

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 3.0 (JUNE 2005)

(c) Copyright TRL Limited, 2004

Adapted from ARCADY/3 which is Crown Copyright
by permission of the controller of HMSO

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited	Tel: +44 (0) 1344 770018
Crowthorne House	Fax: +44 (0) 1344 770864
Nine Mile Ride	Email: softwarebureau@trl.co.uk
Wokingham, Berks.	web: www.trlsoftware.co.uk
RG40 3GA,UK	

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-
"C:\Esteban\PROYECTOS\2000s\2048_ESTUDIO GLORIETA ESTEPONA\2048_arcady\arcady\sin_seg_18a20.vai"
(drive-on-the-right) at 19:27:17 on wednesday, 14 November 2007

FILE PROPERTIES

RUN TITLE: GLORIETA ESTEPONA - SIN CARRIL SEGREGADO - 18h a 20h
LOCATION: ESTEPONA
DATE: 13/11/2007
CLIENT:
ENUMERATOR: econde [ORD-64]
JOB NUMBER: 2048
STATUS:
DESCRIPTION: Sin carril segregado - Estudio de 18:00 h a 20:00 h.

INPUT DATA

ARM A - J.MARTIN
ARM B - GASOLINERA
ARM C - MAR
ARM D - J.CARLOS
ARM E - S.FERNANDO
ARM F - PUERTAS

GEOMETRIC DATA

ARM B IS JUNCTION EXIT ONLY

I	ARM	I	V (M)	I	E (M)	I	L (M)	I	R (M)	I	D (M)	I	PHI (DEG)	I	SLOPE	I	INTERCEPT (PCU/MIN)	I
I	ARM A	I	6.50	I	6.50	I	0.00	I	4.20	I	80.00	I	68.0	I	0.350	I	22.458	I
I	ARM C	I	6.50	I	7.37	I	5.50	I	12.00	I	80.00	I	48.0	I	0.486	I	32.344	I
I	ARM D	I	6.00	I	8.75	I	9.40	I	25.00	I	80.00	I	39.0	I	0.541	I	36.669	I
I	ARM E	I	4.25	I	9.50	I	23.80	I	25.00	I	80.00	I	40.0	I	0.535	I	36.082	I
I	ARM F	I	8.00	I	9.00	I	0.80	I	8.00	I	80.00	I	60.0	I	0.483	I	34.062	I

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

TRAFFIC DEMAND DATA

(Only sets included in the current run are shown)

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

TIME PERIOD BEGINS 18.00 AND ENDS 20.00

LENGTH OF TIME PERIOD - 120 MINUTES.
LENGTH OF TIME SEGMENT - 15 MINUTES.

DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
DEMAND SET TITLE: GLORIETA ESTEPONA - SIN CARRIL SEGREGADO - 18h a 20h

DEMAND SET TITLE: GLORIETA ESTEPONA - SIN CARRIL SEGREGADO - 18h a 20h

I I I I I	I	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S)										I I I I I
		FROM/TO	ARM A	ARM B	ARM C	ARM D	ARM E	ARM F				
18.00 - 18.15	ARM A	0.000 0.0 (10.0)	0.032 0.6 (10.0)	0.168 2.8 (10.0)	0.409 6.9 (10.0)	0.356 6.1 (10.0)	0.035 0.6 (10.0)					
	ARM C	0.270 2.2 (10.0)	0.012 0.1 (10.0)	0.000 0.0 (10.0)	0.025 0.2 (10.0)	0.307 2.5 (10.0)	0.387 3.2 (10.0)					
	ARM D	0.312 2.2 (10.0)	0.021 0.2 (10.0)	0.021 0.2 (10.0)	0.021 0.2 (10.0)	0.163 1.1 (10.0)	0.461 3.3 (10.0)					
	ARM E	0.308 2.8 (10.0)	0.059 0.6 (10.0)	0.114 1.0 (10.0)	0.092 0.9 (10.0)	0.000 0.0 (10.0)	0.427 4.0 (10.0)					
	ARM F	0.027 0.4 (10.0)	0.024 0.4 (10.0)	0.192 3.2 (10.0)	0.396 6.6 (10.0)	0.361 6.0 (10.0)	0.000 0.0 (10.0)					

