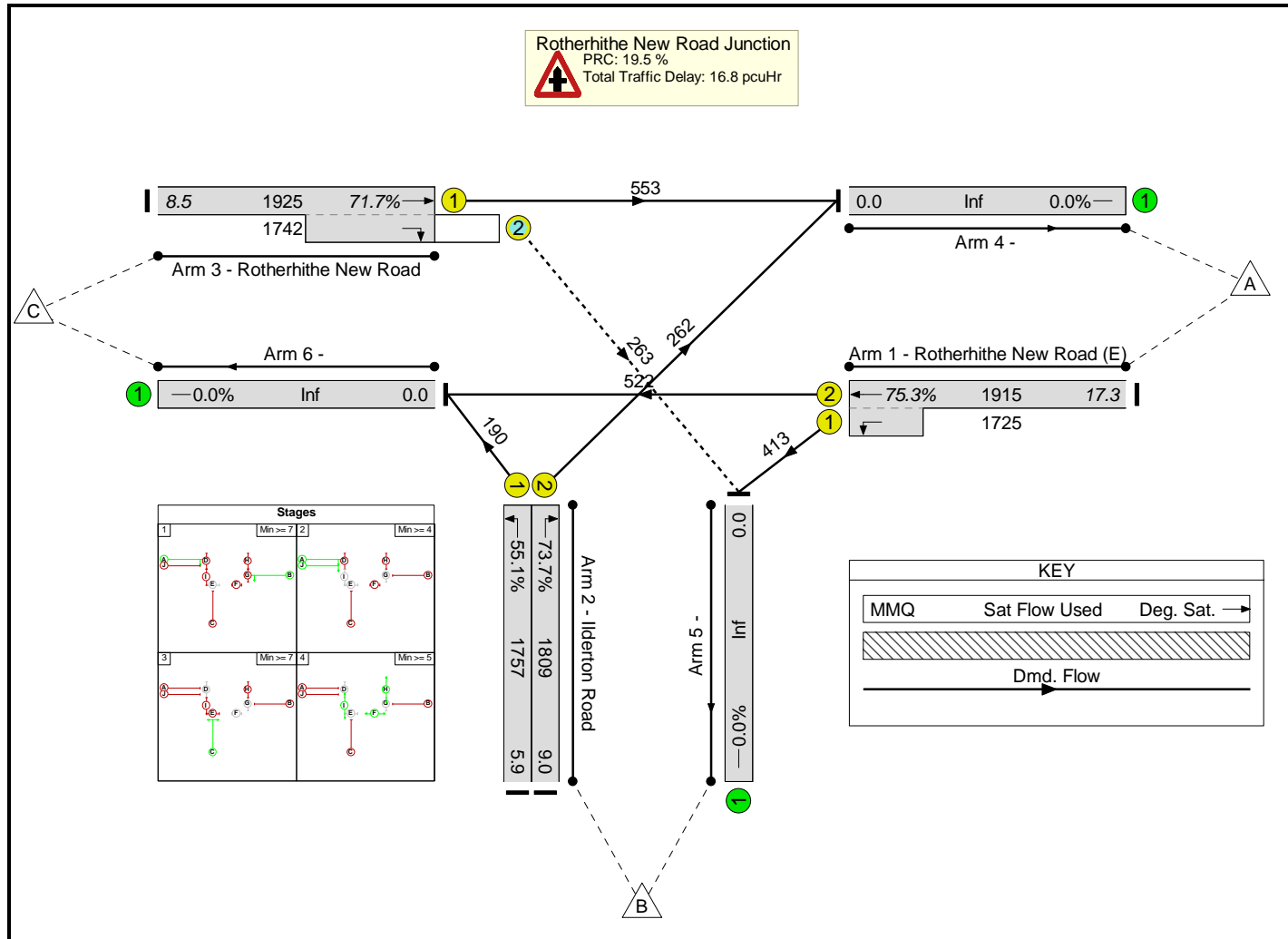


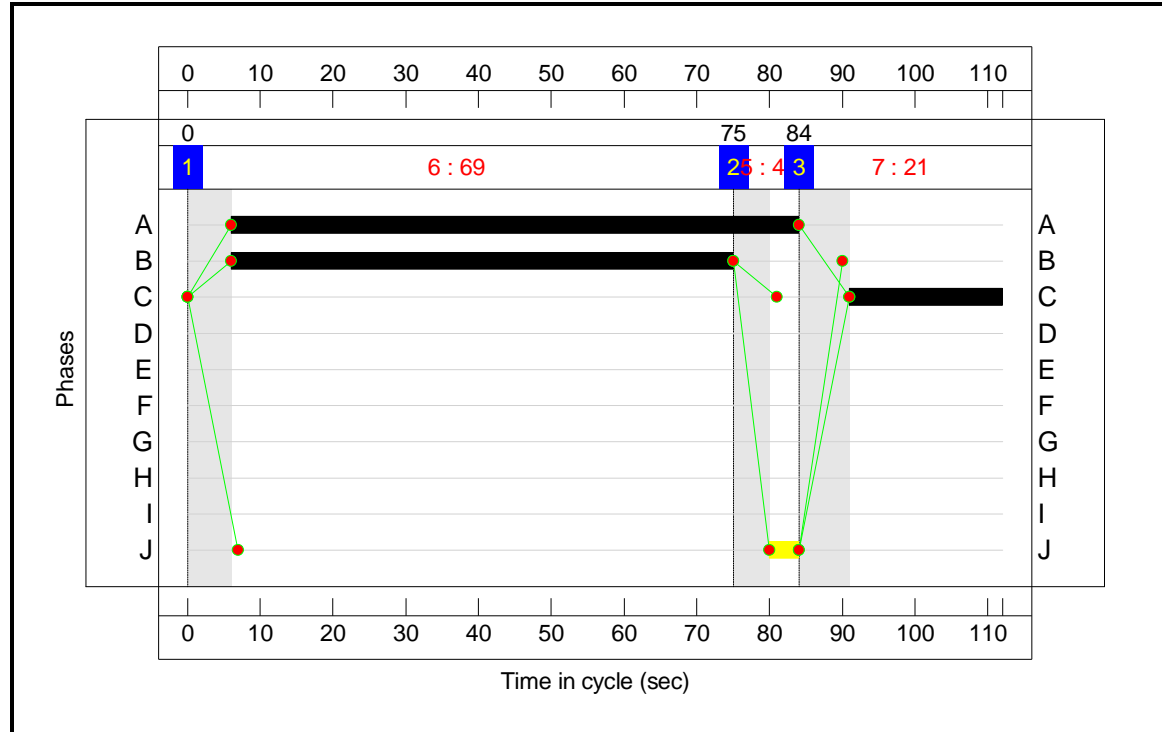
Junction: Rotherhithe New Road / Ilderton Road

Scenario 4: 'PM Base' (FG4: 'PM Base', Plan 1: 'No Peds')

