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)
08.15-08.30									
B-C	1.96	8.05	0.244		0.22	0.32	4.6		0.16
B-A	2.46	5.84	0.421		0.43	0.71	10.0		0.29
C-A	5.67								
C-B	1.47	8.19	0.179		0.16	0.22	3.2		0.15
A-B	1.25								
A-C	6.94								

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	1.96	8.03	0.245		0.32	0.32	4.8		0.16
B-A	2.46	5.83	0.422		0.71	0.72	10.7		0.30
C-A	5.67								
C-B	1.47	8.19	0.179		0.22	0.22	3.3		0.15
A-B	1.25								
A-C	6.94								

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	1.60	8.92	0.180		0.32	0.22	3.4		0.14
B-A	2.01	6.53	0.307		0.72	0.45	7.1		0.22
C-A	4.63								
C-B	1.20	8.54	0.140		0.22	0.16	2.5		0.14
A-B	1.02								
A-C	5.66								

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)
09.00-09.15									
B-C	1.34	9.45	0.142		0.22	0.17	2.6		0.12
B-A	1.68	7.02	0.240		0.45	0.32	5.0		0.19
C-A	3.88								
C-B	1.00	8.80	0.114		0.16	0.13	2.0		0.13
A-B	0.85								
A-C	4.74								

QUEUE FOR STREAM B-C

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

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.4	
08.30	0.7	*
08.45	0.7	*
09.00	0.5	
09.15	0.3	

QUEUE FOR STREAM C-B

E SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
8.15	0.2
08.30	0.2
08.45	0.2
09.00	0.2
9.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	147.3	98.2	20.9	0.14	21.0	0.14
B-A	184.4	123.0	43.5	0.24	43.5	0.24
C-A	425.3	283.5				
C-B	110.1	73.4	15.2	0.14	15.2	0.14
A-B	93.6	62.4				
A-C	520.3	346.9				
ALL	1481.0	987.4	79.6	0.05	79.6	0.05

ELAY 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 JOB

OPES AND INTERCEPT

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

be adjusted)

ntercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
590.18	0.22	0.09

ntercept For 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
459.75	0.21	0.08	0.13	0.29

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
631.87	0.24	0.24

hese values do not allow for any site specific corrections

FFIC DEMAND DATA

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

Demand set: 2014 Base + Dev PM (429)

TIME PERIOD BEGINS 16.30 AND ENDS 18.00

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.35	11.02	7.35
ARM B	15.00	45.00	75.00	2.94	4.41	2.94
ARM C	15.00	45.00	75.00	5.18	7.76	5.18

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.30 - 18.00	ARM A	0.000	0.274	0.726
		0.0	161.0	427.0
		(0.0)	(1.0)	(2.0)
	ARM B	0.494	0.000	0.506
		116.0	0.0	119.0
		(0.0)	(0.0)	(2.0)
	ARM C	0.775	0.225	0.000
		321.0	93.0	0.0
		(3.0)	(4.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2014 Base + Dev PM (429)
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)
16.30-16.45									
B-C	1.49	9.59	0.156		0.00	0.18	2.6		0.12
B-A	1.46	6.69	0.217		0.00	0.27	3.9		0.19
C-A	4.03								
C-B	1.17	8.41	0.139		0.00	0.16	2.3		0.14
A-B	2.02								
A-C	5.36								

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-C	1.78	9.04	0.197		0.18	0.24	3.6		0.14
B-A	1.74	6.14	0.283		0.27	0.39	5.6		0.23
C-A	4.81								
C-B	1.39	8.07	0.173		0.16	0.21	3.0		0.15
A-B	2.41								
A-C	6.40								

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-C	2.18	8.13	0.269		0.24	0.36	5.2		0.17
B-A	2.13	5.34	0.399		0.39	0.64	9.1		0.31
C-A	5.89								
C-B	1.71	7.61	0.224		0.21	0.29	4.1		0.17
A-B	2.95								
A-C	7.84								

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-C	2.18	8.11	0.269		0.36	0.37	5.5		0.17
B-A	2.13	5.34	0.399		0.64	0.65	9.7		0.31
C-A	5.89								
C-B	1.71	7.61	0.224		0.29	0.29	4.3		0.17
A-B	2.95								
A-C	7.84								

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)
17.30-17.45									
B-C	1.78	9.02	0.198		0.37	0.25	3.9		0.14
B-A	1.74	6.13	0.284		0.65	0.40	6.4		0.23
C-A	4.81								
C-B	1.39	8.07	0.173		0.29	0.21	3.3		0.15
A-B	2.41								
A-C	6.40								

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	1.49	9.58	0.156		0.25	0.19	2.9		0.12
B-A	1.46	6.69	0.218		0.40	0.28	4.4		0.19
C-A	4.03								
C-B	1.17	8.41	0.139		0.21	0.16	2.5		0.14
A-B	2.02								
A-C	5.36								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.45	0.2	
17.00	0.2	
17.15	0.4	
17.30	0.4	
17.45	0.2	
18.00	0.2	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.45	0.3	
17.00	0.4	
17.15	0.6	*
17.30	0.7	*
17.45	0.4	
18.00	0.3	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.2
17.00	0.2
17.15	0.3
17.30	0.3
17.45	0.2
18.00	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	163.8	109.2	23.6	0.14	23.6	0.14
B-A	159.7	106.4	39.0	0.24	39.1	0.24
C-A	441.8	294.6				
C-B	128.0	85.3	19.5	0.15	19.5	0.15
A-B	221.6	147.7				
A-C	587.7	391.8				
ALL	1702.6	1135.1	82.2	0.05	82.2	0.05

* *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 JOB

.SLOPES AND INTERCEPT

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

will be adjusted)

Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
590.18	0.22	0.09

Intercept For 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
459.75	0.21	0.08	0.13	0.29

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
631.87	0.24	0.24

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: 2019 Base + Dev AM (429)

E PERIOD BEGINS 07.45 AND ENDS 09.15

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

AND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
RM A	15.00	45.00	75.00	5.95	8.92	5.95
RM B	15.00	45.00	75.00	3.14	4.71	3.14
ARM C	15.00	45.00	75.00	5.19	7.78	5.19

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (VEH/HR) / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.149	0.851
		0.0	71.0	405.0
		(0.0)	(0.0)	(4.0)
	ARM B	0.546	0.000	0.454
		137.0	0.0	114.0
		(2.0)	(0.0)	(3.0)
	ARM C	0.795	0.205	0.000
		330.0	85.0	0.0
		(5.0)	(4.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2019 Base + Dev AM (429)
AND FOR TIME PERIOD 1

