

APPENDIX D

ARCADY Output

ARCADY 7

Version: 7.0.1.130 [12 March 2010]

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File: P:\Bedford Park Developments\T251 - Bexhill\Calculations\Arcady\Little Common Roundabout with Development.arc7
Report generation date: 18/12/2017 17:07:01

- » A1 - (Default Analysis Set) - D2 - Base 2017 + Com, AM
- » A1 - (Default Analysis Set) - D3 - Base 2017 + Com + Dev, AM
- » A1 - (Default Analysis Set) - D5 - Base 2028 + Saturn, AM
- » A1 - (Default Analysis Set) - D6 - Base 2028 + Saturn + Dev, AM
- » A1 - (Default Analysis Set) - D9 - Base 2017 + Com, PM
- » A1 - (Default Analysis Set) - D10 - Base 2017 + Com + Dev, PM
- » A1 - (Default Analysis Set) - D12 - Base 2028 + Saturn, PM
- » A1 - (Default Analysis Set) - D13 - Base 2028 + Saturn + Dev, PM

Summary of roundabout performance

	AM		PM	
	Queue (PCU)	RFC	Queue (PCU)	RFC
(Default Analysis Set) - Base 2017 + Com				
Arm A	14.59	0.95	6.79	0.88
Arm B	0.40	0.29	0.21	0.17
Arm C	2.24	0.70	0.95	0.49
Arm D	3.84	0.80	1.57	0.61
Arm E	1.44	0.59	1.54	0.61
(Default Analysis Set) - Base 2017 + Com + Dev				
Arm A	16.81	0.96	7.16	0.88
Arm B	0.43	0.30	0.23	0.19
Arm C	2.47	0.72	1.07	0.52
Arm D	3.93	0.80	1.61	0.62
Arm E	1.62	0.62	1.66	0.63
(Default Analysis Set) - Base 2028 + Saturn				
Arm A	6.95	0.88	21.97	0.97
Arm B	0.47	0.32	1.22	0.56
Arm C	0.47	0.32	0.74	0.43
Arm D	3.17	0.76	1.28	0.56
Arm E	1.33	0.57	1.25	0.56
(Default Analysis Set) - Base 2028 + Saturn + Dev				
Arm A	7.73	0.89	24.95	0.98
Arm B	0.49	0.33	1.51	0.61
Arm C	0.48	0.33	0.86	0.47
Arm D	3.24	0.77	1.32	0.57
Arm E	1.53	0.61	1.33	0.57

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

Base 2017 + Com - AM runs from 08:00:00 to 09:00:00

Base 2017 + Com + Dev - AM runs from 08:00:00 to 09:00:00

Base 2028 + Saturn - AM runs from 08:00:00 to 09:00:00

Base 2028 + Saturn + Dev - AM runs from 08:00:00 to 09:00:00

Base 2028 + Saturn - PM runs from 17:00:00 to 18:00:00
Base 2017 + Com - PM runs from 17:00:00 to 18:00:00
Base 2017 + Com + Dev - PM runs from 17:00:00 to 18:00:00
Base 2028 + Saturn - PM runs from 17:00:00 to 18:00:00
Base 2028 + Saturn + Dev - PM runs from 17:00:00 to 18:00:00

File summary

File Description

Title	(untitled)
Date	27/04/2015
Status	(new file)
Enumerator	RF
Results Upto Date	True

Analysis Options

RFC Threshold	Vehicle Length (m)	Do Queue Variations
0.85	5.75	

Sorting and Display

Show Arm Names	Arm Grouping	Sorting Direction	Sorting Type	Data Matrix Style	Time Style
	Order	Ascending	Numerical	By Destination	Absolute Time

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	PCU	PCU	perHour	min	-Min	perMin

A1 - (Default Analysis Set) - D2 - Base 2017 + Com, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2017 + Com, AM	Base 2017 + Com	AM			Yes			08:00	09:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1214.00	100.000	1.00
B	FLAT	Yes	79.00	100.000	1.00
C	FLAT	Yes	329.00	100.000	1.00
D	FLAT	Yes	999.00	100.000	1.00
E	FLAT	Yes	470.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	1214.00	1214.00	N/A	N/A
08:00-08:15	B	79.00	79.00	N/A	N/A
08:00-08:15	C	329.00	329.00	N/A	N/A
08:00-08:15	D	999.00	999.00	N/A	N/A
08:00-08:15	E	470.00	470.00	N/A	N/A
08:15-08:30	A	1214.00	1214.00	N/A	N/A
08:15-08:30	B	79.00	79.00	N/A	N/A
08:15-08:30	C	329.00	329.00	N/A	N/A
08:15-08:30	D	999.00	999.00	N/A	N/A
08:15-08:30	E	470.00	470.00	N/A	N/A
08:30-08:45	A	1214.00	1214.00	N/A	N/A
08:30-08:45	B	79.00	79.00	N/A	N/A
08:30-08:45	C	329.00	329.00	N/A	N/A
08:30-08:45	D	999.00	999.00	N/A	N/A
08:30-08:45	E	470.00	470.00	N/A	N/A
08:45-09:00	A	1214.00	1214.00	N/A	N/A
08:45-09:00	B	79.00	79.00	N/A	N/A
08:45-09:00	C	329.00	329.00	N/A	N/A
08:45-09:00	D	999.00	999.00	N/A	N/A
08:45-09:00	E	470.00	470.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

	To					
	A	B	C	D	E	
From	A	0.00	9.00	79.00	854.00	272.00
	B	14.00	0.00	30.00	3.00	32.00
	C	157.00	0.00	0.00	28.00	144.00

	C	137.00	0.00	0.00	20.00	144.00
	D	929.00	19.00	24.00	3.00	24.00
	E	285.00	18.00	96.00	68.00	3.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

	To					
		A	B	C	D	E
From	A	0.00	0.01	0.07	0.70	0.22
	B	0.18	0.00	0.38	0.04	0.41
	C	0.48	0.00	0.00	0.09	0.44
	D	0.93	0.02	0.02	0.00	0.02
	E	0.61	0.04	0.20	0.14	0.01

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

	To					
		A	B	C	D	E
From	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

	To					
		A	B	C	D	E
From	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.95	0.76	14.59	E	1214.00	1214.00	707.47	0.58	11.79	712.45	0.59	0.506	1398.428
B	0.29	0.30	0.40	C	79.00	79.00	22.49	0.28	0.37	22.51	0.28	0.443	894.185
C	0.70	0.42	2.24	D	329.00	329.00	122.91	0.37	2.05	123.23	0.37	0.398	967.094
D	0.80	0.23	3.84	B	999.00	999.00	215.99	0.22	3.60	216.34	0.22	0.585	1616.944
E	0.59	0.19	1.44	B	470.00	470.00	83.49	0.18	1.39	83.57	0.18	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	3.07	5.41	1.87	10.28	24.61	50.00		0.443	894.185

D	2.37	0.91	1.07	10.30	54.03	54.00		0.493	934.103
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
08:00-08:15	A	1214.00	1282.93	0.946	0.00	0.00	10.55	116.87	(0.00)	0.440
08:00-08:15	B	79.00	294.31	0.268	0.00	0.00	0.36	5.00	(0.00)	0.275
08:00-08:15	C	329.00	486.70	0.676	0.00	0.00	1.94	25.58	(0.00)	0.348
08:00-08:15	D	999.00	1263.47	0.791	0.00	0.00	3.53	47.03	(0.00)	0.206
08:00-08:15	E	470.00	801.79	0.586	0.00	0.00	1.38	19.21	(0.00)	0.175
08:15-08:30	A	1214.00	1281.56	0.947	0.00	10.55	12.72	176.66	(0.00)	0.670
08:15-08:30	B	79.00	278.61	0.284	0.00	0.36	0.39	5.69	(0.00)	0.300
08:15-08:30	C	329.00	473.70	0.695	0.00	1.94	2.15	31.15	(0.00)	0.408
08:15-08:30	D	999.00	1254.91	0.796	0.00	3.53	3.74	54.96	(0.00)	0.232
08:15-08:30	E	470.00	793.11	0.593	0.00	1.38	1.43	21.15	(0.00)	0.185
08:30-08:45	A	1214.00	1281.51	0.947	0.00	12.72	13.87	200.18	(0.00)	0.729
08:30-08:45	B	79.00	276.75	0.285	0.00	0.39	0.39	5.87	(0.00)	0.303
08:30-08:45	C	329.00	472.14	0.697	0.00	2.15	2.21	32.76	(0.00)	0.416
08:30-08:45	D	999.00	1254.03	0.797	0.00	3.74	3.81	56.66	(0.00)	0.234
08:30-08:45	E	470.00	792.68	0.593	0.00	1.43	1.44	21.50	(0.00)	0.186
08:45-09:00	A	1214.00	1281.51	0.947	0.00	13.87	14.59	213.77	(0.00)	0.762
08:45-09:00	B	79.00	276.01	0.286	0.00	0.39	0.40	5.93	(0.00)	0.304
08:45-09:00	C	329.00	471.51	0.698	0.00	2.21	2.24	33.42	(0.00)	0.419
08:45-09:00	D	999.00	1253.73	0.797	0.00	3.81	3.84	57.35	(0.00)	0.235
08:45-09:00	E	470.00	792.57	0.593	0.00	1.44	1.44	21.62	(0.00)	0.186

A1 - (Default Analysis Set) - D3 - Base 2017 + Com + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2017 + Com + Dev, AM	Base 2017 + Com + Dev	AM			Yes			08:00	09:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428

B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1216.00	100.000	1.00
B	FLAT	Yes	81.00	100.000	1.00
C	FLAT	Yes	336.00	100.000	1.00
D	FLAT	Yes	1000.00	100.000	1.00
E	FLAT	Yes	492.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	1216.00	1216.00	N/A	N/A
08:00-08:15	B	81.00	81.00	N/A	N/A
08:00-08:15	C	336.00	336.00	N/A	N/A
08:00-08:15	D	1000.00	1000.00	N/A	N/A
08:00-08:15	E	492.00	492.00	N/A	N/A
08:15-08:30	A	1216.00	1216.00	N/A	N/A
08:15-08:30	B	81.00	81.00	N/A	N/A
08:15-08:30	C	336.00	336.00	N/A	N/A
08:15-08:30	D	1000.00	1000.00	N/A	N/A
08:15-08:30	E	492.00	492.00	N/A	N/A
08:30-08:45	A	1216.00	1216.00	N/A	N/A
08:30-08:45	B	81.00	81.00	N/A	N/A
08:30-08:45	C	336.00	336.00	N/A	N/A
08:30-08:45	D	1000.00	1000.00	N/A	N/A
08:30-08:45	E	492.00	492.00	N/A	N/A
08:45-09:00	A	1216.00	1216.00	N/A	N/A
08:45-09:00	B	81.00	81.00	N/A	N/A
08:45-09:00	C	336.00	336.00	N/A	N/A
08:45-09:00	D	1000.00	1000.00	N/A	N/A
08:45-09:00	E	492.00	492.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	9.00	80.00	855.00	272.00
	B	14.00	0.00	30.00	3.00	34.00
	C	157.00	0.00	0.00	28.00	151.00
	D	929.00	19.00	24.00	3.00	25.00
	E	285.00	21.00	107.00	76.00	3.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.01	0.07	0.70	0.22
	B	0.17	0.00	0.37	0.04	0.42
	C	0.47	0.00	0.00	0.08	0.45
	D	0.93	0.02	0.02	0.00	0.03
	E	0.58	0.04	0.22	0.15	0.01

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.96	0.88	16.81	F	1216.00	1216.00	791.07	0.65	13.18	797.74	0.66	0.506	1398.428
B	0.30	0.32	0.43	C	81.00	81.00	24.23	0.30	0.40	24.25	0.30	0.443	894.185
C	0.72	0.45	2.47	D	336.00	336.00	133.93	0.40	2.23	134.32	0.40	0.398	967.094
D	0.80	0.24	3.93	B	1000.00	1000.00	220.65	0.22	3.68	221.02	0.22	0.585	1616.944
E	0.62	0.20	1.62	B	492.00	492.00	93.31	0.19	1.56	93.41	0.19	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
08:00-08:15	A	1216.00	1272.01	0.956	0.00	0.00	11.48	124.67	(0.00)	0.470
08:00-08:15	B	81.00	286.82	0.282	0.00	0.00	0.38	5.34	(0.00)	0.287
08:00-08:15	C	336.00	483.78	0.695	0.00	0.00	2.10	27.41	(0.00)	0.367
08:00-08:15	D	1000.00	1259.08	0.794	0.00	0.00	3.60	47.83	(0.00)	0.210
08:00-08:15	E	492.00	802.04	0.613	0.00	0.00	1.54	21.30	(0.00)	0.186
08:15-08:30	A	1216.00	1270.43	0.957	0.00	11.48	14.24	195.33	(0.00)	0.744
08:15-08:30	B	81.00	270.34	0.300	0.00	0.38	0.42	6.13	(0.00)	0.316
08:15-08:30	C	336.00	470.19	0.715	0.00	2.10	2.35	33.90	(0.00)	0.438
08:15-08:30	D	1000.00	1250.05	0.800	0.00	3.60	3.82	56.13	(0.00)	0.237
08:15-08:30	E	492.00	793.18	0.620	0.00	1.54	1.60	23.65	(0.00)	0.199
08:30-08:45	A	1216.00	1270.38	0.957	0.00	14.24	15.79	226.12	(0.00)	0.827
08:30-08:45	B	81.00	268.17	0.302	0.00	0.42	0.43	6.34	(0.00)	0.320
08:30-08:45	C	336.00	468.36	0.717	0.00	2.35	2.43	35.89	(0.00)	0.449
08:30-08:45	D	1000.00	1249.02	0.801	0.00	3.82	3.89	57.97	(0.00)	0.240
08:30-08:45	E	492.00	792.71	0.621	0.00	1.60	1.61	24.10	(0.00)	0.199
08:45-09:00	A	1216.00	1270.37	0.957	0.00	15.79	16.81	244.95	(0.00)	0.876
08:45-09:00	B	81.00	267.24	0.303	0.00	0.43	0.43	6.42	(0.00)	0.322
08:45-09:00	C	336.00	467.58	0.719	0.00	2.43	2.47	36.73	(0.00)	0.453
08:45-09:00	D	1000.00	1248.65	0.801	0.00	3.89	3.93	58.72	(0.00)	0.240
08:45-09:00	E	492.00	792.59	0.621	0.00	1.61	1.62	24.25	(0.00)	0.199

A1 - (Default Analysis Set) - D5 - Base 2028 + Saturn, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2028 + Saturn, AM	Base 2028 + Saturn	AM			Yes			08:00	09:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1118.00	100.000	1.00
B	FLAT	Yes	107.00	100.000	1.00
C	FLAT	Yes	152.00	100.000	1.00
D	FLAT	Yes	1035.00	100.000	1.00
E	FLAT	Yes	443.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	1118.00	1118.00	N/A	N/A
08:00-08:15	B	107.00	107.00	N/A	N/A
08:00-08:15	C	152.00	152.00	N/A	N/A
08:00-08:15	D	1035.00	1035.00	N/A	N/A
08:00-08:15	E	443.00	443.00	N/A	N/A
08:15-08:30	A	1118.00	1118.00	N/A	N/A
08:15-08:30	B	107.00	107.00	N/A	N/A
08:15-08:30	C	152.00	152.00	N/A	N/A
08:15-08:30	D	1035.00	1035.00	N/A	N/A
08:15-08:30	E	443.00	443.00	N/A	N/A
08:30-08:45	A	1118.00	1118.00	N/A	N/A
08:30-08:45	B	107.00	107.00	N/A	N/A
08:30-08:45	C	152.00	152.00	N/A	N/A
08:30-08:45	D	1035.00	1035.00	N/A	N/A
08:30-08:45	E	443.00	443.00	N/A	N/A

08:30-08:45	D	1035.00	1035.00	N/A	N/A
08:30-08:45	E	443.00	443.00	N/A	N/A
08:45-09:00	A	1118.00	1118.00	N/A	N/A
08:45-09:00	B	107.00	107.00	N/A	N/A
08:45-09:00	C	152.00	152.00	N/A	N/A
08:45-09:00	D	1035.00	1035.00	N/A	N/A
08:45-09:00	E	443.00	443.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

		To				
From		A	B	C	D	E
	A	0.00	20.00	46.00	841.00	211.00
	B	80.00	0.00	0.00	13.00	14.00
	C	125.00	0.00	0.00	13.00	14.00
	D	947.00	15.00	15.00	0.00	58.00
	E	221.00	72.00	72.00	78.00	0.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

		To				
From		A	B	C	D	E
	A	0.00	0.02	0.04	0.75	0.19
	B	0.75	0.00	0.00	0.12	0.13
	C	0.82	0.00	0.00	0.09	0.09
	D	0.91	0.01	0.01	0.00	0.06
	E	0.50	0.16	0.16	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

		To				
From		A	B	C	D	E
	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
From		A	B	C	D	E
	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.88	0.39	6.95	C	1118.00	1118.00	376.45	0.34	6.27	377.59	0.34	0.506	1398.428
B	0.32	0.26	0.47	C	107.00	107.00	26.79	0.25	0.45	26.81	0.25	0.443	894.185
C	0.32	0.19	0.47	B	152.00	152.00	27.22	0.18	0.45	27.24	0.18	0.398	967.094
D	0.76	0.19	3.17	B	1035.00	1035.00	181.66	0.18	3.03	181.88	0.18	0.585	1616.944
E	0.57	0.18	1.33	B	443.00	443.00	77.10	0.17	1.29	77.17	0.17	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
08:00-08:15	A	1118.00	1272.34	0.879	0.00	0.00	6.12	75.43	(0.00)	0.303
08:00-08:15	B	107.00	346.43	0.309	0.00	0.00	0.44	6.12	(0.00)	0.247
08:00-08:15	C	152.00	485.42	0.313	0.00	0.00	0.45	6.37	(0.00)	0.178
08:00-08:15	D	1035.00	1361.91	0.760	0.00	0.00	3.02	41.00	(0.00)	0.171
08:00-08:15	E	443.00	781.03	0.567	0.00	0.00	1.28	17.85	(0.00)	0.172
08:15-08:30	A	1118.00	1270.91	0.880	0.00	6.12	6.63	96.35	(0.00)	0.376
08:15-08:30	B	107.00	335.88	0.319	0.00	0.44	0.46	6.78	(0.00)	0.262
08:15-08:30	C	152.00	476.03	0.319	0.00	0.45	0.46	6.88	(0.00)	0.185
08:15-08:30	D	1035.00	1357.66	0.762	0.00	3.02	3.12	46.21	(0.00)	0.185
08:15-08:30	E	443.00	773.87	0.572	0.00	1.28	1.32	19.53	(0.00)	0.181
08:30-08:45	A	1118.00	1270.88	0.880	0.00	6.63	6.84	101.21	(0.00)	0.383
08:30-08:45	B	107.00	335.32	0.319	0.00	0.46	0.46	6.92	(0.00)	0.263
08:30-08:45	C	152.00	475.53	0.320	0.00	0.46	0.47	6.97	(0.00)	0.185
08:30-08:45	D	1035.00	1357.46	0.762	0.00	3.12	3.15	47.06	(0.00)	0.186
08:30-08:45	E	443.00	773.68	0.573	0.00	1.32	1.32	19.81	(0.00)	0.181
08:45-09:00	A	1118.00	1270.87	0.880	0.00	6.84	6.95	103.46	(0.00)	0.386
08:45-09:00	B	107.00	335.15	0.319	0.00	0.46	0.47	6.96	(0.00)	0.263
08:45-09:00	C	152.00	475.38	0.320	0.00	0.47	0.47	7.00	(0.00)	0.186
08:45-09:00	D	1035.00	1357.41	0.762	0.00	3.15	3.17	47.39	(0.00)	0.186
08:45-09:00	E	443.00	773.64	0.573	0.00	1.32	1.33	19.91	(0.00)	0.181

