

2017 Base, 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	2.84	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	74	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Sefter Road SE		Major
B	Hook Lane		Minor
C	Sefter Road NW		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 - Sefter Road NW	7.30			93.0	✓	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	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 - Hook Lane	One lane plus flare	10.00	9.60	6.00	4.20	3.70		1.00	32	25

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	579	0.100	0.252	0.158	0.359
1	B-C	674	0.097	0.246	-	-
1	C-B	628	0.229	0.229	-	-

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
D7	2017 Base	AM	ONE HOUR	07:45	09:15	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 - Sefter Road SE		ONE HOUR	✓	426	100.000
B - Hook Lane		ONE HOUR	✓	158	100.000
C - Sefter Road NW		ONE HOUR	✓	91	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Sefter Road SE	B - Hook Lane	C - Sefter Road NW
From	A - Sefter Road SE	0	170	256
	B - Hook Lane	150	0	8
	C - Sefter Road NW	85	6	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Sefter Road SE	B - Hook Lane	C - Sefter Road NW
From	A - Sefter Road SE	0	2	1
	B - Hook Lane	1	0	0
	C - Sefter Road NW	1	33	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-C	0.02	7.20	0.0	A	7	11
B-A	0.35	11.97	0.5	B	138	206
C-AB	0.02	7.95	0.0	A	7	10
C-A					77	115
A-B					156	234
A-C					235	352

Main Results for each time segment

07:45 - 08:00

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-C	6	2	572	0.011	6	0.0	0.0	6.358	A
B-A	113	28	500	0.226	112	0.0	0.3	9.247	A
C-AB	5	1	465	0.011	5	0.0	0.0	7.830	A
C-A	63	16			63				
A-B	128	32			128				
A-C	193	48			193				

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-C	7	2	548	0.013	7	0.0	0.0	6.662	A
B-A	135	34	486	0.278	134	0.3	0.4	10.241	B
C-AB	6	2	464	0.014	6	0.0	0.0	7.889	A
C-A	75	19			75				
A-B	153	38			153				
A-C	230	58			230				

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-C	9	2	509	0.017	9	0.0	0.0	7.190	A
B-A	165	41	466	0.355	165	0.4	0.5	11.919	B
C-AB	8	2	463	0.018	8	0.0	0.0	7.946	A
C-A	92	23			92				
A-B	187	47			187				
A-C	282	70			282				

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-C	9	2	509	0.017	9	0.0	0.0	7.197	A
B-A	165	41	466	0.355	165	0.5	0.5	11.968	B
C-AB	8	2	463	0.018	8	0.0	0.0	7.912	A
C-A	92	23			92				
A-B	187	47			187				
A-C	282	70			282				

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-C	7	2	547	0.013	7	0.0	0.0	6.672	A
B-A	135	34	486	0.278	135	0.5	0.4	10.297	B
C-AB	6	2	464	0.014	6	0.0	0.0	7.823	A
C-A	75	19			75				
A-B	153	38			153				
A-C	230	58			230				

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-C	6	2	571	0.011	6	0.0	0.0	6.366	A
B-A	113	28	500	0.226	113	0.4	0.3	9.319	A
C-AB	5	1	465	0.011	5	0.0	0.0	7.799	A
C-A	63	16			63				
A-B	128	32			128				
A-C	193	48			193				

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.67	0.0	A	5	7
B-A	0.32	11.78	0.5	B	119	179
C-AB	0.08	5.42	0.2	A	47	70
C-A					229	344
A-B					247	370
A-C					104	156

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-C	4	0.94	596	0.006	4	0.0	0.0	6.078	A
B-A	98	24	487	0.201	97	0.0	0.2	9.216	A
C-AB	35	9	700	0.050	35	0.0	0.1	5.411	A
C-A	192	48			192				
A-B	203	51			203				
A-C	85	21			85				

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-C	4	1	576	0.008	4	0.0	0.0	6.293	A
B-A	117	29	471	0.248	117	0.2	0.3	10.156	B
C-AB	45	11	716	0.063	45	0.1	0.1	5.366	A
C-A	226	56			226				
A-B	242	60			242				
A-C	102	25			102				

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-C	6	1	546	0.010	5	0.0	0.0	6.662	A
B-A	143	36	449	0.319	143	0.3	0.5	11.736	B
C-AB	61	15	738	0.082	61	0.1	0.2	5.313	A
C-A	271	68			271				
A-B	296	74			296				
A-C	124	31			124				

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-C	6	1	545	0.010	6	0.0	0.0	6.667	A
B-A	143	36	449	0.319	143	0.5	0.5	11.777	B
C-AB	61	15	738	0.082	61	0.2	0.2	5.316	A
C-A	271	68			271				
A-B	296	74			296				
A-C	124	31			124				

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-C	4	1	576	0.008	5	0.0	0.0	6.298	A
B-A	117	29	471	0.248	117	0.5	0.3	10.208	B
C-AB	45	11	716	0.063	45	0.2	0.1	5.371	A
C-A	226	56			226				

A-B	242	60			242				
A-C	102	25			102				

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-C	4	0.94	595	0.006	4	0.0	0.0	6.085	A
B-A	98	24	486	0.201	98	0.3	0.3	9.281	A
C-AB	35	9	700	0.050	35	0.1	0.1	5.417	A
C-A	192	48			192				
A-B	203	51			203				
A-C	85	21			85				

Lower Bognor Road/ Pagham Road
(Existing Layout) - Base 2017

Junctions 9															
PICADY 9 - Priority Intersection Module															
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2016															
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Filename: AM_PM_Lower Bognor Road & Pagham Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady

Report generation date: 15/12/2016 09:34:29

*Base 2017, AM

*Base 2017, PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
Base 2017																
Stream B-C	0.6	2.2	2239.82	1.11	F	57.53	F	-20 %	0.0	0.5	19.67	0.01	C	7.39	A	-6 %
Stream B-A	26.4	80.9	205.21	1.03	F			[Stream B-A]	3.4	18.5	50.45	0.79	F			[Stream B-A]
Stream C-AB	0.0	200.2	3.87	0.00	A				0.0	0.5	6.73	0.02	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tablet for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	19/09/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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**

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	Base 2017	AM	ONE HOUR	07:30	09:00	15
D2	Base 2017	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Base 2017, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	57.55	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-20	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road North		Major
B	Lower Bognor Road		Minor
C	Pagham Road South		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 - Pagham Road South	7.50			95.0	✓	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	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 - Lower Bognor Road	One lane plus flare	10.00	8.00	5.50	4.25	3.00	✓	2.00	105	85

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	635	0.108	0.273	0.172	0.391
1	B-C	666	0.095	0.241	-	-
1	C-B	629	0.228	0.228	-	-

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)
D1	Base 2017	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road North		✓	378	100.000
B - Lower Bognor Road		✓	409	100.000
C - Pagham Road South		✓	726	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
From	A - Pagham Road North	0	213	165
	B - Lower Bognor Road	407	0	2
	C - Pagham Road South	725	1	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
From	A - Pagham Road North	0	2	4
	B - Lower Bognor Road	1	0	0
	C - Pagham Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	1.11	2290.62	0.6	2.2	F
B-A	1.08	208.21	26.4	60.9	F
C-AB	0.00	3.87	0.0	200.0	A
C-A					
AB					
AC					

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	436	0.003	1	0.0	8.290	A
B-A	306	481	0.636	300	1.7	19.196	C
C-AB	2	934	0.002	2	0.0	3.860	A
C-A	545			545			
AB	160			160			
AC	124			124			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	264	0.007	2	0.0	13.743	B
B-A	366	453	0.808	358	3.5	35.503	E
C-AB	3	998	0.003	3	0.0	3.612	A
C-A	650			650			
AB	191			191			
AC	148			148			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	2	1.000	0.59	0.4	2230.817	F
B-A	448	413	1.085	397	16.3	112.410	F
C-AB	4	1089	0.004	4	0.0	3.314	A
C-A	795			795			
AB	235			235			
AC	182			182			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	3	0.712	1	0.6	1802.524	F
B-A	448	413	1.085	408	28.4	205.213	F
C-AB	4	1089	0.004	4	0.0	3.319	A
C-A	795			795			
AB	235			235			
AC	182			182			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	4	0.449	2	0.6	809.776	F
B-A	366	453	0.808	436	8.8	154.436	F
C-AB	3	998	0.003	3	0.0	3.618	A
C-A	650			650			
AB	191			191			
AC	148			148			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	382	0.004	4	0.0	9.591	A
B-A	306	481	0.636	334	1.9	28.385	D
C-AB	2	934	0.002	2	0.0	3.865	A
C-A	545			545			
A-B	160			160			
A-C	124			124			

Queue Variation Results for each time segment

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.65	0.44	1.48	2.53	2.95			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	3.53	0.11	1.54	8.49	11.75			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.41	0.03	0.26	0.47	0.49			N/A	N/A
B-A	16.34	2.31	13.17	31.45	38.53			N/A	N/A
C-AB	0.00	>199	>199	>199	>199			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.59	0.03	0.27	0.59	0.97			N/A	N/A
B-A	26.41	4.58	21.94	50.11	60.93			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.61	0.04	0.37	1.34	2.19			N/A	N/A
B-A	8.82	0.15	3.87	22.83	32.13			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.87	0.03	0.30	1.87	8.46			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Base 2017, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	7.39	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-6	Stream B-A

