

Junctions 9
PICADY 9 - Priority Intersection Module
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**Filename:** DRAFT Site Access J2.j9  
**Path:** J:\39304 Heyford Park Tranche 2\Technical\Transport\Junction Assessments\PICADY\2022 Sensitivity Test\SA 2  
**Report generation date:** 22/02/2018 17:05:47

- »2022 Sensitivity Test, AM
- »2022 Sensitivity Test, PM

**Summary of junction performance**

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
<b>2022 Sensitivity Test</b>						
Stream B-AC	0.1	9.26	0.10	0.0	8.50	0.04
Stream C-AB	0.0	4.98	0.01	0.0	4.52	0.02

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

**File summary**

**File Description**

<b>Title</b>	(untitled)
<b>Location</b>	
<b>Site number</b>	
<b>Date</b>	27/10/2016
<b>Version</b>	
<b>Status</b>	(new file)
<b>Identifier</b>	
<b>Client</b>	
<b>Jobnumber</b>	
<b>Enumerator</b>	PBA\jhorwood
<b>Description</b>	

**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	perHour	s	-Min	perMin

**Analysis Options**

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

### Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Sensitivity Test	AM	ONE HOUR	08:00	09:30	15	✓
D2	2022 Sensitivity Test	PM	ONE HOUR	17:00	18:30	15	✓

### Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

# 2022 Sensitivity Test, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.60	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Name	Description	Arm type
A	Camp Road (E)		Major
B	Central Site Access		Minor
C	Camp Road (W)		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Camp Road (W)	6.22			250.0	✓	0.00

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)	Visibility to left (m)	Visibility to right (m)
B - Central Site Access	One lane	3.62	35	43

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	542	0.098	0.247	0.155	0.353
1	B-C	691	0.105	0.265	-	-
1	C-B	719	0.276	0.276	-	-

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 Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022 Sensitivity Test	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Camp Road (E)		ONE HOUR	✓	364	100.000
B - Central Site Access		ONE HOUR	✓	41	100.000
C - Camp Road (W)		ONE HOUR	✓	234	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A - Camp Road (E)	B - Central Site Access	C - Camp Road (W)
From	A - Camp Road (E)	0	9	355
	B - Central Site Access	28	0	13
	C - Camp Road (W)	230	4	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A - Camp Road (E)	B - Central Site Access	C - Camp Road (W)
From	A - Camp Road (E)	0	3	6
	B - Central Site Access	1	0	1
	C - Camp Road (W)	10	3	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.10	9.26	0.1	A	38	56
C-AB	0.01	4.98	0.0	A	5	8
C-A					210	314
A-B					8	12
A-C					326	489

### Main Results for each time segment

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	31	8	479	0.064	31	0.0	0.1	8.018	A
C-AB	4	1	728	0.005	4	0.0	0.0	4.974	A
C-A	172	43			172				
A-B	7	2			7				
A-C	267	67			267				

**08:15 - 08:30**

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	37	9	460	0.080	37	0.1	0.1	8.499	A
C-AB	5	1	735	0.007	5	0.0	0.0	4.922	A
C-A	205	51			205				
A-B	8	2			8				
A-C	319	80			319				

**08:30 - 08:45**

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	45	11	434	0.104	45	0.1	0.1	9.253	A
C-AB	7	2	747	0.009	7	0.0	0.0	4.854	A
C-A	251	63			251				
A-B	10	2			10				
A-C	391	98			391				

**08:45 - 09:00**

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	45	11	434	0.104	45	0.1	0.1	9.259	A
C-AB	7	2	747	0.009	7	0.0	0.0	4.862	A
C-A	251	63			251				
A-B	10	2			10				
A-C	391	98			391				

**09:00 - 09:15**

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	37	9	460	0.080	37	0.1	0.1	8.506	A
C-AB	5	1	735	0.007	5	0.0	0.0	4.940	A
C-A	205	51			205				
A-B	8	2			8				
A-C	319	80			319				

**09:15 - 09:30**

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	31	8	479	0.064	31	0.1	0.1	8.031	A
C-AB	4	1	728	0.005	4	0.0	0.0	4.984	A
C-A	172	43			172				
A-B	7	2			7				
A-C	267	67			267				

# 2022 Sensitivity Test, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.30	A

### Junction Network Options

Driving side	Lighting
Left	Normal/unknown

## Traffic Demand

### Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022 Sensitivity Test	PM	ONE HOUR	17:00	18:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Camp Road (E)		ONE HOUR	✓	310	100.000
B - Central Site Access		ONE HOUR	✓	16	100.000
C - Camp Road (W)		ONE HOUR	✓	334	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A - Camp Road (E)	B - Central Site Access	C - Camp Road (W)
From	A - Camp Road (E)	0	21	289
	B - Central Site Access	11	0	5
	C - Camp Road (W)	325	9	0

## Vehicle Mix

### Heavy Vehicle Percentages

		To		
		A - Camp Road (E)	B - Central Site Access	C - Camp Road (W)
From	A - Camp Road (E)	0	0	3
	B - Central Site Access	1	0	1
	C - Camp Road (W)	2	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.04	8.50	0.0	A	15	22
C-AB	0.02	4.52	0.0	A	13	20
C-A					293	440
A-B					19	29
A-C					265	398

### Main Results for each time segment

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	12	3	484	0.025	12	0.0	0.0	7.622	A
C-AB	10	2	807	0.012	10	0.0	0.0	4.516	A
C-A	242	60			242				
A-B	16	4			16				
A-C	218	54			218				

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	14	4	466	0.031	14	0.0	0.0	7.970	A
C-AB	13	3	826	0.015	13	0.0	0.0	4.423	A
C-A	288	72			288				
A-B	19	5			19				
A-C	260	65			260				

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	18	4	441	0.040	18	0.0	0.0	8.502	A
C-AB	17	4	854	0.020	17	0.0	0.0	4.300	A
C-A	351	88			351				
A-B	23	6			23				
A-C	318	80			318				

#### 17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	18	4	441	0.040	18	0.0	0.0	8.502	A
C-AB	17	4	854	0.020	17	0.0	0.0	4.304	A
C-A	351	88			351				
A-B	23	6			23				
A-C	318	80			318				

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	14	4	466	0.031	14	0.0	0.0	7.971	A
C-AB	13	3	826	0.015	13	0.0	0.0	4.430	A
C-A	288	72			288				
A-B	19	5			19				
A-C	260	65			260				

**18:15 - 18:30**

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	12	3	484	0.025	12	0.0	0.0	7.629	A
C-AB	10	2	807	0.012	10	0.0	0.0	4.521	A
C-A	242	60			242				
A-B	16	4			16				
A-C	218	54			218				