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)
07.45-08.00									
B-C	1.43	9.36	0.153		0.00	0.18	2.6		0.13
B-A	1.72	6.84	0.251		0.00	0.33	4.7		0.19
C-A	4.14								
C-B	1.07	8.71	0.122		0.00	0.14	2.0		0.13
A-B	0.89								
A-C	5.08								

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)
08.00-08.15									
B-C	1.71	8.79	0.194		0.18	0.24	3.5		0.14
B-A	2.05	6.31	0.325		0.33	0.47	6.8		0.23
C-A	4.94								
C-B	1.27	8.44	0.151		0.14	0.18	2.6		0.14
A-B	1.06								
A-C	6.07								

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)
08.15-08.30									
B-C	2.09	7.79	0.269		0.24	0.36	5.2		0.18
B-A	2.51	5.56	0.453		0.47	0.80	11.2		0.32
C-A	6.06								
C-B	1.56	8.06	0.194		0.18	0.24	3.5		0.15
A-B	1.30								
A-C	7.43								

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	2.09	7.76	0.270		0.36	0.37	5.5		0.18
B-A	2.51	5.55	0.453		0.80	0.81	12.1		0.33
C-A	6.06								
C-B	1.56	8.06	0.194		0.24	0.24	3.6		0.15
A-B	1.30								
A-C	7.43								

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	1.71	8.76	0.195		0.37	0.24	3.8		0.14
B-A	2.05	6.31	0.326		0.81	0.49	7.8		0.24
C-A	4.94								
C-B	1.27	8.44	0.151		0.24	0.18	2.8		0.14
A-B	1.06								
A-C	6.07								

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	1.43	9.34	0.153		0.24	0.18	2.8		0.13
B-A	1.72	6.83	0.252		0.49	0.34	5.3		0.20
C-A	4.14								
C-B	1.07	8.71	0.122		0.18	0.14	2.2		0.13
A-B	0.89								
A-C	5.08								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.2	
08.15	0.2	
08.30	0.4	
08.45	0.4	
09.00	0.2	
09.15	0.2	

QUEUE FOR STREAM B-A

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	

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	156.9	104.6	23.4	0.15	23.4	0.15
B-A	188.6	125.7	47.9	0.25	47.9	0.25
C-A	454.2	302.8				
C-B	117.0	78.0	16.5	0.14	16.5	0.14
A-B	97.7	65.2				
A-C	557.5	371.6				
ALL	1571.9	1047.9	87.8	0.06	87.8	0.06

* 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 JOB

SLOPES AND INTERCEPT

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

will be adjusted)

Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
590.18	0.22	0.09

Intercept For 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
459.75	0.21	0.08	0.13	0.29

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
631.87	0.24	0.24

These values do not allow for any site specific corrections

TRAFFIC DEMAND DATA

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

Demand set: 2019 Base + Dev PM (429)

TIME PERIOD BEGINS 16.30 AND ENDS 18.00

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	7.80	11.70	7.80
ARM B	15.00	45.00	75.00	3.10	4.65	3.10
ARM C	15.00	45.00	75.00	5.53	8.29	5.53

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.30 - 18.00	ARM A	0.000	0.268	0.732
		0.0	167.0	457.0
		(0.0)	(1.0)	(2.0)
	ARM B	0.488	0.000	0.512
		121.0	0.0	127.0
		(0.0)	(0.0)	(2.0)
	ARM C	0.776	0.224	0.000
		343.0	99.0	0.0
		(3.0)	(4.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2019 Base + Dev PM (429)
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)
16.30-16.45									
B-C	1.59	9.45	0.169		0.00	0.20	2.9		0.13
B-A	1.52	6.49	0.234		0.00	0.30	4.3		0.20
C-A	4.30								
C-B	1.24	8.30	0.150		0.00	0.17	2.5		0.14
A-B	2.10								
A-C	5.73								

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)
16.45-17.00									
B-C	1.90	8.84	0.215		0.20	0.27	4.0		0.14
B-A	1.81	5.90	0.308		0.30	0.43	6.2		0.24
C-A	5.14								
C-B	1.48	7.95	0.187		0.17	0.23	3.3		0.15
A-B	2.50								
A-C	6.85								

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-C	2.33	7.79	0.299		0.27	0.42	6.1		0.18
B-A	2.22	5.03	0.441		0.43	0.76	10.6		0.35
C-A	6.29								
C-B	1.82	7.46	0.244		0.23	0.32	4.6		0.18
A-B	3.06								
A-C	8.39								

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)
17.15-17.30									
B-C	2.33	7.76	0.300		0.42	0.42	6.3		0.18
B-A	2.22	5.03	0.442		0.76	0.77	11.5		0.36
C-A	6.29								
C-B	1.82	7.46	0.244		0.32	0.32	4.8		0.18
A-B	3.06								
A-C	8.39								

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)
17.30-17.45									
B-C	1.90	8.82	0.216		0.42	0.28	4.3		0.15
B-A	1.81	5.89	0.308		0.77	0.45	7.2		0.25
C-A	5.14								
C-B	1.48	7.95	0.187		0.32	0.23	3.6		0.15
A-B	2.50								
A-C	6.85								

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	1.59	9.44	0.169		0.28	0.21	3.2		0.13
B-A	1.52	6.49	0.234		0.45	0.31	4.9		0.20
C-A	4.30								
C-B	1.24	8.30	0.150		0.23	0.18	2.7		0.14
A-B	2.10								
A-C	5.73								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.45	0.2	
17.00	0.3	
17.15	0.4	
17.30	0.4	
17.45	0.3	
18.00	0.2	

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.45	0.3	
17.00	0.4	
17.15	0.8	*
17.30	0.8	*
17.45	0.5	
18.00	0.3	

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.2
17.00	0.2
17.15	0.3
17.30	0.3
17.45	0.2
18.00	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	174.8	116.5	26.7	0.15	26.7	0.15
B-A	166.5	111.0	44.7	0.27	44.7	0.27
C-A	472.1	314.7				
C-B	136.3	90.8	21.5	0.16	21.5	0.16
A-B	229.9	153.2				
A-C	629.0	419.4				
ALL	1808.6	1205.7	93.0	0.05	93.0	0.05

* 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 JOB

.SLOPES AND INTERCEPT

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

will be adjusted)

Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
590.18	0.22	0.09

Intercept For 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
459.75	0.21	0.08	0.13	0.29

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
631.87	0.24	0.24

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: 2014 Base AM (429)

E PERIOD BEGINS 07.45 AND ENDS 09.15

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

AND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	5.26	7.89	5.26
ARM B	15.00	45.00	75.00	1.99	2.98	1.99
ARM C	15.00	45.00	75.00	4.86	7.29	4.86