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)
D2	Base 2017	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road North		✓	1170	100.000
B - Lower Bognor Road		✓	240	100.000
C - Pagham Road South		✓	245	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	A - Pagham Road North	0	602	568
	B - Lower Bognor Road	238	0	2
	C - Pagham Road South	240	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	A - Pagham Road North	0	1	2
	B - Lower Bognor Road	3	0	0
	C - Pagham Road South	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.01	19.67	0.0	0.5	C
B-A	0.79	50.45	3.4	18.5	F
C-AB	0.02	6.73	0.0	0.5	A
C-A					
AB					
AC					

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	447	0.003	1	0.0	8.080	A
B-A	179	420	0.426	176	0.7	14.582	E
C-AB	6	562	0.010	6	0.0	6.468	A
C-A	179			179			
AB	453			453			
AC	428			428			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	376	0.005	2	0.0	9.618	A
B-A	214	382	0.560	212	1.2	20.893	C
C-AB	7	554	0.013	7	0.0	6.580	A
C-A	213			213			
AB	541			541			
AC	511			511			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	205	0.011	2	0.0	17.737	C
B-A	262	330	0.795	254	3.1	43.879	E
C-AB	11	545	0.020	11	0.0	6.725	A
C-A	259			259			
AB	663			663			
AC	625			625			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	185	0.012	2	0.0	19.670	C
B-A	262	330	0.795	261	3.4	50.452	F
C-AB	11	545	0.020	11	0.0	6.733	A
C-A	259			259			
AB	663			663			
AC	625			625			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	364	0.005	2	0.0	9.948	A
B-A	214	382	0.560	222	1.3	23.553	C
C-AB	7	554	0.013	7	0.0	6.600	A
C-A	213			213			
AB	541			541			
AC	511			511			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	444	0.003	2	0.0	8.144	A
B-A	179	420	0.426	181	0.8	15.207	C
C-AB	6	562	0.010	6	0.0	6.476	A
C-A	179			179			
AB	453			453			
AC	428			428			

Queue Variation Results for each time segment

16:15 - 16:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.72	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.25	0.45	0.48			N/A	N/A
B-A	1.21	0.09	1.03	2.07	2.80			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	3.15	0.04	0.43	8.77	15.69			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	3.44	0.04	0.35	7.96	18.55			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	1.34	0.04	0.40	3.49	5.94			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A



17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	0.76	0.03	0.32	1.59	3.70			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Nyetimber Lane/ Pagham Road
(Existing Layout) Base 2017

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646 []
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Filename: AM_PM_Nyetimber Lane & Pagham Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady

Report generation date: 05/12/2016 16:21:30

»Base 2017, AM

»Base 2017, PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
Base 2017																
Stream B-AC	0.3	1.1	9.55	0.25	A	2.33	A	130 %	0.3	1.4	11.15	0.24	B	1.46	A	64 %
Stream C-AB	0.1	0.5	4.84	0.04	A			[Stream B-AC]	0.3	0.5	6.87	0.15	A			[Stream B-AC]

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	19/09/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	Base 2017	AM	ONE HOUR	07:45	09:15	15
D2	Base 2017	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Base 2017, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Nyetimber Lane j/w Pagham Road	T-Junction	Two-way	2.33	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	130	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road North		Major
B	Nyetimber Lane		Minor
C	Pagham Road South		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 - Pagham Road South	7.30			200.0	✓	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 - Nyetimber Lane	One lane	4.00	60	45

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	571	0.098	0.246	0.156	0.354
1	B-C	718	0.104	0.262	-	-
1	C-B	690	0.252	0.252	-	-

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)
D1	Base 2017	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road North		✓	151	100.000
B - Nyetimber Lane		✓	116	100.000
C - Pagham Road South		✓	254	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South
A - Pagham Road North		0	27	124
B - Nyetimber Lane		89	0	27
C - Pagham Road South		232	22	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South
A - Pagham Road North		0	7	9
B - Nyetimber Lane		1	0	7
C - Pagham Road South		6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.25	9.55	0.3	1.1	A
C-AB	0.04	4.84	0.1	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	87	531	0.165	87	0.2	8.089	A
C-AB	21	786	0.028	21	0.0	4.837	A
C-A	170			170			
A-B	20			20			
A-C	93			93			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	104	520	0.201	104	0.2	8.654	A
C-AB	27	781	0.035	27	0.0	4.769	A
C-A	201			201			
A-B	24			24			
A-C	111			111			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	128	505	0.253	127	0.3	9.536	A
C-AB	36	803	0.044	36	0.1	4.685	A
C-A	244			244			
A-B	30			30			
A-C	137			137			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	128	504	0.253	128	0.3	9.554	A
C-AB	36	803	0.044	36	0.1	4.693	A

C-A	244			244			
A-B	30			30			
A-C	137			137			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	104	520	0.201	105	0.3	8.679	A
C-AB	27	781	0.035	27	0.0	4.784	A
C-A	201			201			
A-B	24			24			
A-C	111			111			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	87	531	0.165	88	0.2	8.126	A
C-AB	21	766	0.028	22	0.0	4.845	A
C-A	170			170			
A-B	20			20			
A-C	93			93			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C-AB	0.05	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.33	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.06	0.03	0.25	0.46	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.31	1.05	1.05			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.00	0.00	0.25	0.25			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.20	0.00	0.00	0.20	0.20			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

Base 2017, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Nyetimber Lane j/w Pagham Road	T-Junction	Two-way	1.46	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	64	Stream B-AC

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)
D2	Base 2017	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road North		✓	742	100.000
B - Nyetimber Lane		✓	92	100.000
C - Pagham Road South		✓	230	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South
	A - Pagham Road North	0	101	641
	B - Nyetimber Lane	33	0	59
	C - Pagham Road South	172	58	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South
	A - Pagham Road North	0	0	2
	B - Nyetimber Lane	0	0	2
	C - Pagham Road South	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.24	11.15	0.3	1.4	E
C-AB	0.15	6.87	0.3	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	69	497	0.139	69	0.2	8.390	A
C-AB	55	635	0.086	54	0.1	6.196	A
C-A	118			118			
A-B	76			76			
A-C	483			483			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	83	467	0.177	82	0.2	9.366	A
C-AB	69	627	0.111	69	0.2	6.449	A
C-A	137			137			
A-B	91			91			
A-C	576			576			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	101	424	0.239	101	0.3	11.124	B
C-AB	92	617	0.150	92	0.3	6.850	A
C-A	161			161			
A-B	111			111			
A-C	706			706			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	101	424	0.239	101	0.3	11.152	B
C-AB	92	617	0.150	92	0.3	6.866	A
C-A	161			161			
A-B	111			111			
A-C	706			706			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	83	467	0.177	83	0.2	9.398	A
C-AB	69	627	0.111	70	0.2	6.478	A
C-A	137			137			
A-B	91			91			
A-C	576			576			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	69	497	0.139	69	0.2	8.426	A
C-AB	55	635	0.087	55	0.1	6.217	A
C-A	118			118			
A-B	76			76			
A-C	483			483			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker

B-AC	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.31	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.25	0.03	0.26	0.47	0.50			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.31	0.03	0.31	1.10	1.40			N/A	N/A
C-AB	0.25	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

