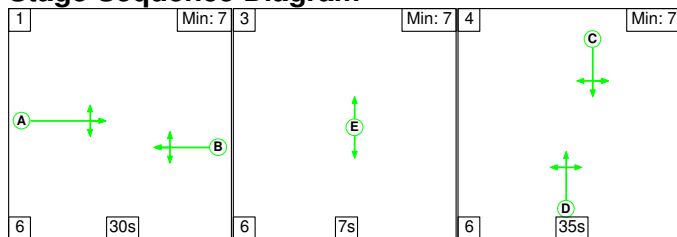
Lane	Scenario 14: 2031 +All Dev (Stage 2 Mitigation) PM
Junction: Troon Way / Nicklaus Road	
1/1	771
1/2 (with short)	696(In) 594(Out)
1/3 (short)	102
2/1	366
3/1	682
3/2 (with short)	656(In) 543(Out)
3/3 (short)	113
4/1	252
5/1	614
5/2	629
6/1	316
7/1	852
7/2	637
8/1	375

Lane Saturation Flows

Junction: Troon Way / Nicklaus Road								
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 (Troon Way Westbound Lane 1)	This lane uses a directly entered Saturation Flow						2345	2345
1/2 (Troon Way Westbound)	3.25	0.00	N	Arm 7 Ahead	Inf	100.0 %	2080	2080
1/3 (Troon Way Westbound)	3.25	0.00	N	Arm 8 Right	25.00	100.0 %	1962	1962
2/1 (Nicklaus Road Northbound)	4.00	0.00	Y	Arm 5 Right	Inf	14.2 %	1940	1940
				Arm 7 Left	15.00	38.8 %		
				Arm 8 Ahead	Inf	47.0 %		
3/1 (Troon Way Eastbound Lane 1)	This lane uses a directly entered Saturation Flow						2200	2200
3/2 (Troon Way Eastbound)	3.25	0.00	N	Arm 5 Ahead	Inf	100.0 %	2080	2080
3/3 (Troon Way Eastbound)	3.25	0.00	N	Arm 6 Right	25.00	100.0 %	1962	1962
4/1 (Nicklaus Road Southbound Lane 1)	This lane uses a directly entered Saturation Flow						1941	1941
5/1 (Troon Way Exit east Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Troon Way Exit east Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Nicklaus Road Exit south Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Troon Way Exit west Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (Troon Way Exit west Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Nicklaus Road Exist north Lane 1)	Infinite Saturation Flow						Inf	Inf

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

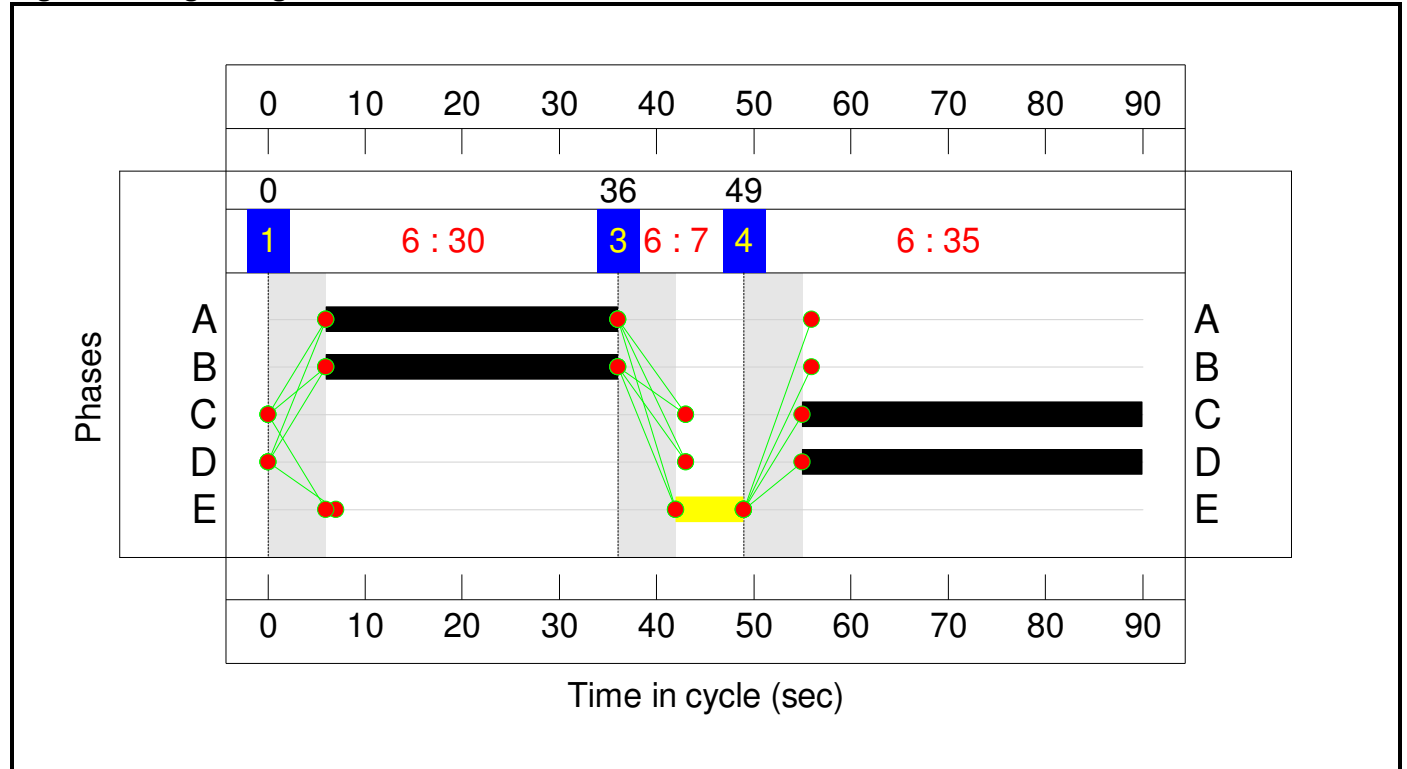
Stage Sequence Diagram



Stage Timings

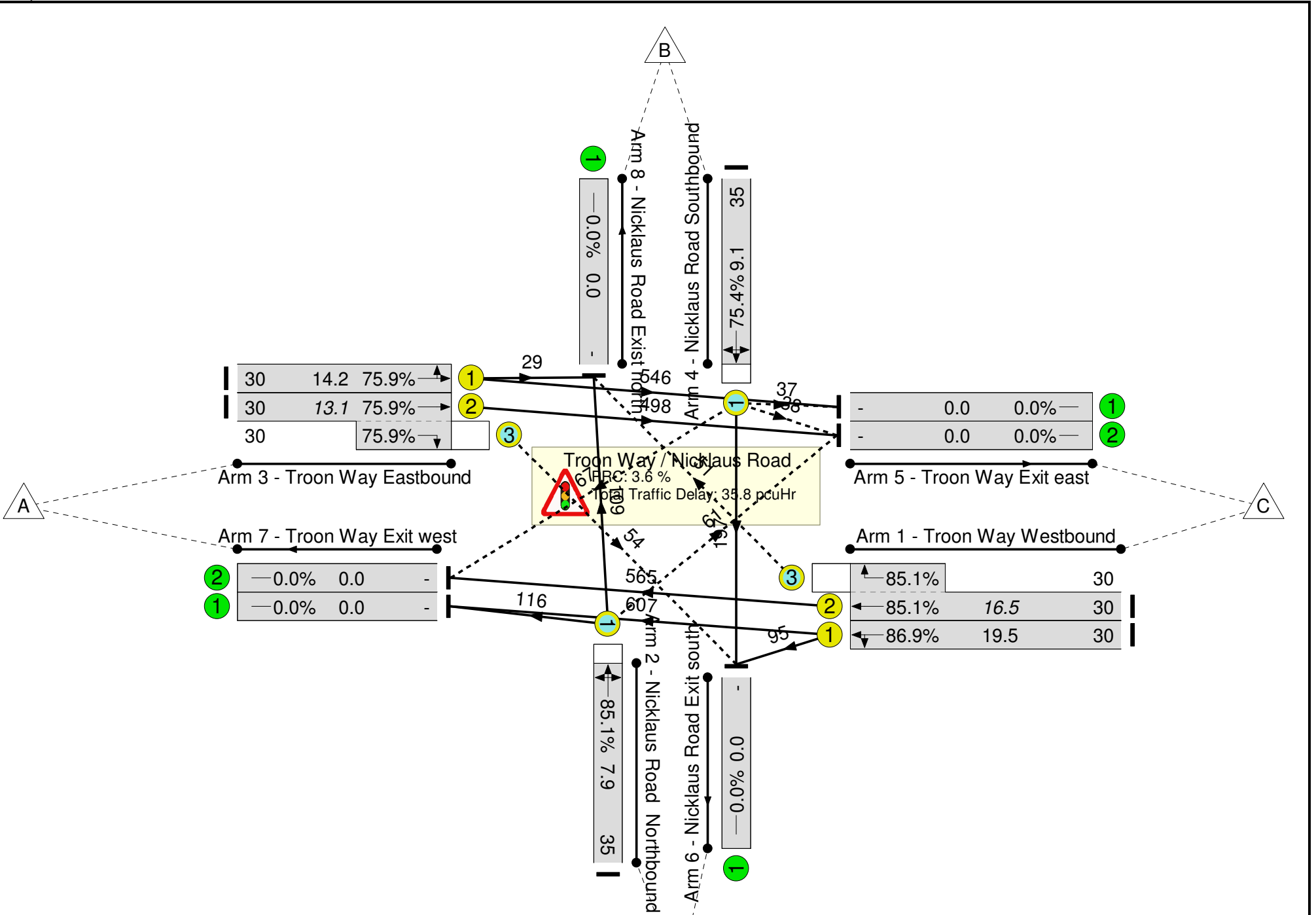
Stage	1	3	4
Duration	30	7	35
Change Point	0	36	49

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A563 / Nicklaus Road - LCC Model	-	-	N/A	-	-		-	-	-	-	-	-	86.9%
Troon Way / Nicklaus Road	-	-	N/A	-	-		-	-	-	-	-	-	86.9%
1/1	Troon Way Westbound Left Ahead	U	N/A	N/A	B		1	30	-	702	2345	808	86.9%
1/2+1/3	Troon Way Westbound Ahead Right	U+O	N/A	N/A	B		1	30	-	616	2080:1962	664+60	85.1 : 85.1%
2/1	Nicklaus Road Northbound Right Left Ahead	O	N/A	N/A	D		1	35	-	286	1936	336	85.1%
3/1	Troon Way Eastbound Ahead Left	U	N/A	N/A	A		1	30	-	575	2200	758	75.9%
3/2+3/3	Troon Way Eastbound Ahead Right	U+O	N/A	N/A	A		1	30	-	552	2080:1962	656+71	75.9 : 75.9%
4/1	Nicklaus Road Southbound Left Ahead Right	O	N/A	N/A	C		1	35	-	339	1941	449	75.4%
5/1	Troon Way Exit east	U	N/A	N/A	-		-	-	-	583	Inf	Inf	0.0%
5/2	Troon Way Exit east	U	N/A	N/A	-		-	-	-	597	Inf	Inf	0.0%
6/1	Nicklaus Road Exit south	U	N/A	N/A	-		-	-	-	346	Inf	Inf	0.0%
7/1	Troon Way Exit west	U	N/A	N/A	-		-	-	-	723	Inf	Inf	0.0%
7/2	Troon Way Exit west	U	N/A	N/A	-		-	-	-	632	Inf	Inf	0.0%
8/1	Nicklaus Road Exist north	U	N/A	N/A	-		-	-	-	189	Inf	Inf	0.0%

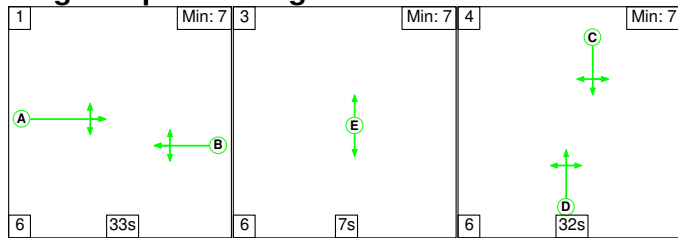
Full Input Data And Results

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: A563 / Nicklaus Road - LCC Model	-	-	289	0	19	22.2	13.0	0.6	35.8	-	-	-	-
Troon Way / Nicklaus Road	-	-	289	0	19	22.2	13.0	0.6	35.8	-	-	-	-
1/1	702	702	-	-	-	5.4	3.1	-	8.5	43.7	16.4	3.1	19.5
1/2+1/3	616	616	51	0	0	4.6	2.7	0.2	7.5	43.9	13.8	2.7	16.5
2/1	286	286	59	0	2	1.6	2.6	0.0	4.3	53.8	5.3	2.6	7.9
3/1	575	575	-	-	-	4.2	1.5	-	5.7	35.9	12.6	1.5	14.2
3/2+3/3	552	552	41	0	13	3.9	1.5	0.3	5.8	37.7	11.6	1.5	13.1
4/1	339	339	139	0	3	2.5	1.5	0.1	4.0	42.9	7.6	1.5	9.1
5/1	583	583	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	597	597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	346	346	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	723	723	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	632	632	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	189	189	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):	3.6	Total Delay for Signalled Lanes (pcuHr):			35.84	Cycle Time (s): 90				
			PRC Over All Lanes (%):	3.6	Total Delay Over All Lanes(pcuHr):			35.84					

Full Input Data And Results

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

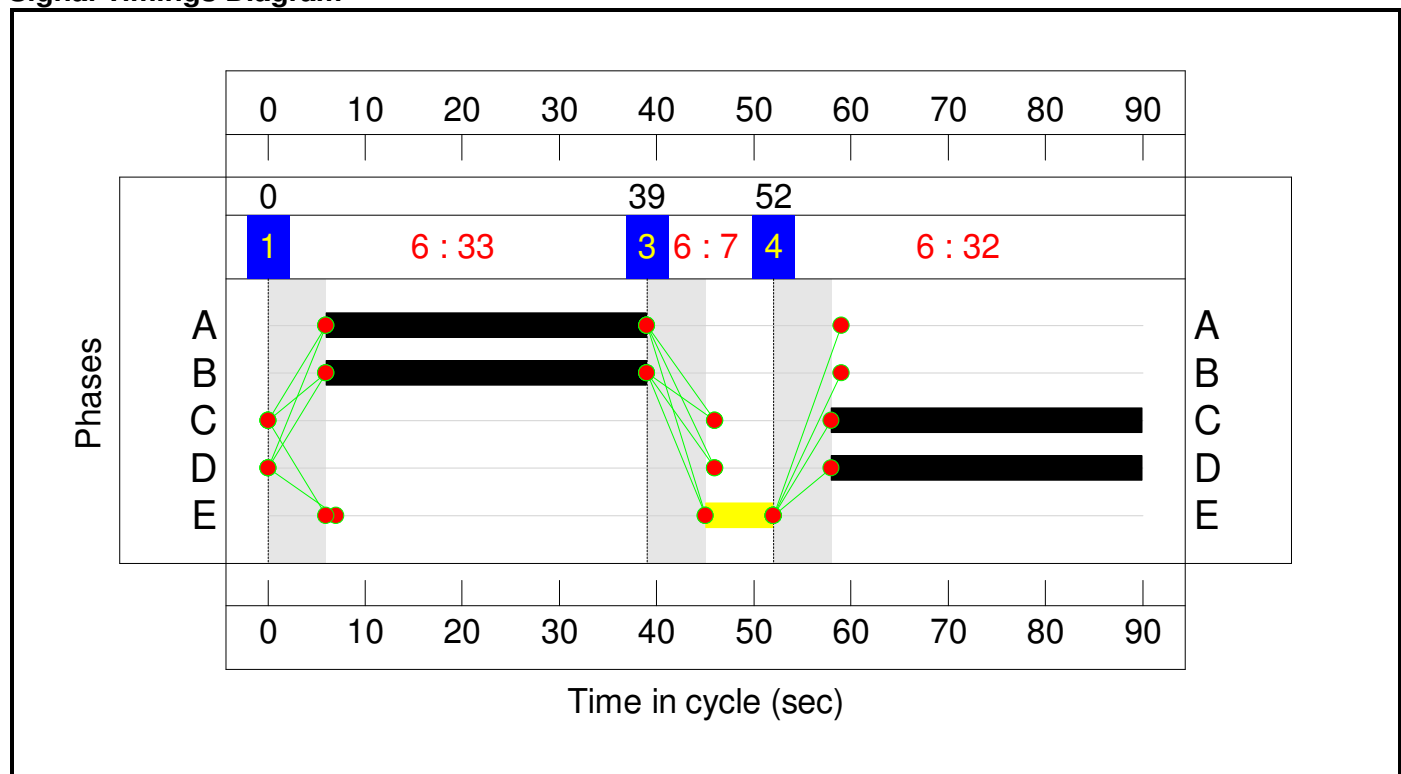
Stage Sequence Diagram



Stage Timings

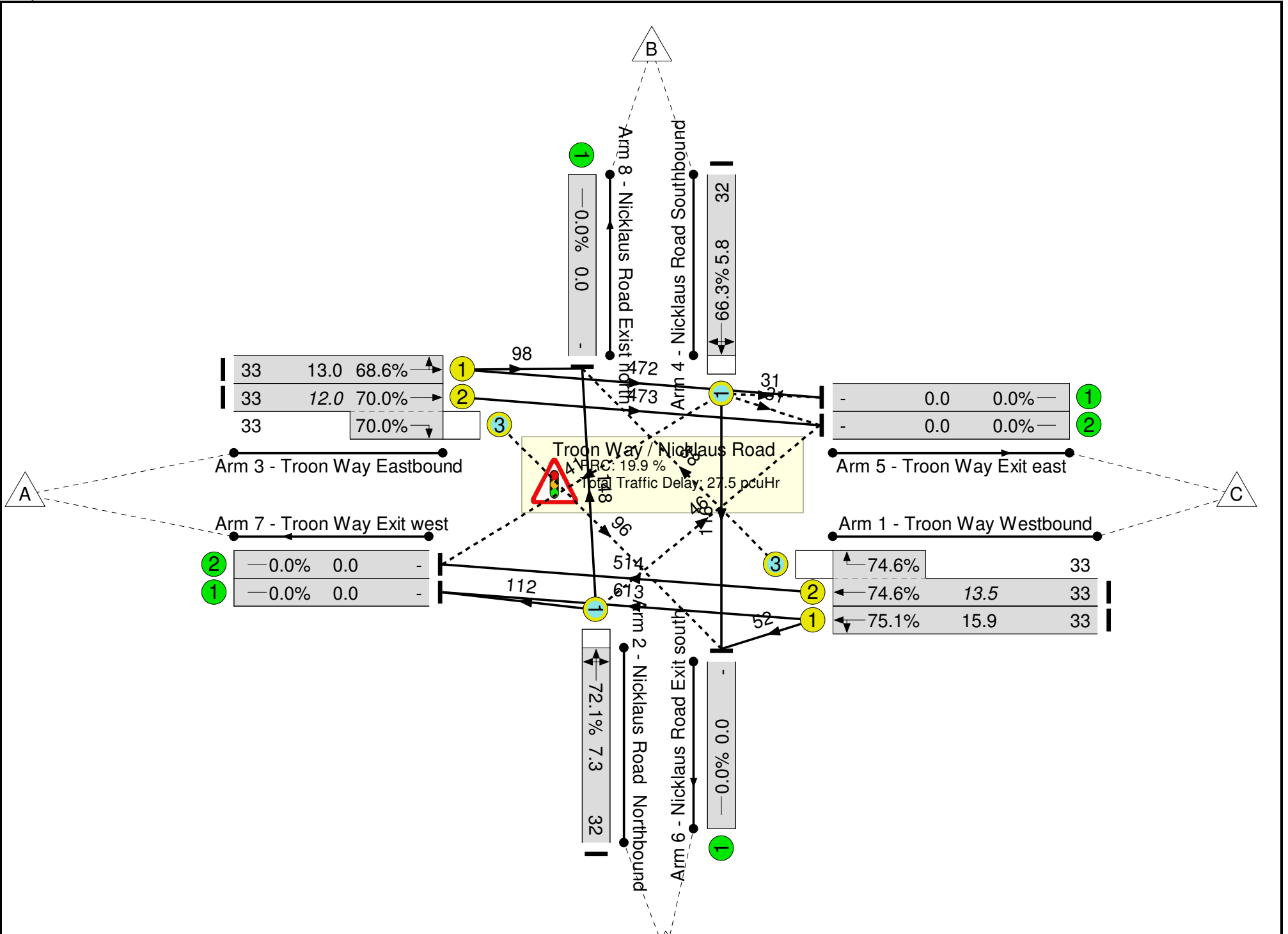
Stage	1	3	4
Duration	33	7	32
Change Point	0	39	52