A1 - (Default Analysis Set) - D6 - Base 2028 + Saturn + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2028 + Saturn + Dev, AM	Base 2028 + Saturn + Dev	AM			Yes			08:00	09:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	

D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1121.00	100.000	1.00
B	FLAT	Yes	108.00	100.000	1.00
C	FLAT	Yes	153.00	100.000	1.00
D	FLAT	Yes	1040.00	100.000	1.00
E	FLAT	Yes	470.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	1121.00	1121.00	N/A	N/A
08:00-08:15	B	108.00	108.00	N/A	N/A
08:00-08:15	C	153.00	153.00	N/A	N/A
08:00-08:15	D	1040.00	1040.00	N/A	N/A
08:00-08:15	E	470.00	470.00	N/A	N/A
08:15-08:30	A	1121.00	1121.00	N/A	N/A

08:15-08:30	A	1121.00	1121.00	N/A	N/A
08:15-08:30	B	108.00	108.00	N/A	N/A
08:15-08:30	C	153.00	153.00	N/A	N/A
08:15-08:30	D	1040.00	1040.00	N/A	N/A
08:15-08:30	E	470.00	470.00	N/A	N/A
08:30-08:45	A	1121.00	1121.00	N/A	N/A
08:30-08:45	B	108.00	108.00	N/A	N/A
08:30-08:45	C	153.00	153.00	N/A	N/A
08:30-08:45	D	1040.00	1040.00	N/A	N/A
08:30-08:45	E	470.00	470.00	N/A	N/A
08:45-09:00	A	1121.00	1121.00	N/A	N/A
08:45-09:00	B	108.00	108.00	N/A	N/A
08:45-09:00	C	153.00	153.00	N/A	N/A
08:45-09:00	D	1040.00	1040.00	N/A	N/A
08:45-09:00	E	470.00	470.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	21.00	47.00	842.00	211.00
	B	80.00	0.00	0.00	13.00	15.00
	C	125.00	0.00	0.00	13.00	15.00
	D	947.00	15.00	15.00	0.00	63.00
	E	221.00	81.00	80.00	88.00	0.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.02	0.04	0.75	0.19
	B	0.74	0.00	0.00	0.12	0.14
	C	0.82	0.00	0.00	0.08	0.10
	D	0.91	0.01	0.01	0.00	0.06
	E	0.47	0.17	0.17	0.19	0.00

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00

From	To	0.00	0.00	0.00	0.00	0.00
C	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
E	0.00	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.89	0.43	7.73	D	1121.00	1121.00	413.19	0.37	6.89	414.61	0.37	0.506	1398.428
B	0.33	0.27	0.49	C	108.00	108.00	28.14	0.26	0.47	28.16	0.26	0.443	894.185
C	0.33	0.19	0.48	B	153.00	153.00	27.85	0.18	0.46	27.86	0.18	0.398	967.094
D	0.77	0.19	3.24	B	1040.00	1040.00	185.72	0.18	3.10	185.95	0.18	0.585	1616.944
E	0.61	0.20	1.53	B	470.00	470.00	88.58	0.19	1.48	88.67	0.19	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
08:00-08:15	A	1121.00	1258.95	0.890	0.00	0.00	6.65	80.75	(0.00)	0.325
08:00-08:15	B	108.00	338.66	0.319	0.00	0.00	0.46	6.39	(0.00)	0.256
08:00-08:15	C	153.00	481.54	0.318	0.00	0.00	0.46	6.50	(0.00)	0.181
08:00-08:15	D	1040.00	1361.03	0.764	0.00	0.00	3.08	41.80	(0.00)	0.174
08:00-08:15	E	470.00	781.17	0.602	0.00	0.00	1.46	20.33	(0.00)	0.186
08:15-08:30	A	1121.00	1257.26	0.892	0.00	6.65	7.31	105.62	(0.00)	0.415
08:15-08:30	B	108.00	327.28	0.330	0.00	0.46	0.48	7.13	(0.00)	0.273
08:15-08:30	C	153.00	471.48	0.325	0.00	0.46	0.47	7.04	(0.00)	0.188
08:15-08:30	D	1040.00	1356.57	0.767	0.00	3.08	3.19	47.25	(0.00)	0.189
08:15-08:30	E	470.00	773.89	0.607	0.00	1.46	1.51	22.46	(0.00)	0.197
08:30-08:45	A	1121.00	1257.22	0.892	0.00	7.31	7.58	111.92	(0.00)	0.425
08:30-08:45	B	108.00	326.58	0.331	0.00	0.48	0.49	7.29	(0.00)	0.274
08:30-08:45	C	153.00	470.86	0.325	0.00	0.47	0.48	7.14	(0.00)	0.189
08:30-08:45	D	1040.00	1356.32	0.767	0.00	3.19	3.22	48.15	(0.00)	0.189
08:30-08:45	E	470.00	773.69	0.607	0.00	1.51	1.53	22.83	(0.00)	0.197
08:45-09:00	A	1121.00	1257.21	0.892	0.00	7.58	7.73	114.90	(0.00)	0.430
08:45-09:00	B	108.00	326.36	0.331	0.00	0.49	0.49	7.34	(0.00)	0.275
08:45-09:00	C	153.00	470.67	0.325	0.00	0.48	0.48	7.17	(0.00)	0.189
08:45-09:00	D	1040.00	1356.28	0.767	0.00	3.22	3.24	48.51	(0.00)	0.189

08:45-09:00	E	470.00	773.64	0.608	0.00	1.53	1.53	22.96	(0.00)	0.198
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A1 - (Default Analysis Set) - D9 - Base 2017 + Com, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2017 + Com, PM	Base 2017 + Com	PM			Yes			17:00	18:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1070.00	100.000	1.00
B	FLAT	Yes	53.00	100.000	1.00
C	FLAT	Yes	263.00	100.000	1.00
D	FLAT	Yes	831.00	100.000	1.00
E	FLAT	Yes	568.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow	DirectDemandEntryFlowInPCU	Direct Demand Exit Flow	Direct Demand Pedestrian Flow
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Time Segment	From	(PCU/hr)	(PCU/hr)	(PCU/hr)	(Ped/hr)
17:00-17:15	A	1070.00	1070.00	N/A	N/A
17:00-17:15	B	53.00	53.00	N/A	N/A
17:00-17:15	C	263.00	263.00	N/A	N/A
17:00-17:15	D	831.00	831.00	N/A	N/A
17:00-17:15	E	568.00	568.00	N/A	N/A
17:15-17:30	A	1070.00	1070.00	N/A	N/A
17:15-17:30	B	53.00	53.00	N/A	N/A
17:15-17:30	C	263.00	263.00	N/A	N/A
17:15-17:30	D	831.00	831.00	N/A	N/A
17:15-17:30	E	568.00	568.00	N/A	N/A
17:30-17:45	A	1070.00	1070.00	N/A	N/A
17:30-17:45	B	53.00	53.00	N/A	N/A
17:30-17:45	C	263.00	263.00	N/A	N/A
17:30-17:45	D	831.00	831.00	N/A	N/A
17:30-17:45	E	568.00	568.00	N/A	N/A
17:45-18:00	A	1070.00	1070.00	N/A	N/A
17:45-18:00	B	53.00	53.00	N/A	N/A
17:45-18:00	C	263.00	263.00	N/A	N/A
17:45-18:00	D	831.00	831.00	N/A	N/A
17:45-18:00	E	568.00	568.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	19.00	109.00	777.00	165.00
	B	4.00	0.00	22.00	2.00	25.00
	C	86.00	2.00	0.00	23.00	152.00
	D	728.00	25.00	28.00	3.00	47.00
	E	273.00	53.00	136.00	99.00	7.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.02	0.10	0.73	0.15
	B	0.08	0.00	0.42	0.04	0.47
	C	0.33	0.01	0.00	0.09	0.58
	D	0.88	0.03	0.03	0.00	0.06
	E	0.48	0.09	0.24	0.17	0.01

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

	L	1.00	1.00	1.00	1.00	1.00
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Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
From		A	B	C	D	E
	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.88	0.39	6.79	C	1070.00	1070.00	367.53	0.34	6.13	368.67	0.34	0.506	1398.428
B	0.17	0.24	0.21	B	53.00	53.00	11.97	0.23	0.20	11.97	0.23	0.443	894.185
C	0.49	0.22	0.95	B	263.00	263.00	55.00	0.21	0.92	55.05	0.21	0.398	967.094
D	0.61	0.11	1.57	A	831.00	831.00	91.79	0.11	1.53	91.85	0.11	0.585	1616.944
E	0.61	0.16	1.54	A	568.00	568.00	89.73	0.16	1.50	89.81	0.16	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
17:00-17:15	A	1070.00	1221.54	0.876	0.00	0.00	5.96	73.57	(0.00)	0.309
17:00-17:15	B	53.00	319.55	0.166	0.00	0.00	0.20	2.77	(0.00)	0.224
17:00-17:15	C	263.00	545.83	0.482	0.00	0.00	0.91	12.65	(0.00)	0.207
17:00-17:15	D	831.00	1363.49	0.609	0.00	0.00	1.53	21.75	(0.00)	0.110
17:00-17:15	E	568.00	937.71	0.606	0.00	0.00	1.50	20.94	(0.00)	0.157
17:15-17:30	A	1070.00	1219.78	0.877	0.00	5.96	6.48	94.05	(0.00)	0.383
17:15-17:30	B	53.00	308.86	0.172	0.00	0.20	0.20	3.03	(0.00)	0.234
17:15-17:30	C	263.00	537.58	0.489	0.00	0.91	0.94	13.93	(0.00)	0.218
17:15-17:30	D	831.00	1359.38	0.611	0.00	1.53	1.56	23.20	(0.00)	0.113
17:15-17:30	E	568.00	934.09	0.608	0.00	1.50	1.53	22.74	(0.00)	0.164
17:30-17:45	A	1070.00	1219.75	0.877	0.00	6.48	6.68	98.85	(0.00)	0.391
17:30-17:45	B	53.00	308.30	0.172	0.00	0.20	0.21	3.08	(0.00)	0.235

17:30-17:45	C	263.00	537.13	0.490	0.00	0.94	0.95	14.17	(0.00)	0.219
17:30-17:45	D	831.00	1359.20	0.611	0.00	1.56	1.56	23.39	(0.00)	0.114
17:30-17:45	E	568.00	934.03	0.608	0.00	1.53	1.54	22.98	(0.00)	0.164
17:45-18:00	A	1070.00	1219.75	0.877	0.00	6.68	6.79	101.06	(0.00)	0.394
17:45-18:00	B	53.00	308.14	0.172	0.00	0.21	0.21	3.09	(0.00)	0.235
17:45-18:00	C	263.00	537.00	0.490	0.00	0.95	0.95	14.25	(0.00)	0.219
17:45-18:00	D	831.00	1359.16	0.611	0.00	1.56	1.57	23.45	(0.00)	0.114
17:45-18:00	E	568.00	934.02	0.608	0.00	1.54	1.54	23.08	(0.00)	0.164

A1 - (Default Analysis Set) - D10 - Base 2017 + Com + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2017 + Com + Dev, PM	Base 2017 + Com + Dev	PM			Yes			17:00	18:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1070.00	100.000	1.00
B	FLAT	Yes	56.00	100.000	1.00
C	FLAT	Yes	277.00	100.000	1.00

D	FLAT	Yes	835.00	100.000	1.00
E	FLAT	Yes	585.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	1070.00	1070.00	N/A	N/A
17:00-17:15	B	56.00	56.00	N/A	N/A
17:00-17:15	C	277.00	277.00	N/A	N/A
17:00-17:15	D	835.00	835.00	N/A	N/A
17:00-17:15	E	585.00	585.00	N/A	N/A
17:15-17:30	A	1070.00	1070.00	N/A	N/A
17:15-17:30	B	56.00	56.00	N/A	N/A
17:15-17:30	C	277.00	277.00	N/A	N/A
17:15-17:30	D	835.00	835.00	N/A	N/A
17:15-17:30	E	585.00	585.00	N/A	N/A
17:30-17:45	A	1070.00	1070.00	N/A	N/A
17:30-17:45	B	56.00	56.00	N/A	N/A
17:30-17:45	C	277.00	277.00	N/A	N/A
17:30-17:45	D	835.00	835.00	N/A	N/A
17:30-17:45	E	585.00	585.00	N/A	N/A
17:45-18:00	A	1070.00	1070.00	N/A	N/A
17:45-18:00	B	56.00	56.00	N/A	N/A
17:45-18:00	C	277.00	277.00	N/A	N/A
17:45-18:00	D	835.00	835.00	N/A	N/A
17:45-18:00	E	585.00	585.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

		To				
From		A	B	C	D	E
	A	0.00	19.00	109.00	777.00	165.00
	B	4.00	0.00	22.00	2.00	28.00
	C	86.00	2.00	0.00	23.00	166.00
	D	728.00	25.00	28.00	3.00	51.00
	E	273.00	56.00	144.00	105.00	7.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

		To				
From		A	B	C	D	E
	A	0.00	0.02	0.10	0.73	0.15
	B	0.07	0.00	0.39	0.04	0.50
	C	0.31	0.01	0.00	0.08	0.60
	D	0.87	0.03	0.03	0.00	0.06
	E	0.47	0.10	0.25	0.18	0.01

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.88	0.42	7.16	C	1070.00	1070.00	385.16	0.36	6.42	386.43	0.36	0.506	1398.428
B	0.19	0.24	0.23	B	56.00	56.00	13.08	0.23	0.22	13.09	0.23	0.443	894.185
C	0.52	0.23	1.07	B	277.00	277.00	61.60	0.22	1.03	61.66	0.22	0.398	967.094
D	0.62	0.12	1.61	A	835.00	835.00	94.61	0.11	1.58	94.67	0.11	0.585	1616.944
E	0.63	0.17	1.66	B	585.00	585.00	96.65	0.17	1.61	96.73	0.17	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
17:00-17:15	A	1070.00	1213.11	0.882	0.00	0.00	6.22	76.13	(0.00)	0.321
17:00-17:15	B	56.00	313.92	0.178	0.00	0.00	0.21	3.02	(0.00)	0.231
17:00-17:15	C	277.00	542.69	0.510	0.00	0.00	1.01	14.07	(0.00)	0.219
17:00-17:15	D	835.00	1353.91	0.617	0.00	0.00	1.58	22.37	(0.00)	0.113
17:00-17:15	E	585.00	627.83	0.931	0.00	0.00	1.61	96.73	(0.00)	0.164

17:00-17:15	E	585.00	937.83	0.624	0.00	0.00	1.61	22.44	(0.00)	0.164
17:15-17:30	A	1070.00	1211.18	0.883	0.00	6.22	6.80	98.50	(0.00)	0.404
17:15-17:30	B	56.00	302.79	0.185	0.00	0.21	0.22	3.31	(0.00)	0.243
17:15-17:30	C	277.00	534.10	0.519	0.00	1.01	1.05	15.61	(0.00)	0.233
17:15-17:30	D	835.00	1349.49	0.619	0.00	1.58	1.60	23.92	(0.00)	0.117
17:15-17:30	E	585.00	934.10	0.626	0.00	1.61	1.65	24.50	(0.00)	0.172
17:30-17:45	A	1070.00	1211.15	0.883	0.00	6.80	7.03	103.99	(0.00)	0.413
17:30-17:45	B	56.00	302.16	0.185	0.00	0.22	0.23	3.37	(0.00)	0.244
17:30-17:45	C	277.00	533.60	0.519	0.00	1.05	1.06	15.91	(0.00)	0.234
17:30-17:45	D	835.00	1349.28	0.619	0.00	1.60	1.61	24.12	(0.00)	0.117
17:30-17:45	E	585.00	934.04	0.626	0.00	1.65	1.66	24.80	(0.00)	0.172
17:45-18:00	A	1070.00	1211.14	0.883	0.00	7.03	7.16	106.54	(0.00)	0.416
17:45-18:00	B	56.00	301.97	0.185	0.00	0.23	0.23	3.39	(0.00)	0.244
17:45-18:00	C	277.00	533.45	0.519	0.00	1.06	1.07	16.01	(0.00)	0.234
17:45-18:00	D	835.00	1349.23	0.619	0.00	1.61	1.61	24.20	(0.00)	0.117
17:45-18:00	E	585.00	934.03	0.626	0.00	1.66	1.66	24.90	(0.00)	0.172

A1 - (Default Analysis Set) - D12 - Base 2028 + Saturn, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2028 + Saturn, PM	Base 2028 + Saturn	PM			Yes			17:00	18:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1226.00	100.000	1.00
B	FLAT	Yes	157.00	100.000	1.00
C	FLAT	Yes	175.00	100.000	1.00
D	FLAT	Yes	745.00	100.000	1.00
E	FLAT	Yes	542.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	1226.00	1226.00	N/A	N/A
17:00-17:15	B	157.00	157.00	N/A	N/A
17:00-17:15	C	175.00	175.00	N/A	N/A
17:00-17:15	D	745.00	745.00	N/A	N/A
17:00-17:15	E	542.00	542.00	N/A	N/A
17:15-17:30	A	1226.00	1226.00	N/A	N/A
17:15-17:30	B	157.00	157.00	N/A	N/A
17:15-17:30	C	175.00	175.00	N/A	N/A
17:15-17:30	D	745.00	745.00	N/A	N/A
17:15-17:30	E	542.00	542.00	N/A	N/A
17:30-17:45	A	1226.00	1226.00	N/A	N/A
17:30-17:45	B	157.00	157.00	N/A	N/A
17:30-17:45	C	175.00	175.00	N/A	N/A
17:30-17:45	D	745.00	745.00	N/A	N/A
17:30-17:45	E	542.00	542.00	N/A	N/A
17:45-18:00	A	1226.00	1226.00	N/A	N/A
17:45-18:00	B	157.00	157.00	N/A	N/A
17:45-18:00	C	175.00	175.00	N/A	N/A
17:45-18:00	D	745.00	745.00	N/A	N/A
17:45-18:00	E	542.00	542.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

	To					
		A	B	C	D	E
From	A	0.00	35.00	58.00	931.00	202.00
	B	36.00	0.00	0.00	18.00	103.00
	C	54.00	0.00	0.00	17.00	104.00
	D	665.00	22.00	22.00	0.00	36.00
	E	310.00	55.00	55.00	122.00	0.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

	To					
		A	B	C	D	E
A		0.00	0.00	0.00	0.70	0.10

From	A	0.00	0.03	0.05	0.78	0.18
	B	0.23	0.00	0.00	0.11	0.66
	C	0.31	0.00	0.00	0.10	0.59
	D	0.89	0.03	0.03	0.00	0.05
	E	0.57	0.10	0.10	0.23	0.00