Network Layout Diagram



Signal Timings Diagram

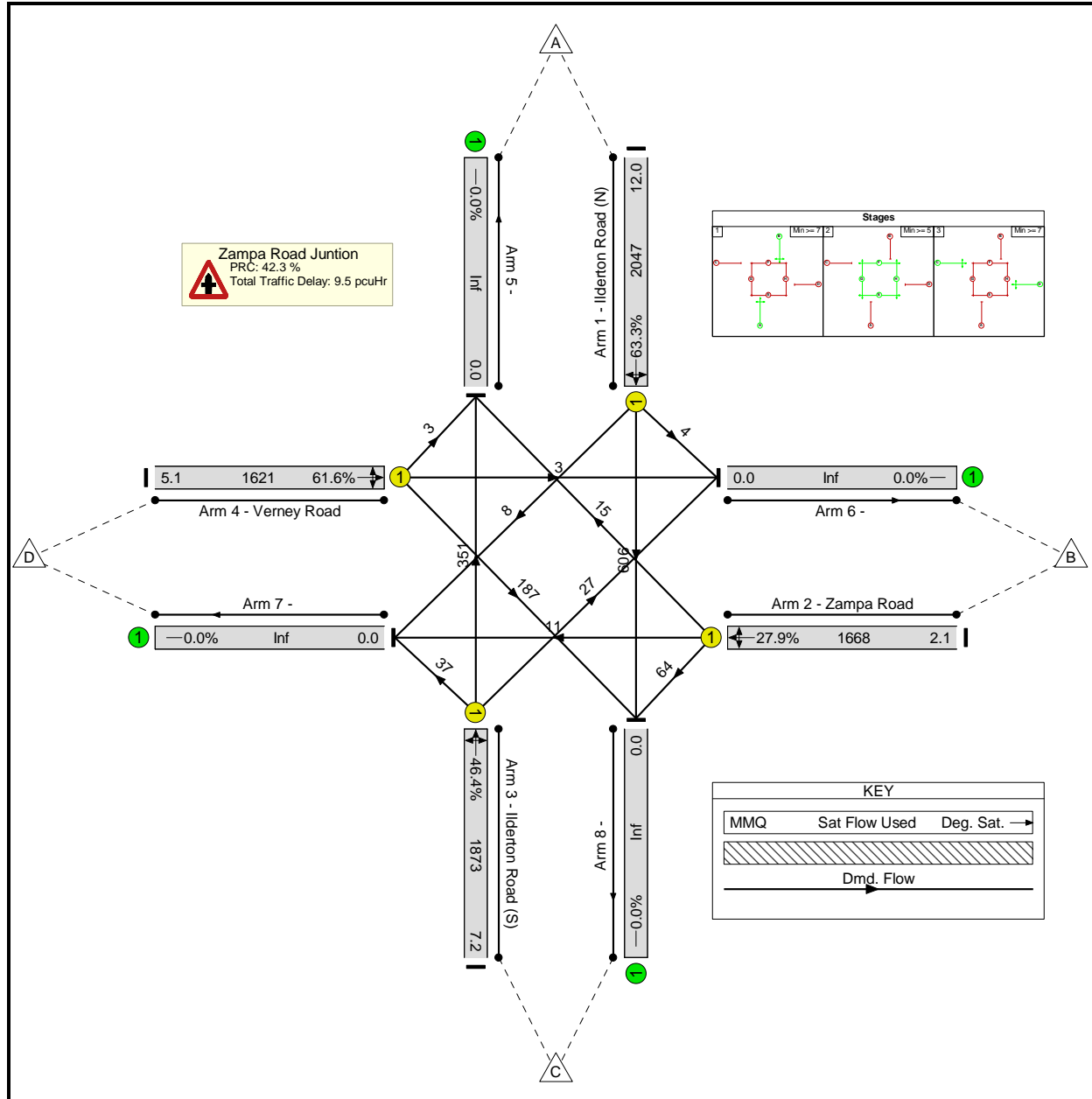


Network Results

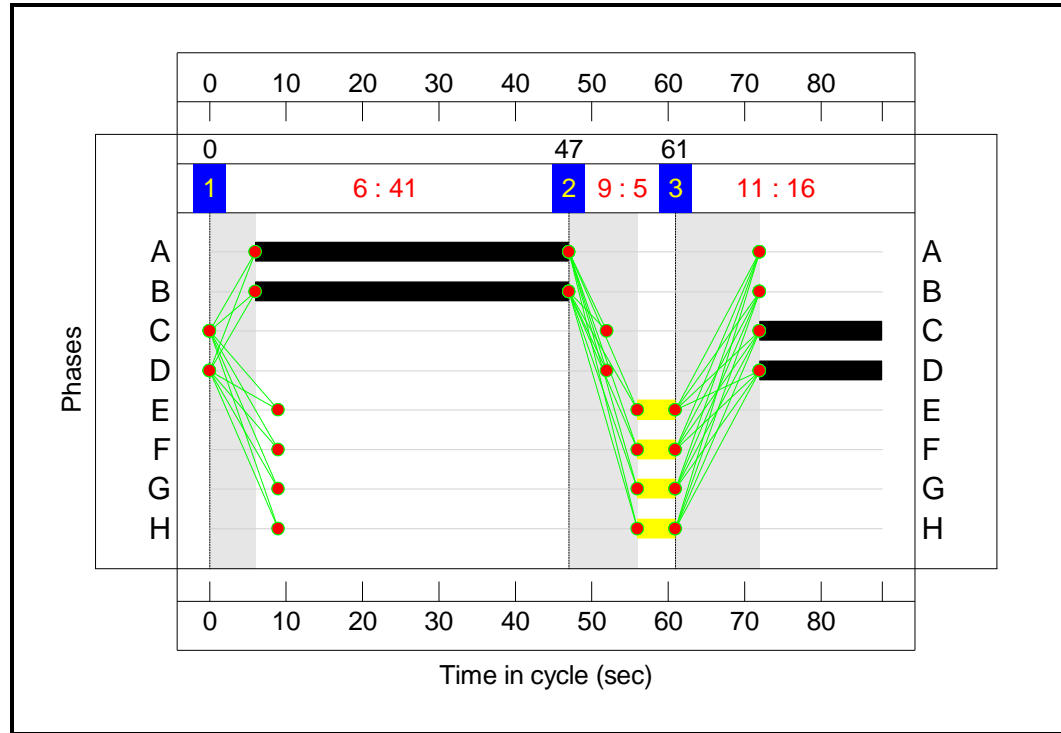
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
1/2+1/1	Rotherhithe New Road (E) Left Ahead	U	B		1	69	-	935	1915:1725	1241	75.3%	4.7	18.2	17.3
2/1	Ilderton Road Left	U	C		1	21	-	190	1757	345	55.1%	2.7	52.1	5.9
2/2	Ilderton Road Right	U	C		1	21	-	262	1809	355	73.7%	4.4	61.0	9.0
3/1+3/2	Rotherhithe New Road Ahead Right	U+O	A	J	1	78	-	816	1925:1742	1139	71.7%	4.9	21.7	8.5
		C1	PRC for Signalled Lanes (%):		19.5		Total Delay for Signalled Lanes (pcuHr):		16.84					
			PRC Over All Lanes (%):		19.5		Total Delay Over All Lanes(pcuHr):		16.84		Cycle Time (s): 112			

Junction: Ilderton Road / Zampa Road / Verney Road

Scenario 4: 'PM Base Validated' (FG4: 'PM Base', Plan 1: 'Peds every cycle')
 Network Layout Diagram



