

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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Run with file:-
"N:\Projects\A046980-7 Thurmaston\calculations\PICADY\
J10_Queen St_Barkby Thorpe Lane_Thorpe Lane, Barkby Thorpe\J10_Thorpe Lane_Barkby Thorpe Lane, Barkby Thorpe.vpi"
(drive-on-the-left) at 08:51:00 on Monday, 4 August 2014

RUN INFORMATION

RUN TITLE : Queen Street / Barkby Thorpe Lane, Barkby Thorpe
LOCATION : Thurmaston
DATE : 15/07/14
CLIENT : Commercial Estates Group
ENUMERATOR : JJ
JOB NUMBER : A046980
STATUS : Final TA
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

MAJOR ROAD (ARM C) ----- MAJOR ROAD (ARM A)
I
I
I
I
I
I
MINOR ROAD (ARM B)

ARM A IS Queen Street
ARM B IS Barkby Thorpe Lane
ARM C IS Thorpe Lane

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
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I	(W) 6.00 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) 50.00 M.	I
I	- BLOCKS TRAFFIC (SPACES)	I	YES (0)	I
I		I		I
I	MINOR ROAD - VISIBILITY TO LEFT	I	(VB-C) 150.0 M.	I
I	- VISIBILITY TO RIGHT	I	(VB-A) 50.0 M.	I
I	- LANE 1 WIDTH	I	(WB-C) -	I
I	- LANE 2 WIDTH	I	(WB-A) -	I
I	WIDTH AT 0 M FROM JUNCTION	I	10.00 M.	I
I	WIDTH AT 5 M FROM JUNCTION	I	6.00 M.	I
I	WIDTH AT 10 M FROM JUNCTION	I	3.00 M.	I
I	WIDTH AT 15 M FROM JUNCTION	I	3.00 M.	I
I	WIDTH AT 20 M FROM JUNCTION	I	3.00 M.	I
I	- LENGTH OF FLARED SECTION	I	DERIVED: 1 PCU	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	0.00		0.00		0.00	I

* Due to the presence of a flare, data is not available

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	0.00		0.00		0.00		0.00		0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-B	I
I	602.92		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: 2014 Base PCU Flows AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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	FLOW STARTS	I	BEFORE	I
I		I	TOP OF PEAK	I	AT TOP	I
I		I	IS REACHED	I	OF PEAK	I
I		I	FALLING	I	PEAK	I
I		I		I		I
I		I	TO RISE	I		I
I	ARM A	I	15.00	I	6.35	I
I	ARM B	I	15.00	I	4.96	I
I	ARM C	I	15.00	I	8.49	I
I		I	45.00	I	9.52	I
I		I	45.00	I	7.44	I
I		I	45.00	I	12.73	I
I		I		I	6.35	I
I		I		I	4.96	I
I		I		I	8.49	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)
08.45-09.00									
B-C	1.02	1.40	0.726		6.30	3.72	71.2		4.07
B-A	4.93	6.27	0.786		22.44	6.06	215.7		2.59
C-AB	2.57	14.91	0.172		0.76	0.47	7.1		0.08
C-A	7.60								
A-B	3.78								
A-C	3.84								

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)
09.00-09.15									
B-C	0.85	6.29	0.136		3.72	0.16	4.0		0.20
B-A	4.13	6.97	0.592		6.06	1.54	30.1		0.43
C-AB	1.80	14.00	0.129		0.47	0.32	4.7		0.08
C-A	6.72								
A-B	3.16								
A-C	3.21								

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

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.1	
08.15	0.3	
08.30	4.7	*****
08.45	6.3	*****
09.00	3.7	****
09.15	0.2	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.4	*
08.15	2.9	***
08.30	13.8	*****
08.45	22.4	*****
09.00	6.1	*****
09.15	1.5	**