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

From	To					
		A	B	C	D	E
	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

From	To					
		A	B	C	D	E
	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.97	1.13	21.97	F	1226.00	1226.00	973.80	0.79	16.23	985.30	0.80	0.506	1398.428
B	0.56	0.48	1.22	D	157.00	157.00	66.45	0.42	1.11	66.60	0.42	0.443	894.185
C	0.43	0.26	0.74	C	175.00	175.00	42.10	0.24	0.70	42.14	0.24	0.398	967.094
D	0.56	0.10	1.28	A	745.00	745.00	74.91	0.10	1.25	74.95	0.10	0.585	1616.944
E	0.56	0.14	1.25	A	542.00	542.00	73.03	0.13	1.22	73.08	0.13	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
17:00-17:15	A	1226.00	1259.92	0.973	0.00	0.00	13.40	140.21	(0.00)	0.525
17:00-17:15	B	157.00	302.54	0.519	0.00	0.00	1.02	13.70	(0.00)	0.391
17:00-17:15	C	175.00	427.38	0.409	0.00	0.00	0.68	9.44	(0.00)	0.233
17:00-17:15	D	745.00	1333.90	0.559	0.00	0.00	1.25	17.83	(0.00)	0.100
17:00-17:15	E	542.00	977.80	0.554	0.00	0.00	1.22	17.26	(0.00)	0.135
17:15-17:30	A	1226.00	1258.74	0.974	0.00	13.40	17.49	234.52	(0.00)	0.892
17:15-17:30	B	157.00	285.78	0.549	0.00	1.02	1.16	16.77	(0.00)	0.461
17:15-17:30	C	175.00	411.87	0.425	0.00	0.68	0.72	10.64	(0.00)	0.253
17:15-17:30	D	745.00	1327.16	0.561	0.00	1.25	1.27	18.90	(0.00)	0.103
17:15-17:30	E	542.00	974.52	0.556	0.00	1.22	1.24	18.47	(0.00)	0.139
17:30-17:45	A	1226.00	1258.72	0.974	0.00	17.49	20.09	283.01	(0.00)	1.033
17:30-17:45	B	157.00	283.19	0.554	0.00	1.16	1.20	17.78	(0.00)	0.473
17:30-17:45	C	175.00	409.51	0.427	0.00	0.72	0.73	10.95	(0.00)	0.256
17:30-17:45	D	745.00	1326.31	0.562	0.00	1.27	1.27	19.06	(0.00)	0.103
17:30-17:45	E	542.00	974.42	0.556	0.00	1.24	1.24	18.62	(0.00)	0.139
17:45-18:00	A	1226.00	1258.72	0.974	0.00	20.09	21.97	316.06	(0.00)	1.127
17:45-18:00	B	157.00	281.96	0.557	0.00	1.20	1.22	18.20	(0.00)	0.479
17:45-18:00	C	175.00	408.43	0.428	0.00	0.73	0.74	11.07	(0.00)	0.257
17:45-18:00	D	745.00	1325.98	0.562	0.00	1.27	1.28	19.12	(0.00)	0.103
17:45-18:00	E	542.00	974.40	0.556	0.00	1.24	1.25	18.68	(0.00)	0.139

A1 - (Default Analysis Set) - D13 - Base 2028 + Saturn + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2028 + Saturn + Dev, PM	Base 2028 + Saturn + Dev	PM			Yes			17:00	18:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

TRAFFIC FLOWS

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1228.00	100.000	1.00
B	FLAT	Yes	169.00	100.000	1.00
C	FLAT	Yes	187.00	100.000	1.00
D	FLAT	Yes	749.00	100.000	1.00
E	FLAT	Yes	557.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	1228.00	1228.00	N/A	N/A
17:00-17:15	B	169.00	169.00	N/A	N/A
17:00-17:15	C	187.00	187.00	N/A	N/A
17:00-17:15	D	749.00	749.00	N/A	N/A
17:00-17:15	E	557.00	557.00	N/A	N/A
17:15-17:30	A	1228.00	1228.00	N/A	N/A
17:15-17:30	B	169.00	169.00	N/A	N/A
17:15-17:30	C	187.00	187.00	N/A	N/A
17:15-17:30	D	749.00	749.00	N/A	N/A
17:15-17:30	E	557.00	557.00	N/A	N/A
17:30-17:45	A	1228.00	1228.00	N/A	N/A
17:30-17:45	B	169.00	169.00	N/A	N/A
17:30-17:45	C	187.00	187.00	N/A	N/A
17:30-17:45	D	749.00	749.00	N/A	N/A
17:30-17:45	E	557.00	557.00	N/A	N/A
17:45-18:00	A	1228.00	1228.00	N/A	N/A
17:45-18:00	B	169.00	169.00	N/A	N/A
17:45-18:00	C	187.00	187.00	N/A	N/A
17:45-18:00	D	749.00	749.00	N/A	N/A
17:45-18:00	E	557.00	557.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

	To				
	A	B	C	D	E
A	0.00	35.00	59.00	932.00	202.00
B	36.00	0.00	0.00	18.00	115.00

From	To	A	B	C	D	E
C		54.00	0.00	0.00	17.00	116.00
D		665.00	22.00	22.00	0.00	40.00
E		310.00	59.00	58.00	130.00	0.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

From	To	A	B	C	D	E
A		0.00	0.03	0.05	0.76	0.16
B		0.21	0.00	0.00	0.11	0.68
C		0.29	0.00	0.00	0.09	0.62
D		0.89	0.03	0.03	0.00	0.05
E		0.56	0.11	0.10	0.23	0.00

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

From	To	A	B	C	D	E
A		1.00	1.00	1.00	1.00	1.00
B		1.00	1.00	1.00	1.00	1.00
C		1.00	1.00	1.00	1.00	1.00
D		1.00	1.00	1.00	1.00	1.00
E		1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

From	To	A	B	C	D	E
A		0.00	0.00	0.00	0.00	0.00
B		0.00	0.00	0.00	0.00	0.00
C		0.00	0.00	0.00	0.00	0.00
D		0.00	0.00	0.00	0.00	0.00
E		0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.98	1.27	24.95	F	1228.00	1228.00	1072.08	0.87	17.87	1087.00	0.89	0.506	1398.428
B	0.61	0.55	1.51	D	169.00	169.00	80.59	0.48	1.34	80.83	0.48	0.443	894.185
C	0.47	0.28	0.86	C	187.00	187.00	48.66	0.26	0.81	48.71	0.26	0.398	967.094
D	0.57	0.11	1.32	A	749.00	749.00	77.57	0.10	1.29	77.61	0.10	0.585	1616.944
E	0.57	0.14	1.33	A	557.00	557.00	77.61	0.14	1.29	77.66	0.14	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	0.76	12.05	52.00	58.00		0.506	1398.428

A	4.37	5.40	5.10	13.05	55.00	50.00		0.500	1350.420
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
17:00-17:15	A	1228.00	1252.44	0.980	0.00	0.00	14.32	147.46	(0.00)	0.552
17:00-17:15	B	169.00	298.45	0.566	0.00	0.00	1.22	16.15	(0.00)	0.433
17:00-17:15	C	187.00	420.74	0.444	0.00	0.00	0.78	10.78	(0.00)	0.250
17:00-17:15	D	749.00	1320.88	0.567	0.00	0.00	1.29	18.42	(0.00)	0.103
17:00-17:15	E	557.00	977.95	0.570	0.00	0.00	1.29	18.29	(0.00)	0.139
17:15-17:30	A	1228.00	1251.15	0.982	0.00	14.32	19.20	254.42	(0.00)	0.968
17:15-17:30	B	169.00	281.37	0.601	0.00	1.22	1.41	20.29	(0.00)	0.525
17:15-17:30	C	187.00	404.75	0.462	0.00	0.78	0.84	12.29	(0.00)	0.275
17:15-17:30	D	749.00	1313.57	0.570	0.00	1.29	1.31	19.57	(0.00)	0.106
17:15-17:30	E	557.00	974.55	0.572	0.00	1.29	1.32	19.64	(0.00)	0.144
17:30-17:45	A	1228.00	1251.13	0.982	0.00	19.20	22.47	313.81	(0.00)	1.144
17:30-17:45	B	169.00	278.60	0.607	0.00	1.41	1.47	21.76	(0.00)	0.543
17:30-17:45	C	187.00	402.18	0.465	0.00	0.84	0.85	12.71	(0.00)	0.279
17:30-17:45	D	749.00	1312.59	0.571	0.00	1.31	1.32	19.75	(0.00)	0.106
17:30-17:45	E	557.00	974.43	0.572	0.00	1.32	1.32	19.81	(0.00)	0.144
17:45-18:00	A	1228.00	1251.13	0.982	0.00	22.47	24.95	356.39	(0.00)	1.270
17:45-18:00	B	169.00	277.23	0.610	0.00	1.47	1.51	22.40	(0.00)	0.551
17:45-18:00	C	187.00	400.97	0.466	0.00	0.85	0.86	12.87	(0.00)	0.280
17:45-18:00	D	749.00	1312.21	0.571	0.00	1.32	1.32	19.82	(0.00)	0.107
17:45-18:00	E	557.00	974.41	0.572	0.00	1.32	1.33	19.88	(0.00)	0.144

ARCADY 7

Version: 7.0.1.130 [12 March 2010]

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File: P:\Bedford Park Developments\T251 - Bexhill\Calculations\Arcady\Little Common Roundabout with Development - Sensi.arc7
Report generation date: 18/12/2017 17:05:29

- » A1 - (Default Analysis Set) - D2 - Base 2017 + Com, AM
- » A1 - (Default Analysis Set) - D3 - Base 2017 + Com + Dev, AM
- » A1 - (Default Analysis Set) - D5 - Base 2028 + Saturn, AM
- » A1 - (Default Analysis Set) - D6 - Base 2028 + Saturn + Dev, AM
- » A1 - (Default Analysis Set) - D9 - Base 2017 + Com, PM
- » A1 - (Default Analysis Set) - D10 - Base 2017 + Com + Dev, PM
- » A1 - (Default Analysis Set) - D12 - Base 2028 + Saturn, PM
- » A1 - (Default Analysis Set) - D13 - Base 2028 + Saturn + Dev, PM

Summary of roundabout performance

	AM		PM	
	Queue (PCU)	RFC	Queue (PCU)	RFC
(Default Analysis Set) - Base 2017 + Com				
Arm A	14.59	0.95	6.79	0.88
Arm B	0.40	0.29	0.21	0.17
Arm C	2.24	0.70	0.95	0.49
Arm D	3.84	0.80	1.57	0.61
Arm E	1.44	0.59	1.54	0.61
(Default Analysis Set) - Base 2017 + Com + Dev				
Arm A	17.72	0.96	7.07	0.88
Arm B	0.44	0.31	0.22	0.18
Arm C	2.51	0.72	1.11	0.53
Arm D	3.94	0.80	1.63	0.62
Arm E	1.66	0.63	1.63	0.62
(Default Analysis Set) - Base 2028 + Saturn				
Arm A	6.95	0.88	21.97	0.97
Arm B	0.47	0.32	1.22	0.56
Arm C	0.47	0.32	0.74	0.43
Arm D	3.17	0.76	1.28	0.56
Arm E	1.33	0.57	1.25	0.56
(Default Analysis Set) - Base 2028 + Saturn + Dev				
Arm A	8.09	0.90	24.45	0.98
Arm B	0.50	0.33	1.59	0.62
Arm C	0.48	0.33	0.90	0.48
Arm D	3.25	0.77	1.34	0.57
Arm E	1.61	0.62	1.31	0.57

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

Base 2017 + Com - AM runs from 08:00:00 to 09:00:00

Base 2017 + Com + Dev - AM runs from 08:00:00 to 09:00:00

Base 2028 + Saturn - AM runs from 08:00:00 to 09:00:00

Base 2028 + Saturn + Dev - AM runs from 08:00:00 to 09:00:00

Base 2017 + Saturn - PM runs from 17:00:00 to 18:00:00
Base 2017 + Com - PM runs from 17:00:00 to 18:00:00
Base 2017 + Com + Dev - PM runs from 17:00:00 to 18:00:00
Base 2028 + Saturn - PM runs from 17:00:00 to 18:00:00
Base 2028 + Saturn + Dev - PM runs from 17:00:00 to 18:00:00

File summary

File Description

Title	(untitled)
Date	27/04/2015
Status	(new file)
Enumerator	RF
Results Upto Date	True

Analysis Options

RFC Threshold	Vehicle Length (m)	Do Queue Variations
0.85	5.75	

Sorting and Display

Show Arm Names	Arm Grouping	Sorting Direction	Sorting Type	Data Matrix Style	Time Style
	Order	Ascending	Numerical	By Destination	Absolute Time

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	PCU	PCU	perHour	min	-Min	perMin

A1 - (Default Analysis Set) - D2 - Base 2017 + Com, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2017 + Com, AM	Base 2017 + Com	AM			Yes			08:00	09:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1214.00	100.000	1.00
B	FLAT	Yes	79.00	100.000	1.00
C	FLAT	Yes	329.00	100.000	1.00
D	FLAT	Yes	999.00	100.000	1.00
E	FLAT	Yes	470.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	1214.00	1214.00	N/A	N/A
08:00-08:15	B	79.00	79.00	N/A	N/A
08:00-08:15	C	329.00	329.00	N/A	N/A
08:00-08:15	D	999.00	999.00	N/A	N/A
08:00-08:15	E	470.00	470.00	N/A	N/A
08:15-08:30	A	1214.00	1214.00	N/A	N/A
08:15-08:30	B	79.00	79.00	N/A	N/A
08:15-08:30	C	329.00	329.00	N/A	N/A
08:15-08:30	D	999.00	999.00	N/A	N/A
08:15-08:30	E	470.00	470.00	N/A	N/A
08:30-08:45	A	1214.00	1214.00	N/A	N/A
08:30-08:45	B	79.00	79.00	N/A	N/A
08:30-08:45	C	329.00	329.00	N/A	N/A
08:30-08:45	D	999.00	999.00	N/A	N/A
08:30-08:45	E	470.00	470.00	N/A	N/A
08:45-09:00	A	1214.00	1214.00	N/A	N/A
08:45-09:00	B	79.00	79.00	N/A	N/A
08:45-09:00	C	329.00	329.00	N/A	N/A
08:45-09:00	D	999.00	999.00	N/A	N/A
08:45-09:00	E	470.00	470.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	9.00	79.00	854.00	272.00
	B	14.00	0.00	30.00	3.00	32.00
	C	157.00	0.00	0.00	28.00	144.00

	C	137.00	0.00	0.00	20.00	144.00
	D	929.00	19.00	24.00	3.00	24.00
	E	285.00	18.00	96.00	68.00	3.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

	To					
		A	B	C	D	E
From	A	0.00	0.01	0.07	0.70	0.22
	B	0.18	0.00	0.38	0.04	0.41
	C	0.48	0.00	0.00	0.09	0.44
	D	0.93	0.02	0.02	0.00	0.02
	E	0.61	0.04	0.20	0.14	0.01

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

	To					
		A	B	C	D	E
From	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

	To					
		A	B	C	D	E
From	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.95	0.76	14.59	E	1214.00	1214.00	707.47	0.58	11.79	712.45	0.59	0.506	1398.428
B	0.29	0.30	0.40	C	79.00	79.00	22.49	0.28	0.37	22.51	0.28	0.443	894.185
C	0.70	0.42	2.24	D	329.00	329.00	122.91	0.37	2.05	123.23	0.37	0.398	967.094
D	0.80	0.23	3.84	B	999.00	999.00	215.99	0.22	3.60	216.34	0.22	0.585	1616.944
E	0.59	0.19	1.44	B	470.00	470.00	83.49	0.18	1.39	83.57	0.18	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	3.07	5.41	1.87	10.28	24.61	50.00		0.443	894.185

D	2.37	0.91	1.07	10.30	54.03	54.00		0.493	934.103
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
08:00-08:15	A	1214.00	1282.93	0.946	0.00	0.00	10.55	116.87	(0.00)	0.440
08:00-08:15	B	79.00	294.31	0.268	0.00	0.00	0.36	5.00	(0.00)	0.275
08:00-08:15	C	329.00	486.70	0.676	0.00	0.00	1.94	25.58	(0.00)	0.348
08:00-08:15	D	999.00	1263.47	0.791	0.00	0.00	3.53	47.03	(0.00)	0.206
08:00-08:15	E	470.00	801.79	0.586	0.00	0.00	1.38	19.21	(0.00)	0.175
08:15-08:30	A	1214.00	1281.56	0.947	0.00	10.55	12.72	176.66	(0.00)	0.670
08:15-08:30	B	79.00	278.61	0.284	0.00	0.36	0.39	5.69	(0.00)	0.300
08:15-08:30	C	329.00	473.70	0.695	0.00	1.94	2.15	31.15	(0.00)	0.408
08:15-08:30	D	999.00	1254.91	0.796	0.00	3.53	3.74	54.96	(0.00)	0.232
08:15-08:30	E	470.00	793.11	0.593	0.00	1.38	1.43	21.15	(0.00)	0.185
08:30-08:45	A	1214.00	1281.51	0.947	0.00	12.72	13.87	200.18	(0.00)	0.729
08:30-08:45	B	79.00	276.75	0.285	0.00	0.39	0.39	5.87	(0.00)	0.303
08:30-08:45	C	329.00	472.14	0.697	0.00	2.15	2.21	32.76	(0.00)	0.416
08:30-08:45	D	999.00	1254.03	0.797	0.00	3.74	3.81	56.66	(0.00)	0.234
08:30-08:45	E	470.00	792.68	0.593	0.00	1.43	1.44	21.50	(0.00)	0.186
08:45-09:00	A	1214.00	1281.51	0.947	0.00	13.87	14.59	213.77	(0.00)	0.762
08:45-09:00	B	79.00	276.01	0.286	0.00	0.39	0.40	5.93	(0.00)	0.304
08:45-09:00	C	329.00	471.51	0.698	0.00	2.21	2.24	33.42	(0.00)	0.419
08:45-09:00	D	999.00	1253.73	0.797	0.00	3.81	3.84	57.35	(0.00)	0.235
08:45-09:00	E	470.00	792.57	0.593	0.00	1.44	1.44	21.62	(0.00)	0.186

A1 - (Default Analysis Set) - D3 - Base 2017 + Com + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2017 + Com + Dev, AM	Base 2017 + Com + Dev	AM			Yes			08:00	09:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428

B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1218.00	100.000	1.00
B	FLAT	Yes	81.00	100.000	1.00
C	FLAT	Yes	337.00	100.000	1.00
D	FLAT	Yes	1000.00	100.000	1.00
E	FLAT	Yes	497.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	1218.00	1218.00	N/A	N/A
08:00-08:15	B	81.00	81.00	N/A	N/A
08:00-08:15	C	337.00	337.00	N/A	N/A
08:00-08:15	D	1000.00	1000.00	N/A	N/A
08:00-08:15	E	497.00	497.00	N/A	N/A
08:15-08:30	A	1218.00	1218.00	N/A	N/A
08:15-08:30	B	81.00	81.00	N/A	N/A
08:15-08:30	C	337.00	337.00	N/A	N/A
08:15-08:30	D	1000.00	1000.00	N/A	N/A
08:15-08:30	E	497.00	497.00	N/A	N/A
08:30-08:45	A	1218.00	1218.00	N/A	N/A
08:30-08:45	B	81.00	81.00	N/A	N/A
08:30-08:45	C	337.00	337.00	N/A	N/A
08:30-08:45	D	1000.00	1000.00	N/A	N/A
08:30-08:45	E	497.00	497.00	N/A	N/A
08:45-09:00	A	1218.00	1218.00	N/A	N/A
08:45-09:00	B	81.00	81.00	N/A	N/A
08:45-09:00	C	337.00	337.00	N/A	N/A
08:45-09:00	D	1000.00	1000.00	N/A	N/A
08:45-09:00	E	497.00	497.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	9.00	81.00	856.00	272.00
	B	14.00	0.00	30.00	3.00	34.00
	C	157.00	0.00	0.00	28.00	152.00
	D	929.00	19.00	24.00	3.00	25.00
	E	285.00	21.00	110.00	78.00	3.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.01	0.07	0.70	0.22
	B	0.17	0.00	0.37	0.04	0.42
	C	0.47	0.00	0.00	0.08	0.45
	D	0.93	0.02	0.02	0.00	0.03
	E	0.57	0.04	0.22	0.16	0.01