Signal Timings Diagram

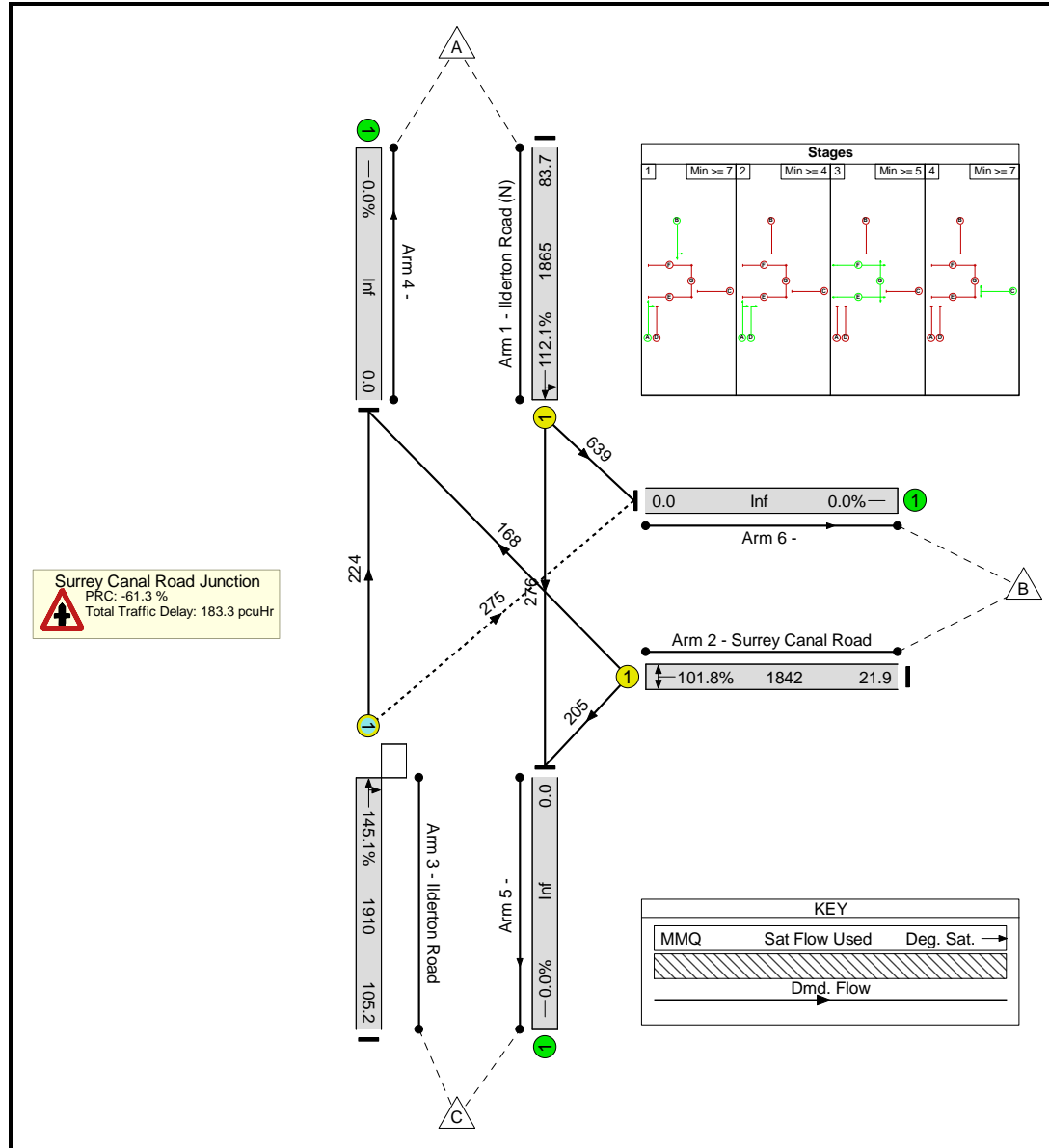


Network Results

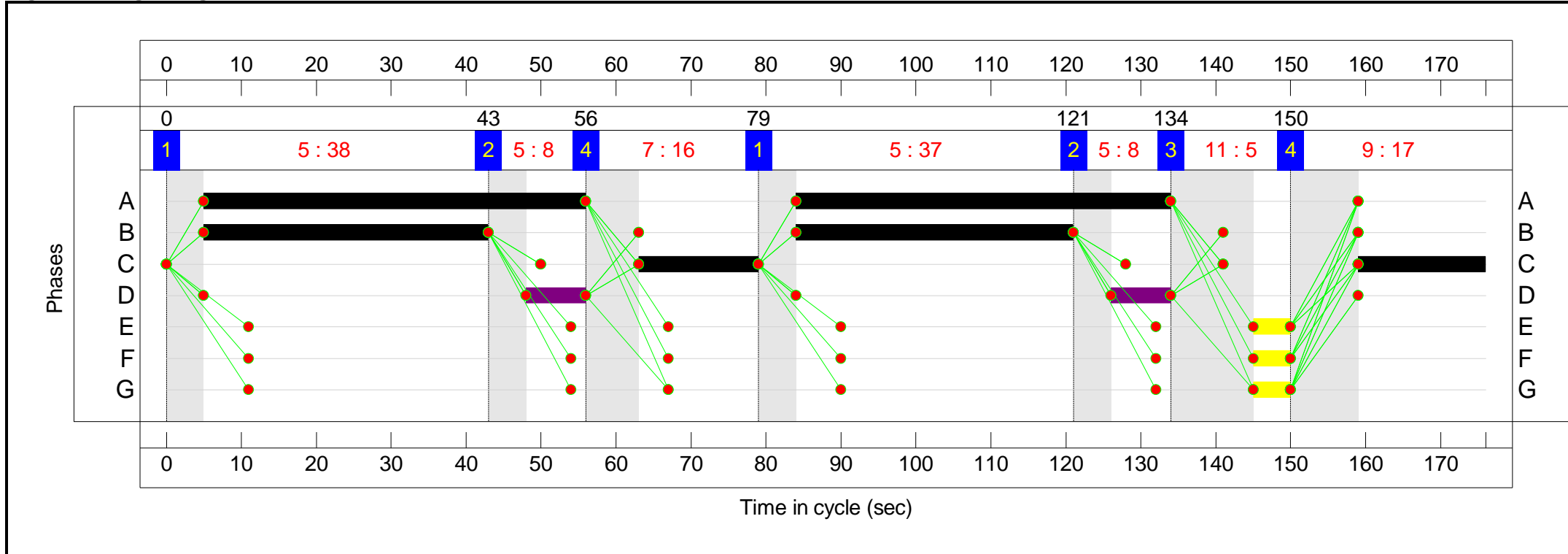
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
1/1	Ilderton Road (N) Left Right Ahead	U	B		1	41	-	618	2047	977	63.3%	3.8	22.2	12.0
2/1	Zampa Road Right Ahead Left	U	D		1	16	-	90	1668	322	27.9%	1.0	38.0	2.1
3/1	Ilderton Road (S) Ahead Right Left	U	A		1	41	-	415	1873	894	46.4%	2.2	19.2	7.2
4/1	Verney Road Left Ahead Right	U	C		1	16	-	193	1621	313	61.6%	2.5	47.3	5.1
C1					PRC for Signalled Lanes (%):	42.3	Total Delay for Signalled Lanes (pcuHr):	9.51						
					PRC Over All Lanes (%):	42.3	Total Delay Over All Lanes (pcuHr):	9.51	Cycle Time (s):	88				

Junction: Ilderton Road / Surrey Canal Road

Scenario 5: 'PM Base Validated' (FG5: 'PM Base', Plan 3: 'Peds every other cycle')
 Network Layout Diagram



