

Junctions 8
PICADY 8 - Priority Intersection Module
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Filename: 19. London Road_Lovedean Lane.arc8

Path: J:\21834 Woodcroft Farm\004 Transport\Working Documents\Junction Analysis\PICADY\April 2013 Assessments

Report generation date: 08/07/2013 10:24:29

-
- » Existing Layout - 2010 Observed, AM
 - » Existing Layout - 2010 Observed, PM
 - » Existing Layout - 2018 Baseline, AM
 - » Existing Layout - 2018 Baseline, PM
 - » Existing Layout - 2018 Baseline + Dev, AM
 - » Existing Layout - 2018 Baseline + Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Existing Layout - 2010 Observed								
Stream B-C	1.41	16.46	0.59	C	0.58	10.70	0.37	B
Stream B-AD	0.70	21.52	0.42	C	0.51	25.66	0.34	D
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream A-D	0.00	5.64	0.00	A	0.01	5.75	0.01	A
Stream D-ABC	0.09	10.84	0.08	B	0.01	8.83	0.01	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
Stream C-B	0.41	7.95	0.29	A	1.86	16.74	0.65	C
Existing Layout - 2018 Baseline								
Stream B-C	2.41	26.13	0.71	D	0.89	14.57	0.47	B
Stream B-AD	1.34	36.00	0.58	E	1.02	44.44	0.51	E
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream A-D	0.00	5.84	0.00	A	0.01	6.00	0.01	A
Stream D-ABC	0.11	11.78	0.10	B	0.01	9.41	0.01	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
Stream C-B	0.51	8.84	0.34	A	3.10	25.20	0.76	D
Existing Layout - 2018 Baseline + Dev								
Stream B-C	2.99	30.92	0.76	D	0.97	15.39	0.49	C
Stream B-AD	1.52	41.25	0.61	E	1.12	48.61	0.54	E
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream A-D	0.00	5.84	0.00	A	0.01	6.00	0.01	A
Stream D-ABC	0.11	11.79	0.10	B	0.01	9.41	0.01	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
Stream C-B	0.53	8.93	0.35	A	3.62	28.53	0.79	D

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

'D1 - 2010 Observed, AM" model duration: 08:00 - 09:00
 'D2 - 2010 Observed, PM" model duration: 17:00 - 18:00
 'D3 - 2018 Baseline, AM" model duration: 08:00 - 09:00
 'D4 - 2018 Baseline, PM" model duration: 17:00 - 18:00
 'D5 - 2018 Baseline + Dev, AM" model duration: 08:00 - 09:00
 'D6 - 2018 Baseline + Dev, PM" model duration: 17:00 - 18:00
 'D7 - 2023 Baseline, AM" model duration: 08:00 - 09:00
 'D8 - 2023 Baseline, PM" model duration: 17:00 - 18:00
 'D9 - 2023 Baseline + Dev, AM" model duration: 08:00 - 09:00
 'D10 - 2023 Baseline + Dev, PM" model duration: 17:00 - 18:00
 'D11 - 2023 Baseline + Dev (700 Units), AM" model duration: 08:00 - 09:00
 'D12 - 2023 Baseline + Dev (700 Units), PM" model duration: 17:00 - 18:00
 'D13 - 2018 Baseline + Dev (700 Units), AM" model duration: 08:00 - 09:00
 'D14 - 2018 Baseline + Dev (700 Units), PM" model duration: 17:00 - 18:00

Run using Junctions 8.0.2.316 at 08/07/2013 10:24:23

File summary

File Description

Title	London Road_Lovedean Lane Junction
Location	Waterlooville
Site Number	19
Date	15/04/2013
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	21834
Enumerator	
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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	s	-Min	perMin

Existing Layout - 2010 Observed, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set (s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Existing Layout	N/A		✓	✓	D1,D2,D3,D4,D5,D6		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2010 Observed, AM	2010 Observed	AM		DIRECT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
London Road_Lovedean Lane Junction	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D		14.65	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	London Road (S)		Major
B	Lovedean Lane		Minor
C	London Road (N)		Major
D	Prochurch Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	7.20		0.00	✓	3.00	250.00		
C	7.20		0.00	✓	2.90	250.00		