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.96	0.92	17.72	F	1218.00	1218.00	824.38	0.68	13.74	831.81	0.68	0.506	1398.428
B	0.31	0.33	0.44	C	81.00	81.00	24.56	0.30	0.41	24.58	0.30	0.443	894.185
C	0.72	0.46	2.51	D	337.00	337.00	135.92	0.40	2.27	136.33	0.40	0.398	967.094
D	0.80	0.24	3.94	B	1000.00	1000.00	220.98	0.22	3.68	221.36	0.22	0.585	1616.944
E	0.63	0.20	1.66	B	497.00	497.00	95.74	0.19	1.60	95.84	0.19	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
08:00-08:15	A	1218.00	1269.53	0.959	0.00	0.00	11.84	127.63	(0.00)	0.481
08:00-08:15	B	81.00	284.40	0.285	0.00	0.00	0.39	5.40	(0.00)	0.291
08:00-08:15	C	337.00	483.13	0.698	0.00	0.00	2.12	27.72	(0.00)	0.370
08:00-08:15	D	1000.00	1258.74	0.794	0.00	0.00	3.61	47.88	(0.00)	0.210
08:00-08:15	E	497.00	802.07	0.620	0.00	0.00	1.58	21.82	(0.00)	0.189
08:15-08:30	A	1218.00	1267.91	0.961	0.00	11.84	14.84	202.62	(0.00)	0.772
08:15-08:30	B	81.00	267.67	0.303	0.00	0.39	0.42	6.21	(0.00)	0.321
08:15-08:30	C	337.00	469.35	0.718	0.00	2.12	2.38	34.38	(0.00)	0.444
08:15-08:30	D	1000.00	1249.61	0.800	0.00	3.61	3.83	56.21	(0.00)	0.238
08:15-08:30	E	497.00	793.19	0.627	0.00	1.58	1.64	24.27	(0.00)	0.202
08:30-08:45	A	1218.00	1267.85	0.961	0.00	14.84	16.56	236.49	(0.00)	0.865
08:30-08:45	B	81.00	265.38	0.305	0.00	0.42	0.43	6.43	(0.00)	0.325
08:30-08:45	C	337.00	467.43	0.721	0.00	2.38	2.47	36.47	(0.00)	0.455
08:30-08:45	D	1000.00	1248.53	0.801	0.00	3.83	3.90	58.06	(0.00)	0.240
08:30-08:45	E	497.00	792.71	0.627	0.00	1.64	1.66	24.74	(0.00)	0.203
08:45-09:00	A	1218.00	1267.84	0.961	0.00	16.56	17.72	257.64	(0.00)	0.922
08:45-09:00	B	81.00	264.38	0.306	0.00	0.43	0.44	6.51	(0.00)	0.327
08:45-09:00	C	337.00	466.59	0.722	0.00	2.47	2.51	37.35	(0.00)	0.460
08:45-09:00	D	1000.00	1248.14	0.801	0.00	3.90	3.94	58.83	(0.00)	0.241
08:45-09:00	E	497.00	792.59	0.627	0.00	1.66	1.66	24.91	(0.00)	0.203

A1 - (Default Analysis Set) - D5 - Base 2028 + Saturn, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2028 + Saturn, AM	Base 2028 + Saturn	AM			Yes			08:00	09:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1118.00	100.000	1.00
B	FLAT	Yes	107.00	100.000	1.00
C	FLAT	Yes	152.00	100.000	1.00
D	FLAT	Yes	1035.00	100.000	1.00
E	FLAT	Yes	443.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	1118.00	1118.00	N/A	N/A
08:00-08:15	B	107.00	107.00	N/A	N/A
08:00-08:15	C	152.00	152.00	N/A	N/A
08:00-08:15	D	1035.00	1035.00	N/A	N/A
08:00-08:15	E	443.00	443.00	N/A	N/A
08:15-08:30	A	1118.00	1118.00	N/A	N/A
08:15-08:30	B	107.00	107.00	N/A	N/A
08:15-08:30	C	152.00	152.00	N/A	N/A
08:15-08:30	D	1035.00	1035.00	N/A	N/A
08:15-08:30	E	443.00	443.00	N/A	N/A
08:30-08:45	A	1118.00	1118.00	N/A	N/A
08:30-08:45	B	107.00	107.00	N/A	N/A
08:30-08:45	C	152.00	152.00	N/A	N/A
08:30-08:45	D	1035.00	1035.00	N/A	N/A
08:30-08:45	E	443.00	443.00	N/A	N/A

08:30-08:45	D	1035.00	1035.00	N/A	N/A
08:30-08:45	E	443.00	443.00	N/A	N/A
08:45-09:00	A	1118.00	1118.00	N/A	N/A
08:45-09:00	B	107.00	107.00	N/A	N/A
08:45-09:00	C	152.00	152.00	N/A	N/A
08:45-09:00	D	1035.00	1035.00	N/A	N/A
08:45-09:00	E	443.00	443.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	20.00	46.00	841.00	211.00
	B	80.00	0.00	0.00	13.00	14.00
	C	125.00	0.00	0.00	13.00	14.00
	D	947.00	15.00	15.00	0.00	58.00
	E	221.00	72.00	72.00	78.00	0.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.02	0.04	0.75	0.19
	B	0.75	0.00	0.00	0.12	0.13
	C	0.82	0.00	0.00	0.09	0.09
	D	0.91	0.01	0.01	0.00	0.06
	E	0.50	0.16	0.16	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.88	0.39	6.95	C	1118.00	1118.00	376.45	0.34	6.27	377.59	0.34	0.506	1398.428
B	0.32	0.26	0.47	C	107.00	107.00	26.79	0.25	0.45	26.81	0.25	0.443	894.185
C	0.32	0.19	0.47	B	152.00	152.00	27.22	0.18	0.45	27.24	0.18	0.398	967.094
D	0.76	0.19	3.17	B	1035.00	1035.00	181.66	0.18	3.03	181.88	0.18	0.585	1616.944
E	0.57	0.18	1.33	B	443.00	443.00	77.10	0.17	1.29	77.17	0.17	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
08:00-08:15	A	1118.00	1272.34	0.879	0.00	0.00	6.12	75.43	(0.00)	0.303
08:00-08:15	B	107.00	346.43	0.309	0.00	0.00	0.44	6.12	(0.00)	0.247
08:00-08:15	C	152.00	485.42	0.313	0.00	0.00	0.45	6.37	(0.00)	0.178
08:00-08:15	D	1035.00	1361.91	0.760	0.00	0.00	3.02	41.00	(0.00)	0.171
08:00-08:15	E	443.00	781.03	0.567	0.00	0.00	1.28	17.85	(0.00)	0.172
08:15-08:30	A	1118.00	1270.91	0.880	0.00	6.12	6.63	96.35	(0.00)	0.376
08:15-08:30	B	107.00	335.88	0.319	0.00	0.44	0.46	6.78	(0.00)	0.262
08:15-08:30	C	152.00	476.03	0.319	0.00	0.45	0.46	6.88	(0.00)	0.185
08:15-08:30	D	1035.00	1357.66	0.762	0.00	3.02	3.12	46.21	(0.00)	0.185
08:15-08:30	E	443.00	773.87	0.572	0.00	1.28	1.32	19.53	(0.00)	0.181
08:30-08:45	A	1118.00	1270.88	0.880	0.00	6.63	6.84	101.21	(0.00)	0.383
08:30-08:45	B	107.00	335.32	0.319	0.00	0.46	0.46	6.92	(0.00)	0.263
08:30-08:45	C	152.00	475.53	0.320	0.00	0.46	0.47	6.97	(0.00)	0.185
08:30-08:45	D	1035.00	1357.46	0.762	0.00	3.12	3.15	47.06	(0.00)	0.186
08:30-08:45	E	443.00	773.68	0.573	0.00	1.32	1.32	19.81	(0.00)	0.181
08:45-09:00	A	1118.00	1270.87	0.880	0.00	6.84	6.95	103.46	(0.00)	0.386
08:45-09:00	B	107.00	335.15	0.319	0.00	0.46	0.47	6.96	(0.00)	0.263
08:45-09:00	C	152.00	475.38	0.320	0.00	0.47	0.47	7.00	(0.00)	0.186
08:45-09:00	D	1035.00	1357.41	0.762	0.00	3.15	3.17	47.39	(0.00)	0.186
08:45-09:00	E	443.00	773.64	0.573	0.00	1.32	1.33	19.91	(0.00)	0.181

A1 - (Default Analysis Set) - D6 - Base 2028 + Saturn + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2028 + Saturn + Dev, AM	Base 2028 + Saturn + Dev	AM			Yes			08:00	09:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	

D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1123.00	100.000	1.00
B	FLAT	Yes	108.00	100.000	1.00
C	FLAT	Yes	153.00	100.000	1.00
D	FLAT	Yes	1041.00	100.000	1.00
E	FLAT	Yes	479.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	1123.00	1123.00	N/A	N/A
08:00-08:15	B	108.00	108.00	N/A	N/A
08:00-08:15	C	153.00	153.00	N/A	N/A
08:00-08:15	D	1041.00	1041.00	N/A	N/A
08:00-08:15	E	479.00	479.00	N/A	N/A
08:15-08:30	A	1123.00	1123.00	N/A	N/A

08:15-08:30	A	1123.00	1123.00	N/A	N/A
08:15-08:30	B	108.00	108.00	N/A	N/A
08:15-08:30	C	153.00	153.00	N/A	N/A
08:15-08:30	D	1041.00	1041.00	N/A	N/A
08:15-08:30	E	479.00	479.00	N/A	N/A
08:30-08:45	A	1123.00	1123.00	N/A	N/A
08:30-08:45	B	108.00	108.00	N/A	N/A
08:30-08:45	C	153.00	153.00	N/A	N/A
08:30-08:45	D	1041.00	1041.00	N/A	N/A
08:30-08:45	E	479.00	479.00	N/A	N/A
08:45-09:00	A	1123.00	1123.00	N/A	N/A
08:45-09:00	B	108.00	108.00	N/A	N/A
08:45-09:00	C	153.00	153.00	N/A	N/A
08:45-09:00	D	1041.00	1041.00	N/A	N/A
08:45-09:00	E	479.00	479.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	21.00	48.00	843.00	211.00
	B	80.00	0.00	0.00	13.00	15.00
	C	125.00	0.00	0.00	13.00	15.00
	D	947.00	15.00	15.00	0.00	64.00
	E	221.00	84.00	83.00	91.00	0.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.02	0.04	0.75	0.19
	B	0.74	0.00	0.00	0.12	0.14
	C	0.82	0.00	0.00	0.08	0.10
	D	0.91	0.01	0.01	0.00	0.06
	E	0.46	0.18	0.17	0.19	0.00

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00

From	To	0.00	0.00	0.00	0.00	0.00
C	0.00	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00	0.00
E	0.00	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.90	0.45	8.09	D	1123.00	1123.00	429.77	0.38	7.16	431.34	0.38	0.506	1398.428
B	0.33	0.28	0.50	C	108.00	108.00	28.56	0.26	0.48	28.58	0.26	0.443	894.185
C	0.33	0.19	0.48	B	153.00	153.00	27.97	0.18	0.47	27.98	0.18	0.398	967.094
D	0.77	0.19	3.25	B	1041.00	1041.00	186.40	0.18	3.11	186.64	0.18	0.585	1616.944
E	0.62	0.20	1.61	B	479.00	479.00	92.84	0.19	1.55	92.94	0.19	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
08:00-08:15	A	1123.00	1254.50	0.895	0.00	0.00	6.89	83.06	(0.00)	0.334
08:00-08:15	B	108.00	335.59	0.322	0.00	0.00	0.46	6.47	(0.00)	0.260
08:00-08:15	C	153.00	480.33	0.319	0.00	0.00	0.46	6.52	(0.00)	0.181
08:00-08:15	D	1041.00	1361.15	0.765	0.00	0.00	3.09	41.93	(0.00)	0.175
08:00-08:15	E	479.00	781.20	0.613	0.00	0.00	1.53	21.24	(0.00)	0.191
08:15-08:30	A	1123.00	1252.71	0.896	0.00	6.89	7.62	109.77	(0.00)	0.432
08:15-08:30	B	108.00	323.86	0.333	0.00	0.46	0.49	7.23	(0.00)	0.278
08:15-08:30	C	153.00	470.00	0.326	0.00	0.46	0.48	7.07	(0.00)	0.189
08:15-08:30	D	1041.00	1356.60	0.767	0.00	3.09	3.20	47.43	(0.00)	0.189
08:15-08:30	E	479.00	773.89	0.619	0.00	1.53	1.59	23.55	(0.00)	0.203
08:30-08:45	A	1123.00	1252.66	0.896	0.00	7.62	7.92	116.79	(0.00)	0.445
08:30-08:45	B	108.00	323.09	0.334	0.00	0.49	0.50	7.40	(0.00)	0.279
08:30-08:45	C	153.00	469.32	0.326	0.00	0.48	0.48	7.17	(0.00)	0.190
08:30-08:45	D	1041.00	1356.34	0.768	0.00	3.20	3.24	48.34	(0.00)	0.190
08:30-08:45	E	479.00	773.69	0.619	0.00	1.59	1.60	23.96	(0.00)	0.203
08:45-09:00	A	1123.00	1252.65	0.897	0.00	7.92	8.09	120.15	(0.00)	0.450
08:45-09:00	B	108.00	322.85	0.335	0.00	0.50	0.50	7.45	(0.00)	0.279
08:45-09:00	C	153.00	469.10	0.326	0.00	0.48	0.48	7.21	(0.00)	0.190
08:45-09:00	D	1041.00	1356.27	0.768	0.00	3.24	3.25	48.70	(0.00)	0.190

08:45-09:00	E	479.00	773.64	0.619	0.00	1.60	1.61	24.10	(0.00)	0.204
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A1 - (Default Analysis Set) - D9 - Base 2017 + Com, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2017 + Com, PM	Base 2017 + Com	PM			Yes			17:00	18:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1070.00	100.000	1.00
B	FLAT	Yes	53.00	100.000	1.00
C	FLAT	Yes	263.00	100.000	1.00
D	FLAT	Yes	831.00	100.000	1.00
E	FLAT	Yes	568.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow	DirectDemandEntryFlowInPCU	Direct Demand Exit Flow	Direct Demand Pedestrian Flow
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Time Segment	From	(PCU/hr)	(PCU/hr)	(PCU/hr)	(Ped/hr)
17:00-17:15	A	1070.00	1070.00	N/A	N/A
17:00-17:15	B	53.00	53.00	N/A	N/A
17:00-17:15	C	263.00	263.00	N/A	N/A
17:00-17:15	D	831.00	831.00	N/A	N/A
17:00-17:15	E	568.00	568.00	N/A	N/A
17:15-17:30	A	1070.00	1070.00	N/A	N/A
17:15-17:30	B	53.00	53.00	N/A	N/A
17:15-17:30	C	263.00	263.00	N/A	N/A
17:15-17:30	D	831.00	831.00	N/A	N/A
17:15-17:30	E	568.00	568.00	N/A	N/A
17:30-17:45	A	1070.00	1070.00	N/A	N/A
17:30-17:45	B	53.00	53.00	N/A	N/A
17:30-17:45	C	263.00	263.00	N/A	N/A
17:30-17:45	D	831.00	831.00	N/A	N/A
17:30-17:45	E	568.00	568.00	N/A	N/A
17:45-18:00	A	1070.00	1070.00	N/A	N/A
17:45-18:00	B	53.00	53.00	N/A	N/A
17:45-18:00	C	263.00	263.00	N/A	N/A
17:45-18:00	D	831.00	831.00	N/A	N/A
17:45-18:00	E	568.00	568.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	19.00	109.00	777.00	165.00
	B	4.00	0.00	22.00	2.00	25.00
	C	86.00	2.00	0.00	23.00	152.00
	D	728.00	25.00	28.00	3.00	47.00
	E	273.00	53.00	136.00	99.00	7.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.02	0.10	0.73	0.15
	B	0.08	0.00	0.42	0.04	0.47
	C	0.33	0.01	0.00	0.09	0.58
	D	0.88	0.03	0.03	0.00	0.06
	E	0.48	0.09	0.24	0.17	0.01

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

	L	1.00	1.00	1.00	1.00	1.00
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Heavy Vehicle Percentages - Roundabout 1 (for whole period)

	To					
From		A	B	C	D	E
	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.88	0.39	6.79	C	1070.00	1070.00	367.53	0.34	6.13	368.67	0.34	0.506	1398.428
B	0.17	0.24	0.21	B	53.00	53.00	11.97	0.23	0.20	11.97	0.23	0.443	894.185
C	0.49	0.22	0.95	B	263.00	263.00	55.00	0.21	0.92	55.05	0.21	0.398	967.094
D	0.61	0.11	1.57	A	831.00	831.00	91.79	0.11	1.53	91.85	0.11	0.585	1616.944
E	0.61	0.16	1.54	A	568.00	568.00	89.73	0.16	1.50	89.81	0.16	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
17:00-17:15	A	1070.00	1221.54	0.876	0.00	0.00	5.96	73.57	(0.00)	0.309
17:00-17:15	B	53.00	319.55	0.166	0.00	0.00	0.20	2.77	(0.00)	0.224
17:00-17:15	C	263.00	545.83	0.482	0.00	0.00	0.91	12.65	(0.00)	0.207
17:00-17:15	D	831.00	1363.49	0.609	0.00	0.00	1.53	21.75	(0.00)	0.110
17:00-17:15	E	568.00	937.71	0.606	0.00	0.00	1.50	20.94	(0.00)	0.157
17:15-17:30	A	1070.00	1219.78	0.877	0.00	5.96	6.48	94.05	(0.00)	0.383
17:15-17:30	B	53.00	308.86	0.172	0.00	0.20	0.20	3.03	(0.00)	0.234
17:15-17:30	C	263.00	537.58	0.489	0.00	0.91	0.94	13.93	(0.00)	0.218
17:15-17:30	D	831.00	1359.38	0.611	0.00	1.53	1.56	23.20	(0.00)	0.113
17:15-17:30	E	568.00	934.09	0.608	0.00	1.50	1.53	22.74	(0.00)	0.164
17:30-17:45	A	1070.00	1219.75	0.877	0.00	6.48	6.68	98.85	(0.00)	0.391
17:30-17:45	B	53.00	308.30	0.172	0.00	0.20	0.21	3.08	(0.00)	0.235

17:30-17:45	C	263.00	537.13	0.490	0.00	0.94	0.95	14.17	(0.00)	0.219
17:30-17:45	D	831.00	1359.20	0.611	0.00	1.56	1.56	23.39	(0.00)	0.114
17:30-17:45	E	568.00	934.03	0.608	0.00	1.53	1.54	22.98	(0.00)	0.164
17:45-18:00	A	1070.00	1219.75	0.877	0.00	6.68	6.79	101.06	(0.00)	0.394
17:45-18:00	B	53.00	308.14	0.172	0.00	0.21	0.21	3.09	(0.00)	0.235
17:45-18:00	C	263.00	537.00	0.490	0.00	0.95	0.95	14.25	(0.00)	0.219
17:45-18:00	D	831.00	1359.16	0.611	0.00	1.56	1.57	23.45	(0.00)	0.114
17:45-18:00	E	568.00	934.02	0.608	0.00	1.54	1.54	23.08	(0.00)	0.164

A1 - (Default Analysis Set) - D10 - Base 2017 + Com + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2017 + Com + Dev, PM	Base 2017 + Com + Dev	PM			Yes			17:00	18:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1070.00	100.000	1.00
B	FLAT	Yes	56.00	100.000	1.00
C	FLAT	Yes	282.00	100.000	1.00

D	FLAT	Yes	837.00	100.000	1.00
E	FLAT	Yes	581.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	1070.00	1070.00	N/A	N/A
17:00-17:15	B	56.00	56.00	N/A	N/A
17:00-17:15	C	282.00	282.00	N/A	N/A
17:00-17:15	D	837.00	837.00	N/A	N/A
17:00-17:15	E	581.00	581.00	N/A	N/A
17:15-17:30	A	1070.00	1070.00	N/A	N/A
17:15-17:30	B	56.00	56.00	N/A	N/A
17:15-17:30	C	282.00	282.00	N/A	N/A
17:15-17:30	D	837.00	837.00	N/A	N/A
17:15-17:30	E	581.00	581.00	N/A	N/A
17:30-17:45	A	1070.00	1070.00	N/A	N/A
17:30-17:45	B	56.00	56.00	N/A	N/A
17:30-17:45	C	282.00	282.00	N/A	N/A
17:30-17:45	D	837.00	837.00	N/A	N/A
17:30-17:45	E	581.00	581.00	N/A	N/A
17:45-18:00	A	1070.00	1070.00	N/A	N/A
17:45-18:00	B	56.00	56.00	N/A	N/A
17:45-18:00	C	282.00	282.00	N/A	N/A
17:45-18:00	D	837.00	837.00	N/A	N/A
17:45-18:00	E	581.00	581.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