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.102	0.898
		0.0	43.0	378.0
		(0.0)	(0.0)	(4.0)
	ARM B	0.327	0.000	0.673
		52.0	0.0	107.0
		(4.0)	(0.0)	(3.0)
	ARM C	0.794	0.206	0.000
		309.0	80.0	0.0
		(5.0)	(4.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2014 Base AM (429)
AND FOR TIME PERIOD 1

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)
07.45-08.00									
B-C	1.34	9.97	0.135		0.00	0.15	2.2		0.12
B-A	0.65	6.44	0.101		0.00	0.11	1.6		0.17
C-A	3.88								
C-B	1.00	8.87	0.113		0.00	0.13	1.8		0.13
A-B	0.54								
A-C	4.74								

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)
08.00-08.15									
B-C	1.60	9.62	0.167		0.15	0.20	2.9		0.12
B-A	0.78	6.02	0.129		0.11	0.15	2.1		0.19
C-A	4.63								
C-B	1.20	8.63	0.139		0.13	0.16	2.3		0.13
A-B	0.64								
A-C	5.66								

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)
08.15-08.30									
B-C	1.96	9.13	0.215		0.20	0.27	4.0		0.14
B-A	0.95	5.44	0.176		0.15	0.21	3.0		0.22
C-A	5.67								
C-B	1.47	8.29	0.177		0.16	0.21	3.1		0.15
A-B	0.79								
A-C	6.94								

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	1.96	9.12	0.215		0.27	0.27	4.1		0.14
B-A	0.95	5.43	0.176		0.21	0.21	3.2		0.22
C-A	5.67								
C-B	1.47	8.29	0.177		0.21	0.21	3.2		0.15
A-B	0.79								
A-C	6.94								

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	1.60	9.62	0.167		0.27	0.20	3.1		0.12
B-A	0.78	6.01	0.130		0.21	0.15	2.3		0.19
C-A	4.63								
C-B	1.20	8.63	0.139		0.21	0.16	2.5		0.13
A-B	0.64								
A-C	5.66								

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)
09.00-09.15									
B-C	1.34	9.96	0.135		0.20	0.16	2.4		0.12
B-A	0.65	6.43	0.101		0.15	0.11	1.8		0.17
C-A	3.88								
C-B	1.00	8.87	0.113		0.16	0.13	2.0		0.13
A-B	0.54								
A-C	4.74								

QUEUE FOR STREAM B-C

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

QUEUE FOR STREAM B-A

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

QUEUE FOR STREAM C-B

E SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
8.15	0.2
08.30	0.2
08.45	0.2
09.00	0.2
9.15	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	147.3	98.2	18.7	0.13	18.7	0.13
B-A	71.6	47.7	14.0	0.20	14.0	0.20
C-A	425.3	283.5				
C-B	110.1	73.4	15.0	0.14	15.0	0.14
A-B	59.2	39.5				
A-C	520.3	346.9				
ALL	1333.8	889.2	47.7	0.04	47.7	0.04

ELAY 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 JOB

OPES AND INTERCEPT

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

l be adjusted)

ntercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
590.18	0.22	0.09

ntercept For 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
459.75	0.21	0.08	0.13	0.29

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
631.87	0.24	0.24

hese values do not allow for any site specific corrections

FFIC DEMAND DATA

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

Demand set: 2014 Base PM (429)

TIME PERIOD BEGINS 16.30 AND ENDS 18.00

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	6.30	9.45	6.30
ARM B	15.00	45.00	75.00	2.41	3.62	2.41
ARM C	15.00	45.00	75.00	5.18	7.76	5.18

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.30 - 18.00	ARM A	0.000	0.153	0.847
		0.0	77.0	427.0
		(0.0)	(1.0)	(2.0)
	ARM B	0.383	0.000	0.617
		74.0	0.0	119.0
		(0.0)	(0.0)	(2.0)
	ARM C	0.775	0.225	0.000
		321.0	93.0	0.0
		(3.0)	(4.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2014 Base PM (429)
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)
16.30-16.45									
B-C	1.49	9.69	0.154		0.00	0.18	2.6		0.12
B-A	0.93	6.58	0.141		0.00	0.16	2.3		0.18
C-A	4.03								
C-B	1.17	8.65	0.135		0.00	0.15	2.2		0.13
A-B	0.97								
A-C	5.36								

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-C	1.78	9.26	0.192		0.18	0.24	3.5		0.13
B-A	1.11	6.10	0.182		0.16	0.22	3.2		0.20
C-A	4.81								
C-B	1.39	8.36	0.167		0.15	0.20	2.9		0.14
A-B	1.15								
A-C	6.40								

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-C	2.18	8.76	0.249		0.24	0.33	4.8		0.15
B-A	1.36	5.34	0.254		0.22	0.33	4.8		0.25
C-A	5.89								
C-B	1.71	7.97	0.214		0.20	0.27	3.9		0.16
A-B	1.41								
A-C	7.84								

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-C	2.18	8.76	0.249		0.33	0.33	4.9		0.15
B-A	1.36	5.33	0.255		0.33	0.34	5.0		0.25
C-A	5.89								
C-B	1.71	7.97	0.214		0.27	0.27	4.1		0.16
A-B	1.41								
A-C	7.84								

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)
17.30-17.45									
B-C	1.78	9.26	0.193		0.33	0.24	3.7		0.13
B-A	1.11	6.09	0.182		0.34	0.23	3.5		0.20
C-A	4.81								
C-B	1.39	8.36	0.167		0.27	0.20	3.1		0.14
A-B	1.15								
A-C	6.40								

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	1.49	9.68	0.154		0.24	0.18	2.8		0.12
B-A	0.93	6.58	0.141		0.23	0.17	2.6		0.18
C-A	4.03								
C-B	1.17	8.65	0.135		0.20	0.16	2.4		0.13
A-B	0.97								
A-C	5.36								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.2
17.00	0.2
17.15	0.3
17.30	0.3
17.45	0.2
18.00	0.2

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.2
17.00	0.2
17.15	0.3
17.30	0.3
17.45	0.2
18.00	0.2

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.2
17.00	0.2
17.15	0.3
17.30	0.3
17.45	0.2
18.00	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	163.8	109.2	22.3	0.14	22.3	0.14
B-A	101.9	67.9	21.4	0.21	21.4	0.21
C-A	441.8	294.6				
C-B	128.0	85.3	18.6	0.15	18.6	0.15
A-B	106.0	70.7				
A-C	587.7	391.8				
ALL	1529.2	1019.5	62.4	0.04	62.4	0.04

* 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 JOB

.SLOPES AND INTERCEPT

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

will be adjusted)

Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
590.18	0.22	0.09

Intercept For 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
459.75	0.21	0.08	0.13	0.29