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.40	3.70	3.70	3.70		2.00	70	30
D	One lane	2.20										55	27

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
19	A-D	781.320	-	-	-	0.287	0.287	0.287	-	0.287	-	-
19	B-AD	520.650	0.090	0.227	-	-	-	0.143	0.325	0.143	0.090	0.227
19	B-C	713.047	0.104	0.262	-	-	-	-	-	-	0.104	0.262
19	C-B	773.497	0.284	0.284	-	-	-	-	-	-	0.284	0.284
19	D-A	589.599	-	-	-	0.217	0.086	0.217	-	0.086	-	-
19	D-BC	467.929	0.128	0.128	0.292	0.204	0.081	0.204	-	0.081	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

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 Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000
D	DIRECT	✓	N/A	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 19 (for whole period)

		To			
		A	B	C	D
From	A	0.000	84.000	375.000	3.000
	B	117.000	0.000	311.000	2.000
	C	360.000	185.000	0.000	5.000
	D	12.000	3.000	15.000	0.000

Turning Proportions (PCU) - Junction 19 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.18	0.81	0.01
	B	0.27	0.00	0.72	0.00
	C	0.65	0.34	0.00	0.01
	D	0.40	0.10	0.50	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 19 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 19 (for whole period)

	To				
From		A	B	C	D
	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.59	16.46	1.41	C	311.00	311.00	80.97	15.62	1.35	81.08	15.64
B-AD	0.42	21.52	0.70	C	119.00	119.00	40.56	20.45	0.68	40.61	20.48
A-B	-	-	-	-	84.00	84.00	-	-	-	-	-
A-C	-	-	-	-	375.00	375.00	-	-	-	-	-
A-D	0.00	5.64	0.00	A	3.00	3.00	0.28	5.59	0.00	0.28	5.59
D-ABC	0.08	10.84	0.09	B	30.00	30.00	5.32	10.63	0.09	5.32	10.64
C-D	-	-	-	-	5.00	5.00	-	-	-	-	-
C-A	-	-	-	-	360.00	360.00	-	-	-	-	-
C-B	0.29	7.95	0.41	A	185.00	185.00	24.08	7.81	0.40	24.08	7.81

Existing Layout - 2010 Observed, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set (s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Existing Layout	N/A		✓	✓	D1,D2,D3,D4,D5,D6		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Rela
2010 Observed, PM	2010 Observed	PM		DIRECT	17:00	18:00	60	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
London Road_Lovedean Lane Junction	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D		15.83	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	London Road (S)		Major
B	Lovedean Lane		Minor
C	London Road (N)		Major
D	Prochurch Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	7.20		0.00	✓	3.00	250.00		
C	7.20		0.00	✓	2.90	250.00		

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.40	3.70	3.70	3.70		2.00	70	30
D	One lane	2.20										55	27

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
19	A-D	781.320	-	-	-	0.287	0.287	0.287	-	0.287	-	-
19	B-AD	519.927	0.090	0.227	-	-	-	0.143	0.324	0.143	0.090	0.227
19	B-C	713.950	0.104	0.262	-	-	-	-	-	-	0.104	0.262
19	C-B	773.497	0.284	0.284	-	-	-	-	-	-	0.284	0.284
19	D-A	589.599	-	-	-	0.217	0.086	0.217	-	0.086	-	-
19	D-BC	467.929	0.128	0.128	0.292	0.204	0.081	0.204	-	0.081	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

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 Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000
D	DIRECT	✓	N/A	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 19 (for whole period)

	To				
From		A	B	C	D
	A	0.000	122.000	418.000	5.000
	B	73.000	0.000	197.000	0.000
	C	439.000	405.000	0.000	10.000
	D	3.000	0.000	1.000	0.000

Turning Proportions (PCU) - Junction 19 (for whole period)