DEMAND SET TITLE: GLORIETA ESTEPONA - SIN CARRIL SEGREGADO - 18h a 20h

TIME	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S)									
	FROM/TO	ARM A	ARM B	ARM C	ARM D	ARM E	ARM F			
18.15 - 18.30	ARM A	0.000 0.0 (10.0)	0.032 0.6 (10.0)	0.168 2.8 (10.0)	0.409 6.9 (10.0)	0.356 6.1 (10.0)	0.035 0.6 (10.0)			
	ARM C	0.270 2.2 (10.0)	0.012 0.1 (10.0)	0.000 0.0 (10.0)	0.025 0.2 (10.0)	0.307 2.5 (10.0)	0.387 3.2 (10.0)			
	ARM D	0.312 2.2 (10.0)	0.021 0.2 (10.0)	0.021 0.2 (10.0)	0.021 0.2 (10.0)	0.163 1.1 (10.0)	0.461 3.3 (10.0)			
	ARM E	0.308 2.8 (10.0)	0.059 0.6 (10.0)	0.114 1.0 (10.0)	0.092 0.9 (10.0)	0.000 0.0 (10.0)	0.427 4.0 (10.0)			
	ARM F	0.027 0.4 (10.0)	0.024 0.4 (10.0)	0.192 3.2 (10.0)	0.396 6.6 (10.0)	0.361 6.0 (10.0)	0.000 0.0 (10.0)			

DEMAND SET TITLE: GLORIETA ESTEPONA - SIN CARRIL SEGREGADO - 18h a 20h

TIME	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S)									
	FROM/TO	ARM A	ARM B	ARM C	ARM D	ARM E	ARM F			
18.30 - 18.45	ARM A	0.000 0.0 (10.0)	0.032 0.6 (10.0)	0.168 2.8 (10.0)	0.409 6.9 (10.0)	0.356 6.1 (10.0)	0.035 0.6 (10.0)			
	ARM C	0.270 2.2 (10.0)	0.012 0.1 (10.0)	0.000 0.0 (10.0)	0.025 0.2 (10.0)	0.307 2.5 (10.0)	0.387 3.2 (10.0)			
	ARM D	0.312 2.2 (10.0)	0.021 0.2 (10.0)	0.021 0.2 (10.0)	0.021 0.2 (10.0)	0.163 1.1 (10.0)	0.461 3.3 (10.0)			
	ARM E	0.308 2.8 (10.0)	0.059 0.6 (10.0)	0.114 1.0 (10.0)	0.092 0.9 (10.0)	0.000 0.0 (10.0)	0.427 4.0 (10.0)			
	ARM F	0.027 0.4 (10.0)	0.024 0.4 (10.0)	0.192 3.2 (10.0)	0.396 6.6 (10.0)	0.361 6.0 (10.0)	0.000 0.0 (10.0)			

DEMAND SET TITLE: GLORIETA ESTEPONA - SIN CARRIL SEGREGADO - 18h a 20h

TIME	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S)									
	FROM/TO	ARM A	ARM B	ARM C	ARM D	ARM E	ARM F			
18.45 - 19.00	ARM A	0.000 0.0 (10.0)	0.032 0.6 (10.0)	0.168 2.8 (10.0)	0.409 6.9 (10.0)	0.356 6.1 (10.0)	0.035 0.6 (10.0)			
	ARM C	0.270 2.2 (10.0)	0.012 0.1 (10.0)	0.000 0.0 (10.0)	0.025 0.2 (10.0)	0.307 2.5 (10.0)	0.387 3.2 (10.0)			
	ARM D	0.312 2.2 (10.0)	0.021 0.2 (10.0)	0.021 0.2 (10.0)	0.021 0.2 (10.0)	0.163 1.1 (10.0)	0.461 3.3 (10.0)			
	ARM E	0.308 2.8 (10.0)	0.059 0.6 (10.0)	0.114 1.0 (10.0)	0.092 0.9 (10.0)	0.000 0.0 (10.0)	0.427 4.0 (10.0)			
	ARM F	0.027 0.4 (10.0)	0.024 0.4 (10.0)	0.192 3.2 (10.0)	0.396 6.6 (10.0)	0.361 6.0 (10.0)	0.000 0.0 (10.0)			