		To				
From		A	B	C	D	E
	A	0.00	19.00	109.00	777.00	165.00
	B	4.00	0.00	22.00	2.00	28.00
	C	86.00	2.00	0.00	23.00	171.00
	D	728.00	25.00	28.00	3.00	53.00
	E	273.00	55.00	142.00	104.00	7.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

		To				
From		A	B	C	D	E
	A	0.00	0.02	0.10	0.73	0.15
	B	0.07	0.00	0.39	0.04	0.50
	C	0.30	0.01	0.00	0.08	0.61
	D	0.87	0.03	0.03	0.00	0.06
	E	0.47	0.09	0.24	0.18	0.01

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

	To					
From		A	B	C	D	E
	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

	To					
From		A	B	C	D	E
	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.88	0.41	7.07	C	1070.00	1070.00	380.87	0.36	6.35	382.10	0.36	0.506	1398.428
B	0.18	0.24	0.22	B	56.00	56.00	13.02	0.23	0.22	13.02	0.23	0.443	894.185
C	0.53	0.24	1.11	B	282.00	282.00	63.78	0.23	1.06	63.85	0.23	0.398	967.094
D	0.62	0.12	1.63	A	837.00	837.00	95.71	0.11	1.60	95.77	0.11	0.585	1616.944
E	0.62	0.17	1.63	B	581.00	581.00	94.96	0.16	1.58	95.04	0.16	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
17:00-17:15	A	1070.00	1215.09	0.881	0.00	0.00	6.16	75.52	(0.00)	0.318
17:00-17:15	B	56.00	315.11	0.178	0.00	0.00	0.21	3.00	(0.00)	0.230
17:00-17:15	C	282.00	542.99	0.519	0.00	0.00	1.05	14.54	(0.00)	0.223
17:00-17:15	D	837.00	1351.05	0.620	0.00	0.00	1.60	22.62	(0.00)	0.114
17:00-17:15	E	581.00	637.87	0.640	0.00	0.00	1.58	22.62	(0.00)	0.109

17:00-17:15	E	581.00	937.87	0.619	0.00	0.00	1.58	22.07	(0.00)	0.163
17:15-17:30	A	1070.00	1213.20	0.882	0.00	6.16	6.72	97.42	(0.00)	0.399
17:15-17:30	B	56.00	304.08	0.184	0.00	0.21	0.22	3.29	(0.00)	0.242
17:15-17:30	C	282.00	534.48	0.528	0.00	1.05	1.09	16.17	(0.00)	0.237
17:15-17:30	D	837.00	1346.56	0.622	0.00	1.60	1.62	24.20	(0.00)	0.118
17:15-17:30	E	581.00	934.10	0.622	0.00	1.58	1.62	24.07	(0.00)	0.170
17:30-17:45	A	1070.00	1213.17	0.882	0.00	6.72	6.95	102.73	(0.00)	0.407
17:30-17:45	B	56.00	303.47	0.185	0.00	0.22	0.22	3.35	(0.00)	0.242
17:30-17:45	C	282.00	533.99	0.528	0.00	1.09	1.10	16.49	(0.00)	0.238
17:30-17:45	D	837.00	1346.35	0.622	0.00	1.62	1.63	24.41	(0.00)	0.118
17:30-17:45	E	581.00	934.04	0.622	0.00	1.62	1.63	24.35	(0.00)	0.170
17:45-18:00	A	1070.00	1213.17	0.882	0.00	6.95	7.07	105.20	(0.00)	0.411
17:45-18:00	B	56.00	303.29	0.185	0.00	0.22	0.22	3.37	(0.00)	0.243
17:45-18:00	C	282.00	533.84	0.528	0.00	1.10	1.11	16.59	(0.00)	0.238
17:45-18:00	D	837.00	1346.30	0.622	0.00	1.63	1.63	24.49	(0.00)	0.118
17:45-18:00	E	581.00	934.03	0.622	0.00	1.63	1.63	24.46	(0.00)	0.170

A1 - (Default Analysis Set) - D12 - Base 2028 + Saturn, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2028 + Saturn, PM	Base 2028 + Saturn	PM			Yes			17:00	18:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1226.00	100.000	1.00
B	FLAT	Yes	157.00	100.000	1.00
C	FLAT	Yes	175.00	100.000	1.00
D	FLAT	Yes	745.00	100.000	1.00
E	FLAT	Yes	542.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	1226.00	1226.00	N/A	N/A
17:00-17:15	B	157.00	157.00	N/A	N/A
17:00-17:15	C	175.00	175.00	N/A	N/A
17:00-17:15	D	745.00	745.00	N/A	N/A
17:00-17:15	E	542.00	542.00	N/A	N/A
17:15-17:30	A	1226.00	1226.00	N/A	N/A
17:15-17:30	B	157.00	157.00	N/A	N/A
17:15-17:30	C	175.00	175.00	N/A	N/A
17:15-17:30	D	745.00	745.00	N/A	N/A
17:15-17:30	E	542.00	542.00	N/A	N/A
17:30-17:45	A	1226.00	1226.00	N/A	N/A
17:30-17:45	B	157.00	157.00	N/A	N/A
17:30-17:45	C	175.00	175.00	N/A	N/A
17:30-17:45	D	745.00	745.00	N/A	N/A
17:30-17:45	E	542.00	542.00	N/A	N/A
17:45-18:00	A	1226.00	1226.00	N/A	N/A
17:45-18:00	B	157.00	157.00	N/A	N/A
17:45-18:00	C	175.00	175.00	N/A	N/A
17:45-18:00	D	745.00	745.00	N/A	N/A
17:45-18:00	E	542.00	542.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

	To					
		A	B	C	D	E
From	A	0.00	35.00	58.00	931.00	202.00
	B	36.00	0.00	0.00	18.00	103.00
	C	54.00	0.00	0.00	17.00	104.00
	D	665.00	22.00	22.00	0.00	36.00
	E	310.00	55.00	55.00	122.00	0.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

	To					
		A	B	C	D	E
A		0.00	0.00	0.00	0.70	0.10

From	A	0.00	0.03	0.05	0.78	0.18
	B	0.23	0.00	0.00	0.11	0.66
	C	0.31	0.00	0.00	0.10	0.59
	D	0.89	0.03	0.03	0.00	0.05
	E	0.57	0.10	0.10	0.23	0.00

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

From	To					
		A	B	C	D	E
	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

From	To					
		A	B	C	D	E
	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.97	1.13	21.97	F	1226.00	1226.00	973.80	0.79	16.23	985.30	0.80	0.506	1398.428
B	0.56	0.48	1.22	D	157.00	157.00	66.45	0.42	1.11	66.60	0.42	0.443	894.185
C	0.43	0.26	0.74	C	175.00	175.00	42.10	0.24	0.70	42.14	0.24	0.398	967.094
D	0.56	0.10	1.28	A	745.00	745.00	74.91	0.10	1.25	74.95	0.10	0.585	1616.944
E	0.56	0.14	1.25	A	542.00	542.00	73.03	0.13	1.22	73.08	0.13	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
17:00-17:15	A	1226.00	1259.92	0.973	0.00	0.00	13.40	140.21	(0.00)	0.525
17:00-17:15	B	157.00	302.54	0.519	0.00	0.00	1.02	13.70	(0.00)	0.391
17:00-17:15	C	175.00	427.38	0.409	0.00	0.00	0.68	9.44	(0.00)	0.233
17:00-17:15	D	745.00	1333.90	0.559	0.00	0.00	1.25	17.83	(0.00)	0.100
17:00-17:15	E	542.00	977.80	0.554	0.00	0.00	1.22	17.26	(0.00)	0.135
17:15-17:30	A	1226.00	1258.74	0.974	0.00	13.40	17.49	234.52	(0.00)	0.892
17:15-17:30	B	157.00	285.78	0.549	0.00	1.02	1.16	16.77	(0.00)	0.461
17:15-17:30	C	175.00	411.87	0.425	0.00	0.68	0.72	10.64	(0.00)	0.253
17:15-17:30	D	745.00	1327.16	0.561	0.00	1.25	1.27	18.90	(0.00)	0.103
17:15-17:30	E	542.00	974.52	0.556	0.00	1.22	1.24	18.47	(0.00)	0.139
17:30-17:45	A	1226.00	1258.72	0.974	0.00	17.49	20.09	283.01	(0.00)	1.033
17:30-17:45	B	157.00	283.19	0.554	0.00	1.16	1.20	17.78	(0.00)	0.473
17:30-17:45	C	175.00	409.51	0.427	0.00	0.72	0.73	10.95	(0.00)	0.256
17:30-17:45	D	745.00	1326.31	0.562	0.00	1.27	1.27	19.06	(0.00)	0.103
17:30-17:45	E	542.00	974.42	0.556	0.00	1.24	1.24	18.62	(0.00)	0.139
17:45-18:00	A	1226.00	1258.72	0.974	0.00	20.09	21.97	316.06	(0.00)	1.127
17:45-18:00	B	157.00	281.96	0.557	0.00	1.20	1.22	18.20	(0.00)	0.479
17:45-18:00	C	175.00	408.43	0.428	0.00	0.73	0.74	11.07	(0.00)	0.257
17:45-18:00	D	745.00	1325.98	0.562	0.00	1.27	1.28	19.12	(0.00)	0.103
17:45-18:00	E	542.00	974.40	0.556	0.00	1.24	1.25	18.68	(0.00)	0.139

A1 - (Default Analysis Set) - D13 - Base 2028 + Saturn + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2028 + Saturn + Dev, PM	Base 2028 + Saturn + Dev	PM			Yes			17:00	18:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

TRAFFIC FLOWS

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1228.00	100.000	1.00
B	FLAT	Yes	173.00	100.000	1.00
C	FLAT	Yes	191.00	100.000	1.00
D	FLAT	Yes	751.00	100.000	1.00
E	FLAT	Yes	554.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	1228.00	1228.00	N/A	N/A
17:00-17:15	B	173.00	173.00	N/A	N/A
17:00-17:15	C	191.00	191.00	N/A	N/A
17:00-17:15	D	751.00	751.00	N/A	N/A
17:00-17:15	E	554.00	554.00	N/A	N/A
17:15-17:30	A	1228.00	1228.00	N/A	N/A
17:15-17:30	B	173.00	173.00	N/A	N/A
17:15-17:30	C	191.00	191.00	N/A	N/A
17:15-17:30	D	751.00	751.00	N/A	N/A
17:15-17:30	E	554.00	554.00	N/A	N/A
17:30-17:45	A	1228.00	1228.00	N/A	N/A
17:30-17:45	B	173.00	173.00	N/A	N/A
17:30-17:45	C	191.00	191.00	N/A	N/A
17:30-17:45	D	751.00	751.00	N/A	N/A
17:30-17:45	E	554.00	554.00	N/A	N/A
17:45-18:00	A	1228.00	1228.00	N/A	N/A
17:45-18:00	B	173.00	173.00	N/A	N/A
17:45-18:00	C	191.00	191.00	N/A	N/A
17:45-18:00	D	751.00	751.00	N/A	N/A
17:45-18:00	E	554.00	554.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

	To				
	A	B	C	D	E
A	0.00	35.00	59.00	932.00	202.00
B	36.00	0.00	0.00	18.00	119.00

From	To	A	B	C	D	E
C		54.00	0.00	0.00	17.00	120.00
D		665.00	22.00	22.00	0.00	42.00
E		310.00	58.00	58.00	128.00	0.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

From	To	A	B	C	D	E
A		0.00	0.03	0.05	0.76	0.16
B		0.21	0.00	0.00	0.10	0.69
C		0.28	0.00	0.00	0.09	0.63
D		0.89	0.03	0.03	0.00	0.06
E		0.56	0.10	0.10	0.23	0.00

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

From	To	A	B	C	D	E
A		1.00	1.00	1.00	1.00	1.00
B		1.00	1.00	1.00	1.00	1.00
C		1.00	1.00	1.00	1.00	1.00
D		1.00	1.00	1.00	1.00	1.00
E		1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

From	To	A	B	C	D	E
A		0.00	0.00	0.00	0.00	0.00
B		0.00	0.00	0.00	0.00	0.00
C		0.00	0.00	0.00	0.00	0.00
D		0.00	0.00	0.00	0.00	0.00
E		0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.98	1.25	24.45	F	1228.00	1228.00	1055.81	0.86	17.60	1070.13	0.87	0.506	1398.428
B	0.62	0.57	1.59	D	173.00	173.00	84.64	0.49	1.41	84.91	0.49	0.443	894.185
C	0.48	0.29	0.90	C	191.00	191.00	50.77	0.27	0.85	50.83	0.27	0.398	967.094
D	0.57	0.11	1.34	A	751.00	751.00	78.67	0.10	1.31	78.71	0.10	0.585	1616.944
E	0.57	0.14	1.31	A	554.00	554.00	76.66	0.14	1.28	76.71	0.14	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	0.76	13.05	53.00	58.00		0.506	1398.428

A	4.37	5.40	5.10	13.05	55.00	50.00		0.500	1350.420
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
17:00-17:15	A	1228.00	1253.94	0.979	0.00	0.00	14.17	146.31	(0.00)	0.548
17:00-17:15	B	173.00	299.07	0.578	0.00	0.00	1.28	16.85	(0.00)	0.442
17:00-17:15	C	191.00	419.81	0.455	0.00	0.00	0.81	11.21	(0.00)	0.255
17:00-17:15	D	751.00	1316.35	0.571	0.00	0.00	1.31	18.66	(0.00)	0.104
17:00-17:15	E	554.00	978.01	0.566	0.00	0.00	1.28	18.07	(0.00)	0.138
17:15-17:30	A	1228.00	1252.67	0.980	0.00	14.17	18.92	251.18	(0.00)	0.955
17:15-17:30	B	173.00	282.02	0.613	0.00	1.28	1.49	21.30	(0.00)	0.540
17:15-17:30	C	191.00	403.78	0.473	0.00	0.81	0.87	12.83	(0.00)	0.281
17:15-17:30	D	751.00	1308.89	0.574	0.00	1.31	1.33	19.85	(0.00)	0.107
17:15-17:30	E	554.00	974.56	0.568	0.00	1.28	1.30	19.39	(0.00)	0.143
17:30-17:45	A	1228.00	1252.65	0.980	0.00	18.92	22.07	308.71	(0.00)	1.126
17:30-17:45	B	173.00	279.28	0.619	0.00	1.49	1.55	22.89	(0.00)	0.560
17:30-17:45	C	191.00	401.22	0.476	0.00	0.87	0.89	13.27	(0.00)	0.285
17:30-17:45	D	751.00	1307.88	0.574	0.00	1.33	1.34	20.04	(0.00)	0.108
17:30-17:45	E	554.00	974.43	0.569	0.00	1.30	1.31	19.57	(0.00)	0.143
17:45-18:00	A	1228.00	1252.65	0.980	0.00	22.07	24.45	349.62	(0.00)	1.246
17:45-18:00	B	173.00	277.94	0.622	0.00	1.55	1.59	23.59	(0.00)	0.568
17:45-18:00	C	191.00	400.02	0.477	0.00	0.89	0.90	13.45	(0.00)	0.287
17:45-18:00	D	751.00	1307.50	0.574	0.00	1.34	1.34	20.11	(0.00)	0.108
17:45-18:00	E	554.00	974.41	0.569	0.00	1.31	1.31	19.63	(0.00)	0.143

ARCADY 7

Version: 7.0.1.130 [12 March 2010]

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File: P:\Bedford Park Developments\T251 - Bexhill\Calculations\Arcady\Little Common Roundabout with Development - Sensi B.arc7

Report generation date: 18/12/2017 17:08:41

- » A1 - (Default Analysis Set) - D2 - Base 2017 + Com, AM
- » A1 - (Default Analysis Set) - D3 - Base 2017 + Com + Dev, AM
- » A1 - (Default Analysis Set) - D5 - Base 2028 + Saturn, AM
- » A1 - (Default Analysis Set) - D6 - Base 2028 + Saturn + Dev, AM
- » A1 - (Default Analysis Set) - D9 - Base 2017 + Com, PM
- » A1 - (Default Analysis Set) - D10 - Base 2017 + Com + Dev, PM
- » A1 - (Default Analysis Set) - D12 - Base 2028 + Saturn, PM
- » A1 - (Default Analysis Set) - D13 - Base 2028 + Saturn + Dev, PM

Summary of roundabout performance

	AM		PM	
	Queue (PCU)	RFC	Queue (PCU)	RFC
(Default Analysis Set) - Base 2017 + Com				
Arm A	14.59	0.95	6.79	0.88
Arm B	0.40	0.29	0.21	0.17
Arm C	2.24	0.70	0.95	0.49
Arm D	3.84	0.80	1.57	0.61
Arm E	1.44	0.59	1.54	0.61
(Default Analysis Set) - Base 2017 + Com + Dev				
Arm A	23.55	0.98	7.92	0.89
Arm B	0.44	0.31	0.23	0.19
Arm C	2.56	0.73	1.13	0.53
Arm D	4.01	0.80	1.65	0.62
Arm E	1.53	0.61	1.91	0.66
(Default Analysis Set) - Base 2028 + Saturn				
Arm A	6.95	0.88	21.97	0.97
Arm B	0.47	0.32	1.22	0.56
Arm C	0.47	0.32	0.74	0.43
Arm D	3.17	0.76	1.28	0.56
Arm E	1.33	0.57	1.25	0.56
(Default Analysis Set) - Base 2028 + Saturn + Dev				
Arm A	10.05	0.92	27.42	0.99
Arm B	0.50	0.34	1.58	0.62
Arm C	0.48	0.33	0.90	0.48
Arm D	3.30	0.77	1.35	0.58
Arm E	1.40	0.58	1.41	0.59

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

Base 2017 + Com - AM runs from 08:00:00 to 09:00:00

Base 2017 + Com + Dev - AM runs from 08:00:00 to 09:00:00

Base 2028 + Satum - AM runs from 08:00:00 to 09:00:00
Base 2028 + Satum + Dev - AM runs from 08:00:00 to 09:00:00
Base 2017 + Com - PM runs from 17:00:00 to 18:00:00
Base 2017 + Com + Dev - PM runs from 17:00:00 to 18:00:00
Base 2028 + Satum - PM runs from 17:00:00 to 18:00:00
Base 2028 + Satum + Dev - PM runs from 17:00:00 to 18:00:00

File summary

File Description

Title	(untitled)
Date	27/04/2015
Status	(new file)
Enumerator	RF
Results Upto Date	True

Analysis Options

RFC Threshold	Vehicle Length (m)	Do Queue Variations
0.85	5.75	

Sorting and Display

Show Arm Names	Arm Grouping	Sorting Direction	Sorting Type	Data Matrix Style	Time Style
	Order	Ascending	Numerical	By Destination	Absolute Time

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	PCU	PCU	perHour	min	-Min	perMin

A1 - (Default Analysis Set) - D2 - Base 2017 + Com, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2017 + Com, AM	Base 2017 + Com	AM			Yes			08:00	09:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

