

ARCADY 7

Version: 7.1.1.245 [9th June 2011]
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File: P:\14-111 - Land West of Bisham Road, Yapton\Trans\Arcady\GLEESONS 250 Units\North End Rd-Yapton Rd-Main Rd\North End Rd-Yapton Rd-Main Rd GLEESON 250.arc7

Report generation date: 07/12/2017 15:14:20

Summary of roundabout performance

AM					PM				
	Queue (Veh)	Delay (min)	RFC	LOS	Queue (Veh)	Delay (min)	RFC	LOS	
(Default Analysis Set) - 2022 Peak + Dev									
Arm A	0.28	0.00	0.22	A	0.52	0.00	0.34	A	
Arm B	0.23	0.00	0.19	A	2.32	0.01	0.70	A	
Arm C	3.88	0.00	0.79	A	0.46	0.00	0.32	A	
(Default Analysis Set) - 2031 Peak + Dev									
Arm A	0.31	0.00	0.24	A	0.57	0.00	0.36	A	
Arm B	0.26	0.00	0.20	A	3.27	0.01	0.77	A	
Arm C	5.48	0.00	0.85	A	0.52	0.00	0.34	A	

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

2022 Peak + Dev - AM runs from 07:30:00 to 09:00:00

2022 Peak + Dev - PM runs from 16:45:00 to 18:15:00

2031 Peak + Dev - AM runs from 07:30:00 to 09:00:00

2031 Peak + Dev - PM runs from 16:45:00 to 18:15:00

File summary

File Description

Title	North End Rd-Yapton Rd-Main Rd
Location	Yapton
Site Number	
Date	18/12/2015
Version	
Status	Completed
Identifier	
Client	Gleeson
Jobnumber	14-110
Enumerator	msherdan [BAS-ODYSSEY-03]
Description	

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	Veh	Veh	perMin	min	-Min	perMin

A1 - (Default Analysis Set) - D3 - 2022 Peak + 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
2022 Peak + Dev, AM	2022 Peak + Dev	AM			Yes			07:30	09:00	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1 (unfiled)	A,B,C		Mini-roundabout			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

ID	Name	Description
A	B2233 Yapton Road	
B	B2132 North End Road	
C	B2233 Main Road	

Capacity Options

Arm	Minimum Capacity (PCU/min)	Maximum Capacity (PCU/min)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	1666.65		0.00
B	0.00	1666.65		0.00
C	0.00	1666.65		0.00

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
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A	4.30	4.30	7.00	15.00	10.50	7.50	0.00
B	3.50	3.50	4.00	6.50	9.50	5.50	0.00
C	5.00	3.50	6.00	0.50	13.90	14.00	0.00

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/min)	Final Slope	Final Intercept (PCU/min)
A	Yes	0.50	2000.00	0.500	2000.000
B	Yes	0.50	885.00	0.500	885.000
C	Yes	0.50	2500.00	0.500	2500.000

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

Arm Capacity Adjustments

Arm	Type	Reason	Direct Capacity Adjustment (PCU/min)	Percentage Capacity Adjustment (%)
A	None	N/A	N/A	N/A
B	Percentage		N/A	105.00
C	None	N/A	N/A	N/A

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 (Veh/min)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	330.00	100.000	N/A
B	ONE HOUR	Yes	124.00	100.000	N/A
C	ONE HOUR	Yes	1174.00	100.000	N/A

Turning Proportions

Turning Counts or Proportions (Veh/min) - Roundabout 1 (for whole period)

		To		
From		A	B	C
	A	0.000	57.000	273.000
	B	31.000	0.000	93.000
	C	586.000	588.000	0.000

Turning Proportions (Veh/min) - Roundabout 1 (for whole period)

Timing Diagram (sec) - Roundabout 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.17	0.83
	B	0.25	0.00	0.75
	C	0.50	0.50	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.010	1.010
	B	1.040	1.000	1.060
	C	1.020	1.030	1.000

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To		
		A	B	C
From	A	0.000	1.000	1.000
	B	4.000	0.000	6.000
	C	2.000	3.000	0.000

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/min)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/min)
A	0.22	0.00	0.28	A	302.81	27253.24	20.36	0.00	0.23	20.36	0.00	0.500	2000.000
B	0.19	0.00	0.23	A	113.78	10240.61	16.17	0.00	0.18	16.17	0.00	0.500	885.000
C	0.79	0.00	3.88	A	1077.28	96955.32	207.15	0.00	2.30	207.15	0.00	0.500	2500.000