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A563 / Nicklaus Road - LCC Model	-	-	N/A	-	-		-	-	-	-	-	-	75.1%
Troon Way / Nicklaus Road	-	-	N/A	-	-		-	-	-	-	-	-	75.1%
1/1	Troon Way Westbound Left Ahead	U	N/A	N/A	B		1	33	-	665	2345	886	75.1%
1/2+1/3	Troon Way Westbound Ahead Right	U+O	N/A	N/A	B		1	33	-	602	2080:1962	689+118	74.6 : 74.6%
2/1	Nicklaus Road Northbound Right Left Ahead	O	N/A	N/A	D		1	32	-	306	1944	425	72.1%
3/1	Troon Way Eastbound Ahead Left	U	N/A	N/A	A		1	33	-	570	2200	831	68.6%
3/2+3/3	Troon Way Eastbound Ahead Right	U+O	N/A	N/A	A		1	33	-	569	2080:1962	675+137	70.0 : 70.0%
4/1	Nicklaus Road Southbound Left Ahead Right	O	N/A	N/A	C		1	32	-	219	1941	330	66.3%
5/1	Troon Way Exit east	U	N/A	N/A	-		-	-	-	503	Inf	Inf	0.0%
5/2	Troon Way Exit east	U	N/A	N/A	-		-	-	-	550	Inf	Inf	0.0%
6/1	Nicklaus Road Exit south	U	N/A	N/A	-		-	-	-	264	Inf	Inf	0.0%
7/1	Troon Way Exit west	U	N/A	N/A	-		-	-	-	725	Inf	Inf	0.0%
7/2	Troon Way Exit west	U	N/A	N/A	-		-	-	-	555	Inf	Inf	0.0%
8/1	Nicklaus Road Exist north	U	N/A	N/A	-		-	-	-	334	Inf	Inf	0.0%

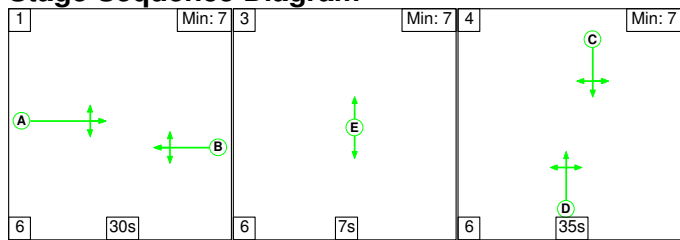
Full Input Data And Results

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: A563 / Nicklaus Road - LCC Model	-	-	327	0	6	19.2	7.4	0.9	27.5	-	-	-	-
Troon Way / Nicklaus Road	-	-	327	0	6	19.2	7.4	0.9	27.5	-	-	-	-
1/1	665	665	-	-	-	4.5	1.5	-	6.0	32.4	14.4	1.5	15.9
1/2+1/3	602	602	88	0	0	3.9	1.4	0.3	5.7	34.2	12.0	1.4	13.5
2/1	306	306	45	0	1	2.0	1.3	0.0	3.2	38.2	6.0	1.3	7.3
3/1	570	570	-	-	-	3.7	1.1	-	4.8	30.4	11.9	1.1	13.0
3/2+3/3	569	569	92	0	4	3.6	1.2	0.5	5.2	33.1	10.8	1.2	12.0
4/1	219	219	102	0	1	1.5	1.0	0.1	2.6	42.1	4.8	1.0	5.8
5/1	503	503	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	550	550	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	264	264	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	725	725	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	555	555	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	334	334	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): 19.9 Total Delay for Signalled Lanes (pcuHr): 27.54 Cycle Time (s): 90 PRC Over All Lanes (%): 19.9 Total Delay Over All Lanes(pcuHr): 27.54</p>													

Full Input Data And Results

Scenario 3: '2016 + Com Dev AM' (FG3: '2016 + Com Dev AM', Plan 1: 'Network Control Plan 1')

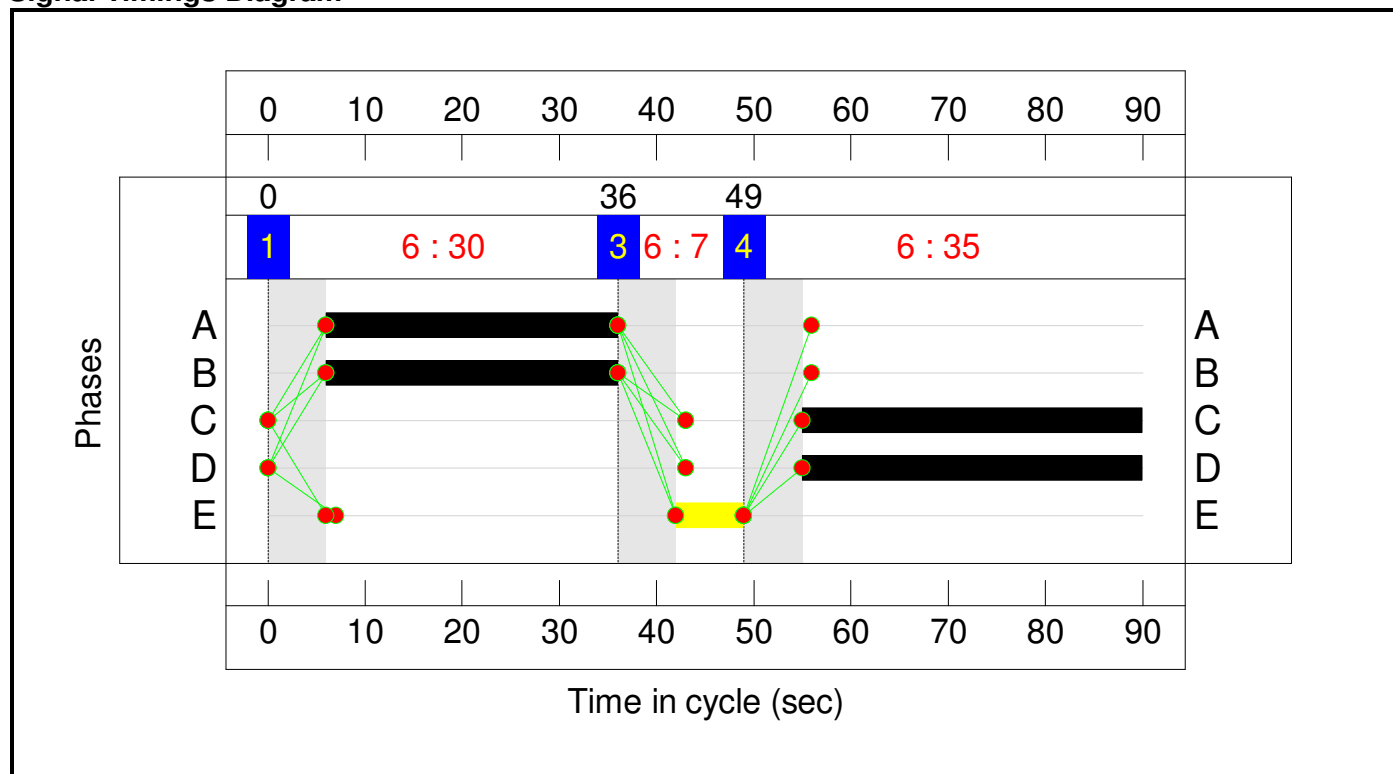
Stage Sequence Diagram



Stage Timings

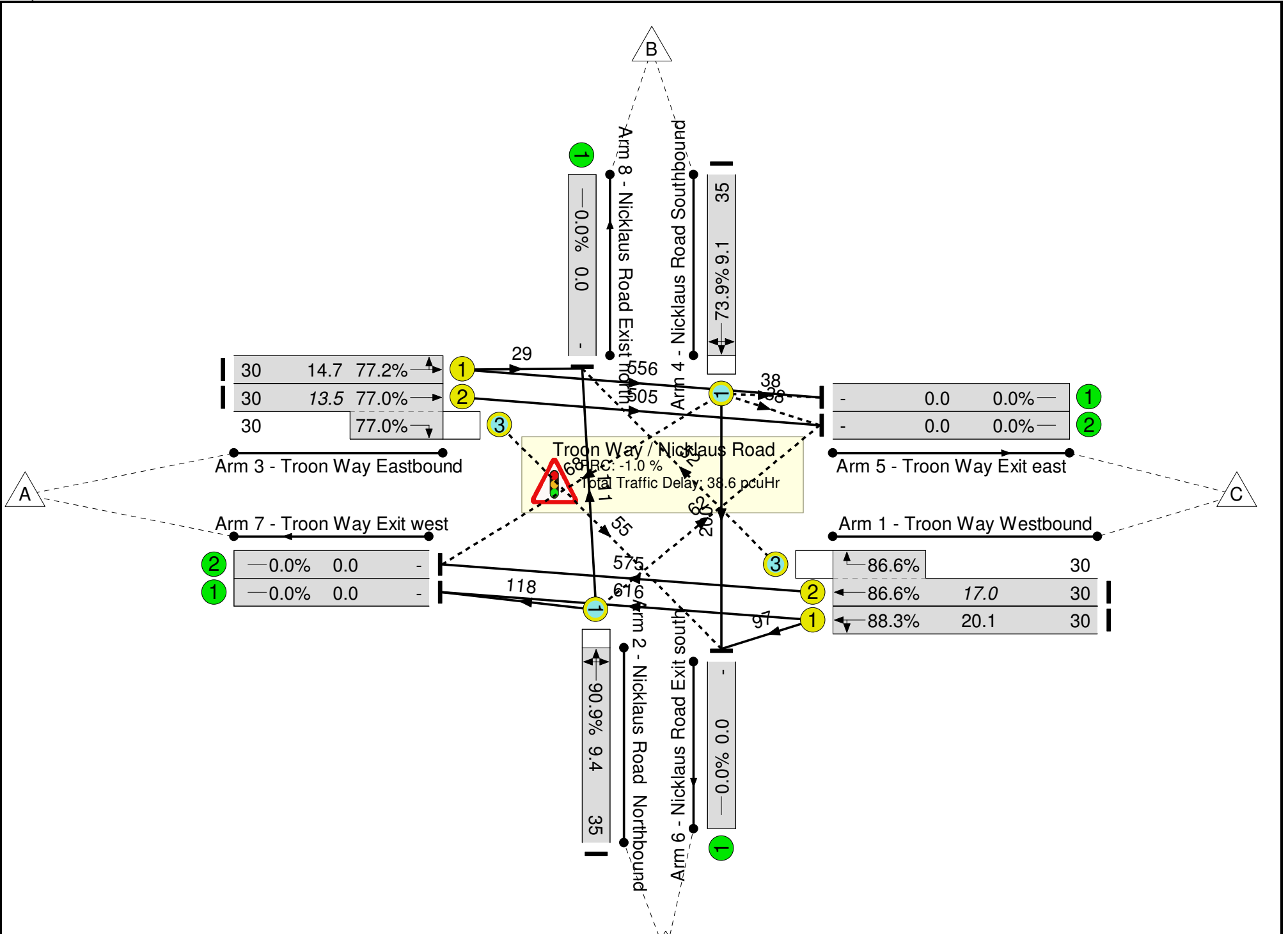
Stage	1	3	4
Duration	30	7	35
Change Point	0	36	49

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A563 / Nicklaus Road - LCC Model	-	-	N/A	-	-		-	-	-	-	-	-	90.9%
Troon Way / Nicklaus Road	-	-	N/A	-	-		-	-	-	-	-	-	90.9%
1/1	Troon Way Westbound Left Ahead	U	N/A	N/A	B		1	30	-	713	2345	808	88.3%
1/2+1/3	Troon Way Westbound Ahead Right	U+O	N/A	N/A	B		1	30	-	627	2080:1962	664+60	86.6 : 86.6%
2/1	Nicklaus Road Northbound Right Left Ahead	O	N/A	N/A	D		1	35	-	291	1936	320	90.9%
3/1	Troon Way Eastbound Ahead Left	U	N/A	N/A	A		1	30	-	585	2200	758	77.2%
3/2+3/3	Troon Way Eastbound Ahead Right	U+O	N/A	N/A	A		1	30	-	560	2080:1962	656+71	77.0 : 77.0%
4/1	Nicklaus Road Southbound Left Ahead Right	O	N/A	N/A	C		1	35	-	344	1941	466	73.9%
5/1	Troon Way Exit east	U	N/A	N/A	-		-	-	-	594	Inf	Inf	0.0%
5/2	Troon Way Exit east	U	N/A	N/A	-		-	-	-	605	Inf	Inf	0.0%
6/1	Nicklaus Road Exit south	U	N/A	N/A	-		-	-	-	352	Inf	Inf	0.0%
7/1	Troon Way Exit west	U	N/A	N/A	-		-	-	-	734	Inf	Inf	0.0%
7/2	Troon Way Exit west	U	N/A	N/A	-		-	-	-	643	Inf	Inf	0.0%
8/1	Nicklaus Road Exist north	U	N/A	N/A	-		-	-	-	192	Inf	Inf	0.0%

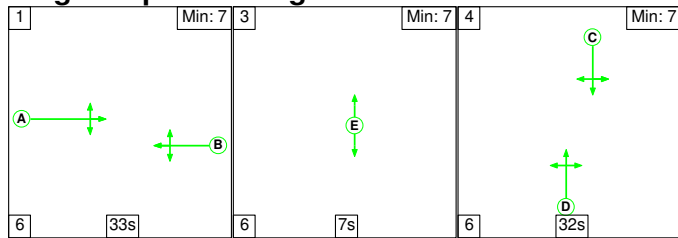
Full Input Data And Results

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: A563 / Nicklaus Road - LCC Model	-	-	287	0	26	22.8	15.2	0.6	38.6	-	-	-	-
Troon Way / Nicklaus Road	-	-	287	0	26	22.8	15.2	0.6	38.6	-	-	-	-
1/1	713	713	-	-	-	5.5	3.5	-	9.0	45.5	16.6	3.5	20.1
1/2+1/3	627	627	52	0	0	4.7	3.0	0.2	8.0	45.7	14.0	3.0	17.0
2/1	291	291	56	0	6	1.7	3.9	0.0	5.7	70.7	5.5	3.9	9.4
3/1	585	585	-	-	-	4.3	1.7	-	5.9	36.6	13.0	1.7	14.7
3/2+3/3	560	560	37	0	18	4.0	1.6	0.3	6.0	38.3	11.9	1.6	13.5
4/1	344	344	142	0	2	2.5	1.4	0.1	4.0	41.6	7.7	1.4	9.1
5/1	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	605	605	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	352	352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	734	734	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	643	643	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	192	192	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):	-1.0	Total Delay for Signalled Lanes (pcuHr):			38.57	Cycle Time (s): 90				
			PRC Over All Lanes (%):	-1.0	Total Delay Over All Lanes(pcuHr):			38.57					

Full Input Data And Results

Scenario 4: '2016 + Com Dev PM' (FG4: '2016 + Com Dev PM', Plan 1: 'Network Control Plan 1')