TABLE 10-10

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1214.00	100.000	1.00
B	FLAT	Yes	79.00	100.000	1.00
C	FLAT	Yes	329.00	100.000	1.00
D	FLAT	Yes	999.00	100.000	1.00
E	FLAT	Yes	470.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	1214.00	1214.00	N/A	N/A
08:00-08:15	B	79.00	79.00	N/A	N/A
08:00-08:15	C	329.00	329.00	N/A	N/A
08:00-08:15	D	999.00	999.00	N/A	N/A
08:00-08:15	E	470.00	470.00	N/A	N/A
08:15-08:30	A	1214.00	1214.00	N/A	N/A
08:15-08:30	B	79.00	79.00	N/A	N/A
08:15-08:30	C	329.00	329.00	N/A	N/A
08:15-08:30	D	999.00	999.00	N/A	N/A
08:15-08:30	E	470.00	470.00	N/A	N/A
08:30-08:45	A	1214.00	1214.00	N/A	N/A
08:30-08:45	B	79.00	79.00	N/A	N/A
08:30-08:45	C	329.00	329.00	N/A	N/A
08:30-08:45	D	999.00	999.00	N/A	N/A
08:30-08:45	E	470.00	470.00	N/A	N/A
08:45-09:00	A	1214.00	1214.00	N/A	N/A
08:45-09:00	B	79.00	79.00	N/A	N/A
08:45-09:00	C	329.00	329.00	N/A	N/A
08:45-09:00	D	999.00	999.00	N/A	N/A
08:45-09:00	E	470.00	470.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

	To				
	A	B	C	D	E
A	0.00	9.00	79.00	854.00	272.00
B	14.00	0.00	30.00	3.00	32.00

From						
	C	157.00	0.00	0.00	28.00	144.00
	D	929.00	19.00	24.00	3.00	24.00
	E	285.00	18.00	96.00	68.00	3.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.01	0.07	0.70	0.22
	B	0.18	0.00	0.38	0.04	0.41
	C	0.48	0.00	0.00	0.09	0.44
	D	0.93	0.02	0.02	0.00	0.02
	E	0.61	0.04	0.20	0.14	0.01

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.95	0.76	14.59	E	1214.00	1214.00	707.47	0.58	11.79	712.45	0.59	0.506	1398.428
B	0.29	0.30	0.40	C	79.00	79.00	22.49	0.28	0.37	22.51	0.28	0.443	894.185
C	0.70	0.42	2.24	D	329.00	329.00	122.91	0.37	2.05	123.23	0.37	0.398	967.094
D	0.80	0.23	3.84	B	999.00	999.00	215.99	0.22	3.60	216.34	0.22	0.585	1616.944
E	0.59	0.19	1.44	B	470.00	470.00	83.49	0.18	1.39	83.57	0.18	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428

B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
08:00-08:15	A	1214.00	1282.93	0.946	0.00	0.00	10.55	116.87	(0.00)	0.440
08:00-08:15	B	79.00	294.31	0.268	0.00	0.00	0.36	5.00	(0.00)	0.275
08:00-08:15	C	329.00	486.70	0.676	0.00	0.00	1.94	25.58	(0.00)	0.348
08:00-08:15	D	999.00	1263.47	0.791	0.00	0.00	3.53	47.03	(0.00)	0.206
08:00-08:15	E	470.00	801.79	0.586	0.00	0.00	1.38	19.21	(0.00)	0.175
08:15-08:30	A	1214.00	1281.56	0.947	0.00	10.55	12.72	176.66	(0.00)	0.670
08:15-08:30	B	79.00	278.61	0.284	0.00	0.36	0.39	5.69	(0.00)	0.300
08:15-08:30	C	329.00	473.70	0.695	0.00	1.94	2.15	31.15	(0.00)	0.408
08:15-08:30	D	999.00	1254.91	0.796	0.00	3.53	3.74	54.96	(0.00)	0.232
08:15-08:30	E	470.00	793.11	0.593	0.00	1.38	1.43	21.15	(0.00)	0.185
08:30-08:45	A	1214.00	1281.51	0.947	0.00	12.72	13.87	200.18	(0.00)	0.729
08:30-08:45	B	79.00	276.75	0.285	0.00	0.39	0.39	5.87	(0.00)	0.303
08:30-08:45	C	329.00	472.14	0.697	0.00	2.15	2.21	32.76	(0.00)	0.416
08:30-08:45	D	999.00	1254.03	0.797	0.00	3.74	3.81	56.66	(0.00)	0.234
08:30-08:45	E	470.00	792.68	0.593	0.00	1.43	1.44	21.50	(0.00)	0.186
08:45-09:00	A	1214.00	1281.51	0.947	0.00	13.87	14.59	213.77	(0.00)	0.762
08:45-09:00	B	79.00	276.01	0.286	0.00	0.39	0.40	5.93	(0.00)	0.304
08:45-09:00	C	329.00	471.51	0.698	0.00	2.21	2.24	33.42	(0.00)	0.419
08:45-09:00	D	999.00	1253.73	0.797	0.00	3.81	3.84	57.35	(0.00)	0.235
08:45-09:00	E	470.00	792.57	0.593	0.00	1.44	1.44	21.62	(0.00)	0.186

A1 - (Default Analysis Set) - D3 - Base 2017 + Com + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2017 + Com +	Base 2017 + Com +	AM			Yes			08:00	09:00	60	15	FLAT

A	((calculated))	((calculated))	0.506	1398.428
B	((calculated))	((calculated))	0.443	894.185
C	((calculated))	((calculated))	0.398	967.094
D	((calculated))	((calculated))	0.585	1616.944
E	((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1253.00	100.000	1.00
B	FLAT	Yes	81.00	100.000	1.00
C	FLAT	Yes	338.00	100.000	1.00
D	FLAT	Yes	1000.00	100.000	1.00
E	FLAT	Yes	477.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	1253.00	1253.00	N/A	N/A
08:00-08:15	B	81.00	81.00	N/A	N/A
08:00-08:15	C	338.00	338.00	N/A	N/A
08:00-08:15	D	1000.00	1000.00	N/A	N/A
08:00-08:15	E	477.00	477.00	N/A	N/A
08:15-08:30	A	1253.00	1253.00	N/A	N/A
08:15-08:30	B	81.00	81.00	N/A	N/A
08:15-08:30	C	338.00	338.00	N/A	N/A
08:15-08:30	D	1000.00	1000.00	N/A	N/A
08:15-08:30	E	477.00	477.00	N/A	N/A
08:30-08:45	A	1253.00	1253.00	N/A	N/A
08:30-08:45	B	81.00	81.00	N/A	N/A
08:30-08:45	C	338.00	338.00	N/A	N/A
08:30-08:45	D	1000.00	1000.00	N/A	N/A
08:30-08:45	E	477.00	477.00	N/A	N/A
08:45-09:00	A	1253.00	1253.00	N/A	N/A
08:45-09:00	B	81.00	81.00	N/A	N/A
08:45-09:00	C	338.00	338.00	N/A	N/A
08:45-09:00	D	1000.00	1000.00	N/A	N/A
08:45-09:00	E	477.00	477.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	12.00	95.00	866.00	280.00
	B	16.00	0.00	30.00	3.00	32.00
	C	166.00	0.00	0.00	28.00	144.00
	D	930.00	19.00	24.00	3.00	24.00
	E	292.00	18.00	96.00	68.00	3.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.01	0.08	0.69	0.22
	B	0.20	0.00	0.37	0.04	0.40
	C	0.49	0.00	0.00	0.08	0.43
	D	0.93	0.02	0.02	0.00	0.02
	E	0.61	0.04	0.20	0.14	0.01

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.98	1.18	23.55	F	1253.00	1253.00	1028.61	0.82	17.14	1041.59	0.83	0.506	1398.428
B	0.31	0.33	0.44	C	81.00	81.00	24.68	0.30	0.41	24.70	0.30	0.443	894.185
C	0.73	0.47	2.56	D	338.00	338.00	138.17	0.41	2.30	138.59	0.41	0.398	967.094
D	0.80	0.25	4.01	B	1000.00	1000.00	224.52	0.22	3.74	224.90	0.22	0.585	1616.944

E	0.61	0.19	1.53	B	477.00	477.00	88.08	0.18	1.47	88.17	0.18	0.524	1393.232
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Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
08:00-08:15	A	1253.00	1282.98	0.977	0.00	0.00	13.95	144.99	(0.00)	0.531
08:00-08:15	B	81.00	284.35	0.285	0.00	0.00	0.39	5.40	(0.00)	0.291
08:00-08:15	C	338.00	482.74	0.700	0.00	0.00	2.15	28.00	(0.00)	0.373
08:00-08:15	D	1000.00	1254.64	0.797	0.00	0.00	3.66	48.47	(0.00)	0.213
08:00-08:15	E	477.00	796.05	0.599	0.00	0.00	1.45	20.17	(0.00)	0.182
08:15-08:30	A	1253.00	1281.56	0.978	0.00	13.95	18.45	246.00	(0.00)	0.916
08:15-08:30	B	81.00	266.73	0.304	0.00	0.39	0.43	6.23	(0.00)	0.322
08:15-08:30	C	338.00	468.28	0.722	0.00	2.15	2.42	34.90	(0.00)	0.450
08:15-08:30	D	1000.00	1245.16	0.803	0.00	3.66	3.89	57.10	(0.00)	0.242
08:15-08:30	E	477.00	786.96	0.606	0.00	1.45	1.51	22.32	(0.00)	0.193
08:30-08:45	A	1253.00	1281.52	0.978	0.00	18.45	21.38	299.97	(0.00)	1.071
08:30-08:45	B	81.00	263.95	0.307	0.00	0.43	0.44	6.47	(0.00)	0.328
08:30-08:45	C	338.00	465.97	0.725	0.00	2.42	2.51	37.14	(0.00)	0.464
08:30-08:45	D	1000.00	1243.92	0.804	0.00	3.89	3.97	59.06	(0.00)	0.245
08:30-08:45	E	477.00	786.45	0.607	0.00	1.51	1.52	22.73	(0.00)	0.194
08:45-09:00	A	1253.00	1281.51	0.978	0.00	21.38	23.55	337.65	(0.00)	1.179
08:45-09:00	B	81.00	262.60	0.308	0.00	0.44	0.44	6.57	(0.00)	0.330
08:45-09:00	C	338.00	464.85	0.727	0.00	2.51	2.56	38.13	(0.00)	0.469
08:45-09:00	D	1000.00	1243.42	0.804	0.00	3.97	4.01	59.88	(0.00)	0.246
08:45-09:00	E	477.00	786.32	0.607	0.00	1.52	1.53	22.87	(0.00)	0.194

A1 - (Default Analysis Set) - D5 - Base 2028 + Saturn, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default)				(D1)		100.000	100.000	

Analysis Set)		YES		(D1)		100.000	100.000	
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Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2028 + Saturn, AM	Base 2028 + Saturn	AM			Yes			08:00	09:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None

C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1118.00	100.000	1.00
B	FLAT	Yes	107.00	100.000	1.00
C	FLAT	Yes	152.00	100.000	1.00
D	FLAT	Yes	1035.00	100.000	1.00
E	FLAT	Yes	443.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	1118.00	1118.00	N/A	N/A
08:00-08:15	B	107.00	107.00	N/A	N/A
08:00-08:15	C	152.00	152.00	N/A	N/A
08:00-08:15	D	1035.00	1035.00	N/A	N/A
08:00-08:15	E	443.00	443.00	N/A	N/A
08:15-08:30	A	1118.00	1118.00	N/A	N/A
08:15-08:30	B	107.00	107.00	N/A	N/A
08:15-08:30	C	152.00	152.00	N/A	N/A
08:15-08:30	D	1035.00	1035.00	N/A	N/A
08:15-08:30	E	443.00	443.00	N/A	N/A
08:30-08:45	A	1118.00	1118.00	N/A	N/A
08:30-08:45	B	107.00	107.00	N/A	N/A
08:30-08:45	C	152.00	152.00	N/A	N/A

From	To	A	B	C	D	E
08:30-08:45	D	1035.00	1035.00	N/A	N/A	N/A
08:30-08:45	E	443.00	443.00	N/A	N/A	N/A
08:45-09:00	A	1118.00	1118.00	N/A	N/A	N/A
08:45-09:00	B	107.00	107.00	N/A	N/A	N/A
08:45-09:00	C	152.00	152.00	N/A	N/A	N/A
08:45-09:00	D	1035.00	1035.00	N/A	N/A	N/A
08:45-09:00	E	443.00	443.00	N/A	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

From	To				
	A	B	C	D	E
A	0.00	20.00	46.00	841.00	211.00
B	80.00	0.00	0.00	13.00	14.00
C	125.00	0.00	0.00	13.00	14.00
D	947.00	15.00	15.00	0.00	58.00
E	221.00	72.00	72.00	78.00	0.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

From	To				
	A	B	C	D	E
A	0.00	0.02	0.04	0.75	0.19
B	0.75	0.00	0.00	0.12	0.13
C	0.82	0.00	0.00	0.09	0.09
D	0.91	0.01	0.01	0.00	0.06
E	0.50	0.16	0.16	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

From	To				
	A	B	C	D	E
A	1.00	1.00	1.00	1.00	1.00
B	1.00	1.00	1.00	1.00	1.00
C	1.00	1.00	1.00	1.00	1.00
D	1.00	1.00	1.00	1.00	1.00
E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

From	To				
	A	B	C	D	E
A	0.00	0.00	0.00	0.00	0.00
B	0.00	0.00	0.00	0.00	0.00
C	0.00	0.00	0.00	0.00	0.00
D	0.00	0.00	0.00	0.00	0.00
E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.88	0.39	6.95	C	1118.00	1118.00	376.45	0.34	6.27	377.59	0.34	0.506	1398.428
B	0.32	0.26	0.47	C	107.00	107.00	26.79	0.25	0.45	26.81	0.25	0.443	894.185
C	0.32	0.19	0.47	B	152.00	152.00	27.22	0.18	0.45	27.24	0.18	0.398	967.094
D	0.76	0.19	3.17	B	1035.00	1035.00	181.66	0.18	3.03	181.88	0.18	0.585	1616.944
E	0.57	0.18	1.33	B	443.00	443.00	77.10	0.17	1.29	77.17	0.17	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
08:00-08:15	A	1118.00	1272.34	0.879	0.00	0.00	6.12	75.43	(0.00)	0.303
08:00-08:15	B	107.00	346.43	0.309	0.00	0.00	0.44	6.12	(0.00)	0.247
08:00-08:15	C	152.00	485.42	0.313	0.00	0.00	0.45	6.37	(0.00)	0.178
08:00-08:15	D	1035.00	1361.91	0.760	0.00	0.00	3.02	41.00	(0.00)	0.171
08:00-08:15	E	443.00	781.03	0.567	0.00	0.00	1.28	17.85	(0.00)	0.172
08:15-08:30	A	1118.00	1270.91	0.880	0.00	6.12	6.63	96.35	(0.00)	0.376
08:15-08:30	B	107.00	335.88	0.319	0.00	0.44	0.46	6.78	(0.00)	0.262
08:15-08:30	C	152.00	476.03	0.319	0.00	0.45	0.46	6.88	(0.00)	0.185
08:15-08:30	D	1035.00	1357.66	0.762	0.00	3.02	3.12	46.21	(0.00)	0.185
08:15-08:30	E	443.00	773.87	0.572	0.00	1.28	1.32	19.53	(0.00)	0.181
08:30-08:45	A	1118.00	1270.88	0.880	0.00	6.63	6.84	101.21	(0.00)	0.383
08:30-08:45	B	107.00	335.32	0.319	0.00	0.46	0.46	6.92	(0.00)	0.263
08:30-08:45	C	152.00	475.53	0.320	0.00	0.46	0.47	6.97	(0.00)	0.185
08:30-08:45	D	1035.00	1357.46	0.762	0.00	3.12	3.15	47.06	(0.00)	0.186
08:30-08:45	E	443.00	773.68	0.573	0.00	1.32	1.32	19.81	(0.00)	0.181
08:45-09:00	A	1118.00	1270.87	0.880	0.00	6.84	6.95	103.46	(0.00)	0.386
08:45-09:00	B	107.00	335.15	0.319	0.00	0.46	0.47	6.96	(0.00)	0.263
08:45-09:00	C	152.00	475.38	0.320	0.00	0.47	0.47	7.00	(0.00)	0.186
08:45-09:00	D	1035.00	1357.41	0.762	0.00	3.15	3.17	47.39	(0.00)	0.186
08:45-09:00	E	443.00	773.64	0.573	0.00	1.32	1.33	19.91	(0.00)	0.181

A1 - (Default Analysis Set) - D6 - Base 2028 + Saturn + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2028 + Saturn + Dev, AM	Base 2028 + Saturn + Dev	AM			Yes			08:00	09:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.34	7.42	4.88	5.88	54.00	54.00	

C	3.07	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1166.00	100.000	1.00
B	FLAT	Yes	108.00	100.000	1.00
C	FLAT	Yes	153.00	100.000	1.00
D	FLAT	Yes	1041.00	100.000	1.00
E	FLAT	Yes	450.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
08:00-08:15	A	1166.00	1166.00	N/A	N/A
08:00-08:15	B	108.00	108.00	N/A	N/A
08:00-08:15	C	153.00	153.00	N/A	N/A
08:00-08:15	D	1041.00	1041.00	N/A	N/A
08:00-08:15	E	450.00	450.00	N/A	N/A

08:15-08:30	A	1166.00	1166.00	N/A	N/A
08:15-08:30	B	108.00	108.00	N/A	N/A
08:15-08:30	C	153.00	153.00	N/A	N/A
08:15-08:30	D	1041.00	1041.00	N/A	N/A
08:15-08:30	E	450.00	450.00	N/A	N/A
08:30-08:45	A	1166.00	1166.00	N/A	N/A
08:30-08:45	B	108.00	108.00	N/A	N/A
08:30-08:45	C	153.00	153.00	N/A	N/A
08:30-08:45	D	1041.00	1041.00	N/A	N/A
08:30-08:45	E	450.00	450.00	N/A	N/A
08:45-09:00	A	1166.00	1166.00	N/A	N/A
08:45-09:00	B	108.00	108.00	N/A	N/A
08:45-09:00	C	153.00	153.00	N/A	N/A
08:45-09:00	D	1041.00	1041.00	N/A	N/A
08:45-09:00	E	450.00	450.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

		To				
From		A	B	C	D	E
	A	0.00	33.00	59.00	855.00	219.00
	B	81.00	0.00	0.00	13.00	14.00
	C	126.00	0.00	0.00	13.00	14.00
	D	953.00	15.00	15.00	0.00	58.00
	E	228.00	72.00	72.00	78.00	0.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

		To				
From		A	B	C	D	E
	A	0.00	0.03	0.05	0.73	0.19
	B	0.75	0.00	0.00	0.12	0.13
	C	0.82	0.00	0.00	0.08	0.09
	D	0.92	0.01	0.01	0.00	0.06
	E	0.51	0.16	0.16	0.17	0.00

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

		To				
From		A	B	C	D	E
	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
	A	0.00	0.00	0.00	0.00	0.00

From	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.92	0.54	10.05	D	1166.00	1166.00	519.18	0.45	8.65	521.56	0.45	0.506	1398.428
B	0.34	0.28	0.50	C	108.00	108.00	28.84	0.27	0.48	28.86	0.27	0.443	894.185
C	0.33	0.19	0.48	B	153.00	153.00	28.14	0.18	0.47	28.16	0.18	0.398	967.094
D	0.77	0.19	3.30	B	1041.00	1041.00	188.82	0.18	3.15	189.06	0.18	0.585	1616.944
E	0.58	0.19	1.40	B	450.00	450.00	80.88	0.18	1.35	80.95	0.18	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
08:00-08:15	A	1166.00	1272.39	0.916	0.00	0.00	8.15	95.33	(0.00)	0.372
08:00-08:15	B	108.00	334.36	0.323	0.00	0.00	0.47	6.50	(0.00)	0.261
08:00-08:15	C	153.00	479.12	0.319	0.00	0.00	0.46	6.55	(0.00)	0.182
08:00-08:15	D	1041.00	1357.03	0.767	0.00	0.00	3.13	42.38	(0.00)	0.176
08:00-08:15	E	450.00	777.14	0.579	0.00	0.00	1.34	18.66	(0.00)	0.178
08:15-08:30	A	1166.00	1270.92	0.917	0.00	8.15	9.26	131.99	(0.00)	0.509
08:15-08:30	B	108.00	321.40	0.336	0.00	0.47	0.50	7.30	(0.00)	0.281
08:15-08:30	C	153.00	467.76	0.327	0.00	0.46	0.48	7.11	(0.00)	0.190
08:15-08:30	D	1041.00	1352.10	0.770	0.00	3.13	3.25	48.04	(0.00)	0.192
08:15-08:30	E	450.00	769.72	0.585	0.00	1.34	1.38	20.49	(0.00)	0.187
08:30-08:45	A	1166.00	1270.88	0.917	0.00	9.26	9.76	143.10	(0.00)	0.532
08:30-08:45	B	108.00	320.32	0.337	0.00	0.50	0.50	7.49	(0.00)	0.282
08:30-08:45	C	153.00	466.81	0.328	0.00	0.48	0.48	7.23	(0.00)	0.191
08:30-08:45	D	1041.00	1351.75	0.770	0.00	3.25	3.28	49.01	(0.00)	0.193
08:30-08:45	E	450.00	769.50	0.585	0.00	1.38	1.39	20.81	(0.00)	0.188
08:45-09:00	A	1166.00	1270.87	0.917	0.00	9.76	10.05	148.75	(0.00)	0.542
08:45-09:00	B	108.00	319.95	0.338	0.00	0.50	0.50	7.55	(0.00)	0.283
08:45-09:00	C	153.00	466.49	0.328	0.00	0.48	0.48	7.26	(0.00)	0.191