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
631.87	0.24	0.24

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: 2019 Base AM (429)

E PERIOD BEGINS 07.45 AND ENDS 09.15

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

AND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	5.64	8.46	5.64
ARM B	15.00	45.00	75.00	2.11	3.17	2.11
ARM C	15.00	45.00	75.00	5.19	7.78	5.19

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.102	0.898
		0.0	46.0	405.0
		(0.0)	(0.0)	(4.0)
	ARM B	0.325	0.000	0.675
		55.0	0.0	114.0
		(4.0)	(0.0)	(3.0)
	ARM C	0.795	0.205	0.000
		330.0	85.0	0.0
		(5.0)	(4.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2019 Base AM (429)
AND FOR TIME PERIOD 1

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)
07.45-08.00									
B-C	1.43	9.85	0.145		0.00	0.17	2.4		0.12
B-A	0.69	6.29	0.110		0.00	0.12	1.7		0.18
C-A	4.14								
C-B	1.07	8.78	0.121		0.00	0.14	2.0		0.13
A-B	0.58								
A-C	5.08								

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)
08.00-08.15									
B-C	1.71	9.48	0.180		0.17	0.22	3.2		0.13
B-A	0.82	5.84	0.141		0.12	0.16	2.4		0.20
C-A	4.94								
C-B	1.27	8.52	0.149		0.14	0.17	2.5		0.14
A-B	0.69								
A-C	6.07								

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)
08.15-08.30									
B-C	2.09	8.93	0.234		0.22	0.30	4.4		0.15
B-A	1.01	5.21	0.194		0.16	0.24	3.4		0.24
C-A	6.06								
C-B	1.56	8.16	0.191		0.17	0.23	3.4		0.15
A-B	0.84								
A-C	7.43								

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	2.09	8.93	0.234		0.30	0.30	4.5		0.15
B-A	1.01	5.21	0.194		0.24	0.24	3.6		0.24
C-A	6.06								
C-B	1.56	8.16	0.191		0.23	0.23	3.5		0.15
A-B	0.84								
A-C	7.43								

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	1.71	9.47	0.180		0.30	0.22	3.4		0.13
B-A	0.82	5.83	0.141		0.24	0.17	2.6		0.20
C-A	4.94								
C-B	1.27	8.52	0.149		0.23	0.18	2.7		0.14
A-B	0.69								
A-C	6.07								

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	1.43	9.84	0.145		0.22	0.17	2.6		0.12
B-A	0.69	6.28	0.110		0.17	0.13	1.9		0.18
C-A	4.14								
C-B	1.07	8.78	0.121		0.18	0.14	2.1		0.13
A-B	0.58								
A-C	5.08								

QUEUE FOR STREAM B-C

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

QUEUE FOR STREAM B-A

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

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	156.9	104.6	20.6	0.13	20.6	0.13
B-A	75.7	50.5	15.6	0.21	15.6	0.21
C-A	454.2	302.8				
C-B	117.0	78.0	16.3	0.14	16.3	0.14
A-B	63.3	42.2				
A-C	557.5	371.6				
ALL	1424.6	949.7	52.5	0.04	52.6	0.04

* 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 JOB

SLOPES AND INTERCEPT

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

will be adjusted)

Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
590.18	0.22	0.09

Intercept For 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
459.75	0.21	0.08	0.13	0.29

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
631.87	0.24	0.24

these values do not allow for any site specific corrections

TRAFFIC DEMAND DATA

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

Demand set: 2019 Base PM (429)

TIME PERIOD BEGINS 16.30 AND ENDS 18.00

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	6.75	10.13	6.75
ARM B	15.00	45.00	75.00	2.58	3.86	2.58
ARM C	15.00	45.00	75.00	5.53	8.29	5.53

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.30 - 18.00	ARM A	0.000	0.154	0.846
		0.0	83.0	457.0
		(0.0)	(1.0)	(2.0)
	ARM B	0.383	0.000	0.617
		79.0	0.0	127.0
		(0.0)	(0.0)	(2.0)
	ARM C	0.776	0.224	0.000
		343.0	99.0	0.0
		(3.0)	(4.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2019 Base PM (429)
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)
16.30-16.45									
B-C	1.59	9.54	0.167		0.00	0.20	2.9		0.13
B-A	0.99	6.41	0.155		0.00	0.18	2.6		0.18
C-A	4.30								
C-B	1.24	8.54	0.145		0.00	0.17	2.4		0.14
A-B	1.04								
A-C	5.73								

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)
16.45-17.00									
B-C	1.90	9.07	0.210		0.20	0.26	3.8		0.14
B-A	1.18	5.89	0.201		0.18	0.25	3.6		0.21
C-A	5.14								
C-B	1.48	8.24	0.180		0.17	0.22	3.2		0.15
A-B	1.24								
A-C	6.85								

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-C	2.33	8.52	0.273		0.26	0.37	5.4		0.16
B-A	1.45	5.06	0.287		0.25	0.39	5.6		0.28
C-A	6.29								
C-B	1.82	7.81	0.233		0.22	0.30	4.3		0.17
A-B	1.52								
A-C	8.39								

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)
17.15-17.30									
B-C	2.33	8.52	0.274		0.37	0.37	5.6		0.16
B-A	1.45	5.06	0.287		0.39	0.40	5.9		0.28
C-A	6.29								
C-B	1.82	7.81	0.233		0.30	0.30	4.5		0.17
A-B	1.52								
A-C	8.39								

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)
17.30-17.45									
B-C	1.90	9.06	0.210		0.37	0.27	4.2		0.14
B-A	1.18	5.89	0.201		0.40	0.26	4.0		0.21
C-A	5.14								
C-B	1.48	8.24	0.180		0.30	0.22	3.4		0.15
A-B	1.24								
A-C	6.85								

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	1.59	9.53	0.167		0.27	0.20	3.1		0.13
B-A	0.99	6.41	0.155		0.26	0.19	2.9		0.18
C-A	4.30								
C-B	1.24	8.54	0.145		0.22	0.17	2.6		0.14
A-B	1.04								
A-C	5.73								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.2
17.00	0.3
17.15	0.4
17.30	0.4
17.45	0.3
18.00	0.2

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.2
17.00	0.2
17.15	0.4
17.30	0.4
17.45	0.3
18.00	0.2

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.2
17.00	0.2
17.15	0.3
17.30	0.3
17.45	0.2
18.00	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	174.8	116.5	25.0	0.14	25.0	0.14
B-A	108.7	72.5	24.6	0.23	24.6	0.23
C-A	472.1	314.7				
C-B	136.3	90.8	20.5	0.15	20.5	0.15
A-B	114.2	76.2				
A-C	629.0	419.4				
ALL	1635.2	1090.1	70.1	0.04	70.1	0.04