Overview: Mini-roundabout Geometry

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Entry width (m)	Effective flare length (m)	Minimum approach road half-width (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island	Final Slope	Final Intercept (PCU/min)
A	4.30	7.00	15.00	4.30	10.50	7.50	0.00		0.500	2000.000
B	3.50	4.00	6.50	3.50	9.50	5.50	0.00		0.500	885.000
C	5.00	6.00	0.50	3.50	13.90	14.00	0.00		0.500	2500.000

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/min)	Capacity (Veh/min)	RFC	Pedestrian Demand (Ped/min)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
1	A	248.44	1850.15	0.151	0.00	0.00	0.18	2.86	(0.02)	0.001
1	B	93.35	777.51	0.120	0.00	0.00	0.14	2.04	(0.02)	0.001
1	C	883.85	1825.98	0.544	0.00	0.00	1.19	17.84	(0.02)	0.001
2	A	298.66	1850.15	0.180	0.00	0.18	0.22	3.29	(0.02)	0.001

2	B	111.47	757.46	0.147	0.00	0.14	0.17	2.59	(0.02)	0.002
2	C	1855.40	1625.98	0.649	0.00	1.19	1.85	27.68	(0.02)	0.002
3	A	363.34	1650.12	0.220	0.00	0.22	0.28	4.23	(0.02)	0.001
3	B	138.53	729.73	0.187	0.00	0.17	0.23	3.45	(0.02)	0.002
3	C	1292.60	1625.98	0.795	0.00	1.85	3.87	57.81	(0.02)	0.003
4	A	363.34	1650.09	0.220	0.00	0.28	0.28	4.24	(0.02)	0.001
4	B	138.53	729.73	0.187	0.00	0.23	0.23	3.45	(0.02)	0.002
4	C	1292.60	1625.98	0.795	0.00	3.87	3.88	56.12	(0.02)	0.003
5	A	296.66	1650.15	0.180	0.00	0.28	0.22	3.29	(0.02)	0.001
5	B	111.47	757.45	0.147	0.00	0.23	0.17	2.59	(0.02)	0.002
5	C	1855.40	1625.98	0.649	0.00	3.88	1.85	27.82	(0.02)	0.002
6	A	248.44	1650.15	0.151	0.00	0.22	0.18	2.68	(0.02)	0.001
6	B	93.35	777.50	0.120	0.00	0.17	0.14	2.05	(0.02)	0.001
6	C	683.85	1625.98	0.544	0.00	1.85	1.19	17.89	(0.02)	0.001

A1 - (Default Analysis Set) - D6 - 2022 Peak + 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
2022 Peak + Dev, PM	2022 Peak + Dev	PM			Yes			16:45	18:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C	Mini-roundabout			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

ID	Name	Description
A	B2233 Yapton Road	
B	B2132 North End Road	
C	B2233 Main Road	

Capacity Options

Arm	Minimum Capacity (PCU/min)	Maximum Capacity (PCU/min)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	1666.65		0.00
B	0.00	1666.65		0.00
C	0.00	1666.65		0.00

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
A	4.30	4.30	7.00	15.00	10.50	7.50	0.00	
B	3.50	3.50	4.00	6.50	9.50	5.50	0.00	
C	5.00	3.50	6.00	0.50	13.90	14.00	0.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/min)	Final Slope	Final Intercept (PCU/min)
A	Yes	0.50	2000.00	0.500	2000.000
B	Yes	0.50	665.00	0.500	665.000
C	Yes	0.50	2500.00	0.500	2500.000

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

Arm Capacity Adjustments

Arm	Type	Reason	Direct Capacity Adjustment (PCU/min)	Percentage Capacity Adjustment (%)
A	None	N/A	N/A	N/A
B	Percentage		N/A	105.00
C	None	N/A	N/A	N/A

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 (Veh/min)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	510.00	100.000	N/A
B	ONE HOUR	Yes	413.00	100.000	N/A
C	ONE HOUR	Yes	472.00	100.000	N/A

Turning Proportions

Turning Counts or Proportions (Veh/min) - Roundabout 1 (for whole period)

		To		
		A	B	C
From	A	0.000	35.000	475.000
	B	46.000	0.000	367.000
	C	317.000	155.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.07	0.93
	B	0.11	0.00	0.89
	C	0.67	0.33	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.040	1.010
	B	1.020	1.000	1.000
	C	1.010	1.030	1.000