Nyetimber Lane/ Grosvenor Road/ Rose Green Road
(Existing Layout) Base 2017

Basic Results Summary

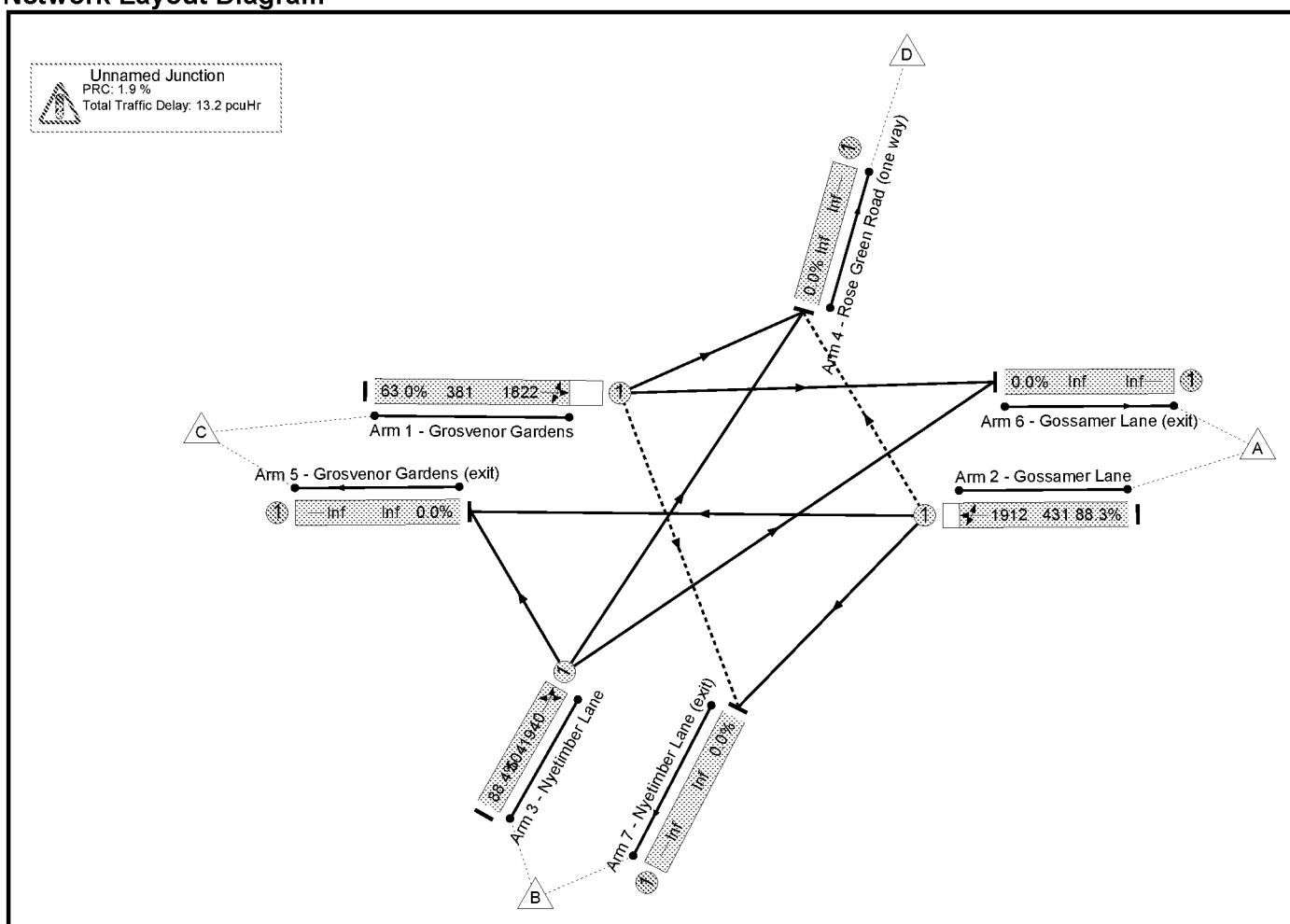
Basic Results Summary

User and Project Details

Project:	Land West of Hook Lane, Pagham
Title:	Grosvenor Gdns-Gossamer La-Nyetimber La-Rose Green Rd
Location:	Grosvenor Gdns-Gossamer La-Nyetimber La-Rose Green Rd, Bognor Regis
File name:	Grosvenor-Gossamer_dec2016.lsg3x
Author:	P Pettitt
Company:	RPS Group
Address:	Milton Park, Oxfordshire
Notes:	

Scenario 1: '2017 Base AM' (FG1: '2017 Base AM', Plan 2: 'Double Cycle')

Network Layout Diagram



Basic Results Summary

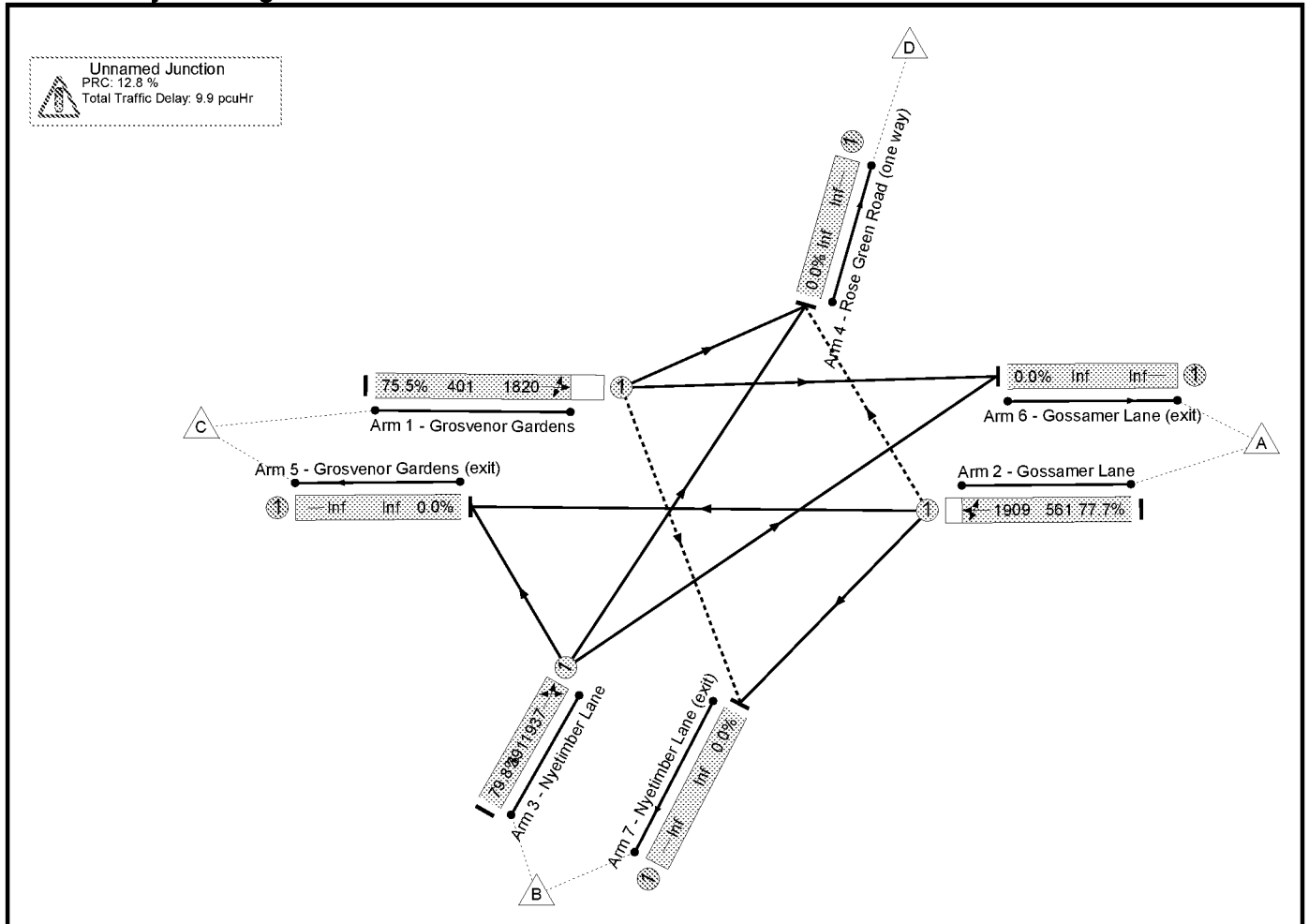
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network: Grosvenor Gdns-Gossamer La-Nyetimber La-Rose Green Rd	-	-	-		-	-	-	-	-	-	88.4%	86	0	11	13.2	-	-	
Unnamed Junction	-	-	-		-	-	-	-	-	-	88.4%	86	0	11	13.2	-	-	
1/1	Grosvenor Gardens Left Ahead Right	O	A		2	32	-	240	1822	381	63.0%	49	0	8	1.8	27.7	4.4	
2/1	Gossamer Lane Right Ahead Left	O	B		2	32	-	380	1912	431	88.3%	37	0	3	5.2	49.6	10.0	
3/1	Nyetimber Lane Ahead Left Right	U	C		2	25	-	445	1940	504	88.4%	-	-	-	6.1	49.7	10.3	
C1		PRC for Signalled Lanes (%):					1.9	Total Delay for Signalled Lanes (pcuHr):					13.24	Cycle Time (s): 104				
		PRC Over All Lanes (%):					1.9	Total Delay Over All Lanes(pcuHr):					13.24					

Basic Results Summary

Scenario 2: '2017 Base PM' (FG2: '2017 Base PM', Plan 2: 'Double Cycle')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network: Grosvenor Gdns-Gossamer La-Nyetimber La-Rose Green Rd	-	-	-		-	-	-	-	-	-	79.8%	95	0	12	9.9	-	-	
Unnamed Junction	-	-	-		-	-	-	-	-	-	79.8%	95	0	12	9.9	-	-	
1/1	Grosvenor Gardens Left Ahead Right	O	A		2	38	-	303	1820	401	75.5%	64	0	10	2.7	31.7	5.9	
2/1	Gossamer Lane Right Ahead Left	O	B		2	38	-	436	1909	561	77.7%	31	0	2	3.6	29.9	9.1	
3/1	Nyetimber Lane Ahead Left Right	U	C		2	19	-	312	1937	391	79.8%	-	-	-	3.6	41.6	6.5	
C1		PRC for Signalled Lanes (%):					12.8	Total Delay for Signalled Lanes (pcuHr):					9.90	Cycle Time (s): 104				
		PRC Over All Lanes (%):					12.8	Total Delay Over All Lanes(pcuHr):					9.90					

Hook Lane/ Pagham Road
(Existing Layout) Base 2017

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646 []

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Filename: AM_PM_Pagham Road-Hook Lane.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady

Report generation date: 14/12/2016 12:15:44

»2017 Base, AM

»2017 Base, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2017 Base														
Stream B-C	0.2	9.28	0.15	A	5.29	A	50 %	0.6	9.15	0.37	A	3.84	A	80 %
Stream B-A	0.7	13.90	0.42	B			[Stream B-A]	0.1	12.11	0.06	B			[Stream B-A]
Stream C-AB	0.4	5.19	0.20	A				0.3	6.92	0.20	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Pagham Road/Hook Lane
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing Layout
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
Description	

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	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	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

D7	2017 Base	AM	ONE HOUR	07:45	09:15	15	✓
D8	2017 Base	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2017 Base, 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	5.29	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	50	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road NE		Major
B	Hook Lane		Minor
C	Pagham Road SW		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 - Pagham Road SW	6.70			200.0	✓	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	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 - Hook Lane	One lane plus flare	10.00	6.70	5.70	4.40	3.50		1.00	26	28