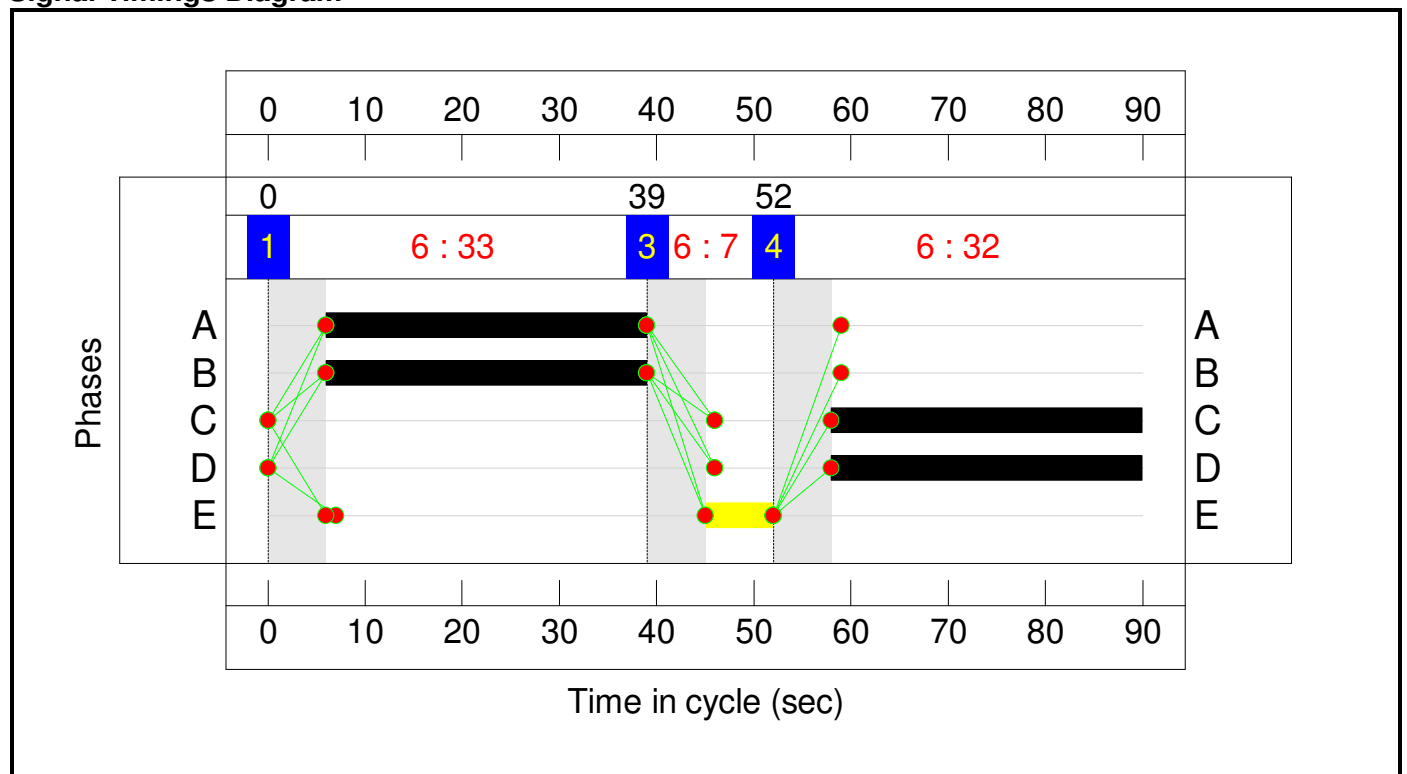
Stage Sequence Diagram



Stage Timings

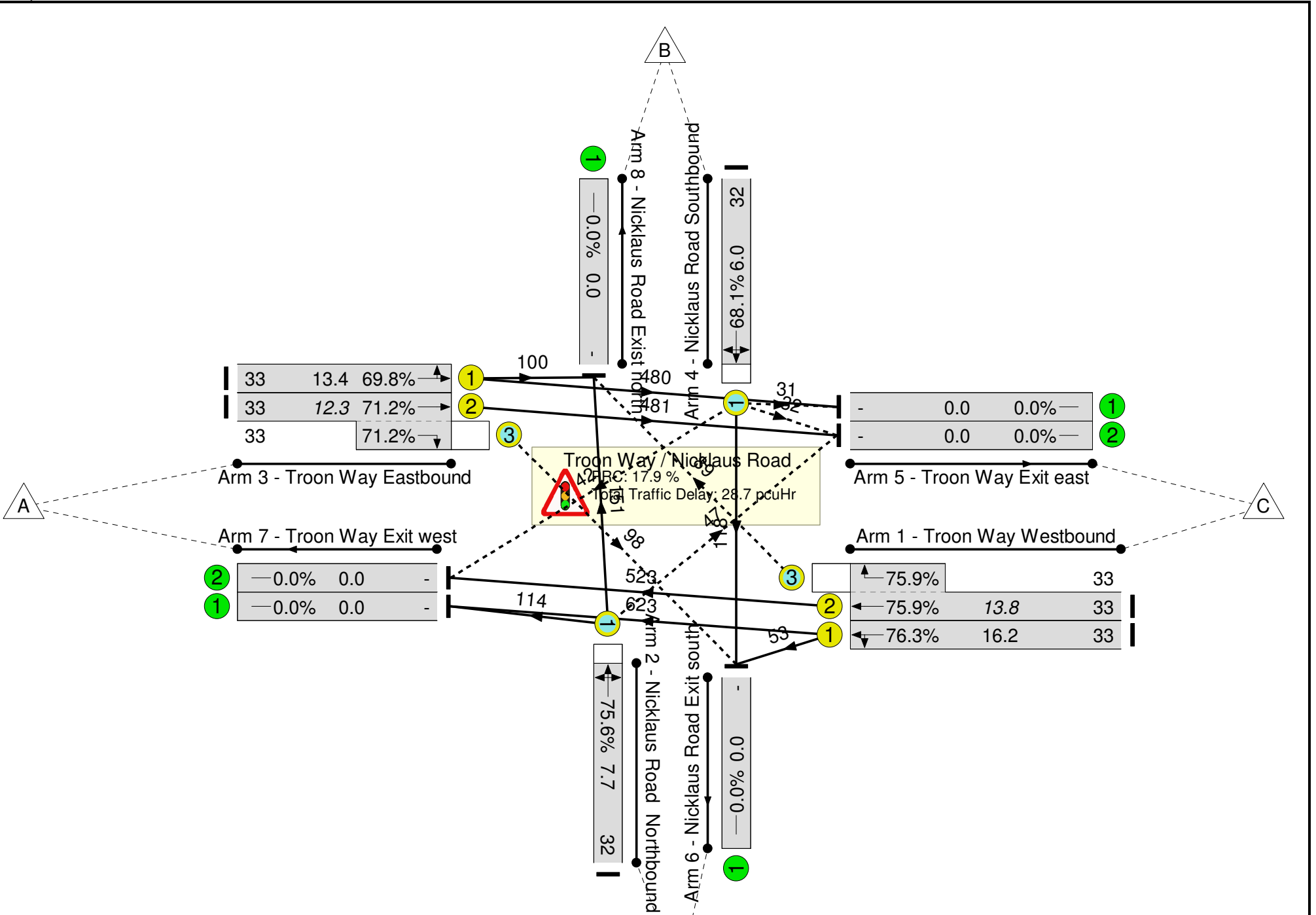
Stage	1	3	4
Duration	33	7	32
Change Point	0	39	52

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A563 / Nicklaus Road - LCC Model	-	-	N/A	-	-		-	-	-	-	-	-	76.3%
Troon Way / Nicklaus Road	-	-	N/A	-	-		-	-	-	-	-	-	76.3%
1/1	Troon Way Westbound Left Ahead	U	N/A	N/A	B		1	33	-	676	2345	886	76.3%
1/2+1/3	Troon Way Westbound Ahead Right	U+O	N/A	N/A	B		1	33	-	612	2080:1962	689+117	75.9 : 75.9%
2/1	Nicklaus Road Northbound Right Left Ahead	O	N/A	N/A	D		1	32	-	312	1944	413	75.6%
3/1	Troon Way Eastbound Ahead Left	U	N/A	N/A	A		1	33	-	580	2200	831	69.8%
3/2+3/3	Troon Way Eastbound Ahead Right	U+O	N/A	N/A	A		1	33	-	579	2080:1962	675+138	71.2 : 71.2%
4/1	Nicklaus Road Southbound Left Ahead Right	O	N/A	N/A	C		1	32	-	223	1941	327	68.1%
5/1	Troon Way Exit east	U	N/A	N/A	-		-	-	-	511	Inf	Inf	0.0%
5/2	Troon Way Exit east	U	N/A	N/A	-		-	-	-	560	Inf	Inf	0.0%
6/1	Nicklaus Road Exit south	U	N/A	N/A	-		-	-	-	269	Inf	Inf	0.0%
7/1	Troon Way Exit west	U	N/A	N/A	-		-	-	-	737	Inf	Inf	0.0%
7/2	Troon Way Exit west	U	N/A	N/A	-		-	-	-	565	Inf	Inf	0.0%
8/1	Nicklaus Road Exist north	U	N/A	N/A	-		-	-	-	340	Inf	Inf	0.0%

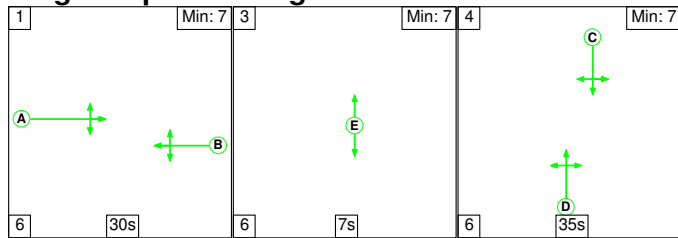
Full Input Data And Results

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: A563 / Nicklaus Road - LCC Model	-	-	325	0	14	19.7	8.1	0.9	28.7	-	-	-	-
Troon Way / Nicklaus Road	-	-	325	0	14	19.7	8.1	0.9	28.7	-	-	-	-
1/1	676	676	-	-	-	4.6	1.6	-	6.2	32.9	14.6	1.6	16.2
1/2+1/3	612	612	89	0	0	4.0	1.5	0.3	5.9	34.8	12.2	1.5	13.8
2/1	312	312	46	0	1	2.0	1.5	0.0	3.5	40.8	6.2	1.5	7.7
3/1	580	580	-	-	-	3.8	1.1	-	5.0	30.8	12.2	1.1	13.4
3/2+3/3	579	579	86	0	12	3.7	1.2	0.5	5.4	33.7	11.0	1.2	12.3
4/1	223	223	104	0	1	1.5	1.0	0.1	2.7	43.4	5.0	1.0	6.0
5/1	511	511	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	560	560	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	269	269	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	737	737	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	565	565	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	340	340	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):	17.9	Total Delay for Signalled Lanes (pcuHr):			28.69	Cycle Time (s): 90				
			PRC Over All Lanes (%):	17.9	Total Delay Over All Lanes(pcuHr):			28.69					

Full Input Data And Results

Scenario 5: '2016 + Com Dev +Ph1 AM' (FG5: '2016 + Com Dev +Ph1 AM', Plan 1: 'Network Control Plan 1')

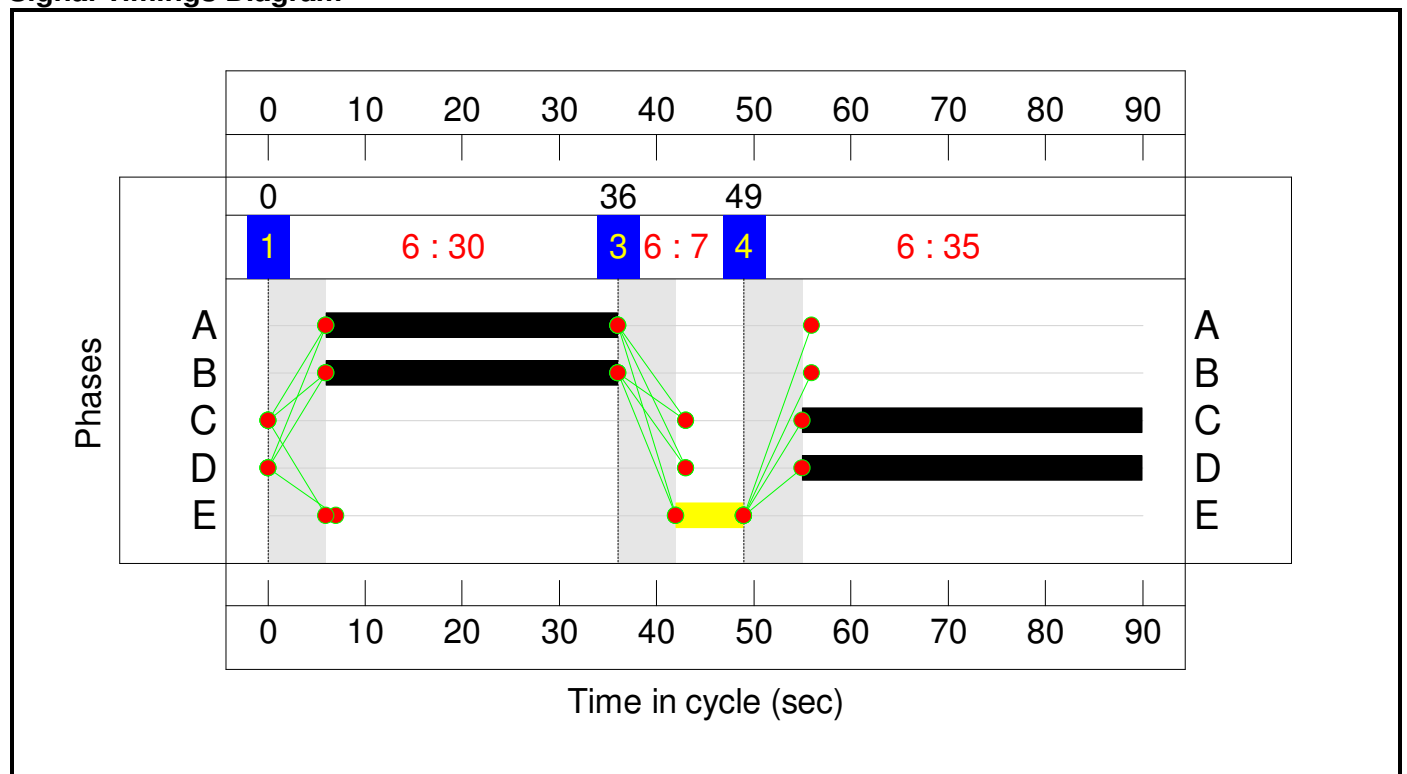
Stage Sequence Diagram



Stage Timings

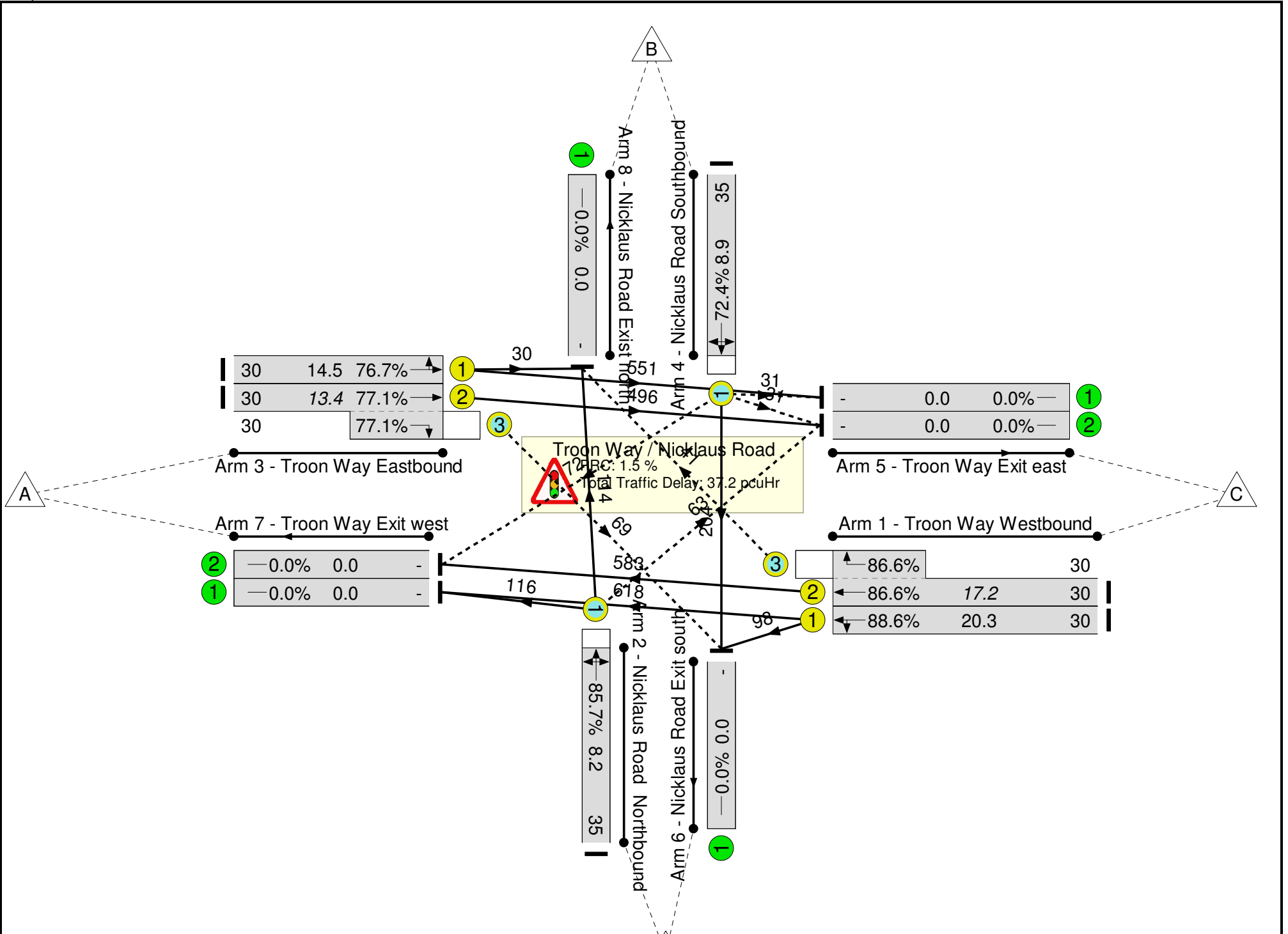
Stage	1	3	4
Duration	30	7	35
Change Point	0	36	49

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A563 / Nicklaus Road - LCC Model	-	-	N/A	-	-		-	-	-	-	-	-	88.6%
Troon Way / Nicklaus Road	-	-	N/A	-	-		-	-	-	-	-	-	88.6%
1/1	Troon Way Westbound Left Ahead	U	N/A	N/A	B		1	30	-	716	2345	808	88.6%
1/2+1/3	Troon Way Westbound Ahead Right	U+O	N/A	N/A	B		1	30	-	624	2080:1962	673+47	86.6 : 86.6%
2/1	Nicklaus Road Northbound Right Left Ahead	O	N/A	N/A	D		1	35	-	293	1938	342	85.7%
3/1	Troon Way Eastbound Ahead Left	U	N/A	N/A	A		1	30	-	581	2200	758	76.7%
3/2+3/3	Troon Way Eastbound Ahead Right	U+O	N/A	N/A	A		1	30	-	565	2080:1962	643+89	77.1 : 77.1%
4/1	Nicklaus Road Southbound Left Ahead Right	O	N/A	N/A	C		1	35	-	338	1941	467	72.4%
5/1	Troon Way Exit east	U	N/A	N/A	-		-	-	-	582	Inf	Inf	0.0%
5/2	Troon Way Exit east	U	N/A	N/A	-		-	-	-	590	Inf	Inf	0.0%
6/1	Nicklaus Road Exit south	U	N/A	N/A	-		-	-	-	371	Inf	Inf	0.0%
7/1	Troon Way Exit west	U	N/A	N/A	-		-	-	-	734	Inf	Inf	0.0%
7/2	Troon Way Exit west	U	N/A	N/A	-		-	-	-	655	Inf	Inf	0.0%
8/1	Nicklaus Road Exist north	U	N/A	N/A	-		-	-	-	185	Inf	Inf	0.0%

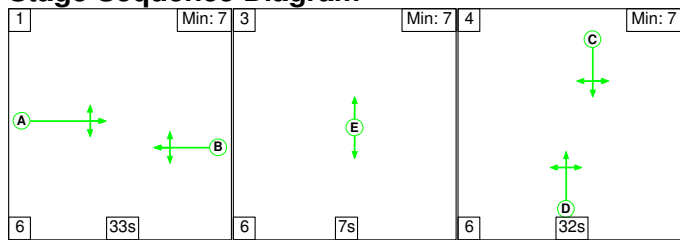
Full Input Data And Results

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: A563 / Nicklaus Road - LCC Model	-	-	268	0	39	22.7	13.9	0.6	37.2	-	-	-	-
Troon Way / Nicklaus Road	-	-	268	0	39	22.7	13.9	0.6	37.2	-	-	-	-
1/1	716	716	-	-	-	5.5	3.6	-	9.2	46.0	16.7	3.6	20.3
1/2+1/3	624	624	41	0	0	4.7	3.0	0.1	7.9	45.6	14.2	3.0	17.2
2/1	293	293	58	0	5	1.7	2.7	0.0	4.4	54.6	5.5	2.7	8.2
3/1	581	581	-	-	-	4.2	1.6	-	5.9	36.3	12.9	1.6	14.5
3/2+3/3	565	565	37	0	32	4.0	1.7	0.4	6.1	38.7	11.7	1.7	13.4
4/1	338	338	133	0	1	2.4	1.3	0.1	3.8	40.6	7.6	1.3	8.9
5/1	582	582	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	590	590	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	371	371	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	734	734	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	655	655	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	185	185	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 1.5 Total Delay for Signalled Lanes (pcuHr): 37.24 Cycle Time (s): 90 PRC Over All Lanes (%): 1.5 Total Delay Over All Lanes(pcuHr): 37.24													

Full Input Data And Results

Scenario 6: '2016 + Com Dev +Ph1 PM' (FG6: '2016 + Com Dev +Ph1 PM', Plan 1: 'Network Control Plan 1')