Signal Timings Diagram



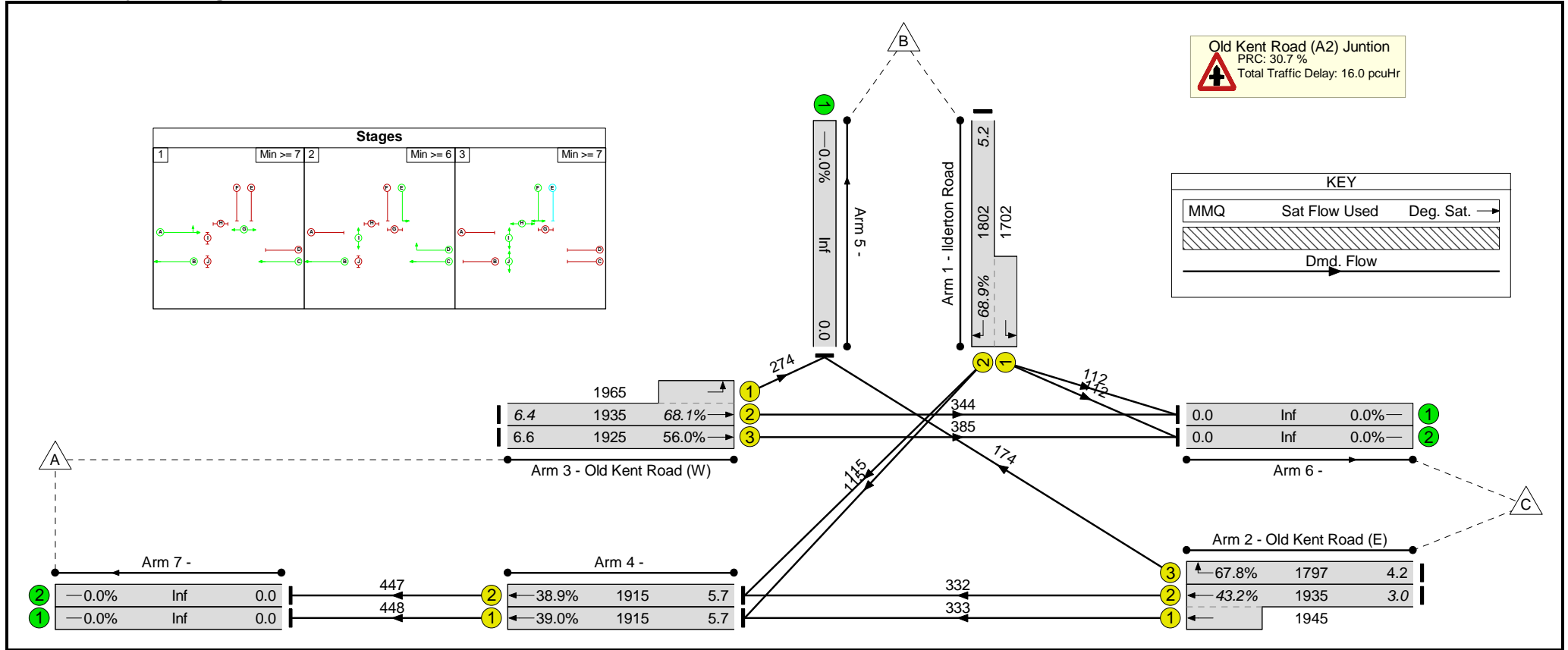
Network Results

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 (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
1/1	Ilderton Road (N) Ahead Left	U	B		2	75	-	915	1865	816	112.1%	69.3	272.5	83.7
2/1	Surrey Canal Road Right Left	U	C		2	33	-	373	1842	366	101.8%	16.1	155.1	21.9
3/1	Ilderton Road Ahead Right	O	A	D	2	101	16	499	1910	344	145.1%	98.0	706.7	105.2
C1					PRC for Signalled Lanes (%):	-61.3	Total Delay for Signalled Lanes (pcuHr):	183.29						
					PRC Over All Lanes (%):	-61.3	Total Delay Over All Lanes (pcuHr):	183.29	Cycle Time (s): 176					

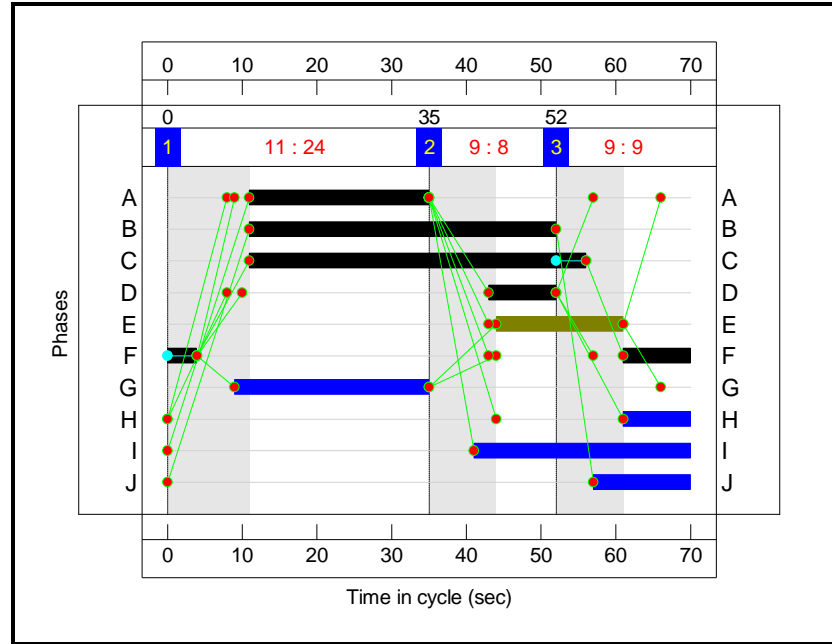
Junction: Old Kent Road / Ilderton Road

Scenario 4: 'PM Base' (FG4: 'PM Base', Plan 1: 'Standard Plan')