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To		
		A	B	C
From	A	0.000	4.000	1.000
	B	2.000	0.000	0.000
	C	1.000	3.000	0.000

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/min)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/min)
A	0.34	0.00	0.52	A	467.98	42118.59	36.21	0.00	0.40	36.21	0.00	0.500	2000.000
B	0.70	0.01	2.32	A	378.98	34107.76	125.02	0.00	1.39	125.02	0.00	0.500	885.000
C	0.32	0.00	0.46	A	433.11	38980.31	32.69	0.00	0.36	32.69	0.00	0.500	2500.000

Overview: Mini-roundabout Geometry

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Entry width (m)	Effective flare length (m)	Minimum approach road half-width (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island	Final Slope	Final Intercept (PCU/min)
A	4.30	7.00	15.00	4.30	10.50	7.50	0.00		0.500	2000.000
B	3.50	4.00	6.50	3.50	9.50	5.50	0.00		0.500	885.000
C	5.00	6.00	0.50	3.50	13.90	14.00	0.00		0.500	2500.000

ARUN DISTRICT COUNCIL Y/91/17/OUT

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/min)	Capacity (Veh/min)	RFC	Pedestrian Demand (Ped/min)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
1	A	383.95	1646.79	0.233	0.00	0.00	0.30	4.56	(0.02)	0.001
1	B	310.93	737.99	0.421	0.00	0.00	0.73	10.90	(0.02)	0.002
1	C	355.35	1839.48	0.217	0.00	0.00	0.28	4.15	(0.02)	0.001
2	A	458.48	1646.79	0.278	0.00	0.30	0.39	5.78	(0.02)	0.001
2	B	371.28	701.26	0.529	0.00	0.73	1.12	16.83	(0.02)	0.003
2	C	424.32	1839.48	0.259	0.00	0.28	0.35	5.23	(0.02)	0.001
3	A	581.52	1646.79	0.341	0.00	0.39	0.52	7.76	(0.02)	0.001
3	B	454.72	650.49	0.699	0.00	1.12	2.32	34.60	(0.02)	0.005
3	C	519.68	1839.48	0.317	0.00	0.35	0.46	6.96	(0.02)	0.001
4	A	581.52	1646.79	0.341	0.00	0.52	0.52	7.76	(0.02)	0.001
4	B	454.72	650.49	0.699	0.00	2.32	2.32	34.61	(0.02)	0.005
4	C	519.68	1839.48	0.317	0.00	0.46	0.46	6.96	(0.02)	0.001
5	A	458.48	1646.79	0.278	0.00	0.52	0.39	5.79	(0.02)	0.001
5	B	371.28	701.26	0.529	0.00	2.32	1.13	16.93	(0.02)	0.003
5	C	424.32	1839.48	0.259	0.00	0.46	0.35	5.24	(0.02)	0.001
6	A	383.95	1646.79	0.233	0.00	0.39	0.30	4.56	(0.02)	0.001
6	B	310.93	737.98	0.421	0.00	1.13	0.73	10.94	(0.02)	0.002
6	C	355.35	1839.48	0.217	0.00	0.35	0.28	4.15	(0.02)	0.001

A1 - (Default Analysis Set) - D7 - 2031 Peak + 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
2031 Peak + Dev, AM	2031 Peak + Dev	AM			Yes			07:30	09:00	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C	Mini-roundabout			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

ID	Name	Description
A	B2233 Yapton Road	
B	B2132 North End Road	
C	B2233 Main Road	

Capacity Options

Arm	Minimum Capacity (PCU/min)	Maximum Capacity (PCU/min)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	1666.65		0.00
B	0.00	1666.65		0.00
C	0.00	1666.65		0.00

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
A	4.30	4.30	7.00	15.00	10.50	7.50	0.00	
B	3.50	3.50	4.00	6.50	9.50	5.50	0.00	
C	5.00	3.50	6.00	0.50	13.90	14.00	0.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/min)	Final Slope	Final Intercept (PCU/min)
A	Yes	0.50	2000.00	0.500	2000.000
B	Yes	0.50	665.00	0.500	665.000
C	Yes	0.50	2500.00	0.500	2500.000

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

Arm Capacity Adjustments

Arm	Type	Reason	Direct Capacity Adjustment (PCU/min)	Percentage Capacity Adjustment (%)
A	None	N/A	N/A	N/A
B	Percentage		N/A	105.00
C	None	N/A	N/A	N/A