* 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 JOB

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

[Printed at 09:04:34 on 30/09/2009]

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

PICADY 5.0 ANALYSIS PROGRAM
RELEASE 4.0 INTERIM (OCTOBER 2006)

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with file:-
"C:\Documents and Settings\WakemanJon\Desktop\North Gawber\Secondary Site Access\
Secondary Site Access29092009.vpi"
(drive-on-the-left) at 13:50:15 on Tuesday, 29 September 2009

RUN INFORMATION
****

RUN TITLE: Secondary Site Access off Spark Lane
LOCATION: North Gawber, Barnsley
DATE: 29/09/09
CLIENT:
ENUMERATOR: wakemanjon
JOB NUMBER:
STATUS: On-going
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 Spark Lane (N)
ARM B IS Site Access
ARM C IS Spark Lane (S)

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

DATA ITEM		MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W)	6.00 M.
CENTRAL RESERVE WIDTH	(WCR)	0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B)	4.00 M.
- VISIBILITY	(VC-B)	60.0 M.
- BLOCKS TRAFFIC		YES
MINOR ROAD - VISIBILITY TO LEFT	(VB-C)	60.0 M.
- VISIBILITY TO RIGHT	(VB-A)	60.0 M.
- LANE 1 WIDTH	(WB-C)	3.00 M.
- LANE 2 WIDTH	(WB-A)	0.00 M.

.SLOPES AND INTERCEPT

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

will be adjusted)

Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
661.71	0.26	0.10

Intercept For 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
526.83	0.24	0.10	0.15	0.35

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
727.96	0.28	0.28

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: 2014 Base + Dev PM (429)

TIME PERIOD BEGINS 16.30 AND ENDS 18.00

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	4.82	7.24	4.82
ARM B	15.00	45.00	75.00	0.61	0.92	0.61
ARM C	15.00	45.00	75.00	3.60	5.40	3.60

TIME	FROM/TO	ARM A	ARM B	ARM C
16.30 - 18.00		TURNING PROPORTIONS TURNING COUNTS (VEH/HR) (PERCENTAGE OF H.V.S)		
	ARM A	0.000 0.0 (0.0)	0.166 64.0 (0.0)	0.834 322.0 (0.0)
	ARM B	0.653 32.0 (0.0)	0.000 0.0 (0.0)	0.347 17.0 (0.0)
	ARM C	0.878 253.0 (2.0)	0.122 35.0 (0.0)	0.000 0.0 (0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2014 Base + Dev PM (429)
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)
16.30-16.45									
B-AC	0.61	7.86	0.078		0.00	0.08	1.2		0.14
C-AB	0.44	10.77	0.041		0.00	0.04	0.6		0.10
A-B	0.80								
A-C	4.04								

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	0.73	7.54	0.097		0.08	0.11	1.6		0.15
C-AB	0.52	10.50	0.050		0.04	0.05	0.8		0.10
A-B	0.96								
A-C	4.82								

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)
17.00-17.15									
B-AC	0.90	7.10	0.127		0.11	0.14	2.1		0.16
C-AB	0.64	10.13	0.063		0.05	0.07	1.0		0.11
A-B	1.17								
A-C	5.91								

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	0.90	7.10	0.127		0.14	0.14	2.2		0.16
C-AB	0.64	10.13	0.063		0.07	0.07	1.0		0.11
A-B	1.17								
A-C	5.91								

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	0.73	7.54	0.097		0.14	0.11	1.7		0.15
C-AB	0.52	10.50	0.050		0.07	0.05	0.8		0.10
A-B	0.96								
A-C	4.82								

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)
17.45-18.00									
B-AC	0.61	7.86	0.078		0.11	0.09	1.3		0.14
C-AB	0.44	10.77	0.041		0.05	0.04	0.6		0.10
A-B	0.80								
A-C	4.04								

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
16.45	0.1
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.0
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	67.4	45.0	10.0	0.15	10.0	0.15
C-AB	48.2	32.1	4.9	0.10	4.9	0.10
A-B	88.1	58.7				
A-C	443.2	295.5				
ALL	995.2	663.4	14.9	0.01	14.9	0.01

* 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 JOB

.SLOPES AND INTERCEPT

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

will be adjusted)

Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
661.71	0.26	0.10

Intercept For 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
526.83	0.24	0.10	0.15	0.35

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
727.96	0.28	0.28

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: 2014 Base + Dev AM (429)

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	4.49	6.73	4.49
ARM B	15.00	45.00	75.00	1.20	1.80	1.20
ARM C	15.00	45.00	75.00	3.13	4.69	3.13

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.053	0.947
		0.0	19.0	340.0
		(0.0)	(0.0)	(4.0)
	ARM B	0.646	0.000	0.354
		62.0	0.0	34.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.960	0.040	0.000
		240.0	10.0	0.0
		(6.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2014 Base + Dev AM (429)
AND FOR TIME PERIOD 1

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)
07.45-08.00									
B-AC	1.20	7.92	0.152		0.00	0.18	2.6		0.15
C-AB	0.13	10.81	0.012		0.00	0.01	0.2		0.09
A-B	0.24								
A-C	4.27								

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)
08.00-08.15									
B-AC	1.44	7.62	0.189		0.18	0.23	3.4		0.16
C-AB	0.15	10.56	0.014		0.01	0.01	0.2		0.10
A-B	0.28								
A-C	5.09								

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)
08.15-08.30									
B-AC	1.76	7.20	0.245		0.23	0.32	4.6		0.18
C-AB	0.18	10.20	0.018		0.01	0.02	0.3		0.10
A-B	0.35								
A-C	6.24								

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-AC	1.76	7.20	0.245		0.32	0.32	4.8		0.18
C-AB	0.18	10.20	0.018		0.02	0.02	0.3		0.10
A-B	0.35								
A-C	6.24								

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-AC	1.44	7.62	0.189		0.32	0.24	3.6		0.16
C-AB	0.15	10.56	0.014		0.02	0.01	0.2		0.10
A-B	0.28								
A-C	5.09								

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-AC	1.20	7.92	0.152		0.24	0.18	2.8		0.15
C-AB	0.13	10.81	0.012		0.01	0.01	0.2		0.09
A-B	0.24								
A-C	4.27								

RNING* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

E SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
8.15	0.2
08.30	0.3
08.45	0.3
09.00	0.2
9.15	0.2

QUEUE FOR STREAM C-AB

E SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
8.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
9.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	132.1	88.1	21.8	0.16	21.8	0.16
C-AB	13.8	9.2	1.3	0.10	1.3	0.10
A-B	26.2	17.4				
A-C	468.0	312.0				
ALL	970.4	646.9	23.1	0.02	23.1	0.02

