Appendix 14.6 Junction Modelling Results

Basic Results Summary

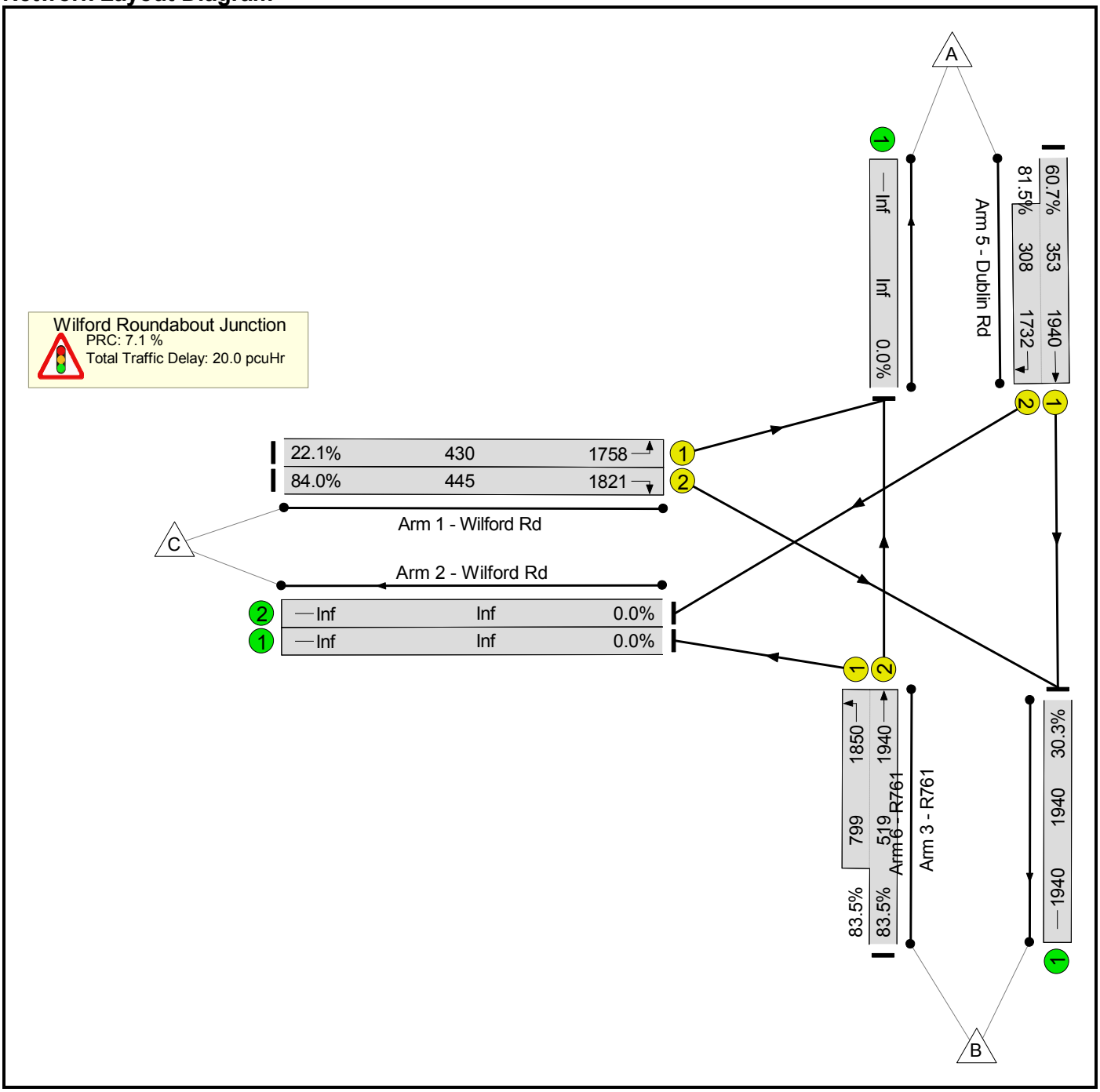
User and Project Details

Project:	**Woodbrook Junction 2 Assessment**
Title:	
Location:	
Client:	Aeval
Site Ref(s):	Proposed Signal Traffic Junction
Design Layout Ref:	5154251
Date Completed:	23/09/2019
Additional detail:	
File name:	J2_Proposed Signal Traffic Junction Rev2.lsg3x
Author:	
Company:	
Address:	

Basic Results Summary

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

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**84.0%**	**0**	**0**	**0**	**20.0**	-	-
Wilford Roundabout Junction	-	-	-		-	-	-	-	-	-	**84.0%**	**0**	**0**	**0**	**20.0**	-	-
1/1	Wilford Rd Left	U	E		1	21	-	95	1758	430	22.1%	-	-	-	0.9	32.5	2.0
1/2	Wilford Rd Right	U	I		1	21	-	374	1821	445	84.0%	-	-	-	5.8	56.0	11.3
3/2+3/1	R761 Left Ahead	U	C D		1	33:50	-	1100	1940:1850	519+799	83.5 : 83.5%	-	-	-	7.6	25.0	15.8
5/1+5/2	Dublin Rd Right Ahead	U	A B		1	20:15	-	465	1940:1732	353+308	60.7 : 81.5%	-	-	-	5.4	42.0	7.2
6/1	R761	U	-		-	-	-	588	1940	1940	30.3%	-	-	-	0.2	1.3	0.2

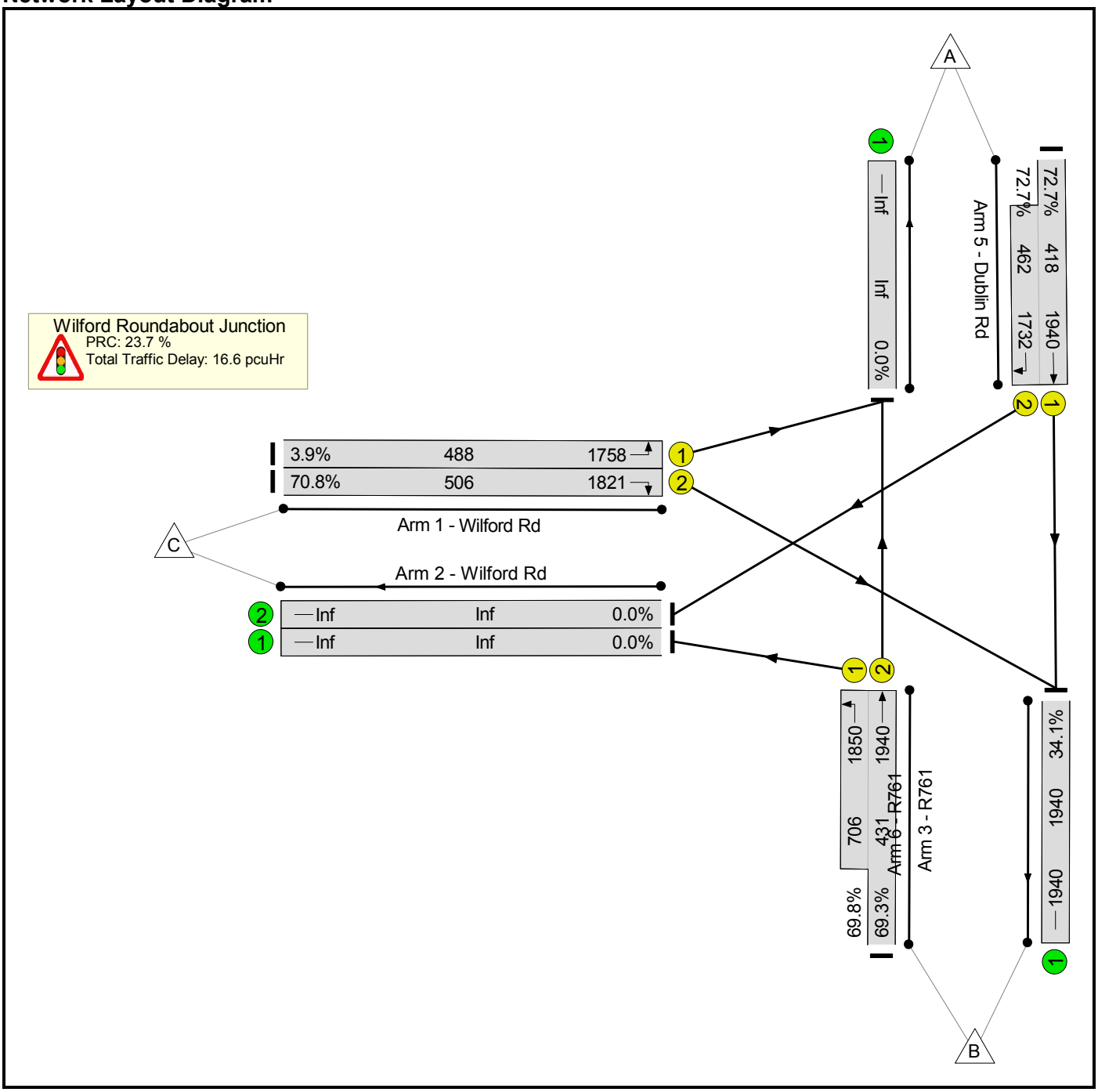
C1 PRC for Signalled Lanes (%): 7.1 Total Delay for Signalled Lanes (pcuHr): 19.74 Cycle Time (s): 90

PRC Over All Lanes (%): 7.1 Total Delay Over All Lanes(pcuHr): 19.96

Basic Results Summary

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

Network Layout Diagram



Basic Results Summary

Network Results

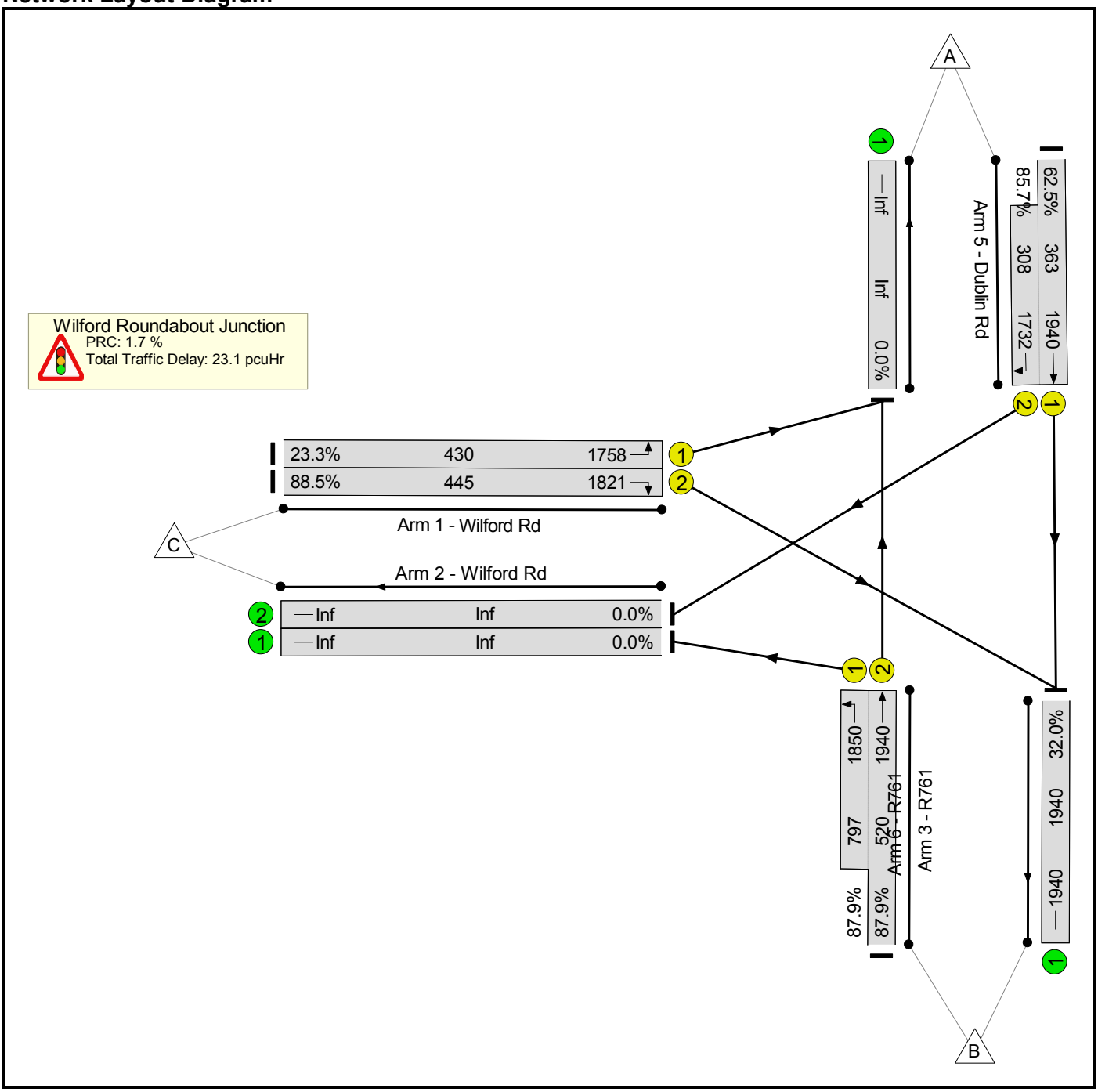
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**72.7%**	**0**	**0**	**0**	**16.6**	-	-
Wilford Roundabout Junction	-	-	-		-	-	-	-	-	-	**72.7%**	**0**	**0**	**0**	**16.6**	-	-
1/1	Wilford Rd Left	U	E		1	24	-	19	1758	488	3.9%	-	-	-	0.1	27.7	0.4
1/2	Wilford Rd Right	U	I		1	24	-	358	1821	506	70.8%	-	-	-	4.1	41.2	9.1
3/2+3/1	R761 Left Ahead	U	C D		1	22:42	-	792	1940:1850	431+706	69.3 : 69.8%	-	-	-	5.9	26.7	9.9
5/1+5/2	Dublin Rd Right Ahead	U	A B		1	28:23	-	640	1940:1732	418+462	72.7 : 72.7%	-	-	-	6.2	34.8	8.9
6/1	R761	U	-		-	-	-	662	1940	1940	34.1%	-	-	-	0.3	1.4	0.3

C1 PRC for Signalled Lanes (%): 23.7 Total Delay for Signalled Lanes (pcuHr): 16.32 Cycle Time (s): 90
PRC Over All Lanes (%): 23.7 Total Delay Over All Lanes(pcuHr): 16.58

Basic Results Summary

Scenario 3: 'AM Opening year +5' (FG3: 'AM Opening year +5', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

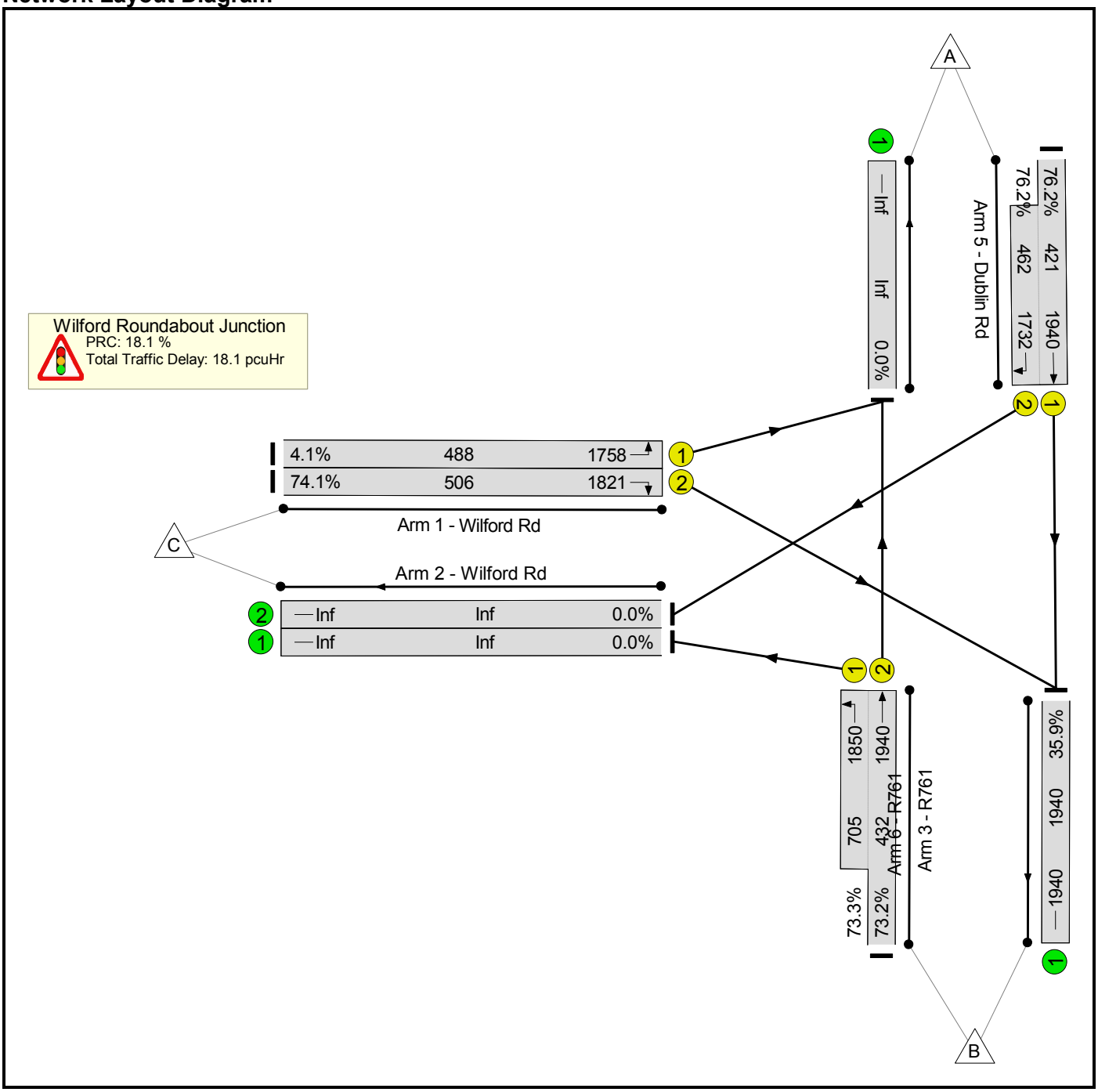
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**88.5%**	**0**	**0**	**0**	**23.1**	-	-
Wilford Roundabout Junction	-	-	-		-	-	-	-	-	-	**88.5%**	**0**	**0**	**0**	**23.1**	-	-
1/1	Wilford Rd Left	U	E		1	21	-	100	1758	430	23.3%	-	-	-	0.9	32.7	2.2
1/2	Wilford Rd Right	U	I		1	21	-	394	1821	445	88.5%	-	-	-	7.0	63.9	12.8
3/2+3/1	R761 Left Ahead	U	C D		1	33:50	-	1157	1940:1850	520+797	87.9 : 87.9%	-	-	-	9.1	28.2	19.6
5/1+5/2	Dublin Rd Right Ahead	U	A B		1	20:15	-	491	1940:1732	363+308	62.5 : 85.7%	-	-	-	5.9	43.0	7.7
6/1	R761	U	-		-	-	-	621	1940	1940	32.0%	-	-	-	0.2	1.4	0.2

C1 PRC for Signalled Lanes (%): 1.7 Total Delay for Signalled Lanes (pcuHr): 22.82 Cycle Time (s): 90
PRC Over All Lanes (%): 1.7 Total Delay Over All Lanes(pcuHr): 23.06

Basic Results Summary

Scenario 4: 'PM Opening year +5' (FG4: 'PM Opening year +5', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**76.2%**	**0**	**0**	**0**	**18.1**	-	-
Wilford Roundabout Junction	-	-	-		-	-	-	-	-	-	**76.2%**	**0**	**0**	**0**	**18.1**	-	-
1/1	Wilford Rd Left	U	E		1	24	-	20	1758	488	4.1%	-	-	-	0.2	27.7	0.4
1/2	Wilford Rd Right	U	I		1	24	-	375	1821	506	74.1%	-	-	-	4.5	43.0	9.8
3/2+3/1	R761 Left Ahead	U	C D		1	22:42	-	833	1940:1850	432+705	73.2 : 73.3%	-	-	-	6.4	27.7	10.7
5/1+5/2	Dublin Rd Right Ahead	U	A B		1	28:23	-	673	1940:1732	421+462	76.2 : 76.2%	-	-	-	6.8	36.1	9.6
6/1	R761	U	-		-	-	-	696	1940	1940	35.9%	-	-	-	0.3	1.4	0.3

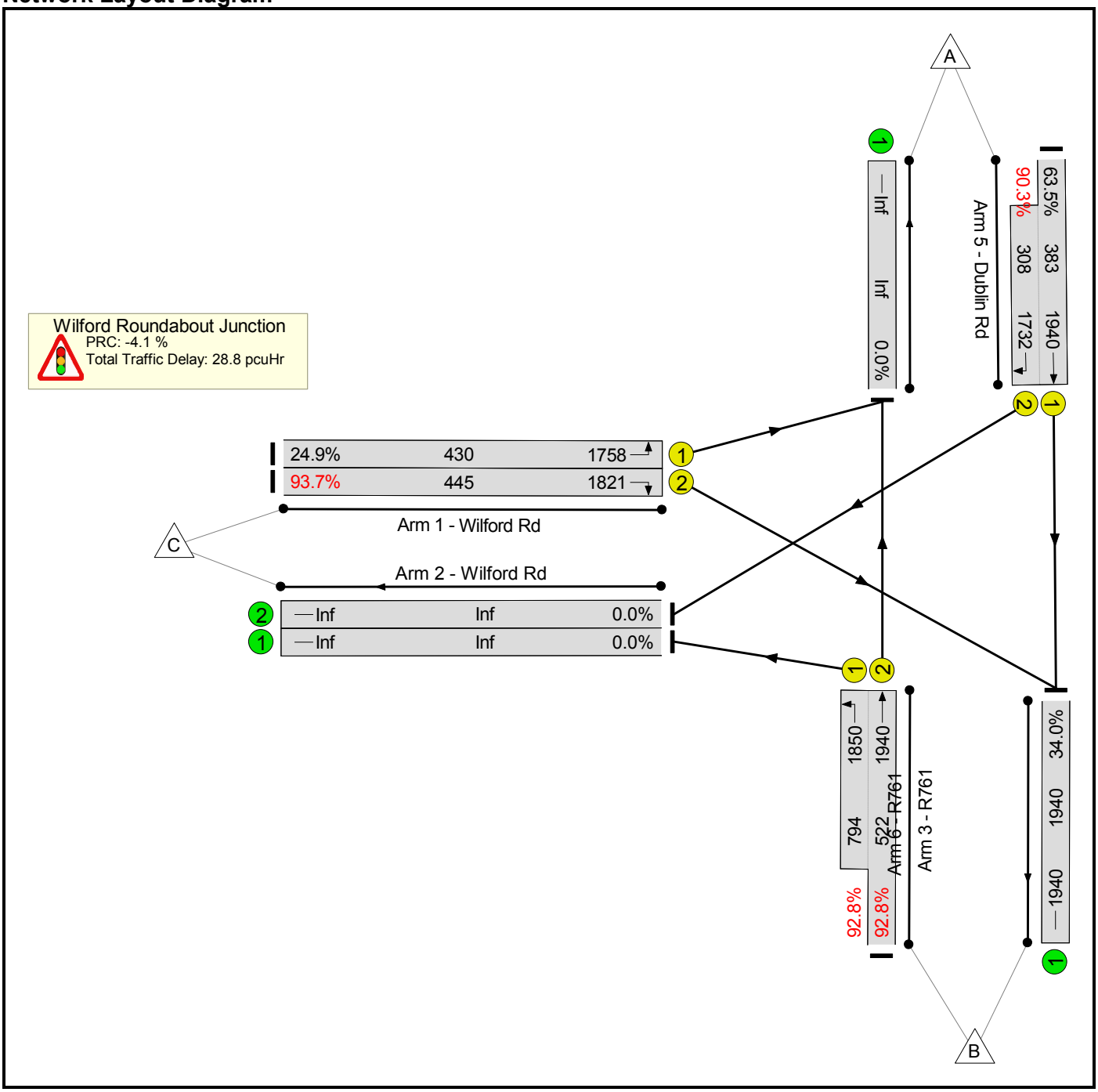
C1 PRC for Signalled Lanes (%): 18.1 Total Delay for Signalled Lanes (pcuHr): 17.81 Cycle Time (s): 90

PRC Over All Lanes (%): 18.1 Total Delay Over All Lanes(pcuHr): 18.09

Basic Results Summary

Scenario 5: 'AM Opening year +15' (FG5: 'AM Opening year +15', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**93.7%**	**0**	**0**	**0**	**28.8**	-	-
Wilford Roundabout Junction	-	-	-		-	-	-	-	-	-	**93.7%**	**0**	**0**	**0**	**28.8**	-	-
1/1	Wilford Rd Left	U	E		1	21	-	107	1758	430	24.9%	-	-	-	1.0	32.9	2.3
1/2	Wilford Rd Right	U	I		1	21	-	417	1821	445	93.7%	-	-	-	9.2	79.6	15.6
3/2+3/1	R761 Left Ahead	U	C D		1	33:50	-	1221	1940:1850	522+794	92.8 : 92.8%	-	-	-	12.0	35.5	26.1
5/1+5/2	Dublin Rd Right Ahead	U	A B		1	20:15	-	521	1940:1732	383+308	63.5 : 90.3%	-	-	-	6.3	43.9	8.3
6/1	R761	U	-		-	-	-	660	1940	1940	34.0%	-	-	-	0.3	1.4	0.3

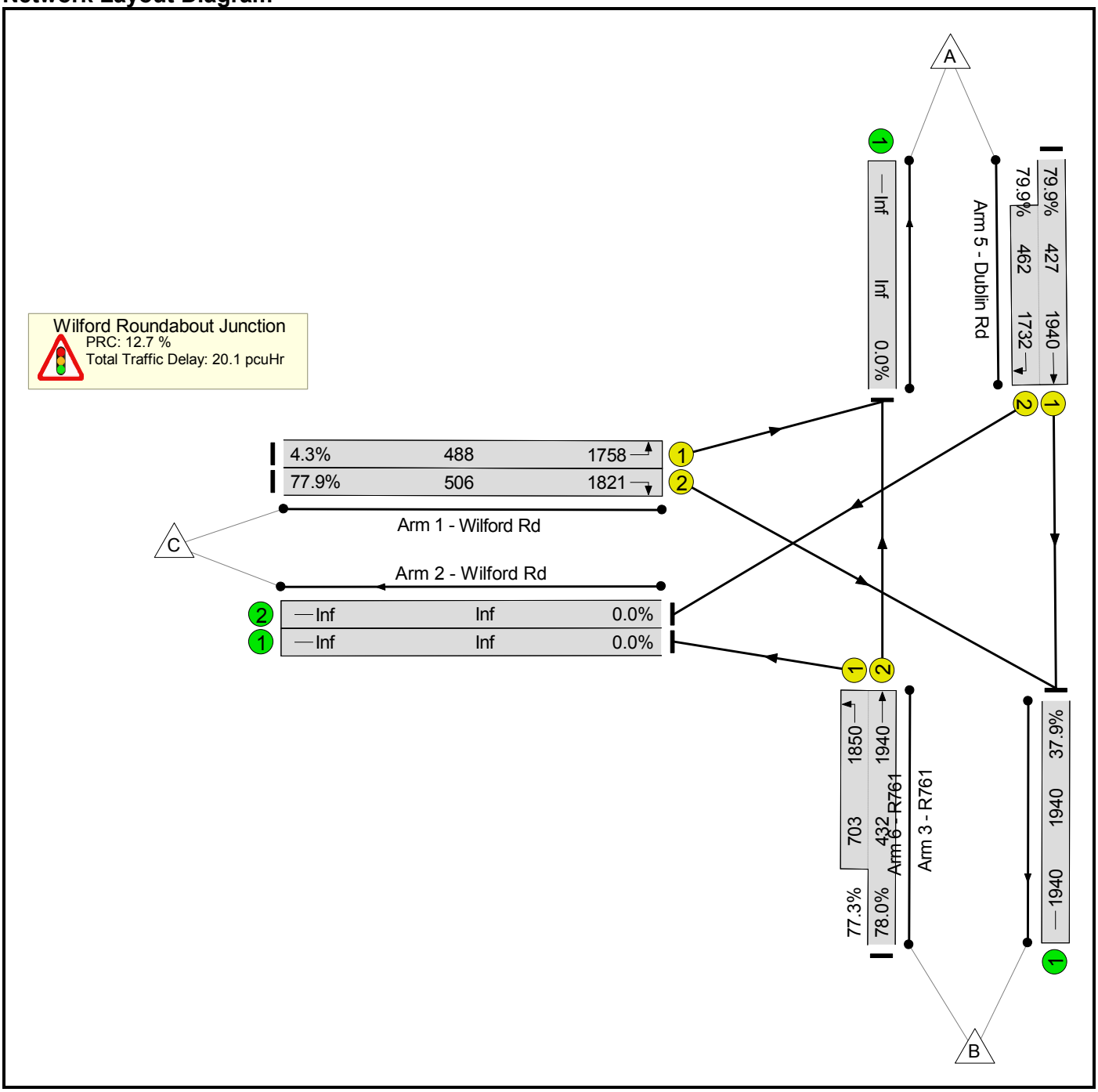
C1 PRC for Signalled Lanes (%): -4.1 Total Delay for Signalled Lanes (pcuHr): 28.59 Cycle Time (s): 90

PRC Over All Lanes (%): -4.1 Total Delay Over All Lanes(pcuHr): 28.84

Basic Results Summary

Scenario 6: 'PM Opening year +15' (FG6: 'PM Opening year +15', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

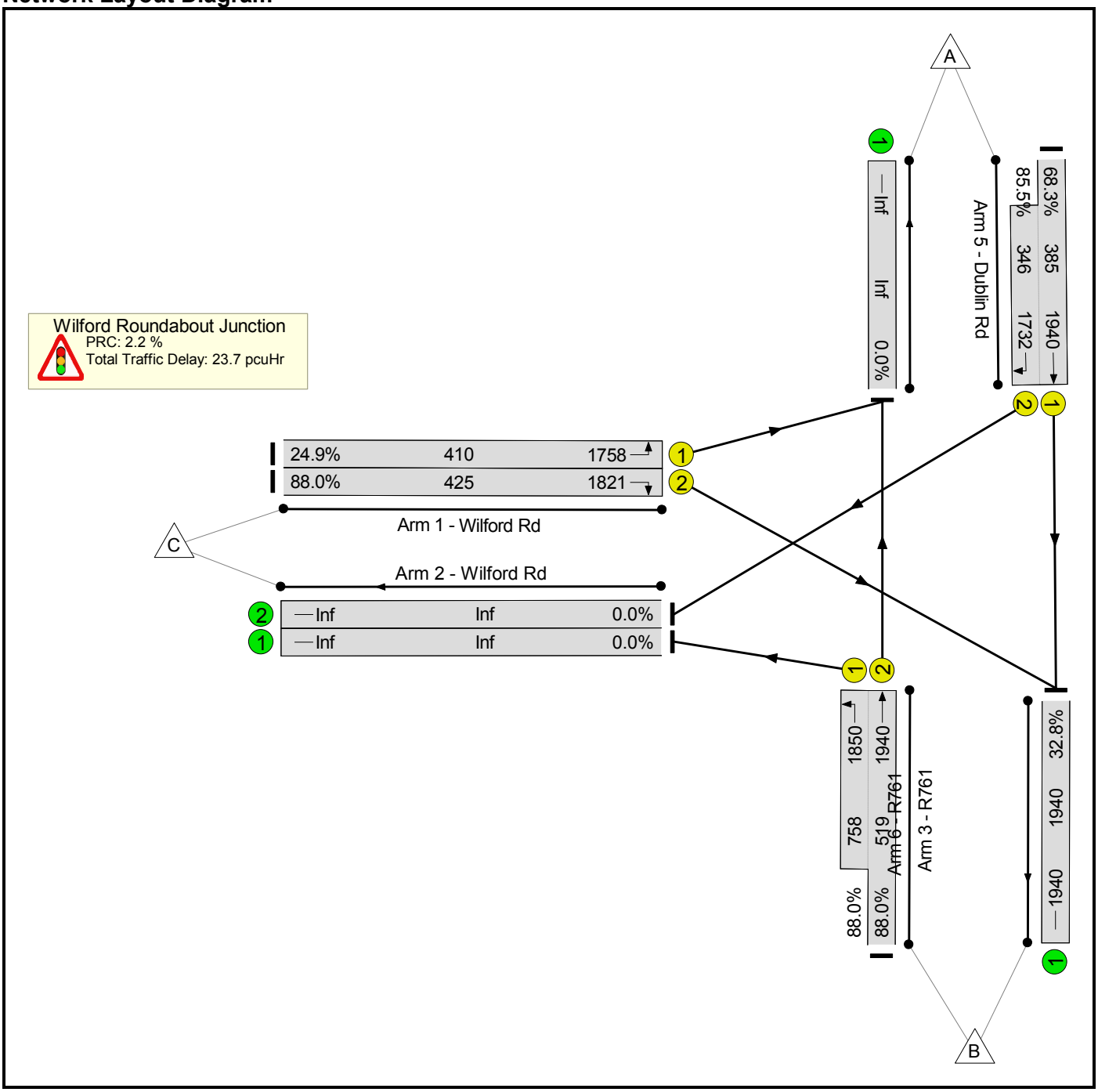
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**79.9%**	**0**	**0**	**0**	**20.1**	-	-
Wilford Roundabout Junction	-	-	-		-	-	-	-	-	-	**79.9%**	**0**	**0**	**0**	**20.1**	-	-
1/1	Wilford Rd Left	U	E		1	24	-	21	1758	488	4.3%	-	-	-	0.2	27.7	0.4
1/2	Wilford Rd Right	U	I		1	24	-	394	1821	506	77.9%	-	-	-	5.0	45.6	10.7
3/2+3/1	R761 Left Ahead	U	C D		1	22:42	-	881	1940:1850	432+703	78.0 : 77.3%	-	-	-	7.2	29.3	12.1
5/1+5/2	Dublin Rd Right Ahead	U	A B		1	28:23	-	710	1940:1732	427+462	79.9 : 79.9%	-	-	-	7.5	37.9	10.5
6/1	R761	U	-		-	-	-	735	1940	1940	37.9%	-	-	-	0.3	1.5	0.3

C1 PRC for Signalled Lanes (%): 12.7 Total Delay for Signalled Lanes (pcuHr): 19.78 Cycle Time (s): 90
PRC Over All Lanes (%): 12.7 Total Delay Over All Lanes(pcuHr): 20.09

Basic Results Summary

Scenario 7: 'AM Opening year DEV_HR' (FG7: 'AM Opening year DEV_HR', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**88.0%**	**0**	**0**	**0**	**23.7**	-	-
Wilford Roundabout Junction	-	-	-		-	-	-	-	-	-	**88.0%**	**0**	**0**	**0**	**23.7**	-	-
1/1	Wilford Rd Left	U	E		1	20	-	102	1758	410	24.9%	-	-	-	1.0	33.9	2.2
1/2	Wilford Rd Right	U	I		1	20	-	374	1821	425	88.0%	-	-	-	6.7	64.6	12.2
3/2+3/1	R761 Left Ahead	U	C D		1	32:48	-	1124	1940:1850	519+758	88.0 : 88.0%	-	-	-	9.3	29.6	18.8
5/1+5/2	Dublin Rd Right Ahead	U	A B		1	22:17	-	559	1940:1732	385+346	68.3 : 85.5%	-	-	-	6.6	42.2	8.7
6/1	R761	U	-		-	-	-	637	1940	1940	32.8%	-	-	-	0.2	1.4	0.2

C1

PRC for Signalled Lanes (%): 2.2
PRC Over All Lanes (%): 2.2

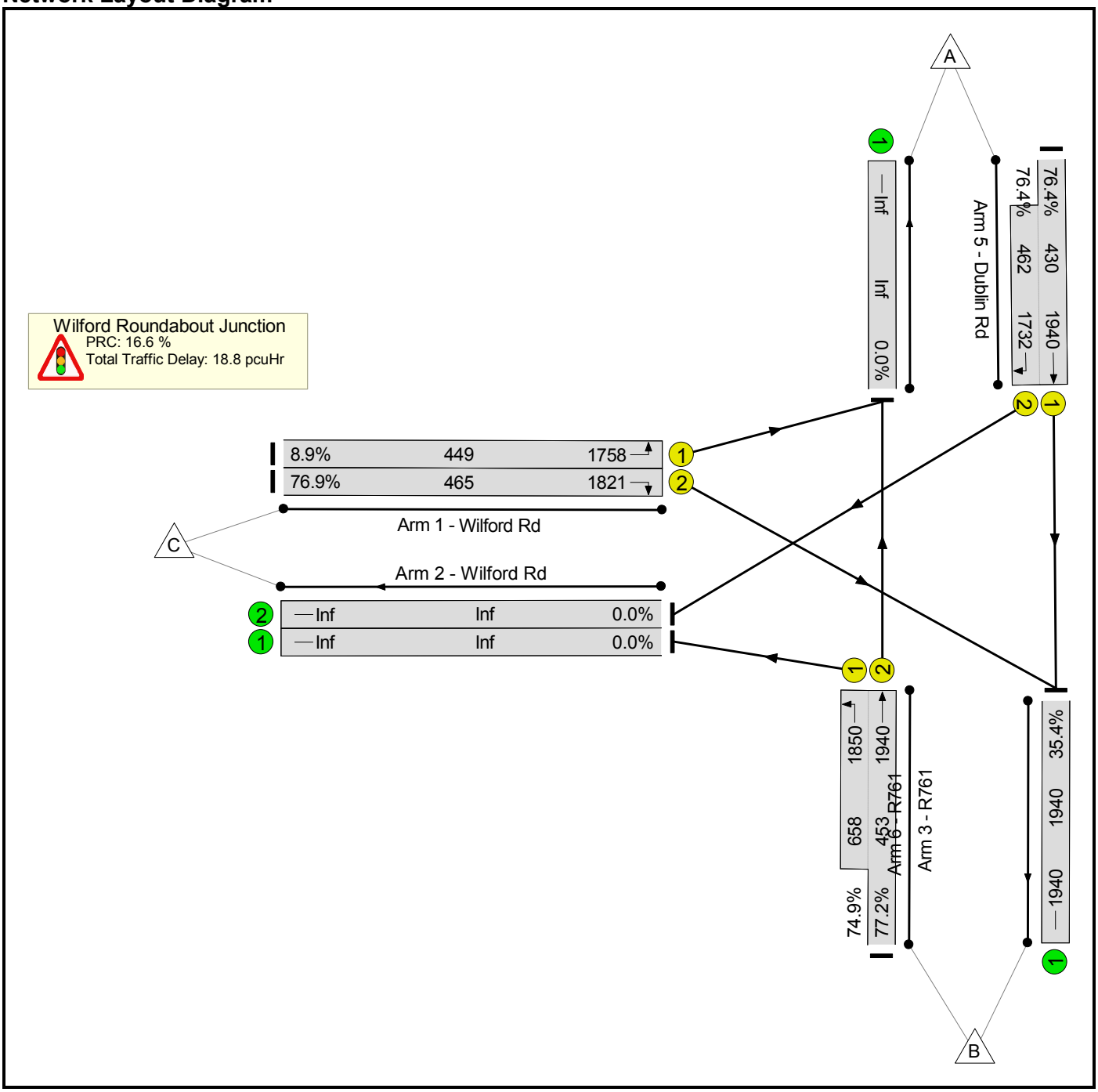
Total Delay for Signalled Lanes (pcuHr): 23.48
Total Delay Over All Lanes(pcuHr): 23.73