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
				HV						

		Yes	Yes	Percentages	2.00			Yes	Yes
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Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/min)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	353.00	100.000	N/A
B	ONE HOUR	Yes	133.00	100.000	N/A
C	ONE HOUR	Yes	1249.00	100.000	N/A

Turning Proportions

Turning Counts or Proportions (Veh/min) - Roundabout 1 (for whole period)

		To		
		A	B	C
From	A	0.000	61.000	292.000
	B	34.000	0.000	99.000
	C	623.000	626.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.17	0.83
	B	0.26	0.00	0.74
	C	0.50	0.50	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.000	1.010	1.010
	B	1.040	1.000	1.080
	C	1.020	1.030	1.000

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To		
		A	B	C
From	A	0.000	1.000	1.000
	B	4.000	0.000	5.000
	C	2.000	3.000	0.000

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/min)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/min)
A	0.24	0.00	0.31	A	323.92	29152.71	22.30	0.00	0.25	22.30	0.00	0.500	2000.000
B	0.20	0.00	0.26	A	122.04	10983.85	17.84	0.00	0.20	17.84	0.00	0.500	885.000
C	0.85	0.00	5.48	A	1146.11	103149.58	271.69	0.00	3.02	271.69	0.00	0.500	2500.000

Overview: Mini-roundabout Geometry

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Entry width (m)	Effective flare length (m)	Minimum approach road half-width (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island	Final Slope	Final Intercept (PCT/min)
A	4.30	7.00	15.00	4.30	10.50	7.50	0.00		0.500	2000.000
B	3.50	4.00	6.50	3.50	9.50	5.50	0.00		0.500	885.000
C	5.00	6.00	0.50	3.50	13.90	14.00	0.00		0.500	2500.000

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/min)	Capacity (Veh/min)	RFC	Pedestrian Demand (Ped/min)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
1	A	265.76	1650.15	0.161	0.00	0.00	0.19	2.88	(0.02)	0.001
1	B	100.13	770.40	0.130	0.00	0.00	0.15	2.24	(0.02)	0.001
1	C	940.31	1625.98	0.578	0.00	0.00	1.37	20.53	(0.02)	0.001
2	A	317.34	1650.15	0.192	0.00	0.19	0.24	3.57	(0.02)	0.001
2	B	119.56	748.95	0.160	0.00	0.15	0.19	2.85	(0.02)	0.002
2	C	1122.83	1625.98	0.691	0.00	1.37	2.23	33.38	(0.02)	0.002
3	A	388.66	1628.81	0.239	0.00	0.24	0.31	4.70	(0.02)	0.001
3	B	146.44	719.30	0.204	0.00	0.19	0.26	3.83	(0.02)	0.002
3	C	1375.18	1625.98	0.846	0.00	2.23	5.47	81.44	(0.02)	0.004
4	A	388.66	1628.75	0.239	0.00	0.31	0.31	4.70	(0.02)	0.001
4	B	146.44	719.29	0.204	0.00	0.26	0.26	3.63	(0.02)	0.002
4	C	1375.18	1625.98	0.846	0.00	5.47	5.48	82.15	(0.02)	0.004
5	A	317.34	1650.15	0.192	0.00	0.31	0.24	3.57	(0.02)	0.001
5	B	119.56	746.95	0.160	0.00	0.26	0.19	2.85	(0.02)	0.002
5	C	1122.83	1625.98	0.691	0.00	5.48	2.23	33.59	(0.02)	0.002
6	A	265.76	1650.15	0.161	0.00	0.24	0.19	2.68	(0.02)	0.001
6	B	100.13	770.40	0.130	0.00	0.19	0.15	2.24	(0.02)	0.001
6	C	940.31	1625.98	0.578	0.00	2.23	1.37	20.61	(0.02)	0.001

A1 - (Default Analysis Set) - D8 - 2031 Peak + 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
2031 Peak + Dev	2031 Peak + Dev	PM			Yes			16:45	18:15	90	15	ONE HOUR

Dev. PM

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1 (unfilled)	A,B,C		Mini-roundabout			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

ID	Name	Description
A	B2233 Yapton Road	
B	B2132 North End Road	
C	B2233 Main Road	

Capacity Options

Arm	Minimum Capacity (PCU/min)	Maximum Capacity (PCU/min)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	1666.65		0.00
B	0.00	1666.65		0.00
C	0.00	1666.65		0.00