	To				
		A	B	C	D
From	A	0.00	0.22	0.77	0.01
	B	0.27	0.00	0.73	0.00
	C	0.51	0.47	0.00	0.01
	D	0.75	0.00	0.25	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 19 (for whole period)

	To				
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 19 (for whole period)

	To				
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.37	10.70	0.58	B	197.00	197.00	34.15	10.40	0.57	34.17	10.41
B-AD	0.34	25.66	0.51	D	73.00	73.00	29.56	24.30	0.49	29.60	24.33
A-B	-	-	-	-	122.00	122.00	-	-	-	-	-
A-C	-	-	-	-	418.00	418.00	-	-	-	-	-
A-D	0.01	5.75	0.01	A	5.00	5.00	0.48	5.70	0.01	0.48	5.70
D-ABC	0.01	8.83	0.01	A	4.00	4.00	0.58	8.71	0.01	0.58	8.71
C-D	-	-	-	-	10.00	10.00	-	-	-	-	-
C-A	-	-	-	-	439.00	439.00	-	-	-	-	-
C-B	0.65	16.74	1.86	C	405.00	405.00	107.03	15.86	1.78	107.20	15.88

Existing Layout - 2018 Baseline, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set (s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Existing Layout	N/A		✓	✓	D1,D2,D3,D4,D5,D6		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relative
2018 Baseline, AM	2018 Baseline	AM		DIRECT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
London Road_Lovedean Lane Junction	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D		22.22	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	London Road (S)		Major
B	Lovedean Lane		Minor
C	London Road (N)		Major
D	Prochurch Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	7.20		0.00	✓	3.00	250.00		
C	7.20		0.00	✓	2.90	250.00		

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

10/10/2013 10:24:39 AM

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.40	3.70	3.70	3.70		2.00	70	30
D	One lane	2.20										55	27

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
19	A-D	781.320	-	-	-	0.287	0.287	0.287	-	0.287	-	-
19	B-AD	521.838	0.090	0.228	-	-	-	0.143	0.325	0.143	0.090	0.228
19	B-C	711.565	0.103	0.261	-	-	-	-	-	-	0.103	0.261
19	C-B	773.497	0.284	0.284	-	-	-	-	-	-	0.284	0.284
19	D-A	589.599	-	-	-	0.217	0.086	0.217	-	0.086	-	-
19	D-BC	467.929	0.128	0.128	0.292	0.204	0.081	0.204	-	0.081	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

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 Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000
D	DIRECT	✓	N/A	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 19 (for whole period)

		To			
		A	B	C	D
From	A	0.000	97.000	433.000	3.000
	B	135.000	0.000	340.000	2.000
	C	416.000	210.000	0.000	6.000
	D	14.000	3.000	17.000	0.000

Turning Proportions (PCU) - Junction 19 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.18	0.81	0.01
	B	0.28	0.00	0.71	0.00
	C	0.66	0.33	0.00	0.01
	D	0.41	0.09	0.50	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 19 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 19 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.71	26.13	2.41	D	340.00	340.00	133.53	23.56	2.23	133.89	23.63
B-AD	0.58	36.00	1.34	E	137.00	137.00	74.08	32.44	1.23	74.30	32.54
A-B	-	-	-	-	97.00	97.00	-	-	-	-	-
A-C	-	-	-	-	433.00	433.00	-	-	-	-	-
A-D	0.00	5.84	0.00	A	3.00	3.00	0.29	5.79	0.00	0.29	5.79
D-ABC	0.10	11.78	0.11	B	34.00	34.00	6.53	11.52	0.11	6.53	11.52
C-D	-	-	-	-	6.00	6.00	-	-	-	-	-
C-A	-	-	-	-	416.00	416.00	-	-	-	-	-
C-B	0.34	8.84	0.51	A	210.00	210.00	30.32	8.66	0.51	30.33	8.67

