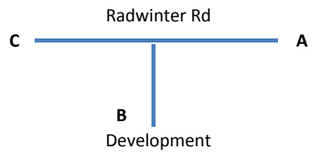
Appendix W

Radwinter Road Access – Junction Assessment Data - 2018

Access 1 - Radwinter Road



AM Peak 0800-0900

Background Traffic 2013 count

	A	B	C
A			274
B			
C	102		

Tempro 12-18

	A	B	C
A	1.038	1.038	1.038
B	1.038	1.038	1.038
C	1.038	1.038	1.038

Background 2018

	A	B	C
A	0	0	284
B	0	0	0
C	106	0	0

Committed Development

	A	B	C
A	0	0	32
B	0	0	0
C	34	0	0

Background + Committed

	A	B	C
A	0	0	316
B	0	0	0
C	140	0	0

Development

	A	B	C
A	0	1	0
B	1	0	52
C	0	38	0

Background + Committed + Development

	A	B	C
A	0	1	316
B	1	0	52
C	140	38	0

PM Peak 1700-1800

Background Traffic 2013 count

	A	B	C
A			139
B			
C	221		

Tempro 12-18

	A	B	C
A	1.055	1.055	1.055
B	1.055	1.055	1.055
C	1.055	1.055	1.055

Background 2018

	A	B	C
A	0	0	147
B	0	0	0
C	233	0	0

Committed Development

	A	B	C
A	0	0	79
B	0	0	0
C	68	0	0

Background + Committed

	A	B	C
A	0	0	226
B	0	0	0
C	301	0	0

Development

	A	B	C
A	0	1	0
B	1	0	50
C	0	49	0

Background + Committed + Development

	A	B	C
A	0	1	226
B	1	0	50
C	301	49	0

AM Peak 0800-0900

Tempro 12-26

	A	B	C
A	1.069	1.069	1.069
B	1.069	1.069	1.069
C	1.069	1.069	1.069

Background 2026

	A	B	C
A	0	0	293
B	0	0	0
C	109	0	0

Committed Development

	A	B	C
A	0	0	32
B	0	0	0
C	34	0	0

Background + Committed

	A	B	C
A	0	0	325
B	0	0	0
C	143	0	0

Development

	A	B	C
A	0	1	0
B	1	0	52
C	0	38	0

Background + Committed + Development

	A	B	C
A	0	1	325
B	1	0	52
C	143	38	0

PM Peak 1700-1800

Tempro 12-26

	A	B	C
A	1.113	1.113	1.113
B	1.113	1.113	1.113
C	1.113	1.113	1.113

Background 2026

	A	B	C
A	0	0	155
B	0	0	0
C	246	0	0

Committed Development

	A	B	C
A	0	0	79
B	0	0	0
C	68	0	0

Background + Committed

	A	B	C
A	0	0	234
B	0	0	0
C	314	0	0

Development

	A	B	C
A	0	1	0
B	1	0	50
C	0	49	0

Background + Committed + Development

	A	B	C
A	0	1	234
B	1	0	50
C	314	49	0

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Access 1 - Radwinter Road.arc8
Path: S:\JPP\JPP Schemes R\R6694PP - Saffron Walden\Reports\TA\Junction Modelling\Access 1 - Radwinter Road
Report generation date: 05/12/2013 12:29:19

» (Default Analysis Set) - 2018-Back + Comm + Dev, AM
» (Default Analysis Set) - 2018-Back + Comm + Dev, PM

Summary of junction performance

	AM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	A1 - 2018-Back + Comm + Dev				
Stream B-C	0.14	7.33	0.11	A	6.99
Stream B-A	0.01	10.97	0.01	B	
Stream C-A	-	-	-	-	
Stream C-B	0.09	6.36	0.08	A	
Stream A-B	-	-	-	-	
Stream A-C	-	-	-	-	

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

"D2 - 2018-Back + Comm + Dev, AM" model duration: 07:45 - 09:15
"D6 - 2018-Back + Comm + Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 05/12/2013 12:29:18