Cycle Time (s): 90

Basic Results Summary

Scenario 8: 'PM Opening year DEV_HR' (FG8: 'PM Opening year DEV_HR', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

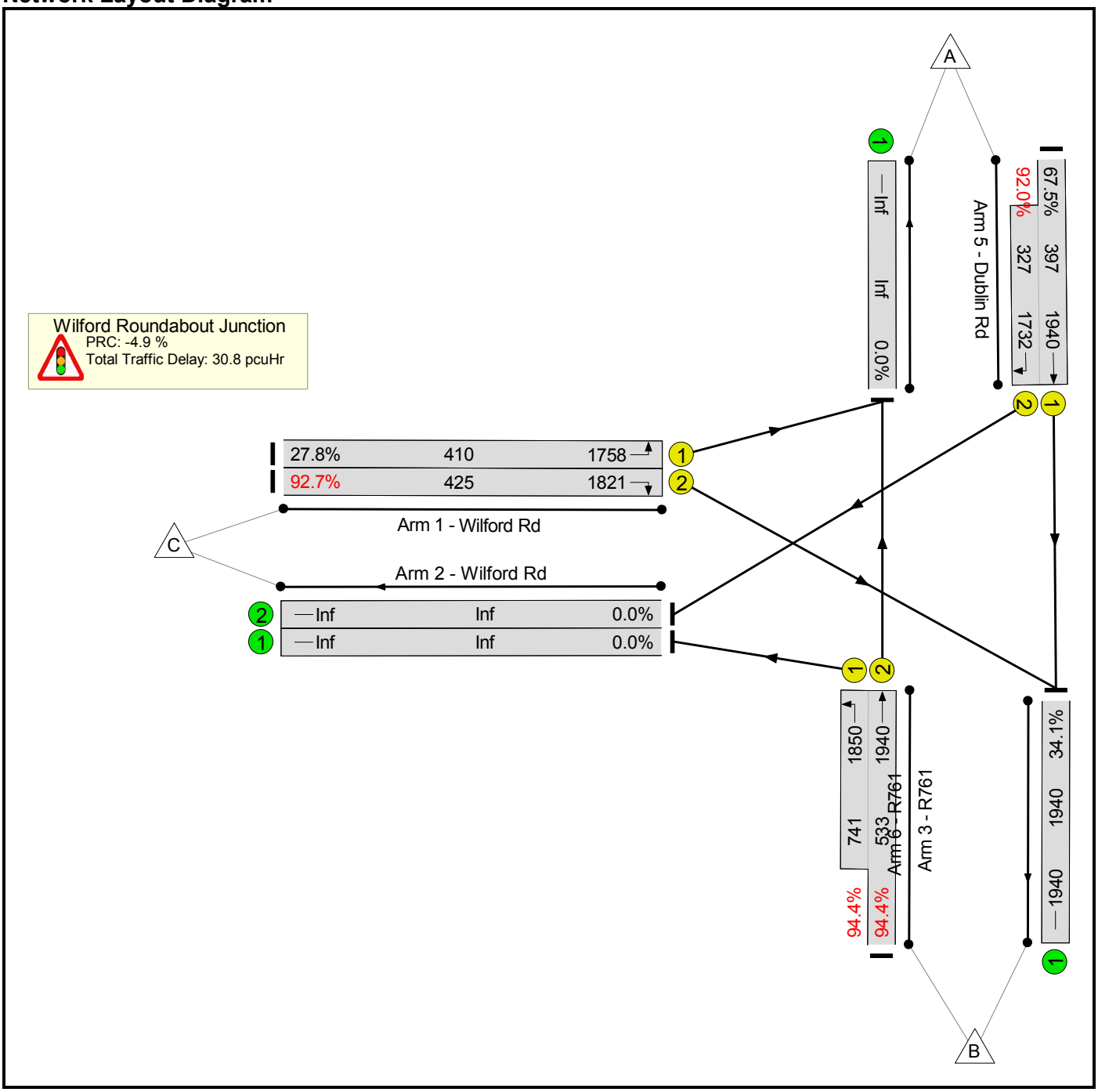
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**77.2%**	**0**	**0**	**0**	**18.8**	-	-
Wilford Roundabout Junction	-	-	-		-	-	-	-	-	-	**77.2%**	**0**	**0**	**0**	**18.8**	-	-
1/1	Wilford Rd Left	U	E		1	22	-	40	1758	449	8.9%	-	-	-	0.3	30.0	0.8
1/2	Wilford Rd Right	U	I		1	22	-	358	1821	465	76.9%	-	-	-	4.7	47.3	9.9
3/2+3/1	R761 Left Ahead	U	C D		1	24:41	-	843	1940:1850	453+658	77.2 : 74.9%	-	-	-	6.7	28.7	10.5
5/1+5/2	Dublin Rd Right Ahead	U	A B		1	29:23	-	682	1940:1732	430+462	76.4 : 76.4%	-	-	-	6.8	35.8	9.6
6/1	R761	U	-		-	-	-	687	1940	1940	35.4%	-	-	-	0.3	1.4	0.3

C1 PRC for Signalled Lanes (%): 16.6 Total Delay for Signalled Lanes (pcuHr): 18.55 Cycle Time (s): 90
PRC Over All Lanes (%): 16.6 Total Delay Over All Lanes(pcuHr): 18.82

Basic Results Summary

Scenario 9: 'AM Opening year +5 DEV_LR' (FG9: 'AM Opening year +5 DEV_LR', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**94.4%**	**0**	**0**	**0**	**30.8**	-	-
Wilford Roundabout Junction	-	-	-		-	-	-	-	-	-	**94.4%**	**0**	**0**	**0**	**30.8**	-	-
1/1	Wilford Rd Left	U	E		1	20	-	114	1758	410	27.8%	-	-	-	1.1	34.4	2.5
1/2	Wilford Rd Right	U	I		1	20	-	394	1821	425	92.7%	-	-	-	8.5	78.1	14.5
3/2+3/1	R761 Left Ahead	U	C D		1	33:49	-	1203	1940:1850	533+741	94.4 : 94.4%	-	-	-	13.9	41.5	28.1
5/1+5/2	Dublin Rd Right Ahead	U	A B		1	21:16	-	569	1940:1732	397+327	67.5 : 92.0%	-	-	-	7.0	44.3	9.2
6/1	R761	U	-		-	-	-	662	1940	1940	34.1%	-	-	-	0.3	1.4	0.3

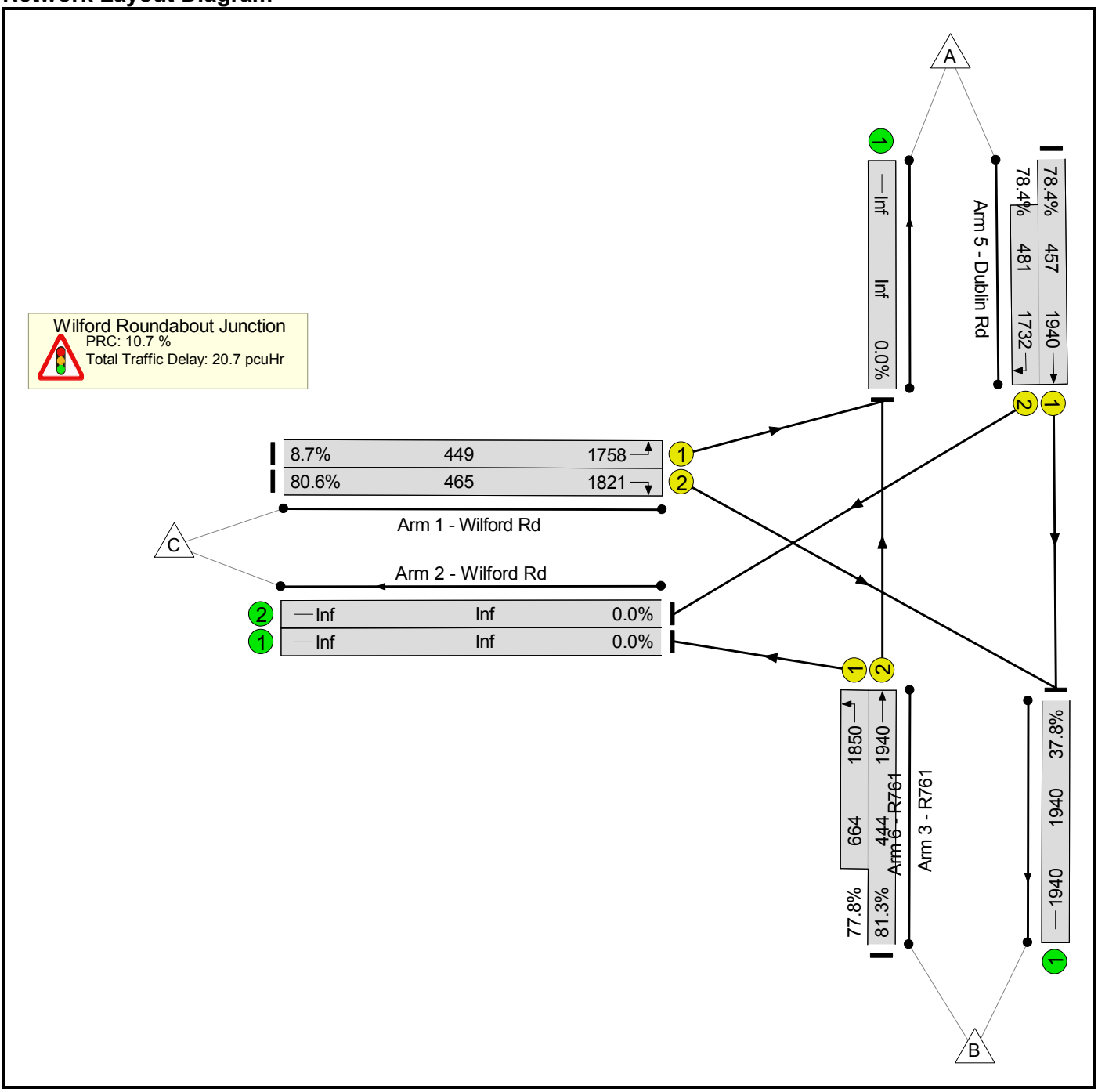
C1 PRC for Signalled Lanes (%): -4.9 Total Delay for Signalled Lanes (pcuHr): 30.52 Cycle Time (s): 90

PRC Over All Lanes (%): -4.9 Total Delay Over All Lanes(pcuHr): 30.78

Basic Results Summary

Scenario 10: 'PM Opening year +5 DEV_LR' (FG10: 'PM Opening year +5 DEV_LR', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**81.3%**	**0**	**0**	**0**	**20.7**	-	-
Wilford Roundabout Junction	-	-	-		-	-	-	-	-	-	**81.3%**	**0**	**0**	**0**	**20.7**	-	-
1/1	Wilford Rd Left	U	E		1	22	-	39	1758	449	8.7%	-	-	-	0.3	30.0	0.8
1/2	Wilford Rd Right	U	I		1	22	-	375	1821	465	80.6%	-	-	-	5.3	50.5	10.7
3/2+3/1	R761 Left Ahead	U	C D		1	23:40	-	878	1940:1850	444+664	81.3 : 77.8%	-	-	-	7.5	30.8	11.6
5/1+5/2	Dublin Rd Right Ahead	U	A B		1	30:24	-	735	1940:1732	457+481	78.4 : 78.4%	-	-	-	7.3	35.7	10.5
6/1	R761	U	-		-	-	-	733	1940	1940	37.8%	-	-	-	0.3	1.5	0.3

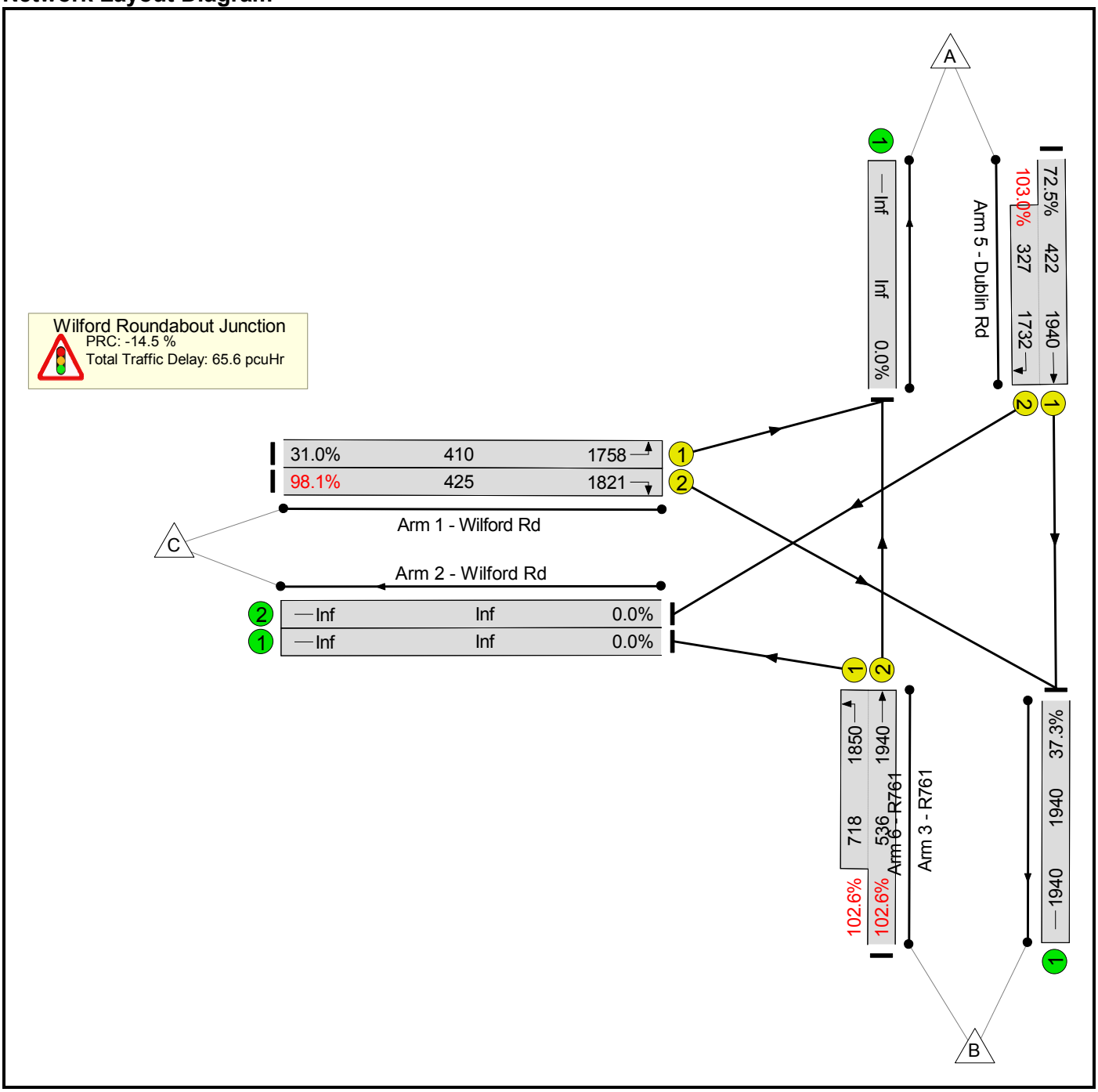
C1 PRC for Signalled Lanes (%): 10.7 Total Delay for Signalled Lanes (pcuHr): 20.38 Cycle Time (s): 90

PRC Over All Lanes (%): 10.7 Total Delay Over All Lanes(pcuHr): 20.68

Basic Results Summary

Scenario 11: 'AM Opening year +15 ALL WB DEV' (FG11: 'AM Opening year +15 ALL WB DEV', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

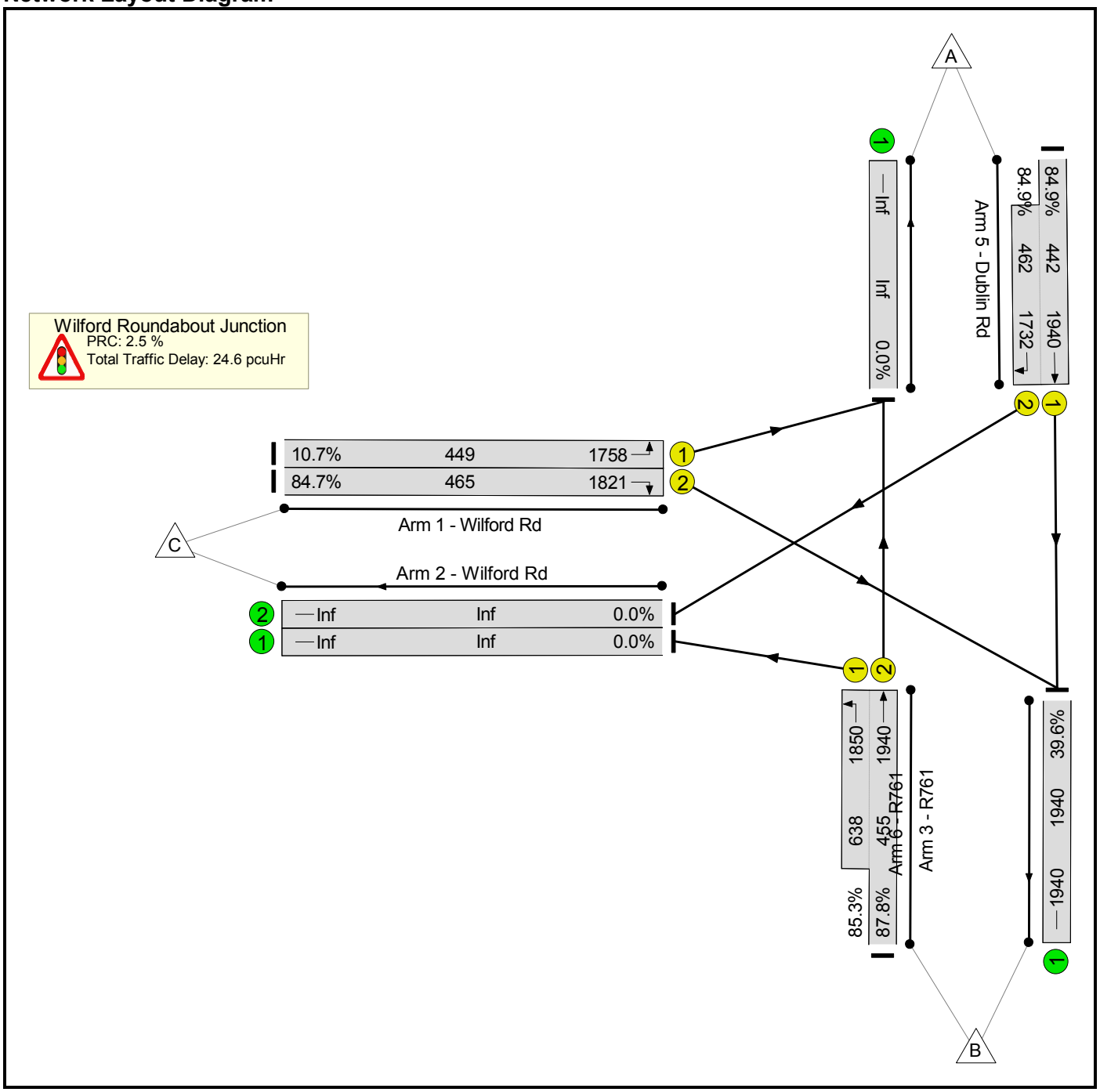
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**103.0%**	**0**	**0**	**0**	**65.6**	-	-
Wilford Roundabout Junction	-	-	-		-	-	-	-	-	-	**103.0%**	**0**	**0**	**0**	**65.6**	-	-
1/1	Wilford Rd Left	U	E		1	20	-	127	1758	410	31.0%	-	-	-	1.2	34.9	2.8
1/2	Wilford Rd Right	U	I		1	20	-	417	1821	425	98.1%	-	-	-	12.4	107.0	18.7
3/2+3/1	R761 Left Ahead	U	C D		1	33:49	-	1287	1940:1850	536+718	102.6 : 102.6%	-	-	-	37.6	105.2	65.0
5/1+5/2	Dublin Rd Right Ahead	U	A B		1	21:16	-	643	1940:1732	422+327	72.5 : 103.0%	-	-	-	14.1	78.7	16.2
6/1	R761	U	-		-	-	-	723	1940	1940	37.3%	-	-	-	0.3	1.5	0.3

C1 PRC for Signalled Lanes (%): -14.5 Total Delay for Signalled Lanes (pcuHr): 65.31 Cycle Time (s): 90
PRC Over All Lanes (%): -14.5 Total Delay Over All Lanes(pcuHr): 65.61

Basic Results Summary

Scenario 12: 'PM Opening year +15 ALL WB DEV' (FG12: 'PM Opening year +15 ALL WB DEV', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

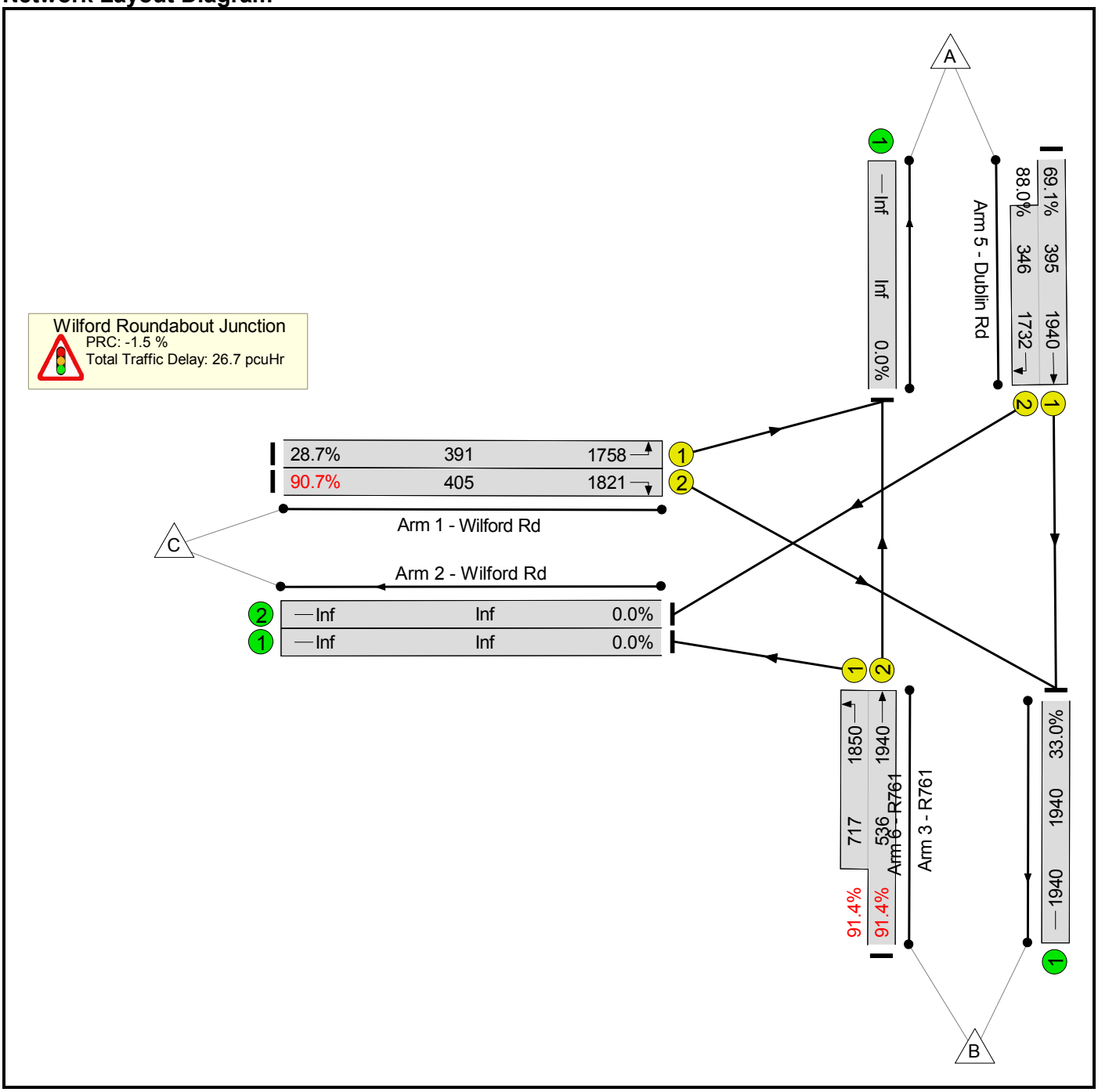
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**87.8%**	**0**	**0**	**0**	**24.6**	-	-
Wilford Roundabout Junction	-	-	-		-	-	-	-	-	-	**87.8%**	**0**	**0**	**0**	**24.6**	-	-
1/1	Wilford Rd Left	U	E		1	22	-	48	1758	449	10.7%	-	-	-	0.4	30.1	1.0
1/2	Wilford Rd Right	U	I		1	22	-	394	1821	465	84.7%	-	-	-	6.1	55.4	11.9
3/2+3/1	R761 Left Ahead	U	C D		1	24:40	-	943	1940:1850	455+638	87.8 : 85.3%	-	-	-	9.2	35.0	14.6
5/1+5/2	Dublin Rd Right Ahead	U	A B		1	30:23	-	767	1940:1732	442+462	84.9 : 84.9%	-	-	-	8.6	40.4	12.0
6/1	R761	U	-		-	-	-	769	1940	1940	39.6%	-	-	-	0.3	1.5	0.3

C1 PRC for Signalled Lanes (%): 2.5 Total Delay for Signalled Lanes (pcuHr): 24.23 Cycle Time (s): 90
PRC Over All Lanes (%): 2.5 Total Delay Over All Lanes(pcuHr): 24.56

Basic Results Summary

Scenario 13: 'AM Sensitivity analysis +15' (FG13: 'AM Sensitivity analysis +15', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**91.4%**	**0**	**0**	**0**	**26.7**	-	-
Wilford Roundabout Junction	-	-	-		-	-	-	-	-	-	**91.4%**	**0**	**0**	**0**	**26.7**	-	-
1/1	Wilford Rd Left	U	E		1	19	-	112	1758	391	28.7%	-	-	-	1.1	35.5	2.5
1/2	Wilford Rd Right	U	I		1	19	-	367	1821	405	90.7%	-	-	-	7.5	73.5	12.9
3/2+3/1	R761 Left Ahead	U	C D		1	33:48	-	1145	1940:1850	536+717	91.4 : 91.4%	-	-	-	11.0	34.5	21.2
5/1+5/2	Dublin Rd Right Ahead	U	A B		1	22:17	-	578	1940:1732	395+346	69.1 : 88.0%	-	-	-	6.9	42.9	9.1
6/1	R761	U	-		-	-	-	640	1940	1940	33.0%	-	-	-	0.2	1.4	0.2

C1

PRC for Signalled Lanes (%): -1.5
PRC Over All Lanes (%): -1.5

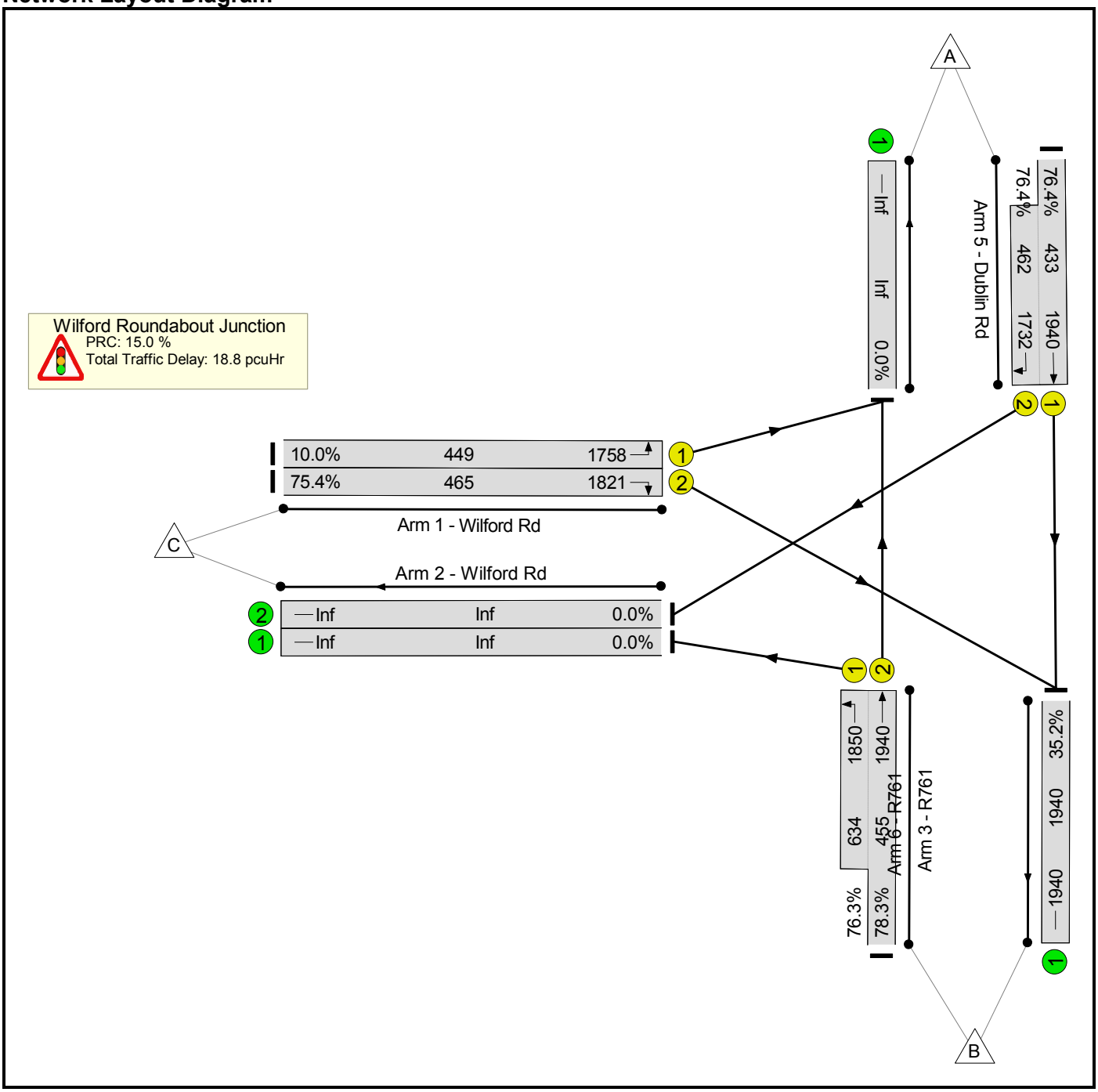
Total Delay for Signalled Lanes (pcuHr): 26.47
Total Delay Over All Lanes(pcuHr): 26.72

Cycle Time (s): 90

Basic Results Summary

Scenario 14: 'PM Sensitivity analysis +15' (FG14: 'PM Sensitivity analysis +15', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

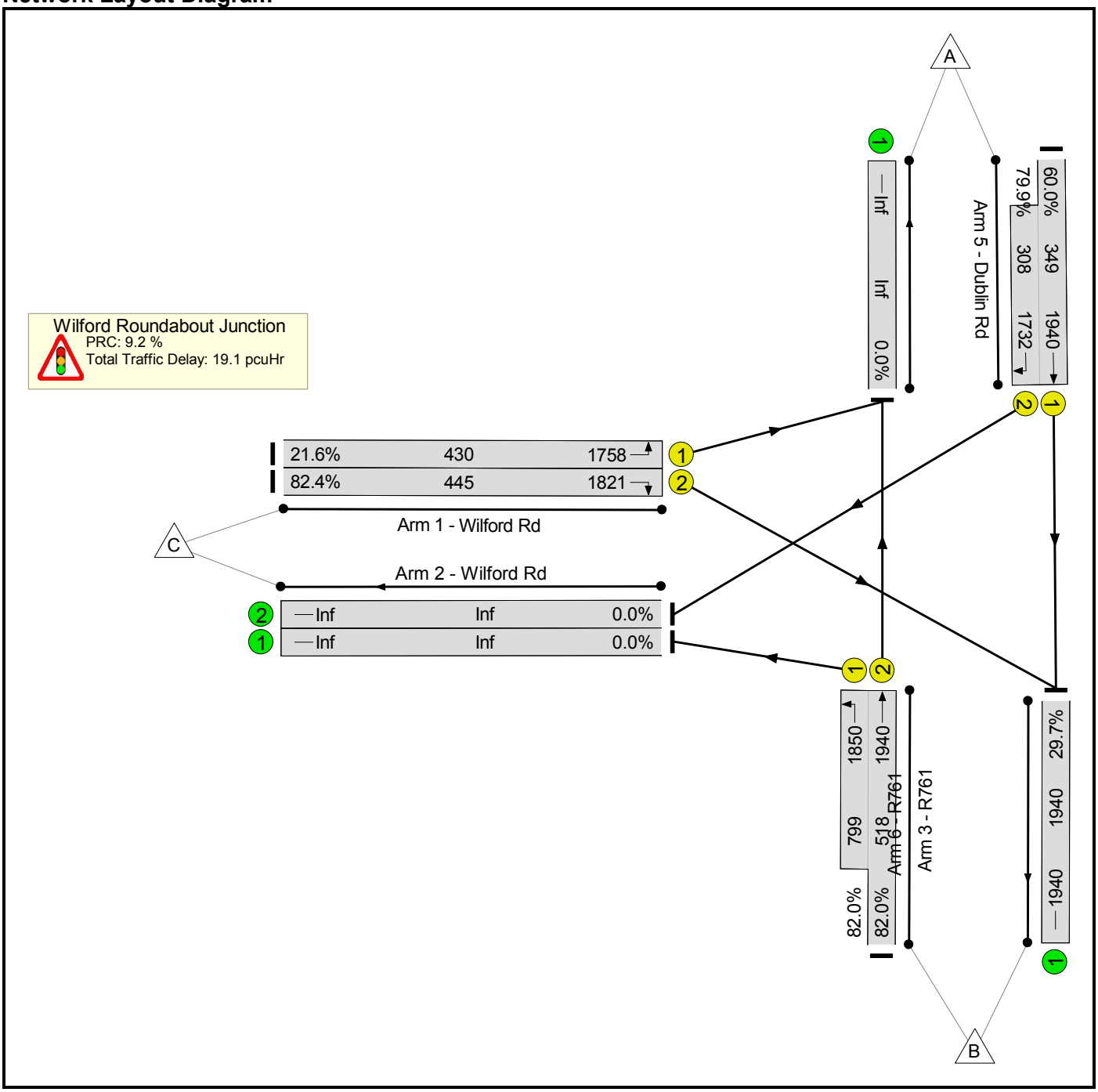
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**78.3%**	**0**	**0**	**0**	**18.8**	-	-
Wilford Roundabout Junction	-	-	-		-	-	-	-	-	-	**78.3%**	**0**	**0**	**0**	**18.8**	-	-
1/1	Wilford Rd Left	U	E		1	22	-	45	1758	449	10.0%	-	-	-	0.4	30.1	0.9
1/2	Wilford Rd Right	U	I		1	22	-	351	1821	465	75.4%	-	-	-	4.5	46.2	9.5
3/2+3/1	R761 Left Ahead	U	C D		1	24:40	-	840	1940:1850	455+634	78.3 : 76.3%	-	-	-	6.9	29.7	10.5
5/1+5/2	Dublin Rd Right Ahead	U	A B		1	30:23	-	684	1940:1732	433+462	76.4 : 76.4%	-	-	-	6.7	35.4	9.6
6/1	R761	U	-		-	-	-	682	1940	1940	35.2%	-	-	-	0.3	1.4	0.3

C1 PRC for Signalled Lanes (%): 15.0 Total Delay for Signalled Lanes (pcuHr): 18.54 Cycle Time (s): 90
PRC Over All Lanes (%): 15.0 Total Delay Over All Lanes(pcuHr): 18.81

Basic Results Summary

Scenario 15: 'Count AM' (FG15: 'Count AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**82.4%**	**0**	**0**	**0**	**19.1**	-	-
Wilford Roundabout Junction	-	-	-		-	-	-	-	-	-	**82.4%**	**0**	**0**	**0**	**19.1**	-	-
1/1	Wilford Rd Left	U	E		1	21	-	93	1758	430	21.6%	-	-	-	0.8	32.5	2.0
1/2	Wilford Rd Right	U	I		1	21	-	367	1821	445	82.4%	-	-	-	5.5	54.0	10.9
3/2+3/1	R761 Left Ahead	U	C D		1	33:50	-	1080	1940:1850	518+799	82.0 : 82.0%	-	-	-	7.3	24.2	14.9
5/1+5/2	Dublin Rd Right Ahead	U	A B		1	20:15	-	455	1940:1732	349+308	60.0 : 79.9%	-	-	-	5.3	41.6	7.0
6/1	R761	U	-		-	-	-	576	1940	1940	29.7%	-	-	-	0.2	1.3	0.2