* 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 JOB

.SLOPES AND INTERCEPT

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

will be adjusted)

Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
661.71	0.26	0.10

Intercept For 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
526.83	0.24	0.10	0.15	0.35

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
727.96	0.28	0.28

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: 2009 Base + Dev AM (429)

E PERIOD BEGINS 07.45 AND ENDS 09.15

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

AND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
RM A	15.00	45.00	75.00	4.16	6.24	4.16
RM B	15.00	45.00	75.00	1.20	1.80	1.20
ARM C	15.00	45.00	75.00	2.90	4.35	2.90

TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.057	0.943
		0.0	19.0	314.0
		(0.0)	(0.0)	(4.0)
	ARM B	0.646	0.000	0.354
		62.0	0.0	34.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.957	0.043	0.000
		222.0	10.0	0.0
		(6.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2009 Base + Dev AM (429)
AND FOR TIME PERIOD 1

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)
07.45-08.00									
B-AC	1.20	8.04	0.150		0.00	0.17	2.5		0.15
C-AB	0.13	10.91	0.012		0.00	0.01	0.2		0.09
A-B	0.24								
A-C	3.94								

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)
8.00-08.15									
B-AC	1.44	7.76	0.185		0.17	0.22	3.3		0.16
C-AB	0.15	10.67	0.014		0.01	0.01	0.2		0.10
A-B	0.28								
A-C	4.70								

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)
08.15-08.30									
B-AC	1.76	7.37	0.239		0.22	0.31	4.5		0.18
C-AB	0.18	10.34	0.018		0.01	0.02	0.3		0.10
A-B	0.35								
A-C	5.76								

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-AC	1.76	7.37	0.239		0.31	0.31	4.7		0.18
C-AB	0.18	10.34	0.018		0.02	0.02	0.3		0.10
A-B	0.35								
A-C	5.76								

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-AC	1.44	7.76	0.185		0.31	0.23	3.6		0.16
C-AB	0.15	10.67	0.014		0.02	0.01	0.2		0.10
A-B	0.28								
A-C	4.70								

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-AC	1.20	8.04	0.150		0.23	0.18	2.7		0.15
C-AB	0.13	10.91	0.012		0.01	0.01	0.2		0.09
A-B	0.24								
A-C	3.94								

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
08.00	0.2
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	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	132.1	88.1	21.3	0.16	21.3	0.16
C-AB	13.8	9.2	1.3	0.10	1.3	0.10
A-B	26.2	17.4				
A-C	432.2	288.1				
ALL	909.8	606.5	22.6	0.02	22.6	0.02

* 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.

OF JOB

.SLOPES AND INTERCEPT

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

will be adjusted)

Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
661.71	0.26	0.10

Intercept For 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
526.83	0.24	0.10	0.15	0.35

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
727.96	0.28	0.28

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: 2009 Base + Dev PM (429)

TIME PERIOD BEGINS 16.30 AND ENDS 18.00

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	4.64	6.96	4.64
ARM B	15.00	45.00	75.00	0.61	0.92	0.61
ARM C	15.00	45.00	75.00	3.36	5.04	3.36

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.30 - 18.00	ARM A	0.000	0.173	0.827
		0.0	64.0	307.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.653	0.000	0.347
		32.0	0.0	17.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.870	0.130	0.000
		234.0	35.0	0.0
		(2.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2009 Base + Dev PM (429)
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)
16.30-16.45									
B-AC	0.61	7.93	0.077		0.00	0.08	1.2		0.14
C-AB	0.44	10.82	0.041		0.00	0.04	0.6		0.10
A-B	0.80								
A-C	3.85								

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	0.73	7.63	0.096		0.08	0.11	1.5		0.14
C-AB	0.52	10.56	0.050		0.04	0.05	0.8		0.10
A-B	0.96								
A-C	4.60								

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	0.90	7.22	0.125		0.11	0.14	2.1		0.16
C-AB	0.64	10.21	0.063		0.05	0.07	1.0		0.10
A-B	1.17								
A-C	5.63								

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	0.90	7.22	0.125		0.14	0.14	2.1		0.16
C-AB	0.64	10.21	0.063		0.07	0.07	1.0		0.10
A-B	1.17								
A-C	5.63								

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	0.73	7.63	0.096		0.14	0.11	1.7		0.15
C-AB	0.52	10.56	0.050		0.07	0.05	0.8		0.10
A-B	0.96								
A-C	4.60								

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	0.61	7.93	0.078		0.11	0.08	1.3		0.14
C-AB	0.44	10.82	0.041		0.05	0.04	0.6		0.10
A-B	0.80								
A-C	3.85								

RNING* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

E SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.1
7.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
8.00	0.1

QUEUE FOR STREAM C-AB

E SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.0
7.00	0.1
7.15	0.1
17.30	0.1
17.45	0.1
8.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	67.4	45.0	9.9	0.15	9.9	0.15
C-AB	48.2	32.1	4.8	0.10	4.8	0.10
A-B	88.1	58.7				
A-C	422.6	281.7				
ALL	948.4	632.2	14.7	0.02	14.7	0.02

* 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 JOB

.SLOPES AND INTERCEPT

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

will be adjusted)

Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
661.71	0.26	0.10

Intercept For 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
526.83	0.24	0.10	0.15	0.35

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
727.96	0.28	0.28

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: 2019 Base + Dev AM (429)

E PERIOD BEGINS 07.45 AND ENDS 09.15

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

AND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
RM A	15.00	45.00	75.00	4.78	7.16	4.78
RM B	15.00	45.00	75.00	1.20	1.80	1.20
ARM C	15.00	45.00	75.00	3.34	5.01	3.34

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (VEH/HR) (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.050	0.950
		0.0	19.0	363.0
		(0.0)	(0.0)	(4.0)
	ARM B	0.646	0.000	0.354
		62.0	0.0	34.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.963	0.037	0.000
		257.0	10.0	0.0
		(6.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2019 Base + Dev AM (429)
AND FOR TIME PERIOD 1

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)
07.45-08.00									
B-AC	1.20	7.82	0.154		0.00	0.18	2.6		0.15
C-AB	0.13	10.73	0.012		0.00	0.01	0.2		0.09
A-B	0.24								
A-C	4.55								

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)
8.00-08.15									
B-AC	1.44	7.50	0.192		0.18	0.23	3.4		0.16
C-AB	0.15	10.46	0.014		0.01	0.01	0.2		0.10
A-B	0.28								
A-C	5.44								

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)
08.15-08.30									
B-AC	1.76	7.05	0.250		0.23	0.33	4.8		0.19
C-AB	0.18	10.08	0.018		0.01	0.02	0.3		0.10
A-B	0.35								
A-C	6.66								