Network Layout Diagram

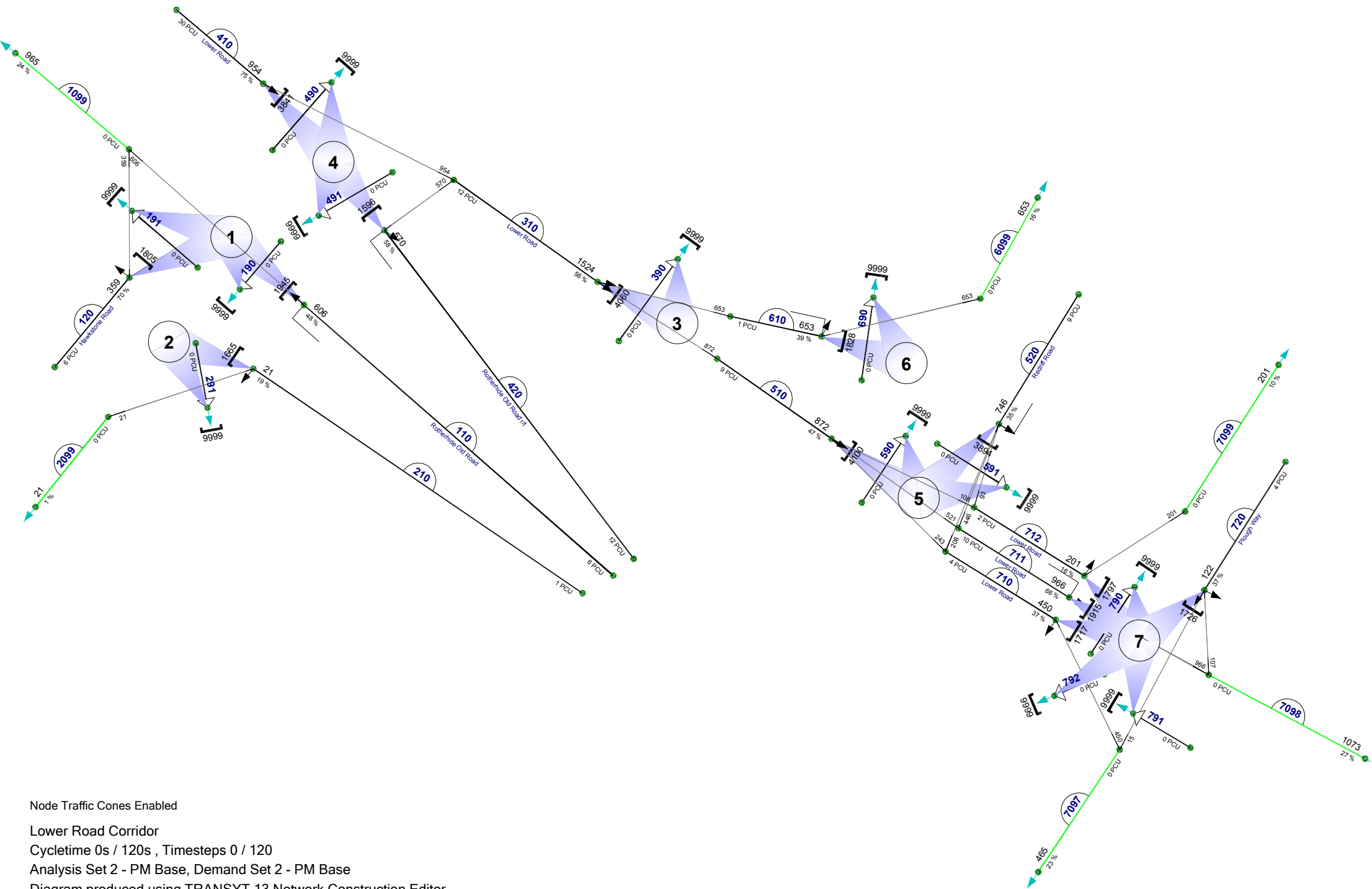


Signal Timings Diagram



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 (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
1/2+1/1	Ilderton Road Right Left	U	F	E	1	13:30	-	454	1802:1702	659	68.9%	3.5	27.9	5.2	
2/2+2/1	Old Kent Road (E) Ahead	U	C		1	45	-	665	1935:1945	1539	43.2%	1.3	7.0	3.0	
2/3	Old Kent Road (E) Right	U	D		1	9	-	174	1797	257	67.8%	2.4	49.7	4.2	
3/2+3/1	Old Kent Road (W) Left Ahead	U	A		1	24	-	618	1935:1965	907	68.1%	4.0	23.4	6.4	
3/3	Old Kent Road (W) Ahead	U	A		1	24	-	385	1925	687	56.0%	2.6	24.0	6.6	
4/1	Ahead	U	B		1	41	-	448	1915	1149	39.0%	1.1	8.7	5.7	
4/2	Ahead	U	B		1	41	-	447	1915	1149	38.9%	1.1	8.7	5.7	
C1						PRC for Signalled Lanes (%):	30.7	Total Delay for Signalled Lanes (pcuHr):			15.96				
						PRC Over All Lanes (%):	30.7	Total Delay Over All Lanes (pcuHr):			15.96	Cycle Time (s): 70			



Node Traffic Cones Enabled

Lower Road Corridor

Cycletime 0s / 120s , Timesteps 0 / 120

Analysis Set 2 - PM Base, Demand Set 2 - PM Base

Diagram produced using TRANSYT 13 Network Construction Editor

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For I STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	I
I	654.35	0.24	0.09	I

I	Intercept For I STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	I
I	508.41	0.22	0.09	0.14	0.31	I

I	Intercept For I STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	I
I	626.08	0.23	0.23	I

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: Ilderton Road / Stockholm Rd_Baseline PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN I FLOW STARTS I TO RISE	I	TOP OF PEAK I IS REACHED	I	FLOW STOPS I FALLING	I	RATE OF FLOW (VEH/MIN) I BEFORE I PEAK	I	AT TOP I OF PEAK	I	AFTER I PEAK	I
I	ARM A	I	15.00	I	45.00	I	75.00	I	10.73	I	16.09	I	10.73	I
I	ARM B	I	15.00	I	45.00	I	75.00	I	0.08	I	0.11	I	0.08	I
I	ARM C	I	15.00	I	45.00	I	75.00	I	5.01	I	7.52	I	5.01	I

Demand set: Ilderton Road / Stockholm Rd_Baseline PM

I	TIME	I	FROM/TO	I	ARM	A	I	ARM	B	I	ARM	C	I
I	16.45 - 17.00	I	ARM A	I	0.000	I	0.001	I	0.999	I		I	
I		I		I	0.0	I	1.0	I	857.0	I		I	
I		I		I	(0.0)	I	(0.0)	I	(0.0)	I		I	
I		I	ARM B	I	0.833	I	0.000	I	0.167	I		I	
I		I		I	5.0	I	0.0	I	1.0	I		I	
I		I		I	(0.0)	I	(0.0)	I	(0.0)	I		I	
I		I	ARM C	I	0.978	I	0.022	I	0.000	I		I	
I		I		I	392.0	I	9.0	I	0.0	I		I	
I		I		I	(0.0)	I	(0.0)	I	(0.0)	I		I	

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Ilderton Road / Stockholm Rd_Baseline PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-AC	0.08	5.75	0.013		0.00	0.01	0.2		0.18
C-AB	0.11	7.99	0.014		0.00	0.01	0.2		0.13
A-B	0.01								
A-C	10.75								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.09	5.14	0.017		0.01	0.02	0.3		0.20
C-AB	0.13	7.52	0.018		0.01	0.02	0.3		0.14
A-B	0.01								
A-C	12.84								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.11	4.31	0.026		0.02	0.03	0.4		0.24
C-AB	0.17	6.86	0.024		0.02	0.03	0.4		0.15
A-B	0.02								
A-C	15.73								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.11	4.31	0.026		0.03	0.03	0.4		0.24
C-AB	0.17	6.86	0.024		0.03	0.03	0.4		0.15
A-B	0.02								
A-C	15.73								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	0.09	5.14	0.017		0.03	0.02	0.3		0.20
C-AB	0.13	7.52	0.018		0.03	0.02	0.3		0.14
A-B	0.01								
A-C	12.84								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	0.08	5.75	0.013		0.02	0.01	0.2		0.18
C-AB	0.11	7.99	0.014		0.02	0.01	0.2		0.13
A-B	0.01								
A-C	10.75								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING * * DELAY *	I	* INCLUSIVE QUEUEING * * DELAY *	I
I	I	I	I	I	I	I	I	I
I	I	I	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
I	B-AC	I	8.3	I 5.5	I 1.7	I 0.21	I 1.7	I 0.21
I	C-AB	I	12.4	I 8.3	I 1.7	I 0.14	I 1.7	I 0.14
I	A-B	I	1.4	I 0.9	I	I	I	I
I	A-C	I	1179.6	I 786.4	I	I	I	I
I	ALL	I	1741.2	I 1160.8	I 3.4	I 0.00	I 3.4	I 0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

===== end of file =====

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 4.0 (SEPT 2008)

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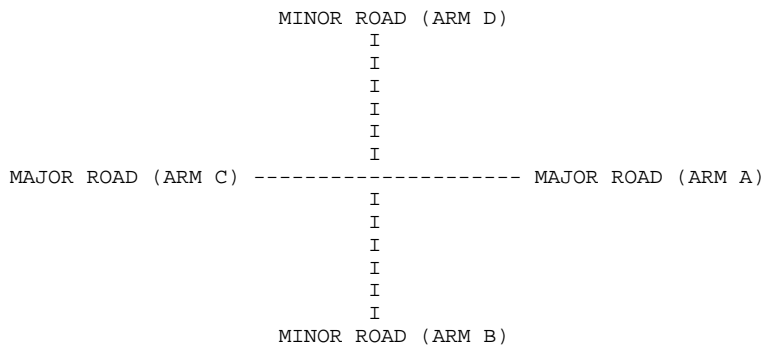
Run with file:-
"J:\17004\Transport\Working Documents\Junction Analysis\PICADY\Site 11 - Ilderton Road_Penarth St_Rollins St\
Ilderton Rd_Penarth St_Rollins St.vpi"
(drive-on-the-left) at 09:27:05 on Wednesday, 22 December 2010

RUN INFORMATION

RUN TITLE : Ilderton Road / Penarth Street / Rollins Street
LOCATION : Site 11
DATE : 18/08/10
CLIENT :
ENUMERATOR : drevans [CBH-DSK-228]
JOB NUMBER : 17004
STATUS :
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Ilderton Road (N)
ARM B IS Rollins Street
ARM C IS Ilderton Road (S)
ARM D IS Penarth Street

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

 GEOMETRIC DATA

I	DATA ITEM	I	MINOR ROAD B	I	MINOR ROAD D	I
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I	(W) 7.40 M.	I	(W) 7.40 M.	I
I	CENTRAL RESERVE WIDTH	I	(WCR) 0.00 M.	I	(WCR) 0.00 M.	I
I		I		I		I
I	MAJOR ROAD RIGHT TURN - WIDTH	I	(WC-B) 2.20 M.	I	(WA-D) 2.20 M.	I
I	- VISIBILITY	I	(VC-B) 90.00 M.	I	(VA-D) 90.00 M.	I
I	- BLOCKS TRAFFIC	I	YES	I	YES	I
I		I		I		I
I	MINOR ROAD - VISIBILITY TO LEFT	I	(VB-C) 25.0 M.	I	(VD-A) 26.0 M.	I
I	- VISIBILITY TO RIGHT	I	(VB-A) 16.0 M.	I	(VD-C) 22.0 M.	I
I	- LANE 1 WIDTH	I	(WB-C) 4.00 M.	I	(WD-A) 4.00 M.	I
I	- LANE 2 WIDTH	I	(WB-A) 0.00 M.	I	(WD-C) 0.00 M.	I