Existing Layout - 2018 Baseline, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set (s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Existing Layout	N/A		✓	✓	D1,D2,D3,D4,D5,D6		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relative
2018 Baseline, PM	2018 Baseline	PM		DIRECT	17:00	18:00	60	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
London Road_Lovedean Lane Junction	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D		24.01	C

100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100%

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	London Road (S)		Major
B	Lovedean Lane		Minor
C	London Road (N)		Major
D	Prochurch Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	7.20		0.00	✓	3.00	250.00		
C	7.20		0.00	✓	2.90	250.00		

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.40	3.70	3.70	3.70		2.00	70	30
D	One lane	2.20										55	27

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
19	A-D	781.320	-	-	-	0.287	0.287	0.287	-	0.287	-	-
19	B-AD	520.563	0.090	0.227	-	-	-	0.143	0.324	0.143	0.090	0.227
19	B-C	713.156	0.104	0.262	-	-	-	-	-	-	0.104	0.262
19	C-B	773.497	0.284	0.284	-	-	-	-	-	-	0.284	0.284
19	D-A	589.599	-	-	-	0.217	0.086	0.217	-	0.086	-	-
19	D-BC	467.929	0.128	0.128	0.292	0.204	0.081	0.204	-	0.081	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

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 Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000
D	DIRECT	✓	N/A	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 19 (for whole period)

		To			
		A	B	C	D
From	A	0.000	142.000	485.000	6.000
	B	85.000	0.000	223.000	0.000
	C	510.000	453.000	0.000	12.000
	D	3.000	0.000	1.000	0.000

Turning Proportions (PCU) - Junction 19 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.22	0.77	0.01
	B	0.28	0.00	0.72	0.00
	C	0.52	0.46	0.00	0.01
	D	0.75	0.00	0.25	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 19 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 19 (for whole period)

	To				
From		A	B	C	D
	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.47	14.57	0.89	B	223.00	223.00	51.38	13.82	0.86	51.43	13.84
B-AD	0.51	44.44	1.02	E	85.00	85.00	56.58	39.94	0.94	56.77	40.07
A-B	-	-	-	-	142.00	142.00	-	-	-	-	-
A-C	-	-	-	-	485.00	485.00	-	-	-	-	-
A-D	0.01	6.00	0.01	A	6.00	6.00	0.59	5.95	0.01	0.59	5.95
D-ABC	0.01	9.41	0.01	A	4.00	4.00	0.62	9.27	0.01	0.62	9.27
C-D	-	-	-	-	12.00	12.00	-	-	-	-	-
C-A	-	-	-	-	510.00	510.00	-	-	-	-	-
C-B	0.76	25.20	3.10	D	453.00	453.00	173.25	22.95	2.89	173.74	23.01

Existing Layout - 2018 Baseline + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set (s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Existing Layout	N/A		✓	✓	D1,D2,D3,D4,D5,D6		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relatio
2018 Baseline + Dev, AM	2018 Baseline + Dev	AM		DIRECT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
London Road_Lovedean Lane Junction	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D		25.54	D

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	London Road (S)		Major
B	Lovedean Lane		Minor
C	London Road (N)		Major
D	Prochurch Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	7.20		0.00	✓	3.00	250.00		
C	7.20		0.00	✓	2.90	250.00		

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.40	3.70	3.70	3.70		2.00	70	30
D	One lane	2.20										55	27

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
19	A-D	781.320	-	-	-	0.287	0.287	0.287	-	0.287	-	-
19	B-AD	520.590	0.090	0.227	-	-	-	0.143	0.325	0.143	0.090	0.227
19	B-C	713.123	0.104	0.262	-	-	-	-	-	-	0.104	0.262
19	C-B	773.497	0.284	0.284	-	-	-	-	-	-	0.284	0.284
19	D-A	589.599	-	-	-	0.217	0.086	0.217	-	0.086	-	-
19	D-BC	467.929	0.128	0.128	0.292	0.204	0.081	0.204	-	0.081	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

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 Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000
D	DIRECT	✓	N/A	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 19 (for whole period)