DEMAND SET TITLE: GLORIETA ESTEPONA - SIN CARRIL SEGREGADO - 18h a 20h

TIME	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S)									
	FROM/TO	ARM A	ARM B	ARM C	ARM D	ARM E	ARM F			
19.00 - 19.15	ARM A	0.000 0.0 (10.0)	0.027 0.5 (10.0)	0.153 2.8 (10.0)	0.541 9.9 (10.0)	0.279 5.1 (10.0)	0.000 0.0 (10.0)			
	ARM C	0.196 1.1 (10.0)	0.047 0.3 (10.0)	0.009 0.1 (10.0)	0.057 0.3 (10.0)	0.289 1.7 (10.0)	0.403 2.3 (10.0)			
	ARM D	0.246 1.5 (10.0)	0.049 0.3 (10.0)	0.082 0.5 (10.0)	0.033 0.2 (10.0)	0.180 1.1 (10.0)	0.410 2.5 (10.0)			
	ARM E	0.408 3.1 (10.0)	0.092 0.7 (10.0)	0.145 1.1 (10.0)	0.039 0.3 (10.0)	0.000 0.0 (10.0)	0.316 2.4 (10.0)			
	ARM F	0.017 0.3 (10.0)	0.017 0.3 (10.0)	0.203 3.5 (10.0)	0.506 8.7 (10.0)	0.256 4.4 (10.0)	0.000 0.0 (10.0)			

DEMAND SET TITLE: GLORIETA ESTEPONA - SIN CARRIL SEGREGADO - 18h a 20h

TIME	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S)									
	FROM/TO	ARM A	ARM B	ARM C	ARM D	ARM E	ARM F			
19.15 - 19.30	ARM A	0.000 0.0 (10.0)	0.027 0.5 (10.0)	0.153 2.8 (10.0)	0.541 9.9 (10.0)	0.279 5.1 (10.0)	0.000 0.0 (10.0)			
	ARM C	0.196 1.1 (10.0)	0.047 0.3 (10.0)	0.009 0.1 (10.0)	0.057 0.3 (10.0)	0.289 1.7 (10.0)	0.403 2.3 (10.0)			
	ARM D	0.246 1.5 (10.0)	0.049 0.3 (10.0)	0.082 0.5 (10.0)	0.033 0.2 (10.0)	0.180 1.1 (10.0)	0.410 2.5 (10.0)			
	ARM E	0.408 3.1 (10.0)	0.092 0.7 (10.0)	0.145 1.1 (10.0)	0.039 0.3 (10.0)	0.000 0.0 (10.0)	0.316 2.4 (10.0)			
	ARM F	0.017 0.3 (10.0)	0.017 0.3 (10.0)	0.203 3.5 (10.0)	0.506 8.7 (10.0)	0.256 4.4 (10.0)	0.000 0.0 (10.0)			