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.5	
08.30	0.8	*
08.45	0.8	*
09.00	0.5	
09.15	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I		
I	I	I	I	I	* DELAY *	I	* DELAY *	I		
I	I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)		
I	B-C	I	93.6	I	62.4	I	208.3	I	2.23	I
I	B-A	I	452.8	I	301.9	I	707.2	I	1.56	I
I	C-AB	I	248.1	I	165.4	I	46.1	I	0.19	I
I	C-A	I	686.5	I	457.7	I		I		I
I	A-B	I	346.9	I	231.2	I		I		I
I	A-C	I	352.4	I	234.9	I		I		I
I	ALL	I	2180.3	I	1453.5	I	961.6	I	0.44	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*****

.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-C	STREAM A-B	STREAM A-B	I
I	0.00	0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

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-C	STREAM A-B	STREAM A-B	STREAM C-A	STREAM C-A	STREAM C-B	STREAM C-B	I
I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM A-C	STREAM A-C	STREAM A-B	STREAM A-B	I
I	602.92	0.23	0.23	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: 2014 Base PCU Flows PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

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-C	1.14	1.18	0.961		4.15	5.31	71.4		4.77
B-A	5.17	4.92	1.052		10.55	16.39	203.4		3.15
C-AB	2.60	10.26	0.254		0.57	0.58	8.8		0.13
C-A	3.65								
A-B	5.10								
A-C	10.50								

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-C	0.93	2.47	0.377		5.31	0.65	20.0		0.98
B-A	4.23	5.80	0.729		16.39	3.33	119.9		1.72
C-AB	1.84	10.14	0.182		0.58	0.36	5.4		0.12
C-A	3.27								
A-B	4.17								
A-C	8.57								

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-C	0.78	6.32	0.123		0.65	0.14	2.3		0.18
B-A	3.54	6.58	0.537		3.33	1.22	20.8		0.36
C-AB	1.40	10.07	0.139		0.36	0.25	3.7		0.12
C-A	2.88								
A-B	3.49								
A-C	7.18								

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

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.1	
17.15	0.2	
17.30	4.2	****
17.45	5.3	*****
18.00	0.7	*
18.15	0.1	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.1	*
17.15	2.2	**
17.30	10.6	*****
17.45	16.4	*****
18.00	3.3	***
18.15	1.2	*

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.2	
17.15	0.3	
17.30	0.6	*
17.45	0.6	*
18.00	0.4	
18.15	0.2	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I	
I	I	I	I	I	* DELAY *	I	* DELAY *	I	
I	I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
I	B-C	I	85.3	I	56.9	I	138.1	I	1.62
I	B-A	I	388.2	I	258.8	I	493.4	I	1.27
I	C-AB	I	174.9	I	116.6	I	35.3	I	0.20
I	C-A	I	294.4	I	196.3	I		I	
I	A-B	I	382.6	I	255.1	I		I	
I	A-C	I	787.3	I	524.9	I		I	
I	ALL	I	2112.8	I	1408.5	I	666.7	I	0.32

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 * 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*****

.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	0.00		0.00		0.00	I

* Due to the presence of a flare, data is not available

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	0.00		0.00		0.00		0.00		0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-B	I
I	602.92		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: 2031 Base+ComDev AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

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)
08.30-08.45									
B-C	1.49	1.01	1.476		11.49	18.83	227.6		15.10
B-A	7.27	4.74	1.532		50.12	88.01	1036.1		13.66
C-AB	6.15	17.42	0.353		1.35	1.37	20.9		0.09
C-A	8.70								
A-B	5.78								
A-C	5.69								

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)
08.45-09.00									
B-C	1.21	1.18	1.031		18.83	19.73	289.2		17.17
B-A	5.93	5.63	1.055		88.01	92.77	1355.9		16.17
C-AB	3.74	15.89	0.235		1.37	0.75	11.4		0.08
C-A	8.38								
A-B	4.72								
A-C	4.64								

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)
09.00-09.15									
B-C	1.02	1.31	0.776		19.73	16.28	270.0		14.54
B-A	4.97	6.26	0.793		92.77	74.34	1253.3		13.52
C-AB	2.58	14.85	0.174		0.75	0.48	7.2		0.08
C-A	7.57								
A-B	3.95								
A-C	3.89								

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

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	4.4	****
08.30	11.5	*****
08.45	18.8	*****
09.00	19.7	*****
09.15	16.3	*****