File summary

File Description

Title	(untitled)
Location	
Site Number	
Date	06/11/2013
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
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

(Default Analysis Set) - 2018-Back + Comm + 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
(Default Analysis Set)	N/A		✓				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	Relationship
2018-Back + Comm + Dev, AM	2018-Back + Comm + Dev	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
Radwinter Road Access	T-Junction	Two-way	A,B,C		6.99	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Radwinter Rd (E)		Major
B	Site Access		Minor
C	Radwinter Road (W)		Major

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)
C	6.00		0.00	✓	3.00	247.00		

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	5.00	3.38	3.38	3.38	✓	1.00	27	26

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	478.036	0.087	0.220	0.138	0.314
1	B-C	704.202	0.108	0.273	-	-
1	C-B	779.431	0.302	0.302	-	-

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	ONE HOUR	✓	317.00	100.000
B	ONE HOUR	✓	64.00	100.000
C	ONE HOUR	✓	187.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	1.000	316.000
	B	2.000	0.000	62.000
	C	140.000	47.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.00	1.00
	B	0.03	0.00	0.97
	C	0.75	0.25	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	10.000	10.000	10.000
	B	10.000	10.000	10.000
	C	10.000	10.000	10.000

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	0.11	7.33	0.14	A	56.89	85.34	9.92	6.97	0.11	9.92	6.97
B-A	0.01	10.97	0.01	B	1.84	2.75	0.48	10.40	0.01	0.48	10.40
C-A	-	-	-	-	128.47	192.70	-	-	-	-	-
C-B	0.08	6.36	0.09	A	43.13	64.69	6.57	6.10	0.07	6.57	6.10
A-B	-	-	-	-	0.92	1.38	-	-	-	-	-
A-C	-	-	-	-	289.97	434.95	-	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	46.68	11.67	46.33	0.00	638.61	0.073	0.00	0.09	6.683	A
B-A	1.51	0.38	1.49	0.00	399.71	0.004	0.00	0.00	9.944	A
C-A	105.40	26.35	105.40	0.00	-	-	-	-	-	-
C-B	35.38	8.85	35.15	0.00	707.36	0.050	0.00	0.06	5.890	A
A-B	0.75	0.19	0.75	0.00	-	-	-	-	-	-
A-C	237.90	59.48	237.90	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	55.74	13.93	55.65	0.00	625.85	0.089	0.09	0.11	6.945	A
B-A	1.80	0.45	1.79	0.00	384.34	0.005	0.00	0.01	10.351	B
C-A	125.86	31.46	125.86	0.00	-	-	-	-	-	-
C-B	42.25	10.56	42.20	0.00	693.37	0.061	0.06	0.07	6.081	A
A-B	0.90	0.22	0.90	0.00	-	-	-	-	-	-
A-C	284.08	71.02	284.08	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	68.26	17.07	68.14	0.00	608.21	0.112	0.11	0.14	7.330	A