DEMAND SET TITLE: GLORIETA ESTEPONA - SIN CARRIL SEGREGADO - 18h a 20h

TIME	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S)									
	FROM/TO	ARM A	ARM B	ARM C	ARM D	ARM E	ARM F			
19.30 - 19.45	ARM A	0.000 0.0 (10.0)	0.027 0.5 (10.0)	0.153 2.8 (10.0)	0.541 9.9 (10.0)	0.279 5.1 (10.0)	0.000 0.0 (10.0)			
	ARM C	0.196 1.1 (10.0)	0.047 0.3 (10.0)	0.009 0.1 (10.0)	0.057 0.3 (10.0)	0.289 1.7 (10.0)	0.403 2.3 (10.0)			
	ARM D	0.246 1.5 (10.0)	0.049 0.3 (10.0)	0.082 0.5 (10.0)	0.033 0.2 (10.0)	0.180 1.1 (10.0)	0.410 2.5 (10.0)			
	ARM E	0.408 3.1 (10.0)	0.092 0.7 (10.0)	0.145 1.1 (10.0)	0.039 0.3 (10.0)	0.000 0.0 (10.0)	0.316 2.4 (10.0)			
	ARM F	0.017 0.3 (10.0)	0.017 0.3 (10.0)	0.203 3.5 (10.0)	0.506 8.7 (10.0)	0.256 4.4 (10.0)	0.000 0.0 (10.0)			

DEMAND SET TITLE: GLORIETA ESTEPONA - SIN CARRIL SEGREGADO - 18h a 20h

TIME	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S)									
	FROM/TO	ARM A	ARM B	ARM C	ARM D	ARM E	ARM F			
19.45 - 20.00	ARM A	0.000 0.0 (10.0)	0.027 0.5 (10.0)	0.153 2.8 (10.0)	0.541 9.9 (10.0)	0.279 5.1 (10.0)	0.000 0.0 (10.0)			
	ARM C	0.196 1.1 (10.0)	0.047 0.3 (10.0)	0.009 0.1 (10.0)	0.057 0.3 (10.0)	0.289 1.7 (10.0)	0.403 2.3 (10.0)			
	ARM D	0.246 1.5 (10.0)	0.049 0.3 (10.0)	0.082 0.5 (10.0)	0.033 0.2 (10.0)	0.180 1.1 (10.0)	0.410 2.5 (10.0)			
	ARM E	0.408 3.1 (10.0)	0.092 0.7 (10.0)	0.145 1.1 (10.0)	0.039 0.3 (10.0)	0.000 0.0 (10.0)	0.316 2.4 (10.0)			
	ARM F	0.017 0.3 (10.0)	0.017 0.3 (10.0)	0.203 3.5 (10.0)	0.506 8.7 (10.0)	0.256 4.4 (10.0)	0.000 0.0 (10.0)			

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

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									
ARM A	17.00	13.74	1.237		0.0	52.7	416.0		2.11
ARM C	8.15	17.59	0.463		0.0	0.9	12.2		0.10
ARM D	7.05	22.99	0.307		0.0	0.4	6.4		0.06
ARM E	9.25	26.51	0.349		0.0	0.5	7.8		0.06
ARM F	16.63	26.04	0.639		0.0	1.7	24.6		0.10
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:									
MARGINAL CHANGE:		ENTRY WIDTH (.1M)	FLARE LENGTH (M)	INSCRIBED CIRC DIAM (M)	ENTRY ANGLE (10 DEGS)				
ARM A		0.282	0.000	0.036	-0.765				
ARM C		0.154	0.123	0.064	-0.740				
ARM D		0.107	0.294	0.056	-0.895				
ARM E		0.150	0.233	0.034	-1.036				
ARM F		0.015	0.748	0.027	-1.206				

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)
18.15-18.30									
ARM A	17.00	13.70	1.241		52.7	102.3	1162.8		5.82
ARM C	8.15	17.47	0.466		0.9	0.9	12.9		0.11
ARM D	7.05	22.89	0.308		0.4	0.4	6.6		0.06
ARM E	9.25	26.47	0.349		0.5	0.5	8.0		0.06
ARM F	16.63	26.01	0.639		1.7	1.8	26.2		0.11
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:									
MARGINAL CHANGE:		ENTRY WIDTH (.1M)		FLARE LENGTH (M)	INSCRIBED CIRC DIAM (M)		ENTRY ANGLE (10 DEGS)		
ARM A		0.281		0.000	0.037		-0.763		
ARM C		0.154		0.123	0.065		-0.735		
ARM D		0.107		0.293	0.057		-0.891		
ARM E		0.150		0.233	0.034		-1.034		
ARM F		0.015		0.748	0.027		-1.205		