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	3.0	***
08.15	12.0	*****
08.30	50.1	*****
08.45	88.0	*****
09.00	92.8	*****
09.15	74.3	*****

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.5	
08.15	0.7	*
08.30	1.4	*
08.45	1.4	*
09.00	0.7	*
09.15	0.5	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I						
I	I	I	I	I	* DELAY *	I	* DELAY *	I						
I	I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)						
I	B-C	I	111.5	I	74.3	I	952.0	I	8.54	I	1053.2	I	9.45	I
I	B-A	I	545.1	I	363.4	I	4268.9	I	7.83	I	4710.0	I	8.64	I
I	C-AB	I	372.9	I	248.6	I	77.3	I	0.21	I	77.3	I	0.21	I
I	C-A	I	740.7	I	493.8	I		I		I		I		I
I	A-B	I	433.6	I	289.0	I		I		I		I		I
I	A-C	I	426.7	I	284.5	I		I		I		I		I
I	ALL	I	2630.4	I	1753.6	I	5298.2	I	2.01	I	5840.5	I	2.22	I

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 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

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

.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	A-C	STREAM A-B	A-B	I
I	0.00	0.00		0.00		I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-A	STREAM A-C	A-C	STREAM A-B	A-B	STREAM C-A	C-A	STREAM C-B	C-B	I
I	0.00	0.00		0.00		0.00		0.00		I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM A-C	A-C	STREAM A-B	A-B	I
I	602.92	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: 2016 Base+ComDev+Phase 1 AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

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)
08.30-08.45									
B-C	1.41	1.42	0.992		4.99	6.56	87.1		5.07
B-A	6.06	5.64	1.073		12.93	20.71	253.5		3.35
C-AB	4.07	16.15	0.252		0.77	0.78	11.8		0.08
C-A	8.41								
A-B	4.48								
A-C	4.15								

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)
08.45-09.00									
B-C	1.15	1.60	0.720		6.56	3.56	71.2		3.64
B-A	4.94	6.33	0.781		20.71	5.18	187.7		2.30
C-AB	2.69	14.97	0.179		0.78	0.49	7.3		0.08
C-A	7.50								
A-B	3.66								
A-C	3.39								

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)
09.00-09.15									
B-C	0.97	6.56	0.147		3.56	0.18	4.1		0.19
B-A	4.14	7.05	0.588		5.18	1.50	27.9		0.41
C-AB	1.89	14.06	0.135		0.49	0.33	4.9		0.08
C-A	6.64								
A-B	3.06								
A-C	2.84								

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

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.2	
08.15	0.3	
08.30	5.0	*****
08.45	6.6	*****
09.00	3.6	****
09.15	0.2	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.3	*
08.15	2.8	***
08.30	12.9	*****
08.45	20.7	*****
09.00	5.2	*****
09.15	1.5	**

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.5	
08.30	0.8	*
08.45	0.8	*
09.00	0.5	
09.15	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I	
I	I	I	I	I	* DELAY *	I	* DELAY *	I	
I	I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
I	B-C	I	106.0	I	70.7	I	215.4	I	2.03
I	B-A	I	454.2	I	302.8	I	649.5	I	1.43
I	C-AB	I	259.0	I	172.7	I	47.3	I	0.18
I	C-A	I	676.9	I	451.3	I		I	
I	A-B	I	335.8	I	223.9	I		I	
I	A-C	I	311.1	I	207.4	I		I	
I	ALL	I	2143.1	I	1428.7	I	912.2	I	0.43

* 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*****

.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	0.00		0.00		0.00	I

* Due to the presence of a flare, data is not available

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	0.00		0.00		0.00		0.00		0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-B	I
I	602.92		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: 2021 Base+ComDev Phase 2 AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

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)
08.30-08.45									
B-C	1.78	4.36	0.408		0.59	0.67	9.7		0.39
B-A	4.39	5.52	0.794		3.10	3.42	49.3		0.83
C-AB	5.00	16.55	0.302		0.95	0.96	14.6		0.09
C-A	8.05								
A-B	4.04								
A-C	3.93								