08:45-09:00	D	1041.00	1351.64	0.770	0.00	3.28	3.30	49.40	(0.00)	0.193
08:45-09:00	E	450.00	769.45	0.585	0.00	1.39	1.40	20.92	(0.00)	0.188

A1 - (Default Analysis Set) - D9 - Base 2017 + Com, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2017 + Com, PM	Base 2017 + Com	PM			Yes			17:00	18:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1070.00	100.000	1.00
B	FLAT	Yes	53.00	100.000	1.00
C	FLAT	Yes	263.00	100.000	1.00
D	FLAT	Yes	831.00	100.000	1.00
E	FLAT	Yes	568.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	1070.00	1070.00	N/A	N/A
17:00-17:15	B	53.00	53.00	N/A	N/A
17:00-17:15	C	263.00	263.00	N/A	N/A
17:00-17:15	D	831.00	831.00	N/A	N/A
17:00-17:15	E	568.00	568.00	N/A	N/A
17:15-17:30	A	1070.00	1070.00	N/A	N/A
17:15-17:30	B	53.00	53.00	N/A	N/A
17:15-17:30	C	263.00	263.00	N/A	N/A
17:15-17:30	D	831.00	831.00	N/A	N/A
17:15-17:30	E	568.00	568.00	N/A	N/A
17:30-17:45	A	1070.00	1070.00	N/A	N/A
17:30-17:45	B	53.00	53.00	N/A	N/A
17:30-17:45	C	263.00	263.00	N/A	N/A
17:30-17:45	D	831.00	831.00	N/A	N/A
17:30-17:45	E	568.00	568.00	N/A	N/A
17:45-18:00	A	1070.00	1070.00	N/A	N/A
17:45-18:00	B	53.00	53.00	N/A	N/A
17:45-18:00	C	263.00	263.00	N/A	N/A
17:45-18:00	D	831.00	831.00	N/A	N/A
17:45-18:00	E	568.00	568.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

	To					
From		A	B	C	D	E
	A	0.00	19.00	109.00	777.00	165.00
	B	4.00	0.00	22.00	2.00	25.00
	C	86.00	2.00	0.00	23.00	152.00
	D	728.00	25.00	28.00	3.00	47.00
	E	273.00	53.00	136.00	99.00	7.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

		To				
From		A	B	C	D	E
	A	0.00	0.02	0.10	0.73	0.15
	B	0.08	0.00	0.42	0.04	0.47
	C	0.33	0.01	0.00	0.09	0.58
	D	0.88	0.03	0.03	0.00	0.06
	E	0.48	0.09	0.24	0.17	0.01

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

	To					
From		A	B	C	D	E
	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00

	E	1.00	1.00	1.00	1.00	1.00
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Heavy Vehicle Percentages - Roundabout 1 (for whole period)

	To					
From	A	B	C	D	E	
	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.88	0.39	6.79	C	1070.00	1070.00	367.53	0.34	6.13	368.67	0.34	0.506	1398.428
B	0.17	0.24	0.21	B	53.00	53.00	11.97	0.23	0.20	11.97	0.23	0.443	894.185
C	0.49	0.22	0.95	B	263.00	263.00	55.00	0.21	0.92	55.05	0.21	0.398	967.094
D	0.61	0.11	1.57	A	831.00	831.00	91.79	0.11	1.53	91.85	0.11	0.585	1616.944
E	0.61	0.16	1.54	A	568.00	568.00	89.73	0.16	1.50	89.81	0.16	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
17:00-17:15	A	1070.00	1221.54	0.876	0.00	0.00	5.96	73.57	(0.00)	0.309
17:00-17:15	B	53.00	319.55	0.166	0.00	0.00	0.20	2.77	(0.00)	0.224
17:00-17:15	C	263.00	545.83	0.482	0.00	0.00	0.91	12.65	(0.00)	0.207
17:00-17:15	D	831.00	1363.49	0.609	0.00	0.00	1.53	21.75	(0.00)	0.110
17:00-17:15	E	568.00	937.71	0.606	0.00	0.00	1.50	20.94	(0.00)	0.157
17:15-17:30	A	1070.00	1219.78	0.877	0.00	5.96	6.48	94.05	(0.00)	0.383
17:15-17:30	B	53.00	308.86	0.172	0.00	0.20	0.20	3.03	(0.00)	0.234
17:15-17:30	C	263.00	537.58	0.489	0.00	0.91	0.94	13.93	(0.00)	0.218
17:15-17:30	D	831.00	1359.38	0.611	0.00	1.53	1.56	23.20	(0.00)	0.113
17:15-17:30	E	568.00	934.09	0.608	0.00	1.50	1.53	22.74	(0.00)	0.164
17:30-17:45	A	1070.00	1219.75	0.877	0.00	6.48	6.68	98.85	(0.00)	0.391
17:30-17:45	B	53.00	308.86	0.172	0.00	0.20	0.21	3.03	(0.00)	0.235

17:30-17:45	D	53.00	308.30	0.172	0.00	0.20	0.21	3.09	(0.00)	0.235
17:30-17:45	C	263.00	537.13	0.490	0.00	0.94	0.95	14.17	(0.00)	0.219
17:30-17:45	D	831.00	1359.20	0.611	0.00	1.56	1.56	23.39	(0.00)	0.114
17:30-17:45	E	568.00	934.03	0.608	0.00	1.53	1.54	22.98	(0.00)	0.164
17:45-18:00	A	1070.00	1219.75	0.877	0.00	6.68	6.79	101.06	(0.00)	0.394
17:45-18:00	B	53.00	308.14	0.172	0.00	0.21	0.21	3.09	(0.00)	0.235
17:45-18:00	C	263.00	537.00	0.490	0.00	0.95	0.95	14.25	(0.00)	0.219
17:45-18:00	D	831.00	1359.16	0.611	0.00	1.56	1.57	23.45	(0.00)	0.114
17:45-18:00	E	568.00	934.02	0.608	0.00	1.54	1.54	23.08	(0.00)	0.164

A1 - (Default Analysis Set) - D10 - Base 2017 + Com + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2017 + Com + Dev, PM	Base 2017 + Com + Dev	PM			Yes			17:00	18:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1091.00	100.000	1.00
B	FLAT	Yes	56.00	100.000	1.00

C	FLAT	Yes	283.00	100.000	1.00
D	FLAT	Yes	837.00	100.000	1.00
E	FLAT	Yes	605.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	1091.00	1091.00	N/A	N/A
17:00-17:15	B	56.00	56.00	N/A	N/A
17:00-17:15	C	283.00	283.00	N/A	N/A
17:00-17:15	D	837.00	837.00	N/A	N/A
17:00-17:15	E	605.00	605.00	N/A	N/A
17:15-17:30	A	1091.00	1091.00	N/A	N/A
17:15-17:30	B	56.00	56.00	N/A	N/A
17:15-17:30	C	283.00	283.00	N/A	N/A
17:15-17:30	D	837.00	837.00	N/A	N/A
17:15-17:30	E	605.00	605.00	N/A	N/A
17:30-17:45	A	1091.00	1091.00	N/A	N/A
17:30-17:45	B	56.00	56.00	N/A	N/A
17:30-17:45	C	283.00	283.00	N/A	N/A
17:30-17:45	D	837.00	837.00	N/A	N/A
17:30-17:45	E	605.00	605.00	N/A	N/A
17:45-18:00	A	1091.00	1091.00	N/A	N/A
17:45-18:00	B	56.00	56.00	N/A	N/A
17:45-18:00	C	283.00	283.00	N/A	N/A
17:45-18:00	D	837.00	837.00	N/A	N/A
17:45-18:00	E	605.00	605.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

	To					
		A	B	C	D	E
From	A	0.00	22.00	116.00	782.00	171.00
	B	7.00	0.00	22.00	2.00	25.00
	C	106.00	2.00	0.00	23.00	152.00
	D	734.00	25.00	28.00	3.00	47.00
	E	310.00	53.00	136.00	99.00	7.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

	To					
		A	B	C	D	E
From	A	0.00	0.02	0.11	0.72	0.16
	B	0.13	0.00	0.39	0.04	0.45
	C	0.37	0.01	0.00	0.08	0.54
	D	0.88	0.03	0.03	0.00	0.06
	E	0.51	0.09	0.22	0.16	0.01

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

	To					
	A	B	C	D	E	
From	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

	To					
	A	B	C	D	E	
From	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.89	0.45	7.92	D	1091.00	1091.00	420.92	0.39	7.02	422.46	0.39	0.506	1398.428
B	0.19	0.25	0.23	B	56.00	56.00	13.15	0.23	0.22	13.16	0.23	0.443	894.185
C	0.53	0.24	1.13	B	283.00	283.00	64.74	0.23	1.08	64.81	0.23	0.398	967.094
D	0.62	0.12	1.65	A	837.00	837.00	96.44	0.12	1.61	96.50	0.12	0.585	1616.944
E	0.66	0.19	1.91	B	605.00	605.00	110.43	0.18	1.84	110.55	0.18	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
17:00-17:15	A	1091.00	1221.79	0.893	0.00	0.00	6.74	81.41	(0.00)	0.338
17:00-17:15	B	56.00	313.09	0.179	0.00	0.00	0.21	3.03	(0.00)	0.232
17:00-17:15	C	283.00	541.38	0.523	0.00	0.00	1.06	14.72	(0.00)	0.225
17:00-17:15	D	837.00	1347.24	0.621	0.00	0.00	1.61	22.77	(0.00)	0.115

17:00-17:15	E	605.00	922.90	0.656	0.00	0.00	1.84	25.38	(0.00)	0.181
17:15-17:30	A	1091.00	1219.80	0.894	0.00	6.74	7.46	107.50	(0.00)	0.436
17:15-17:30	B	56.00	301.25	0.186	0.00	0.21	0.22	3.33	(0.00)	0.245
17:15-17:30	C	283.00	532.30	0.532	0.00	1.06	1.11	16.41	(0.00)	0.240
17:15-17:30	D	837.00	1342.54	0.623	0.00	1.61	1.64	24.38	(0.00)	0.119
17:15-17:30	E	605.00	918.91	0.658	0.00	1.84	1.89	28.04	(0.00)	0.191
17:30-17:45	A	1091.00	1219.76	0.894	0.00	7.46	7.75	114.37	(0.00)	0.448
17:30-17:45	B	56.00	300.50	0.186	0.00	0.22	0.23	3.39	(0.00)	0.245
17:30-17:45	C	283.00	531.70	0.532	0.00	1.11	1.12	16.75	(0.00)	0.241
17:30-17:45	D	837.00	1342.29	0.624	0.00	1.64	1.64	24.60	(0.00)	0.119
17:30-17:45	E	605.00	918.84	0.658	0.00	1.89	1.90	28.44	(0.00)	0.191
17:45-18:00	A	1091.00	1219.75	0.894	0.00	7.75	7.92	117.64	(0.00)	0.453
17:45-18:00	B	56.00	300.26	0.187	0.00	0.23	0.23	3.41	(0.00)	0.246
17:45-18:00	C	283.00	531.51	0.532	0.00	1.12	1.13	16.87	(0.00)	0.241
17:45-18:00	D	837.00	1342.23	0.624	0.00	1.64	1.65	24.68	(0.00)	0.119
17:45-18:00	E	605.00	918.82	0.658	0.00	1.90	1.91	28.59	(0.00)	0.191

A1 - (Default Analysis Set) - D12 - Base 2028 + Saturn, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2028 + Saturn, PM	Base 2028 + Saturn	PM			Yes			17:00	18:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1226.00	100.000	1.00
B	FLAT	Yes	157.00	100.000	1.00
C	FLAT	Yes	175.00	100.000	1.00
D	FLAT	Yes	745.00	100.000	1.00
E	FLAT	Yes	542.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	1226.00	1226.00	N/A	N/A
17:00-17:15	B	157.00	157.00	N/A	N/A
17:00-17:15	C	175.00	175.00	N/A	N/A
17:00-17:15	D	745.00	745.00	N/A	N/A
17:00-17:15	E	542.00	542.00	N/A	N/A
17:15-17:30	A	1226.00	1226.00	N/A	N/A
17:15-17:30	B	157.00	157.00	N/A	N/A
17:15-17:30	C	175.00	175.00	N/A	N/A
17:15-17:30	D	745.00	745.00	N/A	N/A
17:15-17:30	E	542.00	542.00	N/A	N/A
17:30-17:45	A	1226.00	1226.00	N/A	N/A
17:30-17:45	B	157.00	157.00	N/A	N/A
17:30-17:45	C	175.00	175.00	N/A	N/A
17:30-17:45	D	745.00	745.00	N/A	N/A
17:30-17:45	E	542.00	542.00	N/A	N/A
17:45-18:00	A	1226.00	1226.00	N/A	N/A
17:45-18:00	B	157.00	157.00	N/A	N/A
17:45-18:00	C	175.00	175.00	N/A	N/A
17:45-18:00	D	745.00	745.00	N/A	N/A
17:45-18:00	E	542.00	542.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

	To					
From		A	B	C	D	E
	A	0.00	35.00	58.00	931.00	202.00
	B	36.00	0.00	0.00	18.00	103.00
	C	54.00	0.00	0.00	17.00	104.00
	D	665.00	22.00	22.00	0.00	36.00
	E	310.00	55.00	55.00	122.00	0.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

To					
	A	B	C	D	E

From		To				
		A	B	C	D	E
	A	0.00	0.03	0.05	0.76	0.16
	B	0.23	0.00	0.00	0.11	0.66
	C	0.31	0.00	0.00	0.10	0.59
	D	0.89	0.03	0.03	0.00	0.05
	E	0.57	0.10	0.10	0.23	0.00

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

From		To				
		A	B	C	D	E
	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

From		To				
		A	B	C	D	E
	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.97	1.13	21.97	F	1226.00	1226.00	973.80	0.79	16.23	985.30	0.80	0.506	1398.428
B	0.56	0.48	1.22	D	157.00	157.00	66.45	0.42	1.11	66.60	0.42	0.443	894.185
C	0.43	0.26	0.74	C	175.00	175.00	42.10	0.24	0.70	42.14	0.24	0.398	967.094
D	0.56	0.10	1.28	A	745.00	745.00	74.91	0.10	1.25	74.95	0.10	0.585	1616.944
E	0.56	0.14	1.25	A	542.00	542.00	73.03	0.13	1.22	73.08	0.13	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
17:00-17:15	A	1226.00	1259.92	0.973	0.00	0.00	13.40	140.21	(0.00)	0.525
17:00-17:15	B	157.00	302.54	0.519	0.00	0.00	1.02	13.70	(0.00)	0.391
17:00-17:15	C	175.00	427.38	0.409	0.00	0.00	0.68	9.44	(0.00)	0.233
17:00-17:15	D	745.00	1333.90	0.559	0.00	0.00	1.25	17.83	(0.00)	0.100
17:00-17:15	E	542.00	977.80	0.554	0.00	0.00	1.22	17.26	(0.00)	0.135
17:15-17:30	A	1226.00	1258.74	0.974	0.00	13.40	17.49	234.52	(0.00)	0.892
17:15-17:30	B	157.00	285.78	0.549	0.00	1.02	1.16	16.77	(0.00)	0.461
17:15-17:30	C	175.00	411.87	0.425	0.00	0.68	0.72	10.64	(0.00)	0.253
17:15-17:30	D	745.00	1327.16	0.561	0.00	1.25	1.27	18.90	(0.00)	0.103
17:15-17:30	E	542.00	974.52	0.556	0.00	1.22	1.24	18.47	(0.00)	0.139
17:30-17:45	A	1226.00	1258.72	0.974	0.00	17.49	20.09	283.01	(0.00)	1.033
17:30-17:45	B	157.00	283.19	0.554	0.00	1.16	1.20	17.78	(0.00)	0.473
17:30-17:45	C	175.00	409.51	0.427	0.00	0.72	0.73	10.95	(0.00)	0.256
17:30-17:45	D	745.00	1326.31	0.562	0.00	1.27	1.27	19.06	(0.00)	0.103
17:30-17:45	E	542.00	974.42	0.556	0.00	1.24	1.24	18.62	(0.00)	0.139
17:45-18:00	A	1226.00	1258.72	0.974	0.00	20.09	21.97	316.06	(0.00)	1.127
17:45-18:00	B	157.00	281.96	0.557	0.00	1.20	1.22	18.20	(0.00)	0.479
17:45-18:00	C	175.00	408.43	0.428	0.00	0.73	0.74	11.07	(0.00)	0.257
17:45-18:00	D	745.00	1325.98	0.562	0.00	1.27	1.28	19.12	(0.00)	0.103
17:45-18:00	E	542.00	974.40	0.556	0.00	1.24	1.25	18.68	(0.00)	0.139

A1 - (Default Analysis Set) - D13 - Base 2028 + Saturn + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
Base 2028 + Saturn + Dev, PM	Base 2028 + Saturn + Dev	PM			Yes			17:00	18:00	60	15	FLAT

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
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1	(untitled)	A,B,C,D,E	Standard			
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Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	Barnhorn Road	
B	Chestnut Walk	
C	Pear Tree Lane	
D	Little Common Road	
E	Cooden Sea Road	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.57	5.40	9.76	13.05	53.00	56.00	
B	2.97	6.41	1.87	10.38	34.61	60.00	
C	3.01	7.12	4.30	5.68	54.03	54.00	
D	5.04	5.13	1.00	33.90	54.38	23.00	
E	2.41	8.32	12.40	30.20	54.03	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.506	1398.428
B		((calculated))	((calculated))	0.443	894.185
C		((calculated))	((calculated))	0.398	967.094
D		((calculated))	((calculated))	0.585	1616.944
E		((calculated))	((calculated))	0.524	1393.232

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		Yes	Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	PHF
A	FLAT	Yes	1242.00	100.000	1.00
B	FLAT	Yes	173.00	100.000	1.00
C	FLAT	Yes	191.00	100.000	1.00
D	FLAT	Yes	751.00	100.000	1.00
E	FLAT	Yes	560.00	100.000	1.00

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (PCU/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (PCU/hr)	Direct Demand Pedestrian Flow (Ped/hr)
17:00-17:15	A	1242.00	1242.00	N/A	N/A
17:00-17:15	B	173.00	173.00	N/A	N/A
17:00-17:15	C	191.00	191.00	N/A	N/A
17:00-17:15	D	751.00	751.00	N/A	N/A
17:00-17:15	E	560.00	560.00	N/A	N/A
17:15-17:30	A	1242.00	1242.00	N/A	N/A
17:15-17:30	B	173.00	173.00	N/A	N/A
17:15-17:30	C	191.00	191.00	N/A	N/A
17:15-17:30	D	751.00	751.00	N/A	N/A
17:15-17:30	E	560.00	560.00	N/A	N/A
17:30-17:45	A	1242.00	1242.00	N/A	N/A
17:30-17:45	B	173.00	173.00	N/A	N/A
17:30-17:45	C	191.00	191.00	N/A	N/A
17:30-17:45	D	751.00	751.00	N/A	N/A
17:30-17:45	E	560.00	560.00	N/A	N/A
17:45-18:00	A	1242.00	1242.00	N/A	N/A
17:45-18:00	B	173.00	173.00	N/A	N/A
17:45-18:00	C	191.00	191.00	N/A	N/A
17:45-18:00	D	751.00	751.00	N/A	N/A
17:45-18:00	E	560.00	560.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Roundabout 1 (for whole period)