B-A	2.20	0.55	2.20	0.00	363.07	0.006	0.01	0.01	10.972	B
C-A	154.14	38.54	154.14	0.00	-	-	-	-	-	-
C-B	51.75	12.94	51.67	0.00	674.03	0.077	0.07	0.09	6.362	A
A-B	1.10	0.28	1.10	0.00	-	-	-	-	-	-
A-C	347.92	86.98	347.92	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	68.26	17.07	68.26	0.00	608.21	0.112	0.14	0.14	7.333	A
B-A	2.20	0.55	2.20	0.00	363.04	0.006	0.01	0.01	10.973	B
C-A	154.14	38.54	154.14	0.00	-	-	-	-	-	-
C-B	51.75	12.94	51.75	0.00	674.03	0.077	0.09	0.09	6.362	A
A-B	1.10	0.28	1.10	0.00	-	-	-	-	-	-
A-C	347.92	86.98	347.92	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	55.74	13.93	55.86	0.00	625.84	0.089	0.14	0.11	6.948	A
B-A	1.80	0.45	1.80	0.00	384.30	0.005	0.01	0.01	10.352	B
C-A	125.86	31.46	125.86	0.00	-	-	-	-	-	-
C-B	42.25	10.56	42.33	0.00	693.37	0.061	0.09	0.07	6.082	A
A-B	0.90	0.22	0.90	0.00	-	-	-	-	-	-
A-C	284.08	71.02	284.08	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	46.68	11.67	46.76	0.00	638.59	0.073	0.11	0.09	6.691	A
B-A	1.51	0.38	1.51	0.00	399.63	0.004	0.01	0.00	9.946	A
C-A	105.40	26.35	105.40	0.00	-	-	-	-	-	-
C-B	35.38	8.85	35.44	0.00	707.36	0.050	0.07	0.06	5.893	A
A-B	0.75	0.19	0.75	0.00	-	-	-	-	-	-
A-C	237.90	59.48	237.90	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.25	0.08	6.683	A	A
B-A	0.06	0.00	9.944	A	A
C-A	-	-	-	-	-
C-B	0.84	0.06	5.890	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.57	0.10	6.945	A	A
B-A	0.07	0.01	10.351	B	B
C-A	-	-	-	-	-
C-B	1.05	0.07	6.081	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.02	0.13	7.330	A	A
B-A	0.10	0.01	10.972	B	B
C-A	-	-	-	-	-
C-B	1.34	0.09	6.362	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	2.07	0.14	7.333	A	A
B-A	0.10	0.01	10.973	B	B
C-A	-	-	-	-	-
C-B	1.36	0.09	6.362	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.66	0.11	6.948	A	A
B-A	0.08	0.01	10.352	B	B
C-A	-	-	-	-	-
C-B	1.10	0.07	6.082	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.34	0.09	6.691	A	A
B-A	0.06	0.00	9.946	A	A
C-A	-	-	-	-	-
C-B	0.89	0.06	5.893	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2018-Back + Comm + 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
(Default Analysis Set)	N/A		✓				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	Relationship
2018-Back + Comm + Dev, PM	2018-Back + Comm + Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
Radwinter Road Access	T-Junction	Two-way	A,B,C		5.93	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Radwinter Rd (E)		Major
B	Site Access		Minor
C	Radwinter Road (W)		Major