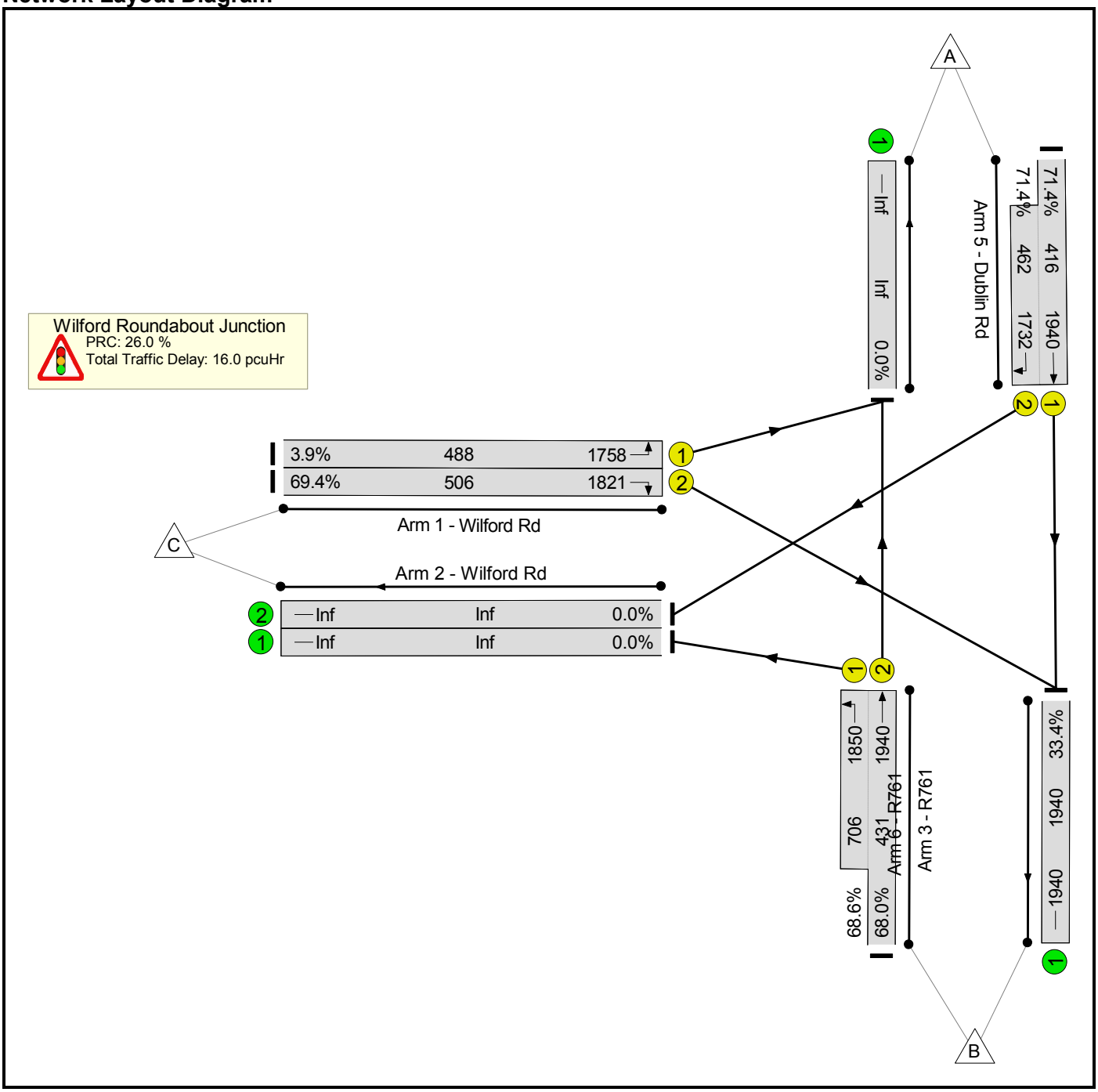
C1 PRC for Signalled Lanes (%): 9.2 Total Delay for Signalled Lanes (pcuHr): 18.86 Cycle Time (s): 90

PRC Over All Lanes (%): 9.2 Total Delay Over All Lanes(pcuHr): 19.07

Basic Results Summary

Scenario 16: 'Count PM' (FG16: 'Count PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

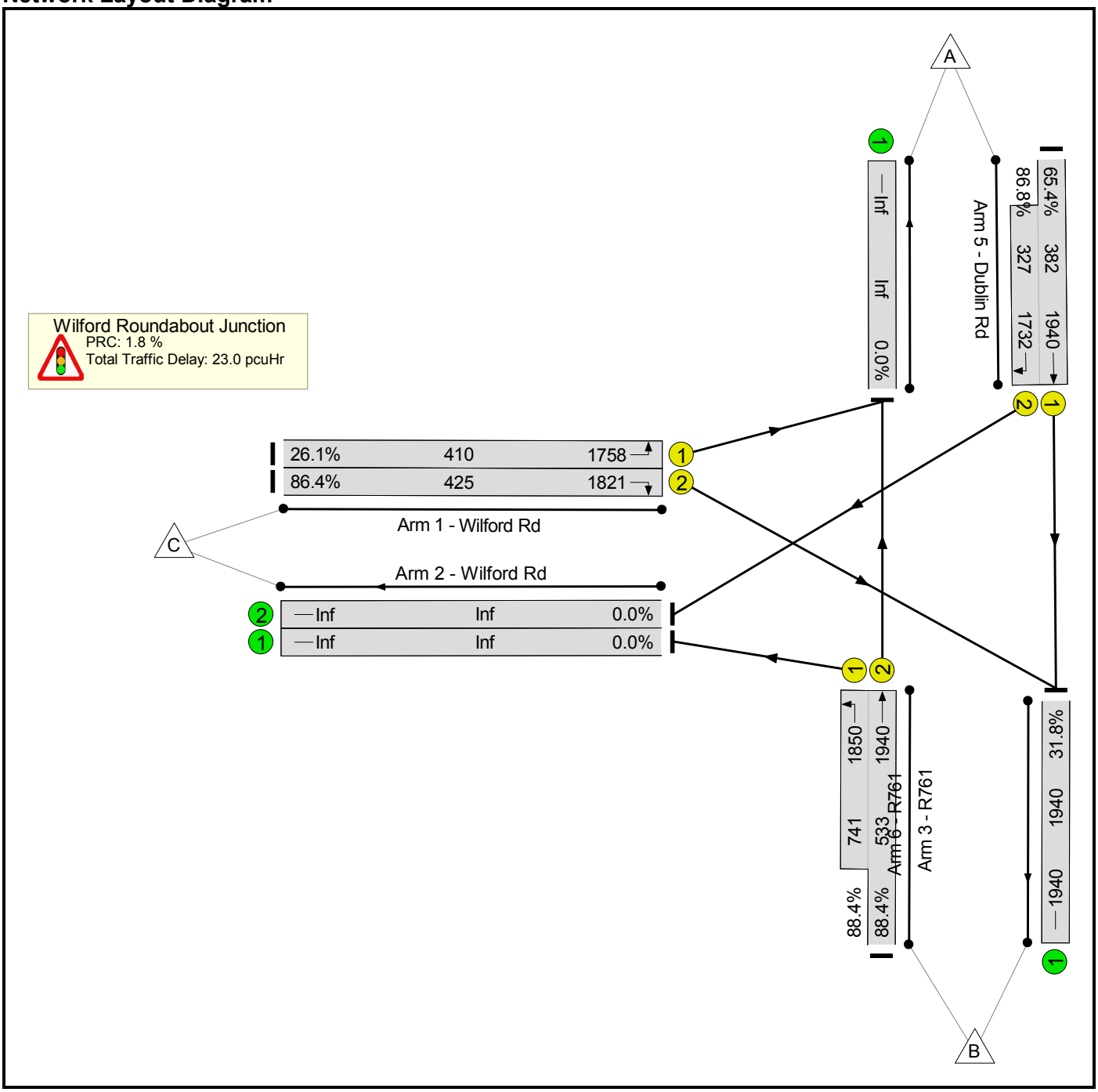
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**71.4%**	**0**	**0**	**0**	**16.0**	-	-
Wilford Roundabout Junction	-	-	-		-	-	-	-	-	-	**71.4%**	**0**	**0**	**0**	**16.0**	-	-
1/1	Wilford Rd Left	U	E		1	24	-	19	1758	488	3.9%	-	-	-	0.1	27.7	0.4
1/2	Wilford Rd Right	U	I		1	24	-	351	1821	506	69.4%	-	-	-	4.0	40.5	8.9
3/2+3/1	R761 Left Ahead	U	C D		1	22:42	-	777	1940:1850	431+706	68.0 : 68.6%	-	-	-	5.7	26.4	9.5
5/1+5/2	Dublin Rd Right Ahead	U	A B		1	28:23	-	627	1940:1732	416+462	71.4 : 71.4%	-	-	-	6.0	34.4	8.7
6/1	R761	U	-		-	-	-	648	1940	1940	33.4%	-	-	-	0.3	1.4	0.3

C1 PRC for Signalled Lanes (%): 26.0 Total Delay for Signalled Lanes (pcuHr): 15.79 Cycle Time (s): 90
PRC Over All Lanes (%): 26.0 Total Delay Over All Lanes(pcuHr): 16.04

Basic Results Summary

Scenario 17: 'AM Sensitivity analysis +5' (FG17: 'AM Sensitivity analysis +5', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**88.4%**	**0**	**0**	**0**	**23.0**	-	-
Wilford Roundabout Junction	-	-	-		-	-	-	-	-	-	**88.4%**	**0**	**0**	**0**	**23.0**	-	-
1/1	Wilford Rd Left	U	E		1	20	-	107	1758	410	26.1%	-	-	-	1.0	34.1	2.3
1/2	Wilford Rd Right	U	I		1	20	-	367	1821	425	86.4%	-	-	-	6.3	61.4	11.6
3/2+3/1	R761 Left Ahead	U	C D		1	33:49	-	1126	1940:1850	533+741	88.4 : 88.4%	-	-	-	9.2	29.3	17.7
5/1+5/2	Dublin Rd Right Ahead	U	A B		1	21:16	-	534	1940:1732	382+327	65.4 : 86.8%	-	-	-	6.3	42.7	8.4
6/1	R761	U	-		-	-	-	617	1940	1940	31.8%	-	-	-	0.2	1.4	0.2

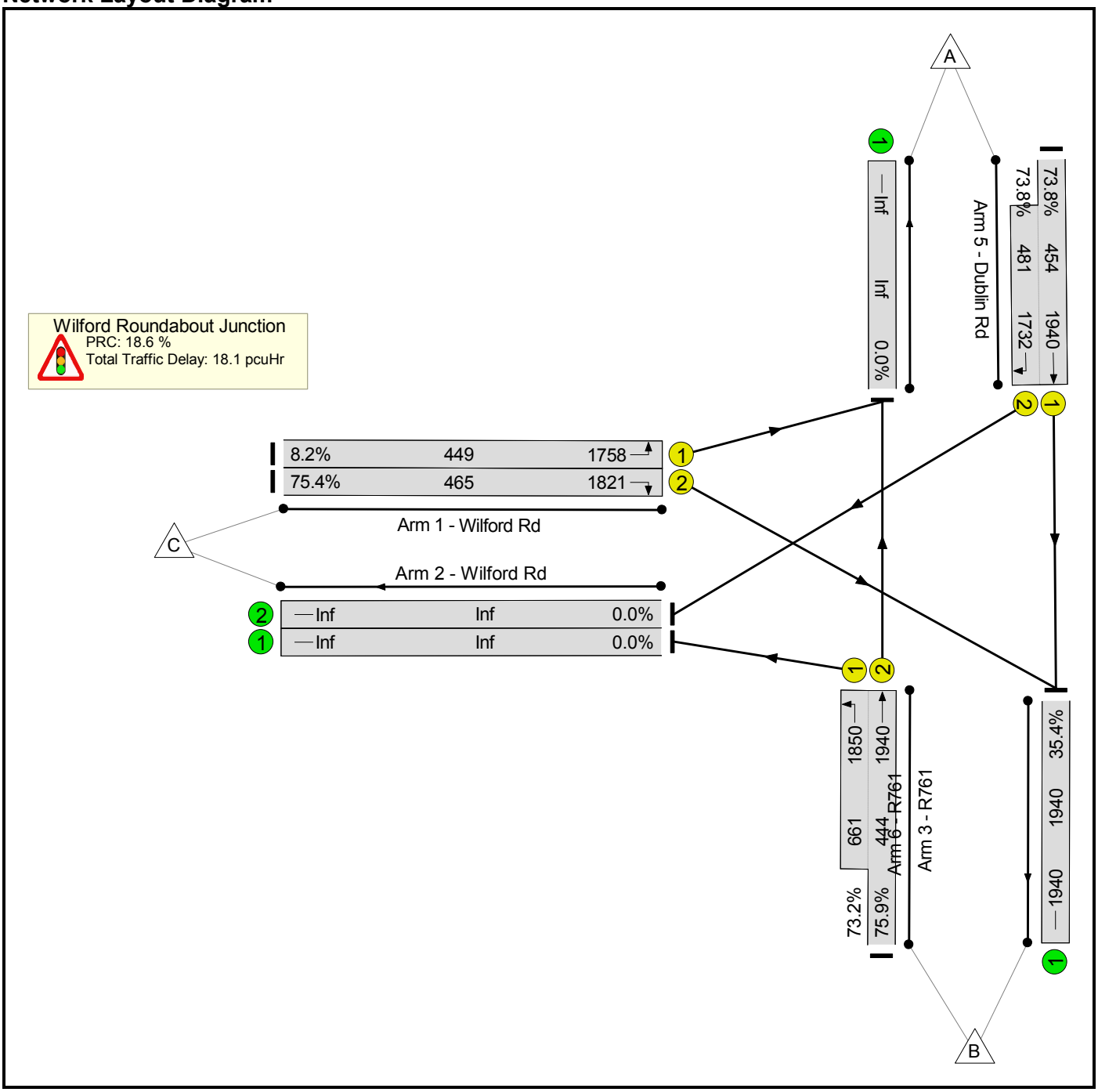
C1 PRC for Signalled Lanes (%): 1.8 Total Delay for Signalled Lanes (pcuHr): 22.78 Cycle Time (s): 90

PRC Over All Lanes (%): 1.8 Total Delay Over All Lanes(pcuHr): 23.01

Basic Results Summary

Scenario 18: 'PM Sensitvity analysis +5' (FG18: 'PM Sensitivity analysis +5', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**75.9%**	**0**	**0**	**0**	**18.1**	-	-
Wilford Roundabout Junction	-	-	-		-	-	-	-	-	-	**75.9%**	**0**	**0**	**0**	**18.1**	-	-
1/1	Wilford Rd Left	U	E		1	22	-	37	1758	449	8.2%	-	-	-	0.3	29.9	0.7
1/2	Wilford Rd Right	U	I		1	22	-	351	1821	465	75.4%	-	-	-	4.5	46.2	9.5
3/2+3/1	R761 Left Ahead	U	C D		1	23:41	-	821	1940:1850	444+661	75.9 : 73.2%	-	-	-	6.5	28.5	10.2
5/1+5/2	Dublin Rd Right Ahead	U	A B		1	29:24	-	690	1940:1732	454+481	73.8 : 73.8%	-	-	-	6.6	34.2	9.4
6/1	R761	U	-		-	-	-	686	1940	1940	35.4%	-	-	-	0.3	1.4	0.3

C1 PRC for Signalled Lanes (%): 18.6 Total Delay for Signalled Lanes (pcuHr): 17.87 Cycle Time (s): 90
PRC Over All Lanes (%): 18.6 Total Delay Over All Lanes(pcuHr): 18.15

Junctions 9

ARCADY 9 - Roundabout Module

Filename: J2_UnnamedRd-R761.Roundabout.j9
Path: Z:\5154251 Castlethorn Woodbrook\7 Calcs\72Model
Report generation date: 23/09/2019 13:06:47

»Opening Year , AM
»Opening Year, PM
»Opening Year DEV_HR, AM
»Opening Year DEV_HR, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	Opening Year							
Arm A	0.5	3.58	0.33	A	0.8	4.22	0.45	A
Arm B	2.4	7.28	0.70	A	1.1	4.71	0.52	A
Arm C	0.5	3.68	0.34	A	0.3	3.02	0.26	A
	Opening Year DEV_HR							
Arm A	0.6	3.90	0.38	A	0.9	4.52	0.47	A
Arm B	2.7	8.03	0.73	A	1.3	5.05	0.56	A
Arm C	0.5	3.75	0.34	A	0.4	3.23	0.27	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	Woodbrook Junction 2 Assessment
Location	Wilford Roundabout Junction
Site number	
Date	23/09/2019
Version	
Status	Planning
Identifier	
Client	Aeval
Jobnumber	5154251
Enumerator	ATKINSMCCARTHY\MCollins
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Opening Year	AM	ONE HOUR	08:00	09:30	15
D2	Opening Year	PM	ONE HOUR	17:00	18:30	15
D3	Opening Year DEV_HR	AM	ONE HOUR	08:00	09:30	15
D4	Opening Year DEV_HR	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Opening Year , AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm C - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	5.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	untitled	
B	untitled	
C	untitled	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A	3.70	6.45	23.7	30.5	58.6	20.0	
B	3.70	6.90	28.5	56.0	58.6	31.0	
C	4.20	7.00	56.0	32.5	58.6	64.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.599	1818
B	0.605	1886
C	0.557	1805

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Opening Year	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	465	100.000
B		✓	1100	100.000
C		✓	469	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	214	251
	B	433	0	667
	C	95	374	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	8	3
	B	4	0	2
	C	7	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
A	0.33	3.58	0.5	A
B	0.70	7.28	2.4	A
C	0.34	3.68	0.5	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	350	281	1650	0.212	349	0.3	2.910	A
B	828	188	1772	0.467	825	0.9	3.891	A
C	353	325	1624	0.217	352	0.3	2.956	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	418	336	1617	0.259	418	0.4	3.160	A
B	989	225	1749	0.565	987	1.3	4.844	A
C	422	389	1589	0.265	421	0.4	3.225	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	512	411	1571	0.326	511	0.5	3.572	A
B	1211	276	1719	0.705	1207	2.4	7.168	A
C	516	475	1541	0.335	516	0.5	3.672	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	512	412	1571	0.326	512	0.5	3.576	A
B	1211	276	1719	0.705	1211	2.4	7.285	A
C	516	477	1540	0.335	516	0.5	3.678	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	418	337	1616	0.259	419	0.4	3.164	A
B	989	226	1749	0.565	993	1.4	4.923	A
C	422	391	1588	0.266	422	0.4	3.232	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	350	282	1649	0.212	350	0.3	2.920	A
B	828	189	1771	0.468	830	0.9	3.939	A
C	353	327	1623	0.218	353	0.3	2.965	A

Opening Year, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm C - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	4.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	Opening Year	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	640	100.000
B		✓	792	100.000
C		✓	377	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	304	336
	B	299	0	493
	C	19	358	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	5	1
	B	6	0	2
	C	6	1	1

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
A	0.45	4.22	0.8	A
B	0.52	4.71	1.1	A
C	0.26	3.02	0.3	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	482	269	1657	0.291	480	0.4	3.143	A
B	596	252	1733	0.344	594	0.5	3.265	A
C	284	224	1680	0.169	283	0.2	2.607	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	575	322	1625	0.354	575	0.6	3.523	A
B	712	302	1703	0.418	711	0.7	3.751	A
C	339	268	1656	0.205	339	0.3	2.767	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	705	394	1582	0.445	704	0.8	4.211	A
B	872	369	1662	0.525	870	1.1	4.694	A
C	415	329	1622	0.256	415	0.3	3.018	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	705	394	1582	0.446	705	0.8	4.222	A
B	872	370	1662	0.525	872	1.1	4.715	A
C	415	329	1622	0.256	415	0.3	3.019	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	575	322	1625	0.354	576	0.6	3.537	A
B	712	303	1703	0.418	714	0.7	3.770	A
C	339	269	1655	0.205	339	0.3	2.769	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	482	270	1656	0.291	482	0.4	3.155	A
B	596	253	1733	0.344	597	0.5	3.282	A
C	284	225	1680	0.169	284	0.2	2.613	A

Opening Year DEV_HR, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm C - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	6.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	Opening Year DEV_HR	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	544	100.000
B		✓	1120	100.000
C		✓	475	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	255	289
	B	453	0	667
	C	101	374	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	8	3
	B	4	0	2
	C	7	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
A	0.38	3.90	0.6	A
B	0.73	8.03	2.7	A
C	0.34	3.75	0.5	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	410	281	1650	0.248	408	0.3	3.050	A
B	843	217	1755	0.481	839	0.9	4.028	A
C	358	340	1616	0.221	356	0.3	2.987	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	489	336	1617	0.303	489	0.5	3.360	A
B	1007	260	1729	0.582	1005	1.4	5.100	A
C	427	406	1579	0.270	427	0.4	3.269	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	599	411	1571	0.381	598	0.6	3.889	A
B	1233	318	1693	0.728	1228	2.7	7.867	A
C	523	497	1529	0.342	522	0.5	3.741	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	599	412	1571	0.381	599	0.6	3.898	A
B	1233	318	1693	0.728	1233	2.7	8.032	A
C	523	499	1528	0.342	523	0.5	3.748	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	489	337	1616	0.303	490	0.5	3.369	A
B	1007	260	1728	0.583	1012	1.5	5.202	A
C	427	409	1577	0.271	428	0.4	3.277	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	410	282	1649	0.248	410	0.3	3.059	A
B	843	218	1754	0.481	845	1.0	4.082	A
C	358	342	1615	0.221	358	0.3	2.996	A

Opening Year DEV_HR, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm C - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	4.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	Opening Year DEV_HR	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	675	100.000
B		✓	835	100.000
C		✓	395	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	325	350
	B	342	0	493
	C	37	358	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	8	3
	B	4	0	2
	C	7	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
A	0.47	4.52	0.9	A
B	0.56	5.05	1.3	A
C	0.27	3.23	0.4	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	508	269	1657	0.307	506	0.5	3.290	A
B	629	263	1727	0.364	626	0.6	3.356	A
C	297	257	1662	0.179	296	0.2	2.747	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	607	322	1625	0.373	606	0.6	3.720	A
B	751	314	1696	0.443	750	0.8	3.910	A
C	355	307	1634	0.217	355	0.3	2.934	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	743	394	1582	0.470	742	0.9	4.509	A
B	919	385	1653	0.556	918	1.3	5.020	A
C	435	376	1596	0.273	435	0.4	3.232	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	743	394	1582	0.470	743	0.9	4.523	A
B	919	385	1653	0.556	919	1.3	5.047	A
C	435	377	1596	0.273	435	0.4	3.233	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	607	322	1625	0.373	608	0.6	3.733	A
B	751	315	1695	0.443	752	0.8	3.935	A
C	355	308	1634	0.217	355	0.3	2.937	A

18:15 - 18:30

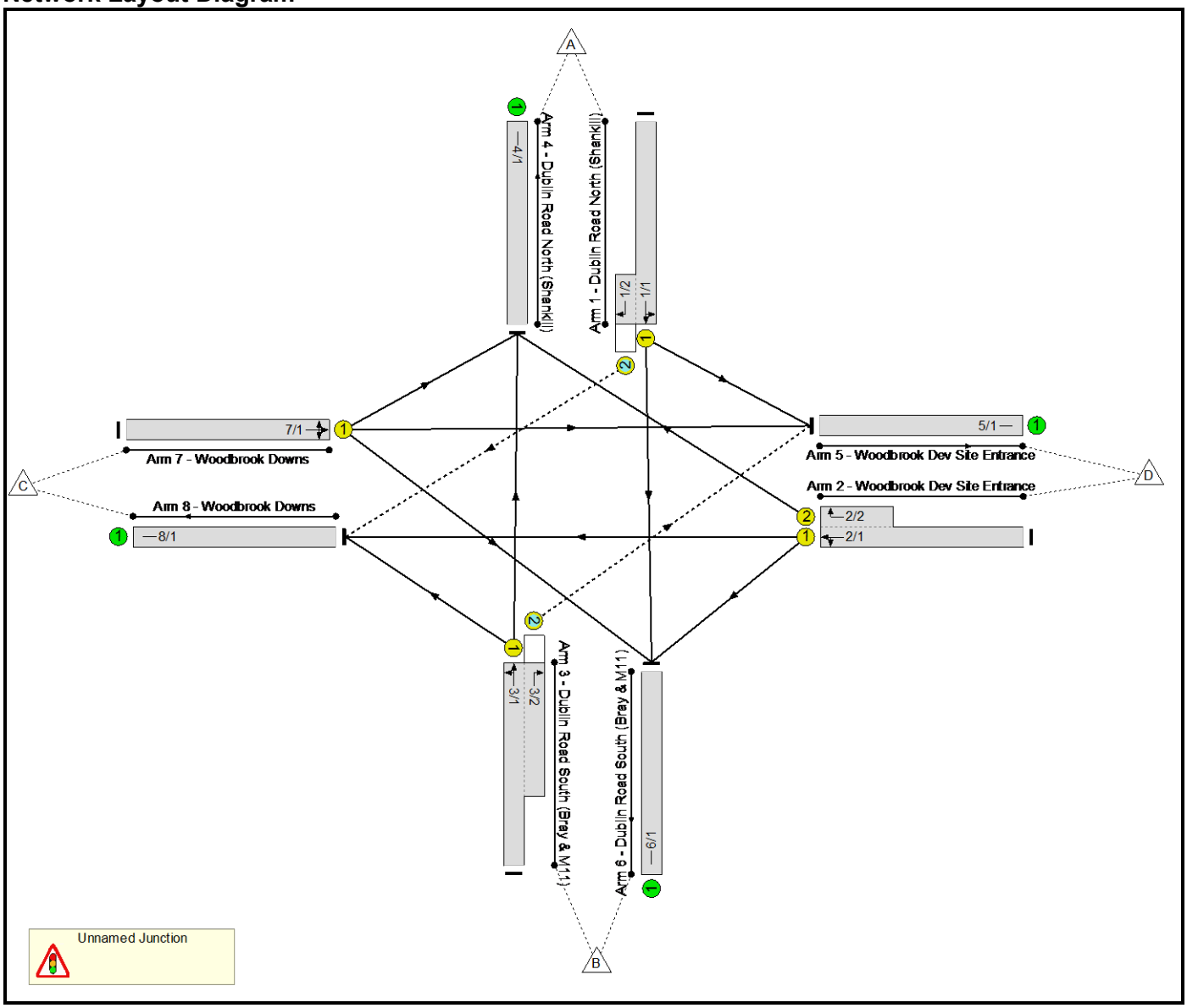
Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
A	508	270	1656	0.307	509	0.5	3.306	A
B	629	264	1726	0.364	630	0.6	3.377	A
C	297	258	1662	0.179	298	0.2	2.754	A

Full Input Data And Results

User and Project Details

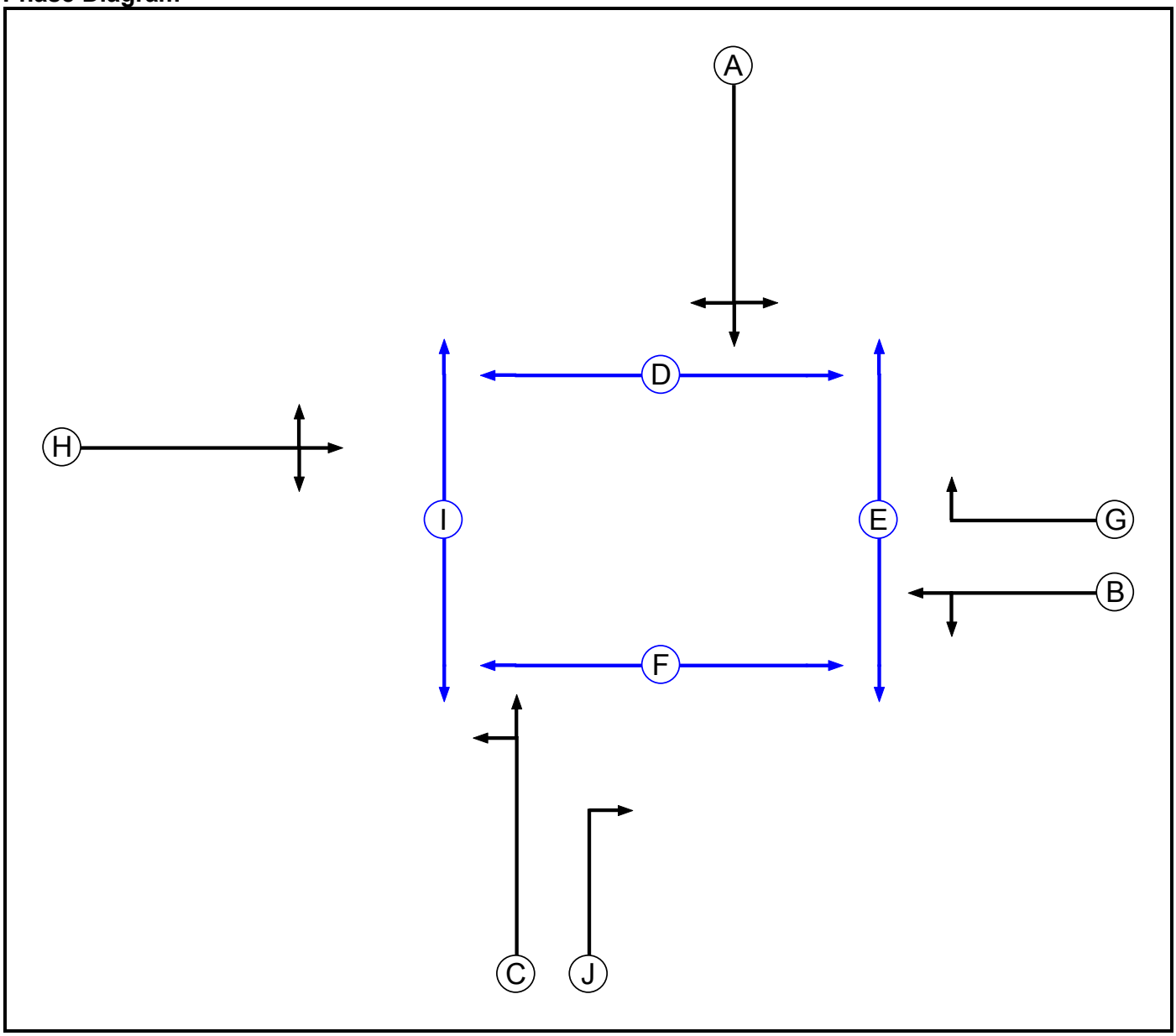
Project:	**Woodbrook Junction 3 Assessment**
Title:	
Location:	
Client:	Aeval
Site Ref(s):	Development Entrance Interim Layout Junction
Design Layout Ref:	5154251
Date Completed:	23/09/2019
Additional detail:	
File name:	J3_Development Entrance Interim Layout P1 With RTL 2019.09.20.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

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	Pedestrian		5	5
E	Pedestrian		5	5
F	Pedestrian		5	5
G	Traffic		7	7
H	Traffic		7	7
I	Pedestrian		5	5
J	Traffic		7	7

Full Input Data And Results

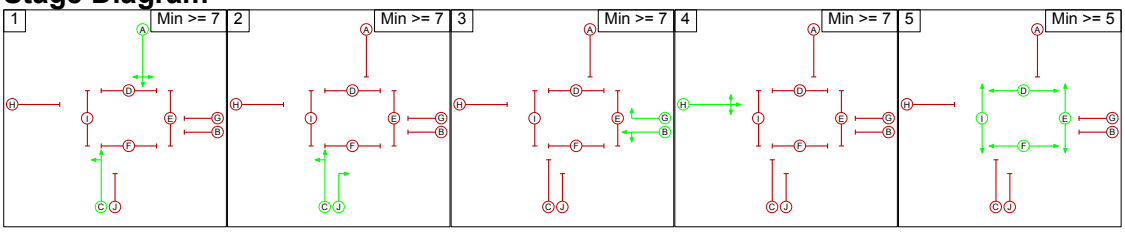
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J
A		7	-	7	7	7	7	7	7	7
B	8		8	8	8	8	-	8	8	8
C	-	7		7	7	7	7	7	7	-
D	10	10	10		-	-	10	10	-	10
E	9	9	9	-		-	9	9	-	9
F	10	10	10	-	-		10	10	-	10
G	8	-	8	8	8	8		8	8	8
H	7	7	7	7	7	7	7		7	7
I	10	10	10	-	-	-	10	10		10
J	7	7	-	7	7	7	7	7	7	

Phases in Stage

Stage No.	Phases in Stage
1	A C
2	C J
3	B G
4	H
5	D E F I

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	5
1		7	7	7	7
2	7		7	7	7
3	8	8		8	8
4	7	7	7		7
5	10	10	10	10	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction											
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)**
1/2 (Dublin Road North (Shankill))	8/1 (Right)	1439	0	3/1	1.09	All	2.00	-	0.50	2	2.00
3/2 (Dublin Road South (Bray & M11))	5/1 (Right)	1439	0	1/1	1.09	All	2.00	-	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction

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 (Dublin Road North (Shankill))	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Left	7.50
											Arm 6 Ahead	Inf
1/2 (Dublin Road North (Shankill))	O	A	2	3	3.7	Geom	-	3.00	0.00	Y	Arm 8 Right	12.00
2/1 (Woodbrook Dev Site Entrance)	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 6 Left	7.50
											Arm 8 Ahead	Inf
2/2 (Woodbrook Dev Site Entrance)	U	G	2	3	5.4	Geom	-	3.00	0.00	N	Arm 4 Right	12.50
3/1 (Dublin Road South (Bray & M11))	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 4 Ahead	Inf
											Arm 8 Left	9.50
3/2 (Dublin Road South (Bray & M11))	O	J	2	3	9.9	Geom	-	3.00	0.00	Y	Arm 5 Right	10.50
4/1 (Dublin Road North (Shankill))	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Woodbrook Dev Site Entrance)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Dublin Road South (Bray & M11))	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Woodbrook Downs)	U	H	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 4 Left	8.00
											Arm 5 Ahead	Inf
											Arm 6 Right	13.60
8/1 (Woodbrook Downs)	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'AM Opening year'	08:00	09:00	01:00	
2: 'PM Opening year'	17:00	18:00	01:00	
3: 'AM Opening year +5'	08:00	09:00	01:00	
4: 'PM Opening year +5'	17:00	18:00	01:00	
5: 'AM Opening year DEV'	08:00	09:00	01:00	
6: 'PM Opening year DEV'	17:00	18:00	01:00	
7: 'AM Opening year +5_DEV'	08:00	09:00	01:00	
8: 'PM Opening year +5_DEV'	17:00	18:00	01:00	

Scenario 1: 'AM Opening year' (FG1: 'AM Opening year', Plan 1: 'Staging Plan No. 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	426	0	0	426
	B	433	1	5	0	439
	C	5	1	0	0	6
	D	0	0	0	0	0
	Tot.	438	428	5	0	871

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: AM Opening year
Junction: Unnamed Junction	
1/1 (with short)	426(In) 426(Out)
1/2 (short)	0
2/1 (with short)	0(In) 0(Out)
2/2 (short)	0
3/1 (with short)	438(In) 438(Out)
3/2 (short)	0
4/1	438
5/1	0
6/1	427
7/1	6
8/1	5

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Dublin Road North (Shankill))	3.00	0.00	Y	Arm 5 Left	7.50	0.0 %	1915	1915
				Arm 6 Ahead	Inf	100.0 %		
1/2 (Dublin Road North (Shankill))	3.00	0.00	Y	Arm 8 Right	12.00	0.0 %	1915	1915
2/1 (Woodbrook Dev Site Entrance)	3.00	0.00	Y	Arm 6 Left	7.50	0.0 %	1915	1915
				Arm 8 Ahead	Inf	0.0 %		
2/2 (Woodbrook Dev Site Entrance)	3.00	0.00	N	Arm 4 Right	12.50	0.0 %	2055	2055
3/1 (Dublin Road South (Bray & M11))	3.00	0.00	Y	Arm 4 Ahead	Inf	98.9 %	1912	1912
				Arm 8 Left	9.50	1.1 %		
3/2 (Dublin Road South (Bray & M11))	3.00	0.00	Y	Arm 5 Right	10.50	0.0 %	1915	1915
4/1 (Dublin Road North (Shankill) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Woodbrook Dev Site Entrance Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Dublin Road South (Bray & M11) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Woodbrook Downs)	3.00	0.00	Y	Arm 4 Left	8.00	83.3 %	1630	1630
				Arm 5 Ahead	Inf	0.0 %		
				Arm 6 Right	13.60	16.7 %		
8/1 (Woodbrook Downs Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'PM Opening year' (FG2: 'PM Opening year', Plan 1: 'Staging Plan No. 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	599	3	0	602
	B	320	1	3	0	324
	C	1	3	0	0	4
	D	0	0	0	0	0
	Tot.	321	603	6	0	930

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: PM Opening year
Junction: Unnamed Junction	
1/1 (with short)	602(In) 599(Out)
1/2 (short)	3
2/1 (with short)	0(In) 0(Out)
2/2 (short)	0
3/1 (with short)	323(In) 323(Out)
3/2 (short)	0
4/1	321
5/1	0
6/1	602
7/1	4
8/1	6

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Dublin Road North (Shankill))	3.00	0.00	Y	Arm 5 Left	7.50	0.0 %	1915	1915
				Arm 6 Ahead	Inf	100.0 %		
1/2 (Dublin Road North (Shankill))	3.00	0.00	Y	Arm 8 Right	12.00	100.0 %	1702	1702
2/1 (Woodbrook Dev Site Entrance)	3.00	0.00	Y	Arm 6 Left	7.50	0.0 %	1915	1915
				Arm 8 Ahead	Inf	0.0 %		
2/2 (Woodbrook Dev Site Entrance)	3.00	0.00	N	Arm 4 Right	12.50	0.0 %	2055	2055
3/1 (Dublin Road South (Bray & M11))	3.00	0.00	Y	Arm 4 Ahead	Inf	99.1 %	1912	1912
				Arm 8 Left	9.50	0.9 %		
3/2 (Dublin Road South (Bray & M11))	3.00	0.00	Y	Arm 5 Right	10.50	0.0 %	1915	1915
4/1 (Dublin Road North (Shankill) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Woodbrook Dev Site Entrance Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Dublin Road South (Bray & M11) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Woodbrook Downs)	3.00	0.00	Y	Arm 4 Left	8.00	25.0 %	1695	1695
				Arm 5 Ahead	Inf	0.0 %		
				Arm 6 Right	13.60	75.0 %		
8/1 (Woodbrook Downs Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 3: 'AM Opening year +5' (FG3: 'AM Opening year +5', Plan 1: 'Staging Plan No. 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	450	0	0	450
	B	458	1	5	0	464
	C	5	1	0	0	6
	D	0	0	0	0	0
	Tot.	463	452	5	0	920

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: AM Opening year +5
Junction: Unnamed Junction	
1/1 (with short)	450(In) 450(Out)
1/2 (short)	0
2/1 (with short)	0(In) 0(Out)
2/2 (short)	0
3/1 (with short)	463(In) 463(Out)
3/2 (short)	0
4/1	463
5/1	0
6/1	451
7/1	6
8/1	5

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Dublin Road North (Shankill))	3.00	0.00	Y	Arm 5 Left	7.50	0.0 %	1915	1915
				Arm 6 Ahead	Inf	100.0 %		
1/2 (Dublin Road North (Shankill))	3.00	0.00	Y	Arm 8 Right	12.00	0.0 %	1915	1915
2/1 (Woodbrook Dev Site Entrance)	3.00	0.00	Y	Arm 6 Left	7.50	0.0 %	1915	1915
				Arm 8 Ahead	Inf	0.0 %		
2/2 (Woodbrook Dev Site Entrance)	3.00	0.00	N	Arm 4 Right	12.50	0.0 %	2055	2055
3/1 (Dublin Road South (Bray & M11))	3.00	0.00	Y	Arm 4 Ahead	Inf	98.9 %	1912	1912
				Arm 8 Left	9.50	1.1 %		
3/2 (Dublin Road South (Bray & M11))	3.00	0.00	Y	Arm 5 Right	10.50	0.0 %	1915	1915
4/1 (Dublin Road North (Shankill) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Woodbrook Dev Site Entrance Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Dublin Road South (Bray & M11) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Woodbrook Downs)	3.00	0.00	Y	Arm 4 Left	8.00	83.3 %	1630	1630
				Arm 5 Ahead	Inf	0.0 %		
				Arm 6 Right	13.60	16.7 %		
8/1 (Woodbrook Downs Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: 'PM Opening year +5' (FG4: 'PM Opening year +5', Plan 1: 'Staging Plan No. 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	631	3	0	634
	B	339	0	3	0	342
	C	1	3	0	0	4
	D	0	0	0	0	0
	Tot.	340	634	6	0	980