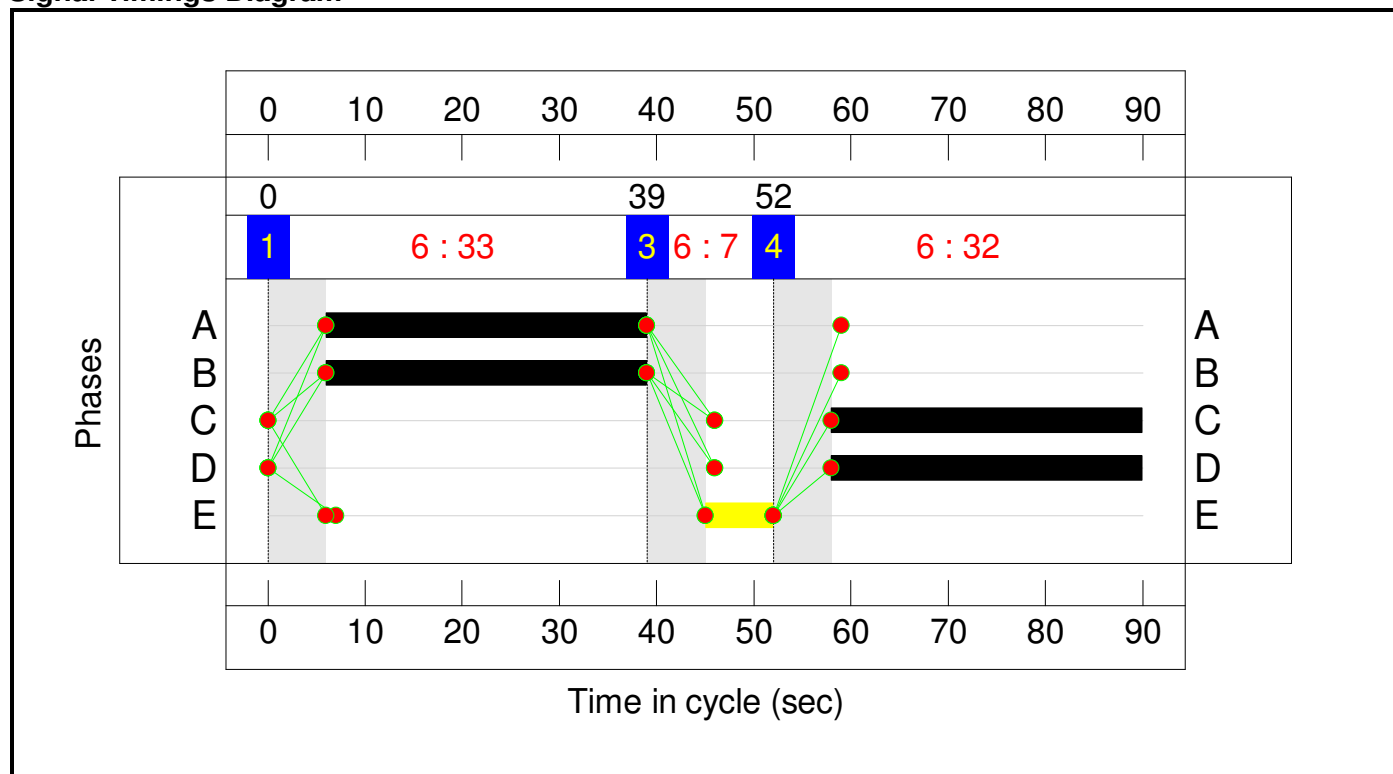
Stage Sequence Diagram



Stage Timings

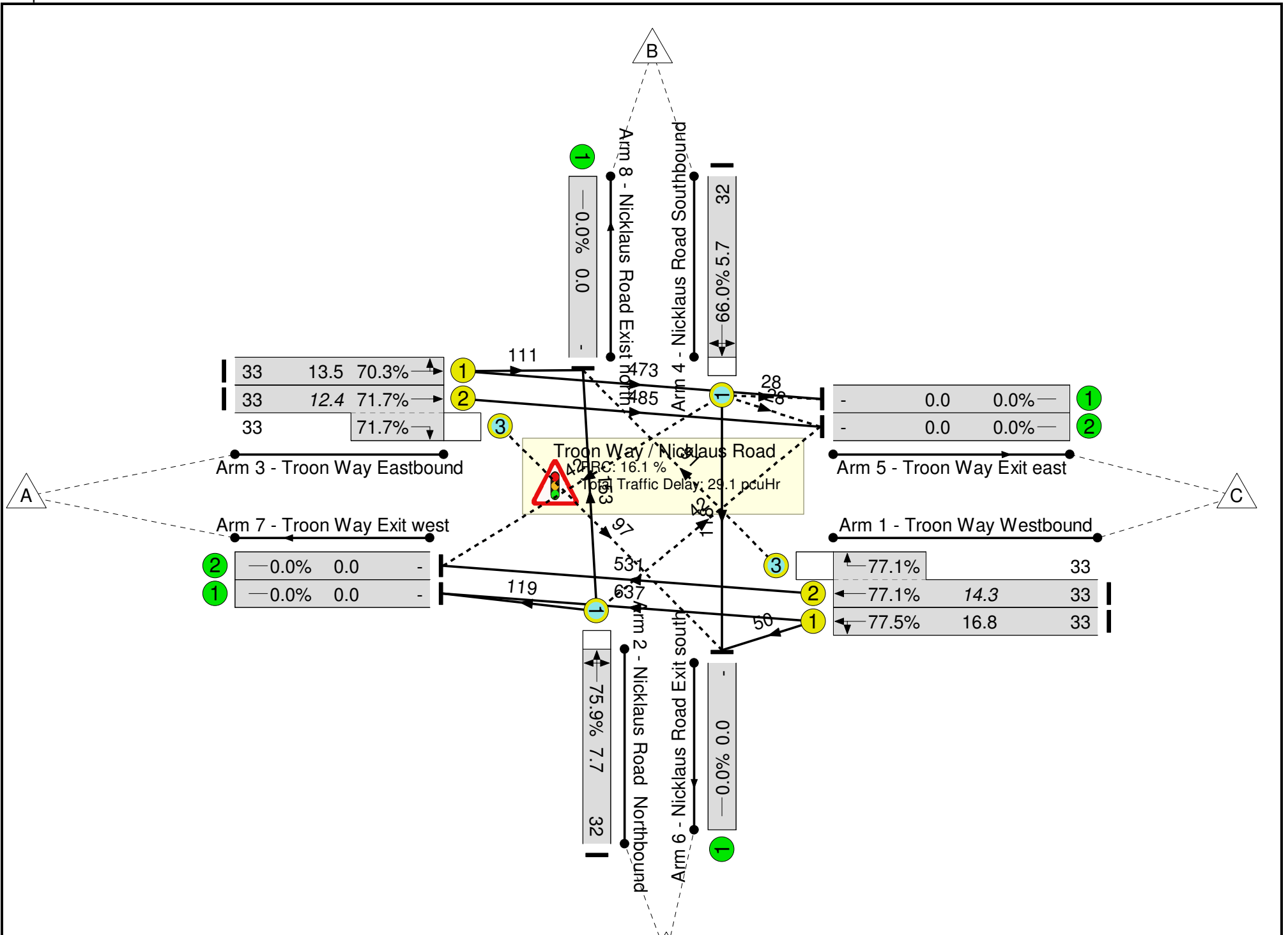
Stage	1	3	4
Duration	33	7	32
Change Point	0	39	52

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A563 / Nicklaus Road - LCC Model	-	-	N/A	-	-		-	-	-	-	-	-	77.5%
Troon Way / Nicklaus Road	-	-	N/A	-	-		-	-	-	-	-	-	77.5%
1/1	Troon Way Westbound Left Ahead	U	N/A	N/A	B		1	33	-	687	2345	886	77.5%
1/2+1/3	Troon Way Westbound Ahead Right	U+O	N/A	N/A	B		1	33	-	622	2080:1962	689+118	77.1 : 77.1%
2/1	Nicklaus Road Northbound Right Left Ahead	O	N/A	N/A	D		1	32	-	314	1941	414	75.9%
3/1	Troon Way Eastbound Ahead Left	U	N/A	N/A	A		1	33	-	584	2200	831	70.3%
3/2+3/3	Troon Way Eastbound Ahead Right	U+O	N/A	N/A	A		1	33	-	582	2080:1962	677+135	71.7 : 71.7%
4/1	Nicklaus Road Southbound Left Ahead Right	O	N/A	N/A	C		1	32	-	216	1941	327	66.0%
5/1	Troon Way Exit east	U	N/A	N/A	-		-	-	-	501	Inf	Inf	0.0%
5/2	Troon Way Exit east	U	N/A	N/A	-		-	-	-	555	Inf	Inf	0.0%
6/1	Nicklaus Road Exit south	U	N/A	N/A	-		-	-	-	265	Inf	Inf	0.0%
7/1	Troon Way Exit west	U	N/A	N/A	-		-	-	-	756	Inf	Inf	0.0%
7/2	Troon Way Exit west	U	N/A	N/A	-		-	-	-	573	Inf	Inf	0.0%
8/1	Nicklaus Road Exist north	U	N/A	N/A	-		-	-	-	355	Inf	Inf	0.0%

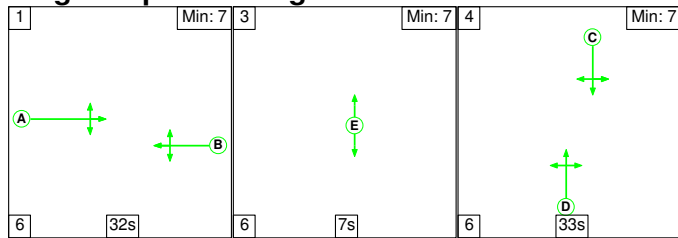
Full Input Data And Results

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: A563 / Nicklaus Road - LCC Model	-	-	310	0	18	19.9	8.3	1.0	29.1	-	-	-	-
Troon Way / Nicklaus Road	-	-	310	0	18	19.9	8.3	1.0	29.1	-	-	-	-
1/1	687	687	-	-	-	4.7	1.7	-	6.4	33.5	15.1	1.7	16.8
1/2+1/3	622	622	91	0	0	4.1	1.7	0.4	6.1	35.5	12.6	1.7	14.3
2/1	314	314	42	0	0	2.0	1.5	0.0	3.6	41.0	6.2	1.5	7.7
3/1	584	584	-	-	-	3.8	1.2	-	5.0	30.9	12.3	1.2	13.5
3/2+3/3	582	582	80	0	17	3.7	1.3	0.5	5.5	33.9	11.1	1.3	12.4
4/1	216	216	97	0	1	1.5	1.0	0.1	2.5	42.0	4.7	1.0	5.7
5/1	501	501	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	555	555	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	265	265	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	756	756	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	573	573	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	355	355	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): 16.1 Total Delay for Signalled Lanes (pcuHr): 29.12 Cycle Time (s): 90 PRC Over All Lanes (%): 16.1 Total Delay Over All Lanes(pcuHr): 29.12</p>													

Full Input Data And Results

Scenario 7: '2021 + Com Dev AM' (FG7: '2021 + Com Dev AM', Plan 1: 'Network Control Plan 1')

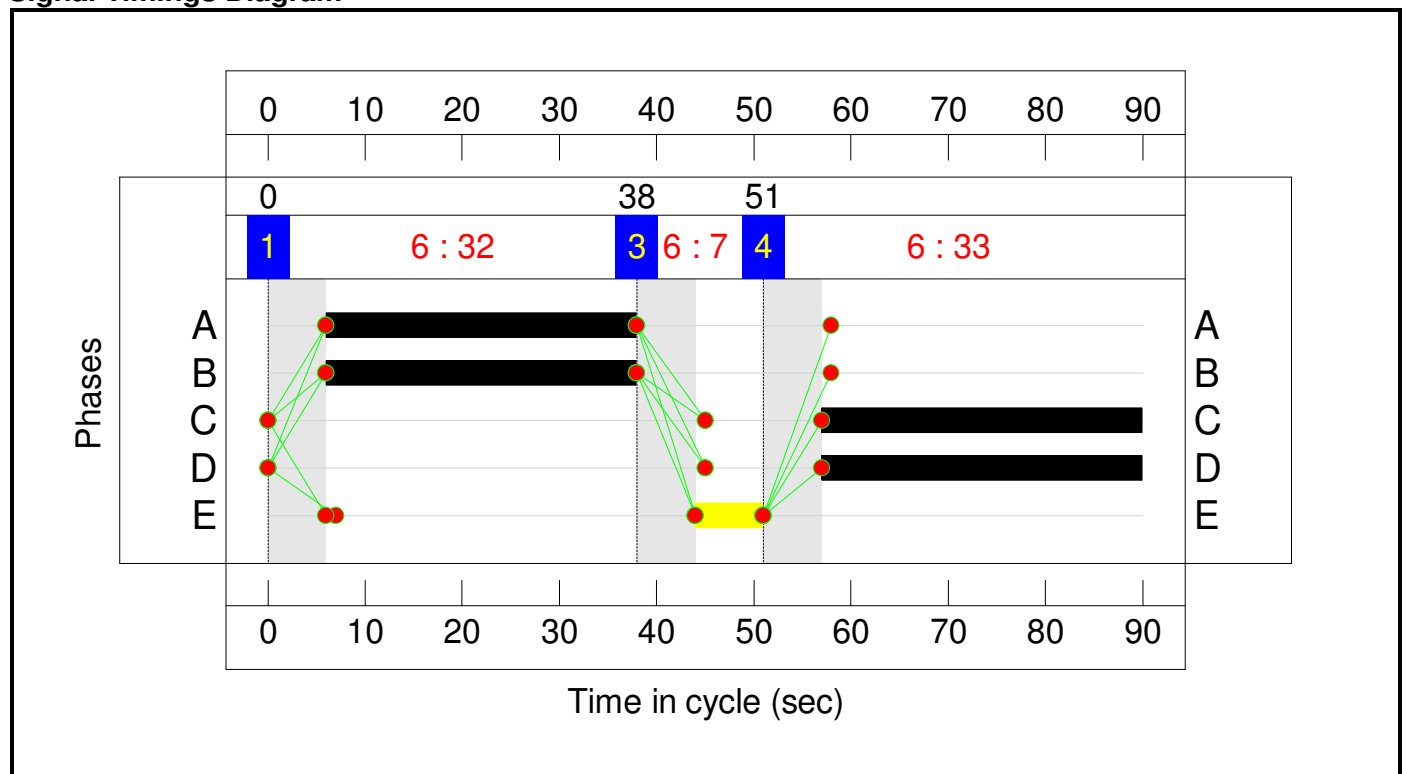
Stage Sequence Diagram



Stage Timings

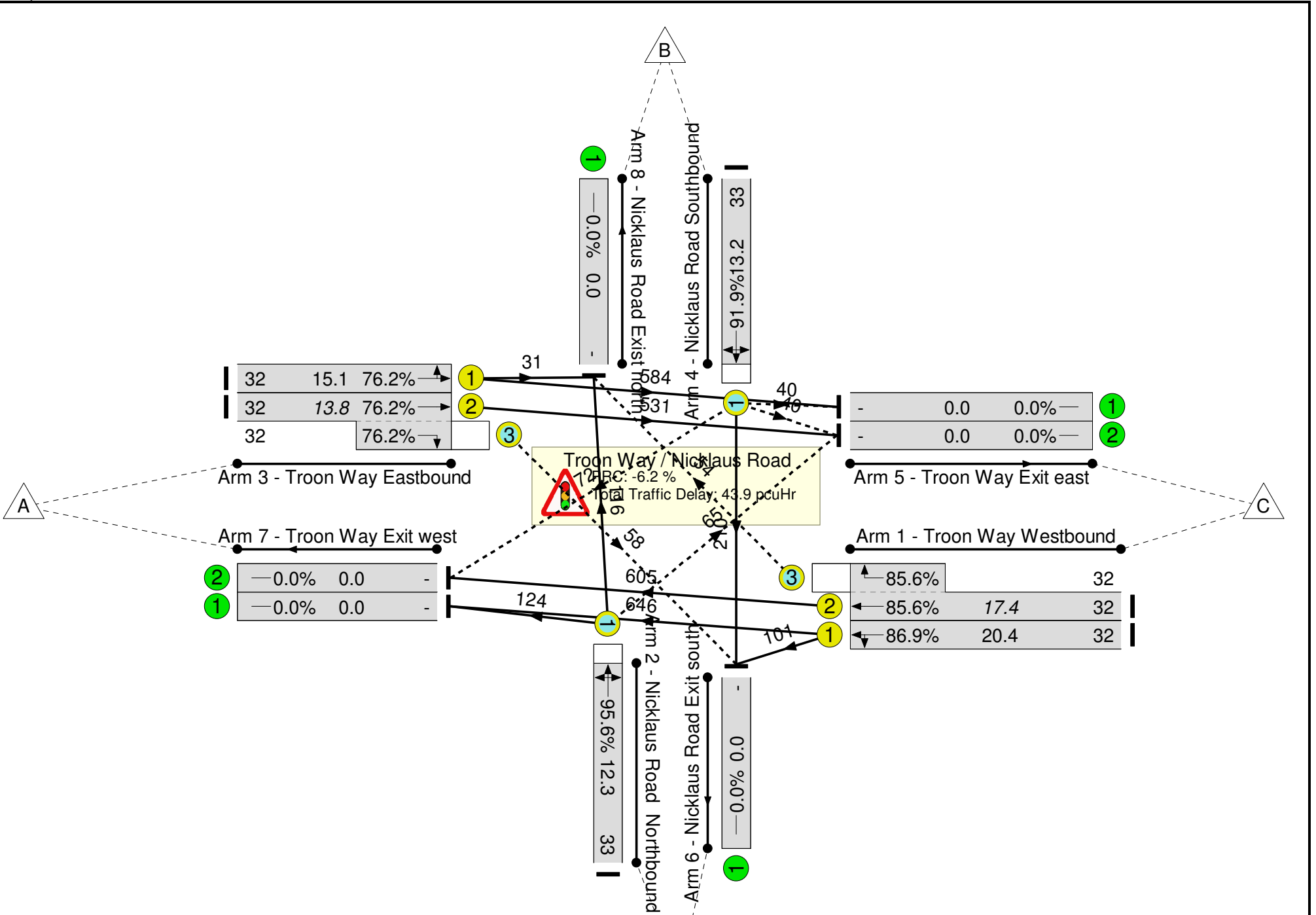
Stage	1	3	4
Duration	32	7	33
Change Point	0	38	51

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A563 / Nicklaus Road - LCC Model	-	-	N/A	-	-		-	-	-	-	-	-	95.6%
Troon Way / Nicklaus Road	-	-	N/A	-	-		-	-	-	-	-	-	95.6%
1/1	Troon Way Westbound Left Ahead	U	N/A	N/A	B		1	32	-	747	2345	860	86.9%
1/2+1/3	Troon Way Westbound Ahead Right	U+O	N/A	N/A	B		1	32	-	659	2080:1962	707+63	85.6 : 85.6%
2/1	Nicklaus Road Northbound Right Left Ahead	O	N/A	N/A	D		1	33	-	305	1936	319	95.6%
3/1	Troon Way Eastbound Ahead Left	U	N/A	N/A	A		1	32	-	615	2200	807	76.2%
3/2+3/3	Troon Way Eastbound Ahead Right	U+O	N/A	N/A	A		1	32	-	589	2080:1962	697+76	76.2 : 76.2%
4/1	Nicklaus Road Southbound Left Ahead Right	O	N/A	N/A	C		1	33	-	362	1941	394	91.9%
5/1	Troon Way Exit east	U	N/A	N/A	-		-	-	-	624	Inf	Inf	0.0%
5/2	Troon Way Exit east	U	N/A	N/A	-		-	-	-	636	Inf	Inf	0.0%
6/1	Nicklaus Road Exit south	U	N/A	N/A	-		-	-	-	369	Inf	Inf	0.0%
7/1	Troon Way Exit west	U	N/A	N/A	-		-	-	-	770	Inf	Inf	0.0%
7/2	Troon Way Exit west	U	N/A	N/A	-		-	-	-	677	Inf	Inf	0.0%
8/1	Nicklaus Road Exist north	U	N/A	N/A	-		-	-	-	201	Inf	Inf	0.0%