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	565	0.100	0.252	0.159	0.360
1	B-C	603	0.090	0.226	-	-
1	C-B	690	0.259	0.259	-	-

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
D7	2017 Base	AM	ONE HOUR	07:45	09:15	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 - Pagham Road NE		ONE HOUR	✓	65	100.000
B - Hook Lane		ONE HOUR	✓	230	100.000
C - Pagham Road SW		ONE HOUR	✓	388	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road NE	B - Hook Lane	C - Pagham Road SW
From	A - Pagham Road NE	0	8	57
	B - Hook Lane	170	0	60
	C - Pagham Road SW	290	98	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road NE	B - Hook Lane	C - Pagham Road SW
From	A - Pagham Road NE	0	13	18
	B - Hook Lane	1	0	7
	C - Pagham Road SW	3	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-C	0.15	9.28	0.2	A	55	83
B-A	0.42	13.90	0.7	B	156	234
C-AB	0.20	5.19	0.4	A	134	201
C-A					222	333
A-B					7	11
A-C					52	78

Main Results for each time segment

07:45 - 08:00

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-C	45	11	506	0.089	45	0.0	0.1	7.796	A
B-A	128	32	484	0.265	127	0.0	0.4	10.053	B
C-AB	101	25	809	0.125	100	0.0	0.2	5.077	A
C-A	191	48			191				
A-B	6	2			6				
A-C	43	11			43				

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-C	54	13	487	0.111	54	0.1	0.1	8.303	A
B-A	153	38	468	0.327	152	0.4	0.5	11.385	B
C-AB	129	32	833	0.154	128	0.2	0.3	5.110	A
C-A	220	55			220				
A-B	7	2			7				
A-C	51	13			51				

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-C	66	17	455	0.145	66	0.1	0.2	9.255	A
B-A	187	47	446	0.420	186	0.5	0.7	13.802	B
C-AB	171	43	865	0.198	171	0.3	0.4	5.184	A
C-A	256	64			256				
A-B	9	2			9				
A-C	63	16			63				

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-C	66	17	454	0.146	66	0.2	0.2	9.283	A
B-A	187	47	446	0.420	187	0.7	0.7	13.899	B
C-AB	172	43	866	0.198	172	0.4	0.4	5.193	A
C-A	256	64			256				
A-B	9	2			9				
A-C	63	16			63				

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-C	54	13	486	0.111	54	0.2	0.1	8.335	A
B-A	153	38	468	0.327	154	0.7	0.5	11.490	B
C-AB	129	32	833	0.155	129	0.4	0.3	5.128	A
C-A	220	55			220				
A-B	7	2			7				
A-C	51	13			51				

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-C	45	11	505	0.089	45	0.1	0.1	7.832	A
B-A	128	32	483	0.265	128	0.5	0.4	10.159	B
C-AB	101	25	809	0.125	102	0.3	0.2	5.099	A
C-A	191	48			191				
A-B	6	2			6				
A-C	43	11			43				

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.37	9.15	0.6	A	191	286
B-A	0.06	12.11	0.1	B	15	22
C-AB	0.20	6.92	0.3	A	107	160
C-A					79	119
A-B					33	50
A-C					259	388

Main Results for each time segment

16:45 - 17:00

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-C	157	39	655	0.239	155	0.0	0.3	7.182	A
B-A	12	3	363	0.033	12	0.0	0.0	10.267	B
C-AB	85	21	657	0.129	84	0.0	0.2	6.278	A
C-A	68	17			68				
A-B	27	7			27				
A-C	212	53			212				

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-C	187	47	642	0.291	187	0.3	0.4	7.905	A
B-A	14	4	344	0.042	14	0.0	0.0	10.935	B
C-AB	104	26	655	0.159	104	0.2	0.2	6.527	A
C-A	79	20			79				
A-B	32	8			32				
A-C	254	63			254				

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-C	229	57	622	0.368	228	0.4	0.6	9.119	A
B-A	18	4	315	0.056	18	0.0	0.1	12.098	B
C-AB	132	33	653	0.203	132	0.2	0.3	6.906	A
C-A	91	23			91				
A-B	40	10			40				
A-C	310	78			310				

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-C	229	57	622	0.368	229	0.6	0.6	9.150	A
B-A	18	4	315	0.056	18	0.1	0.1	12.112	B
C-AB	132	33	653	0.203	132	0.3	0.3	6.921	A
C-A	91	23			91				
A-B	40	10			40				
A-C	310	78			310				

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-C	187	47	642	0.291	188	0.6	0.4	7.943	A
B-A	14	4	343	0.042	14	0.1	0.0	10.950	B
C-AB	104	26	655	0.159	104	0.3	0.2	6.546	A
C-A	79	20			79				

A-B	32	8			32				
A-C	254	63			254				

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-C	157	39	655	0.239	157	0.4	0.3	7.232	A
B-A	12	3	362	0.033	12	0.0	0.0	10.283	B
C-AB	85	21	657	0.129	85	0.2	0.2	6.300	A
C-A	68	17			68				
A-B	27	7			27				
A-C	212	53			212				

Pagham Road/ Sefter Road
(Existing Layout) Base 2017

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646 []

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Filename: AM_PM_Pagham Road-Sefter Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady

Report generation date: 14/12/2016 12:18:04

»2017 Base, AM

»2017 Base, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2017 Base														
Stream B-AC	8.4	85.84	0.93	F	31.33	D	-15 %	0.5	14.61	0.35	E	2.04	A	56 %
Stream C-AB	0.0	3.99	0.01	A			[Stream B-AC]	0.0	5.88	0.00	A			[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Pagham Road/Sefter Road
Location	
Site number	
Date	15/06/2016
Version	
Status	Existing Layout
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.petitt
Description	

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	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	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

D7	2017 Base	AM	ONE HOUR	07:15	08:45	15	✓
D8	2017 Base	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

2017 Base, 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	31.33	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-15	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road N		Major
B	Sefter Road		Minor
C	Pagham Road S		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 - Pagham Road S	6.00			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 - Sefter Road	One lane	3.20	10	36

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	508	0.093	0.234	0.147	0.334
1	B-C	660	0.101	0.256	-	-
1	C-B	719	0.278	0.278	-	-

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
D7	2017 Base	AM	ONE HOUR	07:15	08:45	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 - Pagham Road N		ONE HOUR	✓	120	100.000
B - Sefter Road		ONE HOUR	✓	343	100.000
C - Pagham Road S		ONE HOUR	✓	469	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
From	A - Pagham Road N	0	69	51
	B - Sefter Road	343	0	0
	C - Pagham Road S	466	3	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
From	A - Pagham Road N	0	0	10
	B - Sefter Road	1	0	0
	C - Pagham Road S	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	0.93	65.64	8.4	F	315	472
C-AB	0.01	3.99	0.0	A	5	8
C-A					425	638
A-B					63	95
A-C					47	70

Main Results for each time segment

07:15 - 07:30

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	258	65	436	0.592	253	0.0	1.4	19.124	C
C-AB	4	0.92	906	0.004	4	0.0	0.0	3.990	A
C-A	349	87			349				
A-B	52	13			52				
A-C	38	10			38				

07:30 - 07:45

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	308	77	423	0.729	304	1.4	2.4	29.275	D
C-AB	5	1	943	0.005	5	0.0	0.0	3.833	A
C-A	417	104			417				
A-B	62	16			62				

A-C	46	11			46				
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07:45 - 08:00

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	378	94	405	0.933	360	2.4	6.8	60.645	F
C-AB	7	2	996	0.007	7	0.0	0.0	3.637	A
C-A	510	127			510				
A-B	76	19			76				
A-C	56	14			56				

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	378	94	405	0.933	371	6.8	8.4	65.644	F
C-AB	7	2	996	0.007	7	0.0	0.0	3.642	A
C-A	510	127			510				
A-B	76	19			76				
A-C	56	14			56				

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	308	77	423	0.729	330	8.4	3.0	44.420	E
C-AB	5	1	943	0.005	5	0.0	0.0	3.841	A
C-A	417	104			417				
A-B	62	16			62				
A-C	46	11			46				

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	258	65	436	0.592	264	3.0	1.5	21.628	C
C-AB	4	0.92	906	0.004	4	0.0	0.0	3.995	A
C-A	349	87			349				
A-B	52	13			52				
A-C	38	10			38				

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.35	14.61	0.5	B	108	162
C-AB	0.00	5.88	0.0	A	2	3
C-A					103	155
A-B					274	412
A-C					289	434

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	89	22	418	0.212	88	0.0	0.3	10.861	B
C-AB	2	0.43	645	0.003	2	0.0	0.0	5.599	A
C-A	85	21			85				
A-B	225	56			225				
A-C	237	59			237				

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	106	27	401	0.265	106	0.3	0.4	12.192	B
C-AB	2	0.54	632	0.003	2	0.0	0.0	5.714	A
C-A	101	25			101				
A-B	269	67			269				
A-C	283	71			283				

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	130	32	376	0.345	129	0.4	0.5	14.529	B
C-AB	3	0.69	615	0.005	3	0.0	0.0	5.878	A
C-A	124	31			124				
A-B	329	82			329				
A-C	347	87			347				