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: PM Opening year +5
Junction: Unnamed Junction	
1/1 (with short)	634(In) 631(Out)
1/2 (short)	3
2/1 (with short)	0(In) 0(Out)
2/2 (short)	0
3/1 (with short)	342(In) 342(Out)
3/2 (short)	0
4/1	340
5/1	0
6/1	634
7/1	4
8/1	6

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Dublin Road North (Shankill))	3.00	0.00	Y	Arm 5 Left	7.50	0.0 %	1915	1915
				Arm 6 Ahead	Inf	100.0 %		
1/2 (Dublin Road North (Shankill))	3.00	0.00	Y	Arm 8 Right	12.00	100.0 %	1702	1702
2/1 (Woodbrook Dev Site Entrance)	3.00	0.00	Y	Arm 6 Left	7.50	0.0 %	1915	1915
				Arm 8 Ahead	Inf	0.0 %		
2/2 (Woodbrook Dev Site Entrance)	3.00	0.00	N	Arm 4 Right	12.50	0.0 %	2055	2055
3/1 (Dublin Road South (Bray & M11))	3.00	0.00	Y	Arm 4 Ahead	Inf	99.1 %	1912	1912
				Arm 8 Left	9.50	0.9 %		
3/2 (Dublin Road South (Bray & M11))	3.00	0.00	Y	Arm 5 Right	10.50	0.0 %	1915	1915
4/1 (Dublin Road North (Shankill) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Woodbrook Dev Site Entrance Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Dublin Road South (Bray & M11) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Woodbrook Downs)	3.00	0.00	Y	Arm 4 Left	8.00	25.0 %	1695	1695
				Arm 5 Ahead	Inf	0.0 %		
				Arm 6 Right	13.60	75.0 %		
8/1 (Woodbrook Downs Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 5: 'AM Opening year DEV' (FG5: 'AM Opening year DEV', Plan 1: 'Staging Plan No. 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	426	0	19	445
	B	433	1	5	26	465
	C	5	1	0	0	6
	D	65	80	0	0	145
	Tot.	503	508	5	45	1061

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: AM Opening year DEV
Junction: Unnamed Junction	
1/1 (with short)	445(In) 445(Out)
1/2 (short)	0
2/1 (with short)	145(In) 80(Out)
2/2 (short)	65
3/1 (with short)	464(In) 438(Out)
3/2 (short)	26
4/1	503
5/1	45
6/1	507
7/1	6
8/1	5

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Dublin Road North (Shankill))	3.00	0.00	Y	Arm 5 Left	7.50	4.3 %	1899	1899
				Arm 6 Ahead	Inf	95.7 %		
1/2 (Dublin Road North (Shankill))	3.00	0.00	Y	Arm 8 Right	12.00	0.0 %	1915	1915
2/1 (Woodbrook Dev Site Entrance)	3.00	0.00	Y	Arm 6 Left	7.50	100.0 %	1596	1596
				Arm 8 Ahead	Inf	0.0 %		
2/2 (Woodbrook Dev Site Entrance)	3.00	0.00	N	Arm 4 Right	12.50	100.0 %	1835	1835
3/1 (Dublin Road South (Bray & M11))	3.00	0.00	Y	Arm 4 Ahead	Inf	98.9 %	1912	1912
				Arm 8 Left	9.50	1.1 %		
3/2 (Dublin Road South (Bray & M11))	3.00	0.00	Y	Arm 5 Right	10.50	100.0 %	1676	1676
4/1 (Dublin Road North (Shankill) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Woodbrook Dev Site Entrance Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Dublin Road South (Bray & M11) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Woodbrook Downs)	3.00	0.00	Y	Arm 4 Left	8.00	83.3 %	1630	1630
				Arm 5 Ahead	Inf	0.0 %		
				Arm 6 Right	13.60	16.7 %		
8/1 (Woodbrook Downs Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 6: 'PM Opening year DEV' (FG6: 'PM Opening year DEV', Plan 1: 'Staging Plan No. 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	599	3	52	654
	B	320	1	3	61	385
	C	1	3	0	0	4
	D	21	36	0	0	57
	Tot.	342	639	6	113	1100

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: PM Opening year DEV
Junction: Unnamed Junction	
1/1 (with short)	654(In) 651(Out)
1/2 (short)	3
2/1 (with short)	57(In) 36(Out)
2/2 (short)	21
3/1 (with short)	384(In) 323(Out)
3/2 (short)	61
4/1	342
5/1	113
6/1	638
7/1	4
8/1	6

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Dublin Road North (Shankill))	3.00	0.00	Y	Arm 5 Left	7.50	8.0 %	1885	1885
				Arm 6 Ahead	Inf	92.0 %		
1/2 (Dublin Road North (Shankill))	3.00	0.00	Y	Arm 8 Right	12.00	100.0 %	1702	1702
2/1 (Woodbrook Dev Site Entrance)	3.00	0.00	Y	Arm 6 Left	7.50	100.0 %	1596	1596
				Arm 8 Ahead	Inf	0.0 %		
2/2 (Woodbrook Dev Site Entrance)	3.00	0.00	N	Arm 4 Right	12.50	100.0 %	1835	1835
3/1 (Dublin Road South (Bray & M11))	3.00	0.00	Y	Arm 4 Ahead	Inf	99.1 %	1912	1912
				Arm 8 Left	9.50	0.9 %		
3/2 (Dublin Road South (Bray & M11))	3.00	0.00	Y	Arm 5 Right	10.50	100.0 %	1676	1676
4/1 (Dublin Road North (Shankill) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Woodbrook Dev Site Entrance Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Dublin Road South (Bray & M11) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Woodbrook Downs)	3.00	0.00	Y	Arm 4 Left	8.00	25.0 %	1695	1695
				Arm 5 Ahead	Inf	0.0 %		
				Arm 6 Right	13.60	75.0 %		
8/1 (Woodbrook Downs Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 7: 'AM Opening +5_DEV' (FG7: 'AM Opening year +5_DEV', Plan 1: 'Staging Plan No. 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	450	0	43	493
	B	458	0	5	60	523
	C	5	1	0	0	6
	D	64	79	0	0	143
	Tot.	527	530	5	103	1165

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: AM Opening +5_DEV
Junction: Unnamed Junction	
1/1 (with short)	493(In) 493(Out)
1/2 (short)	0
2/1 (with short)	143(In) 79(Out)
2/2 (short)	64
3/1 (with short)	523(In) 463(Out)
3/2 (short)	60
4/1	527
5/1	103
6/1	530
7/1	6
8/1	5

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Dublin Road North (Shankill))	3.00	0.00	Y	Arm 5 Left	7.50	8.7 %	1882	1882
				Arm 6 Ahead	Inf	91.3 %		
1/2 (Dublin Road North (Shankill))	3.00	0.00	Y	Arm 8 Right	12.00	0.0 %	1915	1915
2/1 (Woodbrook Dev Site Entrance)	3.00	0.00	Y	Arm 6 Left	7.50	100.0 %	1596	1596
				Arm 8 Ahead	Inf	0.0 %		
2/2 (Woodbrook Dev Site Entrance)	3.00	0.00	N	Arm 4 Right	12.50	100.0 %	1835	1835
3/1 (Dublin Road South (Bray & M11))	3.00	0.00	Y	Arm 4 Ahead	Inf	98.9 %	1912	1912
				Arm 8 Left	9.50	1.1 %		
3/2 (Dublin Road South (Bray & M11))	3.00	0.00	Y	Arm 5 Right	10.50	100.0 %	1676	1676
4/1 (Dublin Road North (Shankill) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Woodbrook Dev Site Entrance Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Dublin Road South (Bray & M11) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Woodbrook Downs)	3.00	0.00	Y	Arm 4 Left	8.00	83.3 %	1630	1630
				Arm 5 Ahead	Inf	0.0 %		
				Arm 6 Right	13.60	16.7 %		
8/1 (Woodbrook Downs Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 8: 'PM Opening +5_DEV' (FG8: 'PM Opening year +5_DEV', Plan 1: 'Staging Plan No. 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	631	3	53	687
	B	339	1	3	63	406
	C	1	3	0	0	4
	D	37	63	0	0	100
	Tot.	377	698	6	116	1197

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: PM Opening +5_DEV
Junction: Unnamed Junction	
1/1 (with short)	687(In) 684(Out)
1/2 (short)	3
2/1 (with short)	100(In) 63(Out)
2/2 (short)	37
3/1 (with short)	405(In) 342(Out)
3/2 (short)	63
4/1	377
5/1	116
6/1	697
7/1	4
8/1	6

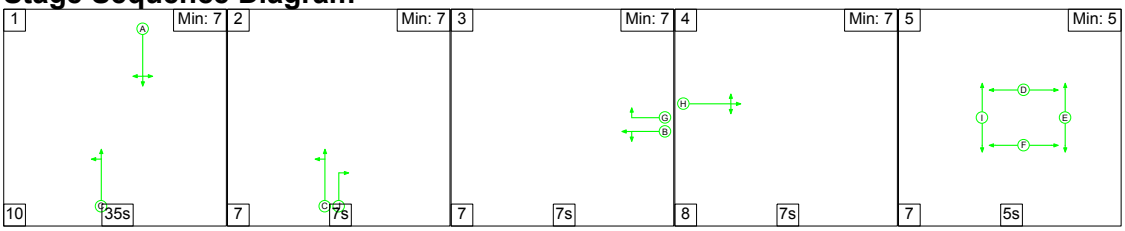
Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
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 (Dublin Road North (Shankill))	3.00	0.00	Y	Arm 5 Left	7.50	7.7 %	1886	1886
				Arm 6 Ahead	Inf	92.3 %		
1/2 (Dublin Road North (Shankill))	3.00	0.00	Y	Arm 8 Right	12.00	100.0 %	1702	1702
2/1 (Woodbrook Dev Site Entrance)	3.00	0.00	Y	Arm 6 Left	7.50	100.0 %	1596	1596
				Arm 8 Ahead	Inf	0.0 %		
2/2 (Woodbrook Dev Site Entrance)	3.00	0.00	N	Arm 4 Right	12.50	100.0 %	1835	1835
3/1 (Dublin Road South (Bray & M11))	3.00	0.00	Y	Arm 4 Ahead	Inf	99.1 %	1912	1912
				Arm 8 Left	9.50	0.9 %		
3/2 (Dublin Road South (Bray & M11))	3.00	0.00	Y	Arm 5 Right	10.50	100.0 %	1676	1676
4/1 (Dublin Road North (Shankill) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Woodbrook Dev Site Entrance Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Dublin Road South (Bray & M11) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Woodbrook Downs)	3.00	0.00	Y	Arm 4 Left	8.00	25.0 %	1695	1695
				Arm 5 Ahead	Inf	0.0 %		
				Arm 6 Right	13.60	75.0 %		
8/1 (Woodbrook Downs Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 1: 'AM Opening year' (FG1: 'AM Opening year', Plan 1: 'Staging Plan No. 1')

Stage Sequence Diagram

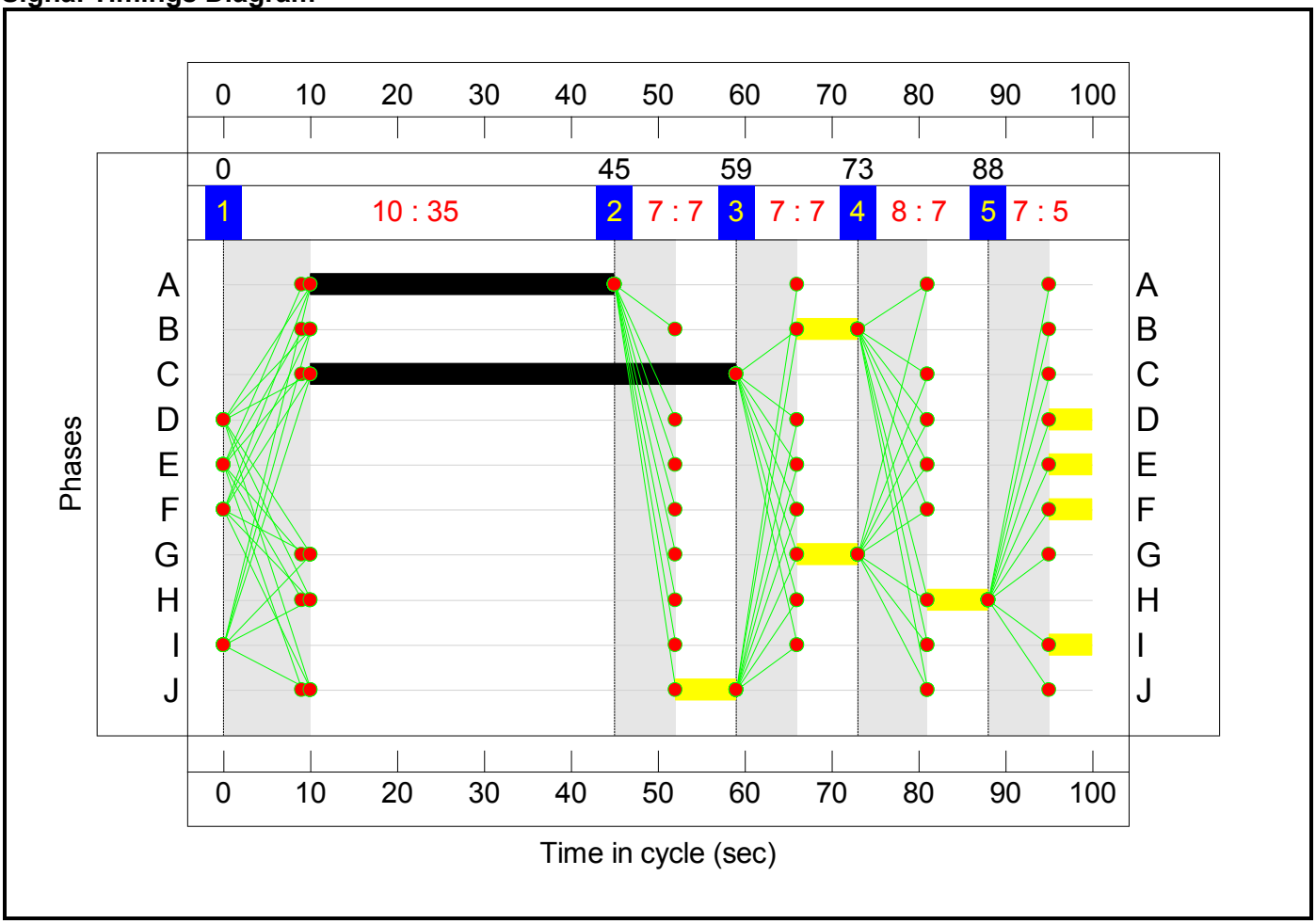


Stage Timings

Stage	1	2	3	4	5
Duration	35	7	7	7	5
Change Point	0	45	59	73	88

Full Input Data And Results

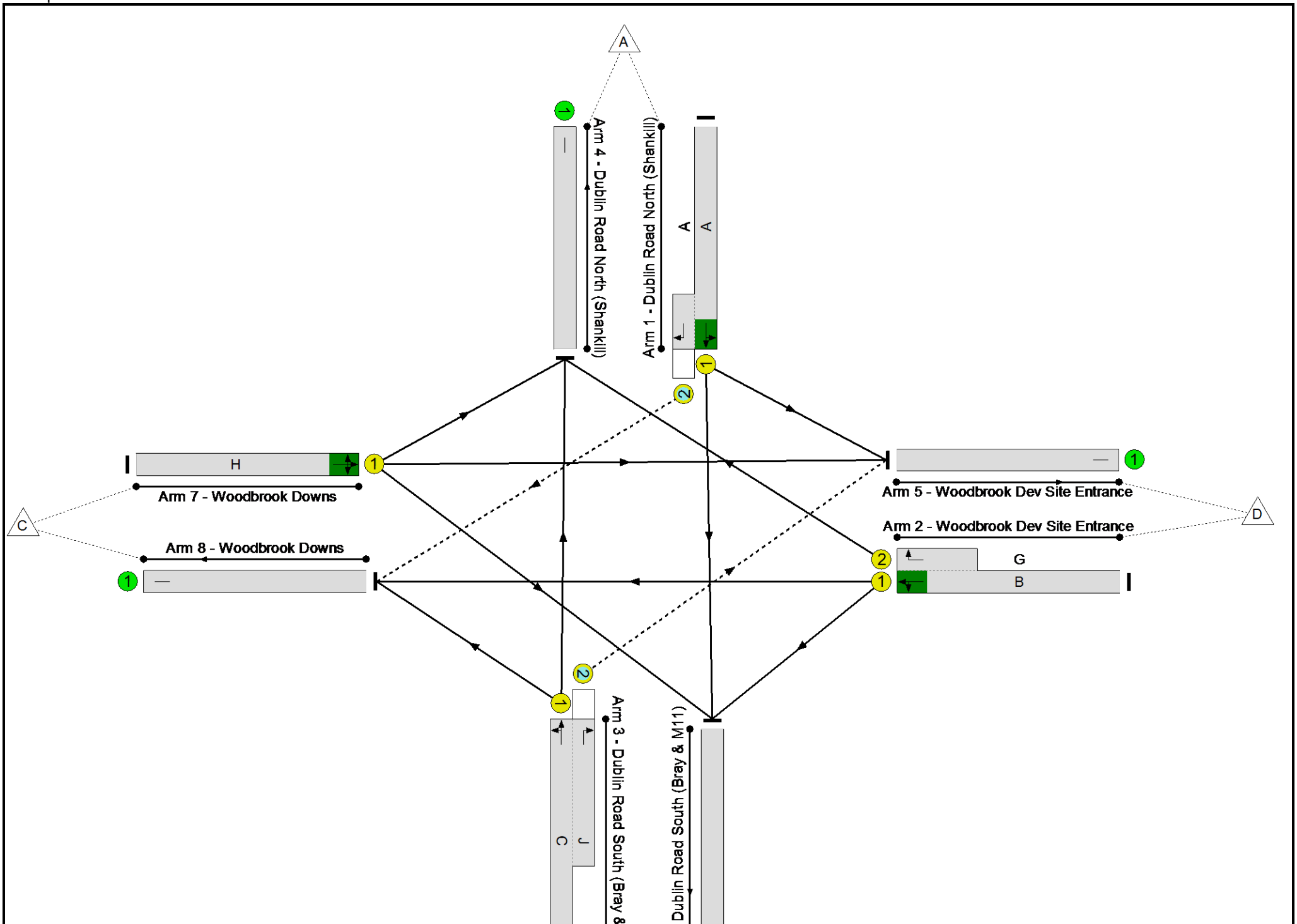
Signal Timings Diagram



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	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**54.3%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**54.3%**
1/1+1/2	Dublin Road North (Shankill) Left Ahead Right	U+O	N/A	N/A	A		1	35	-	426	1915:1915	785+0	54.3 : 0.0%
2/1+2/2	Woodbrook Dev Site Entrance Right Left Ahead	U	N/A	N/A	B G		1	7	-	0	1915:2055	191+96	0.0 : 0.0%
3/1+3/2	Dublin Road South (Bray & M11) Ahead Right Left	U+O	N/A	N/A	C J		1	49:7	-	438	1912:1915	956+0	45.8 : 0.0%
4/1	Dublin Road North (Shankill)	U	N/A	N/A	-		-	-	-	438	Inf	Inf	0.0%
5/1	Woodbrook Dev Site Entrance	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
6/1	Dublin Road South (Bray & M11)	U	N/A	N/A	-		-	-	-	427	Inf	Inf	0.0%
7/1	Woodbrook Downs Left Ahead Right	U	N/A	N/A	H		1	7	-	6	1630	163	3.7%
8/1	Woodbrook Downs	U	N/A	N/A	-		-	-	-	5	Inf	Inf	0.0%

Full Input Data And Results

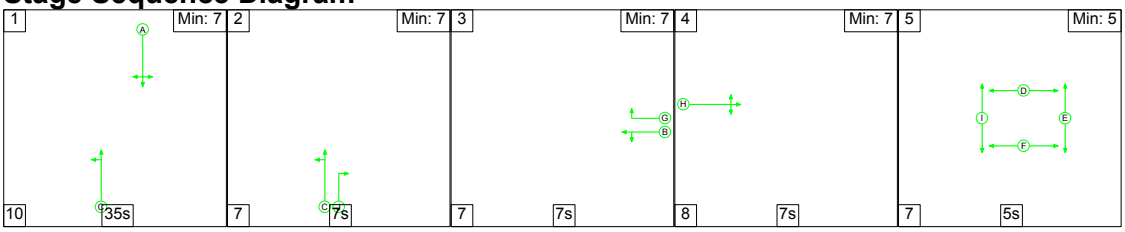
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**4.7**	**1.0**	**0.0**	**5.7**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**4.7**	**1.0**	**0.0**	**5.7**	**-**	**-**	**-**	**-**
1/1+1/2	426	426	0	0	0	2.6	0.6	0.0	3.2	27.4	8.9	0.6	9.5
2/1+2/2	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1+3/2	438	438	0	0	0	2.0	0.4	0.0	2.4	19.7	7.8	0.4	8.2
4/1	438	438	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	427	427	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	6	6	-	-	-	0.1	0.0	-	0.1	52.4	0.2	0.0	0.2
8/1	5	5	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 65.9 Total Delay for Signalled Lanes (pcuHr): 5.72 Cycle Time (s): 100
PRC Over All Lanes (%): 65.9 Total Delay Over All Lanes(pcuHr): 5.72

Full Input Data And Results

Scenario 2: 'PM Opening year' (FG2: 'PM Opening year', Plan 1: 'Staging Plan No. 1')

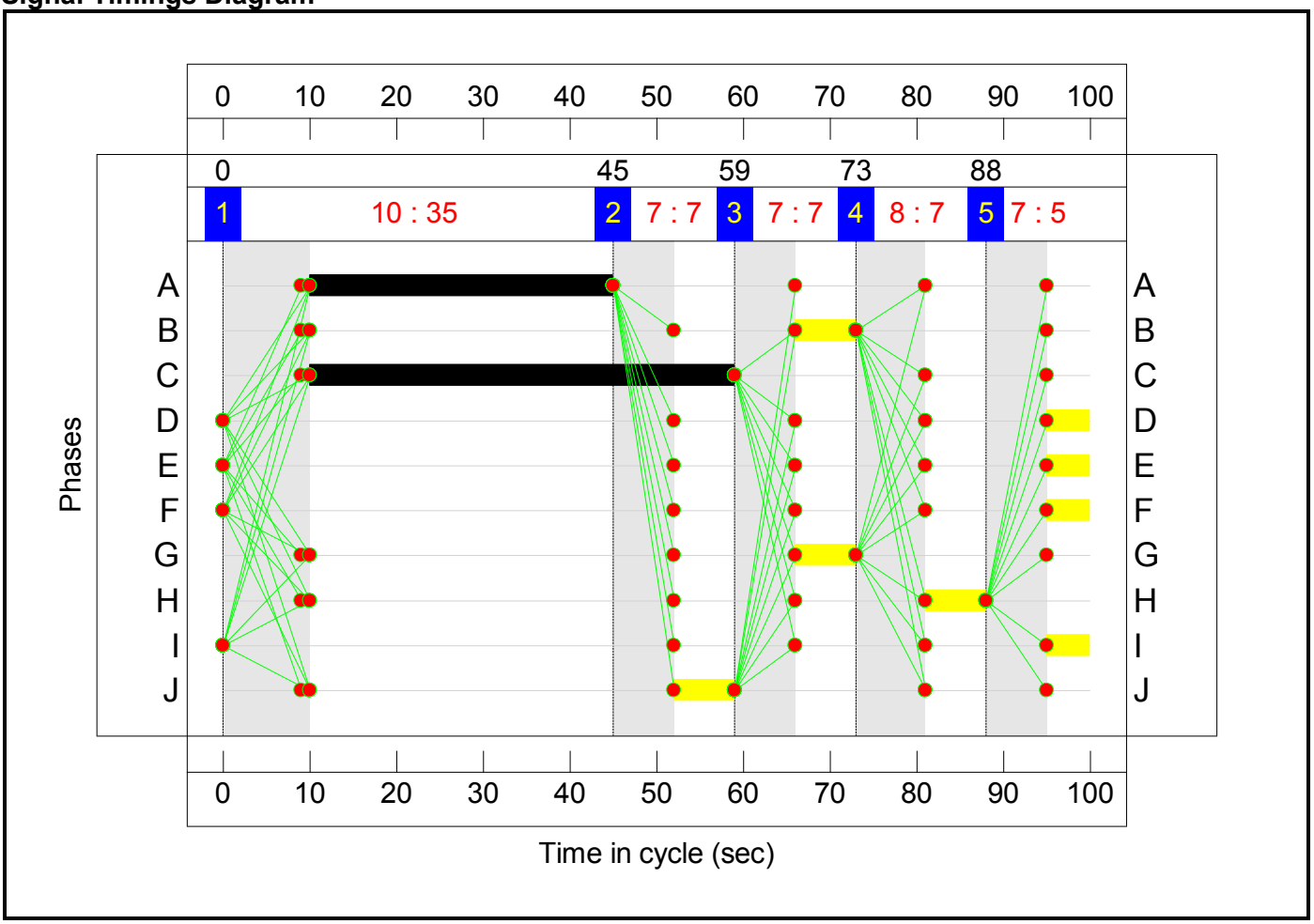
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	5
Duration	35	7	7	7	5
Change Point	0	45	59	73	88

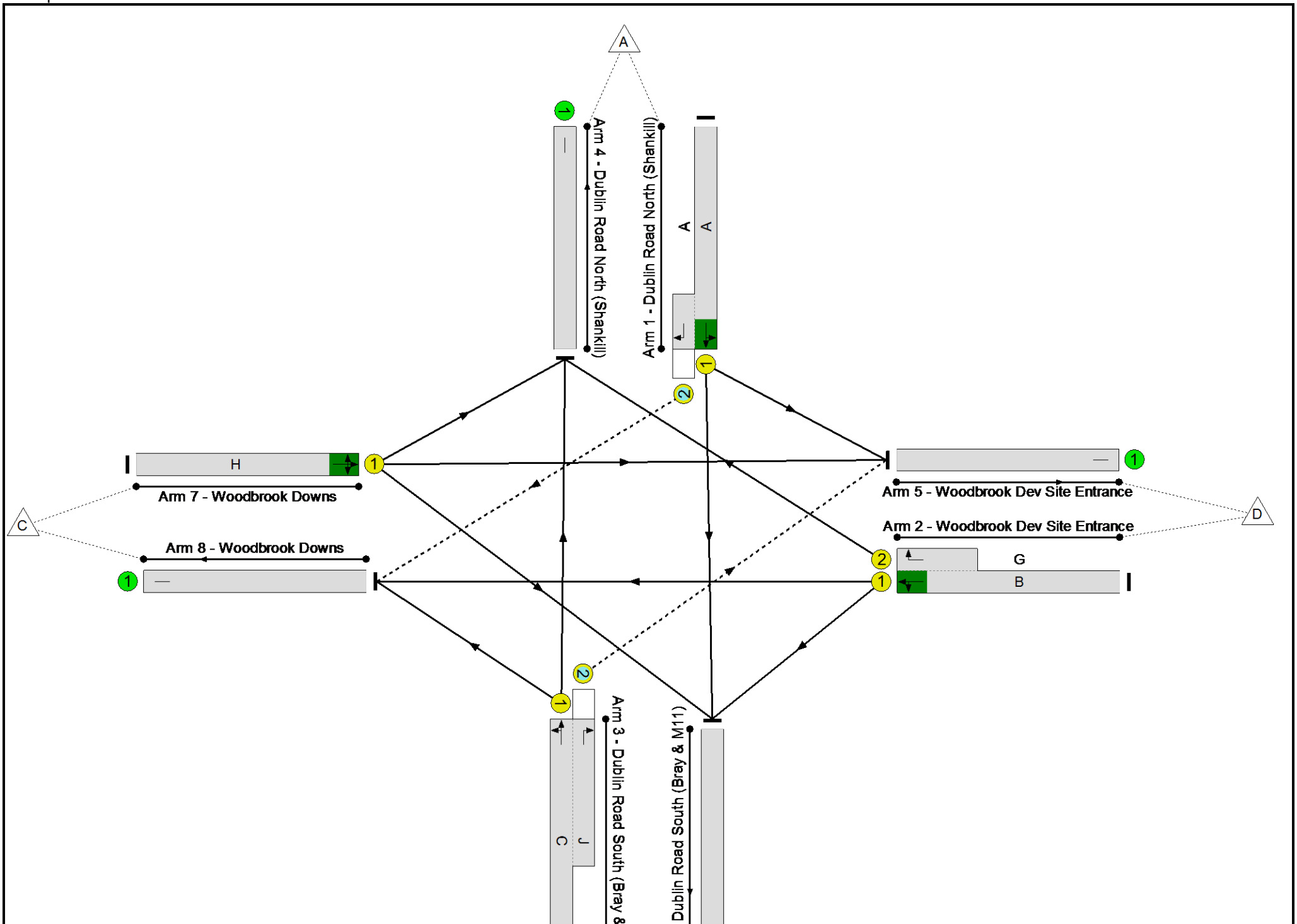
Signal Timings Diagram



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	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**76.3%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**76.3%**
1/1+1/2	Dublin Road North (Shankill) Left Ahead Right	U+O	N/A	N/A	A		1	35	-	602	1915:1702	785+4	76.3 : 76.3%
2/1+2/2	Woodbrook Dev Site Entrance Right Left Ahead	U	N/A	N/A	B G		1	7	-	0	1915:2055	192+128	0.0 : 0.0%
3/1+3/2	Dublin Road South (Bray & M11) Ahead Right Left	U+O	N/A	N/A	C J		1	49:7	-	323	1912:1915	956+0	33.8 : 0.0%
4/1	Dublin Road North (Shankill)	U	N/A	N/A	-		-	-	-	321	Inf	Inf	0.0%
5/1	Woodbrook Dev Site Entrance	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
6/1	Dublin Road South (Bray & M11)	U	N/A	N/A	-		-	-	-	602	Inf	Inf	0.0%
7/1	Woodbrook Downs Left Ahead Right	U	N/A	N/A	H		1	7	-	4	1695	169	2.4%
8/1	Woodbrook Downs	U	N/A	N/A	-		-	-	-	6	Inf	Inf	0.0%

Full Input Data And Results

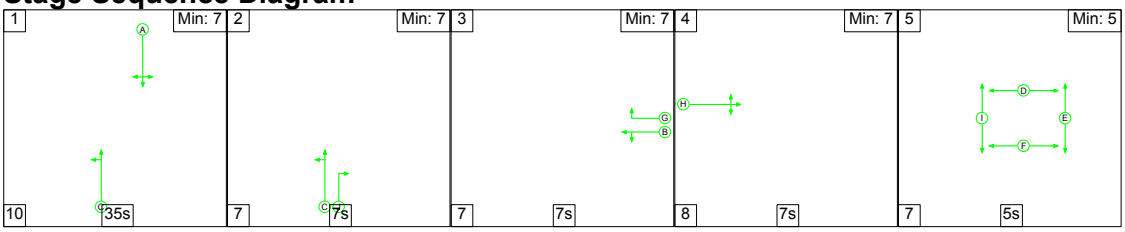
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**3**	**0**	**0**	**5.6**	**1.8**	**0.0**	**7.5**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**3**	**0**	**0**	**5.6**	**1.8**	**0.0**	**7.5**	**-**	**-**	**-**	**-**
1/1+1/2	602	602	3	0	0	4.2	1.6	0.0	5.8	34.8	14.2	1.6	15.8
2/1+2/2	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1+3/2	323	323	0	0	0	1.3	0.3	0.0	1.6	17.9	5.4	0.3	5.6
4/1	321	321	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	602	602	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	4	4	-	-	-	0.0	0.0	-	0.1	51.8	0.1	0.0	0.1
8/1	6	6	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 18.0 Total Delay for Signalled Lanes (pcuHr): 7.48 Cycle Time (s): 100
PRC Over All Lanes (%): 18.0 Total Delay Over All Lanes(pcuHr): 7.48

Full Input Data And Results

Scenario 3: 'AM Opening year +5' (FG3: 'AM Opening year +5', Plan 1: 'Staging Plan No. 1')

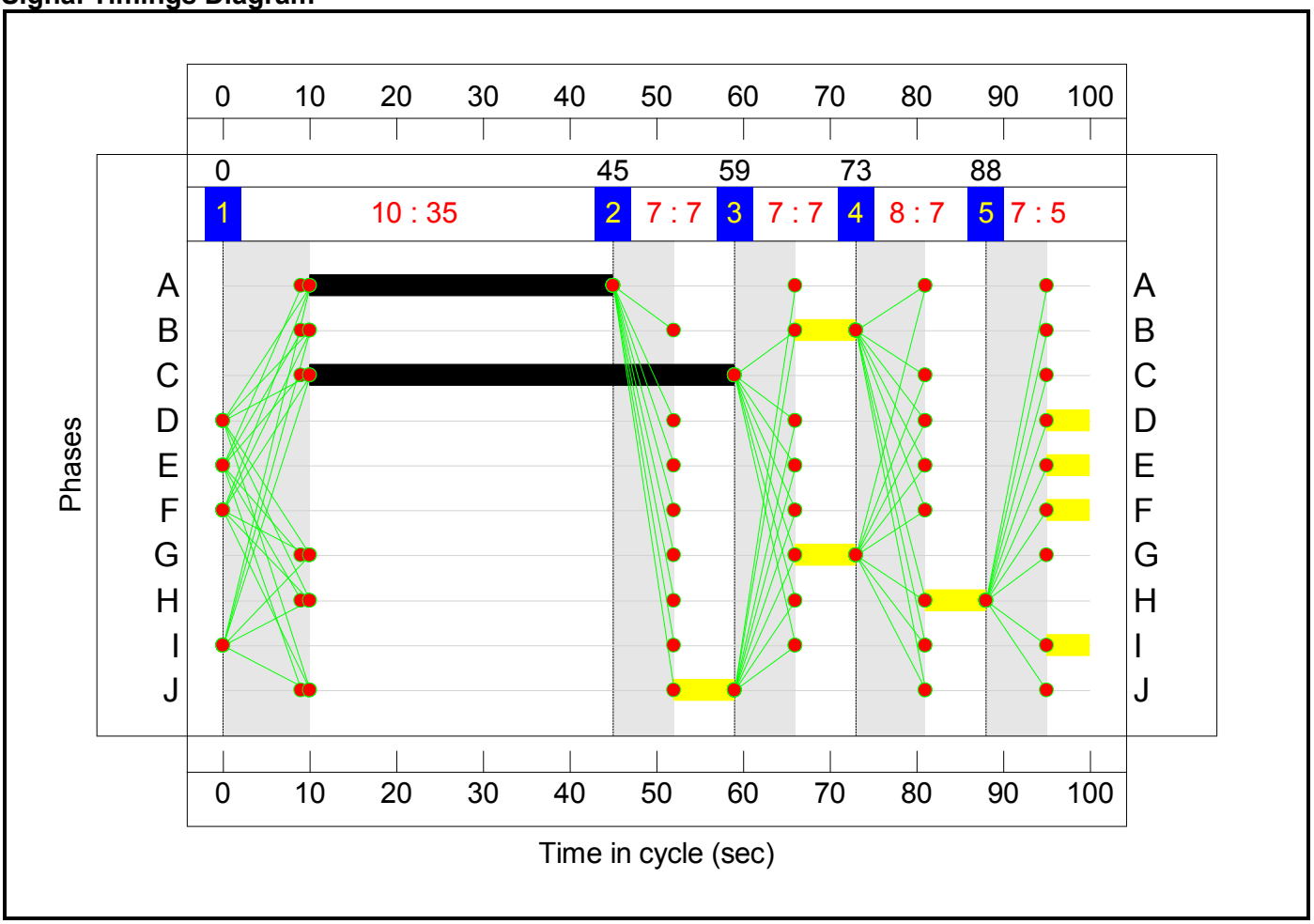
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	5
Duration	35	7	7	7	5
Change Point	0	45	59	73	88