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)
C	6.00		0.00	✓	3.00	247.00		

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	5.00	3.38	3.38	3.38	✓	1.00	27	26

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	478.098	0.087	0.220	0.138	0.314
1	B-C	704.170	0.108	0.273	-	-
1	C-B	779.431	0.302	0.302	-	-

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	ONE HOUR	✓	1.00	100.000
B	ONE HOUR	✓	63.00	100.000
C	ONE HOUR	✓	58.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	1.000	0.000
	B	2.000	0.000	61.000
	C	0.000	58.000	0.000

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

		To		
		A	B	C
From	A	0.00	1.00	0.00
	B	0.03	0.00	0.97
	C	0.00	1.00	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	10.000	10.000	10.000
	B	10.000	10.000	10.000
	C	10.000	10.000	10.000

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	0.10	6.22	0.12	A	55.97	83.96	8.52	6.09	0.09	8.52	6.09
B-A	0.00	8.70	0.01	A	1.84	2.75	0.39	8.57	0.00	0.39	8.57
C-A	-	-	-	-	0.00	0.00	-	-	-	-	-
C-B	0.08	5.53	0.10	A	53.22	79.83	7.22	5.43	0.08	7.22	5.43
A-B	-	-	-	-	0.00	0.00	-	-	-	-	-
A-C	-	-	-	-	0.00	0.00	-	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	45.92	11.48	45.62	0.00	703.60	0.065	0.00	0.08	6.015	A
B-A	1.51	0.38	1.49	0.00	464.21	0.003	0.00	0.00	8.558	A
C-A	0.00	0.00	0.00	0.00	-	-	-	-	-	-
C-B	43.67	10.92	43.41	0.00	779.43	0.056	0.00	0.06	5.379	A
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	0.00	0.00	0.00	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	54.84	13.71	54.77	0.00	703.47	0.078	0.08	0.09	6.104	A
B-A	1.80	0.45	1.80	0.00	461.36	0.004	0.00	0.00	8.616	A
C-A	0.00	0.00	0.00	0.00	-	-	-	-	-	-
C-B	52.14	13.04	52.09	0.00	779.43	0.067	0.06	0.08	5.444	A
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	0.00	0.00	0.00	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	67.16	16.79	67.07	0.00	703.31	0.095	0.09	0.12	6.224	A
B-A	2.20	0.55	2.20	0.00	457.45	0.005	0.00	0.01	8.698	A
C-A	0.00	0.00	0.00	0.00	-	-	-	-	-	-
C-B	63.86	15.96	63.78	0.00	779.43	0.082	0.08	0.10	5.533	A
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	0.00	0.00	0.00	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	67.16	16.79	67.16	0.00	703.31	0.095	0.12	0.12	6.224	A
B-A	2.20	0.55	2.20	0.00	457.42	0.005	0.01	0.01	8.698	A
C-A	0.00	0.00	0.00	0.00	-	-	-	-	-	-
C-B	63.86	15.96	63.86	0.00	779.43	0.082	0.10	0.10	5.533	A
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	0.00	0.00	0.00	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	54.84	13.71	54.93	0.00	703.47	0.078	0.12	0.09	6.108	A
B-A	1.80	0.45	1.80	0.00	461.32	0.004	0.01	0.00	8.619	A
C-A	0.00	0.00	0.00	0.00	-	-	-	-	-	-
C-B	52.14	13.04	52.21	0.00	779.43	0.067	0.10	0.08	5.445	A
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	0.00	0.00	0.00	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	45.92	11.48	45.99	0.00	703.58	0.065	0.09	0.08	6.021	A
B-A	1.51	0.38	1.51	0.00	464.12	0.003	0.00	0.00	8.561	A
C-A	0.00	0.00	0.00	0.00	-	-	-	-	-	-
C-B	43.67	10.92	43.72	0.00	779.43	0.056	0.08	0.07	5.382	A
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	0.00	0.00	0.00	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.11	0.07	6.015	A	A
B-A	0.05	0.00	8.558	A	A
C-A	-	-	-	-	-
C-B	0.95	0.06	5.379	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.36	0.09	6.104	A	A
B-A	0.06	0.00	8.616	A	A
C-A	-	-	-	-	-
C-B	1.16	0.08	5.444	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.70	0.11	6.224	A	A
B-A	0.08	0.01	8.698	A	A
C-A	-	-	-	-	-
C-B	1.44	0.10	5.533	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.73	0.12	6.224	A	A
B-A	0.08	0.01	8.698	A	A
C-A	-	-	-	-	-
C-B	1.47	0.10	5.533	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.43	0.10	6.108	A	A
B-A	0.07	0.00	8.619	A	A
C-A	-	-	-	-	-
C-B	1.21	0.08	5.445	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

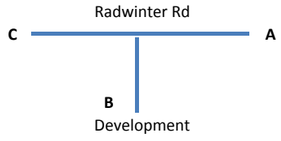
Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.18	0.08	6.021	A	A
B-A	0.06	0.00	8.561	A	A
C-A	-	-	-	-	-
C-B	1.00	0.07	5.382	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Appendix X