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-C

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-C	STREAM	A-C	STREAM	A-B	I
I	697.48		0.25		0.10	I

STREAM D-A

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM D-A	STREAM	C-A	STREAM	C-D	I
I	701.64		0.26		0.10	I

STREAM B-A

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-A	STREAM	A-C	STREAM	A-D	STREAM	D-A	STREAM	D-B	I
I	542.98		0.23		0.23		0.23		0.23	I

I	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM	A-B	STREAM	C-A	STREAM	C-B	STREAM	D-C	I
I		0.09		0.15		0.34		0.12	I

STREAM D-C

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM D-C	STREAM	C-A	STREAM	C-B	STREAM	B-C	STREAM	B-D	I
I	546.57		0.24		0.24		0.24		0.24	I

I	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM	C-D	STREAM	A-C	STREAM	A-D	STREAM	B-A	I
I		0.09		0.15		0.34		0.12	I

STREAM C-B

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-D	I
I	626.08		0.23		0.33	I

STREAM A-D

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM A-D	STREAM	C-A	STREAM	C-B	I
I	626.08		0.23		0.33	I

I	Intercept For I STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B	I
I	542.98	0.23	0.23	0.09	0.34	I

I	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing	I
I	0.15	0.15			I

B-D Stream From Right Hand Lane

I	Intercept For I STREAM B-D	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-B	I
I	542.98	0.23	0.23	0.09	0.34	I

I	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-D	Slope For Opposing	Slope For Opposing	I
I	0.15	0.15			I

D-B Stream From Left Hand Lane

I	Intercept For I STREAM D-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM D-C	Slope For Opposing STREAM A-D	I
I	546.57	0.24	0.24	0.09	0.34	I

I	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing	I
I	0.15	0.15			I

D-B Stream From Right Hand Lane

I	Intercept For I STREAM B-D	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing STREAM A-D	I
I	546.57	0.24	0.24	0.09	0.34	I

I	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing	Slope For Opposing	I
I	0.15	0.15			I

TRAFFIC DEMAND DATA

I	ARM	I	FLOW	SCALE(%)	I
I	A	I	100		I
I	B	I	100		I
I	C	I	100		I
I	D	I	100		I

Demand set: Ilderton Road / Penarth Street / Rollins Street_Baseline PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	I	NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VEH/MIN)			I
		I	I	I	I	I	I	
I	ARM	FLOW STARTS	TOP OF PEAK	FLOW STOPS	BEFORE	AT TOP	AFTER	I
I		TO RISE	IS REACHED	FALLING	PEAK	OF PEAK	PEAK	I
I	I	I	I	I	I	I	I	I
I	ARM A	15.00	45.00	75.00	5.76	8.64	5.76	I
I	ARM B	15.00	45.00	75.00	0.76	1.14	0.76	I
I	ARM C	15.00	45.00	75.00	6.39	9.58	6.39	I
I	ARM D	15.00	45.00	75.00	0.94	1.41	0.94	I

Demand set: Ilderton Road / Penarth Street / Rollins Street_Baseline PM

I		TURNING PROPORTIONS								I	
I		TURNING COUNTS								I	
I		(PERCENTAGE OF H.V.S)								I	
I		I								I	
I	TIME	FROM/TO	ARM	A	ARM	B	ARM	C	ARM	D	I
I	16.45 - 17.00	I	I	I	I	I	I	I	I	I	I
I		I	ARM A	0.000	0.013	0.961	0.026	I	I	I	I
I		I		0.0	6.0	443.0	12.0	I	I	I	I
I		I		(0.0)	(0.0)	(0.0)	(0.0)	I	I	I	I
I		I		I	I	I	I	I	I	I	I
I		I	ARM B	0.508	0.000	0.410	0.082	I	I	I	I
I		I		31.0	0.0	25.0	5.0	I	I	I	I
I		I		(0.0)	(0.0)	(0.0)	(0.0)	I	I	I	I
I		I		I	I	I	I	I	I	I	I
I		I	ARM C	0.930	0.047	0.000	0.023	I	I	I	I
I		I		475.0	24.0	0.0	12.0	I	I	I	I
I		I		(0.0)	(0.0)	(0.0)	(0.0)	I	I	I	I
I		I		I	I	I	I	I	I	I	I
I		I	ARM D	0.773	0.040	0.187	0.000	I	I	I	I
I		I		58.0	3.0	14.0	0.0	I	I	I	I
I		I		(0.0)	(0.0)	(0.0)	(0.0)	I	I	I	I
I		I		I	I	I	I	I	I	I	I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Ilderton Road / Penarth Street / Rollins Street_Baseline PM
AND FOR TIME PERIOD 2

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	16.45-17.00										I
I	B-ACD	0.77	7.67	0.100		0.00	0.11	1.6		0.14	I
I	A-BCD	0.15	8.94	0.017		0.00	0.02	0.3		0.11	I
I	D-ABC	0.94	9.06	0.104		0.00	0.11	1.7		0.12	I
I	C-ABD	0.30	9.10	0.033		0.00	0.03	0.5		0.11	I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.00-17.15										I
I	B-ACD	0.91	7.21	0.127		0.11	0.14	2.1		0.16	I
I	A-BCD	0.18	8.65	0.021		0.02	0.02	0.3		0.12	I
I	D-ABC	1.12	8.67	0.130		0.11	0.15	2.2		0.13	I
I	C-ABD	0.36	8.84	0.041		0.03	0.04	0.7		0.12	I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.15-17.30										I
I	B-ACD	1.12	6.55	0.171		0.14	0.20	2.9		0.18	I
I	A-BCD	0.22	8.25	0.027		0.02	0.03	0.4		0.12	I
I	D-ABC	1.38	8.11	0.170		0.15	0.20	2.9		0.15	I
I	C-ABD	0.44	8.49	0.052		0.04	0.06	0.9		0.12	I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.30-17.45										I
I	B-ACD	1.12	6.55	0.171		0.20	0.20	3.1		0.18	I
I	A-BCD	0.22	8.25	0.027		0.03	0.03	0.4		0.12	I
I	D-ABC	1.38	8.11	0.170		0.20	0.20	3.0		0.15	I
I	C-ABD	0.44	8.49	0.052		0.06	0.06	0.9		0.12	I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	17.45-18.00										I
I	B-ACD	0.91	7.21	0.127		0.20	0.15	2.3		0.16	I
I	A-BCD	0.18	8.65	0.021		0.03	0.02	0.3		0.12	I
I	D-ABC	1.12	8.67	0.130		0.20	0.15	2.3		0.13	I
I	C-ABD	0.36	8.84	0.041		0.06	0.04	0.7		0.12	I

I	TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I	18.00-18.15										I
I	B-ACD	0.77	7.67	0.100		0.15	0.11	1.7		0.14	I
I	A-BCD	0.15	8.94	0.017		0.02	0.02	0.3		0.11	I
I	D-ABC	0.94	9.06	0.104		0.15	0.12	1.8		0.12	I
I	C-ABD	0.30	9.10	0.033		0.04	0.04	0.5		0.11	I