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)
18.30-18.45									
ARM A	17.00	13.70	1.241		102.3	151.9	1906.6		9.41
ARM C	8.15	17.47	0.467		0.9	0.9	13.0		0.11
ARM D	7.05	22.89	0.308		0.4	0.4	6.7		0.06
ARM E	9.25	26.47	0.349		0.5	0.5	8.0		0.06
ARM F	16.63	26.01	0.639		1.8	1.8	26.4		0.11
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:									
MARGINAL CHANGE:		ENTRY WIDTH (.1M)		FLARE LENGTH (M)	INSCRIBED CIRC DIAM (M)		ENTRY ANGLE (10 DEGS)		
ARM A		0.281		0.000	0.037		-0.763		
ARM C		0.154		0.123	0.065		-0.735		
ARM D		0.107		0.293	0.057		-0.891		
ARM E		0.150		0.233	0.034		-1.034		
ARM F		0.015		0.748	0.027		-1.205		

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)
18.45-19.00									
ARM A	17.00	13.70	1.241		151.9	201.4	2649.6		13.19
ARM C	8.15	17.47	0.467		0.9	0.9	13.1		0.11
ARM D	7.05	22.89	0.308		0.4	0.4	6.7		0.06
ARM E	9.25	26.47	0.349		0.5	0.5	8.0		0.06
ARM F	16.63	26.01	0.639		1.8	1.8	26.4		0.11
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:									
MARGINAL CHANGE:		ENTRY WIDTH (.1M)		FLARE LENGTH (M)	INSCRIBED CIRC DIAM (M)		ENTRY ANGLE (10 DEGS)		
ARM A		0.281		0.000	0.037		-0.763		
ARM C		0.154		0.123	0.065		-0.735		
ARM D		0.107		0.293	0.057		-0.891		
ARM E		0.150		0.233	0.034		-1.034		
ARM F		0.015		0.748	0.027		-1.205		

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)
19.00-19.15									
ARM A	18.30	13.30	1.376		201.4	276.4	3583.2		18.07
ARM C	5.78	17.54	0.330		0.9	0.5	7.6		0.09
ARM D	6.10	25.64	0.238		0.4	0.3	4.8		0.05
ARM E	7.60	27.99	0.272		0.5	0.4	5.7		0.05
ARM F	17.20	26.54	0.648		1.8	1.8	27.0		0.11
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:									
MARGINAL CHANGE:		ENTRY WIDTH (.1M)		FLARE LENGTH (M)	INSCRIBED CIRC DIAM (M)		ENTRY ANGLE (10 DEGS)		
ARM A		0.277		0.000	0.039		-0.740		
ARM C		0.154		0.123	0.065		-0.738		
ARM D		0.114		0.311	0.042		-0.998		
ARM E		0.154		0.240	0.026		-1.094		
ARM F		0.015		0.757	0.024		-1.229		

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)
19.15-19.30									
ARM A	18.30	13.30	1.376		276.4	351.3	4707.8		23.70
ARM C	5.78	17.51	0.330		0.5	0.5	7.4		0.09
ARM D	6.10	25.83	0.236		0.3	0.3	4.7		0.05
ARM E	7.60	28.05	0.271		0.4	0.4	5.6		0.05
ARM F	17.20	26.54	0.648		1.8	1.8	27.3		0.11
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:									
	MARGINAL CHANGE:	ENTRY WIDTH (.1M)	FLARE LENGTH (M)	INSCRIBED CIRC DIAM (M)	ENTRY ANGLE (10 DEGS)				
	ARM A	0.277	0.000	0.039	-0.740				
	ARM C	0.154	0.123	0.065	-0.737				
	ARM D	0.114	0.312	0.041	-1.006				
	ARM E	0.155	0.241	0.026	-1.096				
	ARM F	0.015	0.757	0.024	-1.230				