		To			
		A	B	C	D
From	A	0.000	97.000	433.000	3.000
	B	135.000	0.000	359.000	2.000
	C	416.000	214.000	0.000	6.000
	D	14.000	3.000	17.000	0.000

Turning Proportions (PCU) - Junction 19 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.18	0.81	0.01
	B	0.27	0.00	0.72	0.00
	C	0.65	0.34	0.00	0.01
	D	0.41	0.09	0.50	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 19 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 19 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.76	30.92	2.99	D	359.00	359.00	162.38	27.14	2.71	162.95	27.23
B-AD	0.61	41.25	1.52	E	137.00	137.00	82.85	36.28	1.38	83.16	36.42
A-B	-	-	-	-	97.00	97.00	-	-	-	-	-
A-C	-	-	-	-	433.00	433.00	-	-	-	-	-
A-D	0.00	5.84	0.00	A	3.00	3.00	0.29	5.79	0.00	0.29	5.79
D-ABC	0.10	11.79	0.11	B	34.00	34.00	6.53	11.53	0.11	6.53	11.53
C-D	-	-	-	-	6.00	6.00	-	-	-	-	-
C-A	-	-	-	-	416.00	416.00	-	-	-	-	-
C-B	0.35	8.93	0.53	A	214.00	214.00	31.19	8.74	0.52	31.20	8.75

Existing Layout - 2018 Baseline + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set (s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Existing Layout	N/A		✓	✓	D1,D2,D3,D4,D5,D6		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relatio
2018 Baseline + Dev, PM	2018 Baseline + Dev	PM		DIRECT	17:00	18:00	60	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
London Road_Lovedean Lane Junction	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D		26.62	D

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	London Road (S)		Major
B	Lovedean Lane		Minor
C	London Road (N)		Major
D	Prochurch Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	7.20		0.00	✓	3.00	250.00		
C	7.20		0.00	✓	2.90	250.00		

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.40	3.70	3.70	3.70		2.00	70	30
D	One lane	2.20										55	27

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
19	A-D	781.320	-	-	-	0.287	0.287	0.287	-	0.287	-	-
19	B-AD	519.965	0.090	0.227	-	-	-	0.143	0.324	0.143	0.090	0.227
19	B-C	713.903	0.104	0.262	-	-	-	-	-	-	0.104	0.262
19	C-B	773.497	0.284	0.284	-	-	-	-	-	-	0.284	0.284
19	D-A	589.599	-	-	-	0.217	0.086	0.217	-	0.086	-	-
19	D-BC	467.929	0.128	0.128	0.292	0.204	0.081	0.204	-	0.081	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

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 Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000
D	DIRECT	✓	N/A	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 19 (for whole period)

		To			
		A	B	C	D
From	A	0.000	142.000	485.000	6.000
	B	85.000	0.000	229.000	0.000
	C	510.000	470.000	0.000	12.000
	D	3.000	0.000	1.000	0.000

Turning Proportions (PCU) - Junction 19 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.22	0.77	0.01
	B	0.27	0.00	0.73	0.00
	C	0.51	0.47	0.00	0.01
	D	0.75	0.00	0.25	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 19 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 19 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.49	15.39	0.97	C	229.00	229.00	55.33	14.50	0.92	55.39	14.51
B-AD	0.54	48.61	1.12	E	85.00	85.00	61.08	43.11	1.02	61.31	43.28
A-B	-	-	-	-	142.00	142.00	-	-	-	-	-
A-C	-	-	-	-	485.00	485.00	-	-	-	-	-
A-D	0.01	6.00	0.01	A	6.00	6.00	0.59	5.95	0.01	0.59	5.95
D-ABC	0.01	9.41	0.01	A	4.00	4.00	0.62	9.27	0.01	0.62	9.27
C-D	-	-	-	-	12.00	12.00	-	-	-	-	-
C-A	-	-	-	-	510.00	510.00	-	-	-	-	-
C-B	0.79	28.53	3.62	D	470.00	470.00	200.20	25.56	3.34	200.86	25.64