Radwinter Road Access – Junction Assessment Data – 2026 with full RT Link

With Link

Access 1 - Radwinter Road



AM Peak 0800-0900

Background Traffic 2013 count

	A	B	C
A			274
B			
C	102		

Tempro 12-18

	A	B	C
A	1.038	1.038	1.038
B	1.038	1.038	1.038
C	1.038	1.038	1.038

Background 2018

	A	B	C
A	0	0	284
B	0	0	0
C	106	0	0

Diversion from Thax / Rad

	A	B	C
A		128	
B	181		
C			

Committed Development

	A	B	C
A	0	0	32
B	0	0	0
C	34	0	0

Background + Committed + Diversion

	A	B	C
A	0	128	316
B	181	0	0
C	140	0	0

Development

	A	B	C
A	0	2	0
B	4	0	156
C	0	83	0

Background + Committed + Development

	A	B	C
A	0	130	316
B	185	0	156
C	140	83	0

PM Peak 1700-1800

Background Traffic 2013 count

	A	B	C
A			139
B			
C	221		

Tempro 12-18

	A	B	C
A	1.055	1.055	1.055
B	1.055	1.055	1.055
C	1.055	1.055	1.055

Background 2018

	A	B	C
A	0	0	147
B	0	0	0
C	233	0	0

Diversion from Thax / Rad

	A	B	C
A		196	
B	225		
C			

Committed Development

	A	B	C
A	0	0	79
B	0	0	0
C	68	0	0

Background + Committed + Diversion

	A	B	C
A	0	196	226
B	225	0	0
C	301	0	0

Development

	A	B	C
A	0	4	0
B	3	0	113
C	0	145	0

Background + Committed + Development

	A	B	C
A	0	200	226
B	228	0	113
C	301	145	0

2026
AM Peak 0800-0900

Tempro 12-26

	A	B	C
A	1.069	1.069	1.069
B	1.069	1.069	1.069
C	1.069	1.069	1.069

Background 2026

	A	B	C
A	0	0	293
B	0	0	0
C	109	0	0

Diversion from Thax / Rad

	A	B	C
A		131	
B	193		
C			

Committed Development

	A	B	C
A	0	0	32
B	0	0	0
C	34	0	0

Background + Committed + Diversion

	A	B	C
A	0	131	325
B	193	0	0
C	143	0	0

Development

	A	B	C
A	0	2	0
B	4	0	156
C	0	83	0

Background + Committed + Development

	A	B	C
A	0	134	325
B	197	0	156
C	143	83	0

2026
PM Peak 1700-1800

Tempro 12-26

	A	B	C
A	1.113	1.113	1.113
B	1.113	1.113	1.113
C	1.113	1.113	1.113

Background 2026

	A	B	C
A	0	0	155
B	0	0	0
C	246	0	0

Diversion from Thax / Rad

	A	B	C
A		207	
B	237		
C			

Committed Development

	A	B	C
A	0	0	79
B	0	0	0
C	68	0	0

Background + Committed + Diversion

	A	B	C
A	0	207	234
B	237	0	0
C	314	0	0

Development

	A	B	C
A	0	4	0
B	3	0	113
C	0	145	0

Background + Committed + Development

	A	B	C
A	0	211	234
B	240	0	113
C	314	145	0

Junctions 8

PICADY 8 - Priority Intersection Module

Filename: Access 1 - Radwinter Road-with full link operation.arc8
Path: S:\JPP\JPP Schemes R\R6694PP - Saffron Walden\Reports\TA\Junction Modelling\Access 1 - Radwinter Road
Report generation date: 05/12/2013 12:36:23

» (Default Analysis Set) - 2026-Back + Comm + Dev, AM
» (Default Analysis Set) - 2026-Back + Comm + Dev, PM

Summary of junction performance

	AM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	A1 - 2026-Back + Comm + Dev				
Stream B-C	0.86	18.43	0.44	C	21.25
Stream B-A	1.71	29.32	0.62	D	
Stream C-A	-	-	-	-	
Stream C-B	0.19	7.39	0.15	A	
Stream A-B	-	-	-	-	
Stream A-C	-	-	-	-	

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

"D4 - 2026-Back + Comm + Dev, AM" model duration: 07:45 - 09:15
"D8 - 2026-Back + Comm + Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 05/12/2013 12:36:22

File summary

File Description

Title	(untitled)
Location	
Site Number	
Date	06/11/2013
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
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

(Default Analysis Set) - 2026-Back + Comm + 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
(Default Analysis Set)	N/A		✓				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	Relationship
2026-Back + Comm + Dev, AM	2026-Back + Comm + Dev	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
Radwinter Road Access	T-Junction	Two-way	A,B,C		21.25	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Radwinter Rd (E)		Major
B	Site Access		Minor
C	Radwinter Road (W)		Major

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)
C	6.00		0.00	✓	3.00	247.00		

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	5.00	3.38	3.38	3.38	✓	1.00	27	26