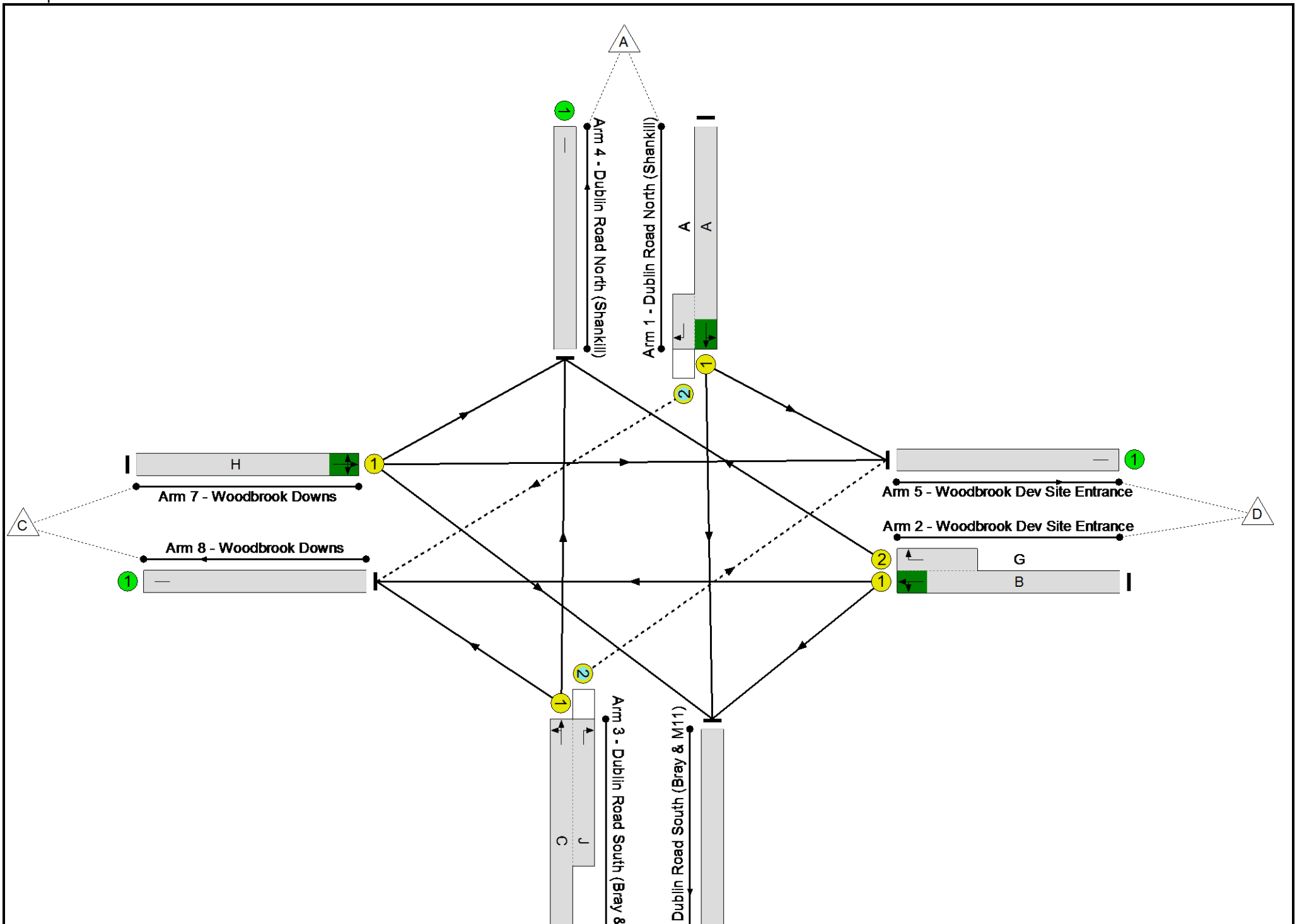
Signal Timings Diagram



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	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**57.3%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**57.3%**
1/1+1/2	Dublin Road North (Shankill) Left Ahead Right	U+O	N/A	N/A	A		1	35	-	450	1915:1915	785+0	57.3 : 0.0%
2/1+2/2	Woodbrook Dev Site Entrance Right Left Ahead	U	N/A	N/A	B G		1	7	-	0	1915:2055	191+96	0.0 : 0.0%
3/1+3/2	Dublin Road South (Bray & M11) Ahead Right Left	U+O	N/A	N/A	C J		1	49:7	-	463	1912:1915	956+0	48.4 : 0.0%
4/1	Dublin Road North (Shankill)	U	N/A	N/A	-		-	-	-	463	Inf	Inf	0.0%
5/1	Woodbrook Dev Site Entrance	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
6/1	Dublin Road South (Bray & M11)	U	N/A	N/A	-		-	-	-	451	Inf	Inf	0.0%
7/1	Woodbrook Downs Left Ahead Right	U	N/A	N/A	H		1	7	-	6	1630	163	3.7%
8/1	Woodbrook Downs	U	N/A	N/A	-		-	-	-	5	Inf	Inf	0.0%

Full Input Data And Results

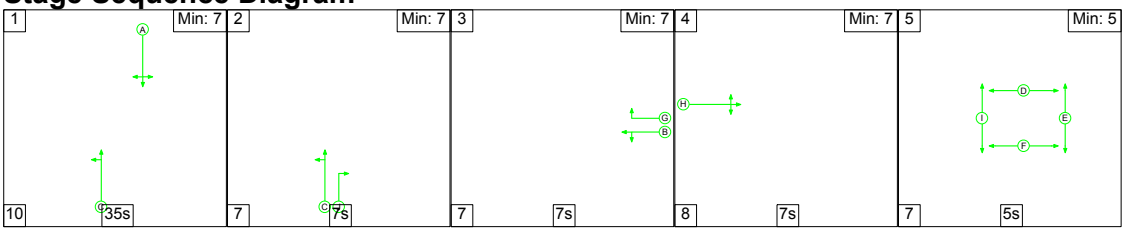
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**5.0**	**1.2**	**0.0**	**6.2**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**5.0**	**1.2**	**0.0**	**6.2**	**-**	**-**	**-**	**-**
1/1+1/2	450	450	0	0	0	2.8	0.7	0.0	3.5	28.1	9.6	0.7	10.3
2/1+2/2	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1+3/2	463	463	0	0	0	2.1	0.5	0.0	2.6	20.1	8.4	0.5	8.8
4/1	463	463	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	451	451	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	6	6	-	-	-	0.1	0.0	-	0.1	52.4	0.2	0.0	0.2
8/1	5	5	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 57.0 Total Delay for Signalled Lanes (pcuHr): 6.19 Cycle Time (s): 100
PRC Over All Lanes (%): 57.0 Total Delay Over All Lanes(pcuHr): 6.19

Full Input Data And Results

Scenario 4: 'PM Opening year +5' (FG4: 'PM Opening year +5', Plan 1: 'Staging Plan No. 1')

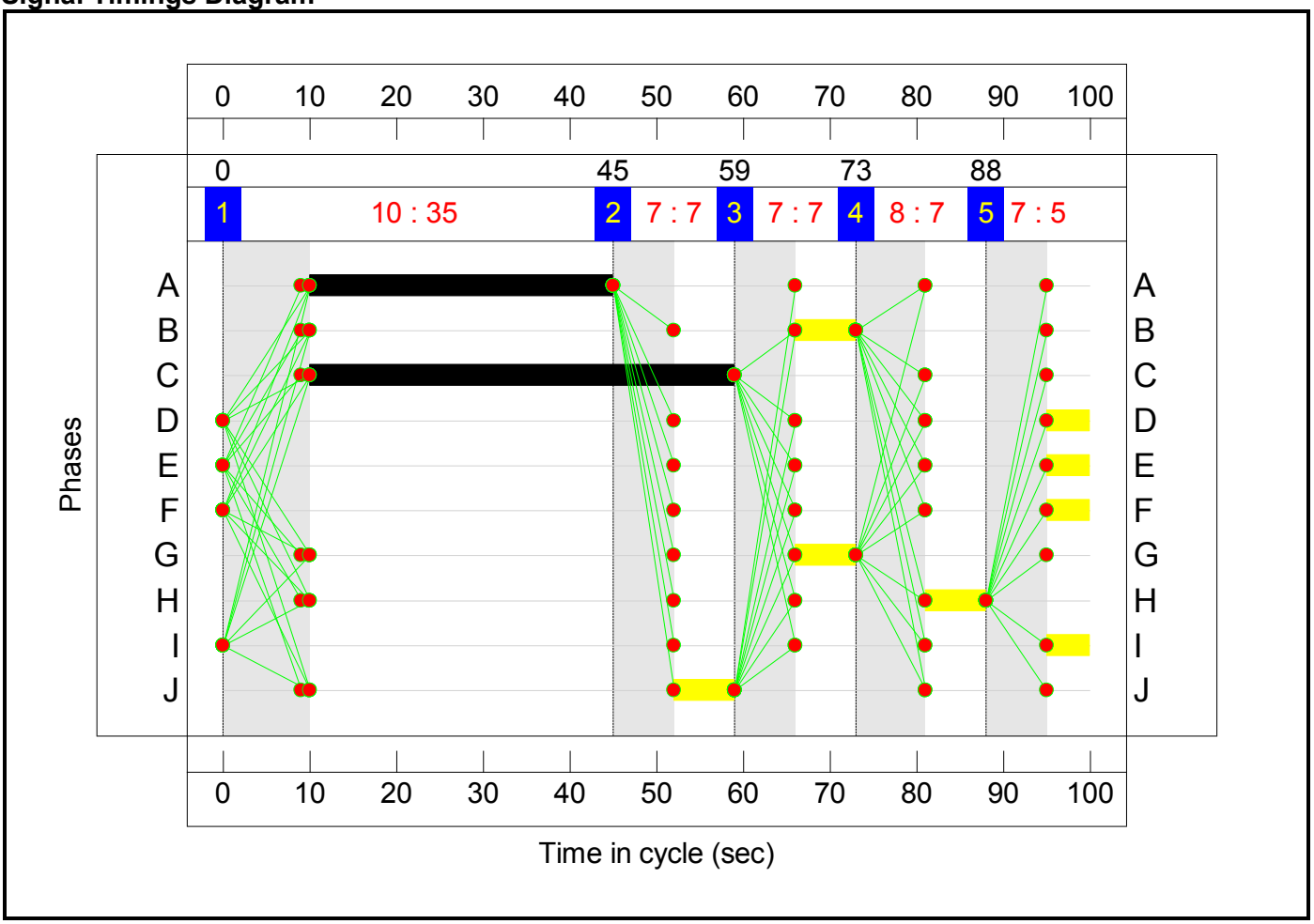
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	5
Duration	35	7	7	7	5
Change Point	0	45	59	73	88

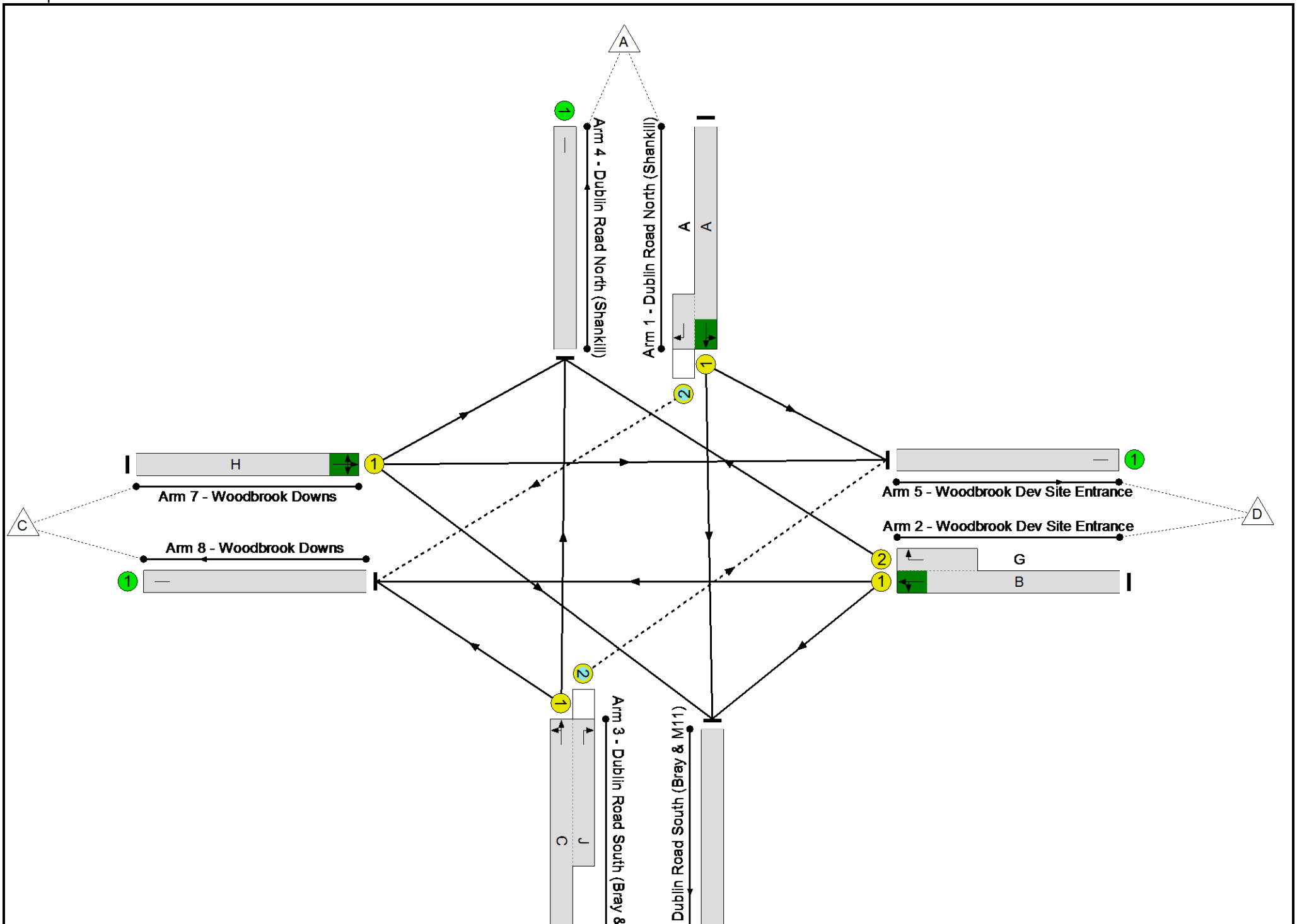
Signal Timings Diagram



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	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**80.4%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**80.4%**
1/1+1/2	Dublin Road North (Shankill) Left Ahead Right	U+O	N/A	N/A	A		1	35	-	634	1915:1702	785+4	80.4 : 80.4%
2/1+2/2	Woodbrook Dev Site Entrance Right Left Ahead	U	N/A	N/A	B G		1	7	-	0	1915:2055	192+128	0.0 : 0.0%
3/1+3/2	Dublin Road South (Bray & M11) Ahead Right Left	U+O	N/A	N/A	C J		1	49:7	-	342	1912:1915	956+0	35.8 : 0.0%
4/1	Dublin Road North (Shankill)	U	N/A	N/A	-		-	-	-	340	Inf	Inf	0.0%
5/1	Woodbrook Dev Site Entrance	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
6/1	Dublin Road South (Bray & M11)	U	N/A	N/A	-		-	-	-	634	Inf	Inf	0.0%
7/1	Woodbrook Downs Left Ahead Right	U	N/A	N/A	H		1	7	-	4	1695	169	2.4%
8/1	Woodbrook Downs	U	N/A	N/A	-		-	-	-	6	Inf	Inf	0.0%

Full Input Data And Results

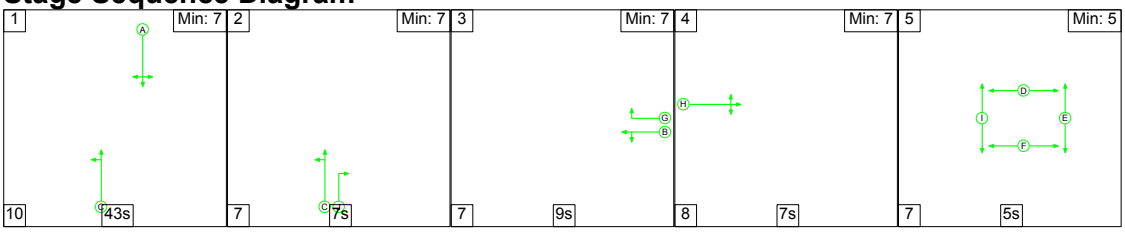
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**3**	**0**	**0**	**6.1**	**2.3**	**0.0**	**8.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**3**	**0**	**0**	**6.1**	**2.3**	**0.0**	**8.4**	**-**	**-**	**-**	**-**
1/1+1/2	634	634	3	0	0	4.6	2.0	0.0	6.6	37.3	15.3	2.0	17.3
2/1+2/2	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1+3/2	342	342	0	0	0	1.4	0.3	0.0	1.7	18.2	5.7	0.3	6.0
4/1	340	340	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	634	634	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	4	4	-	-	-	0.0	0.0	-	0.1	51.8	0.1	0.0	0.1
8/1	6	6	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 12.0 Total Delay for Signalled Lanes (pcuHr): 8.35 Cycle Time (s): 100
PRC Over All Lanes (%): 12.0 Total Delay Over All Lanes(pcuHr): 8.35

Full Input Data And Results

Scenario 5: 'AM Opening year DEV' (FG5: 'AM Opening year DEV', Plan 1: 'Staging Plan No. 1')

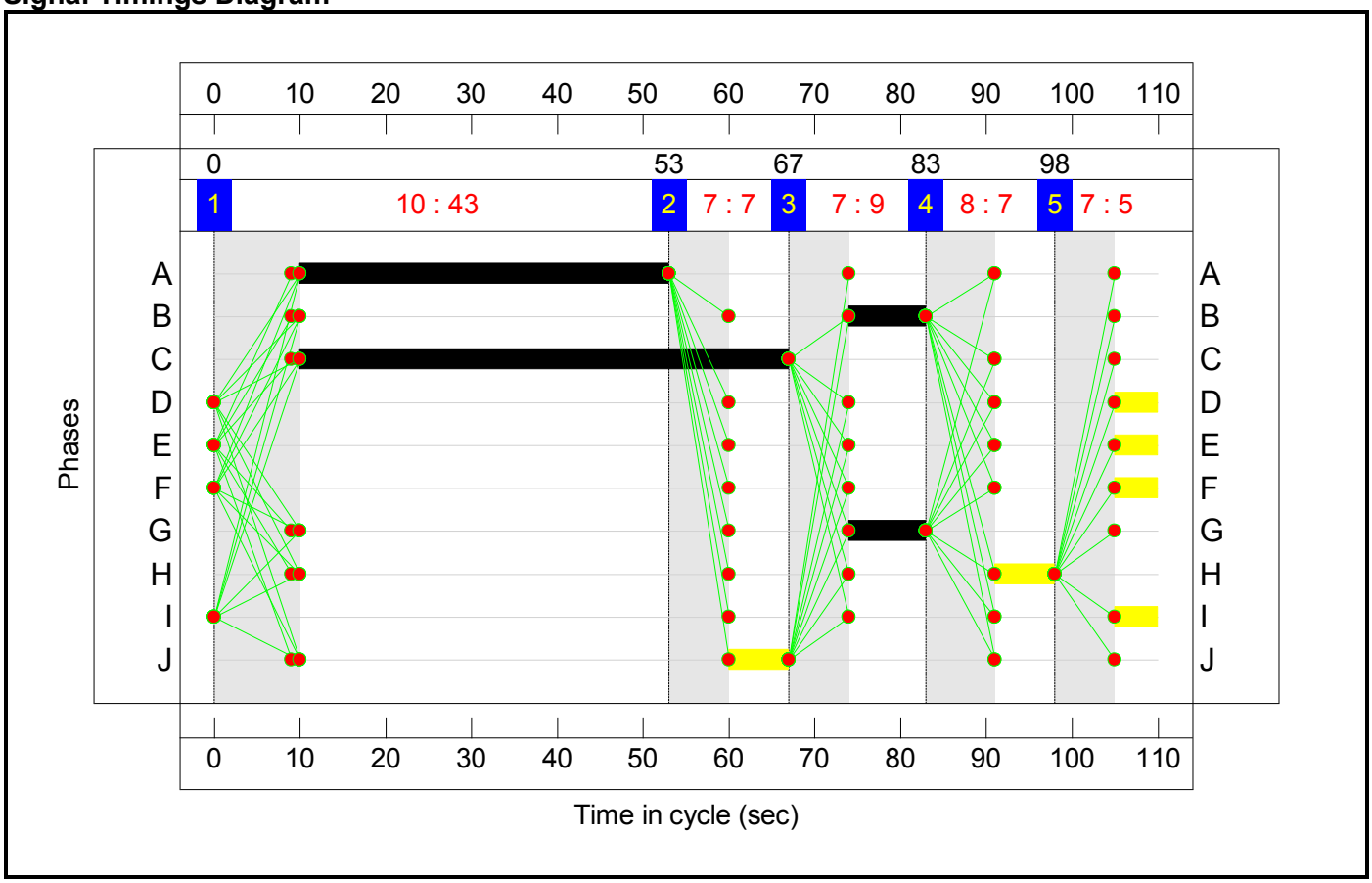
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	5
Duration	43	7	9	7	5
Change Point	0	53	67	83	98

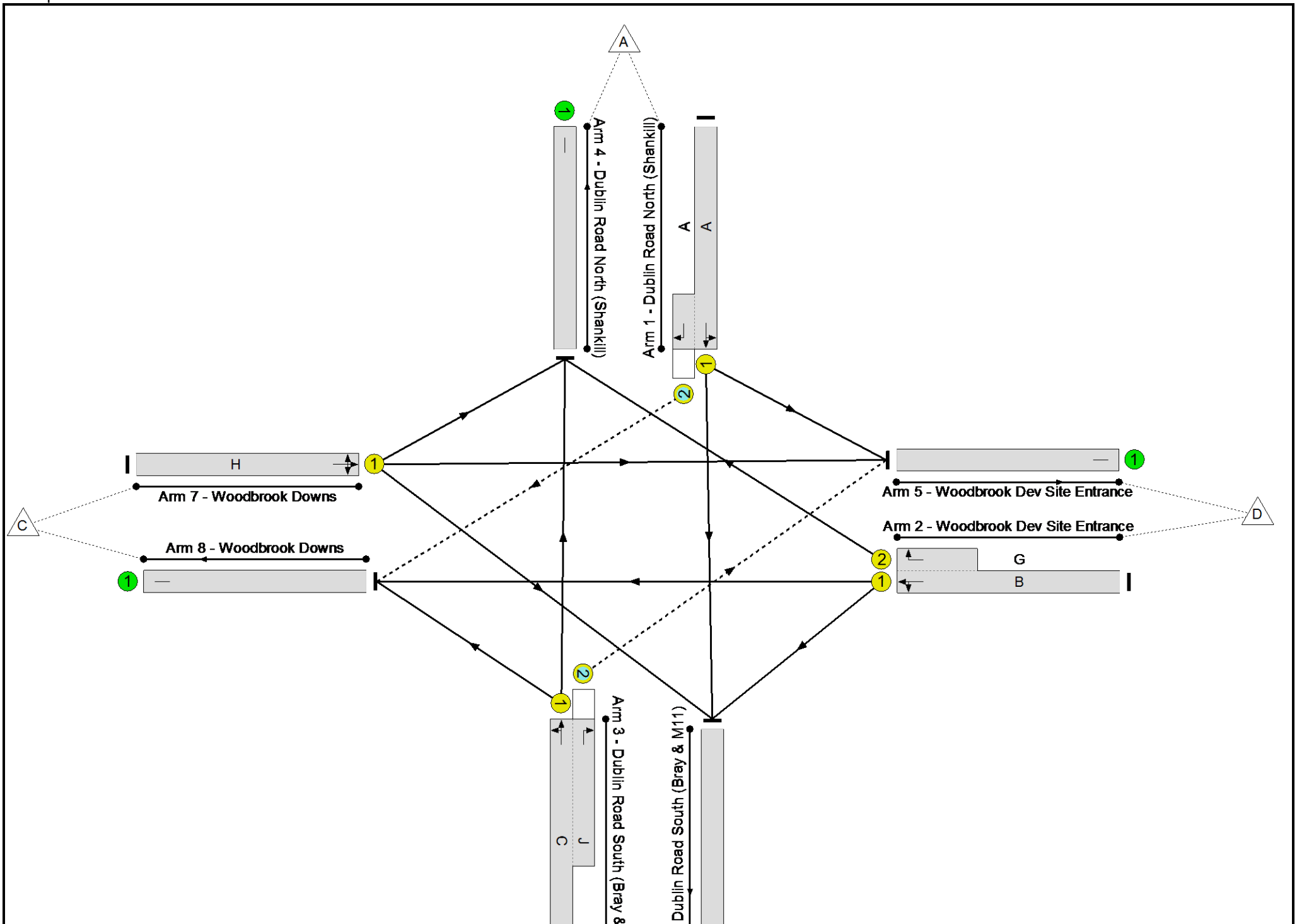
Signal Timings Diagram



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	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**58.6%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**58.6%**
1/1+1/2	Dublin Road North (Shankill) Left Ahead Right	U+O	N/A	N/A	A		1	43	-	445	1899:1915	760+0	58.6 : 0.0%
2/1+2/2	Woodbrook Dev Site Entrance Right Left Ahead	U	N/A	N/A	B G		1	9	-	145	1596:1835	145+118	55.1 : 55.1%
3/1+3/2	Dublin Road South (Bray & M11) Ahead Right Left	U+O	N/A	N/A	C J		1	57:7	-	464	1912:1676	977+58	44.8 : 44.8%
4/1	Dublin Road North (Shankill)	U	N/A	N/A	-		-	-	-	503	Inf	Inf	0.0%
5/1	Woodbrook Dev Site Entrance	U	N/A	N/A	-		-	-	-	45	Inf	Inf	0.0%
6/1	Dublin Road South (Bray & M11)	U	N/A	N/A	-		-	-	-	507	Inf	Inf	0.0%
7/1	Woodbrook Downs Left Ahead Right	U	N/A	N/A	H		1	7	-	6	1630	119	5.1%
8/1	Woodbrook Downs	U	N/A	N/A	-		-	-	-	5	Inf	Inf	0.0%

Full Input Data And Results

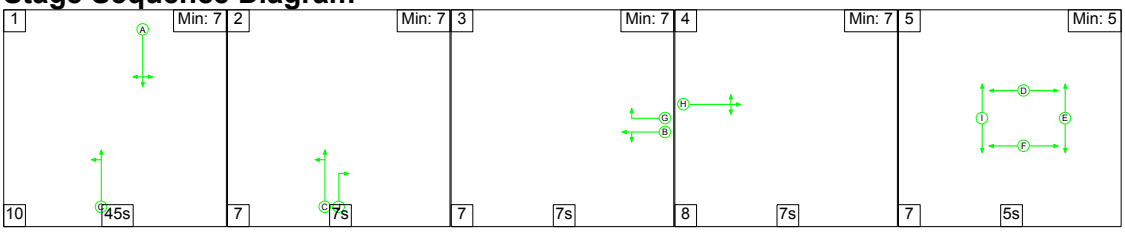
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**26**	**0**	**7.5**	**1.7**	**0.0**	**9.2**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**26**	**0**	**7.5**	**1.7**	**0.0**	**9.2**	**-**	**-**	**-**	**-**
1/1+1/2	445	445	0	0	0	3.2	0.7	0.0	3.9	31.6	10.6	0.7	11.3
2/1+2/2	145	145	-	-	-	1.9	0.6	-	2.5	62.6	2.3	0.6	2.9
3/1+3/2	464	464	0	26	0	2.3	0.4	0.0	2.7	20.9	8.2	0.4	8.6
4/1	503	503	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	45	45	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	507	507	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	6	6	-	-	-	0.1	0.0	-	0.1	63.7	0.2	0.0	0.2
8/1	5	5	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 53.6 Total Delay for Signalled Lanes (pcuHr): 9.22 Cycle Time (s): 110
PRC Over All Lanes (%): 53.6 Total Delay Over All Lanes(pcuHr): 9.22

Full Input Data And Results

Scenario 6: 'PM Opening year DEV' (FG6: 'PM Opening year DEV', Plan 1: 'Staging Plan No. 1')

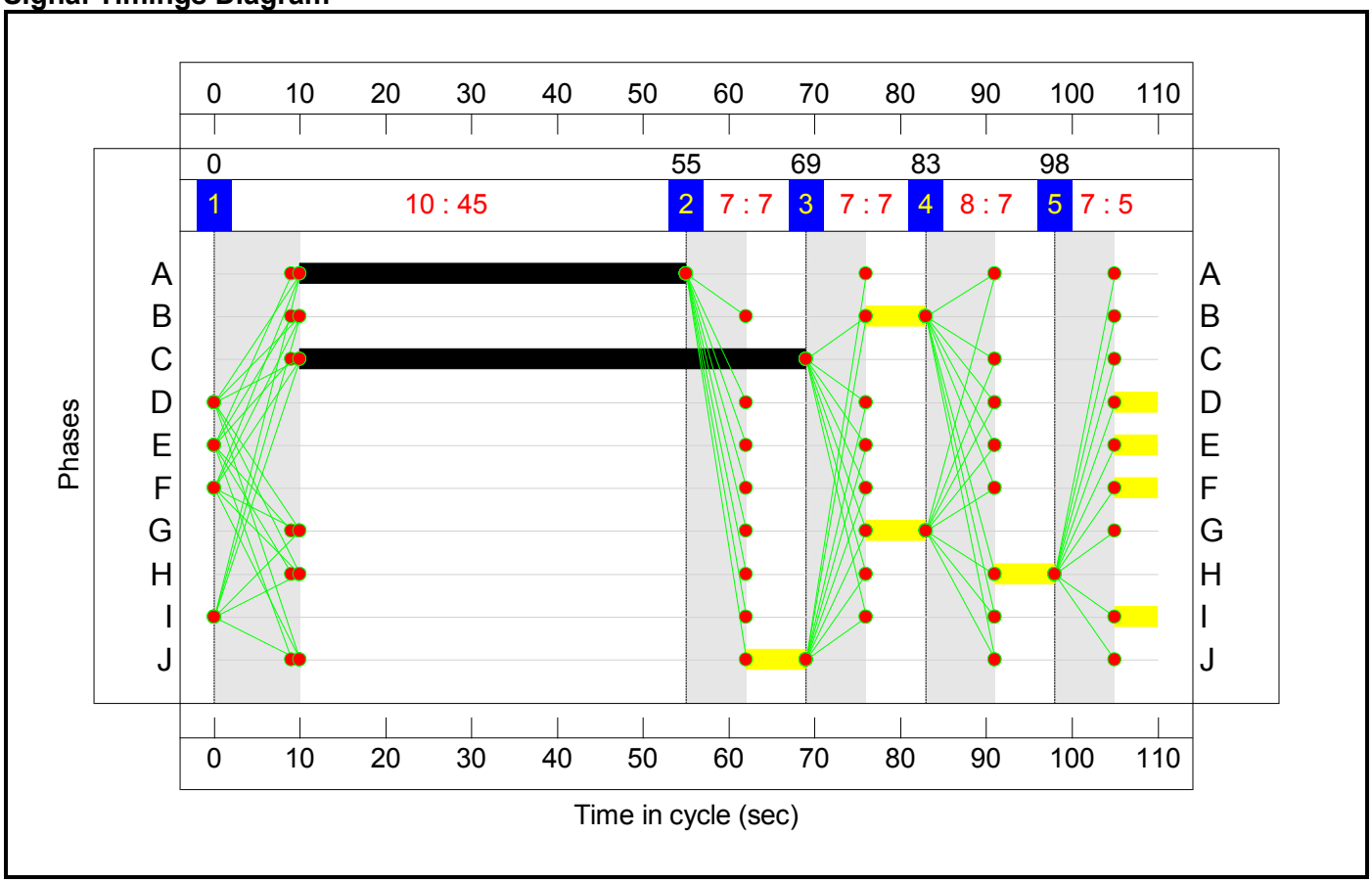
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	5
Duration	45	7	7	7	5
Change Point	0	55	69	83	98

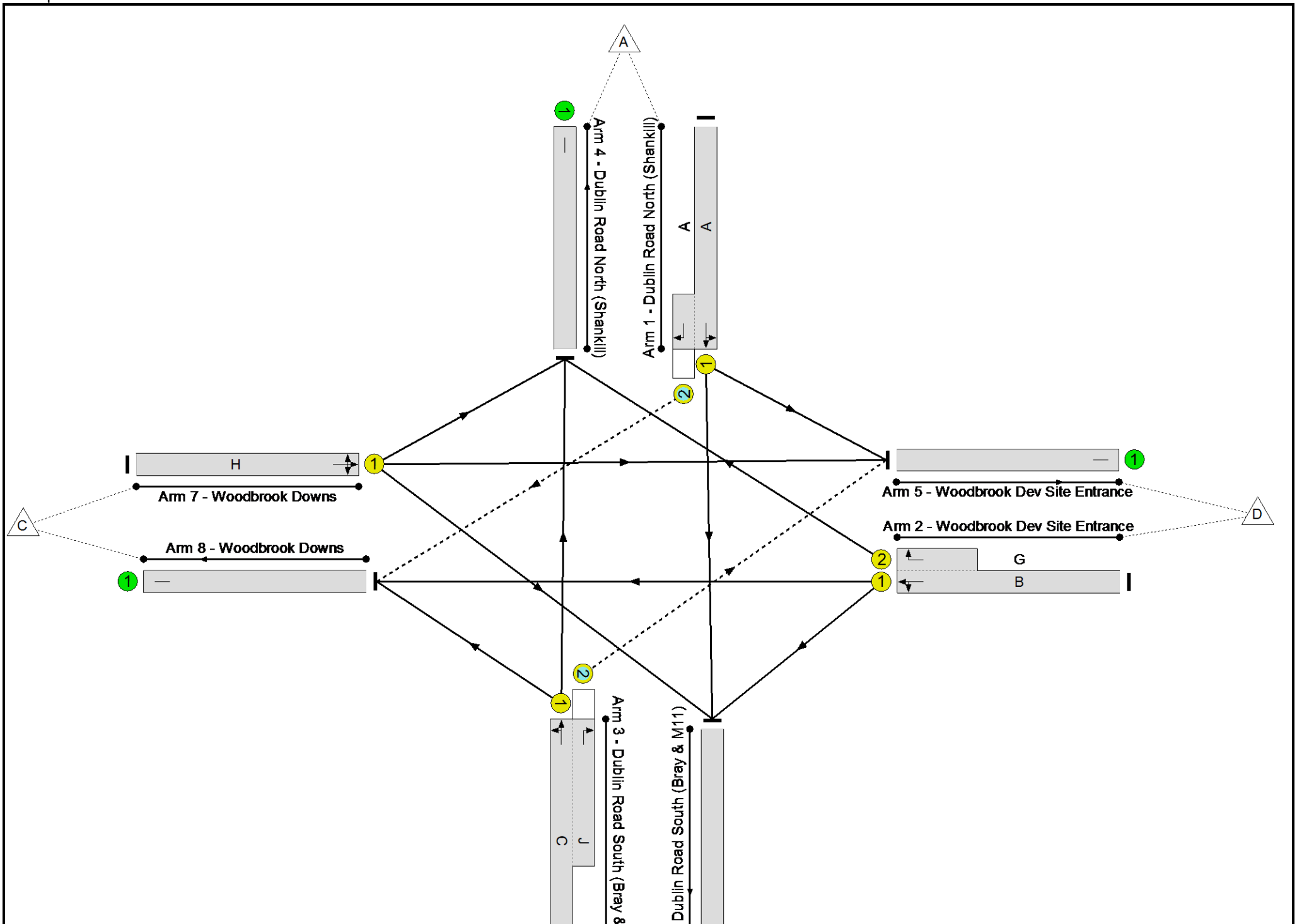
Signal Timings Diagram



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	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**82.6%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**82.6%**
1/1+1/2	Dublin Road North (Shankill) Left Ahead Right	U+O	N/A	N/A	A		1	45	-	654	1885:1702	788+4	82.6 : 82.6%
2/1+2/2	Woodbrook Dev Site Entrance Right Left Ahead	U	N/A	N/A	B G		1	7	-	57	1596:1835	116+68	31.0 : 31.0%
3/1+3/2	Dublin Road South (Bray & M11) Ahead Right Left	U+O	N/A	N/A	C J		1	59:7	-	384	1912:1676	926+122	34.9 : 50.0%
4/1	Dublin Road North (Shankill)	U	N/A	N/A	-		-	-	-	342	Inf	Inf	0.0%
5/1	Woodbrook Dev Site Entrance	U	N/A	N/A	-		-	-	-	113	Inf	Inf	0.0%
6/1	Dublin Road South (Bray & M11)	U	N/A	N/A	-		-	-	-	638	Inf	Inf	0.0%
7/1	Woodbrook Downs Left Ahead Right	U	N/A	N/A	H		1	7	-	4	1695	123	3.2%
8/1	Woodbrook Downs	U	N/A	N/A	-		-	-	-	6	Inf	Inf	0.0%

Full Input Data And Results

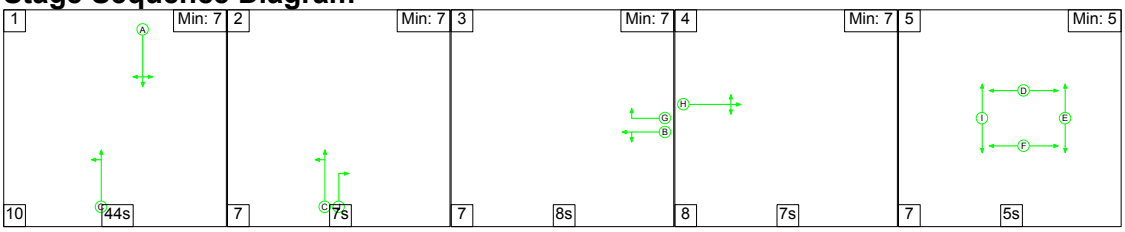
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**3**	**60**	**1**	**8.0**	**2.8**	**0.0**	**10.9**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**3**	**60**	**1**	**8.0**	**2.8**	**0.0**	**10.9**	**-**	**-**	**-**	**-**
1/1+1/2	654	654	3	0	0	5.2	2.3	0.0	7.5	41.1	17.6	2.3	19.9
2/1+2/2	57	57	-	-	-	0.8	0.2	-	1.0	62.4	1.0	0.2	1.3
3/1+3/2	384	384	0	60	1	2.1	0.3	0.0	2.3	22.0	5.4	0.3	5.7
4/1	342	342	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	113	113	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	638	638	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	4	4	-	-	-	0.1	0.0	-	0.1	62.8	0.1	0.0	0.1
8/1	6	6	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 9.0 Total Delay for Signalled Lanes (pcuHr): 10.87 Cycle Time (s): 110
PRC Over All Lanes (%): 9.0 Total Delay Over All Lanes(pcuHr): 10.87

Full Input Data And Results

Scenario 7: 'AM Opening +5_DEV' (FG7: 'AM Opening year +5_DEV', Plan 1: 'Staging Plan No. 1')