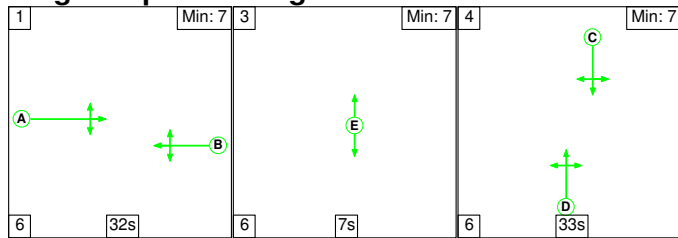
Full Input Data And Results

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: A563 / Nicklaus Road - LCC Model	-	-	301	0	28	23.8	19.4	0.7	43.9	-	-	-	-
Troon Way / Nicklaus Road	-	-	301	0	28	23.8	19.4	0.7	43.9	-	-	-	-
1/1	747	747	-	-	-	5.5	3.1	-	8.6	41.6	17.2	3.1	20.4
1/2+1/3	659	659	54	0	0	4.8	2.8	0.2	7.8	42.5	14.6	2.8	17.4
2/1	305	305	56	0	9	2.3	5.9	0.0	8.2	96.5	6.5	5.9	12.3
3/1	615	615	-	-	-	4.3	1.6	-	5.9	34.3	13.5	1.6	15.1
3/2+3/3	589	589	42	0	16	4.0	1.6	0.3	5.9	36.1	12.2	1.6	13.8
4/1	362	362	149	0	3	3.0	4.4	0.1	7.5	75.1	8.7	4.4	13.2
5/1	624	624	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	636	636	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	369	369	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	770	770	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	677	677	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	201	201	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -6.2 Total Delay for Signalled Lanes (pcuHr): 43.90 Cycle Time (s): 90 PRC Over All Lanes (%): -6.2 Total Delay Over All Lanes(pcuHr): 43.90													

Full Input Data And Results

Scenario 8: '2021 + Com Dev PM' (FG8: '2021 + Com Dev PM', Plan 1: 'Network Control Plan 1')

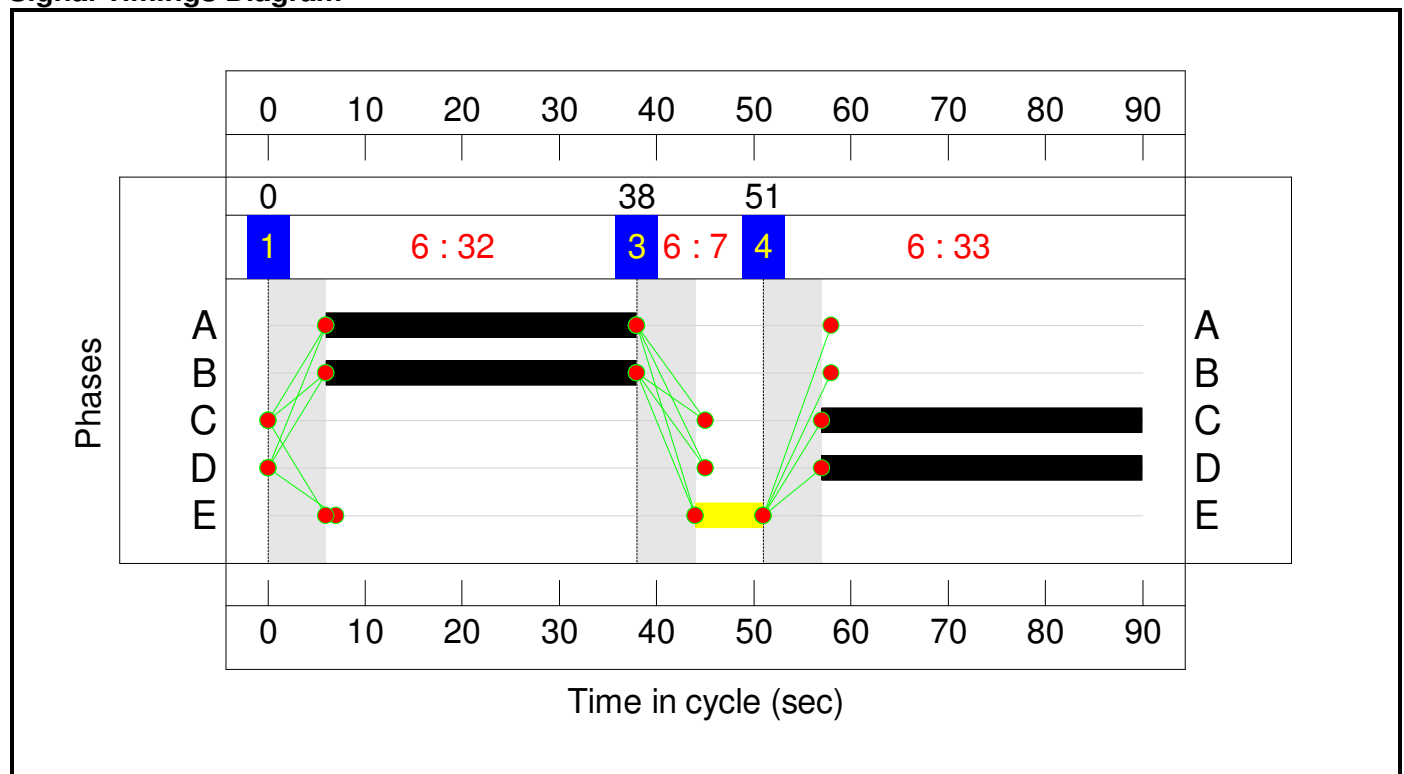
Stage Sequence Diagram



Stage Timings

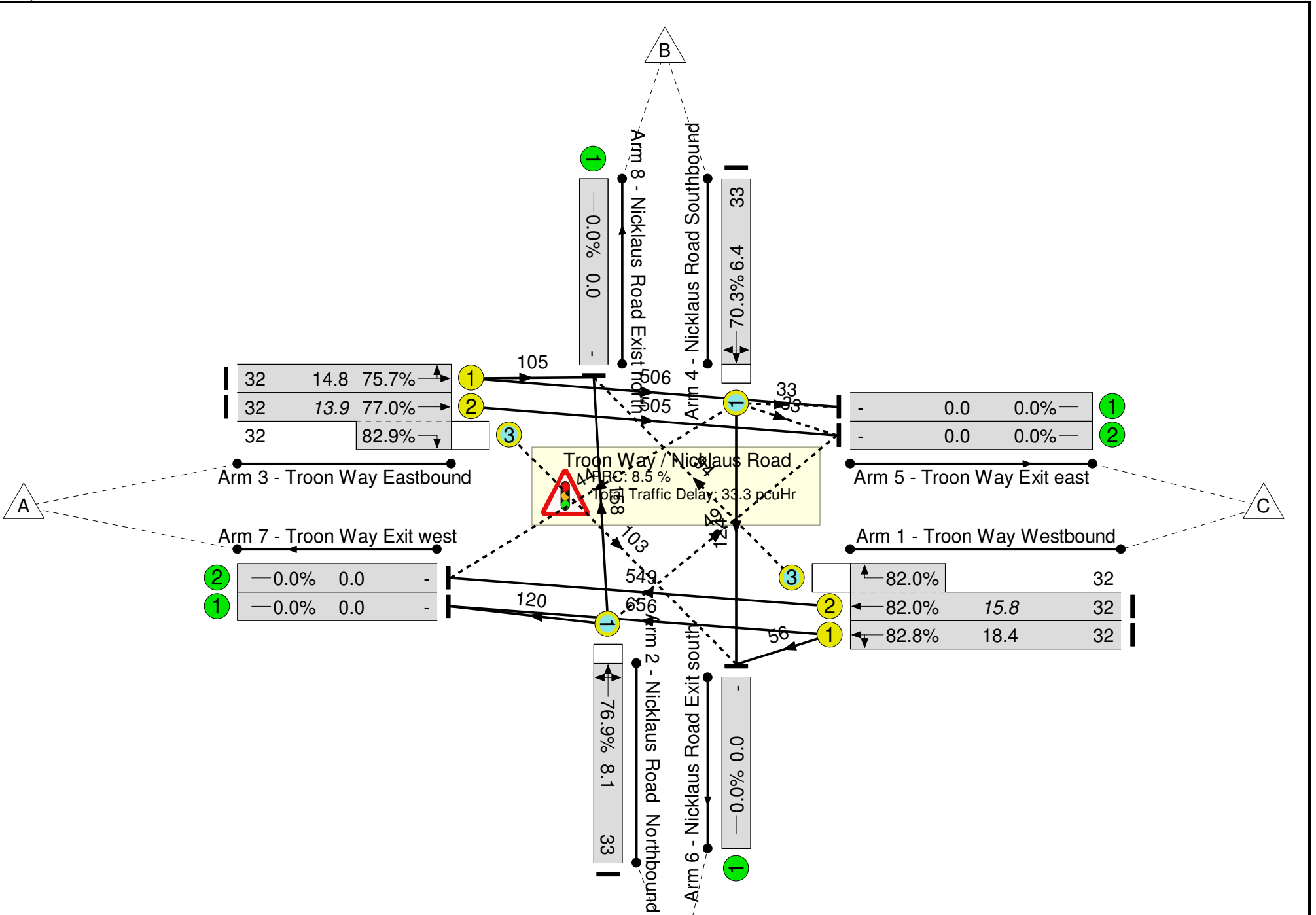
Stage	1	3	4
Duration	32	7	33
Change Point	0	38	51

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A563 / Nicklaus Road - LCC Model	-	-	N/A	-	-		-	-	-	-	-	-	82.9%
Troon Way / Nicklaus Road	-	-	N/A	-	-		-	-	-	-	-	-	82.9%
1/1	Troon Way Westbound Left Ahead	U	N/A	N/A	B		1	32	-	712	2345	860	82.8%
1/2+1/3	Troon Way Westbound Ahead Right	U+O	N/A	N/A	B		1	32	-	643	2080:1962	669+115	82.0 : 82.0%
2/1	Nicklaus Road Northbound Right Left Ahead	O	N/A	N/A	D		1	33	-	327	1944	425	76.9%
3/1	Troon Way Eastbound Ahead Left	U	N/A	N/A	A		1	32	-	611	2200	807	75.7%
3/2+3/3	Troon Way Eastbound Ahead Right	U+O	N/A	N/A	A		1	32	-	608	2080:1962	656+124	77.0 : 82.9%
4/1	Nicklaus Road Southbound Left Ahead Right	O	N/A	N/A	C		1	33	-	234	1941	333	70.3%
5/1	Troon Way Exit east	U	N/A	N/A	-		-	-	-	539	Inf	Inf	0.0%
5/2	Troon Way Exit east	U	N/A	N/A	-		-	-	-	587	Inf	Inf	0.0%
6/1	Nicklaus Road Exit south	U	N/A	N/A	-		-	-	-	283	Inf	Inf	0.0%
7/1	Troon Way Exit west	U	N/A	N/A	-		-	-	-	776	Inf	Inf	0.0%
7/2	Troon Way Exit west	U	N/A	N/A	-		-	-	-	593	Inf	Inf	0.0%
8/1	Nicklaus Road Exist north	U	N/A	N/A	-		-	-	-	357	Inf	Inf	0.0%

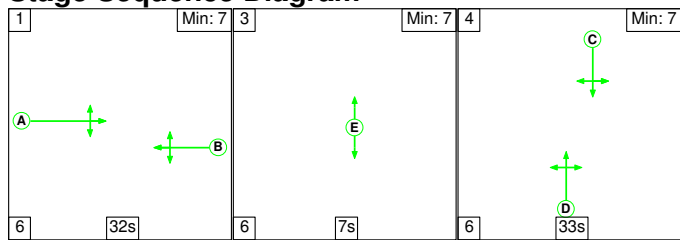
Full Input Data And Results

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: A563 / Nicklaus Road - LCC Model	-	-	308	0	48	21.7	10.6	1.0	33.3	-	-	-	-
Troon Way / Nicklaus Road	-	-	308	0	48	21.7	10.6	1.0	33.3	-	-	-	-
1/1	712	712	-	-	-	5.1	2.3	-	7.5	37.7	16.0	2.3	18.4
1/2+1/3	643	643	94	0	0	4.5	2.2	0.4	7.1	39.7	13.6	2.2	15.8
2/1	327	327	48	0	1	2.1	1.6	0.0	3.7	40.6	6.4	1.6	8.1
3/1	611	611	-	-	-	4.2	1.5	-	5.8	34.0	13.2	1.5	14.8
3/2+3/3	608	608	59	0	44	4.1	1.7	0.5	6.4	37.9	12.2	1.7	13.9
4/1	234	234	107	0	3	1.6	1.2	0.1	2.9	44.3	5.2	1.2	6.4
5/1	539	539	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	587	587	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	283	283	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	776	776	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	593	593	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	357	357	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 8.5 Total Delay for Signalled Lanes (pcuHr): 33.30 Cycle Time (s): 90 PRC Over All Lanes (%): 8.5 Total Delay Over All Lanes(pcuHr): 33.30													

Full Input Data And Results

Scenario 9: '2021 + Com Dev +Ph2 AM' (FG9: '2021 + Com Dev +Ph2 AM', Plan 1: 'Network Control Plan 1')

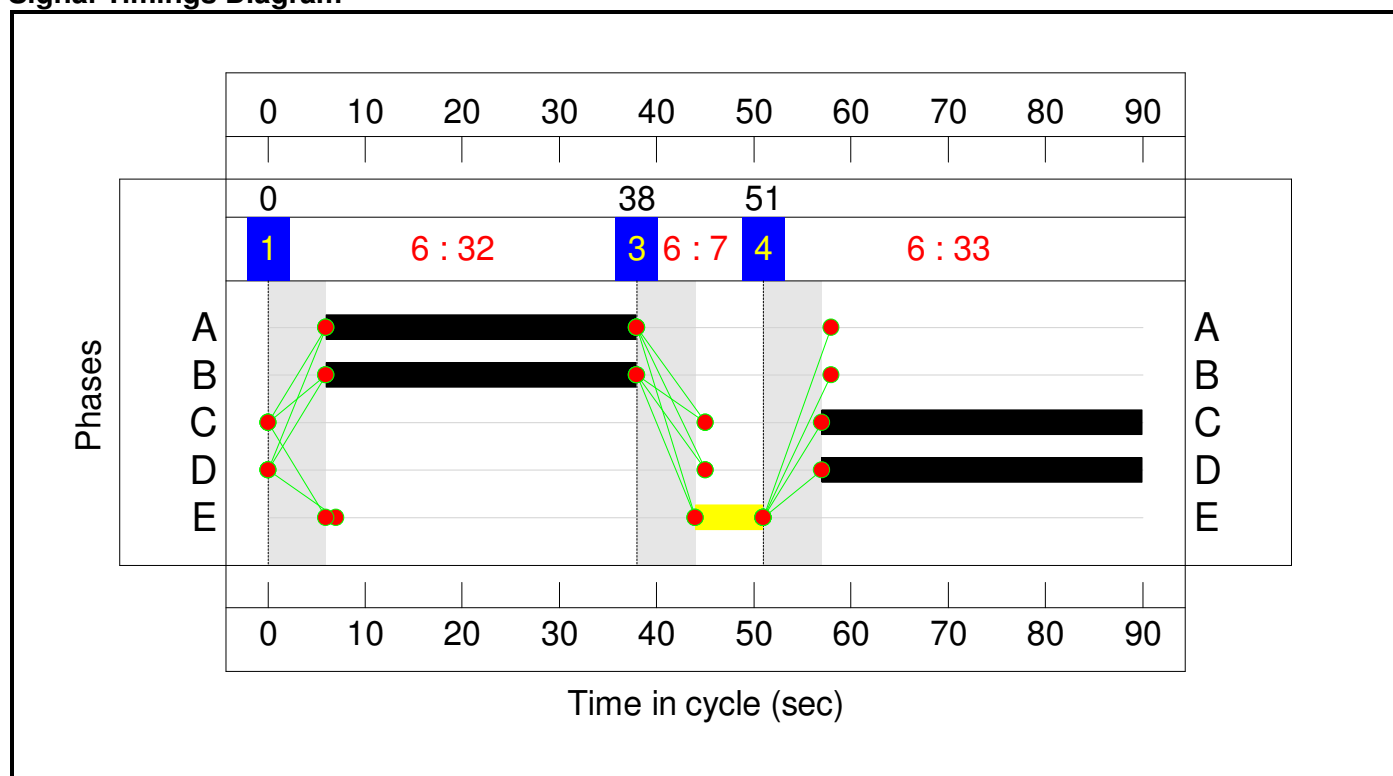
Stage Sequence Diagram



Stage Timings

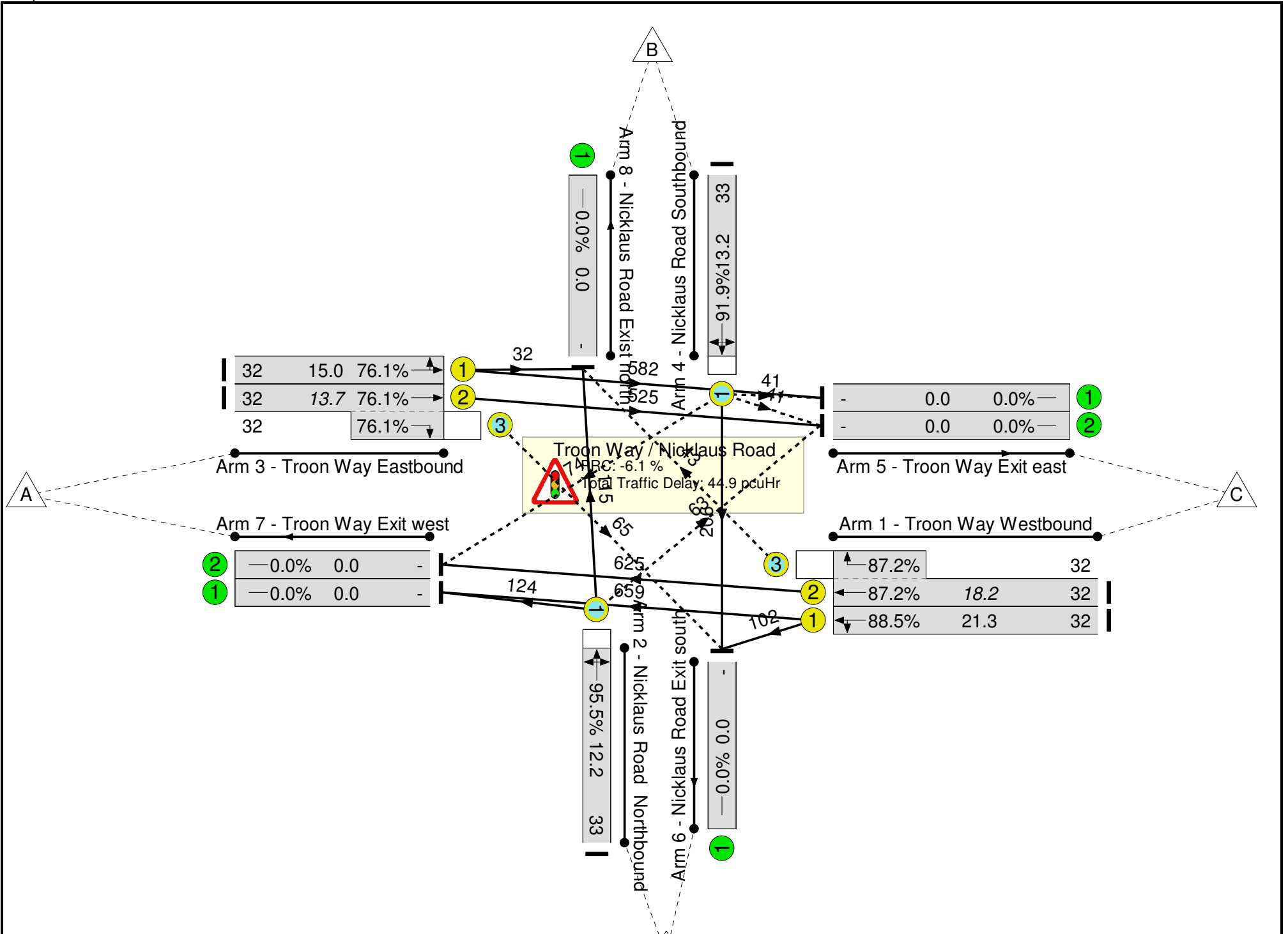
Stage	1	3	4
Duration	32	7	33
Change Point	0	38	51