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	130	32	376	0.345	130	0.5	0.5	14.605	B
C-AB	3	0.69	615	0.005	3	0.0	0.0	5.883	A
C-A	124	31			124				
A-B	329	82			329				
A-C	347	87			347				

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	106	27	401	0.265	107	0.5	0.4	12.275	B
C-AB	2	0.54	632	0.003	2	0.0	0.0	5.727	A
C-A	101	25			101				
A-B	269	67			269				
A-C	283	71			283				

18:15 - 18:30

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
--------	--------------	-------------------	-------------------	-----	---------------------	-------------------	-----------------	-----------	-----

	(Veh/hr)	(Veh)							
B-AC	89	22	418	0.212	89	0.4	0.3	10.955	B
C-AB	2	0.43	645	0.003	2	0.0	0.0	5.604	A
C-A	85	21			85				
A-B	225	56			225				
A-C	237	59			237				

Grosvenor Gardens / Rose Green Road/ Carlton Avenue
(Existing Layout) Base 2017

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646 []
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Filename: AM_PM_Rose Green Road-Carlton Avenue.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady

Report generation date: 15/12/2016 09:16:38

»2017 Base, AM

»2017 Base, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2017 Base														
Stream B-ACD	1.1	21.72	0.53	C	18.25	C	-5 % [Stream D-ABC]	0.6	16.75	0.39	C	29.60	D	-12 % [Stream D-ABC]
Stream A-BCD	0.0	6.53	0.01	A				0.0	5.41	0.01	A			
Stream D-ABC	4.7	44.72	0.84	E				9.5	79.34	0.94	F			
Stream C-ABD	0.2	5.19	0.09	A				0.2	4.90	0.10	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Rose Green Road/Carlton Avenue
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing Junction
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
Description	

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	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	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
----	---------------	------------------	----------------------	--------------------	---------------------	---------------------------	-------------------

D7	2017 Base	AM	ONE HOUR	07:45	09:15	15	✓
D8	2017 Base	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

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2017 Base	AM	ONE HOUR	07:45	09:15	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 - Grosvenor Gardens		ONE HOUR	✓	215	100.000
B - Carlton Avenue		ONE HOUR	✓	172	100.000
C - Rose Green Road W		ONE HOUR	✓	373	100.000
D - Rose Green Road N		ONE HOUR	✓	368	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
	A - Grosvenor Gardens	0	13	199	3
	B - Carlton Avenue	49	0	48	75
	C - Rose Green Road W	170	32	0	171
	D - Rose Green Road N	35	53	280	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
	A - Grosvenor Gardens	0	0	1	33
	B - Carlton Avenue	0	0	0	1
	C - Rose Green Road W	1	0	0	1
	D - Rose Green Road N	3	0	2	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-ACD	0.53	21.72	1.1	C	158	237
A-BCD	0.01	6.53	0.0	A	4	6
A-B					12	18
A-C					181	272
D-ABC	0.84	44.72	4.7	E	338	507
C-ABD	0.09	5.19	0.2	A	52	77
C-D					146	219
C-A					145	217

Main Results for each time segment

07:45 - 08:00

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-ACD	129	32	418	0.309	128	0.0	0.4	12.311	B
A-BCD	3	0.79	555	0.006	3	0.0	0.0	6.528	A

A-B	10	2			10				
A-C	149	37			149				
D-ABC	277	69	523	0.530	273	0.0	1.1	14.163	E
C-ABD	37	9	733	0.051	37	0.0	0.1	5.170	A
C-D	122	31			122				
C-A	122	30			122				

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-ACD	155	39	392	0.394	154	0.4	0.6	15.041	C
A-BCD	4	1	567	0.007	4	0.0	0.0	6.435	A
A-B	12	3			12				
A-C	178	44			178				
D-ABC	331	83	505	0.655	328	1.1	1.8	20.021	C
C-ABD	49	12	750	0.065	49	0.1	0.1	5.130	A
C-D	144	36			144				
C-A	143	36			143				

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-ACD	189	47	357	0.531	188	0.6	1.1	21.066	C
A-BCD	6	1	584	0.009	6	0.0	0.0	6.267	A
A-B	14	4			14				
A-C	217	54			217				
D-ABC	405	101	480	0.843	395	1.8	4.3	38.384	E
C-ABD	68	17	777	0.088	68	0.1	0.2	5.082	A
C-D	172	43			172				
C-A	171	43			171				

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-ACD	189	47	355	0.534	189	1.1	1.1	21.722	C
A-BCD	6	1	584	0.009	6	0.0	0.0	6.227	A
A-B	14	4			14				
A-C	217	54			217				
D-ABC	405	101	480	0.844	403	4.3	4.7	44.715	E
C-ABD	69	17	775	0.089	69	0.2	0.2	5.101	A
C-D	171	43			171				
C-A	170	43			170				

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-ACD	155	39	389	0.397	156	1.1	0.7	15.559	C
A-BCD	4	1	566	0.007	4	0.0	0.0	6.343	A
A-B	12	3			12				
A-C	178	44			178				
D-ABC	331	83	505	0.656	342	4.7	2.0	23.345	C
C-ABD	49	12	748	0.066	49	0.2	0.1	5.160	A
C-D	144	36			144				
C-A	143	36			143				

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-ACD	129	32	417	0.311	130	0.7	0.5	12.606	E
A-BCD	3	0.80	554	0.006	3	0.0	0.0	6.483	A
A-B	10	2			10				
A-C	149	37			149				

D-ABC	277	69	522	0.530	280	2.0	1.2	15.086	C
C-ABD	37	9	732	0.051	37	0.1	0.1	5.191	A
C-D	122	31			122				
C-A	121	30			121				

2017 Base, 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	Right-Left Stagger	Two-way	29.60	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-12	Stream D-ABC

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
D8	2017 Base	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 - Grosvenor Gardens		ONE HOUR	✓	203	100.000
B - Carlton Avenue		ONE HOUR	✓	125	100.000
C - Rose Green Road W		ONE HOUR	✓	458	100.000
D - Rose Green Road N		ONE HOUR	✓	418	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
	A - Grosvenor Gardens	0	33	165	5
	B - Carlton Avenue	37	0	40	48
	C - Rose Green Road W	233	33	0	192
	D - Rose Green Road N	84	47	287	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
	A - Grosvenor Gardens	0	0	1	0
	B - Carlton Avenue	0	0	0	2
	C - Rose Green Road W	0	0	0	1
	D - Rose Green Road N	0	0	1	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-ACD	0.39	16.75	0.6	C	115	172
A-BCD	0.01	5.41	0.0	A	6	10
A-B					30	45
A-C					150	225
D-ABC	0.84	79.34	9.5	F	384	575
C-ABD	0.10	4.90	0.2	A	60	90
C-D					163	244
C-A					197	296

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-ACD	94	24	420	0.224	93	0.0	0.3	10.979	E
A-BCD	5	1	670	0.007	5	0.0	0.0	5.409	A
A-B	25	6			25				
A-C	123	31			123				
D-ABC	315	79	535	0.589	309	0.0	1.4	15.619	C
C-ABD	42	11	780	0.054	42	0.0	0.1	4.879	A
C-D	137	34			137				
C-A	166	41			166				

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-ACD	112	28	393	0.286	112	0.3	0.4	12.791	E
A-BCD	6	2	673	0.009	6	0.0	0.0	5.394	A
A-B	29	7			29				
A-C	147	37			147				
D-ABC	376	94	515	0.729	371	1.4	2.5	24.272	C
C-ABD	57	14	806	0.070	56	0.1	0.1	4.802	A
C-D	160	40			160				
C-A	195	49			195				

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-ACD	138	34	356	0.387	137	0.4	0.6	16.351	C
A-BCD	8	2	678	0.012	8	0.0	0.0	5.368	A
A-B	36	9			36				
A-C	179	45			179				
D-ABC	460	115	489	0.842	439	2.5	7.6	57.266	F
C-ABD	82	20	846	0.096	81	0.1	0.2	4.708	A
C-D	191	48			191				
C-A	232	58			232				

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-ACD	138	34	352	0.391	138	0.6	0.6	16.753	C
A-BCD	8	2	678	0.012	8	0.0	0.0	5.373	A

A-B	36	9			36				
A-C	179	45			179				
D-ABC	460	115	488	0.942	453	7.6	9.5	79.000	F
C-ABD	82	21	843	0.097	82	0.2	0.2	4.733	A
C-D	191	48			191				
C-A	231	58			231				

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-ACD	112	28	387	0.290	113	0.6	0.4	13.184	B
A-BCD	6	2	673	0.009	6	0.0	0.0	5.399	A
A-B	29	7			29				
A-C	147	37			147				
D-ABC	376	94	515	0.730	402	9.5	3.0	38.845	E
C-ABD	57	14	802	0.071	57	0.2	0.1	4.841	A
C-D	160	40			160				
C-A	194	49			194				

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-ACD	94	24	418	0.225	95	0.4	0.3	11.162	B
A-BCD	5	1	670	0.007	5	0.0	0.0	5.412	A
A-B	25	6			25				
A-C	123	31			123				
D-ABC	315	79	534	0.589	321	3.0	1.5	17.281	C
C-ABD	42	11	778	0.055	43	0.1	0.1	4.901	A
C-D	137	34			137				
C-A	166	41			166				

B2166 Lagness Road/ Mill Lane/ Vinnetrow Road
(Existing Layout) Base 2017

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: AM_PM_Vinnetrow Road & B2166.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Arcady