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)
08.45-09.00									
B-C	1.45	7.13	0.204		0.67	0.26	4.1		0.18
B-A	3.58	6.38	0.562		3.42	1.35	23.1		0.39
C-AB	3.24	15.25	0.212		0.96	0.58	8.8		0.08
C-A	7.42								
A-B	3.30								
A-C	3.21								

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)
09.00-09.15									
B-C	1.22	8.52	0.143		0.26	0.17	2.6		0.14
B-A	3.00	6.97	0.430		1.35	0.78	12.4		0.26
C-AB	2.27	14.29	0.159		0.58	0.39	5.8		0.08
C-A	6.65								
A-B	2.76								
A-C	2.69								

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

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.2
08.30	0.6 *
08.45	0.7 *
09.00	0.3
09.15	0.2

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.7 *
08.15	1.2 *
08.30	3.1 ***
08.45	3.4 ***
09.00	1.3 *
09.15	0.8 *

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.4
08.15	0.6 *
08.30	1.0 *
08.45	1.0 *
09.00	0.6 *
09.15	0.4

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I	
I	I	I	I	I	* DELAY *	I	* DELAY *	I	
I	I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
I	B-C	I	133.5	I	89.0	I	30.5	I	0.23
I	B-A	I	329.0	I	219.3	I	150.8	I	0.46
I	C-AB	I	314.6	I	209.7	I	57.4	I	0.18
I	C-A	I	664.1	I	442.7	I		I	
I	A-B	I	302.8	I	201.9	I		I	
I	A-C	I	294.6	I	196.4	I		I	
I	ALL	I	2038.5	I	1359.0	I	238.7	I	0.12

* 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*****

.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	0.00		0.00		0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	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	0.00		0.00		0.00		0.00		0.00

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-B	I
I	602.92		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: 2031 Base+ComDev PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

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-C	1.38	0.91	1.518		10.97	18.15	218.6		15.64
B-A	6.31	4.00	1.578		44.78	79.53	932.4		14.17
C-AB	3.79	10.41	0.365		1.04	1.06	16.1		0.15
C-A	3.71								
A-B	6.42								
A-C	12.59								

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-C	1.12	1.12	1.006		18.15	18.68	276.2		17.22
B-A	5.15	5.00	1.030		79.53	81.99	1211.4		16.24
C-AB	2.53	10.21	0.248		1.06	0.58	8.8		0.13
C-A	3.59								
A-B	5.24								
A-C	10.28								

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-C	0.94	1.28	0.735		18.68	14.56	249.3		13.81
B-A	4.32	5.73	0.753		81.99	61.83	1078.7		12.73
C-AB	1.86	10.10	0.185		0.58	0.37	5.6		0.12
C-A	3.27								
A-B	4.39								
A-C	8.61								

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

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	4.0	****
17.30	11.0	*****
17.45	18.2	*****
18.00	18.7	*****
18.15	14.6	*****

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	2.4	**
17.15	9.8	*****
17.30	44.8	*****
17.45	79.5	*****
18.00	82.0	*****
18.15	61.8	*****

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.4	
17.15	0.5	*
17.30	1.0	*
17.45	1.1	*
18.00	0.6	*
18.15	0.4	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-C	103.2	68.8	898.4
B-A	473.5	315.7	3762.8
C-AB	245.0	163.4	59.6
C-A	317.9	211.9	
A-B	481.7	321.2	
A-C	944.2	629.5	
ALL	2565.7	1710.4	4720.8

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
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*****END OF RUN*****

.SLOPES AND INTERCEPT

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

Intercept For	Slope For	Opposing	Slope For	Opposing
STREAM B-C	STREAM A-C	STREAM A-B	STREAM A-B	
0.00	0.00		0.00	

* Due to the presence of a flare, data is not available

Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing
STREAM B-A	STREAM A-C	STREAM A-B	STREAM C-A	STREAM C-B	STREAM C-B	
0.00	0.00		0.00		0.00	

* Due to the presence of a flare, data is not available

Intercept For	Slope For	Opposing	Slope For	Opposing
STREAM C-B	STREAM A-C	STREAM A-B	STREAM A-B	
602.92	0.23		0.23	

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

TRAFFIC DEMAND DATA

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

Demand set: 2016 Base+ComDev Phase 1 PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