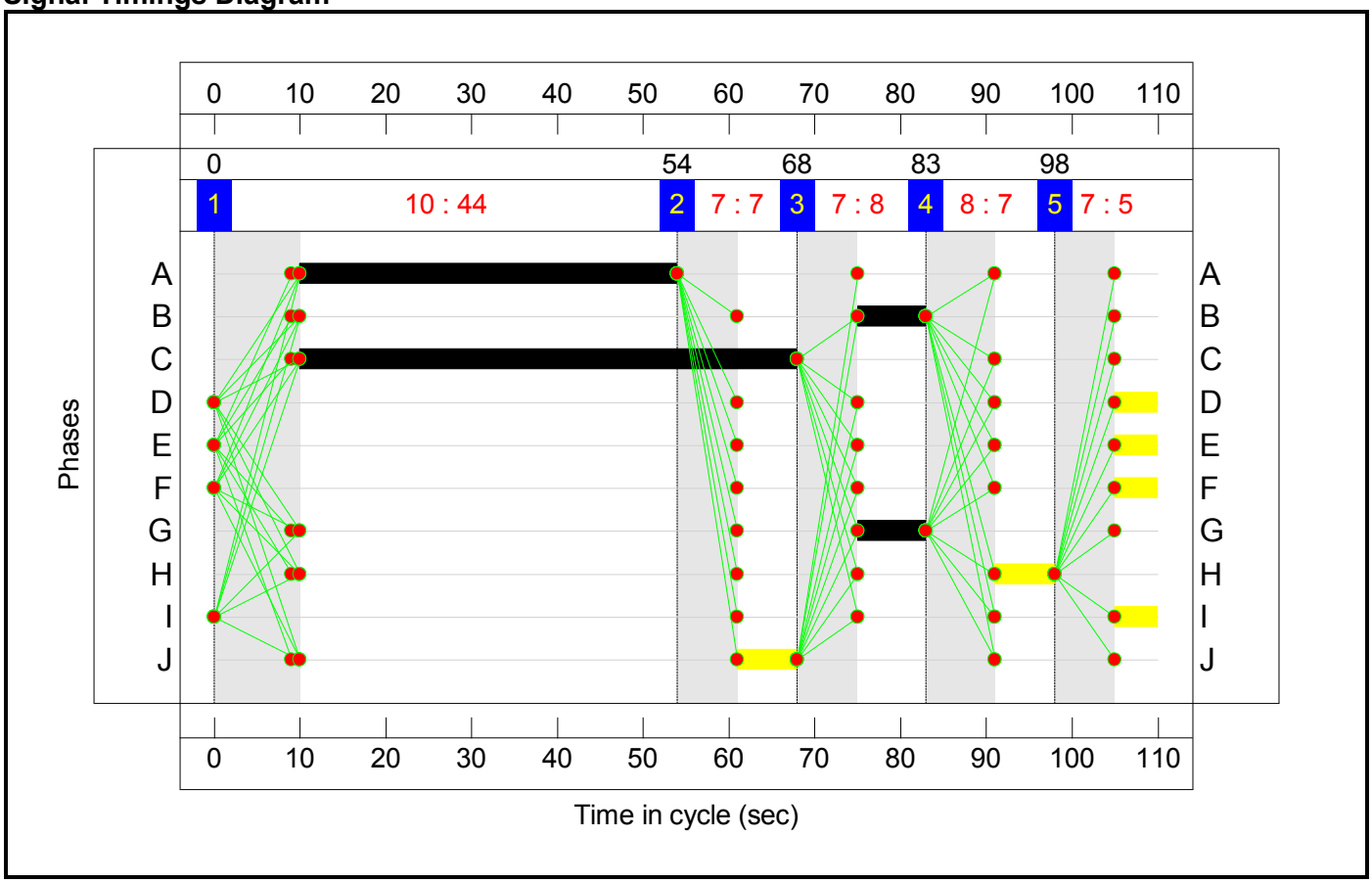
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	5
Duration	44	7	8	7	5
Change Point	0	54	68	83	98

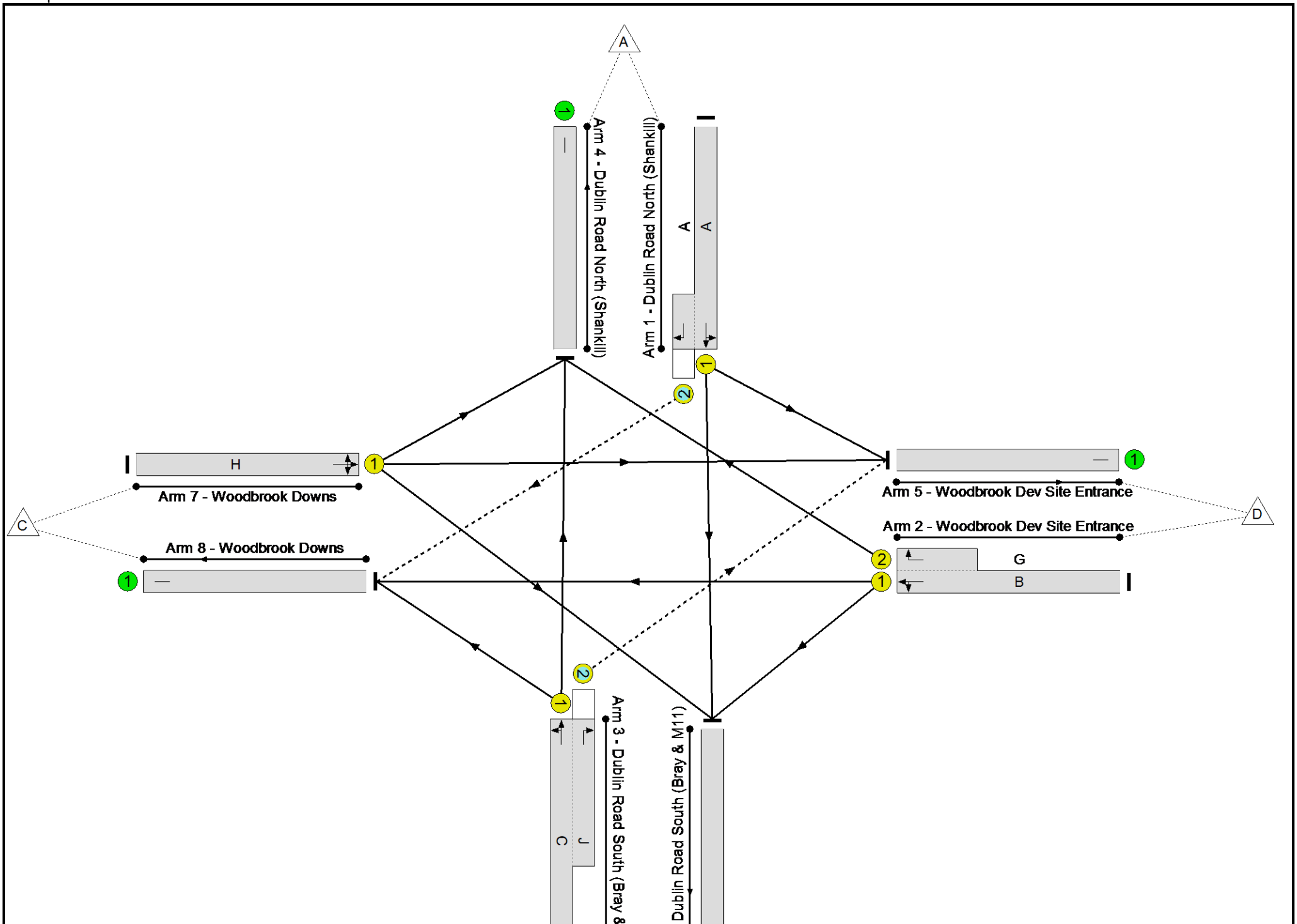
Signal Timings Diagram



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	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**64.0%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**64.0%**
1/1+1/2	Dublin Road North (Shankill) Left Ahead Right	U+O	N/A	N/A	A		1	44	-	493	1882:1915	770+0	64.0 : 0.0%
2/1+2/2	Woodbrook Dev Site Entrance Right Left Ahead	U	N/A	N/A	B G		1	8	-	143	1596:1835	131+106	60.5 : 60.5%
3/1+3/2	Dublin Road South (Bray & M11) Ahead Right Left	U+O	N/A	N/A	C J		1	58:7	-	523	1912:1676	947+122	48.9 : 49.2%
4/1	Dublin Road North (Shankill)	U	N/A	N/A	-		-	-	-	527	Inf	Inf	0.0%
5/1	Woodbrook Dev Site Entrance	U	N/A	N/A	-		-	-	-	103	Inf	Inf	0.0%
6/1	Dublin Road South (Bray & M11)	U	N/A	N/A	-		-	-	-	530	Inf	Inf	0.0%
7/1	Woodbrook Downs Left Ahead Right	U	N/A	N/A	H		1	7	-	6	1630	119	5.1%
8/1	Woodbrook Downs	U	N/A	N/A	-		-	-	-	5	Inf	Inf	0.0%

Full Input Data And Results

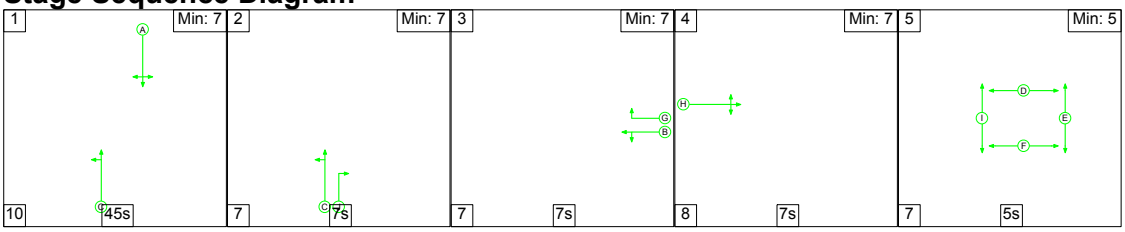
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**59**	**1**	**8.4**	**2.1**	**0.0**	**10.5**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**59**	**1**	**8.4**	**2.1**	**0.0**	**10.5**	**-**	**-**	**-**	**-**
1/1+1/2	493	493	0	0	0	3.6	0.9	0.0	4.4	32.5	12.1	0.9	12.9
2/1+2/2	143	143	-	-	-	1.9	0.8	-	2.7	67.4	2.3	0.8	3.1
3/1+3/2	523	523	0	59	1	2.8	0.5	0.0	3.3	22.7	8.6	0.5	9.1
4/1	527	527	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	103	103	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	530	530	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	6	6	-	-	-	0.1	0.0	-	0.1	63.7	0.2	0.0	0.2
8/1	5	5	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 40.6 Total Delay for Signalled Lanes (pcuHr): 10.54 Cycle Time (s): 110
PRC Over All Lanes (%): 40.6 Total Delay Over All Lanes(pcuHr): 10.54

Full Input Data And Results

Scenario 8: 'PM Opening +5_DEV' (FG8: 'PM Opening year +5_DEV', Plan 1: 'Staging Plan No. 1')

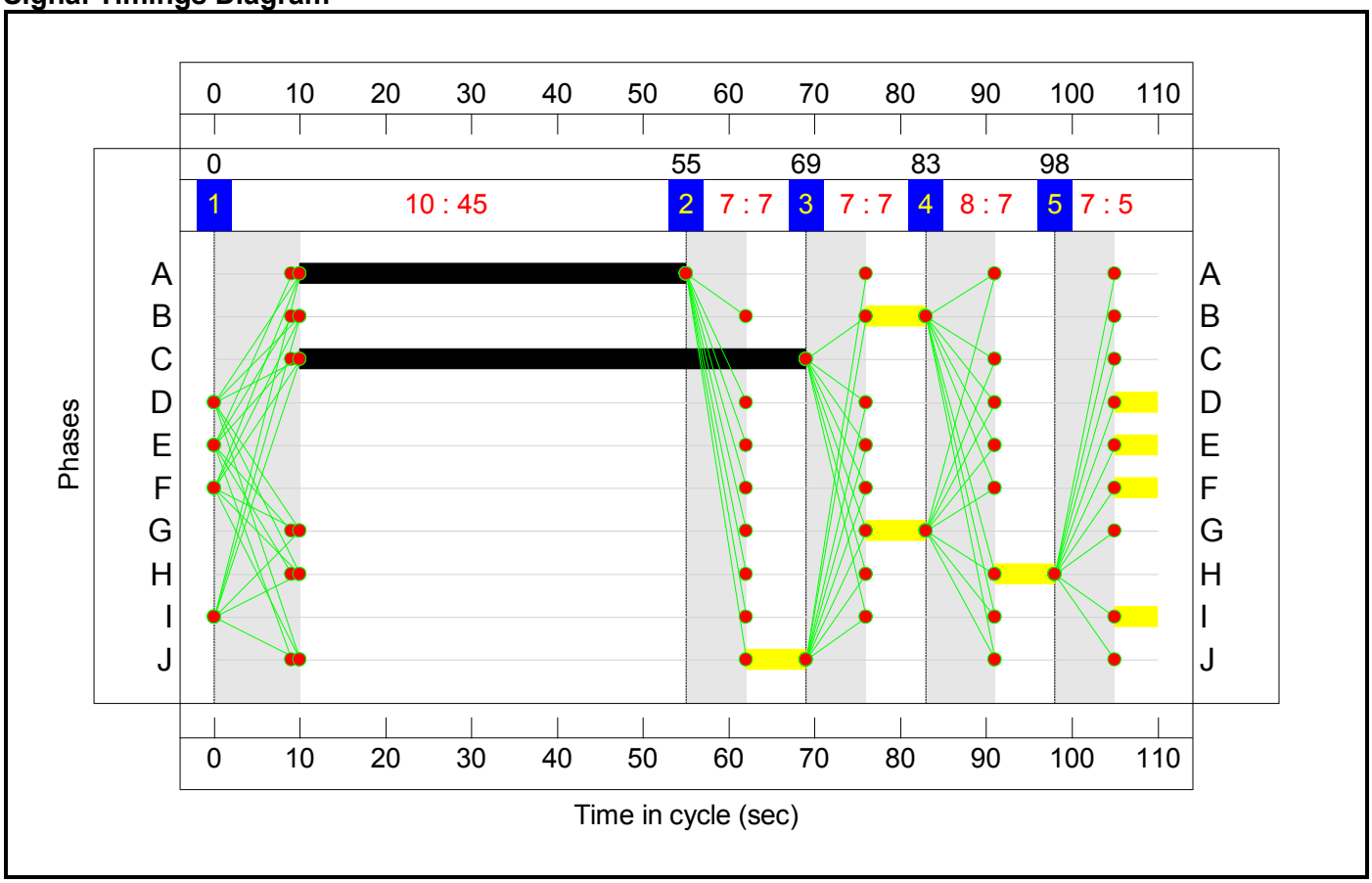
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	5
Duration	45	7	7	7	5
Change Point	0	55	69	83	98

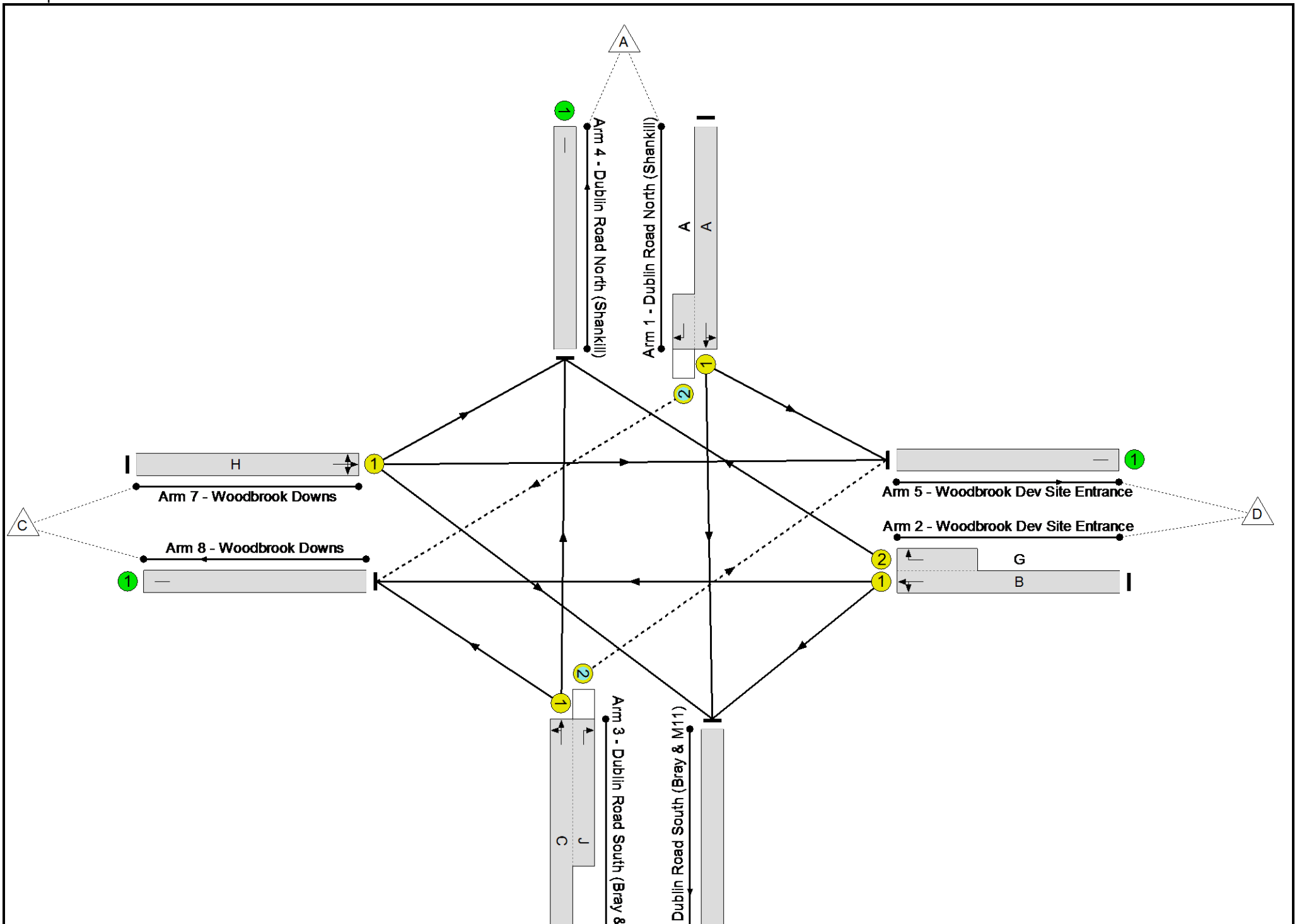
Signal Timings Diagram



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	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.7%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.7%**
1/1+1/2	Dublin Road North (Shankill) Left Ahead Right	U+O	N/A	N/A	A		1	45	-	687	1886:1702	789+3	86.7 : 86.7%
2/1+2/2	Woodbrook Dev Site Entrance Right Left Ahead	U	N/A	N/A	B G		1	7	-	100	1596:1835	116+68	54.3 : 54.3%
3/1+3/2	Dublin Road South (Bray & M11) Ahead Right Left	U+O	N/A	N/A	C J		1	59:7	-	405	1912:1676	929+122	36.8 : 51.7%
4/1	Dublin Road North (Shankill)	U	N/A	N/A	-		-	-	-	377	Inf	Inf	0.0%
5/1	Woodbrook Dev Site Entrance	U	N/A	N/A	-		-	-	-	116	Inf	Inf	0.0%
6/1	Dublin Road South (Bray & M11)	U	N/A	N/A	-		-	-	-	697	Inf	Inf	0.0%
7/1	Woodbrook Downs Left Ahead Right	U	N/A	N/A	H		1	7	-	4	1695	123	3.2%
8/1	Woodbrook Downs	U	N/A	N/A	-		-	-	-	6	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	**-**	**-**	**3**	**62**	**1**	**9.2**	**4.0**	**0.0**	**13.2**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**3**	**62**	**1**	**9.2**	**4.0**	**0.0**	**13.2**	**-**	**-**	**-**	**-**
1/1+1/2	687	687	3	0	0	5.6	3.1	0.0	8.7	45.4	19.1	3.1	22.2
2/1+2/2	100	100	-	-	-	1.4	0.6	-	1.9	70.0	1.9	0.6	2.4
3/1+3/2	405	405	0	62	1	2.2	0.3	0.0	2.5	22.1	5.7	0.3	6.0
4/1	377	377	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	116	116	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	697	697	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	4	4	-	-	-	0.1	0.0	-	0.1	62.8	0.1	0.0	0.1
8/1	6	6	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 3.8 Total Delay for Signalled Lanes (pcuHr): 13.16 Cycle Time (s): 110
PRC Over All Lanes (%): 3.8 Total Delay Over All Lanes(pcuHr): 13.16

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646 []

For sales and distribution information, program advice and maintenance, contact TRL:
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Filename: J4_ShaganaghCemetry-DublinRd.Tjunction rev1.j9
Path: Z:\5154251 Castlethorn Woodbrook\7 Calcs\72Model
Report generation date: 23/09/2019 13:04:14

»Opening Year, AM
»Opening Year, PM
»Opening Year +5, AM
»Opening Year +5, PM
»Opening Year +15, AM
»Opening Year +15, PM
»Opening Year DEV, AM
»Opening Year DEV, PM
»Opening Year +5 DEV, AM
»Opening Year +5 DEV, PM
»Opening Year +15 DEV, AM
»Opening Year +15 DEV, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	Opening Year							
Stream B-C	0.0	6.64	0.01	A	0.0	7.49	0.02	A
Stream B-A	0.0	10.67	0.01	B	0.0	11.90	0.04	B
Stream C-B	0.0	6.34	0.03	A	0.0	6.90	0.02	A
	Opening Year +5							
Stream B-C	0.0	6.73	0.01	A	0.0	7.65	0.03	A
Stream B-A	0.0	11.01	0.01	B	0.0	12.43	0.04	B
Stream C-B	0.0	6.43	0.04	A	0.0	7.05	0.03	A
	Opening Year +15							
Stream B-C	0.0	6.83	0.01	A	0.0	7.83	0.03	A
Stream B-A	0.0	11.46	0.01	B	0.0	13.03	0.05	B
Stream C-B	0.0	6.55	0.04	A	0.0	7.21	0.03	A
	Opening Year DEV							
Stream B-C	0.0	6.71	0.01	A	0.0	7.66	0.03	A
Stream B-A	0.0	11.19	0.01	B	0.0	12.75	0.04	B
Stream C-B	0.0	6.42	0.04	A	0.0	7.12	0.03	A
	Opening Year +5 DEV							
Stream B-C	0.0	6.88	0.01	A	0.0	7.90	0.03	A
Stream B-A	0.0	11.83	0.01	B	0.0	13.37	0.05	B
Stream C-B	0.0	6.61	0.04	A	0.0	7.29	0.03	A
	Opening Year +15 DEV							
Stream B-C	0.0	6.92	0.01	A	0.0	8.15	0.03	A
Stream B-A	0.0	13.09	0.02	B	0.1	14.58	0.05	B
Stream C-B	0.0	6.80	0.04	A	0.0	7.56	0.03	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	Woodbrook Junction 4 Assessment
Location	Shanganagh Cemetry
Site number	
Date	23/09/2019
Version	
Status	Planning
Identifier	
Client	Aeval
Jobnumber	5154251
Enumerator	ATKINSMCCARTHY\MCollins
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Opening Year	AM	ONE HOUR	08:00	09:30	15
D2	Opening Year	PM	ONE HOUR	17:00	18:30	15
D3	Opening Year +5	AM	ONE HOUR	08:00	09:30	15
D4	Opening Year +5	PM	ONE HOUR	17:00	18:30	15
D5	Opening Year +15	AM	ONE HOUR	08:00	09:30	15
D6	Opening Year +15	PM	ONE HOUR	17:00	18:30	15
D13	Opening Year DEV	AM	ONE HOUR	08:00	09:30	15
D14	Opening Year DEV	PM	ONE HOUR	17:00	18:30	15
D15	Opening Year +5 DEV	AM	ONE HOUR	08:00	09:30	15
D16	Opening Year +5 DEV	PM	ONE HOUR	17:00	18:30	15
D17	Opening Year +15 DEV	AM	ONE HOUR	08:00	09:30	15
D18	Opening Year +15 DEV	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Opening Year, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.50			250.0		-

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	9.90	5.60	4.60	4.60	4.20	✓	3.00	60	60

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	531	0.095	0.239	0.151	0.342
1	B-C	668	0.100	0.253	-	-
1	C-B	719	0.272	0.272	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Opening Year	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	437	100.000
B		✓	8	100.000
C		✓	441	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	15	422
	B	4	0	4
	C	423	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.64	0.0	A
B-A	0.01	10.67	0.0	B
C-A				
C-B	0.03	6.34	0.0	A
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	3	585	0.005	3	0.0	6.186	A
B-A	3	402	0.008	3	0.0	9.028	A
C-A	318			318			
C-B	14	629	0.022	13	0.0	5.847	A
A-B	11			11			
A-C	318			318			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	569	0.006	4	0.0	6.371	A
B-A	4	377	0.010	4	0.0	9.648	A
C-A	380			380			
C-B	16	612	0.026	16	0.0	6.044	A
A-B	13			13			
A-C	379			379			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	546	0.008	4	0.0	6.642	A
B-A	4	342	0.013	4	0.0	10.666	B
C-A	466			466			
C-B	20	588	0.034	20	0.0	6.338	A
A-B	17			17			
A-C	465			465			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	546	0.008	4	0.0	6.644	A
B-A	4	342	0.013	4	0.0	10.664	B
C-A	466			466			
C-B	20	588	0.034	20	0.0	6.338	A
A-B	17			17			
A-C	465			465			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	568	0.006	4	0.0	6.374	A
B-A	4	377	0.010	4	0.0	9.647	A
C-A	380			380			
C-B	16	612	0.026	16	0.0	6.044	A
A-B	13			13			
A-C	379			379			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	3	584	0.005	3	0.0	6.192	A
B-A	3	402	0.007	3	0.0	9.023	A
C-A	318			318			
C-B	14	629	0.022	14	0.0	5.850	A
A-B	11			11			
A-C	318			318			

Opening Year, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	Opening Year	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	617	100.000
B		✓	22	100.000
C		✓	329	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	15	602
	B	11	0	11
	C	318	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	7.49	0.0	A
B-A	0.04	11.90	0.0	B
C-A				
C-B	0.02	6.90	0.0	A
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	8	549	0.015	8	0.0	6.660	A
B-A	8	383	0.022	8	0.0	9.602	A
C-A	239			239			
C-B	8	592	0.014	8	0.0	6.164	A
A-B	11			11			
A-C	453			453			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	10	525	0.019	10	0.0	6.983	A
B-A	10	354	0.028	10	0.0	10.450	B
C-A	286			286			
C-B	10	568	0.017	10	0.0	6.453	A
A-B	13			13			
A-C	541			541			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	12	493	0.025	12	0.0	7.483	A
B-A	12	315	0.039	12	0.0	11.901	B
C-A	350			350			
C-B	12	534	0.023	12	0.0	6.901	A
A-B	17			17			
A-C	663			663			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	12	493	0.025	12	0.0	7.486	A
B-A	12	315	0.039	12	0.0	11.901	B
C-A	350			350			
C-B	12	534	0.023	12	0.0	6.901	A
A-B	17			17			
A-C	663			663			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	10	525	0.019	10	0.0	6.991	A
B-A	10	355	0.028	10	0.0	10.448	B
C-A	286			286			
C-B	10	568	0.017	10	0.0	6.454	A
A-B	13			13			
A-C	541			541			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	8	548	0.015	8	0.0	6.668	A
B-A	8	383	0.022	8	0.0	9.601	A
C-A	239			239			
C-B	8	592	0.014	8	0.0	6.164	A
A-B	11			11			
A-C	453			453			

Opening Year +5, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	Opening Year +5	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	461	100.000
B		✓	8	100.000
C		✓	467	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	16	445
	B	4	0	4
	C	448	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.73	0.0	A
B-A	0.01	11.01	0.0	B
C-A				
C-B	0.04	6.43	0.0	A
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	3	580	0.005	3	0.0	6.233	A
B-A	3	394	0.008	3	0.0	9.196	A
C-A	337			337			
C-B	14	624	0.023	14	0.0	5.902	A
A-B	12			12			
A-C	335			335			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	563	0.006	4	0.0	6.432	A
B-A	4	368	0.010	4	0.0	9.879	A
C-A	403			403			
C-B	17	606	0.028	17	0.0	6.113	A
A-B	14			14			
A-C	400			400			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	540	0.008	4	0.0	6.724	A
B-A	4	331	0.013	4	0.0	11.015	B
C-A	493			493			
C-B	21	580	0.036	21	0.0	6.433	A
A-B	18			18			
A-C	490			490			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	540	0.008	4	0.0	6.725	A
B-A	4	331	0.013	4	0.0	11.013	B
C-A	493			493			
C-B	21	580	0.036	21	0.0	6.433	A
A-B	18			18			
A-C	490			490			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	563	0.006	4	0.0	6.435	A
B-A	4	368	0.010	4	0.0	9.878	A
C-A	403			403			
C-B	17	606	0.028	17	0.0	6.114	A
A-B	14			14			
A-C	400			400			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	3	580	0.005	3	0.0	6.241	A
B-A	3	395	0.008	3	0.0	9.193	A
C-A	337			337			
C-B	14	624	0.023	14	0.0	5.904	A
A-B	12			12			
A-C	335			335			

Opening Year +5, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	Opening Year +5	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	649	100.000
B		✓	24	100.000
C		✓	349	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	16	633
	B	12	0	12
	C	337	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	7.65	0.0	A
B-A	0.04	12.43	0.0	B
C-A				
C-B	0.03	7.05	0.0	A
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	9	542	0.017	9	0.0	6.748	A
B-A	9	375	0.024	9	0.0	9.833	A
C-A	254			254			
C-B	9	586	0.015	9	0.0	6.242	A
A-B	12			12			
A-C	477			477			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	11	518	0.021	11	0.0	7.100	A
B-A	11	345	0.031	11	0.0	10.780	B
C-A	303			303			
C-B	11	560	0.019	11	0.0	6.556	A
A-B	14			14			
A-C	569			569			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	13	484	0.027	13	0.0	7.649	A
B-A	13	303	0.044	13	0.0	12.432	B
C-A	371			371			
C-B	13	524	0.025	13	0.0	7.045	A
A-B	18			18			
A-C	697			697			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	13	484	0.027	13	0.0	7.651	A
B-A	13	303	0.044	13	0.0	12.431	B
C-A	371			371			
C-B	13	524	0.025	13	0.0	7.045	A
A-B	18			18			
A-C	697			697			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	11	517	0.021	11	0.0	7.105	A
B-A	11	345	0.031	11	0.0	10.778	B
C-A	303			303			
C-B	11	560	0.019	11	0.0	6.559	A
A-B	14			14			
A-C	569			569			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	9	542	0.017	9	0.0	6.757	A
B-A	9	375	0.024	9	0.0	9.832	A
C-A	254			254			
C-B	9	586	0.015	9	0.0	6.243	A
A-B	12			12			
A-C	477			477			

Opening Year +15, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	Opening Year +15	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	490	100.000
B		✓	8	100.000
C		✓	497	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	17	473
	B	4	0	4
	C	477	20	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.83	0.0	A
B-A	0.01	11.46	0.0	B
C-A				
C-B	0.04	6.55	0.0	A
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	3	575	0.005	3	0.0	6.293	A
B-A	3	386	0.008	3	0.0	9.404	A
C-A	359			359			
C-B	15	618	0.024	15	0.0	5.967	A
A-B	13			13			
A-C	356			356			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	557	0.006	4	0.0	6.507	A
B-A	4	358	0.010	4	0.0	10.167	B
C-A	429			429			
C-B	18	599	0.030	18	0.0	6.198	A
A-B	15			15			
A-C	425			425			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	532	0.008	4	0.0	6.825	A
B-A	4	319	0.014	4	0.0	11.459	B
C-A	525			525			
C-B	22	572	0.039	22	0.0	6.547	A
A-B	19			19			
A-C	521			521			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	532	0.008	4	0.0	6.827	A
B-A	4	319	0.014	4	0.0	11.456	B
C-A	525			525			
C-B	22	572	0.039	22	0.0	6.547	A
A-B	19			19			
A-C	521			521			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	556	0.006	4	0.0	6.513	A
B-A	4	358	0.010	4	0.0	10.166	B
C-A	429			429			
C-B	18	599	0.030	18	0.0	6.198	A
A-B	15			15			
A-C	425			425			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	3	575	0.005	3	0.0	6.298	A
B-A	3	386	0.008	3	0.0	9.400	A
C-A	359			359			
C-B	15	618	0.024	15	0.0	5.968	A
A-B	13			13			
A-C	356			356			

Opening Year +15, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	Opening Year +15	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	687	100.000
B		✓	24	100.000
C		✓	370	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	17	670
	B	12	0	12
	C	358	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	7.83	0.0	A
B-A	0.05	13.03	0.0	B
C-A				
C-B	0.03	7.21	0.0	A
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	9	535	0.017	9	0.0	6.840	A
B-A	9	366	0.025	9	0.0	10.085	B
C-A	270			270			
C-B	9	578	0.016	9	0.0	6.328	A
A-B	13			13			
A-C	504			504			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	11	509	0.021	11	0.0	7.222	A
B-A	11	334	0.032	11	0.0	11.141	B
C-A	322			322			
C-B	11	550	0.020	11	0.0	6.669	A
A-B	15			15			
A-C	602			602			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	13	473	0.028	13	0.0	7.825	A
B-A	13	289	0.046	13	0.0	13.030	B
C-A	394			394			
C-B	13	513	0.026	13	0.0	7.206	A
A-B	19			19			
A-C	738			738			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	13	473	0.028	13	0.0	7.828	A
B-A	13	289	0.046	13	0.0	13.031	B
C-A	394			394			
C-B	13	513	0.026	13	0.0	7.206	A
A-B	19			19			
A-C	738			738			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	11	509	0.021	11	0.0	7.228	A
B-A	11	334	0.032	11	0.0	11.141	B
C-A	322			322			
C-B	11	550	0.020	11	0.0	6.672	A
A-B	15			15			
A-C	602			602			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	9	535	0.017	9	0.0	6.846	A
B-A	9	366	0.025	9	0.0	10.083	B
C-A	270			270			
C-B	9	578	0.016	9	0.0	6.331	A
A-B	13			13			
A-C	504			504			

Opening Year DEV, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	Opening Year DEV	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	455	100.000
B		✓	8	100.000
C		✓	506	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	15	440
	B	4	0	4
	C	486	20	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.71	0.0	A
B-A	0.01	11.19	0.0	B
C-A				
C-B	0.04	6.42	0.0	A
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	3	581	0.005	3	0.0	6.222	A
B-A	3	391	0.008	3	0.0	9.281	A
C-A	366			366			
C-B	15	625	0.024	15	0.0	5.897	A
A-B	11			11			
A-C	331			331			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	564	0.006	4	0.0	6.418	A
B-A	4	364	0.010	4	0.0	9.997	A
C-A	437			437			
C-B	18	607	0.030	18	0.0	6.107	A
A-B	13			13			
A-C	396			396			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	541	0.008	4	0.0	6.706	A
B-A	4	326	0.014	4	0.0	11.195	B
C-A	535			535			
C-B	22	582	0.038	22	0.0	6.424	A
A-B	17			17			
A-C	484			484			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	541	0.008	4	0.0	6.707	A
B-A	4	326	0.014	4	0.0	11.192	B
C-A	535			535			
C-B	22	582	0.038	22	0.0	6.424	A
A-B	17			17			
A-C	484			484			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	564	0.006	4	0.0	6.424	A
B-A	4	364	0.010	4	0.0	9.995	A
C-A	437			437			
C-B	18	607	0.030	18	0.0	6.111	A
A-B	13			13			
A-C	396			396			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	3	581	0.005	3	0.0	6.227	A
B-A	3	391	0.008	3	0.0	9.278	A
C-A	366			366			
C-B	15	625	0.024	15	0.0	5.900	A
A-B	11			11			
A-C	331			331			

Opening Year DEV, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	Opening Year DEV	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	668	100.000
B		✓	23	100.000
C		✓	351	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	15	653
	B	11	0	12
	C	339	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	7.66	0.0	A
B-A	0.04	12.75	0.0	B
C-A				
C-B	0.03	7.12	0.0	A
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	9	544	0.017	9	0.0	6.729	A
B-A	8	368	0.023	8	0.0	10.009	B
C-A	255			255			
C-B	9	582	0.016	9	0.0	6.285	A
A-B	11			11			
A-C	492			492			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	11	518	0.021	11	0.0	7.091	A
B-A	10	337	0.029	10	0.0	11.004	B
C-A	305			305			
C-B	11	555	0.019	11	0.0	6.612	A
A-B	13			13			
A-C	587			587			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	13	483	0.027	13	0.0	7.658	A
B-A	12	294	0.041	12	0.0	12.749	B
C-A	373			373			
C-B	13	518	0.025	13	0.0	7.125	A
A-B	17			17			
A-C	719			719			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	13	483	0.027	13	0.0	7.660	A
B-A	12	294	0.041	12	0.0	12.749	B
C-A	373			373			
C-B	13	518	0.025	13	0.0	7.125	A
A-B	17			17			
A-C	719			719			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	11	518	0.021	11	0.0	7.097	A
B-A	10	337	0.029	10	0.0	11.003	B
C-A	305			305			
C-B	11	555	0.019	11	0.0	6.613	A
A-B	13			13			
A-C	587			587			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	9	544	0.017	9	0.0	6.733	A
B-A	8	368	0.023	8	0.0	10.013	B
C-A	255			255			
C-B	9	582	0.016	9	0.0	6.285	A
A-B	11			11			
A-C	492			492			

Opening Year +5 DEV, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D15	Opening Year +5 DEV	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	505	100.000
B		✓	8	100.000
C		✓	531	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	16	489
	B	4	0	4
	C	510	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.88	0.0	A
B-A	0.01	11.83	0.0	B
C-A				
C-B	0.04	6.61	0.0	A
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	3	572	0.005	3	0.0	6.326	A
B-A	3	379	0.008	3	0.0	9.575	A
C-A	384			384			
C-B	16	615	0.026	16	0.0	6.005	A
A-B	12			12			
A-C	368			368			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	553	0.007	4	0.0	6.549	A
B-A	4	350	0.010	4	0.0	10.406	B
C-A	458			458			
C-B	19	595	0.032	19	0.0	6.247	A
A-B	14			14			
A-C	440			440			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	527	0.008	4	0.0	6.883	A
B-A	4	309	0.014	4	0.0	11.834	B
C-A	562			562			
C-B	23	567	0.041	23	0.0	6.615	A
A-B	18			18			
A-C	538			538			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	527	0.008	4	0.0	6.885	A
B-A	4	309	0.014	4	0.0	11.831	B
C-A	562			562			
C-B	23	567	0.041	23	0.0	6.615	A
A-B	18			18			
A-C	538			538			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	553	0.007	4	0.0	6.556	A
B-A	4	350	0.010	4	0.0	10.402	B
C-A	458			458			
C-B	19	595	0.032	19	0.0	6.248	A
A-B	14			14			
A-C	440			440			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	3	572	0.005	3	0.0	6.331	A
B-A	3	379	0.008	3	0.0	9.570	A
C-A	384			384			
C-B	16	615	0.026	16	0.0	6.008	A
A-B	12			12			
A-C	368			368			

Opening Year +5 DEV, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D16	Opening Year +5 DEV	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	702	100.000
B		✓	24	100.000
C		✓	386	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	16	686
	B	12	0	12
	C	373	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	7.90	0.0	A
B-A	0.05	13.37	0.0	B
C-A				
C-B	0.03	7.29	0.0	A
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	9	532	0.017	9	0.0	6.879	A
B-A	9	361	0.025	9	0.0	10.221	B
C-A	281			281			
C-B	10	575	0.017	10	0.0	6.371	A
A-B	12			12			
A-C	516			516			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	11	506	0.021	11	0.0	7.274	A
B-A	11	328	0.033	11	0.0	11.341	B
C-A	335			335			
C-B	12	547	0.021	12	0.0	6.726	A
A-B	14			14			
A-C	617			617			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	13	469	0.028	13	0.0	7.901	A
B-A	13	282	0.047	13	0.0	13.367	B
C-A	411			411			
C-B	14	508	0.028	14	0.0	7.288	A
A-B	18			18			
A-C	755			755			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	13	469	0.028	13	0.0	7.905	A
B-A	13	282	0.047	13	0.0	13.368	B
C-A	411			411			
C-B	14	508	0.028	14	0.0	7.288	A
A-B	18			18			
A-C	755			755			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	11	505	0.021	11	0.0	7.281	A
B-A	11	328	0.033	11	0.0	11.343	B
C-A	335			335			
C-B	12	547	0.021	12	0.0	6.729	A
A-B	14			14			
A-C	617			617			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	9	532	0.017	9	0.0	6.888	A
B-A	9	361	0.025	9	0.0	10.220	B
C-A	281			281			
C-B	10	575	0.017	10	0.0	6.371	A
A-B	12			12			
A-C	516			516			