Report generation date: 08/12/2016 14:53:20

»Base 2017, AM

»Base 2017, PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
Base 2017																
1 - Vinnetrow Road	0.5	2.3	5.83	0.33	A	9.23	A	17 % [2 - B2166 E]	1.8	5.7	14.30	0.65	B	9.47	A	16 % [1 - Vinnetrow Road]
2 - B2166 E	3.8	17.0	12.03	0.80	B				0.8	2.3	4.49	0.44	A			
3 - Mill Lane	0.1	0.5	6.68	0.11	A				0.1	0.5	4.27	0.05	A			
4 - B2166 W	0.7	2.7	5.05	0.40	A				2.7	9.6	10.63	0.74	C			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	10/11/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	Base 2017	AM	ONE HOUR	07:30	09:00	15
D2	Base 2017	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Base 2017, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	9.23	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	17	2 - B2166 E

Arms

Arms

Arm	Name	Description
1	Vinnetrow Road	
2	B2166 E	
3	Mill Lane	
4	B2166 W	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Vinnetrow Road	3.00	6.00	5.0	30.0	30.0	35.0	
2 - B2166 E	4.00	6.00	12.0	30.0	30.0	42.0	
3 - Mill Lane	3.00	7.00	8.0	20.0	30.0	30.0	
4 - B2166 W	3.50	6.00	6.0	20.0	30.0	30.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vinnetrow Road	0.559	1219
2 - B2166 E	0.623	1566
3 - Mill Lane	0.591	1375
4 - B2166 W	0.593	1385

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

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)
D1	Base 2017	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	282	100.000
2 - B2166 E		✓	1054	100.000
3 - Mill Lane		✓	61	100.000
4 - B2166 W		✓	425	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	153	6	123
	2 - B2166 E	225	0	4	825
	3 - Mill Lane	16	10	0	35
	4 - B2166 W	12	400	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.33	5.83	0.5	2.3	A
2 - B2166 E	0.80	12.03	3.8	17.0	B
3 - Mill Lane	0.11	6.66	0.1	0.5	A
4 - B2166 W	0.40	5.05	0.7	2.7	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	212	317	1011	0.210	211	0.3	4.494	A
2 - B2166 E	794	106	1490	0.533	789	1.1	5.106	A
3 - Mill Lane	46	878	852	0.054	46	0.1	4.465	A
4 - B2166 W	320	188	1233	0.259	319	0.3	3.931	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	254	380	976	0.260	253	0.3	4.976	A
2 - B2166 E	948	127	1476	0.642	945	1.8	6.743	A
3 - Mill Lane	55	1052	748	0.073	55	0.1	5.191	A
4 - B2166 W	382	225	1211	0.315	382	0.5	4.338	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	310	465	928	0.334	310	0.5	5.813	A
2 - B2166 E	1160	156	1458	0.796	1153	3.7	11.501	B
3 - Mill Lane	67	1284	610	0.110	67	0.1	6.627	A
4 - B2166 W	468	275	1182	0.396	467	0.6	5.033	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	310	466	928	0.335	310	0.5	5.828	A
2 - B2166 E	1160	156	1458	0.796	1160	3.8	12.030	B
3 - Mill Lane	67	1291	606	0.111	67	0.1	6.685	A
4 - B2166 W	468	276	1181	0.396	468	0.7	5.049	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	254	381	976	0.260	254	0.4	4.993	A
2 - B2166 E	948	128	1476	0.642	955	1.8	7.013	A
3 - Mill Lane	55	1063	742	0.074	55	0.1	5.244	A

4 - B2166 W	382	227	1210	0.316	383	0.5	4.357	A
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08:48 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	212	319	1010	0.210	213	0.3	4.514	A
2 - B2166 E	794	107	1489	0.533	796	1.2	5.215	A
3 - Mill Lane	46	886	847	0.054	46	0.1	4.494	A
4 - B2166 W	320	190	1232	0.260	320	0.4	3.952	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2 - B2166 E	1.13	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	0.35	0.00	0.00	0.35	0.35			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - B2166 E	1.76	0.05	0.61	4.53	6.92			N/A	N/A
3 - Mill Lane	0.08	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	0.46	0.00	0.00	0.46	0.46			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.50	0.03	0.25	0.50	0.50			N/A	N/A
2 - B2166 E	3.67	0.03	0.30	3.91	16.95			N/A	N/A
3 - Mill Lane	0.12	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	0.65	0.03	0.25	0.65	0.65			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.50	0.03	0.30	1.38	2.27			N/A	N/A
2 - B2166 E	3.78	0.03	0.28	3.78	7.96			N/A	N/A
3 - Mill Lane	0.12	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.65	0.03	0.28	1.00	2.72			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - B2166 E	1.83	0.05	0.69	4.69	7.11			N/A	N/A
3 - Mill Lane	0.08	0.00	0.00	0.08	0.08			N/A	N/A
4 - B2166 W	0.46	0.00	0.00	0.46	0.46			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2 - B2166 E	1.15	0.04	0.38	2.91	5.21			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	0.35	0.00	0.00	0.35	0.35			N/A	N/A

Base 2017, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	9.47	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	16	1 - Vinnetrow Road

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)
D2	Base 2017	PM	ONE HOUR	16:30	18:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	422	100.000
2 - B2166 E		✓	561	100.000
3 - Mill Lane		✓	40	100.000
4 - B2166 W		✓	860	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	265	12	145
	2 - B2166 E	107	0	7	447
	3 - Mill Lane	5	15	0	20
	4 - B2166 W	70	778	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.65	14.30	1.8	5.7	B
2 - B2166 E	0.44	4.49	0.8	2.3	A
3 - Mill Lane	0.05	4.27	0.1	0.5	A
4 - B2166 W	0.74	10.63	2.7	9.6	B

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	318	602	875	0.363	315	0.6	6.403	A
2 - B2166 E	422	126	1456	0.290	421	0.4	3.479	A
3 - Mill Lane	30	524	1032	0.029	30	0.0	3.591	A
4 - B2166 W	647	95	1312	0.494	644	1.0	5.358	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	379	722	808	0.469	378	0.9	8.347	A
2 - B2166 E	504	151	1440	0.350	504	0.5	3.843	A
3 - Mill Lane	36	627	971	0.037	36	0.0	3.848	A
4 - B2166 W	773	114	1300	0.595	771	1.4	6.780	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	465	882	718	0.647	461	1.8	13.814	E
2 - B2166 E	618	185	1420	0.435	617	0.8	4.479	A
3 - Mill Lane	44	767	889	0.050	44	0.1	4.259	A
4 - B2166 W	947	140	1285	0.737	942	2.7	10.348	E

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	465	886	716	0.649	464	1.8	14.304	E
2 - B2166 E	618	186	1419	0.435	618	0.8	4.492	A
3 - Mill Lane	44	770	888	0.050	44	0.1	4.265	A
4 - B2166 W	947	140	1285	0.737	947	2.7	10.633	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	379	728	805	0.472	383	0.9	8.610	A
2 - B2166 E	504	153	1439	0.350	505	0.5	3.860	A
3 - Mill Lane	36	631	970	0.037	36	0.0	3.857	A
4 - B2166 W	773	114	1300	0.595	778	1.5	6.961	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	318	608	872	0.364	319	0.6	6.522	A
2 - B2166 E	422	128	1455	0.290	423	0.4	3.492	A
3 - Mill Lane	30	527	1030	0.029	30	0.0	3.598	A
4 - B2166 W	647	96	1311	0.494	649	1.0	5.457	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.56	0.55	1.00	1.40	1.45			N/A	N/A
2 - B2166 E	0.41	0.00	0.00	0.41	0.41			N/A	N/A
3 - Mill Lane	0.03	0.00	0.00	0.03	0.03			N/A	N/A
4 - B2166 W	0.96	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.87	0.09	0.86	1.27	1.71			N/A	N/A
2 - B2166 E	0.54	0.54	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.04	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	1.44	0.06	0.82	3.33	4.80			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
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Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.76	0.03	0.28	1.76	5.67			N/A	N/A
2 - B2166 E	0.76	0.03	0.25	0.76	0.76			N/A	N/A
3 - Mill Lane	0.05	0.03	0.26	0.46	0.49			N/A	N/A
4 - B2166 W	2.69	0.03	0.29	2.69	9.58			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.81	0.03	0.28	1.81	5.34			N/A	N/A
2 - B2166 E	0.77	0.03	0.28	0.77	2.35			N/A	N/A
3 - Mill Lane	0.05	0.00	0.00	0.05	0.05			N/A	N/A
4 - B2166 W	2.74	0.03	0.27	2.74	3.53			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.91	0.06	0.76	1.64	2.07			N/A	N/A
2 - B2166 E	0.54	0.54	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	1.49	0.06	0.89	3.42	4.85			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.58	0.04	0.40	1.49	1.69			N/A	N/A
2 - B2166 E	0.41	0.00	0.00	0.41	0.41			N/A	N/A
3 - Mill Lane	0.03	0.00	0.00	0.03	0.03			N/A	N/A
4 - B2166 W	0.99	0.04	0.43	2.37	3.74			N/A	N/A

(Existing Layouts) - 2031 No
Mitigation & No Development

Junctions 9															
PICADY 9 - Priority Intersection Module															
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017															
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Filename: Lower Bognor Road Pagham Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN No Mitigation - No Development