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
A	4.30	4.30	7.00	15.00	10.50	7.50	0.00	
B	3.50	3.50	4.00	6.50	9.50	5.50	0.00	
C	5.00	3.50	6.00	0.50	13.90	14.00	0.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/min)	Final Slope	Final Intercept (PCU/min)
A	Yes	0.50	2000.00	0.500	2000.000
B	Yes	0.50	665.00	0.500	665.000
C	Yes	0.50	2500.00	0.500	2500.000

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

Arm Capacity Adjustments

Arm	Type	Reason	Direct Capacity Adjustment (PCU/min)	Percentage Capacity Adjustment (%)
A	None	N/A	N/A	N/A
B	Percentage		N/A	105.00
C	None	N/A	N/A	N/A

0	100%	100%	100%	100%
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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 RV (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 (Veh/min)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	544.00	100.000	N/A
B	ONE HOUR	Yes	440.00	100.000	N/A
C	ONE HOUR	Yes	507.00	100.000	N/A

Turning Proportions

Turning Counts or Proportions (Veh/min) - Roundabout 1 (for whole period)

	To		
	A	B	C
From	A 0.000	38.000	506.000
	B 49.000	0.000	391.000
	C 340.000	167.000	0.000

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

	To		
	A	B	C
From	A 0.000	0.070	0.930
	B 0.110	0.000	0.890
	C 0.670	0.330	0.000

Vehicle Mix

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

	To		
	A	B	C
From	A 1.000	1.040	1.010
	B 1.020	1.000	1.000
	C 1.010	1.030	1.000

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

	To		
	A	B	C
From	A 0.000	4.000	1.000
	B 2.000	0.000	0.000
	C 1.000	3.000	0.000

ARUN DISTRICT COUNCIL

RESULTS

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/min)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/min)
A	0.36	0.00	0.57	A	499.18	44526.36	39.75	0.00	0.44	39.75	0.00	0.500	2000.000
B	0.77	0.01	3.27	A	403.75	36337.55	163.61	0.00	1.82	163.61	0.00	0.500	635.000
C	0.34	0.00	0.52	A	465.23	41870.79	38.14	0.00	0.40	38.14	0.00	0.500	2500.000

Overview: Mini-roundabout Geometry

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Entry width (m)	Effective flare length (m)	Minimum approach road half-width (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island	Final Slope	Final Intercept (PCU/min)
A	4.30	7.00	15.00	4.30	10.50	7.50	0.00		0.500	2000.000
B	3.50	4.00	6.50	3.50	9.50	5.50	0.00		0.500	635.000
C	5.00	6.00	0.50	3.50	13.90	14.00	0.00		0.500	2500.000

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/min)	Capacity (Veh/min)	RFC	Pedestrian Demand (Ped/min)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
1	A	409.55	1546.72	0.249	0.00	0.00	0.33	4.98	(0.02)	0.001
1	B	331.25	725.65	0.456	0.00	0.00	0.84	12.57	(0.02)	0.003
1	C	381.70	1639.45	0.233	0.00	0.00	0.30	4.55	(0.02)	0.001
2	A	489.04	1546.72	0.297	0.00	0.33	0.42	6.33	(0.02)	0.001
2	B	395.55	686.52	0.576	0.00	0.84	1.36	20.32	(0.02)	0.003
2	C	455.78	1639.45	0.278	0.00	0.30	0.39	5.77	(0.02)	0.001
3	A	598.95	1546.72	0.364	0.00	0.42	0.57	8.57	(0.02)	0.001
3	B	484.45	632.43	0.766	0.00	1.36	3.27	48.58	(0.02)	0.007
3	C	558.22	1639.45	0.340	0.00	0.39	0.52	7.74	(0.02)	0.001
4	A	598.95	1546.72	0.364	0.00	0.57	0.57	8.57	(0.02)	0.001
4	B	484.45	632.43	0.766	0.00	3.27	3.27	49.04	(0.02)	0.007
4	C	558.22	1639.45	0.340	0.00	0.52	0.52	7.74	(0.02)	0.001
5	A	489.04	1546.72	0.297	0.00	0.57	0.42	6.34	(0.02)	0.001
5	B	395.55	686.51	0.576	0.00	3.27	1.36	20.48	(0.02)	0.003
5	C	455.78	1639.45	0.278	0.00	0.52	0.39	5.78	(0.02)	0.001
6	A	409.55	1546.72	0.249	0.00	0.42	0.33	4.97	(0.02)	0.001
6	B	331.25	725.63	0.457	0.00	1.36	0.84	12.63	(0.02)	0.003
6	C	381.70	1639.45	0.233	0.00	0.39	0.30	4.55	(0.02)	0.001