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A563 / Nicklaus Road - LCC Model	-	-	N/A	-	-		-	-	-	-	-	-	95.5%
Troon Way / Nicklaus Road	-	-	N/A	-	-		-	-	-	-	-	-	95.5%
1/1	Troon Way Westbound Left Ahead	U	N/A	N/A	B		1	32	-	761	2345	860	88.5%
1/2+1/3	Troon Way Westbound Ahead Right	U+O	N/A	N/A	B		1	32	-	668	2080:1962	717+49	87.2 : 87.2%
2/1	Nicklaus Road Northbound Right Left Ahead	O	N/A	N/A	D		1	33	-	302	1936	316	95.5%
3/1	Troon Way Eastbound Ahead Left	U	N/A	N/A	A		1	32	-	614	2200	807	76.1%
3/2+3/3	Troon Way Eastbound Ahead Right	U+O	N/A	N/A	A		1	32	-	590	2080:1962	690+85	76.1 : 76.1%
4/1	Nicklaus Road Southbound Left Ahead Right	O	N/A	N/A	C		1	33	-	362	1941	394	91.9%
5/1	Troon Way Exit east	U	N/A	N/A	-		-	-	-	623	Inf	Inf	0.0%
5/2	Troon Way Exit east	U	N/A	N/A	-		-	-	-	629	Inf	Inf	0.0%
6/1	Nicklaus Road Exit south	U	N/A	N/A	-		-	-	-	373	Inf	Inf	0.0%
7/1	Troon Way Exit west	U	N/A	N/A	-		-	-	-	783	Inf	Inf	0.0%
7/2	Troon Way Exit west	U	N/A	N/A	-		-	-	-	699	Inf	Inf	0.0%
8/1	Nicklaus Road Exist north	U	N/A	N/A	-		-	-	-	190	Inf	Inf	0.0%

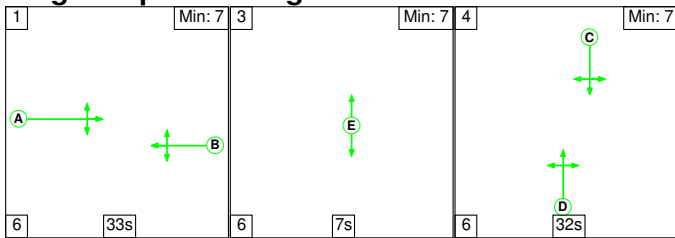
Full Input Data And Results

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: A563 / Nicklaus Road - LCC Model	-	-	284	0	43	24.0	20.2	0.7	44.9	-	-	-	-
Troon Way / Nicklaus Road	-	-	284	0	43	24.0	20.2	0.7	44.9	-	-	-	-
1/1	761	761	-	-	-	5.6	3.6	-	9.2	43.7	17.8	3.6	21.3
1/2+1/3	668	668	43	0	0	4.9	3.2	0.1	8.2	44.2	15.1	3.2	18.2
2/1	302	302	55	0	8	2.2	5.8	0.0	8.1	96.4	6.4	5.8	12.2
3/1	614	614	-	-	-	4.3	1.6	-	5.8	34.2	13.5	1.6	15.0
3/2+3/3	590	590	34	0	31	4.0	1.6	0.4	6.0	36.3	12.2	1.6	13.7
4/1	362	362	152	0	4	3.0	4.5	0.1	7.6	75.2	8.7	4.5	13.2
5/1	623	623	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	629	629	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	373	373	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	783	783	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	699	699	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	190	190	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):	-6.1	Total Delay for Signalled Lanes (pcuHr):			44.90	Cycle Time (s): 90				
			PRC Over All Lanes (%):	-6.1	Total Delay Over All Lanes(pcuHr):			44.90					

Full Input Data And Results

Scenario 10: '2021 + Com Dev +Ph2 PM' (FG10: '2021 + Com Dev +Ph2 PM', Plan 1: 'Network Control Plan 1')

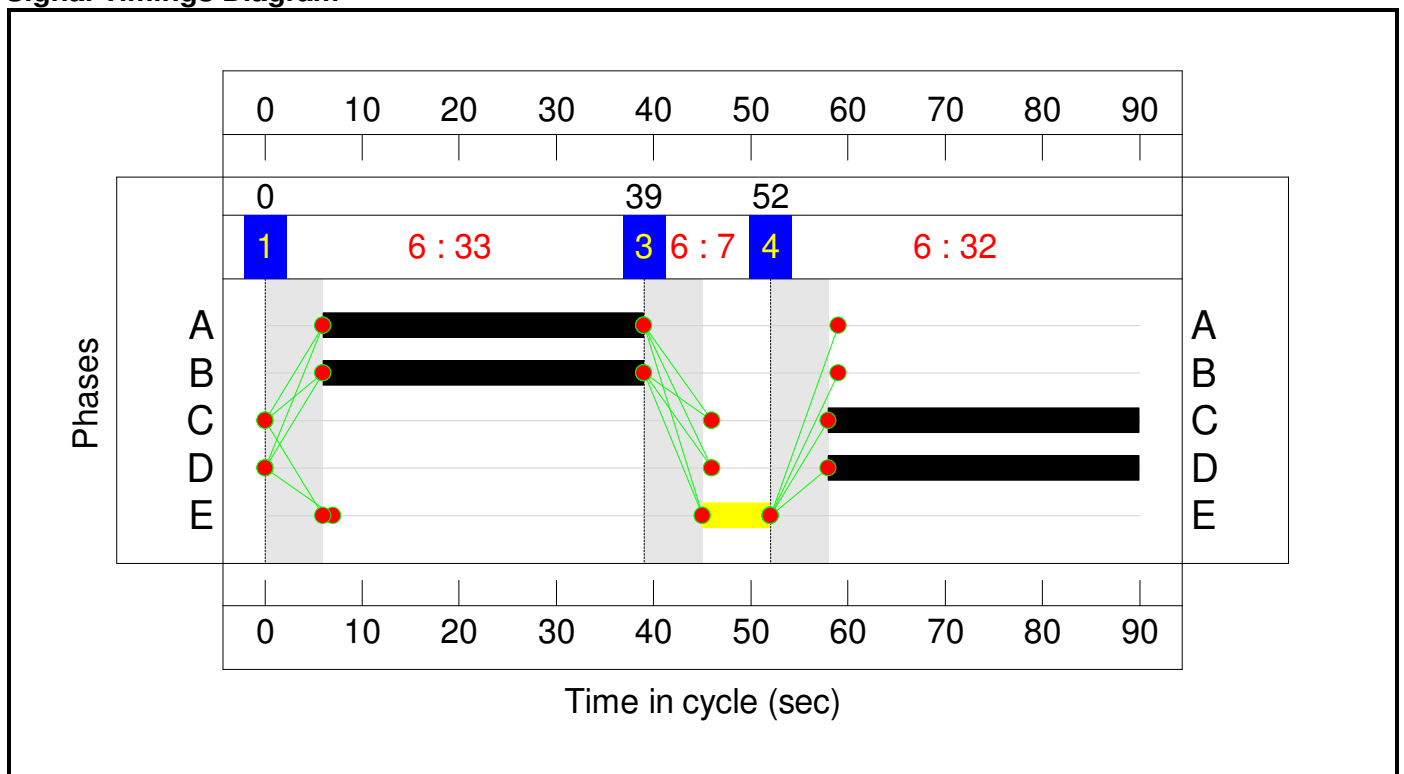
Stage Sequence Diagram



Stage Timings

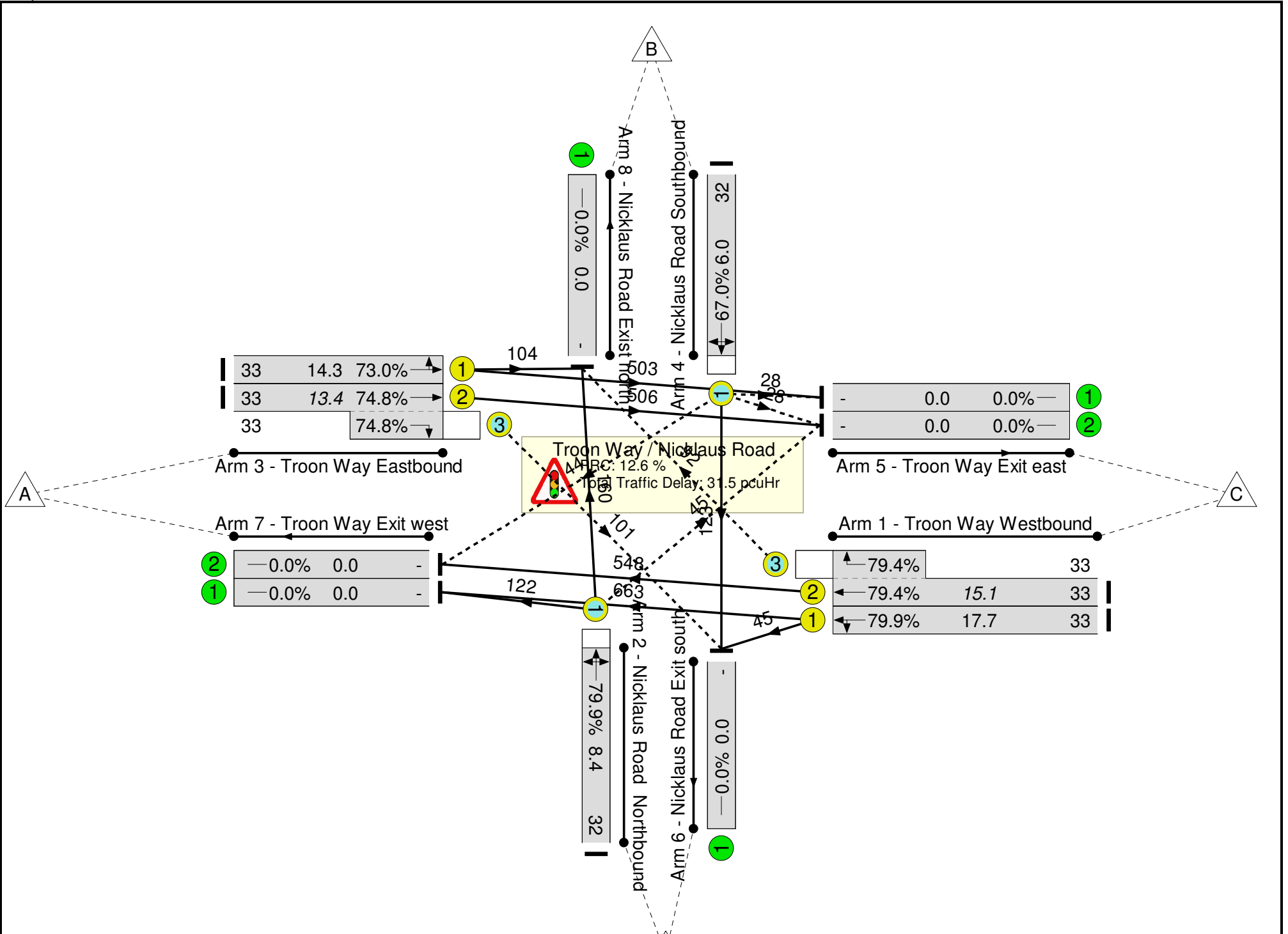
Stage	1	3	4
Duration	33	7	32
Change Point	0	39	52

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A563 / Nicklaus Road - LCC Model	-	-	N/A	-	-		-	-	-	-	-	-	79.9%
Troon Way / Nicklaus Road	-	-	N/A	-	-		-	-	-	-	-	-	79.9%
1/1	Troon Way Westbound Left Ahead	U	N/A	N/A	B		1	33	-	708	2345	886	79.9%
1/2+1/3	Troon Way Westbound Ahead Right	U+O	N/A	N/A	B		1	33	-	640	2080:1962	690+116	79.4 : 79.4%
2/1	Nicklaus Road Northbound Right Left Ahead	O	N/A	N/A	D		1	32	-	327	1943	409	79.9%
3/1	Troon Way Eastbound Ahead Left	U	N/A	N/A	A		1	33	-	607	2200	831	73.0%
3/2+3/3	Troon Way Eastbound Ahead Right	U+O	N/A	N/A	A		1	33	-	607	2080:1962	677+135	74.8 : 74.8%
4/1	Nicklaus Road Southbound Left Ahead Right	O	N/A	N/A	C		1	32	-	223	1941	333	67.0%
5/1	Troon Way Exit east	U	N/A	N/A	-		-	-	-	531	Inf	Inf	0.0%
5/2	Troon Way Exit east	U	N/A	N/A	-		-	-	-	579	Inf	Inf	0.0%
6/1	Nicklaus Road Exit south	U	N/A	N/A	-		-	-	-	269	Inf	Inf	0.0%
7/1	Troon Way Exit west	U	N/A	N/A	-		-	-	-	785	Inf	Inf	0.0%
7/2	Troon Way Exit west	U	N/A	N/A	-		-	-	-	592	Inf	Inf	0.0%
8/1	Nicklaus Road Exist north	U	N/A	N/A	-		-	-	-	356	Inf	Inf	0.0%

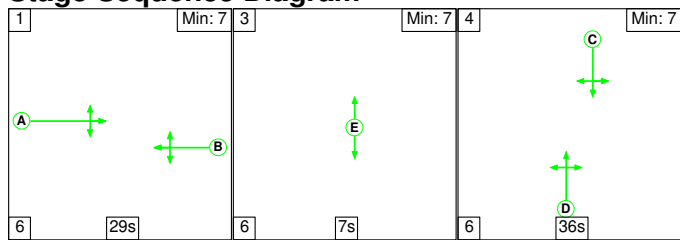
Full Input Data And Results

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: A563 / Nicklaus Road - LCC Model	-	-	303	0	35	20.9	9.5	1.0	31.5	-	-	-	-
Troon Way / Nicklaus Road	-	-	303	0	35	20.9	9.5	1.0	31.5	-	-	-	-
1/1	708	708	-	-	-	4.9	1.9	-	6.9	34.9	15.7	1.9	17.7
1/2+1/3	640	640	92	0	0	4.3	1.9	0.4	6.6	36.9	13.2	1.9	15.1
2/1	327	327	45	0	1	2.1	1.9	0.0	4.0	44.6	6.5	1.9	8.4
3/1	607	607	-	-	-	4.1	1.3	-	5.4	32.0	13.0	1.3	14.3
3/2+3/3	607	607	70	0	31	4.0	1.5	0.5	6.0	35.4	12.0	1.5	13.4
4/1	223	223	97	0	3	1.6	1.0	0.1	2.7	42.9	5.0	1.0	6.0
5/1	531	531	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	579	579	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	269	269	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	785	785	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	592	592	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	356	356	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 12.6 Total Delay for Signalled Lanes (pcuHr): 31.48 Cycle Time (s): 90 PRC Over All Lanes (%): 12.6 Total Delay Over All Lanes(pcuHr): 31.48													

Full Input Data And Results

Scenario 11: '2031 + Com Dev AM' (FG11: '2031 + Com Dev AM', Plan 1: 'Network Control Plan 1')

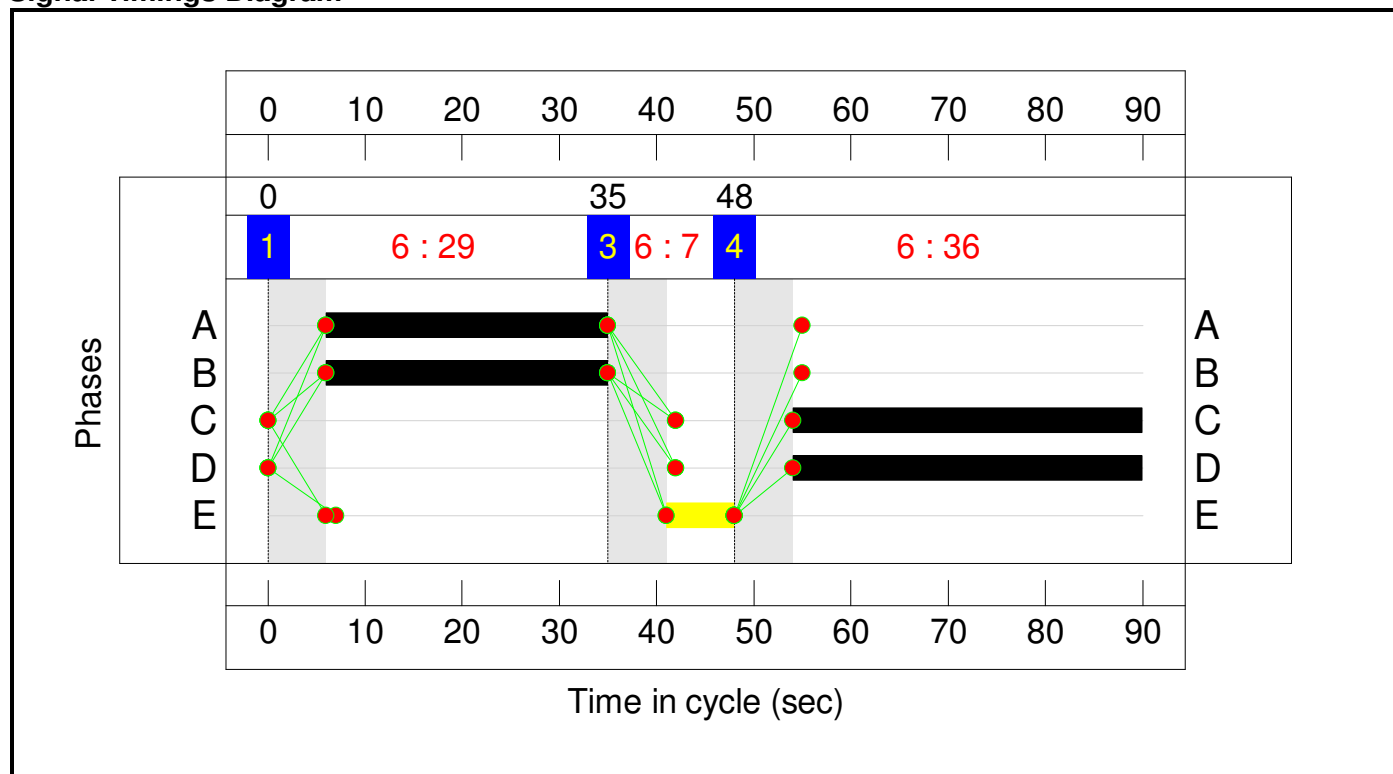
Stage Sequence Diagram



Stage Timings

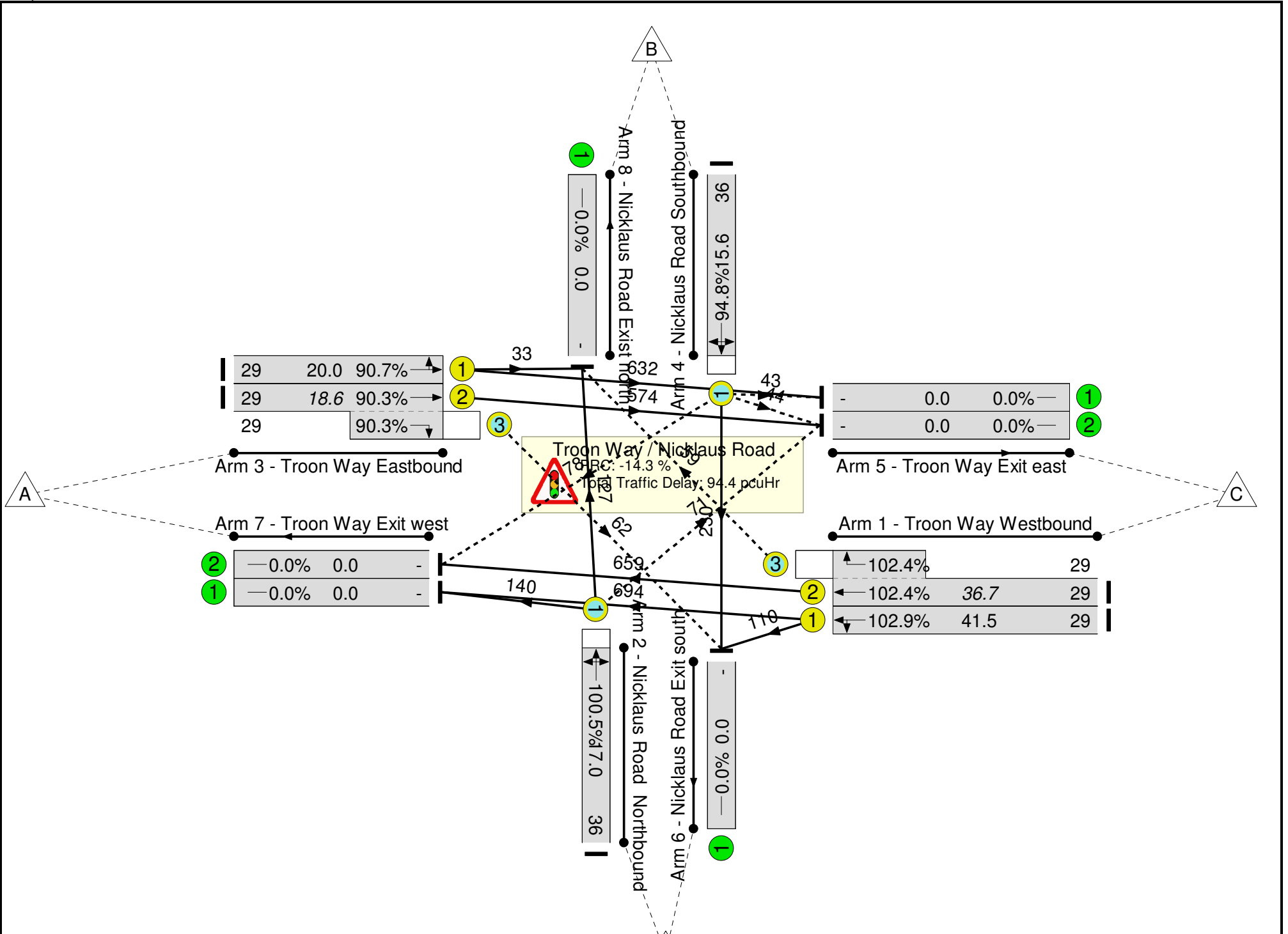
Stage	1	3	4
Duration	29	7	36
Change Point	0	35	48