Report generation date: 01/03/2017 10:31:29

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
Stream B-C	0.0	~1	0.00	0.00	A	24.50	C	-12 %	0.0	~1	0.00	0.00	A	75.66	F	-23 %
Stream B-A	9.3	42.3	73.19	0.94	F			[Stream B-A]	34.6	79.3	246.08	1.10	F			[Stream B-A]
Stream C-AB	0.0	~1	0.00	0.00	A				0.1	0.5	9.27	0.09	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	19/09/2016
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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**

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	24.50	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-12	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road North		Major
B	Lower Bognor Road		Minor
C	Pagham Road South		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 - Pagham Road South	7.50			95.0	✓	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	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 - Lower Bognor Road	One lane plus flare	10.00	8.00	5.50	4.25	3.00	✓	2.00	105	85

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	635	0.108	0.273	0.172	0.391
1	B-C	666	0.095	0.241	-	-
1	C-B	629	0.228	0.228	-	-

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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road North		✓	466	100.000
B - Lower Bognor Road		✓	409	100.000
C - Pagham Road South		✓	437	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	From			
	A - Pagham Road North	0	412	54
	B - Lower Bognor Road	409	0	0
	C - Pagham Road South	437	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	From			
	A - Pagham Road North	0	2	4
	B - Lower Bognor Road	1	0	0
	C - Pagham Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.00	0.00	0.0	~1	A
B-A	0.04	79.19	9.3	42.3	F
C-AB	0.00	0.00	0.0	~1	A
C-A					
AB					
AC					

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	534	0.000	0	0.0	0.000	A
B-A	308	527	0.585	303	1.4	15.720	C
C-AB	0	542	0.000	0	0.0	0.000	A
C-A	329			329			
AB	310			310			
AC	41			41			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	504	0.000	0	0.0	0.000	A
B-A	368	507	0.726	363	2.4	24.388	C
C-AB	0	526	0.000	0	0.0	0.000	A
C-A	393			393			
AB	370			370			
AC	49			49			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	461	0.000	0	0.0	0.000	A
B-A	450	479	0.940	430	7.5	57.474	F
C-AB	0	504	0.000	0	0.0	0.000	A
C-A	481			481			
AB	454			454			
AC	59			59			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	455	0.000	0	0.0	0.000	A
B-A	450	479	0.940	443	9.3	79.183	F
C-AB	0	504	0.000	0	0.0	0.000	A
C-A	481			481			
AB	454			454			
AC	59			59			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	494	0.000	0	0.0	0.000	A
B-A	368	507	0.726	393	2.9	38.713	E
C-AB	0	526	0.000	0	0.0	0.000	A
C-A	393			393			
AB	370			370			
AC	49			49			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	531	0.000	0	0.0	0.000	A
B-A	308	527	0.585	314	1.5	17.349	C
C-AB	0	542	0.000	0	0.0	0.000	A
C-A	329			329			
AB	310			310			
AC	41			41			

Queue Variation Results for each time segment

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.35	0.57	1.22	1.68	1.84			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	2.42	0.09	1.42	5.64	7.82			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	7.50	0.12	2.78	19.95	28.73			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	9.28	0.07	1.57	26.82	42.26			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	2.93	0.04	0.41	7.95	14.85			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.47	0.03	0.31	2.49	7.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	75.65	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-23	Stream B-A

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)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road North		✓	938	100.000
B - Lower Bognor Road		✓	441	100.000
C - Pagham Road South		✓	76	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	A - Pagham Road North	0	648	290
	B - Lower Bognor Road	441	0	0
	C - Pagham Road South	44	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	A - Pagham Road North	0	1	2
	B - Lower Bognor Road	3	0	0
	C - Pagham Road South	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.00	0.00	0.0	~1	A
B-A	1.12	246.08	34.6	70.3	F
C-AB	0.09	9.27	0.1	0.5	A
C-A					
AB					
AC					

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	470	0.000	0	0.0	0.000	A
B-A	332	491	0.676	324	1.9	20.724	C
C-AB	26	490	0.053	26	0.1	7.744	A
C-A	31			31			
AB	488			488			
AC	218			218			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	428	0.000	0	0.0	0.000	A
B-A	396	467	0.850	387	4.4	40.581	E
C-AB	31	464	0.068	31	0.1	8.316	A
C-A	37			37			
AB	583			583			
AC	261			261			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	389	0.000	0	0.0	0.000	A
B-A	486	433	1.122	421	30.6	128.767	F
C-AB	40	428	0.093	40	0.1	9.258	A
C-A	44			44			
AB	713			713			
AC	319			319			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	389	0.000	0	0.0	0.000	A
B-A	486	433	1.122	430	34.8	246.085	F
C-AB	40	428	0.093	40	0.1	9.268	A
C-A	44			44			
AB	713			713			
AC	319			319			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	409	0.000	0	0.0	0.000	A
B-A	396	467	0.850	453	20.3	221.732	F
C-AB	31	464	0.068	32	0.1	8.333	A
C-A	37			37			
AB	583			583			
AC	261			261			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	446	0.000	0	0.0	0.000	A
B-A	332	491	0.676	404	2.3	63.672	F
C-AB	26	490	0.053	26	0.1	7.756	A
C-A	31			31			
AB	488			488			
AC	218			218			

Queue Variation Results for each time segment

16:15 - 16:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.94	0.33	1.20	3.24	3.96			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	4.40	0.15	2.17	10.42	14.19			N/A	N/A
C-AB	0.08	0.03	0.25	0.46	0.48			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	20.59	4.56	17.62	36.91	44.09			N/A	N/A
C-AB	0.12	0.03	0.26	0.47	0.50			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	34.59	9.67	30.66	59.72	70.32			N/A	N/A
C-AB	0.12	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	20.34	3.13	16.60	39.06	47.76			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A



17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	2.34	0.03	0.31	3.00	11.30			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017
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Filename: B2145 B2166.j9

Path: \\eur-mpfs-02\tr_projects\JNY8840 - Land West of Hook Lane, Pagham, near Bognor
Regis\Transport\Picady\Revised Traffic Flows\2031 SATURN No Mitigation - No Development
Report generation date: 18/08/2017 11:15:19

»2031 Base + Committed (SATURN FLOWS), AM
»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM							PM								
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
1 - B2145 North	1.0	2.0	6.10	0.51	A	24.25	C	-2 % [3 - B2145 South]	9.0	40.6	29.42	0.91	C	16.12	C	1 % [1 - B2145 North]
2 - B2166	6.3	32.4	18.47	0.87	C				1.9	2.8	7.36	0.66	A			
3 - B2145 South	11.4	56.8	42.93	0.94	E				2.1	3.7	8.28	0.69	A			

There are warnings associated with one or more model runs - see the 'Data Error and Warnings' tablet for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	05/12/2016
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	24.25	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-2	3 - B2145 South

Arms

Arms

Arm	Name	Description
1	B2145 North	
2	B2166	
3	B2145 South	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - B2145 North	3.26	7.00	11.4	46.1	30.0	16.0	
2 - B2166	2.90	7.00	21.7	25.3	30.0	15.1	
3 - B2145 South	3.58	6.71	9.0	39.5	30.0	10.3	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B2145 North	0.673	1657
2 - B2166	0.688	1755
3 - B2145 South	0.682	1676

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

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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2145 North		✓	558	100.000
2 - B2166		✓	1171	100.000
3 - B2145 South		✓	925	100.000

Origin-Destination Data

Demand (Veh/hr)

	To		
	1 - B2145 North	2 - B2166	3 - B2145 South

From	1 - B2145 North	0	248	310
	2 - B2166	757	0	414
	3 - B2145 South	407	518	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2145 North	2 - B2166	3 - B2145 South
	1 - B2145 North	0	4	7
	2 - B2166	2	0	1
	3 - B2145 South	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.51	6.10	1.0	2.0	A
2 - B2166	0.87	18.47	6.3	32.4	C
3 - B2145 South	0.54	42.59	11.4	58.8	E

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	420	387	1319	0.319	418	0.5	3.989	A
2 - B2166	882	232	1558	0.566	876	1.3	5.245	A
3 - B2145 South	696	567	1264	0.551	692	1.2	6.239	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	502	463	1270	0.395	501	0.6	4.677	A
2 - B2166	1053	278	1525	0.690	1049	2.2	7.513	A
3 - B2145 South	832	678	1187	0.700	827	2.3	9.885	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	614	554	1211	0.507	613	1.0	6.000	A
2 - B2166	1289	340	1480	0.871	1274	5.9	16.441	C
3 - B2145 South	1018	824	1088	0.936	990	9.3	30.703	D