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	543.850	0.099	0.250	0.158	0.358
1	B-C	679.076	0.104	0.263	-	-
1	C-B	779.431	0.302	0.302	-	-

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	ONE HOUR	✓	459.00	100.000
B	ONE HOUR	✓	353.00	100.000
C	ONE HOUR	✓	226.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	134.000	325.000
	B	197.000	0.000	156.000
	C	143.000	83.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.29	0.71
	B	0.56	0.00	0.44
	C	0.63	0.37	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	10.000	10.000	10.000
	B	10.000	10.000	10.000
	C	10.000	10.000	10.000

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	0.44	18.43	0.86	C	143.15	214.72	47.77	13.35	0.53	47.77	13.35
B-A	0.62	29.32	1.71	D	180.77	271.16	91.93	20.34	1.02	91.95	20.35
C-A	-	-	-	-	131.22	196.83	-	-	-	-	-
C-B	0.15	7.39	0.19	A	76.16	114.24	13.13	6.89	0.15	13.13	6.89
A-B	-	-	-	-	122.96	184.44	-	-	-	-	-
A-C	-	-	-	-	298.23	447.34	-	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	117.44	29.36	116.21	0.00	528.56	0.222	0.00	0.31	9.575	A
B-A	148.31	37.08	146.02	0.00	425.73	0.348	0.00	0.57	14.047	B
C-A	107.66	26.91	107.66	0.00	-	-	-	-	-	-
C-B	62.49	15.62	62.04	0.00	675.07	0.093	0.00	0.11	6.456	A
A-B	100.88	25.22	100.88	0.00	-	-	-	-	-	-
A-C	244.68	61.17	244.68	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	140.24	35.06	139.69	0.00	479.47	0.292	0.31	0.45	11.636	B
B-A	177.10	44.27	175.97	0.00	397.42	0.446	0.57	0.86	17.787	C
C-A	128.55	32.14	128.55	0.00	-	-	-	-	-	-
C-B	74.62	18.65	74.50	0.00	654.82	0.114	0.11	0.14	6.821	A
A-B	120.46	30.12	120.46	0.00	-	-	-	-	-	-
A-C	292.17	73.04	292.17	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	171.76	42.94	170.22	0.00	391.19	0.439	0.45	0.83	17.795	C
B-A	216.90	54.23	213.76	0.00	352.04	0.616	0.86	1.64	28.005	D
C-A	157.45	39.36	157.45	0.00	-	-	-	-	-	-
C-B	91.38	22.85	91.20	0.00	626.81	0.146	0.14	0.19	7.392	A
A-B	147.54	36.88	147.54	0.00	-	-	-	-	-	-
A-C	357.83	89.46	357.83	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	171.76	42.94	171.64	0.00	386.22	0.445	0.83	0.86	18.433	C
B-A	216.90	54.23	216.63	0.00	351.01	0.618	1.64	1.71	29.320	D
C-A	157.45	39.36	157.45	0.00	-	-	-	-	-	-
C-B	91.38	22.85	91.38	0.00	626.81	0.146	0.19	0.19	7.394	A
A-B	147.54	36.88	147.54	0.00	-	-	-	-	-	-
A-C	357.83	89.46	357.83	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	140.24	35.06	141.81	0.00	474.41	0.296	0.86	0.47	11.962	B
B-A	177.10	44.27	180.25	0.00	396.64	0.446	1.71	0.92	18.553	C
C-A	128.55	32.14	128.55	0.00	-	-	-	-	-	-
C-B	74.62	18.65	74.79	0.00	654.82	0.114	0.19	0.14	6.828	A
A-B	120.46	30.12	120.46	0.00	-	-	-	-	-	-
A-C	292.17	73.04	292.17	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	117.44	29.36	118.04	0.00	525.36	0.224	0.47	0.32	9.736	A
B-A	148.31	37.08	149.57	0.00	425.28	0.349	0.92	0.60	14.430	B
C-A	107.66	26.91	107.66	0.00	-	-	-	-	-	-
C-B	62.49	15.62	62.61	0.00	675.07	0.093	0.14	0.11	6.468	A
A-B	100.88	25.22	100.88	0.00	-	-	-	-	-	-
A-C	244.68	61.17	244.68	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	4.44	0.30	9.575	A	A
B-A	8.05	0.54	14.047	B	B
C-A	-	-	-	-	-
C-B	1.62	0.11	6.456	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	6.46	0.43	11.636	B	B
B-A	12.14	0.81	17.787	C	B
C-A	-	-	-	-	-
C-B	2.06	0.14	6.821	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	11.70	0.78	17.795	C	B
B-A	22.22	1.48	28.005	D	C
C-A	-	-	-	-	-
C-B	2.73	0.18	7.392	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	12.77	0.85	18.433	C	B
B-A	25.20	1.68	29.320	D	C
C-A	-	-	-	-	-
C-B	2.80	0.19	7.394	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	7.41	0.49	11.962	B	B
B-A	14.80	0.99	18.553	C	B
C-A	-	-	-	-	-
C-B	2.19	0.15	6.828	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	4.99	0.33	9.736	A	A
B-A	9.51	0.63	14.430	B	B
C-A	-	-	-	-	-
C-B	1.73	0.12	6.468	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2026-Back + Comm + 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
(Default Analysis Set)	N/A		✓				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	Relationship
2026-Back + Comm + Dev, PM	2026-Back + Comm + Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
Radwinter Road Access	T-Junction	Two-way	A,B,C		44.80	E