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-ACD

TIME SEGMENT	NO. OF VEHICLES IN QUEUE
ENDING 17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.1
18.15	0.1

QUEUE FOR STREAM A-BCD

TIME SEGMENT	NO. OF VEHICLES IN QUEUE
ENDING 17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM D-ABC

TIME SEGMENT	NO. OF VEHICLES IN QUEUE
ENDING 17.00	0.1
17.15	0.1
17.30	0.2
17.45	0.2
18.00	0.2
18.15	0.1

 QUEUE FOR STREAM C-ABD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

 QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND		I	* QUEUEING * * DELAY *		I	* INCLUSIVE QUEUEING * * DELAY *		I
I	I	I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	I	(MIN)	(MIN/VEH)	I
I	B-ACD	I	84.0	56.0	I	13.7	0.16	I	13.7	0.16	I
I	A-BCD	I	16.5	11.0	I	2.0	0.12	I	2.0	0.12	I
I	D-ABC	I	103.2	68.8	I	13.9	0.13	I	13.9	0.13	I
I	C-ABD	I	33.0	22.0	I	4.1	0.12	I	4.1	0.12	I
I	ALL	I	1525.1	1016.7	I	33.7	0.02	I	33.7	0.02	I

 * DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

===== end of file =====

 GEOMETRIC DATA

I	DATA ITEM	I	MINOR ROAD B	I
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I	(W) 7.50 M.	I
I	CENTRAL RESERVE WIDTH	I	(WCR) 0.00 M.	I
I		I		I
I	MAJOR ROAD RIGHT TURN - WIDTH	I	(WC-B) 2.20 M.	I
I	- VISIBILITY	I	(VC-B) 90.00 M.	I
I	- BLOCKS TRAFFIC	I	YES	I
I		I		I
I	MINOR ROAD - VISIBILITY TO LEFT	I	(VB-C) 20.0 M.	I
I	- VISIBILITY TO RIGHT	I	(VB-A) 14.0 M.	I
I	- LANE 1 WIDTH	I	(WB-C) 2.20 M.	I
I	- LANE 2 WIDTH	I	(WB-A) 0.00 M.	I

 .SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-C	STREAM	A-C	STREAM	A-B	I
I	582.07		0.21		0.08	I

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-A	STREAM	A-C	STREAM	A-B	STREAM	C-A	STREAM	C-B	I
I	451.67		0.19		0.08		0.12		0.28	I

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-B	I
I	626.08		0.23		0.23	I

(NB These values do not allow for any site specific corrections)

 TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE(%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: Surrey Canal Road / Excelsior Ind Estate Access_Baseline PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN	I	RATE OF FLOW (VEH/MIN)	I
I	I	I	FLOW STARTS I TOP OF PEAK I FLOW STOPS I BEFORE I AT TOP I AFTER	I	I	I
I	I	I	TO RISE I IS REACHED I FALLING I PEAK I OF PEAK I PEAK	I	I	I
I	I	I	I	I	I	I
I	ARM A	I	15.00 I 45.00 I 75.00	I	11.43 I 17.14 I 11.43	I
I	ARM B	I	15.00 I 45.00 I 75.00	I	0.22 I 0.34 I 0.22	I
I	ARM C	I	15.00 I 45.00 I 75.00	I	4.61 I 6.92 I 4.61	I

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	0.27	6.37	0.042		0.06	0.04	0.7		0.16
C-AB	0.09	7.33	0.012		0.02	0.01	0.2		0.14
A-B	0.03								
A-C	13.66								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-AC	0.23	6.87	0.033		0.04	0.03	0.5		0.15
C-AB	0.08	7.83	0.010		0.01	0.01	0.1		0.13
A-B	0.03								
A-C	11.44								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

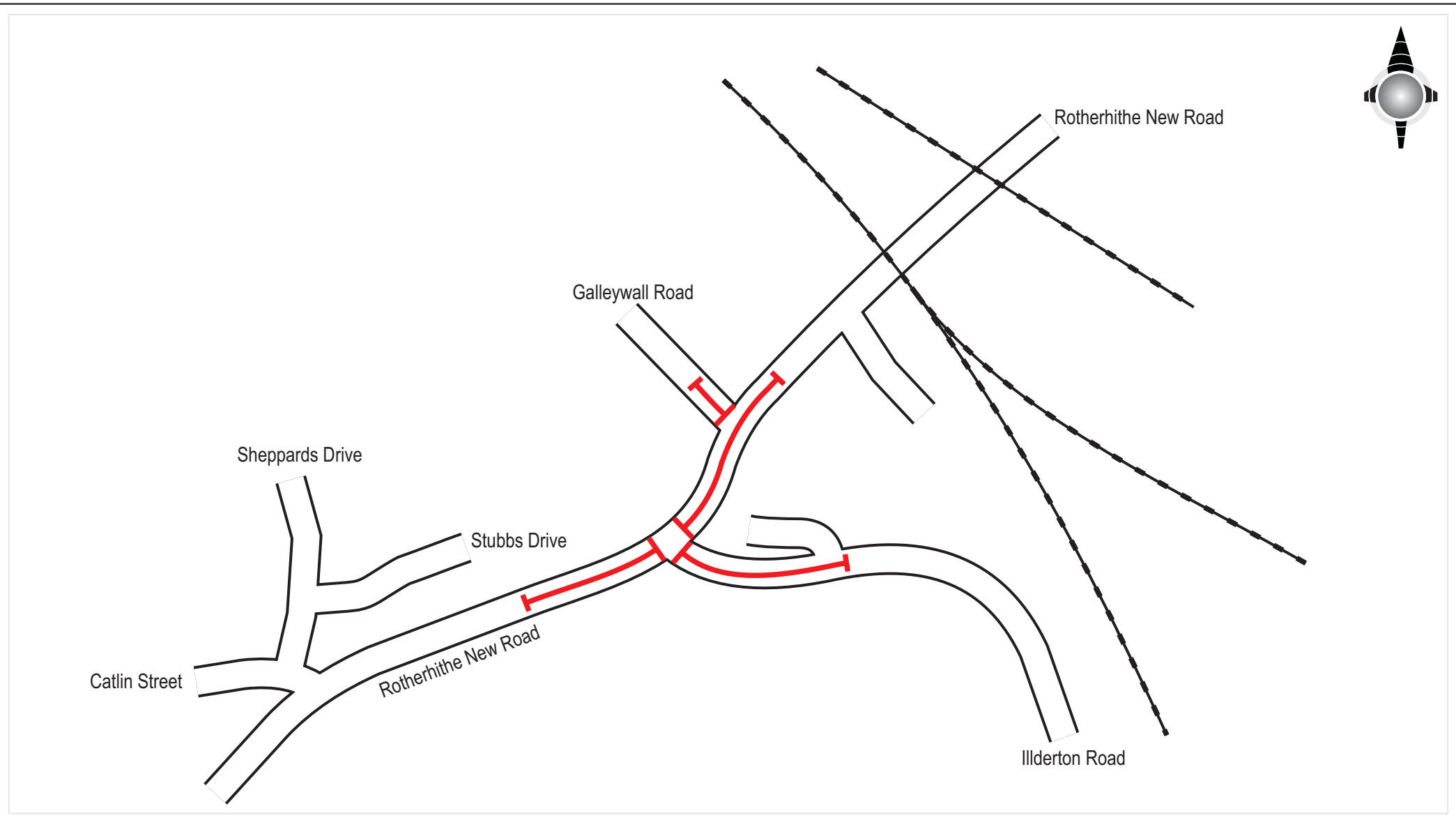
QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	CAPACITY (VEH/H)	* QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN)
B-AC	24.8	16.5	4.2	0.17
C-AB	8.3	5.5	1.2	0.14
A-B	2.8	1.8		
A-C	1255.3	836.9		
ALL	1790.7	1193.8	5.3	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