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-C	1.25	1.33	0.938		4.14	5.15	70.1		4.19
B-A	5.27	5.14	1.024		9.42	14.05	177.5		2.70
C-AB	2.79	10.39	0.269		0.59	0.60	9.0		0.13
C-A	3.45								
A-B	4.62								
A-C	9.58								

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-C	1.02	3.19	0.320		5.15	0.49	14.5		0.62
B-A	4.30	6.01	0.716		14.05	2.97	93.2		1.32
C-AB	2.00	10.26	0.195		0.60	0.38	5.7		0.12
C-A	3.09								
A-B	3.78								
A-C	7.82								

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-C	0.85	6.56	0.130		0.49	0.15	2.4		0.18
B-A	3.60	6.75	0.533		2.97	1.19	20.1		0.34
C-AB	1.53	10.17	0.150		0.38	0.26	3.9		0.12
C-A	2.74								
A-B	3.16								
A-C	6.55								

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

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.1
17.15	0.3
17.30	4.1 ****
17.45	5.2 *****
18.00	0.5
18.15	0.2

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	1.1 *
17.15	2.1 **
17.30	9.4 *****
17.45	14.0 *****
18.00	3.0 ***
18.15	1.2 *

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.3
17.15	0.4
17.30	0.6 *
17.45	0.6 *
18.00	0.4
18.15	0.3

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I		
I	I	I	I	I	* DELAY *	I	* DELAY *	I		
I	I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)		
I	B-C	I	93.6	I	62.4	I	132.1	I	1.41	I
I	B-A	I	395.0	I	263.4	I	429.9	I	1.09	I
I	C-AB	I	189.4	I	126.3	I	36.7	I	0.19	I
I	C-A	I	278.6	I	185.7	I		I		I
I	A-B	I	346.9	I	231.2	I		I		I
I	A-C	I	718.5	I	479.0	I		I		I
I	ALL	I	2022.0	I	1348.0	I	598.8	I	0.30	I
I		I		I		I		I		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*****

.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-C	STREAM A-B	STREAM A-B	I
I	0.00	0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

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-C	STREAM A-B	STREAM A-B	STREAM C-A	STREAM C-A	STREAM C-B	STREAM C-B	I
I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM A-C	STREAM A-C	STREAM A-B	STREAM A-B	I
I	602.92	0.23	0.23	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: 2021 Base+ComDev Phase 2 PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

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-C	1.78	3.65	0.488		0.76	0.90	13.0		0.53
B-A	3.91	4.83	0.809		3.21	3.62	51.7		1.00
C-AB	3.94	10.76	0.366		0.87	0.89	13.5		0.15
C-A	3.09								
A-B	3.12								
A-C	9.87								

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-C	1.45	6.44	0.226		0.90	0.30	4.8		0.20
B-A	3.19	5.84	0.547		3.62	1.27	22.3		0.42
C-AB	2.83	10.56	0.268		0.89	0.55	8.3		0.13
C-A	2.91								
A-B	2.55								
A-C	8.06								

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-C	1.22	7.88	0.154		0.30	0.18	2.9		0.15
B-A	2.67	6.52	0.410		1.27	0.71	11.4		0.26
C-AB	2.17	10.43	0.208		0.55	0.37	5.6		0.12
C-A	2.64								
A-B	2.13								
A-C	6.75								

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

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.2
17.15	0.3
17.30	0.8 *
17.45	0.9 *
18.00	0.3
18.15	0.2

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.7 *
17.15	1.1 *
17.30	3.2 ***
17.45	3.6 ****
18.00	1.3 *
18.15	0.7 *

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.4
17.15	0.5 *
17.30	0.9 *
17.45	0.9 *
18.00	0.5 *
18.15	0.4

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I		
I	I	I	I	I	* DELAY *	I	* DELAY *	I		
I	I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)		
I	B-C	I	133.5	I	89.0	I	37.5	I	0.28	I
I	B-A	I	293.2	I	195.5	I	150.1	I	0.51	I
I	C-AB	I	267.6	I	178.4	I	53.7	I	0.20	I
I	C-A	I	259.6	I	173.1	I		I		I
I	A-B	I	234.0	I	156.0	I		I		I
I	A-C	I	740.5	I	493.7	I		I		I
I	ALL	I	1928.4	I	1285.6	I	241.3	I	0.13	I