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Radwinter Rd (E)		Major
B	Site Access		Minor
C	Radwinter Road (W)		Major

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)
C	6.00		0.00	✓	3.00	247.00		

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	5.00	3.38	3.38	3.38	✓	1.00	27	26

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	534.490	0.097	0.246	0.155	0.352
1	B-C	659.554	0.101	0.256	-	-
1	C-B	779.431	0.302	0.302	-	-

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	ONE HOUR	✓	445.00	100.000
B	ONE HOUR	✓	353.00	100.000
C	ONE HOUR	✓	459.00	100.000

Turning Proportions

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

		To		
		A	B	C
From	A	0.000	211.000	234.000
	B	240.000	0.000	113.000
	C	314.000	145.000	0.000

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

		To		
		A	B	C
From	A	0.00	0.47	0.53
	B	0.68	0.00	0.32
	C	0.68	0.32	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	10.000	10.000	10.000
	B	10.000	10.000	10.000
	C	10.000	10.000	10.000

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	0.58	41.90	1.37	E	103.69	155.54	52.75	20.35	0.59	52.76	20.35
B-A	0.84	68.16	4.62	F	220.23	330.34	193.27	35.10	2.15	193.34	35.12
C-A	-	-	-	-	288.13	432.20	-	-	-	-	-
C-B	0.25	8.39	0.37	A	133.05	199.58	25.36	7.62	0.28	25.36	7.62
A-B	-	-	-	-	193.62	290.43	-	-	-	-	-
A-C	-	-	-	-	214.72	322.08	-	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	85.07	21.27	84.15	0.00	483.71	0.176	0.00	0.23	9.888	A
B-A	180.68	45.17	177.12	0.00	395.76	0.457	0.00	0.89	17.841	C
C-A	236.40	59.10	236.40	0.00	-	-	-	-	-	-
C-B	109.16	27.29	108.33	0.00	678.26	0.161	0.00	0.21	6.938	A
A-B	158.85	39.71	158.85	0.00	-	-	-	-	-	-
A-C	176.17	44.04	176.17	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	101.58	25.40	101.07	0.00	405.23	0.251	0.23	0.36	12.997	B
B-A	215.76	53.94	213.34	0.00	364.91	0.591	0.89	1.49	25.703	D
C-A	282.28	70.57	282.28	0.00	-	-	-	-	-	-
C-B	130.35	32.59	130.11	0.00	658.62	0.198	0.21	0.27	7.489	A
A-B	189.68	47.42	189.68	0.00	-	-	-	-	-	-
A-C	210.36	52.59	210.36	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	124.42	31.10	121.54	0.00	242.47	0.513	0.36	1.08	32.033	D
B-A	264.24	66.06	254.18	0.00	317.67	0.832	1.49	4.01	55.249	F
C-A	345.72	86.43	345.72	0.00	-	-	-	-	-	-
C-B	159.65	39.91	159.25	0.00	631.47	0.253	0.27	0.37	8.379	A
A-B	232.32	58.08	232.32	0.00	-	-	-	-	-	-
A-C	257.64	64.41	257.64	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	124.42	31.10	123.25	0.00	216.23	0.575	1.08	1.37	41.903	E