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)
19.30-19.45									
ARM A	18.30	13.30	1.376		351.3	426.3	5832.6		29.33
ARM C	5.78	17.50	0.330		0.5	0.5	7.4		0.09
ARM D	6.10	25.91	0.235		0.3	0.3	4.6		0.05
ARM E	7.60	28.08	0.271		0.4	0.4	5.6		0.05
ARM F	17.20	26.54	0.648		1.8	1.8	27.4		0.11
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:									
	MARGINAL CHANGE:	ENTRY WIDTH (.1M)	FLARE LENGTH (M)	INSCRIBED CIRC DIAM (M)	ENTRY ANGLE (10 DEGS)				
	ARM A	0.277	0.000	0.039	-0.740				
	ARM C	0.154	0.123	0.065	-0.736				
	ARM D	0.114	0.313	0.040	-1.009				
	ARM E	0.155	0.241	0.026	-1.097				
	ARM F	0.015	0.757	0.024	-1.230				

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)
19.45-20.00									
ARM A	18.30	13.30	1.376		426.3	501.3	6957.3		34.96
ARM C	5.78	17.50	0.330		0.5	0.5	7.4		0.09
ARM D	6.10	25.94	0.235		0.3	0.3	4.6		0.05
ARM E	7.60	28.09	0.271		0.4	0.4	5.6		0.05
ARM F	17.20	26.54	0.648		1.8	1.8	27.5		0.11
EFFECT ON CAPACITY (PCU/MIN) OF MARGINAL CHANGES IN:									
	MARGINAL CHANGE:	ENTRY WIDTH (.1M)	FLARE LENGTH (M)	INSCRIBED CIRC DIAM (M)	ENTRY ANGLE (10 DEGS)				
	ARM A	0.277	0.000	0.039	-0.740				
	ARM C	0.154	0.123	0.065	-0.736				
	ARM D	0.114	0.313	0.040	-1.010				
	ARM E	0.155	0.241	0.026	-1.098				
	ARM F	0.015	0.757	0.024	-1.230				

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
18.15	52.7	*****
18.30	102.3	*****
18.45	151.9	*****
19.00	201.4	*****
19.15	276.4	*****
19.30	351.3	*****
19.45	426.3	*****
20.00	501.3	*****

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
18.15	0.9	*
18.30	0.9	*
18.45	0.9	*
19.00	0.9	*
19.15	0.5	
19.30	0.5	
19.45	0.5	
20.00	0.5	

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
18.15	0.4	
18.30	0.4	
18.45	0.4	
19.00	0.4	
19.15	0.3	
19.30	0.3	
19.45	0.3	
20.00	0.3	

QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
18.15	0.5	*
18.30	0.5	*
18.45	0.5	*
19.00	0.5	*
19.15	0.4	
19.30	0.4	
19.45	0.4	
20.00	0.4	

QUEUE AT ARM F

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
18.15	1.7	**
18.30	1.8	**
18.45	1.8	**
19.00	1.8	**
19.15	1.8	**
19.30	1.8	**
19.45	1.8	**
20.00	1.8	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	ARM	I	TOTAL	DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I
I		I			I	* DELAY *	I	* DELAY *	I
I		I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	I	(MIN)
I		I			I			I	(MIN/VEH)
I	A	I	2118.0	I 1059.0	I 27216.0	I 12.85	I 36662.6	I 17.31	I
I	C	I	835.8	I 417.9	I 81.2	I 0.10	I 81.2	I 0.10	I
I	D	I	789.0	I 394.5	I 45.1	I 0.06	I 45.1	I 0.06	I
I	E	I	1011.0	I 505.5	I 54.4	I 0.05	I 54.4	I 0.05	I
I	F	I	2029.8	I 1014.9	I 212.9	I 0.10	I 212.9	I 0.10	I
I	ALL	I	6783.6	I 3391.8	I 27609.4	I 4.07	I 37056.1	I 5.46	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 JOB

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

[Printed at 19:27:35 on 14/11/2007]