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)
08.30-08.45									
B-AC	1.76	7.05	0.250		0.33	0.33	4.9		0.19
C-AB	0.18	10.08	0.018		0.02	0.02	0.3		0.10
A-B	0.35								
A-C	6.66								

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)
08.45-09.00									
B-AC	1.44	7.50	0.192		0.33	0.24	3.7		0.17
C-AB	0.15	10.46	0.014		0.02	0.01	0.2		0.10
A-B	0.28								
A-C	5.44								

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-AC	1.20	7.82	0.154		0.24	0.18	2.8		0.15
C-AB	0.13	10.73	0.012		0.01	0.01	0.2		0.09
A-B	0.24								
A-C	4.55								

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
08.00	0.2
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	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	132.1	88.1	22.3	0.17	22.3	0.17
C-AB	13.8	9.2	1.3	0.10	1.3	0.10
A-B	26.2	17.4				
A-C	499.6	333.1				
ALL	1025.4	683.6	23.6	0.02	23.6	0.02

* 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.

OF JOB

.SLOPES AND INTERCEPT

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

will be adjusted)

Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
661.71	0.26	0.10

Intercept For 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
526.83	0.24	0.10	0.15	0.35

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
727.96	0.28	0.28

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: 2019 Base + Dev PM (429)

TIME PERIOD BEGINS 16.30 AND ENDS 18.00

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	5.24	7.86	5.24
ARM B	15.00	45.00	75.00	0.61	0.92	0.61
ARM C	15.00	45.00	75.00	3.81	5.72	3.81

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.30 - 18.00	ARM A	0.000	0.153	0.847
		0.0	64.0	355.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.653	0.000	0.347
		32.0	0.0	17.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.885	0.115	0.000
		270.0	35.0	0.0
		(2.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2019 Base + Dev PM (429)
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)
16.30-16.45									
B-AC	0.61	7.73	0.080		0.00	0.09	1.2		0.14
C-AB	0.44	10.65	0.041		0.00	0.04	0.6		0.10
A-B	0.80								
A-C	4.45								

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	0.73	7.38	0.099		0.09	0.11	1.6		0.15
C-AB	0.52	10.36	0.051		0.04	0.05	0.8		0.10
A-B	0.96								
A-C	5.32								

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	0.90	6.91	0.130		0.11	0.15	2.2		0.17
C-AB	0.64	9.96	0.064		0.05	0.07	1.0		0.11
A-B	1.17								
A-C	6.51								

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	0.90	6.91	0.130		0.15	0.15	2.2		0.17
C-AB	0.64	9.96	0.064		0.07	0.07	1.0		0.11
A-B	1.17								
A-C	6.51								

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	0.73	7.38	0.099		0.15	0.11	1.7		0.15
C-AB	0.52	10.36	0.051		0.07	0.05	0.8		0.10
A-B	0.96								
A-C	5.32								

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	0.61	7.72	0.080		0.11	0.09	1.3		0.14
C-AB	0.44	10.65	0.041		0.05	0.04	0.6		0.10
A-B	0.80								
A-C	4.45								

RNING* NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

E SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.1
7.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
8.00	0.1

QUEUE FOR STREAM C-AB

E SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.0
7.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
8.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	67.4	45.0	10.3	0.15	10.3	0.15
C-AB	48.2	32.1	4.9	0.10	4.9	0.10
A-B	88.1	58.7				
A-C	488.6	325.8				
ALL	1064.0	709.3	15.2	0.01	15.2	0.01

* 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 JOB

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

[Printed at 13:50:23 on 29/09/2009]

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

PICADY 5.0 ANALYSIS PROGRAM
RELEASE 4.0 INTERIM (OCTOBER 2006)

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Data with file:-
"C:\Documents and Settings\WakemanJon\Desktop\North Gawber\Primary Site Access\Site Access29092009.vpi"
(drive-on-the-left) at 14:03:22 on Tuesday, 29 September 2009

RUN INFORMATION
****

RUN TITLE: North Gawber Site Access Primary
LOCATION: North Gawber, Barnsley
DATE: 28/09/09
CLIENT:
ENUMERATOR: wakemanjon
JOB NUMBER:
STATUS: On-going
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 Carr Green Lane (S)
ARM B IS Site Access
ARM C IS Carr Green Lane (N)

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.

TRL TRL VIEWER 3.1 AD C:\Documents and Settings\WakemanJon\Desktop\North Gawber\Primary Site Access\Site Acc

GEOMETRIC DATA

DATA ITEM		MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W)	6.00 M.
CENTRAL RESERVE WIDTH	(WCR)	0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B)	2.20 M.
- VISIBILITY	(VC-B)	100.0 M.
- BLOCKS TRAFFIC		YES
MINOR ROAD - VISIBILITY TO LEFT	(VB-C)	60.0 M.
- VISIBILITY TO RIGHT	(VB-A)	59.0 M.
- LANE 1 WIDTH	(WB-C)	5.00 M.
- LANE 2 WIDTH	(WB-A)	0.00 M.

.SLOPES AND INTERCEPT

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

will be adjusted)

Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
793.45	0.31	0.12

Intercept For 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
631.72	0.29	0.12	0.18	0.42

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
631.87	0.24	0.24

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: 2009 Base + Dev AM (429)

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.47	0.71	0.47
ARM B	15.00	45.00	75.00	1.02	1.54	1.02
ARM C	15.00	45.00	75.00	1.51	2.27	1.51

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15				
	ARM A	0.000	0.000	1.000
		0.0	0.0	38.0
		(0.0)	(0.0)	(3.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	82.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.793	0.207	0.000
		96.0	25.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2009 Base + Dev AM (429)
AND FOR TIME PERIOD 1

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)
07.45-08.00									
B-AC	1.03	13.07	0.079		0.00	0.08	1.2		0.08
C-AB	0.35	11.20	0.031		0.00	0.04	0.6		0.09
C-A	1.17								
A-B	0.00								
A-C	0.48								

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)
08.00-08.15									
B-AC	1.23	13.04	0.094		0.08	0.10	1.5		0.08
C-AB	0.43	11.33	0.038		0.04	0.05	0.7		0.09
C-A	1.38								
A-B	0.00								
A-C	0.57								

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)
08.15-08.30									
B-AC	1.50	13.00	0.116		0.10	0.13	1.9		0.09
C-AB	0.54	11.51	0.047		0.05	0.06	0.9		0.09
C-A	1.68								
A-B	0.00								
A-C	0.70								

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)
8.30-08.45									
B-AC	1.50	13.00	0.116		0.13	0.13	2.0		0.09
C-AB	0.54	11.51	0.047		0.06	0.06	0.9		0.09
C-A	1.68								
A-B	0.00								
A-C	0.70								