B-A	264.24	66.06	261.80	0.00	315.46	0.838	4.01	4.62	68.156	F
C-A	345.72	86.43	345.72	0.00	-	-	-	-	-	-
C-B	159.65	39.91	159.64	0.00	631.47	0.253	0.37	0.37	8.392	A
A-B	232.32	58.08	232.32	0.00	-	-	-	-	-	-
A-C	257.64	64.41	257.64	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	101.58	25.40	105.44	0.00	380.16	0.267	1.37	0.41	14.607	B
B-A	215.76	53.94	227.34	0.00	363.04	0.594	4.62	1.73	31.250	D
C-A	282.28	70.57	282.28	0.00	-	-	-	-	-	-
C-B	130.35	32.59	130.74	0.00	658.62	0.198	0.37	0.27	7.506	A
A-B	189.68	47.42	189.68	0.00	-	-	-	-	-	-
A-C	210.36	52.59	210.36	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	85.07	21.27	85.74	0.00	475.38	0.179	0.41	0.24	10.181	B
B-A	180.68	45.17	183.74	0.00	395.09	0.457	1.73	0.96	18.996	C
C-A	236.40	59.10	236.40	0.00	-	-	-	-	-	-
C-B	109.16	27.29	109.41	0.00	678.26	0.161	0.27	0.21	6.966	A
A-B	158.85	39.71	158.85	0.00	-	-	-	-	-	-
A-C	176.17	44.04	176.17	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.32	0.22	9.888	A	A
B-A	12.24	0.82	17.841	C	B
C-A	-	-	-	-	-
C-B	3.03	0.20	6.938	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	5.20	0.35	12.997	B	B
B-A	20.56	1.37	25.703	D	C
C-A	-	-	-	-	-
C-B	3.94	0.26	7.489	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	14.46	0.96	32.033	D	C
B-A	48.63	3.24	55.249	F	E
C-A	-	-	-	-	-
C-B	5.36	0.36	8.379	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	19.27	1.28	41.903	E	D
B-A	65.48	4.37	68.156	F	E
C-A	-	-	-	-	-
C-B	5.54	0.37	8.392	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	6.71	0.45	14.607	B	B
B-A	30.87	2.06	31.250	D	C
C-A	-	-	-	-	-
C-B	4.22	0.28	7.506	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	3.79	0.25	10.181	B	B
B-A	15.49	1.03	18.996	C	B
C-A	-	-	-	-	-
C-B	3.27	0.22	6.966	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Appendix Z

Draft Masterplan

McBains Cooper Consulting Ltd drawing no. 57183-SK07 A

manor oak HOMES
building for the future environment

LAND AT:
RADWINTER ROAD,
SAFFRON WALDEN

ILLUSTRATIVE MASTERPLAN

SCHOOL OPTION

APPROX 1: 2500 @A3 /1:1250 @A1

McBAINS COOPER

McBainsCooper Consulting Ltd
December 20 2013
57183-SK07 A

0 25 50 75 100 125m

ATTENUATION
ATTENUATION
GREEN
GREEN
RADWINTER ROAD
RETIREMENT VILLAGE
FOOT/CYCLE LINK
AVENUE
OPEN SPACE PROVISION
BALANCE OF DRAFT ALLOCATION
GREEN
TESCO
ATTENUATION
BI
BI
ATTENUATION
0.9HA EXPANSION
1.2 HA PRIMARY SCHOOL SITE
KIER HOMES APPLICATION