Opening Year +15 DEV, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D17	Opening Year +15 DEV	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	551	100.000
B		✓	9	100.000
C		✓	596	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	17	534
	B	4	0	5
	C	574	22	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.92	0.0	A
B-A	0.02	13.09	0.0	B
C-A				
C-B	0.04	6.80	0.0	A
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	576	0.007	4	0.0	6.295	A
B-A	3	355	0.008	3	0.0	10.214	B
C-A	432			432			
C-B	17	606	0.027	16	0.0	6.109	A
A-B	13			13			
A-C	402			402			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	555	0.008	4	0.0	6.543	A
B-A	4	324	0.011	4	0.0	11.250	B
C-A	516			516			
C-B	20	584	0.034	20	0.0	6.381	A
A-B	15			15			
A-C	480			480			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	6	526	0.010	5	0.0	6.918	A
B-A	4	279	0.016	4	0.0	13.090	B
C-A	632			632			
C-B	24	553	0.044	24	0.0	6.801	A
A-B	19			19			
A-C	588			588			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	6	526	0.010	6	0.0	6.920	A
B-A	4	279	0.016	4	0.0	13.088	B
C-A	632			632			
C-B	24	553	0.044	24	0.0	6.801	A
A-B	19			19			
A-C	588			588			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	554	0.008	5	0.0	6.546	A
B-A	4	324	0.011	4	0.0	11.248	B
C-A	516			516			
C-B	20	584	0.034	20	0.0	6.382	A
A-B	15			15			
A-C	480			480			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	575	0.007	4	0.0	6.302	A
B-A	3	356	0.008	3	0.0	10.210	B
C-A	432			432			
C-B	17	606	0.027	17	0.0	6.112	A
A-B	13			13			
A-C	402			402			

Opening Year +15 DEV, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D18	Opening Year +15 DEV	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	761	100.000
B		✓	25	100.000
C		✓	414	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	17	744
	B	12	0	13
	C	401	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	3
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	8.15	0.0	A
B-A	0.05	14.58	0.1	B
C-A				
C-B	0.03	7.56	0.0	A
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	10	526	0.019	10	0.0	6.979	A
B-A	9	344	0.026	9	0.0	10.728	B
C-A	302			302			
C-B	10	563	0.017	10	0.0	6.510	A
A-B	13			13			
A-C	560			560			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	12	496	0.024	12	0.0	7.425	A
B-A	11	309	0.035	11	0.0	12.067	B
C-A	360			360			
C-B	12	532	0.022	12	0.0	6.913	A
A-B	15			15			
A-C	669			669			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	14	456	0.031	14	0.0	8.146	A
B-A	13	260	0.051	13	0.1	14.577	B
C-A	442			442			
C-B	14	490	0.029	14	0.0	7.559	A
A-B	19			19			
A-C	819			819			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	14	456	0.031	14	0.0	8.149	A
B-A	13	260	0.051	13	0.1	14.579	B
C-A	442			442			
C-B	14	490	0.029	14	0.0	7.559	A
A-B	19			19			
A-C	819			819			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	12	496	0.024	12	0.0	7.430	A
B-A	11	309	0.035	11	0.0	12.069	B
C-A	360			360			
C-B	12	532	0.022	12	0.0	6.916	A
A-B	15			15			
A-C	669			669			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	10	525	0.019	10	0.0	6.987	A
B-A	9	345	0.026	9	0.0	10.731	B
C-A	302			302			
C-B	10	563	0.017	10	0.0	6.513	A
A-B	13			13			
A-C	560			560			

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: J5_CrinkenLn-DublinRd.Tjunction.j9
Path: Z:\5154251 Castlethorn Woodbrook\7 Calcs\72Model
Report generation date: 23/09/2019 13:10:32

»Opening Year , AM
»Opening Year, PM
»Opening Year +5, AM
»Opening Year +5, PM
»Opening Year +15, AM
»Opening Year +15, PM
»Opening Year DEV, AM
»Opening Year DEV, PM
»Opening Year +5 DEV, AM
»Opening Year +5 DEV, PM
»Opening Year +15 DEV, AM
»Opening Year +15 DEV, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	Opening Year							
Stream B-C	0.2	7.86	0.15	A	0.1	6.86	0.12	A
Stream B-A	0.2	15.07	0.18	C	0.1	14.87	0.11	B
Stream C-AB	0.4	5.32	0.16	A	0.6	4.69	0.22	A
	Opening Year +5							
Stream B-C	0.2	8.09	0.16	A	0.1	7.02	0.12	A
Stream B-A	0.2	15.93	0.19	C	0.1	15.66	0.12	C
Stream C-AB	0.4	5.34	0.18	A	0.7	4.73	0.24	A
	Opening Year +15							
Stream B-C	0.2	8.37	0.17	A	0.1	7.17	0.13	A
Stream B-A	0.3	17.01	0.21	C	0.2	16.58	0.13	C
Stream C-AB	0.5	5.36	0.19	A	0.8	4.77	0.27	A
	Opening Year DEV							
Stream B-C	0.2	8.22	0.16	A	0.1	7.03	0.12	A
Stream B-A	0.2	16.27	0.19	C	0.1	15.70	0.13	C
Stream C-AB	0.4	5.37	0.17	A	0.7	4.62	0.23	A
	Opening Year +5 DEV							
Stream B-C	0.2	8.57	0.17	A	0.1	7.26	0.13	A
Stream B-A	0.3	17.73	0.22	C	0.2	16.85	0.14	C
Stream C-AB	0.5	5.31	0.19	A	0.8	4.70	0.26	A
	Opening Year +15 DEV							
Stream B-C	0.2	9.16	0.18	A	0.2	7.49	0.13	A
Stream B-A	0.3	20.28	0.26	C	0.2	18.41	0.16	C
Stream C-AB	0.6	5.36	0.22	A	1.0	4.75	0.29	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

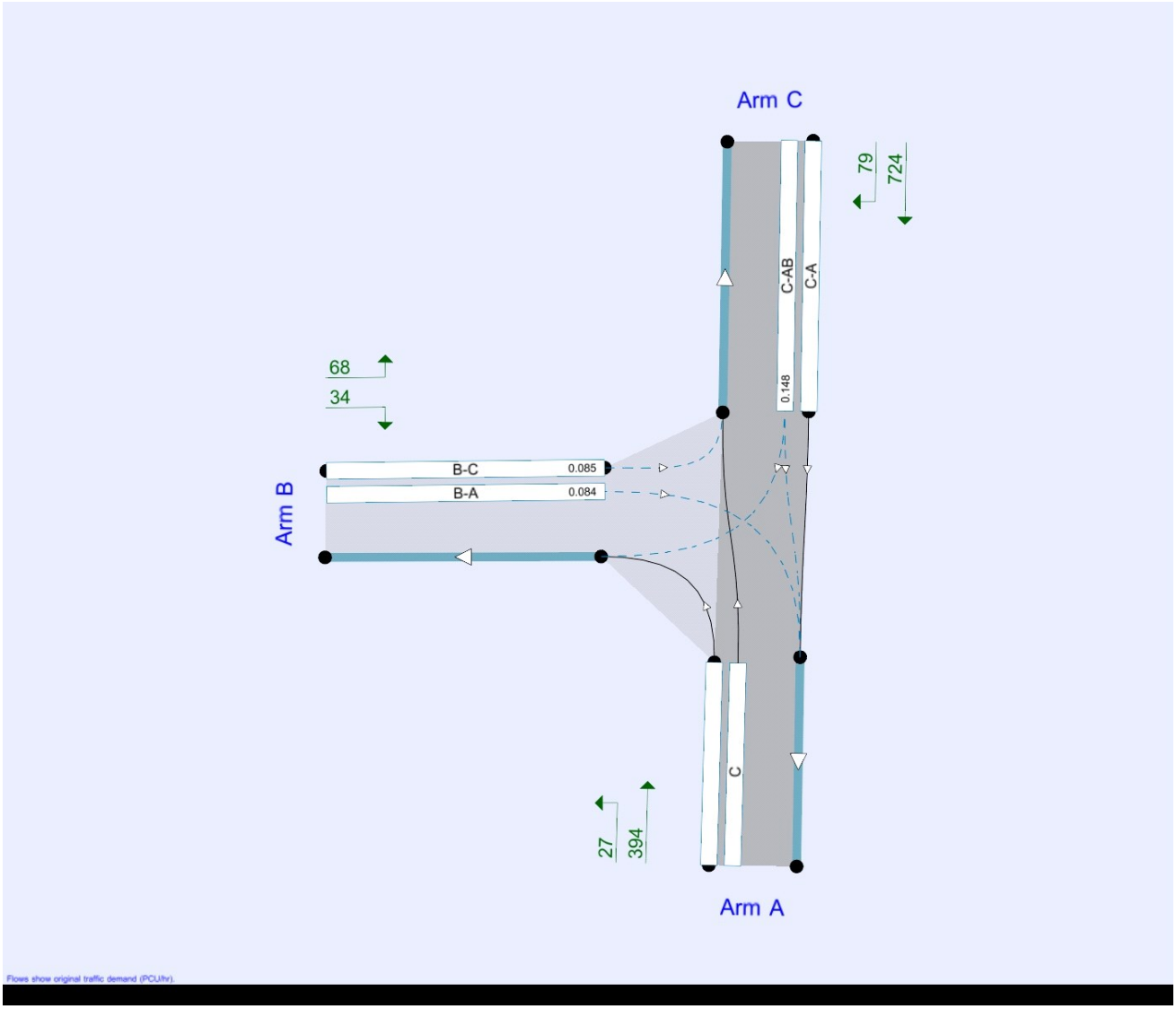
File summary

File Description

Title	Woodbrook Junction 5 Assessment
Location	Crinken Lane Priority Junction
Site number	
Date	23/09/2019
Version	
Status	Planning
Identifier	
Client	Aeval
Jobnumber	5154251
Enumerator	ATKINSMCCARTHY\MCollins
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Opening Year	AM	ONE HOUR	08:00	09:30	15
D2	Opening Year	PM	ONE HOUR	17:00	18:30	15
D3	Opening Year +5	AM	ONE HOUR	08:00	09:30	15
D4	Opening Year +5	PM	ONE HOUR	17:00	18:30	15
D15	Opening Year +15	AM	ONE HOUR	08:00	09:30	15
D16	Opening Year +15	PM	ONE HOUR	17:00	18:30	15
D23	Opening Year DEV	AM	ONE HOUR	08:00	09:30	15
D24	Opening Year DEV	PM	ONE HOUR	17:00	18:30	15
D25	Opening Year +5 DEV	AM	ONE HOUR	08:00	09:30	15
D26	Opening Year +5 DEV	PM	ONE HOUR	17:00	18:30	15
D27	Opening Year +15 DEV	AM	ONE HOUR	08:00	09:30	15
D28	Opening Year +15 DEV	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Opening Year , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
9	untitled	T-Junction	Two-way	1.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Blackrock road		Major
B	Unnamed road		Minor
C	Blackrock road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			145.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	8.50	6.00	4.70	4.00	3.70	✓	2.00	20	17

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
9	B-A	471	0.086	0.217	0.136	0.310
9	B-C	688	0.105	0.266	-	-
9	C-B	658	0.255	0.255	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Opening Year	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	444	100.000
B		✓	120	100.000
C		✓	456	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	41	403
	B	47	0	73
	C	396	60	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	7
	B	0	0	0
	C	5	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.15	7.86	0.2	A
B-A	0.18	15.07	0.2	C
C-AB	0.16	5.32	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	55	588	0.093	55	0.1	6.741	A
B-A	35	348	0.102	35	0.1	11.489	B
C-AB	73	776	0.095	73	0.2	5.277	A
C-A	270			270			
A-B	31			31			
A-C	303			303			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	66	568	0.116	66	0.1	7.166	A
B-A	42	324	0.130	42	0.1	12.770	B
C-AB	97	802	0.121	97	0.2	5.272	A
C-A	313			313			
A-B	37			37			
A-C	362			362			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	80	539	0.149	80	0.2	7.845	A
B-A	52	291	0.178	51	0.2	15.032	C
C-AB	138	840	0.164	137	0.4	5.304	A
C-A	364			364			
A-B	45			45			
A-C	444			444			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	80	538	0.149	80	0.2	7.857	A
B-A	52	291	0.178	52	0.2	15.066	C
C-AB	138	841	0.164	138	0.4	5.317	A
C-A	364			364			
A-B	45			45			
A-C	444			444			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	66	567	0.116	66	0.1	7.183	A
B-A	42	324	0.130	43	0.2	12.808	B
C-AB	98	803	0.122	98	0.3	5.296	A
C-A	312			312			
A-B	37			37			
A-C	362			362			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	55	588	0.094	55	0.1	6.762	A
B-A	35	348	0.102	36	0.1	11.534	B
C-AB	74	776	0.095	74	0.2	5.299	A
C-A	270			270			
A-B	31			31			
A-C	303			303			

Opening Year, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
9	untitled	T-Junction	Two-way	1.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	Opening Year	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	335	100.000
B		✓	89	100.000
C		✓	659	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	22	313
	B	27	0	62
	C	587	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.12	6.86	0.1	A
B-A	0.11	14.87	0.1	B
C-AB	0.22	4.69	0.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	47	631	0.074	46	0.1	6.150	A
B-A	20	330	0.062	20	0.1	11.602	B
C-AB	108	890	0.121	107	0.3	4.664	A
C-A	388			388			
A-B	17			17			
A-C	236			236			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	56	616	0.091	56	0.1	6.428	A
B-A	24	306	0.079	24	0.1	12.785	B
C-AB	149	939	0.158	148	0.4	4.631	A
C-A	444			444			
A-B	20			20			
A-C	281			281			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	68	593	0.115	68	0.1	6.850	A
B-A	30	272	0.109	30	0.1	14.844	B
C-AB	222	1008	0.220	221	0.6	4.667	A
C-A	503			503			
A-B	24			24			
A-C	345			345			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	68	593	0.115	68	0.1	6.856	A
B-A	30	272	0.109	30	0.1	14.867	B
C-AB	223	1009	0.221	223	0.6	4.681	A
C-A	503			503			
A-B	24			24			
A-C	345			345			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	56	615	0.091	56	0.1	6.438	A
B-A	24	306	0.079	24	0.1	12.809	B
C-AB	149	940	0.159	150	0.4	4.657	A
C-A	443			443			
A-B	20			20			
A-C	281			281			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	47	631	0.074	47	0.1	6.162	A
B-A	20	330	0.062	20	0.1	11.632	B
C-AB	108	890	0.122	109	0.3	4.689	A
C-A	388			388			
A-B	17			17			
A-C	236			236			

Opening Year +5, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
9	untitled	T-Junction	Two-way	1.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	Opening Year +5	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	471	100.000
B		✓	126	100.000
C		✓	481	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	43	428
	B	49	0	77
	C	418	63	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	7
	B	0	0	0
	C	5	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.16	8.09	0.2	A
B-A	0.19	15.93	0.2	C
C-AB	0.18	5.34	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	58	583	0.099	58	0.1	6.848	A
B-A	37	340	0.108	36	0.1	11.829	B
C-AB	79	783	0.101	79	0.2	5.271	A
C-A	283			283			
A-B	32			32			
A-C	322			322			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	69	561	0.123	69	0.1	7.319	A
B-A	44	315	0.140	44	0.2	13.272	B
C-AB	106	811	0.131	106	0.3	5.274	A
C-A	326			326			
A-B	39			39			
A-C	385			385			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	85	530	0.160	85	0.2	8.083	A
B-A	54	280	0.193	54	0.2	15.892	C
C-AB	152	852	0.178	151	0.4	5.323	A
C-A	378			378			
A-B	47			47			
A-C	471			471			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	85	529	0.160	85	0.2	8.095	A
B-A	54	280	0.193	54	0.2	15.935	C
C-AB	152	852	0.178	152	0.4	5.339	A
C-A	378			378			
A-B	47			47			
A-C	471			471			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	69	560	0.124	69	0.1	7.335	A
B-A	44	315	0.140	44	0.2	13.319	B
C-AB	106	812	0.131	107	0.3	5.302	A
C-A	326			326			
A-B	39			39			
A-C	385			385			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	58	582	0.100	58	0.1	6.873	A
B-A	37	340	0.108	37	0.1	11.880	B
C-AB	80	783	0.102	80	0.2	5.295	A
C-A	282			282			
A-B	32			32			
A-C	322			322			

Opening Year +5, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
9	untitled	T-Junction	Two-way	1.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	Opening Year +5	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	355	100.000
B		✓	94	100.000
C		✓	695	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	23	332
	B	29	0	65
	C	619	76	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.12	7.02	0.1	A
B-A	0.12	15.66	0.1	C
C-AB	0.24	4.73	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	49	626	0.078	49	0.1	6.237	A
B-A	22	324	0.067	22	0.1	11.908	B
C-AB	118	903	0.131	117	0.3	4.650	A
C-A	405			405			
A-B	17			17			
A-C	250			250			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	58	609	0.096	58	0.1	6.542	A
B-A	26	298	0.088	26	0.1	13.244	B
C-AB	165	955	0.172	164	0.4	4.632	A
C-A	460			460			
A-B	21			21			
A-C	298			298			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	72	585	0.122	71	0.1	7.010	A
B-A	32	262	0.122	32	0.1	15.625	C
C-AB	250	1029	0.243	249	0.7	4.709	A
C-A	516			516			
A-B	25			25			
A-C	366			366			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	72	585	0.122	72	0.1	7.016	A
B-A	32	262	0.122	32	0.1	15.656	C
C-AB	250	1030	0.243	250	0.7	4.726	A
C-A	515			515			
A-B	25			25			
A-C	366			366			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	58	608	0.096	59	0.1	6.552	A
B-A	26	298	0.088	26	0.1	13.273	B
C-AB	165	956	0.173	166	0.4	4.663	A
C-A	460			460			
A-B	21			21			
A-C	298			298			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	49	625	0.078	49	0.1	6.252	A
B-A	22	323	0.067	22	0.1	11.943	B
C-AB	119	904	0.132	120	0.3	4.677	A
C-A	404			404			
A-B	17			17			
A-C	250			250			

Opening Year +15, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
9	untitled	T-Junction	Two-way	1.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D15	Opening Year +15	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	503	100.000
B		✓	131	100.000
C		✓	510	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	46	457
	B	51	0	80
	C	444	66	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	7
	B	0	0	0
	C	5	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.17	8.37	0.2	A
B-A	0.21	17.01	0.3	C
C-AB	0.19	5.36	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	60	576	0.105	60	0.1	6.972	A
B-A	38	332	0.116	38	0.1	12.217	B
C-AB	86	791	0.109	85	0.2	5.262	A
C-A	298			298			
A-B	35			35			
A-C	344			344			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	72	552	0.130	72	0.1	7.492	A
B-A	46	305	0.150	46	0.2	13.867	B
C-AB	116	822	0.141	116	0.3	5.273	A
C-A	343			343			
A-B	41			41			
A-C	411			411			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	88	519	0.170	88	0.2	8.351	A
B-A	56	268	0.210	56	0.3	16.959	C
C-AB	168	866	0.194	167	0.5	5.348	A
C-A	394			394			
A-B	51			51			
A-C	503			503			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	88	518	0.170	88	0.2	8.366	A
B-A	56	268	0.210	56	0.3	17.014	C
C-AB	168	866	0.194	168	0.5	5.362	A
C-A	393			393			
A-B	51			51			
A-C	503			503			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	72	552	0.130	72	0.2	7.513	A
B-A	46	305	0.150	46	0.2	13.926	B
C-AB	116	822	0.141	117	0.3	5.303	A
C-A	342			342			
A-B	41			41			
A-C	411			411			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	60	575	0.105	60	0.1	6.996	A
B-A	38	332	0.116	39	0.1	12.275	B
C-AB	87	792	0.109	87	0.2	5.289	A
C-A	297			297			
A-B	35			35			
A-C	344			344			

Opening Year +15, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
9	untitled	T-Junction	Two-way	1.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D16	Opening Year +15	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	379	100.000
B		✓	98	100.000
C		✓	734	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	25	354
	B	30	0	68
	C	655	79	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.13	7.17	0.1	A
B-A	0.13	16.58	0.2	C
C-AB	0.27	4.77	0.8	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	51	621	0.082	51	0.1	6.312	A
B-A	23	315	0.072	22	0.1	12.267	B
C-AB	129	918	0.140	127	0.3	4.624	A
C-A	424			424			
A-B	19			19			
A-C	267			267			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	61	603	0.101	61	0.1	6.647	A
B-A	27	288	0.094	27	0.1	13.778	B
C-AB	181	974	0.186	180	0.5	4.623	A
C-A	479			479			
A-B	22			22			
A-C	318			318			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	75	577	0.130	75	0.1	7.165	A
B-A	33	250	0.132	33	0.1	16.547	C
C-AB	279	1053	0.265	277	0.8	4.745	A
C-A	530			530			
A-B	28			28			
A-C	390			390			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	75	577	0.130	75	0.1	7.171	A
B-A	33	250	0.132	33	0.2	16.585	C
C-AB	279	1053	0.265	279	0.8	4.766	A
C-A	529			529			
A-B	28			28			
A-C	390			390			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	61	602	0.102	61	0.1	6.658	A
B-A	27	288	0.094	27	0.1	13.819	B
C-AB	182	975	0.186	183	0.5	4.655	A
C-A	478			478			
A-B	22			22			
A-C	318			318			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	51	620	0.083	51	0.1	6.328	A
B-A	23	315	0.072	23	0.1	12.307	B
C-AB	129	919	0.141	130	0.3	4.654	A
C-A	423			423			
A-B	19			19			
A-C	267			267			

Opening Year DEV, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
9	untitled	T-Junction	Two-way	1.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D23	Opening Year DEV	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	507	100.000
B		✓	121	100.000
C		✓	473	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	45	462
	B	48	0	73
	C	413	60	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	7
	B	0	0	0
	C	5	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.16	8.22	0.2	A
B-A	0.19	16.27	0.2	C
C-AB	0.17	5.37	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	55	575	0.096	55	0.1	6.915	A
B-A	36	337	0.107	36	0.1	11.936	B
C-AB	75	775	0.097	75	0.2	5.305	A
C-A	281			281			
A-B	34			34			
A-C	348			348			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	66	551	0.119	66	0.1	7.406	A
B-A	43	311	0.139	43	0.2	13.446	B
C-AB	101	801	0.126	101	0.3	5.309	A
C-A	324			324			
A-B	40			40			
A-C	415			415			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	80	519	0.155	80	0.2	8.205	A
B-A	53	274	0.193	53	0.2	16.220	C
C-AB	145	840	0.172	144	0.4	5.359	A
C-A	376			376			
A-B	50			50			
A-C	509			509			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	80	518	0.155	80	0.2	8.217	A
B-A	53	274	0.193	53	0.2	16.266	C
C-AB	145	841	0.172	145	0.4	5.374	A
C-A	376			376			
A-B	50			50			
A-C	509			509			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	66	551	0.119	66	0.1	7.425	A
B-A	43	311	0.139	43	0.2	13.494	B
C-AB	101	802	0.126	102	0.3	5.336	A
C-A	324			324			
A-B	40			40			
A-C	415			415			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	55	574	0.096	55	0.1	6.938	A
B-A	36	337	0.107	36	0.1	11.987	B
C-AB	76	775	0.098	76	0.2	5.330	A
C-A	280			280			
A-B	34			34			
A-C	348			348			

Opening Year DEV, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
9	untitled	T-Junction	Two-way	1.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D24	Opening Year DEV	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	357	100.000
B		✓	92	100.000
C		✓	707	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	24	333
	B	30	0	62
	C	635	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.12	7.03	0.1	A
B-A	0.13	15.70	0.1	C
C-AB	0.23	4.62	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	47	621	0.075	46	0.1	6.257	A
B-A	23	325	0.070	22	0.1	11.887	B
C-AB	114	911	0.125	113	0.3	4.582	A
C-A	418			418			
A-B	18			18			
A-C	251			251			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	56	604	0.092	56	0.1	6.560	A
B-A	27	299	0.090	27	0.1	13.242	B
C-AB	159	965	0.165	159	0.4	4.548	A
C-A	476			476			
A-B	22			22			
A-C	299			299			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	68	581	0.118	68	0.1	7.024	A
B-A	33	262	0.126	33	0.1	15.681	C
C-AB	243	1041	0.234	242	0.7	4.604	A
C-A	535			535			
A-B	26			26			
A-C	367			367			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	68	580	0.118	68	0.1	7.030	A
B-A	33	262	0.126	33	0.1	15.699	C
C-AB	244	1042	0.234	244	0.7	4.621	A
C-A	535			535			
A-B	26			26			
A-C	367			367			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	56	604	0.092	56	0.1	6.568	A
B-A	27	299	0.090	27	0.1	13.272	B
C-AB	160	966	0.166	161	0.4	4.579	A
C-A	475			475			
A-B	22			22			
A-C	299			299			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	47	621	0.075	47	0.1	6.273	A
B-A	23	325	0.070	23	0.1	11.920	B
C-AB	115	912	0.126	115	0.3	4.609	A
C-A	417			417			
A-B	18			18			
A-C	251			251			

Opening Year +5 DEV, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
9	untitled	T-Junction	Two-way	1.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D25	Opening Year +5 DEV	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	533	100.000
B		✓	130	100.000
C		✓	521	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	47	486
	B	53	0	77
	C	458	63	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	7
	B	0	0	0
	C	5	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.17	8.57	0.2	A
B-A	0.22	17.73	0.3	C
C-AB	0.19	5.31	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	58	566	0.102	58	0.1	7.078	A
B-A	40	329	0.121	39	0.1	12.417	B
C-AB	84	794	0.106	83	0.2	5.228	A
C-A	308			308			
A-B	35			35			
A-C	366			366			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	69	541	0.128	69	0.1	7.629	A
B-A	48	301	0.159	47	0.2	14.212	B
C-AB	114	825	0.138	113	0.3	5.234	A
C-A	355			355			
A-B	42			42			
A-C	437			437			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	85	505	0.168	85	0.2	8.550	A
B-A	58	261	0.223	58	0.3	17.658	C
C-AB	166	871	0.190	165	0.5	5.295	A
C-A	408			408			
A-B	52			52			
A-C	535			535			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	85	505	0.168	85	0.2	8.566	A
B-A	58	261	0.223	58	0.3	17.726	C
C-AB	166	871	0.191	166	0.5	5.313	A
C-A	407			407			
A-B	52			52			
A-C	535			535			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	69	540	0.128	69	0.1	7.651	A
B-A	48	301	0.159	48	0.2	14.280	B
C-AB	114	826	0.138	115	0.3	5.262	A
C-A	354			354			
A-B	42			42			
A-C	437			437			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	58	565	0.103	58	0.1	7.107	A
B-A	40	329	0.121	40	0.1	12.480	B
C-AB	84	794	0.106	85	0.2	5.253	A
C-A	308			308			
A-B	35			35			
A-C	366			366			

Opening Year +5 DEV, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
9	untitled	T-Junction	Two-way	1.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D26	Opening Year +5 DEV	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	391	100.000
B		✓	97	100.000
C		✓	744	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	26	365
	B	32	0	65
	C	668	76	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.13	7.26	0.1	A
B-A	0.14	16.85	0.2	C
C-AB	0.26	4.70	0.8	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	49	613	0.080	49	0.1	6.373	A
B-A	24	316	0.076	24	0.1	12.309	B
C-AB	126	923	0.136	124	0.3	4.580	A
C-A	434			434			
A-B	20			20			
A-C	275			275			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	58	594	0.098	58	0.1	6.716	A
B-A	29	288	0.100	29	0.1	13.887	B
C-AB	178	980	0.181	177	0.5	4.569	A
C-A	491			491			
A-B	23			23			
A-C	328			328			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	72	568	0.126	71	0.1	7.249	A
B-A	35	249	0.142	35	0.2	16.812	C
C-AB	275	1060	0.260	274	0.8	4.680	A
C-A	544			544			
A-B	29			29			
A-C	402			402			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	72	568	0.126	72	0.1	7.256	A
B-A	35	249	0.142	35	0.2	16.853	C
C-AB	276	1061	0.260	276	0.8	4.700	A
C-A	543			543			
A-B	29			29			
A-C	402			402			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	58	594	0.098	59	0.1	6.726	A
B-A	29	288	0.100	29	0.1	13.930	B
C-AB	178	981	0.182	180	0.5	4.604	A
C-A	490			490			
A-B	23			23			
A-C	328			328			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	49	612	0.080	49	0.1	6.390	A
B-A	24	316	0.076	24	0.1	12.354	B
C-AB	127	924	0.137	127	0.3	4.610	A
C-A	433			433			
A-B	20			20			
A-C	275			275			

Opening Year +15 DEV, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
9	untitled	T-Junction	Two-way	2.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D27	Opening Year +15 DEV	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	600	100.000
B		✓	136	100.000
C		✓	566	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	52	548
	B	56	0	80
	C	500	66	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	7
	B	0	0	0
	C	5	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.18	9.16	0.2	A
B-A	0.26	20.28	0.3	C
C-AB	0.22	5.36	0.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	60	551	0.109	60	0.1	7.325	A
B-A	42	314	0.134	42	0.2	13.199	B
C-AB	93	806	0.116	92	0.2	5.217	A
C-A	333			333			
A-B	39			39			
A-C	413			413			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	72	522	0.138	72	0.2	7.986	A
B-A	50	282	0.178	50	0.2	15.477	C
C-AB	128	840	0.153	128	0.4	5.235	A
C-A	381			381			
A-B	47			47			
A-C	493			493			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	88	482	0.183	88	0.2	9.135	A
B-A	62	239	0.258	61	0.3	20.176	C
C-AB	192	891	0.215	191	0.6	5.343	A
C-A	432			432			
A-B	57			57			
A-C	603			603			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	88	481	0.183	88	0.2	9.161	A
B-A	62	239	0.258	62	0.3	20.280	C
C-AB	192	891	0.215	192	0.6	5.365	A
C-A	431			431			
A-B	57			57			
A-C	603			603			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	72	521	0.138	72	0.2	8.020	A
B-A	50	283	0.178	51	0.2	15.565	C
C-AB	129	841	0.153	130	0.4	5.268	A
C-A	380			380			
A-B	47			47			
A-C	493			493			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	60	549	0.110	60	0.1	7.365	A
B-A	42	314	0.134	42	0.2	13.273	B
C-AB	94	806	0.116	94	0.3	5.247	A
C-A	332			332			
A-B	39			39			
A-C	413			413			

Opening Year +15 DEV, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
9	untitled	T-Junction	Two-way	1.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D28	Opening Year +15 DEV	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	421	100.000
B		✓	102	100.000
C		✓	803	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	27	394
	B	34	0	68
	C	724	79	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.13	7.49	0.2	A
B-A	0.16	18.41	0.2	C
C-AB	0.29	4.75	1.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	51	605	0.085	51	0.1	6.488	A
B-A	26	305	0.084	25	0.1	12.839	B
C-AB	140	947	0.148	139	0.4	4.527	A
C-A	464			464			
A-B	20			20			
A-C	297			297			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	61	585	0.105	61	0.1	6.871	A
B-A	31	275	0.111	30	0.1	14.713	B
C-AB	201	1010	0.199	200	0.5	4.538	A
C-A	521			521			
A-B	24			24			
A-C	354			354			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	75	556	0.135	75	0.2	7.480	A
B-A	37	233	0.161	37	0.2	18.348	C
C-AB	320	1099	0.291	318	1.0	4.723	A
C-A	564			564			
A-B	30			30			
A-C	434			434			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	75	555	0.135	75	0.2	7.489	A
B-A	37	233	0.161	37	0.2	18.410	C
C-AB	321	1100	0.292	321	1.0	4.749	A
C-A	563			563			
A-B	30			30			
A-C	434			434			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	61	584	0.105	61	0.1	6.886	A
B-A	31	275	0.111	31	0.1	14.770	B
C-AB	202	1011	0.200	204	0.6	4.576	A
C-A	520			520			
A-B	24			24			
A-C	354			354			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	51	605	0.085	51	0.1	6.509	A
B-A	26	305	0.084	26	0.1	12.890	B
C-AB	141	948	0.149	142	0.4	4.561	A
C-A	463			463			
A-B	20			20			
A-C	297			297			

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.1.4646 []

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Filename: J6_QuinnsRd-CherringtonRd.roundabout.j9
Path: Z:\5154251 Castlethorn Woodbrook\7 Calcs\72Model
Report generation date: 23/09/2019 15:25:28

»J2 - Opening Year , AM
»J2 - Opening Year, PM
»J2 - Opening Year +5, AM
»J2 - Opening Year +5, PM
»J2 - Opening Year +15, AM
»J2 - Opening Year +15, PM
»J2 - Opening Year DEV, AM
»J2 - Opening Year DEV, PM
»J2 - Opening Year +5 DEV, AM
»J2 - Opening Year +5 DEV, PM
»J2 - Opening Year +15 DEV, AM
»J2 - Opening Year +15 DEV, PM
»J2 - Sensitivity analysis +5, PM
»J2 - Sensitivity analysis +5, AM
»J2 - Sensitivity analysis +15, AM
»J2 - Sensitivity analysis +15, PM
»J2 - Count, AM
»J2 - Count, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	J2 - Opening Year							
Arm B	0.4	6.95	0.27	A	0.2	7.68	0.19	A
Arm C	2.0	12.45	0.67	B	0.9	7.46	0.46	A
Arm D	0.0	2.51	0.02	A	0.0	2.26	0.01	A
Arm A	1.1	9.11	0.51	A	27.7	112.99	1.03	F
	J2 - Opening Year +5							
Arm B	0.4	7.21	0.29	A	0.3	7.81	0.20	A
Arm C	2.5	14.17	0.71	B	1.0	7.84	0.48	A
Arm D	0.0	2.56	0.02	A	0.0	2.28	0.01	A
Arm A	1.2	9.72	0.54	A	46.2	171.67	1.08	F
	J2 - Opening Year +15							
Arm B	0.5	7.53	0.31	A	0.3	7.94	0.22	A
Arm C	3.1	16.94	0.75	C	1.1	8.36	0.51	A
Arm D	0.0	2.61	0.02	A	0.0	2.31	0.01	A
Arm A	1.4	10.54	0.57	B	71.4	284.11	1.14	F
	J2 - Opening Year DEV							
Arm B	0.4	6.94	0.28	A	0.3	7.83	0.20	A
Arm C	2.9	15.90	0.74	C	1.0	7.77	0.48	A
Arm D	0.0	2.58	0.02	A	0.0	2.27	0.01	A
Arm A	1.1	9.28	0.53	A	47.7	176.41	1.09	F
	J2 - Opening Year +5 DEV							
Arm B	0.4	7.54	0.30	A	0.3	7.93	0.21	A
Arm C	3.5	18.61	0.78	C	1.1	8.49	0.52	A
Arm D	0.0	2.63	0.02	A	0.0	2.31	0.01	A
Arm A	1.5	10.79	0.58	B	71.8	286.69	1.15	F
	J2 - Opening Year +15 DEV							
Arm B	0.5	8.06	0.33	A	0.3	8.09	0.23	A
Arm C	6.0	29.55	0.86	D	1.3	9.27	0.56	A
Arm D	0.0	2.72	0.03	A	0.0	2.35	0.01	A
Arm A	1.8	12.42	0.64	B	113.6	490.80	1.23	F
	J2 - Sensitivity analysis +5							
Arm B	0.4	7.16	0.28	A	0.3	7.93	0.20	A
Arm C	2.7	14.97	0.72	B	1.0	7.95	0.49	A
Arm D	0.0	2.56	0.02	A	0.0	2.28	0.01	A
Arm A	1.2	9.85	0.54	A	42.0	159.08	1.07	F
	J2 - Sensitivity analysis +15							
Arm B	0.4	7.28	0.29	A	0.3	8.01	0.20	A
Arm C	3.2	17.26	0.76	C	1.0	8.07	0.49	A
Arm D	0.0	2.60	0.02	A	0.0	2.29	0.01	A
Arm A	1.3	10.25	0.56	B	52.4	192.09	1.10	F
	J2 - Count							
Arm B	0.4	6.86	0.27	A	0.2	7.75	0.19	A
Arm C	1.9	11.93	0.65	B	0.8	7.38	0.45	A
Arm D	0.0	2.49	0.02	A	0.0	2.25	0.01	A
Arm A	1.0	8.94	0.50	A	22.9	97.63	1.01	F