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-AC	1.23	13.04	0.094		0.13	0.10	1.6		0.08
C-AB	0.43	11.33	0.038		0.06	0.05	0.7		0.09
C-A	1.38								
A-B	0.00								
A-C	0.57								

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)
09.00-09.15									
B-AC	1.03	13.07	0.079		0.10	0.09	1.3		0.08
C-AB	0.35	11.20	0.031		0.05	0.04	0.6		0.09
C-A	1.17								
A-B	0.00								
A-C	0.48								

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
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 C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.1
08.45	0.1
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	112.9	75.2	9.5	0.08	9.5	0.08
C-AB	39.6	26.4	4.5	0.11	4.5	0.11
C-A	127.0	84.6				
A-B	0.0	0.0				
A-C	52.3	34.9				
ALL	331.7	221.1	14.1	0.04	14.1	0.04

ELAY 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 JOB

OPES AND INTERCEPT

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

be adjusted)

Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
793.45	0.31	0.12

Intercept For 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
631.72	0.29	0.12	0.18	0.42

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
631.87	0.24	0.24

These values do not allow for any site specific corrections

FFIC DEMAND DATA

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

Demand set: 2014 Base + Dev AM (429)

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

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

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.52	0.79	0.52
ARM B	15.00	45.00	75.00	1.02	1.54	1.02
ARM C	15.00	45.00	75.00	1.61	2.42	1.61

TIME	TURNING PROPORTIONS / TURNING COUNTS (VEH/HR) (PERCENTAGE OF H.V.S) FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.000	1.000
		0.0	0.0	42.0
		(0.0)	(0.0)	(3.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	82.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.806	0.194	0.000
		104.0	25.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2014 Base + Dev AM (429)
AND FOR TIME PERIOD 1

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)
07.45-08.00									
B-AC	1.03	13.06	0.079		0.00	0.09	1.2		0.08
C-AB	0.35	11.25	0.031		0.00	0.04	0.6		0.09
C-A	1.26								
A-B	0.00								
A-C	0.53								

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)
08.00-08.15									
B-AC	1.23	13.02	0.094		0.09	0.10	1.5		0.08
C-AB	0.43	11.39	0.038		0.04	0.05	0.7		0.09
C-A	1.50								
A-B	0.00								
A-C	0.63								

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)
08.15-08.30									
B-AC	1.50	12.98	0.116		0.10	0.13	1.9		0.09
C-AB	0.55	11.58	0.047		0.05	0.06	1.0		0.09
C-A	1.82								
A-B	0.00								
A-C	0.77								

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-AC	1.50	12.98	0.116		0.13	0.13	2.0		0.09
C-AB	0.55	11.58	0.047		0.06	0.06	1.0		0.09
C-A	1.82								
A-B	0.00								
A-C	0.77								

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-AC	1.23	13.02	0.094		0.13	0.10	1.6		0.08
C-AB	0.43	11.39	0.038		0.06	0.05	0.8		0.09
C-A	1.50								
A-B	0.00								
A-C	0.63								

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-AC	1.03	13.06	0.079		0.10	0.09	1.3		0.08
C-AB	0.35	11.25	0.032		0.05	0.04	0.6		0.09
C-A	1.26								
A-B	0.00								
A-C	0.53								

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
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 C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	112.9	75.2	9.6	0.08	9.6	0.08
C-AB	40.0	26.7	4.6	0.12	4.6	0.12
C-A	137.5	91.7				
A-B	0.0	0.0				
A-C	57.8	38.5				
ALL	348.2	232.2	14.2	0.04	14.2	0.04

* 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 JOB

.SLOPES AND INTERCEPT

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

will be adjusted)

Intercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
793.45	0.31	0.12

Intercept For 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
631.72	0.29	0.12	0.18	0.42

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
631.87	0.24	0.24

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: 2009 Base + Dev PM (429)

E PERIOD BEGINS 16.30 AND ENDS 18.00

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

AND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
RM A	15.00	45.00	75.00	0.74	1.11	0.74
RM B	15.00	45.00	75.00	0.52	0.79	0.52
ARM C	15.00	45.00	75.00	1.74	2.61	1.74

TURNING PROPORTIONS
TURNING COUNTS (VEH/HR)
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.30 - 18.00	ARM A	0.000	0.000	1.000
		0.0	0.0	59.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	42.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.396	0.604	0.000
		55.0	84.0	0.0
		(2.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2009 Base + Dev PM (429)
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)
16.30-16.45									
B-AC	0.53	13.00	0.041		0.00	0.04	0.6		0.08
C-AB	1.13	10.80	0.104		0.00	0.12	1.8		0.10
C-A	0.62								
A-B	0.00								
A-C	0.74								

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)
.45-17.00									
B-AC	0.63	12.95	0.049		0.04	0.05	0.8		0.08
C-AB	1.36	10.85	0.125		0.12	0.15	2.3		0.11
C-A	0.72								
A-B	0.00								
A-C	0.88								

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	0.77	12.89	0.060		0.05	0.06	0.9		0.08
C-AB	1.70	10.92	0.155		0.15	0.20	3.0		0.11
C-A	0.85								
A-B	0.00								
A-C	1.08								

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	0.77	12.89	0.060		0.06	0.06	1.0		0.08
C-AB	1.70	10.92	0.155		0.20	0.20	3.0		0.11
C-A	0.85								
A-B	0.00								
A-C	1.08								

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	0.63	12.95	0.049		0.06	0.05	0.8		0.08
C-AB	1.36	10.85	0.126		0.20	0.16	2.3		0.11
C-A	0.72								
A-B	0.00								
A-C	0.88								

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	0.53	13.00	0.041		0.05	0.04	0.6		0.08
C-AB	1.13	10.80	0.104		0.16	0.13	1.9		0.10
C-A	0.62								
A-B	0.00								
A-C	0.74								

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
16.45	0.0
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.0

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.1
17.00	0.2
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	57.8	38.5	4.7	0.08	4.7	0.08
C-AB	125.5	83.7	14.5	0.12	14.5	0.12
C-A	65.8	43.9				
A-B	0.0	0.0				
A-C	81.2	54.1				
ALL	330.3	220.2	19.1	0.06	19.1	0.06

ELAY 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 JOB

OPES AND INTERCEPT

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

be adjusted)

ntercept For Stream B-C	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
793.45	0.31	0.12

Intercept For 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
631.72	0.29	0.12	0.18	0.42

Intercept For Stream C-B	Slope For Opposing Stream A-C	Slope For Opposing Stream A-B
631.87	0.24	0.24

These values do not allow for any site specific corrections

FFIC DEMAND DATA