==== end of file =====

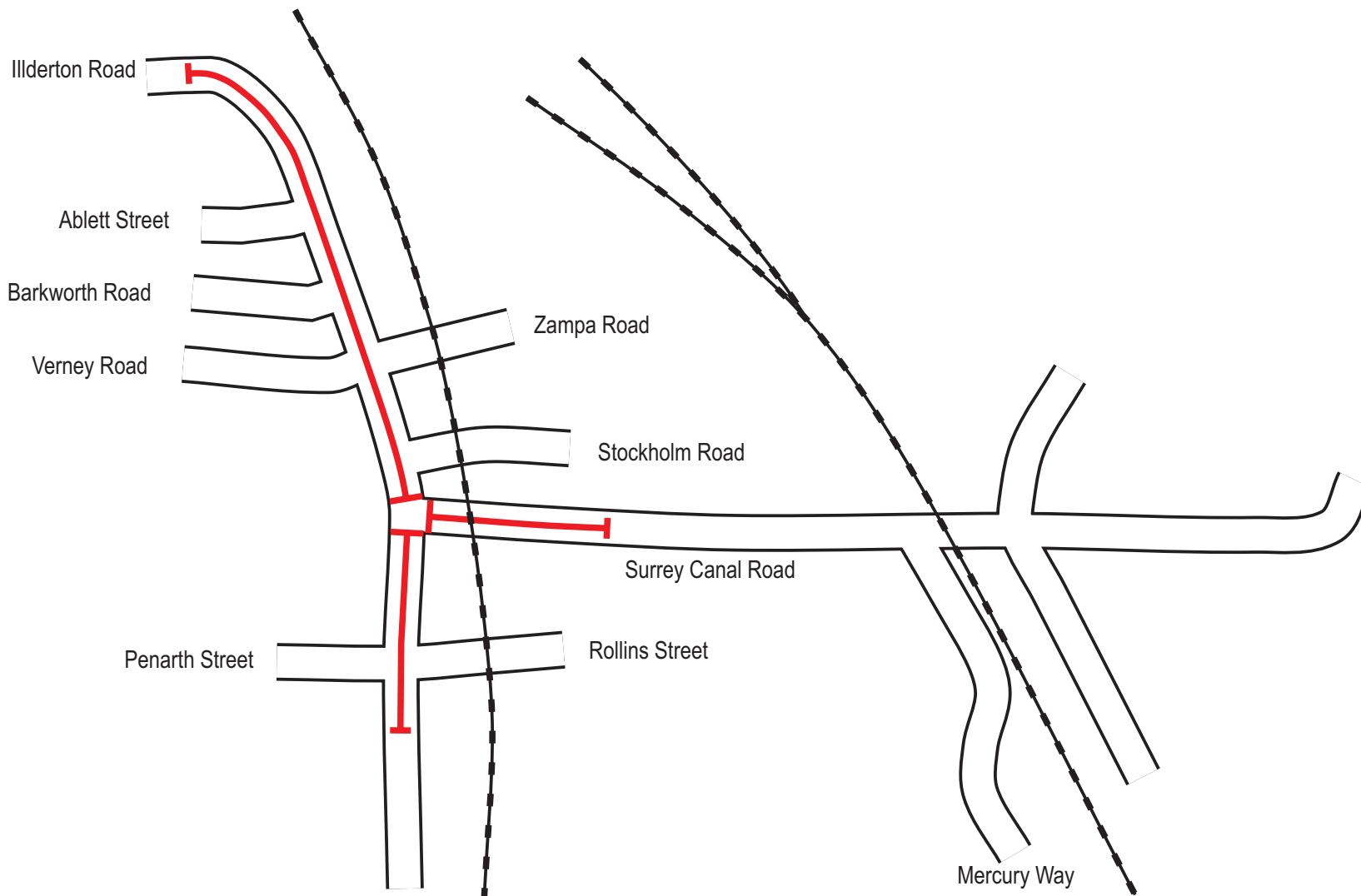


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Client
ReNEWAL

Surrey Canal
 Observed Vehicle Queue Lengths
 Average AM and PM Peak

Date	26/01/2011
Scale	NTS
Drawn by	DJW
Checked by	-
Revision	-



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Client

ReNEWAL

Surrey Canal
Observed Vehicle Queue Lengths
Average PM Peak

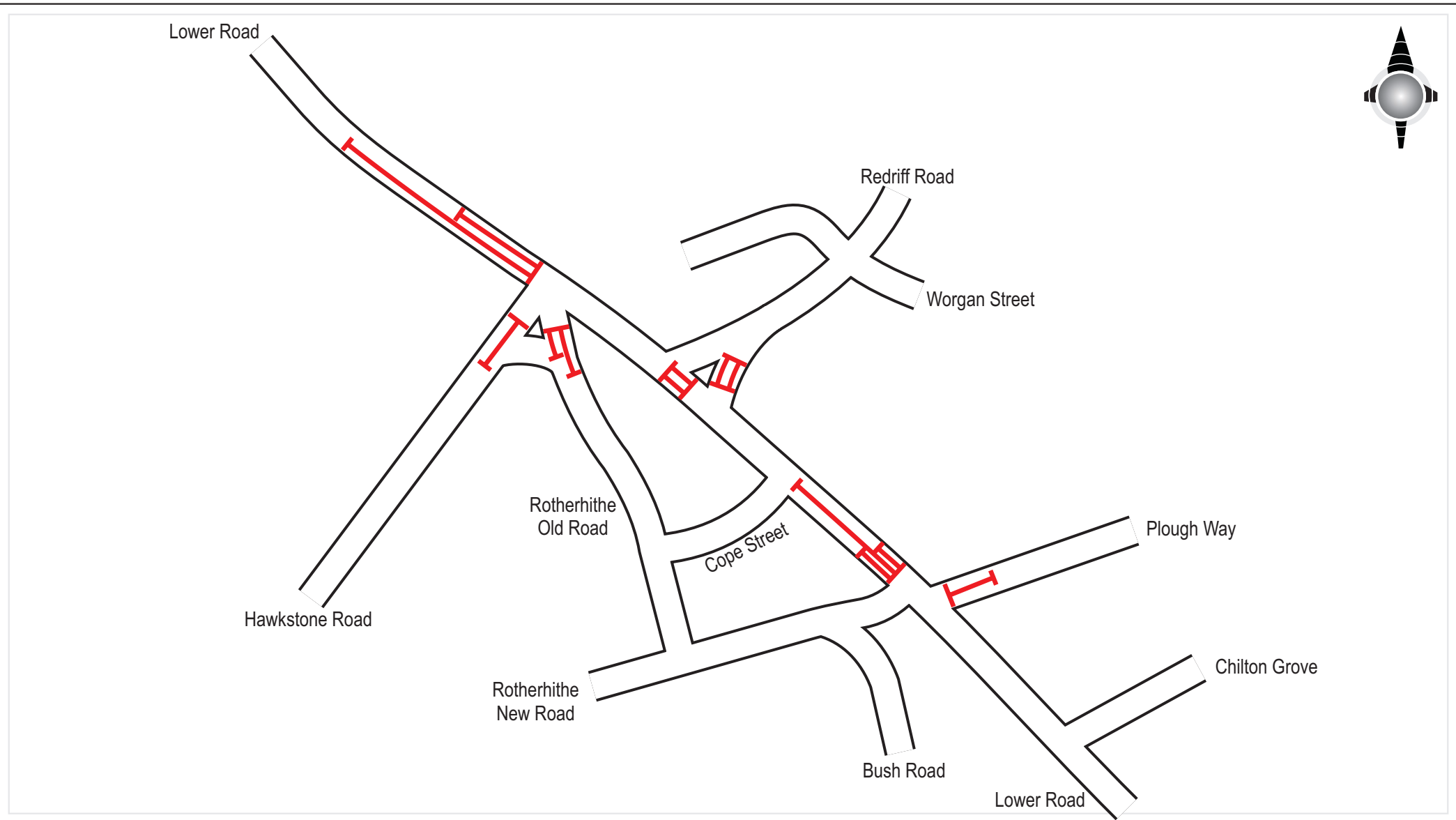
Date 26/01/2011

Scale NTS

Drawn by DJW

Checked by -

Revision -



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Client
ReNEWAL

Surrey Canal
Observed Vehicle Queue Lengths
Average PM Peak

Date	26/01/2011
Scale	NTS
Drawn by	DJW
Checked by	-
Revision	-