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

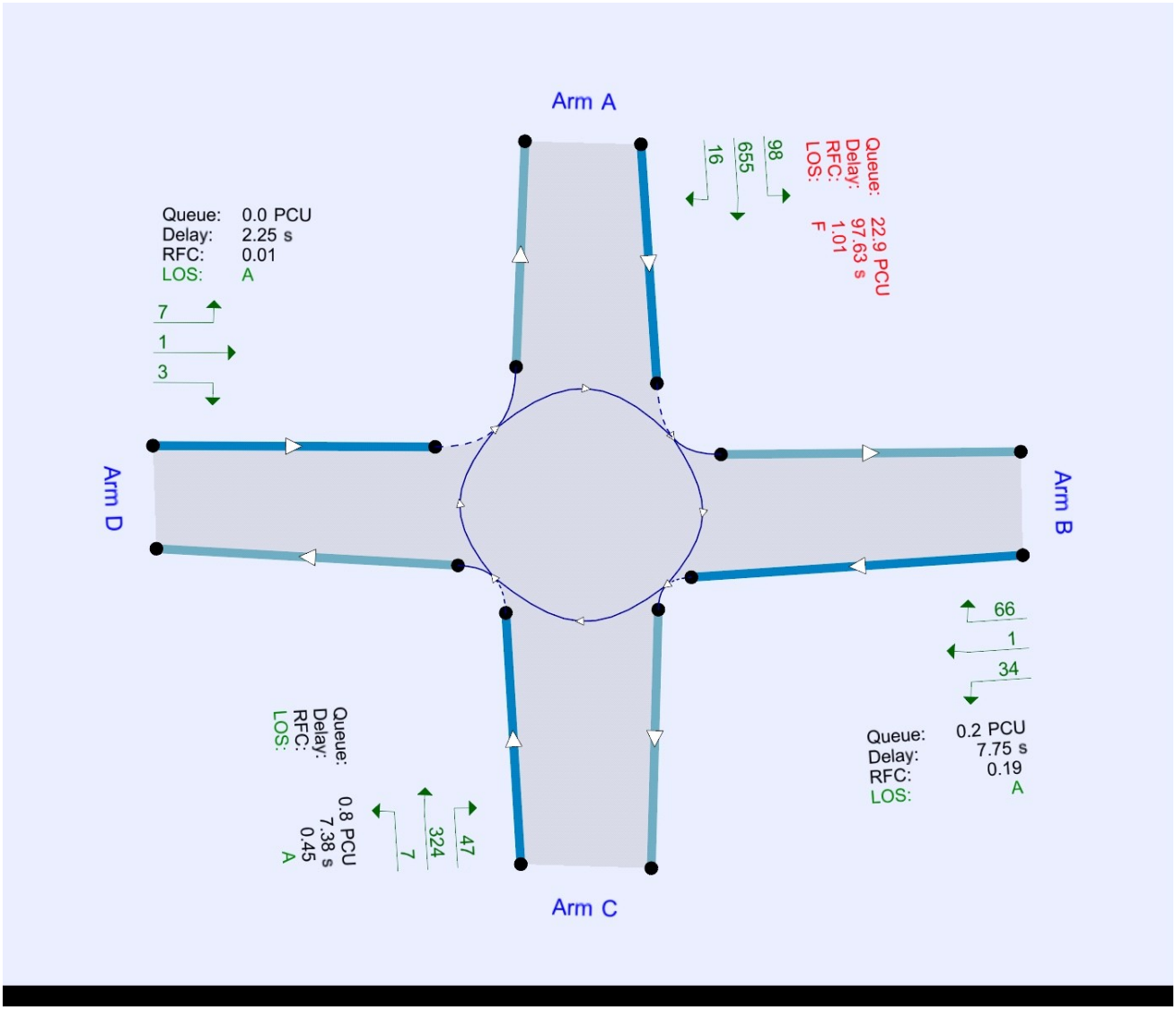
File summary

File Description

Title	Woodbrook Junction 6 Assessment
Location	Quinns Road Cherrington Roundabout
Site number	
Date	23/09/2019
Version	
Status	Planning
Identifier	
Client	Aeval
Jobnumber	5154251
Enumerator	ATKINSMCCARTHY\MCollins
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Opening Year	AM	ONE HOUR	08:00	09:30	15
D2	Opening Year	PM	ONE HOUR	17:00	18:30	15
D3	Opening Year +5	AM	ONE HOUR	08:00	09:30	15
D4	Opening Year +5	PM	ONE HOUR	17:00	18:30	15
D5	Opening Year +15	AM	ONE HOUR	08:00	09:30	15
D6	Opening Year +15	PM	ONE HOUR	17:00	18:30	15
D13	Opening Year DEV	AM	ONE HOUR	08:00	09:30	15
D14	Opening Year DEV	PM	ONE HOUR	17:00	18:30	15
D15	Opening Year +5 DEV	AM	ONE HOUR	08:00	09:30	15
D16	Opening Year +5 DEV	PM	ONE HOUR	17:00	18:30	15
D17	Opening Year +15 DEV	AM	ONE HOUR	08:00	09:30	15
D18	Opening Year +15 DEV	PM	ONE HOUR	17:00	18:30	15
D19	Sensitivity analysis +5	PM	ONE HOUR	17:00	18:30	15
D20	Sensitivity analysis +5	AM	ONE HOUR	08:00	09:30	15
D21	Sensitivity analysis +15	AM	ONE HOUR	08:00	09:30	15
D22	Sensitivity analysis +15	PM	ONE HOUR	17:00	18:30	15
D23	Count	AM	ONE HOUR	08:00	09:30	15
D24	Count	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	J2	100.000

J2 - Opening Year , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	10.20	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
B	untitled	
C	untitled	
D	untitled	
A	untitled	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
B	3.70	3.70	0.0	11.0	23.0	76.0	
C	3.60	3.70	3.0	14.0	23.0	61.0	
D	3.50	3.60	3.0	12.0	23.0	80.0	
A	3.25	3.50	3.0	15.0	23.0	75.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final slope	Final intercept (PCU/hr)
B				0.435	897
C				0.473	974
D	✓	0.586	1895	0.586	1895
A				0.437	864

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Opening Year	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B		✓	179	100.000
C		✓	548	100.000
D		✓	29	100.000
A		✓	390	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B	C	D	A
From	B	0	57	0	122
	C	31	0	5	512
	D	1	9	0	19
	A	40	343	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B	C	D	A
From	B	0	4	0	1
	C	11	0	0	5
	D	0	0	0	0
	A	8	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B	0.27	6.95	0.4	A
C	0.67	12.45	2.0	B
D	0.02	2.51	0.0	A
A	0.51	9.11	1.1	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	135	268	781	0.173	134	0.2	5.668	A
C	413	97	929	0.444	409	0.8	7.248	A
D	22	497	1604	0.014	22	0.0	2.275	A
A	294	31	851	0.345	291	0.5	6.743	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	161	322	757	0.213	161	0.3	6.149	A
C	493	116	920	0.536	491	1.2	8.814	A
D	26	596	1546	0.017	26	0.0	2.368	A
A	351	37	848	0.413	350	0.7	7.587	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	197	394	726	0.272	197	0.4	6.928	A
C	603	142	907	0.665	600	2.0	12.199	B
D	32	729	1468	0.022	32	0.0	2.506	A
A	429	45	845	0.508	428	1.1	9.058	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	197	395	725	0.272	197	0.4	6.946	A
C	603	142	907	0.665	603	2.0	12.448	B
D	32	732	1466	0.022	32	0.0	2.509	A
A	429	45	845	0.508	429	1.1	9.114	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	161	324	756	0.213	161	0.3	6.173	A
C	493	116	919	0.536	496	1.2	9.016	A
D	26	601	1543	0.017	26	0.0	2.375	A
A	351	37	848	0.413	352	0.8	7.649	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	135	271	779	0.173	135	0.2	5.696	A
C	413	97	928	0.444	414	0.9	7.390	A
D	22	502	1601	0.014	22	0.0	2.279	A
A	294	31	851	0.345	294	0.6	6.816	A

J2 - Opening Year, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	71.89	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	Opening Year	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B		✓	103	100.000
C		✓	385	100.000
D		✓	11	100.000
A		✓	783	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B	C	D	A
From	B	0	35	1	67
	C	48	0	7	330
	D	1	3	0	7
	A	99	668	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B	C	D	A
From	B	0	0	0	0
	C	0	0	0	6
	D	0	0	0	0
	A	0	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B	0.19	7.68	0.2	A
C	0.46	7.46	0.9	A
D	0.01	2.26	0.0	A
A	1.03	112.99	27.7	F

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	78	509	676	0.115	77	0.1	6.009	A
C	290	63	945	0.307	288	0.5	5.744	A
D	8	333	1700	0.005	8	0.0	2.127	A
A	589	39	847	0.696	581	2.2	13.425	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	93	610	632	0.147	92	0.2	6.670	A
C	346	75	939	0.369	346	0.6	6.369	A
D	10	399	1661	0.006	10	0.0	2.180	A
A	704	47	844	0.834	695	4.5	23.378	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	113	708	589	0.192	113	0.2	7.557	A
C	424	91	931	0.455	423	0.9	7.426	A
D	12	489	1609	0.008	12	0.0	2.254	A
A	862	57	839	1.027	806	18.4	65.846	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	113	724	582	0.195	113	0.2	7.678	A
C	424	92	931	0.455	424	0.9	7.459	A
D	12	490	1608	0.008	12	0.0	2.255	A
A	862	57	839	1.027	825	27.7	112.988	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	93	691	596	0.155	93	0.2	7.153	A
C	346	77	938	0.369	347	0.6	6.415	A
D	10	401	1660	0.006	10	0.0	2.183	A
A	704	47	844	0.834	788	6.5	74.221	F

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	78	531	666	0.116	78	0.1	6.121	A
C	290	64	944	0.307	290	0.5	5.791	A
D	8	336	1698	0.005	8	0.0	2.131	A
A	589	39	847	0.696	606	2.5	16.212	C

J2 - Opening Year +5, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	11.27	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	Opening Year +5	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B		✓	188	100.000
C		✓	579	100.000
D		✓	31	100.000
A		✓	412	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B	C	D	A
From	B	0	60	0	128
	C	33	0	5	541
	D	1	10	0	20
	A	43	362	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B	C	D	A
From	B	0	4	0	1
	C	11	0	0	5
	D	0	0	0	0
	A	8	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B	0.29	7.21	0.4	A
C	0.71	14.17	2.5	B
D	0.02	2.56	0.0	A
A	0.54	9.72	1.2	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	142	283	774	0.183	141	0.2	5.785	A
C	436	101	927	0.470	432	0.9	7.610	A
D	23	524	1588	0.015	23	0.0	2.300	A
A	310	33	850	0.365	308	0.6	6.954	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	169	340	749	0.226	169	0.3	6.317	A
C	521	121	917	0.568	519	1.4	9.471	A
D	28	629	1526	0.018	28	0.0	2.402	A
A	370	39	847	0.437	370	0.8	7.915	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	207	416	716	0.289	207	0.4	7.192	A
C	637	148	904	0.705	633	2.4	13.769	B
D	34	768	1445	0.024	34	0.0	2.551	A
A	454	48	843	0.538	452	1.2	9.640	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	207	417	716	0.289	207	0.4	7.212	A
C	637	149	904	0.705	637	2.5	14.169	B
D	34	773	1442	0.024	34	0.0	2.556	A
A	454	48	843	0.538	454	1.2	9.716	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	169	342	748	0.226	169	0.3	6.342	A
C	521	122	917	0.568	525	1.4	9.762	A
D	28	636	1523	0.018	28	0.0	2.409	A
A	370	40	847	0.437	372	0.8	7.999	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	142	286	773	0.183	142	0.2	5.818	A
C	436	102	926	0.471	438	1.0	7.789	A
D	23	531	1584	0.015	23	0.0	2.308	A
A	310	33	850	0.365	311	0.6	7.040	A

J2 - Opening Year +5, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	107.94	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	Opening Year +5	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B		✓	107	100.000
C		✓	406	100.000
D		✓	11	100.000
A		✓	824	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B	C	D	A
From	B	0	36	1	70
	C	50	0	7	349
	D	1	3	0	7
	A	104	703	17	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B	C	D	A
From	B	0	0	0	0
	C	0	0	0	6
	D	0	0	0	0
	A	0	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B	0.20	7.81	0.3	A
C	0.48	7.84	1.0	A
D	0.01	2.28	0.0	A
A	1.08	171.67	46.2	F

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	81	535	664	0.121	80	0.1	6.155	A
C	306	66	943	0.324	304	0.5	5.898	A
D	8	351	1689	0.005	8	0.0	2.141	A
A	620	40	847	0.733	610	2.6	14.983	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	96	638	619	0.155	96	0.2	6.876	A
C	365	79	937	0.389	364	0.7	6.600	A
D	10	421	1648	0.006	10	0.0	2.196	A
A	741	48	843	0.878	728	5.9	28.965	D

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	118	720	584	0.202	118	0.3	7.711	A
C	447	95	930	0.481	446	1.0	7.803	A
D	12	515	1593	0.008	12	0.0	2.276	A
A	907	59	839	1.082	820	27.7	88.985	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	118	731	579	0.203	118	0.3	7.805	A
C	447	95	929	0.481	447	1.0	7.843	A
D	12	516	1592	0.008	12	0.0	2.277	A
A	907	59	838	1.082	833	46.2	171.674	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	96	723	582	0.165	96	0.2	7.411	A
C	365	81	936	0.390	366	0.7	6.654	A
D	10	423	1647	0.006	10	0.0	2.200	A
A	741	49	843	0.879	825	25.2	159.201	F

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	81	621	627	0.129	81	0.1	6.596	A
C	306	68	942	0.324	306	0.5	5.957	A
D	8	354	1688	0.005	8	0.0	2.145	A
A	620	41	847	0.733	709	3.1	40.045	E

J2 - Opening Year +15, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	12.95	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	Opening Year +15	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B		✓	197	100.000
C		✓	616	100.000
D		✓	32	100.000
A		✓	439	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B	C	D	A
From	B	0	63	0	134
	C	35	0	6	575
	D	1	10	0	21
	A	46	385	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B	C	D	A
From	B	0	4	0	1
	C	11	0	0	5
	D	0	0	0	0
	A	8	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B	0.31	7.53	0.5	A
C	0.75	16.94	3.1	C
D	0.02	2.61	0.0	A
A	0.57	10.54	1.4	B

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	148	301	766	0.194	147	0.2	5.921	A
C	464	106	924	0.502	460	1.0	8.087	A
D	24	555	1570	0.015	24	0.0	2.328	A
A	331	34	849	0.389	328	0.7	7.227	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	177	361	740	0.239	177	0.3	6.513	A
C	554	127	914	0.606	552	1.6	10.390	B
D	29	667	1504	0.019	29	0.0	2.439	A
A	395	41	846	0.466	394	0.9	8.347	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	217	442	705	0.308	216	0.4	7.503	A
C	678	156	901	0.753	673	3.0	16.206	C
D	35	813	1418	0.025	35	0.0	2.602	A
A	483	50	842	0.574	481	1.4	10.435	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	217	444	704	0.308	217	0.5	7.529	A
C	678	156	900	0.753	678	3.1	16.940	C
D	35	819	1415	0.025	35	0.0	2.608	A
A	483	51	842	0.574	483	1.4	10.544	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	177	364	739	0.240	178	0.3	6.543	A
C	554	128	914	0.606	560	1.7	10.862	B
D	29	675	1500	0.019	29	0.0	2.449	A
A	395	42	846	0.466	397	0.9	8.458	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	148	304	765	0.194	149	0.2	5.957	A
C	464	107	924	0.502	466	1.1	8.322	A
D	24	563	1565	0.015	24	0.0	2.337	A
A	331	35	849	0.389	332	0.7	7.332	A

J2 - Opening Year +15, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	176.51	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	Opening Year +15	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B		✓	113	100.000
C		✓	431	100.000
D		✓	12	100.000
A		✓	870	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B	C	D	A
From	B	0	38	1	74
	C	52	0	8	371
	D	1	3	0	8
	A	109	743	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B	C	D	A
From	B	0	0	0	0
	C	0	0	0	6
	D	0	0	0	0
	A	0	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B	0.22	7.94	0.3	A
C	0.51	8.36	1.1	A
D	0.01	2.31	0.0	A
A	1.14	284.11	71.4	F

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	85	564	652	0.131	84	0.1	6.337	A
C	324	69	942	0.345	322	0.5	6.090	A
D	9	372	1677	0.005	9	0.0	2.157	A
A	655	42	846	0.774	642	3.2	17.156	C

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	102	669	606	0.168	101	0.2	7.125	A
C	387	83	935	0.414	387	0.7	6.889	A
D	11	446	1634	0.007	11	0.0	2.217	A
A	782	50	842	0.928	761	8.4	37.928	E

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	124	728	581	0.214	124	0.3	7.882	A
C	475	100	927	0.512	473	1.1	8.306	A
D	13	546	1575	0.008	13	0.0	2.304	A
A	958	61	838	1.144	828	40.8	121.631	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	124	734	578	0.215	124	0.3	7.940	A
C	475	100	927	0.512	475	1.1	8.358	A
D	13	547	1574	0.008	13	0.0	2.305	A
A	958	62	837	1.144	836	71.4	252.233	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	102	729	580	0.175	102	0.2	7.530	A
C	387	85	934	0.415	389	0.8	6.953	A
D	11	448	1632	0.007	11	0.0	2.221	A
A	782	51	842	0.928	830	59.3	284.108	F

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	85	730	580	0.147	85	0.2	7.281	A
C	324	74	940	0.345	325	0.6	6.167	A
D	9	375	1675	0.005	9	0.0	2.161	A
A	655	42	846	0.774	832	15.2	166.969	F

J2 - Opening Year DEV, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	12.06	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	Opening Year DEV	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B		✓	181	100.000
C		✓	608	100.000
D		✓	30	100.000
A		✓	404	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B	C	D	A
From	B	0	59	0	122
	C	34	0	6	568
	D	1	10	0	19
	A	40	357	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B	C	D	A
From	B	0	0	0	0
	C	0	0	0	6
	D	0	0	0	0
	A	0	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B	0.28	6.94	0.4	A
C	0.74	15.90	2.9	C
D	0.02	2.58	0.0	A
A	0.53	9.28	1.1	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	136	280	776	0.176	135	0.2	5.616	A
C	458	97	929	0.493	454	1.0	7.936	A
D	23	541	1578	0.014	23	0.0	2.313	A
A	304	34	850	0.358	302	0.6	6.719	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	163	336	751	0.217	162	0.3	6.110	A
C	547	116	920	0.594	545	1.5	10.078	B
D	27	649	1515	0.018	27	0.0	2.419	A
A	363	40	847	0.429	362	0.8	7.615	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	199	410	719	0.277	199	0.4	6.919	A
C	669	142	907	0.738	664	2.8	15.306	C
D	33	792	1431	0.023	33	0.0	2.574	A
A	445	49	843	0.528	443	1.1	9.214	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	199	412	718	0.278	199	0.4	6.937	A
C	669	142	907	0.738	669	2.9	15.900	C
D	33	797	1428	0.023	33	0.0	2.580	A
A	445	50	843	0.528	445	1.1	9.280	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	163	337	750	0.217	163	0.3	6.135	A
C	547	116	919	0.594	552	1.6	10.478	B
D	27	656	1510	0.018	27	0.0	2.428	A
A	363	41	847	0.429	365	0.8	7.689	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	136	282	774	0.176	137	0.2	5.645	A
C	458	97	928	0.493	460	1.0	8.152	A
D	23	547	1574	0.014	23	0.0	2.321	A
A	304	34	850	0.358	305	0.6	6.794	A

J2 - Opening Year DEV, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	111.19	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	Opening Year DEV	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B		✓	106	100.000
C		✓	404	100.000
D		✓	11	100.000
A		✓	827	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B	C	D	A
From	B	0	38	1	67
	C	50	0	8	346
	D	1	3	0	7
	A	99	712	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B	C	D	A
From	B	0	0	0	0
	C	0	0	0	6
	D	0	0	0	0
	A	0	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B	0.20	7.83	0.3	A
C	0.48	7.77	1.0	A
D	0.01	2.27	0.0	A
A	1.09	176.41	47.7	F

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	80	541	662	0.121	79	0.1	6.174	A
C	304	63	945	0.322	302	0.5	5.870	A
D	8	346	1692	0.005	8	0.0	2.137	A
A	623	40	847	0.735	612	2.7	15.110	C

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	95	645	617	0.155	95	0.2	6.903	A
C	363	75	939	0.387	363	0.7	6.558	A
D	10	415	1652	0.006	10	0.0	2.192	A
A	743	48	843	0.882	730	6.1	29.450	D

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	117	726	581	0.201	116	0.2	7.736	A
C	445	91	932	0.477	444	0.9	7.735	A
D	12	508	1597	0.008	12	0.0	2.271	A
A	911	59	839	1.086	821	28.5	90.857	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	117	737	576	0.202	117	0.3	7.829	A
C	445	91	931	0.478	445	1.0	7.773	A
D	12	510	1596	0.008	12	0.0	2.272	A
A	911	59	838	1.086	834	47.7	176.405	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	95	729	580	0.164	96	0.2	7.436	A
C	363	77	938	0.387	364	0.7	6.610	A
D	10	417	1650	0.006	10	0.0	2.194	A
A	743	49	843	0.882	825	27.2	166.507	F

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	80	635	621	0.129	80	0.1	6.658	A
C	304	65	944	0.322	305	0.5	5.930	A
D	8	349	1690	0.005	8	0.0	2.139	A
A	623	41	847	0.735	719	3.1	44.753	E

J2 - Opening Year +5 DEV, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	13.93	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D15	Opening Year +5 DEV	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B		✓	193	100.000
C		✓	638	100.000
D		✓	31	100.000
A		✓	446	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B	C	D	A
From	B	0	65	0	128
	C	36	0	6	596
	D	1	10	0	20
	A	43	396	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B	C	D	A
From	B	0	4	0	1
	C	11	0	0	5
	D	0	0	0	0
	A	8	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B	0.30	7.54	0.4	A
C	0.78	18.61	3.5	C
D	0.02	2.63	0.0	A
A	0.58	10.79	1.5	B

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	145	308	763	0.190	144	0.2	5.926	A
C	480	101	927	0.518	476	1.1	8.327	A
D	23	567	1563	0.015	23	0.0	2.338	A
A	336	35	849	0.395	333	0.7	7.302	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	174	370	736	0.236	173	0.3	6.520	A
C	574	121	917	0.625	571	1.7	10.876	B
D	28	681	1496	0.019	28	0.0	2.451	A
A	401	42	846	0.474	400	0.9	8.470	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	212	453	700	0.303	212	0.4	7.512	A
C	702	148	904	0.777	696	3.4	17.613	C
D	34	830	1409	0.024	34	0.0	2.618	A
A	491	51	842	0.583	489	1.4	10.669	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	212	455	699	0.304	212	0.4	7.539	A
C	702	149	904	0.777	702	3.5	18.613	C
D	34	836	1405	0.024	34	0.0	2.625	A
A	491	52	842	0.583	491	1.5	10.787	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	174	373	735	0.236	174	0.3	6.552	A
C	574	122	917	0.626	580	1.8	11.477	B
D	28	690	1490	0.019	28	0.0	2.460	A
A	401	43	846	0.474	403	1.0	8.589	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	145	312	762	0.191	146	0.2	5.965	A
C	480	102	926	0.519	483	1.2	8.600	A
D	23	575	1558	0.015	23	0.0	2.345	A
A	336	36	849	0.396	337	0.7	7.410	A

J2 - Opening Year +5 DEV, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	177.22	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D16	Opening Year +5 DEV	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B		✓	111	100.000
C		✓	440	100.000
D		✓	12	100.000
A		✓	869	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B	C	D	A
From	B	0	40	1	70
	C	55	0	8	377
	D	1	4	0	7
	A	104	748	17	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B	C	D	A
From	B	0	0	0	0
	C	0	0	0	6
	D	0	0	0	0
	A	0	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B	0.21	7.93	0.3	A
C	0.52	8.49	1.1	A
D	0.01	2.31	0.0	A
A	1.15	286.69	71.8	F

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	84	568	650	0.129	83	0.1	6.338	A
C	331	66	943	0.351	329	0.6	6.136	A
D	9	375	1675	0.005	9	0.0	2.160	A
A	654	45	845	0.774	641	3.2	17.202	C

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	100	673	604	0.165	100	0.2	7.126	A
C	396	79	937	0.422	395	0.8	6.964	A
D	11	450	1631	0.007	11	0.0	2.221	A
A	781	54	841	0.929	760	8.5	38.122	E

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	122	732	579	0.211	122	0.3	7.875	A
C	484	94	930	0.521	483	1.1	8.438	A
D	13	551	1572	0.008	13	0.0	2.309	A
A	957	66	836	1.145	826	41.1	122.418	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	122	738	576	0.212	122	0.3	7.933	A
C	484	94	930	0.521	484	1.1	8.494	A
D	13	553	1571	0.008	13	0.0	2.310	A
A	957	66	836	1.145	834	71.8	254.096	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	100	733	578	0.173	100	0.2	7.534	A
C	396	80	937	0.422	397	0.8	7.030	A
D	11	453	1630	0.007	11	0.0	2.223	A
A	781	54	841	0.929	829	59.9	286.688	F

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	84	734	578	0.145	84	0.2	7.289	A
C	331	70	941	0.352	332	0.6	6.219	A
D	9	379	1673	0.005	9	0.0	2.163	A
A	654	45	845	0.775	830	15.8	169.726	F

J2 - Opening Year +15 DEV, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	20.03	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D17	Opening Year +15 DEV	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B		✓	205	100.000
C		✓	707	100.000
D		✓	33	100.000
A		✓	486	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B	C	D	A
From	B	0	71	0	134
	C	40	0	7	660
	D	1	11	0	21
	A	46	432	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B	C	D	A
From	B	0	4	0	1
	C	11	0	0	5
	D	0	0	0	0
	A	8	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B	0.33	8.06	0.5	A
C	0.86	29.55	6.0	D
D	0.03	2.72	0.0	A
A	0.64	12.42	1.8	B

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	154	337	751	0.206	153	0.3	6.137	A
C	532	106	924	0.576	527	1.4	9.407	A
D	25	622	1531	0.016	25	0.0	2.390	A
A	366	39	847	0.432	363	0.8	7.763	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	184	404	721	0.255	184	0.3	6.829	A
C	636	127	914	0.695	632	2.3	13.254	B
D	30	746	1458	0.020	30	0.0	2.520	A
A	437	47	844	0.518	436	1.1	9.241	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	226	494	682	0.331	225	0.5	8.023	A
C	778	156	901	0.864	765	5.6	25.773	D
D	36	905	1365	0.027	36	0.0	2.709	A
A	535	57	840	0.637	532	1.8	12.208	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	226	496	681	0.331	226	0.5	8.061	A
C	778	156	900	0.864	777	6.0	29.548	D
D	36	916	1358	0.027	36	0.0	2.723	A
A	535	57	839	0.637	535	1.8	12.421	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	184	408	720	0.256	185	0.4	6.872	A
C	636	128	914	0.696	650	2.5	15.030	C
D	30	764	1447	0.021	30	0.0	2.541	A
A	437	48	844	0.518	440	1.2	9.431	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	154	341	749	0.206	155	0.3	6.182	A
C	532	107	924	0.576	536	1.5	9.888	A
D	25	632	1524	0.016	25	0.0	2.402	A
A	366	39	847	0.432	367	0.8	7.912	A

J2 - Opening Year +15 DEV, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	301.74	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D18	Opening Year +15 DEV	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B		✓	118	100.000
C		✓	472	100.000
D		✓	13	100.000
A		✓	934	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B	C	D	A
From	B	0	43	1	74
	C	57	0	8	407
	D	1	4	0	8
	A	109	807	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B	C	D	A
From	B	0	0	0	0
	C	0	0	0	6
	D	0	0	0	0
	A	0	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B	0.23	8.09	0.3	A
C	0.56	9.27	1.3	A
D	0.01	2.35	0.0	A
A	1.23	490.80	113.6	F

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	89	608	633	0.140	88	0.2	6.603	A
C	355	69	942	0.377	353	0.6	6.401	A
D	10	402	1659	0.006	10	0.0	2.182	A
A	703	46	844	0.833	685	4.4	21.363	C

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	106	708	589	0.180	106	0.2	7.446	A
C	424	83	935	0.454	423	0.9	7.379	A
D	12	483	1612	0.007	12	0.0	2.248	A
A	840	56	840	0.999	798	14.9	57.534	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	130	739	576	0.226	130	0.3	8.063	A
C	520	98	928	0.560	518	1.3	9.189	A
D	14	590	1549	0.009	14	0.0	2.345	A
A	1028	68	835	1.232	831	64.2	183.962	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	130	741	575	0.226	130	0.3	8.091	A
C	520	99	928	0.560	520	1.3	9.270	A
D	14	592	1548	0.009	14	0.0	2.346	A
A	1028	68	835	1.232	834	112.7	390.040	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	106	742	574	0.185	106	0.2	7.695	A
C	424	84	935	0.454	426	0.9	7.463	A
D	12	486	1610	0.007	12	0.0	2.251	A
A	840	56	840	1.000	836	113.6	490.805	F

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	89	742	574	0.155	89	0.2	7.420	A
C	355	73	940	0.378	356	0.6	6.496	A
D	10	406	1657	0.006	10	0.0	2.185	A
A	703	47	844	0.833	836	80.3	418.682	F

J2 - Sensitivity analysis +5, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	99.64	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D19	Sensitivity analysis +5	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B		✓	104	100.000
C		✓	412	100.000
D		✓	11	100.000
A		✓	814	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B	C	D	A
From	B	0	37	1	66
	C	52	0	8	352
	D	1	3	0	7
	A	98	700	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B	C	D	A
From	B	0	4	0	1
	C	11	0	0	5
	D	0	0	0	0
	A	8	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B	0.20	7.93	0.3	A
C	0.49	7.95	1.0	A
D	0.01	2.28	0.0	A
A	1.07	159.08	42.0	F

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	78	532	666	0.118	78	0.1	6.242	A
C	310	62	945	0.328	308	0.5	5.949	A
D	8	351	1689	0.005	8	0.0	2.141	A
A	613	42	846	0.724	602	2.6	14.975	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	93	636	621	0.151	93	0.2	6.963	A
C	370	74	939	0.394	370	0.7	6.666	A
D	10	422	1648	0.006	10	0.0	2.197	A
A	732	50	842	0.869	719	5.7	28.216	D

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	115	721	583	0.196	114	0.2	7.826	A
C	454	90	932	0.487	452	1.0	7.906	A
D	12	516	1593	0.008	12	0.0	2.277	A
A	896	62	838	1.070	816	25.7	84.537	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	115	734	578	0.198	114	0.3	7.928	A
C	454	90	932	0.487	454	1.0	7.949	A
D	12	517	1592	0.008	12	0.0	2.278	A
A	896	62	837	1.070	831	42.0	159.082	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	93	726	582	0.161	94	0.2	7.534	A
C	370	77	938	0.395	372	0.7	6.723	A
D	10	424	1647	0.006	10	0.0	2.199	A
A	732	50	842	0.869	822	19.5	139.304	F

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	78	599	636	0.123	79	0.1	6.584	A
C	310	64	944	0.329	311	0.5	6.009	A
D	8	355	1687	0.005	8	0.0	2.145	A
A	613	42	846	0.724	679	3.0	30.162	D

J2 - Sensitivity analysis +5, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	11.77	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D20	Sensitivity analysis +5	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B		✓	181	100.000
C		✓	596	100.000
D		✓	30	100.000
A		✓	417	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B	C	D	A
From	B	0	61	0	120
	C	33	0	6	557
	D	1	10	0	19
	A	40	370	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B	C	D	A
From	B	0	4	0	1
	C	11	0	0	5
	D	0	0	0	0
	A	8	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B	0.28	7.16	0.4	A
C	0.72	14.97	2.7	B
D	0.02	2.56	0.0	A
A	0.54	9.85	1.2	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	136	289	771	0.177	135	0.2	5.766	A
C	449	95	930	0.483	445	1.0	7.759	A
D	23	530	1584	0.014	23	0.0	2.304	A
A	314	33	850	0.369	312	0.6	7.002	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	163	347	746	0.218	162	0.3	6.286	A
C	536	114	921	0.582	534	1.4	9.753	A
D	27	636	1522	0.018	27	0.0	2.407	A
A	375	39	847	0.442	374	0.8	7.989	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	199	425	713	0.280	199	0.4	7.141	A
C	656	140	908	0.722	652	2.6	14.486	B
D	33	777	1440	0.023	33	0.0	2.558	A
A	459	48	843	0.544	457	1.2	9.772	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	199	426	712	0.280	199	0.4	7.161	A
C	656	140	908	0.722	656	2.7	14.970	B
D	33	781	1437	0.023	33	0.0	2.563	A
A	459	48	843	0.544	459	1.2	9.853	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	163	349	745	0.218	163	0.3	6.311	A
C	536	114	920	0.582	540	1.5	10.095	B
D	27	643	1518	0.018	27	0.0	2.413	A
A	375	40	847	0.443	376	0.8	8.074	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	136	292	770	0.177	137	0.2	5.796	A
C	449	96	929	0.483	451	1.0	7.955	A
D	23	537	1580	0.014	23	0.0	2.312	A
A	314	33	850	0.369	315	0.6	7.091	A

J2 - Sensitivity analysis +15, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	13.10	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D21	Sensitivity analysis +15	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B		✓	183	100.000
C		✓	627	100.000
D		✓	30	100.000
A		✓	430	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B	C	D	A
From	B	0	63	0	120
	C	34	0	6	587
	D	1	10	0	19
	A	40	383	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B	C	D	A
From	B	0	4	0	1
	C	11	0	0	5
	D	0	0	0	0
	A	8	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B	0.29	7.28	0.4	A
C	0.76	17.26	3.2	C
D	0.02	2.60	0.0	A
A	0.56	10.25	1.3	B

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	138	299	767	0.180	137	0.2	5.817	A
C	472	95	930	0.508	468	1.1	8.134	A
D	23	553	1571	0.014	23	0.0	2.324	A
A	324	34	850	0.381	321	0.6	7.130	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	165	359	741	0.222	164	0.3	6.362	A
C	564	114	921	0.612	561	1.6	10.487	B
D	27	664	1506	0.018	27	0.0	2.433	A
A	387	40	847	0.457	386	0.9	8.195	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	201	439	706	0.285	201	0.4	7.261	A
C	690	140	908	0.760	684	3.1	16.474	C
D	33	810	1421	0.023	33	0.0	2.594	A
A	473	49	843	0.562	472	1.3	10.150	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	201	440	706	0.286	201	0.4	7.283	A
C	690	140	908	0.760	690	3.2	17.262	C
D	33	815	1417	0.023	33	0.0	2.600	A
A	473	50	843	0.562	473	1.3	10.245	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	165	361	740	0.222	165	0.3	6.389	A
C	564	114	920	0.612	570	1.7	10.985	B
D	27	672	1501	0.018	27	0.0	2.443	A
A	387	41	847	0.457	388	0.9	8.293	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	138	302	766	0.180	138	0.2	5.853	A
C	472	96	929	0.508	474	1.1	8.378	A
D	23	560	1567	0.014	23	0.0	2.331	A
A	324	34	850	0.381	325	0.7	7.227	A

J2 - Sensitivity analysis +15, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	120.09	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D22	Sensitivity analysis +15	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B		✓	106	100.000
C		✓	418	100.000
D		✓	12	100.000
A		✓	835	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B	C	D	A
From	B	0	39	1	66
	C	51	0	8	359
	D	1	4	0	7
	A	98	719	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B	C	D	A
From	B	0	4	0	1
	C	11	0	0	5
	D	0	0	0	0
	A	8	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B	0.20	8.01	0.3	A
C	0.49	8.07	1.0	A
D	0.01	2.29	0.0	A
A	1.10	192.09	52.4	F

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	80	548	659	0.121	79	0.1	6.334	A
C	315	63	944	0.333	313	0.5	5.997	A
D	9	356	1686	0.005	9	0.0	2.145	A
A	629	42	846	0.743	617	2.8	15.858	C

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	95	653	613	0.155	95	0.2	7.091	A
C	376	76	939	0.400	375	0.7	6.738	A
D	11	427	1645	0.007	11	0.0	2.202	A
A	751	50	842	0.891	736	6.6	31.606	D

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	117	730	580	0.201	116	0.3	7.926	A
C	460	91	931	0.494	459	1.0	8.030	A
D	13	523	1589	0.008	13	0.0	2.284	A
A	919	61	838	1.098	822	31.0	97.617	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	117	740	575	0.203	117	0.3	8.013	A
C	460	92	931	0.494	460	1.0	8.072	A
D	13	524	1588	0.008	13	0.0	2.285	A
A	919	62	837	1.098	834	52.4	192.093	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	95	732	579	0.165	96	0.2	7.612	A
C	376	78	937	0.401	377	0.7	6.799	A
D	11	429	1643	0.007	11	0.0	2.206	A
A	751	50	842	0.891	826	33.7	190.184	F

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	80	664	608	0.131	80	0.2	6.959	A
C	315	67	943	0.334	315	0.5	6.064	A
D	9	359	1685	0.005	9	0.0	2.148	A
A	629	42	846	0.743	749	3.5	63.708	F

J2 - Count, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	9.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D23	Count	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B		✓	176	100.000
C		✓	537	100.000
D		✓	29	100.000
A		✓	383	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B	C	D	A
From	B	0	56	0	120
	C	30	0	5	502
	D	1	9	0	19
	A	40	336	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B	C	D	A
From	B	0	4	0	1
	C	11	0	0	5
	D	0	0	0	0
	A	8	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B	0.27	6.86	0.4	A
C	0.65	11.93	1.9	B
D	0.02	2.49	0.0	A
A	0.50	8.94	1.0	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	133	263	783	0.169	132	0.2	5.629	A
C	404	95	929	0.435	401	0.8	7.130	A
D	22	487	1610	0.014	22	0.0	2.267	A
A	288	30	851	0.339	286	0.5	6.676	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	158	316	760	0.208	158	0.3	6.093	A
C	483	114	921	0.524	481	1.1	8.602	A
D	26	585	1552	0.017	26	0.0	2.358	A
A	344	36	849	0.406	344	0.7	7.486	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	194	386	729	0.266	193	0.4	6.845	A
C	591	140	908	0.651	588	1.9	11.721	B
D	32	715	1476	0.022	32	0.0	2.492	A
A	422	44	845	0.499	420	1.0	8.887	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	194	388	729	0.266	194	0.4	6.859	A
C	591	140	908	0.651	591	1.9	11.934	B
D	32	718	1474	0.022	32	0.0	2.495	A
A	422	44	845	0.499	422	1.0	8.941	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	158	318	759	0.208	159	0.3	6.116	A
C	483	114	920	0.525	486	1.2	8.780	A
D	26	589	1550	0.017	26	0.0	2.362	A
A	344	36	849	0.406	346	0.7	7.546	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	133	266	782	0.170	133	0.2	5.656	A
C	404	96	929	0.435	406	0.8	7.262	A
D	22	492	1606	0.014	22	0.0	2.271	A
A	288	30	851	0.339	289	0.5	6.748	A

J2 - Count, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	62.49	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D24	Count	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
B		✓	101	100.000
C		✓	378	100.000
D		✓	11	100.000
A		✓	769	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		B	C	D	A
From	B	0	34	1	66
	C	47	0	7	324
	D	1	3	0	7
	A	98	655	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		B	C	D	A
From	B	0	4	0	1
	C	11	0	0	5
	D	0	0	0	0
	A	8	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B	0.19	7.75	0.2	A
C	0.45	7.38	0.8	A
D	0.01	2.25	0.0	A
A	1.01	97.63	22.9	F

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	76	500	680	0.112	76	0.1	6.070	A
C	285	62	945	0.301	283	0.5	5.725	A
D	8	327	1703	0.005	8	0.0	2.123	A
A	579	38	848	0.683	570	2.2	13.278	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	91	599	637	0.143	91	0.2	6.721	A
C	340	74	939	0.362	339	0.6	6.331	A
D	10	392	1665	0.006	10	0.0	2.174	A
A	691	46	844	0.819	683	4.2	22.376	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	111	701	592	0.188	111	0.2	7.623	A
C	416	90	932	0.447	415	0.8	7.348	A
D	12	480	1614	0.008	12	0.0	2.247	A
A	847	56	840	1.008	799	16.0	60.009	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	111	718	585	0.190	111	0.2	7.751	A
C	416	91	931	0.447	416	0.8	7.377	A
D	12	481	1613	0.008	12	0.0	2.248	A
A	847	56	840	1.008	819	22.9	97.628	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	91	666	607	0.149	91	0.2	7.113	A
C	340	76	938	0.362	341	0.6	6.374	A
D	10	394	1664	0.006	10	0.0	2.175	A
A	691	46	844	0.819	760	5.7	56.382	F

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B	76	519	671	0.113	76	0.1	6.171	A
C	285	63	945	0.301	285	0.5	5.771	A
D	8	330	1702	0.005	8	0.0	2.125	A
A	579	38	848	0.683	592	2.4	15.521	C