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 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

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

.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-C	STREAM A-B	STREAM A-B	I
I	0.00	0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

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-C	STREAM A-B	STREAM A-B	STREAM C-A	STREAM C-A	STREAM C-B	STREAM C-B	I
I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM A-C	STREAM A-C	STREAM A-B	STREAM A-B	I
I	602.92	0.23	0.23	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: 2031 Base+Comm Dev+All Dev AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

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)
08.30-08.45									
B-C	0.90	9.43	0.095		0.10	0.10	1.6		0.12
B-A	1.30	5.41	0.241		0.31	0.31	4.7		0.24
C-AB	2.35	18.86	0.125		0.30	0.30	4.5		0.06
C-A	13.08								
A-B	1.12								
A-C	5.27								

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)
08.45-09.00									
B-C	0.73	9.95	0.074		0.10	0.08	1.2		0.11
B-A	1.06	6.19	0.172		0.31	0.21	3.3		0.20
C-AB	1.42	17.06	0.083		0.30	0.16	2.4		0.06
C-A	11.18								
A-B	0.91								
A-C	4.30								

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)
09.00-09.15									
B-C	0.61	10.28	0.060		0.08	0.06	1.0		0.10
B-A	0.89	6.76	0.132		0.21	0.15	2.4		0.17
C-AB	1.00	15.95	0.063		0.16	0.11	1.6		0.07
C-A	9.55								
A-B	0.77								
A-C	3.60								

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

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.2
08.30	0.3
08.45	0.3
09.00	0.2
09.15	0.2

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.2
08.30	0.3
08.45	0.3
09.00	0.2
09.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I		
I	I	I	I	I	* DELAY *	I	* DELAY *	I		
I	I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)		
I	B-C	I	67.4	I	45.0	I	7.4	I	0.11	I
I	B-A	I	97.7	I	65.2	I	19.9	I	0.20	I
I	C-AB	I	142.9	I	95.3	I	16.9	I	0.12	I
I	C-A	I	1014.7	I	676.5	I		I		I
I	A-B	I	84.0	I	56.0	I		I		I
I	A-C	I	395.0	I	263.4	I		I		I
I	ALL	I	1801.7	I	1201.2	I	44.2	I	0.02	I

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

.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-C	STREAM A-B	STREAM A-B	I
I	0.00	0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

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-C	STREAM A-B	STREAM A-B	STREAM C-A	STREAM C-A	STREAM C-B	STREAM C-B	I
I	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM A-C	STREAM A-C	STREAM A-B	STREAM A-B	I
I	602.92	0.23	0.23	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: 2031 Base+Comm Dev+All Dev PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

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

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-C	0.35	8.46	0.041		0.04	0.04	0.6		0.12
B-A	0.00	4.35	0.000		0.00	0.00	0.0		0.00
C-AB	0.00	6.45	0.000		0.00	0.00	0.0		0.00
C-A	8.24								
A-B	0.81								
A-C	11.84								

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)
17.45-18.00									
B-C	0.28	9.08	0.031		0.04	0.03	0.5		0.11
B-A	0.00	5.09	0.000		0.00	0.00	0.0		0.00
C-AB	0.00	6.94	0.000		0.00	0.00	0.0		0.00
C-A	6.73								
A-B	0.66								
A-C	9.66								

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-C	0.24	9.52	0.025		0.03	0.03	0.4		0.11
B-A	0.00	5.62	0.000		0.00	0.00	0.0		0.00
C-AB	0.00	7.30	0.000		0.00	0.00	0.0		0.00
C-A	5.63								
A-B	0.55								
A-C	8.09								

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

QUEUE FOR STREAM B-C

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 B-A

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

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-C	26.2	3.0	0.11
B-A	0.0	0.0	0.00
C-AB	0.0	0.0	0.00
C-A	618.0	412.0	
A-B	60.6	40.4	
A-C	887.8	591.9	
ALL	1592.5	1061.7	3.0

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 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

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

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