	To				
	A	B	C	D	E
A	0.00	38.00	61.00	938.00	205.00

From	B	52.00	0.00	0.00	18.00	103.00
	C	70.00	0.00	0.00	17.00	104.00
	D	671.00	22.00	22.00	0.00	36.00
	E	328.00	55.00	55.00	122.00	0.00

Turning Proportions (PCU) - Roundabout 1 (for whole period)

From	To					
		A	B	C	D	E
	A	0.00	0.03	0.05	0.76	0.17
	B	0.30	0.00	0.00	0.10	0.60
	C	0.37	0.00	0.00	0.09	0.54
	D	0.89	0.03	0.03	0.00	0.05
	E	0.59	0.10	0.10	0.22	0.00

Vehicle Mix

Average PCU Per Vehicle - Roundabout 1 (for whole period)

From	To					
		A	B	C	D	E
	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

From	To					
		A	B	C	D	E
	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS	Total Demand (PCU/hr)	Total Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Queueing Total Delay (PCU-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.99	1.37	27.42	F	1242.00	1242.00	1152.66	0.93	19.21	1170.58	0.94	0.506	1398.428
B	0.62	0.57	1.58	D	173.00	173.00	84.38	0.49	1.41	84.65	0.49	0.443	894.185
C	0.48	0.29	0.90	C	191.00	191.00	50.79	0.27	0.85	50.85	0.27	0.398	967.094
D	0.58	0.11	1.35	A	751.00	751.00	78.87	0.11	1.31	78.91	0.11	0.585	1616.944
E	0.59	0.15	1.41	A	560.00	560.00	82.33	0.15	1.37	82.39	0.15	0.524	1393.232

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
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	main road (pcy)	main (pcy)	side road (pcy)	total (pcy)	summed (pcy)	angle (deg)	slip	stop	pcu/min
A	4.57	5.40	9.76	13.05	53.00	56.00		0.506	1398.428
B	2.97	6.41	1.87	10.38	34.61	60.00		0.443	894.185
C	3.01	7.12	4.30	5.68	54.03	54.00		0.398	967.094
D	5.04	5.13	1.00	33.90	54.38	23.00		0.585	1616.944
E	2.41	8.32	12.40	30.20	54.03	44.00		0.524	1393.232

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (PCU)	End Queue (PCU)	Queueing Total Delay (PCU-min)	Geometric Total Delay (PCU-min)	Average Delay Per Arriving Vehicle (min)
17:00-17:15	A	1242.00	1260.03	0.986	0.00	0.00	15.08	153.52	(0.00)	0.569
17:00-17:15	B	173.00	299.69	0.577	0.00	0.00	1.27	16.79	(0.00)	0.440
17:00-17:15	C	191.00	419.87	0.455	0.00	0.00	0.81	11.21	(0.00)	0.255
17:00-17:15	D	751.00	1314.95	0.571	0.00	0.00	1.31	18.71	(0.00)	0.105
17:00-17:15	E	560.00	958.50	0.584	0.00	0.00	1.37	19.31	(0.00)	0.147
17:15-17:30	A	1242.00	1258.74	0.987	0.00	15.08	20.58	270.60	(0.00)	1.018
17:15-17:30	B	173.00	282.43	0.613	0.00	1.27	1.48	21.23	(0.00)	0.538
17:15-17:30	C	191.00	403.68	0.473	0.00	0.81	0.87	12.83	(0.00)	0.282
17:15-17:30	D	751.00	1307.43	0.574	0.00	1.31	1.34	19.90	(0.00)	0.108
17:15-17:30	E	560.00	954.69	0.587	0.00	1.37	1.40	20.84	(0.00)	0.152
17:30-17:45	A	1242.00	1258.73	0.987	0.00	20.58	24.42	338.91	(0.00)	1.222
17:30-17:45	B	173.00	279.56	0.619	0.00	1.48	1.55	22.83	(0.00)	0.558
17:30-17:45	C	191.00	401.02	0.476	0.00	0.87	0.89	13.28	(0.00)	0.285
17:30-17:45	D	751.00	1306.40	0.575	0.00	1.34	1.34	20.09	(0.00)	0.108
17:30-17:45	E	560.00	954.53	0.587	0.00	1.40	1.41	21.05	(0.00)	0.152
17:45-18:00	A	1242.00	1258.72	0.987	0.00	24.42	27.42	389.63	(0.00)	1.373
17:45-18:00	B	173.00	278.12	0.622	0.00	1.55	1.58	23.54	(0.00)	0.567
17:45-18:00	C	191.00	399.74	0.478	0.00	0.89	0.90	13.47	(0.00)	0.287
17:45-18:00	D	751.00	1305.99	0.575	0.00	1.34	1.35	20.17	(0.00)	0.108
17:45-18:00	E	560.00	954.50	0.587	0.00	1.41	1.41	21.13	(0.00)	0.152

APPENDIX E

Highways England and ESCC comments

Chris Smith

From: Ben Lenton <Ben.Lenton@eastsussex.gov.uk>
Sent: Monday, April 25, 2016 5:14 PM
To: Chris Smith
Subject: RE: Spindlewood Drive, Little Common, Bexhill - Transport Assessment

Hi Chris

Apologies for the delay in getting back to you.

In response to your email I can confirm that I agree with HE view that the use of the SATURN model flows to assess the impact of development and SHLAA site traffic on the Little Common Roundabout is acceptable. I am therefore satisfied with this approach and the assessment that has been undertaken. I have confirmed this to RDC.

I look forward to being consulted and receiving the full TA when the formal planning application has been submitted to RDC.

Regards

Ben Lenton
Development Control Transport
East Sussex County Council
t: 01273 336114 or 07701 394528 | e: ben.lenton@eastsussex.gov.uk
County Hall | St Anne's Crescent | Lewes | BN7 1UE

From: Chris Smith [mailto:chris@exigoprojectsolutions.co.uk]
Sent: 14 April 2016 12:22
To: Ben Lenton
Subject: Re: Spindlewood Drive, Little Common, Bexhill - Transport Assessment

Hi Ben,

Hope you are well and work isn't too manic

In relation to Spindlewood Drive we have written confirmation from the HE.

I know we spoke on the phone about the RDC request and we agreed that this is fully addressed and ESCC had no objections in highway capacity terms subject to the improvement works.

Would you mind just sending an email confirming that ESCC are satisfied with the assessment as carried out and that the RDC queries have been fully addressed?

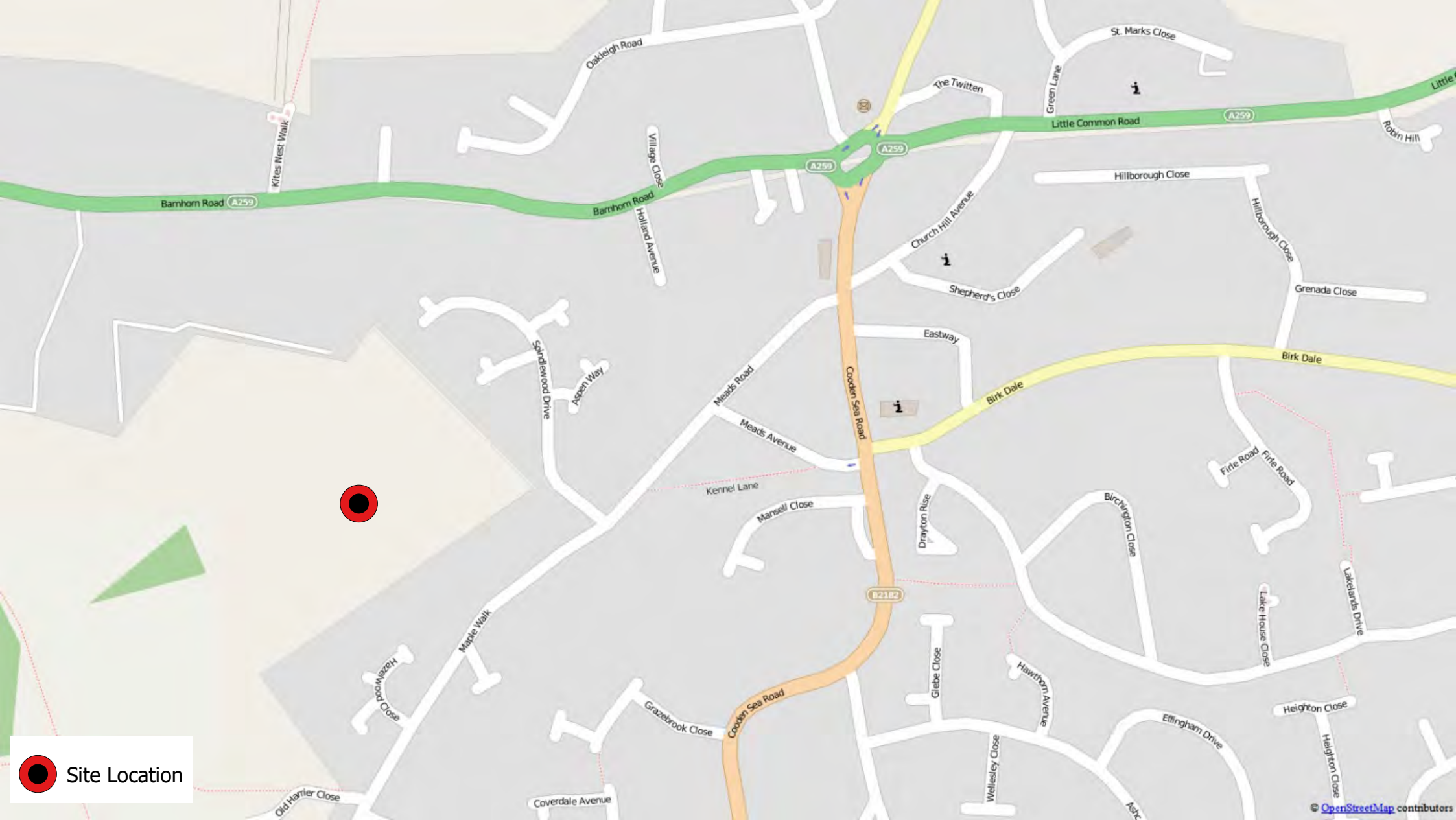
We are ready to submit, I just need to prove to RDC that all of their queries have been addressed and that ESCC and the HE are satisfied with the proposal. RDC have been nervous I relation to highways at this site and we want to make sure the app is validated immediately.

Kind Regards,

Chris
Director

Exigo Project Solutions Ltd
Suite 2c Unit 2 The Gateway

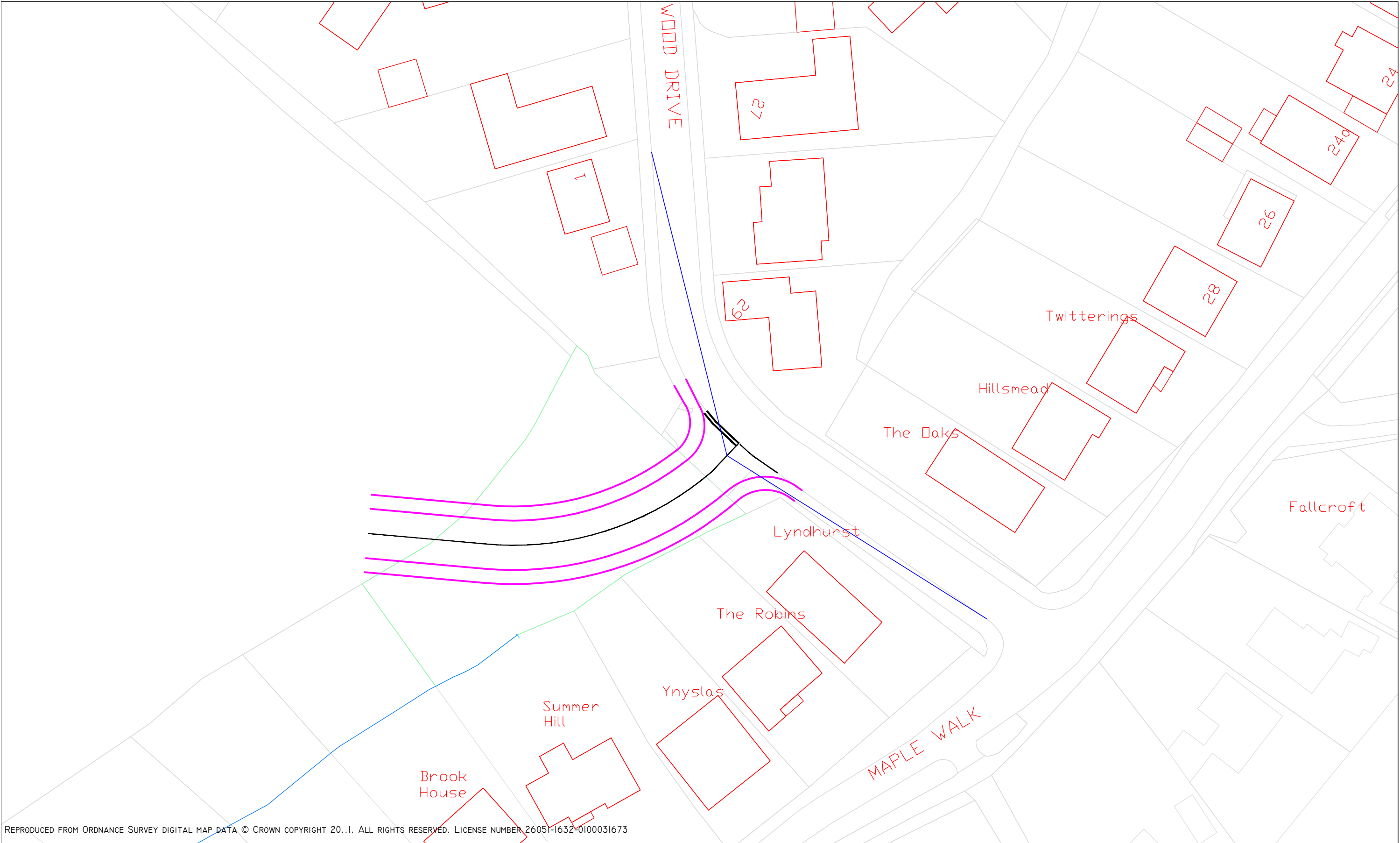
DRAWINGS



 Site Location

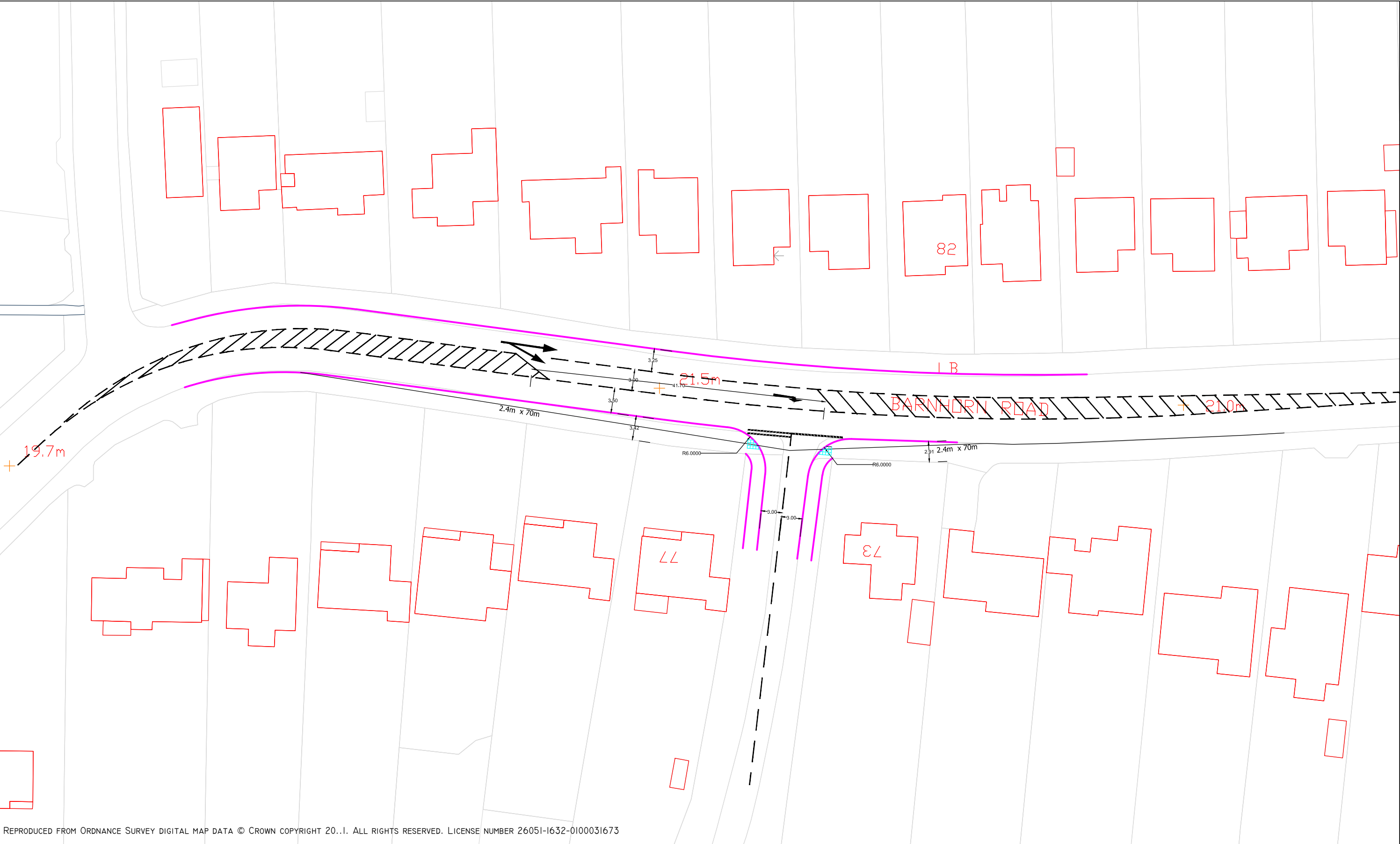
SCALE 1:10,000	DRAWN BY JA	CHECKED BY PR		SCHEME Scheme	DRAWING TITLE Location Plan
DRAWING REFERENCE T277/GIS/01		REV n/a		ON BEHALF OF Client	
DATE 2/5/2015		CAD REF N/A			

Exigo Project Solutions, Unit 2c - The Gateway
Silkwood Park, Wakefield, WF5 9TJ



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SCALE @ A3 1:500		DRAWN BY MM	CHECKED BY PR		SCHEME BEXHILL		DRAWING TITLE SPINDLEWOOD DRIVE ACCESS
DRAWING REFERENCE T277_I5			REVISION		ON BEHALF OF		
DATE Nov 16		CAD REF T277_I5.DWG			UNIT 2C, THE GATEWAY. SILKWOOD PARK, WAKEFIELD. WF5 9TJ		



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SCALE @ A3 1:500		DRAWN BY CS		CHECKED BY JA		 UNIT 2C, THE GATEWAY. SILKWOOD PARK, WAKEFIELD. WF5 9TJ	SCHEME BEXHILL		DRAWING TITLE SPINDLEWOOD DRIVE ACCESS
DRAWING REFERENCE T277_30				REVISION			ON BEHALF OF		
DATE Nov 16		CAD REF T277_30.DWG							