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A563 / Nicklaus Road - LCC Model	-	-	N/A	-	-		-	-	-	-	-	-	102.9%
Troon Way / Nicklaus Road	-	-	N/A	-	-		-	-	-	-	-	-	102.9%
1/1	Troon Way Westbound Left Ahead	U	N/A	N/A	B		1	29	-	804	2345	782	102.9%
1/2+1/3	Troon Way Westbound Ahead Right	U+O	N/A	N/A	B		1	29	-	718	2080:1962	643+58	102.4 : 102.4%
2/1	Nicklaus Road Northbound Right Left Ahead	O	N/A	N/A	D		1	36	-	338	1935	336	100.5%
3/1	Troon Way Eastbound Ahead Left	U	N/A	N/A	A		1	29	-	665	2200	733	90.7%
3/2+3/3	Troon Way Eastbound Ahead Right	U+O	N/A	N/A	A		1	29	-	636	2080:1962	635+69	90.3 : 90.3%
4/1	Nicklaus Road Southbound Left Ahead Right	O	N/A	N/A	C		1	36	-	395	1941	416	94.8%
5/1	Troon Way Exit east	U	N/A	N/A	-		-	-	-	675	Inf	Inf	0.0%
5/2	Troon Way Exit east	U	N/A	N/A	-		-	-	-	689	Inf	Inf	0.0%
6/1	Nicklaus Road Exit south	U	N/A	N/A	-		-	-	-	402	Inf	Inf	0.0%
7/1	Troon Way Exit west	U	N/A	N/A	-		-	-	-	834	Inf	Inf	0.0%
7/2	Troon Way Exit west	U	N/A	N/A	-		-	-	-	737	Inf	Inf	0.0%
8/1	Nicklaus Road Exist north	U	N/A	N/A	-		-	-	-	219	Inf	Inf	0.0%

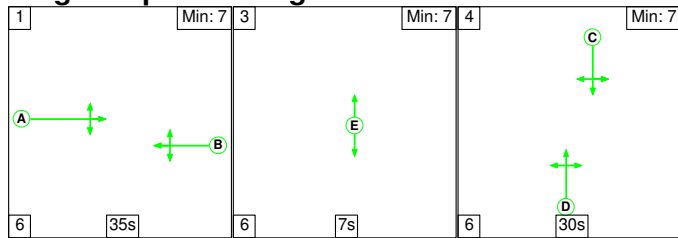
Full Input Data And Results

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: A563 / Nicklaus Road - LCC Model	-	-	251	0	104	30.5	63.2	0.7	94.4	-	-	-	-
Troon Way / Nicklaus Road	-	-	251	0	104	30.5	63.2	0.7	94.4	-	-	-	-
1/1	804	782	-	-	-	7.7	20.8	-	28.5	127.6	20.7	20.8	41.5
1/2+1/3	718	701	32	0	26	6.7	18.4	0.2	25.3	126.7	18.3	18.4	36.7
2/1	338	336	62	0	8	2.6	9.6	0.1	12.3	131.0	7.4	9.6	17.0
3/1	665	665	-	-	-	5.3	4.3	-	9.6	52.0	15.7	4.3	20.0
3/2+3/3	636	636	0	0	62	5.0	4.2	0.3	9.5	53.6	14.5	4.2	18.6
4/1	395	395	157	0	8	3.2	5.9	0.1	9.3	84.5	9.7	5.9	15.6
5/1	675	675	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	689	689	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	399	399	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	814	814	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	721	721	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	217	217	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): -14.3 Total Delay for Signalled Lanes (pcuHr): 94.44 Cycle Time (s): 90</p> <p> PRC Over All Lanes (%): -14.3 Total Delay Over All Lanes(pcuHr): 94.44</p>													

Full Input Data And Results

Scenario 12: '2031 + Com Dev PM' (FG12: '2031 + Com Dev PM', Plan 1: 'Network Control Plan 1')

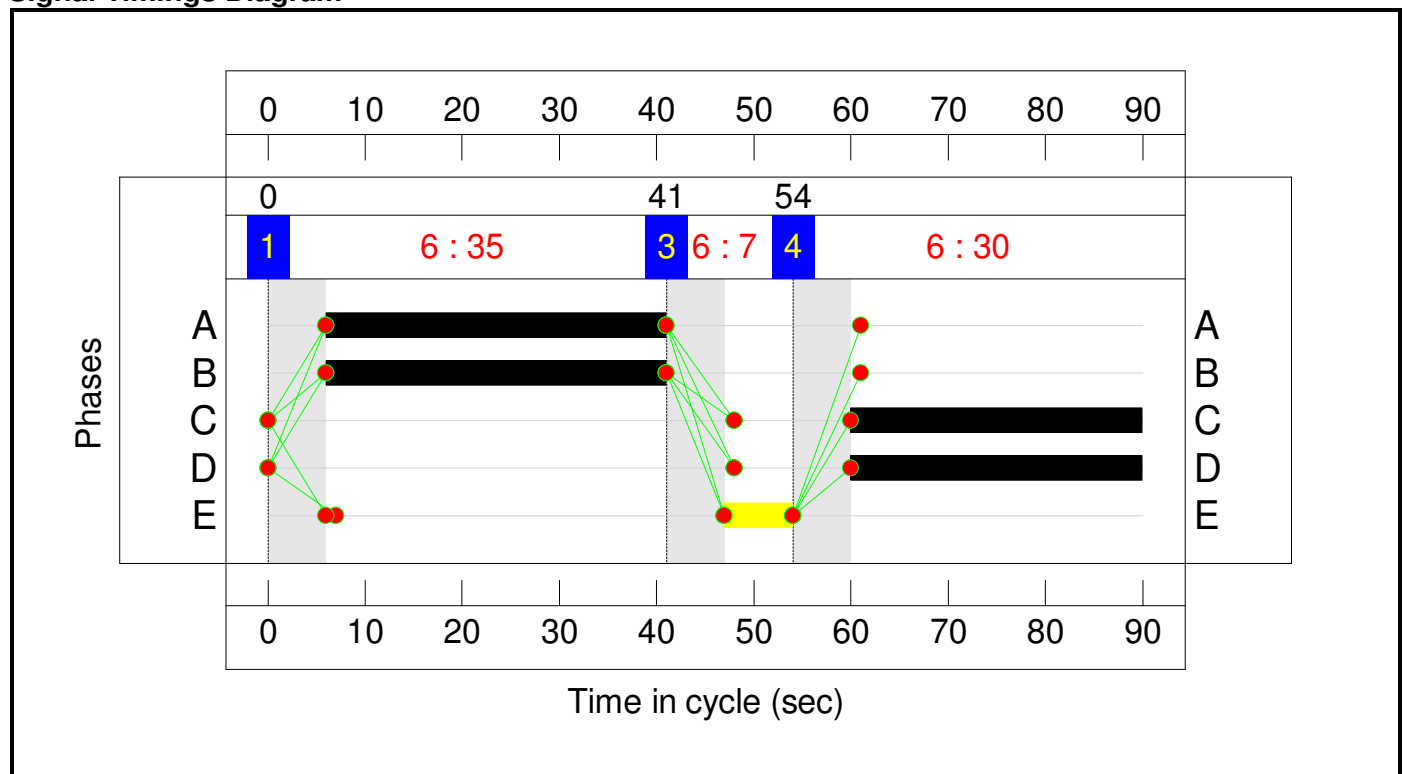
Stage Sequence Diagram



Stage Timings

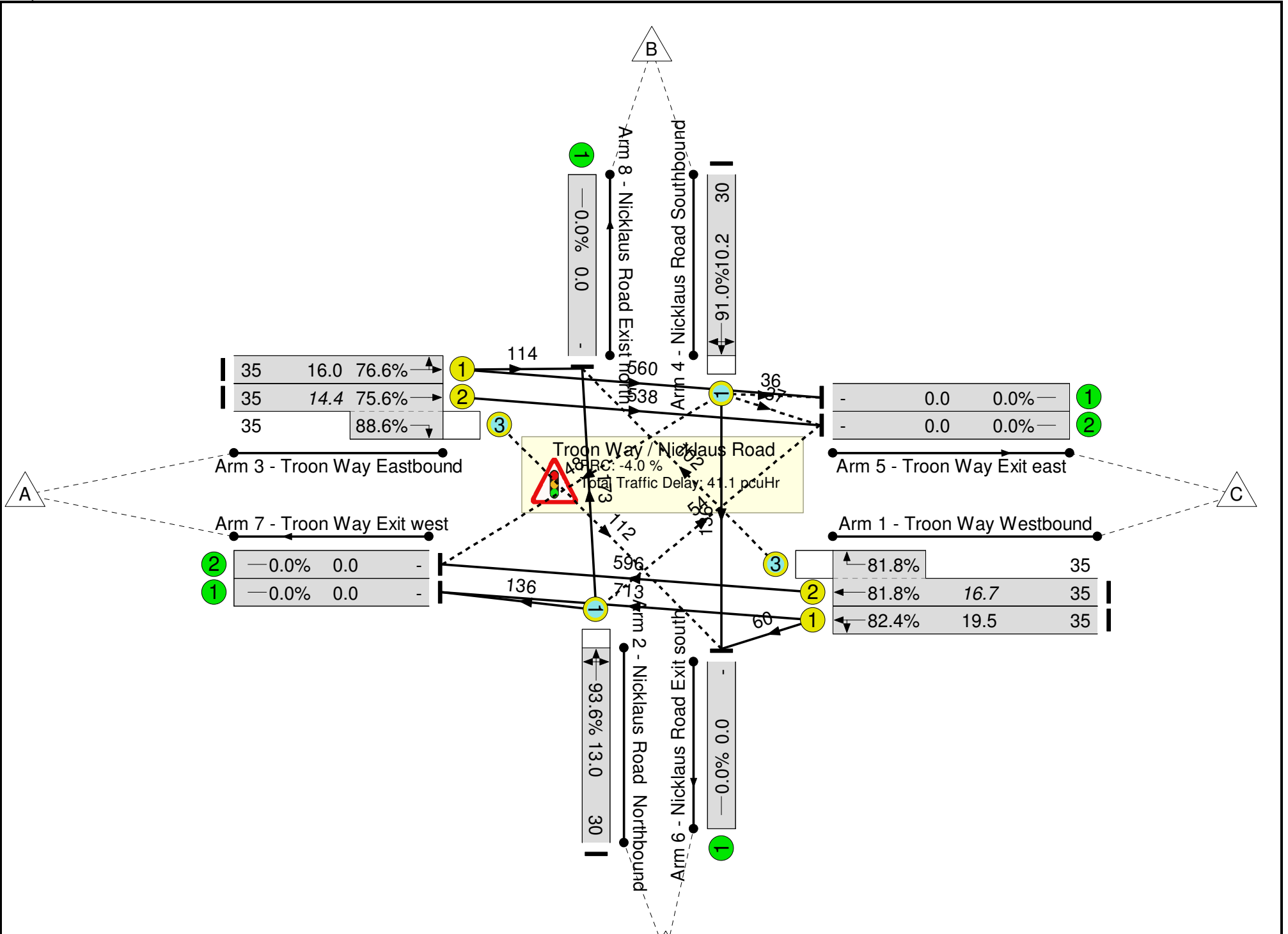
Stage	1	3	4
Duration	35	7	30
Change Point	0	41	54

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A563 / Nicklaus Road - LCC Model	-	-	N/A	-	-		-	-	-	-	-	-	93.6%
Troon Way / Nicklaus Road	-	-	N/A	-	-		-	-	-	-	-	-	93.6%
1/1	Troon Way Westbound Left Ahead	U	N/A	N/A	B		1	35	-	773	2345	938	82.4%
1/2+1/3	Troon Way Westbound Ahead Right	U+O	N/A	N/A	B		1	35	-	698	2080:1962	728+125	81.8 : 81.8%
2/1	Nicklaus Road Northbound Right Left Ahead	O	N/A	N/A	D		1	30	-	363	1942	388	93.6%
3/1	Troon Way Eastbound Ahead Left	U	N/A	N/A	A		1	35	-	674	2200	880	76.6%
3/2+3/3	Troon Way Eastbound Ahead Right	U+O	N/A	N/A	A		1	35	-	650	2080:1962	711+126	75.6 : 88.6%
4/1	Nicklaus Road Southbound Left Ahead Right	O	N/A	N/A	C		1	30	-	257	1941	282	91.0%
5/1	Troon Way Exit east	U	N/A	N/A	-		-	-	-	596	Inf	Inf	0.0%
5/2	Troon Way Exit east	U	N/A	N/A	-		-	-	-	629	Inf	Inf	0.0%
6/1	Nicklaus Road Exit south	U	N/A	N/A	-		-	-	-	308	Inf	Inf	0.0%
7/1	Troon Way Exit west	U	N/A	N/A	-		-	-	-	849	Inf	Inf	0.0%
7/2	Troon Way Exit west	U	N/A	N/A	-		-	-	-	644	Inf	Inf	0.0%
8/1	Nicklaus Road Exist north	U	N/A	N/A	-		-	-	-	389	Inf	Inf	0.0%

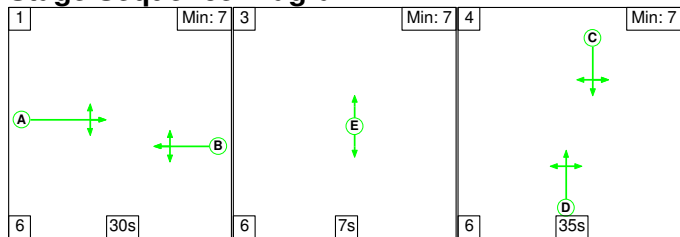
Full Input Data And Results

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: A563 / Nicklaus Road - LCC Model	-	-	316	0	73	23.0	16.8	1.2	41.1	-	-	-	-
Troon Way / Nicklaus Road	-	-	316	0	73	23.0	16.8	1.2	41.1	-	-	-	-
1/1	773	773	-	-	-	5.2	2.3	-	7.5	34.8	17.2	2.3	19.5
1/2+1/3	698	698	94	0	8	4.5	2.2	0.5	7.2	37.2	14.5	2.2	16.7
2/1	363	363	48	0	6	2.7	5.2	0.0	7.9	78.3	7.8	5.2	13.0
3/1	674	674	-	-	-	4.4	1.6	-	6.0	32.0	14.4	1.6	16.0
3/2+3/3	650	650	60	0	52	4.1	1.7	0.6	6.4	35.5	12.7	1.7	14.4
4/1	257	257	114	0	7	2.1	3.9	0.1	6.1	86.0	6.3	3.9	10.2
5/1	596	596	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	629	629	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	308	308	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	849	849	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	644	644	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	389	389	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):	-4.0	Total Delay for Signalled Lanes (pcuHr):			41.12	Cycle Time (s): 90				
			PRC Over All Lanes (%):	-4.0	Total Delay Over All Lanes(pcuHr):			41.12					

Full Input Data And Results

Scenario 13: '2031 +All Dev (Stage 2 Mitigation) AM' (FG13: '2031 +All Dev (Stage 2 Mitigation) AM', Plan 1: 'Network Control Plan 1')

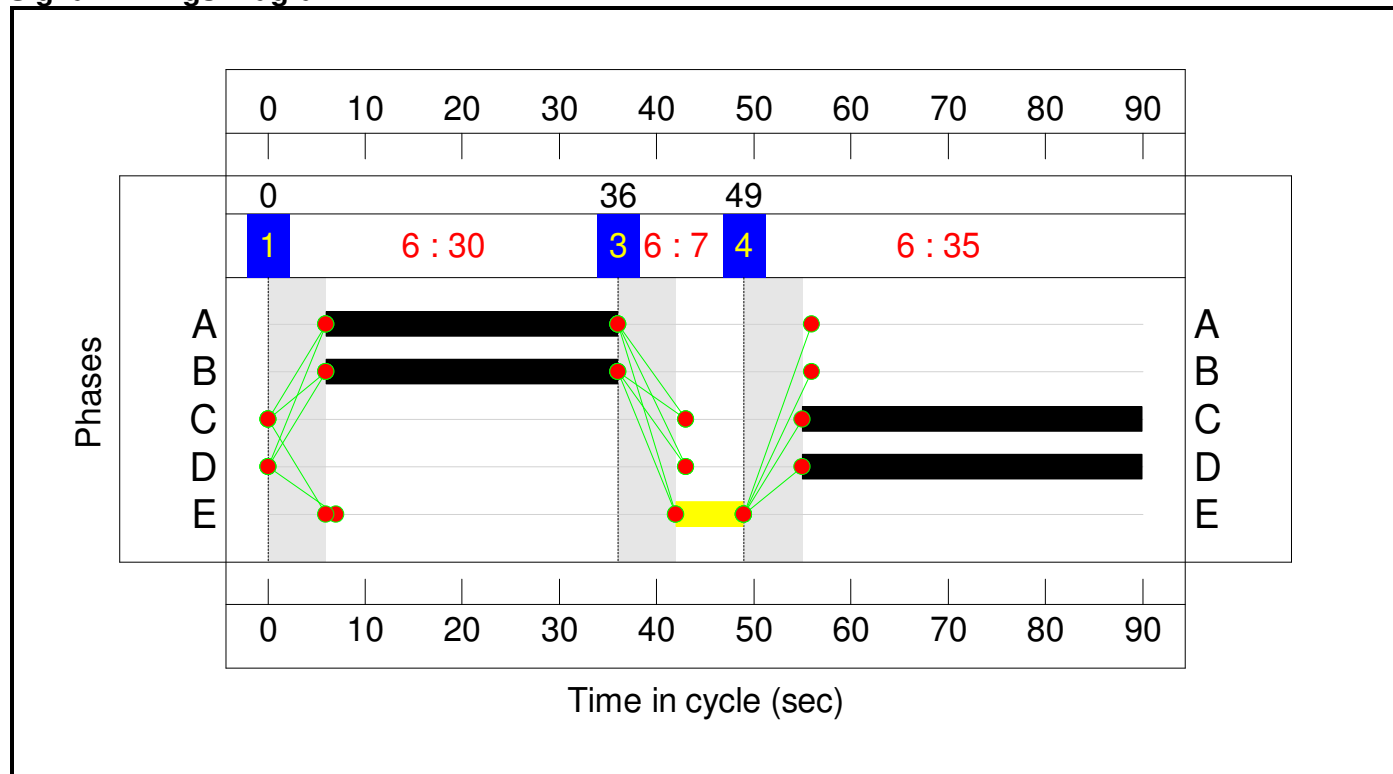
Stage Sequence Diagram



Stage Timings

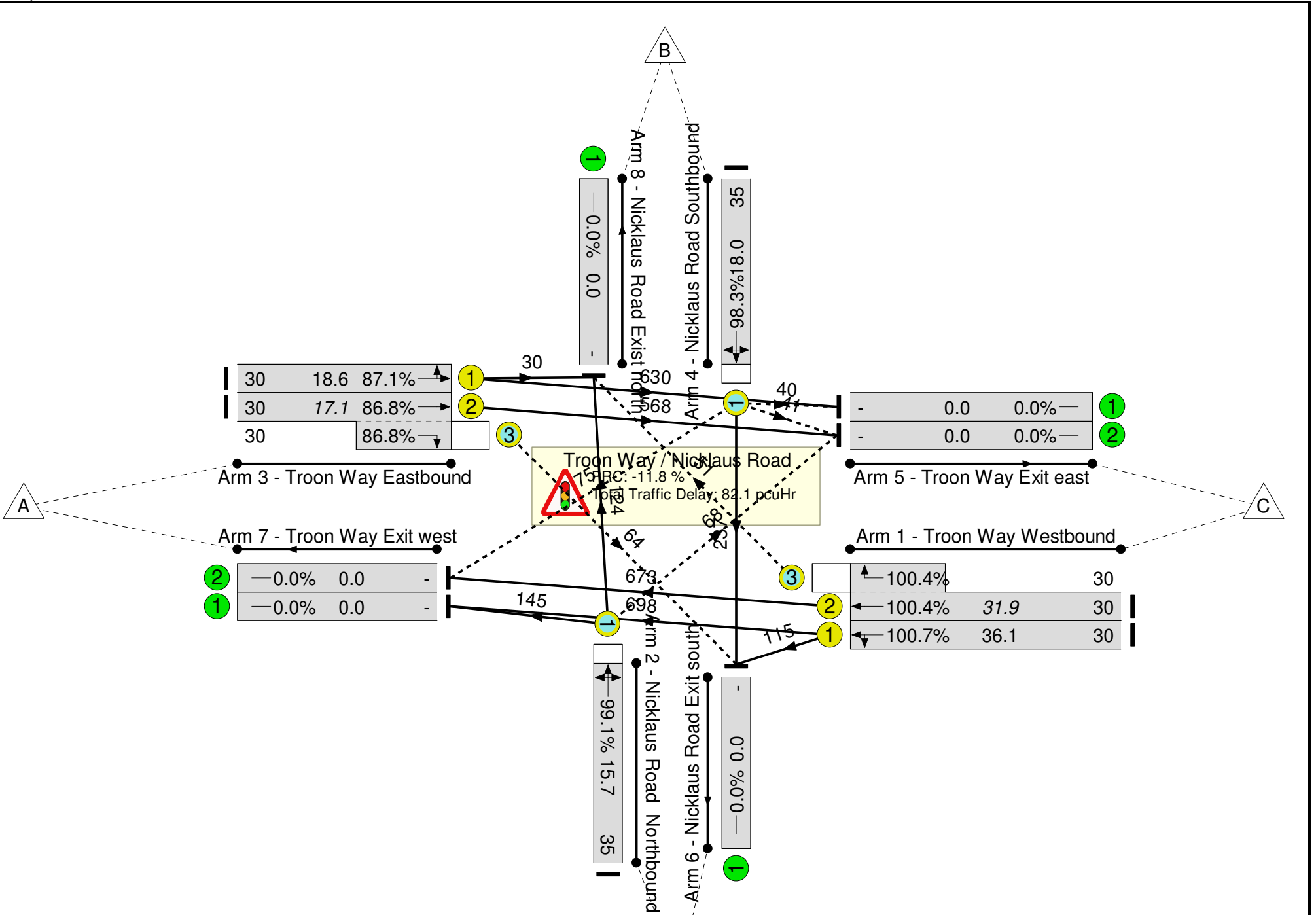
Stage	1	3	4
Duration	30	7	35
Change Point	0	36	49

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A563 / Nicklaus Road - LCC Model	-	-	N/A	-	-		-	-	-	-	-	-	100.7%
Troon Way / Nicklaus Road	-	-	N/A	-	-		-	-	-	-	-	-	100.7%
1/1	Troon Way Westbound Left Ahead	U	N/A	N/A	B		1	30	-	813	2345	808	100.7%
1/2+1/3	Troon Way Westbound Ahead Right	U+O	N/A	N/A	B		1	30	-	724	2080:1962	671+51	100.4 : 100.4%
2/1	Nicklaus Road Northbound Right Left Ahead	O	N/A	N/A	D		1	35	-	337	1932	340	99.1%
3/1	Troon Way Eastbound Ahead Left	U	N/A	N/A	A		1	30	-	660	2200	758	87.1%
3/2+3/3	Troon Way Eastbound Ahead Right	U+O	N/A	N/A	A		1	30	-	632	2080:1962	654+74	86.8 : 86.8%
4/1	Nicklaus Road Southbound Left Ahead Right	O	N/A	N/A	C		1	35	-	393	1941	400	98.3%
5/1	Troon Way Exit east	U	N/A	N/A	-		-	-	-	670	Inf	Inf	0.0%
5/2	Troon Way Exit east	U	N/A	N/A	-		-	-	-	677	Inf	Inf	0.0%
6/1	Nicklaus Road Exit south	U	N/A	N/A	-		-	-	-	416	Inf	Inf	0.0%
7/1	Troon Way Exit west	U	N/A	N/A	-		-	-	-	843	Inf	Inf	0.0%
7/2	Troon Way Exit west	U	N/A	N/A	-		-	-	-	748	Inf	Inf	0.0%
8/1	Nicklaus Road Exist north	U	N/A	N/A	-		-	-	-	205	Inf	Inf	0.0%

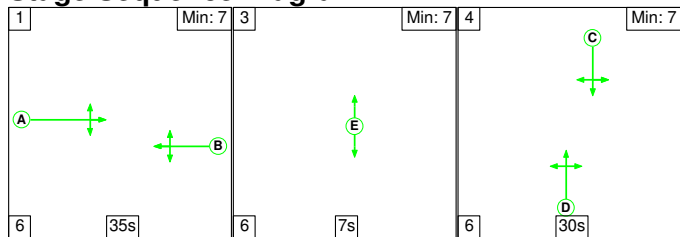
Full Input Data And Results

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: A563 / Nicklaus Road - LCC Model	-	-	245	0	93	28.6	52.8	0.7	82.1	-	-	-	-
Troon Way / Nicklaus Road	-	-	245	0	93	28.6	52.8	0.7	82.1	-	-	-	-
1/1	813	808	-	-	-	6.9	15.6	-	22.5	99.8	20.5	15.6	36.1
1/2+1/3	724	721	43	0	8	6.0	14.1	0.2	20.3	101.0	17.8	14.1	31.9
2/1	337	337	60	0	8	2.6	8.5	0.0	11.1	118.1	7.2	8.5	15.7
3/1	660	660	-	-	-	5.1	3.2	-	8.2	44.9	15.4	3.2	18.6
3/2+3/3	632	632	0	0	64	4.8	3.1	0.4	8.2	46.8	14.0	3.1	17.1
4/1	393	393	143	0	13	3.3	8.3	0.1	11.8	107.7	9.7	8.3	18.0
5/1	670	670	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	677	677	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	415	415	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	838	838	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	746	746	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	205	205	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): -11.8 Total Delay for Signalled Lanes (pcuHr): 82.11 Cycle Time (s): 90</p> <p> PRC Over All Lanes (%): -11.8 Total Delay Over All Lanes(pcuHr): 82.11</p>													

Full Input Data And Results

Scenario 14: '2031 +All Dev (Stage 2 Mitigation) PM' (FG14: '2031+All Dev (Stage 2 Mitigation) PM', Plan 1: 'Network Control Plan 1')

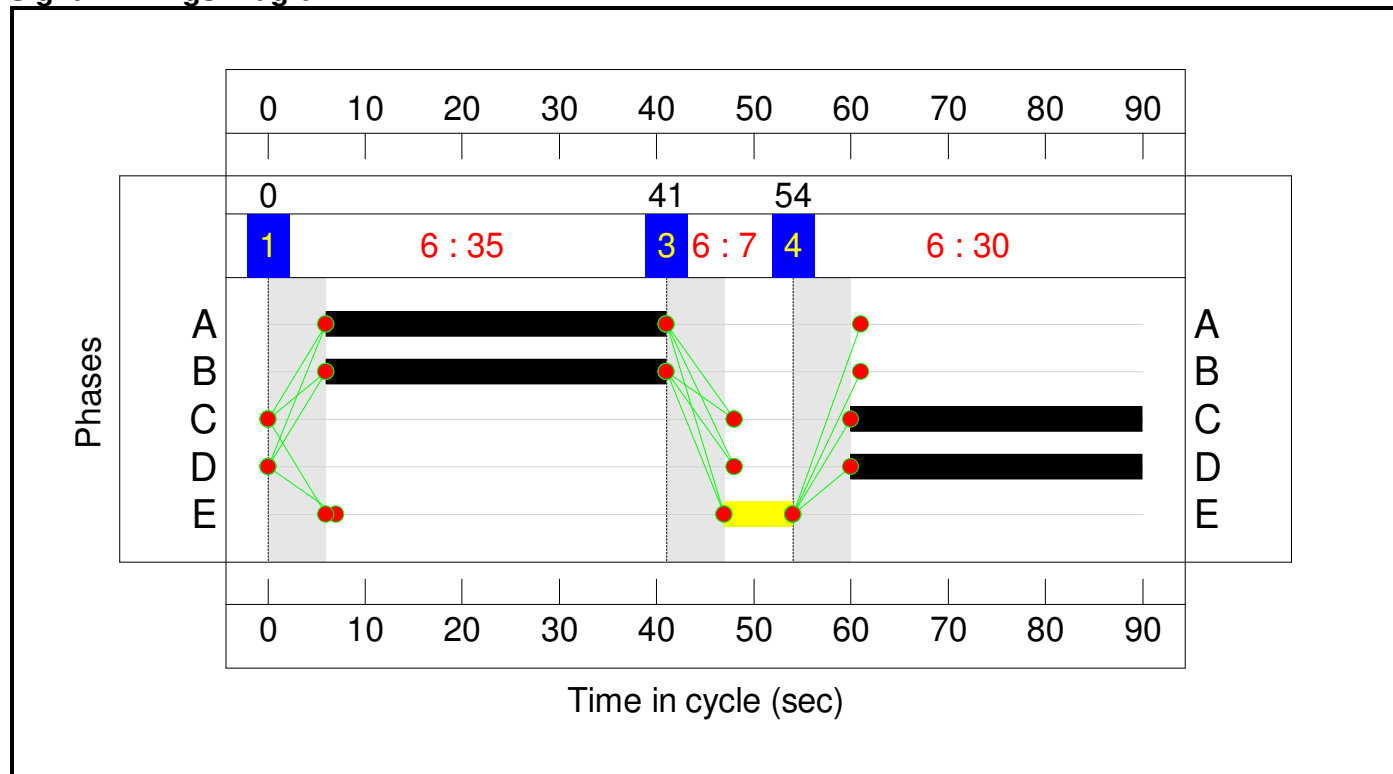
Stage Sequence Diagram



Stage Timings

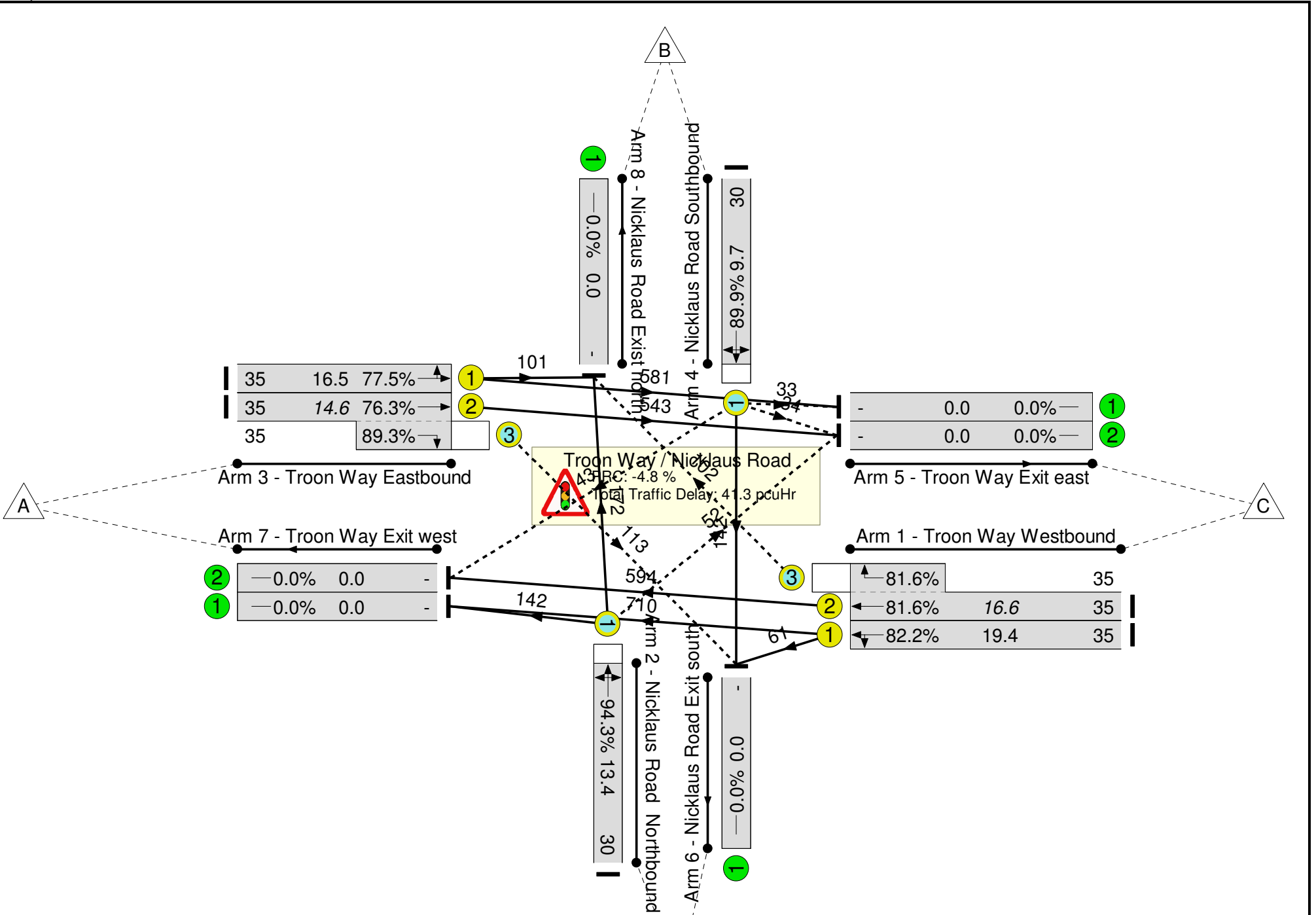
Stage	1	3	4
Duration	35	7	30
Change Point	0	41	54

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A563 / Nicklaus Road - LCC Model	-	-	N/A	-	-		-	-	-	-	-	-	94.3%
Troon Way / Nicklaus Road	-	-	N/A	-	-		-	-	-	-	-	-	94.3%
1/1	Troon Way Westbound Left Ahead	U	N/A	N/A	B		1	35	-	771	2345	938	82.2%
1/2+1/3	Troon Way Westbound Ahead Right	U+O	N/A	N/A	B		1	35	-	696	2080:1962	728+125	81.6 : 81.6%
2/1	Nicklaus Road Northbound Right Left Ahead	O	N/A	N/A	D		1	30	-	366	1940	388	94.3%
3/1	Troon Way Eastbound Ahead Left	U	N/A	N/A	A		1	35	-	682	2200	880	77.5%
3/2+3/3	Troon Way Eastbound Ahead Right	U+O	N/A	N/A	A		1	35	-	656	2080:1962	711+127	76.3 : 89.3%
4/1	Nicklaus Road Southbound Left Ahead Right	O	N/A	N/A	C		1	30	-	252	1941	280	89.9%
5/1	Troon Way Exit east	U	N/A	N/A	-		-	-	-	614	Inf	Inf	0.0%
5/2	Troon Way Exit east	U	N/A	N/A	-		-	-	-	629	Inf	Inf	0.0%
6/1	Nicklaus Road Exit south	U	N/A	N/A	-		-	-	-	316	Inf	Inf	0.0%
7/1	Troon Way Exit west	U	N/A	N/A	-		-	-	-	852	Inf	Inf	0.0%
7/2	Troon Way Exit west	U	N/A	N/A	-		-	-	-	637	Inf	Inf	0.0%
8/1	Nicklaus Road Exist north	U	N/A	N/A	-		-	-	-	375	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: A563 / Nicklaus Road - LCC Model	-	-	299	0	78	23.1	17.0	1.2	41.3	-	-	-	-
Troon Way / Nicklaus Road	-	-	299	0	78	23.1	17.0	1.2	41.3	-	-	-	-
1/1	771	771	-	-	-	5.2	2.2	-	7.4	34.6	17.1	2.2	19.4
1/2+1/3	696	696	88	0	14	4.5	2.2	0.5	7.2	37.1	14.4	2.2	16.6
2/1	366	366	46	0	6	2.7	5.5	0.0	8.3	81.4	7.8	5.5	13.4
3/1	682	682	-	-	-	4.4	1.7	-	6.1	32.4	14.8	1.7	16.5
3/2+3/3	656	656	60	0	53	4.2	1.8	0.6	6.5	35.9	12.8	1.8	14.6
4/1	252	252	105	0	5	2.1	3.6	0.1	5.8	82.4	6.2	3.6	9.7
5/1	614	614	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	629	629	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	316	316	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	852	852	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	637	637	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -4.8 Total Delay for Signalled Lanes (pcuHr): 41.32 Cycle Time (s): 90 PRC Over All Lanes (%): -4.8 Total Delay Over All Lanes(pcuHr): 41.32													