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	614	566	1204	0.510	614	1.0	6.102	A
2 - B2166	1289	341	1479	0.872	1288	6.3	18.467	C
3 - B2145 South	1018	833	1082	0.942	1010	11.4	42.988	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	502	486	1256	0.399	503	0.7	4.792	A
2 - B2166	1053	279	1524	0.691	1069	2.3	8.177	A
3 - B2145 South	832	691	1179	0.706	867	2.5	12.797	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	420	393	1315	0.319	421	0.5	4.027	A
2 - B2166	882	234	1557	0.566	885	1.3	5.391	A
3 - B2145 South	696	572	1260	0.553	701	1.3	6.503	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
2 - B2166	1.29	0.56	1.15	1.57	1.79			N/A	N/A
3 - B2145 South	1.21	0.54	1.14	1.58	1.80			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.65	0.10	0.84	1.37	1.44			N/A	N/A
2 - B2166	2.17	0.05	0.48	5.89	9.55			N/A	N/A
3 - B2145 South	2.26	0.05	0.49	6.13	9.87			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.02	0.03	0.26	1.02	1.02			N/A	N/A
2 - B2166	5.94	0.04	0.38	14.43	32.37			N/A	N/A
3 - B2145 South	9.34	0.08	1.75	26.81	41.79			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.03	0.03	0.27	1.03	1.97			N/A	N/A
2 - B2166	6.31	0.03	0.31	6.88	29.31			N/A	N/A
3 - B2145 South	11.41	0.05	0.88	33.20	58.79			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.67	0.22	0.94	1.39	1.44			N/A	N/A
2 - B2166	2.29	0.05	0.45	6.31	10.66			N/A	N/A
3 - B2145 South	2.49	0.04	0.40	6.71	12.59			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.47	0.04	0.41	1.24	1.37			N/A	N/A
2 - B2166	1.32	0.03	0.33	2.89	6.76			N/A	N/A
3 - B2145 South	1.26	0.03	0.30	1.48	5.87			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	16.12	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	1	1 - B2145 North

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)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2145 North		✓	1069	100.000
2 - B2166		✓	861	100.000
3 - B2145 South		✓	858	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		1 - B2145 North	2 - B2166	3 - B2145 South
	1 - B2145 North	0	690	379
	2 - B2166	360	0	501
	3 - B2145 South	394	464	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		1 - B2145 North	2 - B2166	3 - B2145 South
	1 - B2145 North	0	2	2
	2 - B2166	3	0	1
	3 - B2145 South	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.81	29.42	9.0	43.5	C
2 - B2166	0.66	7.36	1.9	2.8	A
3 - B2145 South	0.69	8.28	2.1	3.7	A

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	805	348	1395	0.577	799	1.3	5.991	A
2 - B2166	648	283	1528	0.424	645	0.7	4.067	A
3 - B2145 South	646	270	1466	0.441	643	0.8	4.355	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	961	416	1350	0.712	957	2.4	9.065	A
2 - B2166	774	339	1489	0.520	773	1.1	5.015	A
3 - B2145 South	771	323	1429	0.540	770	1.2	5.445	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1177	509	1289	0.913	1154	8.0	23.637	C
2 - B2166	948	409	1441	0.658	945	1.9	7.208	A
3 - B2145 South	945	395	1380	0.685	941	2.1	8.134	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1177	511	1287	0.914	1173	9.0	29.420	D
2 - B2166	948	416	1436	0.660	948	1.9	7.364	A
3 - B2145 South	945	396	1379	0.685	945	2.1	8.285	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	961	419	1348	0.713	987	2.6	10.634	B
2 - B2166	774	350	1482	0.522	777	1.1	5.133	A
3 - B2145 South	771	325	1428	0.540	775	1.2	5.544	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	805	350	1393	0.578	810	1.4	6.217	A
2 - B2166	648	287	1525	0.425	650	0.7	4.119	A
3 - B2145 South	646	272	1465	0.441	648	0.8	4.413	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.34	0.57	1.24	1.72	1.88			N/A	N/A
2 - B2166	0.73	0.55	1.00	1.40	1.45			N/A	N/A
3 - B2145 South	0.78	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.39	0.05	0.51	6.53	10.49			N/A	N/A
2 - B2166	1.07	0.07	0.81	2.00	2.84			N/A	N/A
3 - B2145 South	1.16	0.06	0.80	2.42	3.38			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	8.03	0.05	0.77	23.28	40.41			N/A	N/A
2 - B2166	1.88	0.03	0.27	1.88	1.88			N/A	N/A
3 - B2145 South	2.11	0.03	0.27	2.11	3.75			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker

1 - B2145 North	9.02	0.04	0.39	21.92	49.64			N/A	N/A
2 - B2166	1.91	0.03	0.27	1.91	1.91			N/A	N/A
3 - B2145 South	2.14	0.03	0.27	2.14	2.14			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.57	0.04	0.42	7.04	12.79			N/A	N/A
2 - B2166	1.11	0.11	1.02	1.78	2.21			N/A	N/A
3 - B2145 South	1.19	0.09	1.00	2.10	2.83			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.39	0.03	0.31	2.37	7.06			N/A	N/A
2 - B2166	0.74	0.05	0.57	1.28	1.79			N/A	N/A
3 - B2145 South	0.80	0.05	0.49	1.60	2.24			N/A	N/A

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.0.1.4646 [I] © Copyright TRL Limited, 2017
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Filename: Vinnetrow Road B2166.j9

Path: \\eur-mpfs-02\tr_projects\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031 SATURN No Mitigation - No Development

Report generation date: 18/08/2017 12:01:38

»2031 Base + Committed (SATURN FLOWS), AM
 »2031 Base + Committed (SATURN FLOWS), PM
 »CATM Flows, AM
 »CATM Flows, PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2031 Base + Committed (SATURN FLOWS)															
1 - Vinnetrow Road	0.4	1.8	5.78	0.31	A	6.21	A	42 % [2 - B2166 E]	0.9	3.7	10.39	0.47	B	14.86	B	6 % [4 - B2166 W]
2 - B2166 E	1.6	2.3	6.62	0.62	A				0.6	2.6	3.76	0.36	A			
3 - Mill Lane	0.1	0.5	5.87	0.11	A				0.1	0.5	4.01	0.06	A			
4 - B2166 W	0.9	1.8	5.83	0.48	A				6.4	22.4	22.18	0.87	C			
	CATM Flows															
1 - Vinnetrow Road	0.1	0.5	4.14	0.09	A	10.61	B	14 % [2 - B2166 E]	2.0	5.5	10.95	0.68	B	6.82	A	26 % [1 - Vinnetrow Road]
2 - B2166 E	4.8	23.5	13.19	0.83	B				1.2	1.5	4.91	0.54	A			
3 - Mill Lane	0.2	0.5	7.15	0.14	A				0.1	0.5	4.55	0.06	A			
4 - B2166 W	0.5	2.0	4.18	0.32	A				0.4	1.2	3.84	0.27	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	10/11/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15
D3	CATM Flows	AM	ONE HOUR	07:30	09:00	15

D4	CATM Flows	PM	ONE HOUR	16:30	18:00	15
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Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	6.21	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	42	2 - B2166 E

Arms

Arms

Arm	Name	Description
1	Vinnetrow Road	
2	B2166 E	
3	Mill Lane	
4	B2166 W	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Vinnetrow Road	3.00	6.00	5.0	30.0	30.0	35.0	
2 - B2166 E	4.00	6.00	12.0	30.0	30.0	30.0	
3 - Mill Lane	3.00	7.00	8.0	20.0	30.0	30.0	
4 - B2166 W	3.50	6.00	4.0	20.0	30.0	30.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vinnetrow Road	0.559	1219
2 - B2166 E	0.649	1633
3 - Mill Lane	0.591	1375
4 - B2166 W	0.579	1313

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

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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	251	100.000
2 - B2166 E		✓	822	100.000
3 - Mill Lane		✓	72	100.000
4 - B2166 W		✓	524	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	19	7	225
	2 - B2166 E	87	0	5	730
	3 - Mill Lane	19	12	0	41
	4 - B2166 W	60	448	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.31	5.78	0.4	1.8	A
2 - B2166 E	0.62	6.62	1.6	2.3	A
3 - Mill Lane	0.11	5.87	0.1	0.5	A
4 - B2166 W	0.48	5.83	0.9	1.8	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	189	357	994	0.190	188	0.2	4.463	A
2 - B2166 E	619	186	1506	0.411	616	0.7	4.034	A
3 - Mill Lane	54	781	910	0.060	54	0.1	4.203	A
4 - B2166 W	394	88	1218	0.324	393	0.5	4.350	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	226	427	954	0.237	225	0.3	4.937	A
2 - B2166 E	739	223	1482	0.499	738	1.0	4.832	A
3 - Mill Lane	65	935	818	0.079	65	0.1	4.777	A
4 - B2166 W	471	106	1208	0.390	470	0.6	4.875	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	276	523	900	0.307	276	0.4	5.761	A
2 - B2166 E	905	273	1449	0.625	902	1.6	6.559	A
3 - Mill Lane	79	1144	694	0.114	79	0.1	5.855	A
4 - B2166 W	577	130	1195	0.483	576	0.9	5.805	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	276	524	900	0.307	276	0.4	5.776	A
2 - B2166 E	905	273	1448	0.625	905	1.6	6.623	A
3 - Mill Lane	79	1147	692	0.115	79	0.1	5.874	A
4 - B2166 W	577	130	1195	0.483	577	0.9	5.828	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	226	429	953	0.237	226	0.3	4.956	A
2 - B2166 E	739	223	1481	0.499	742	1.0	4.884	A
3 - Mill Lane	65	940	816	0.079	65	0.1	4.796	A

4 - B2166 W	471	106	1208	0.390	472	0.6	4.901	A
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08:48 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	189	359	993	0.190	189	0.2	4.484	A
2 - B2166 E	619	187	1505	0.411	620	0.7	4.074	A
3 - Mill Lane	54	786	907	0.060	54	0.1	4.221	A
4 - B2166 W	394	89	1218	0.324	395	0.5	4.378	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.23	0.00	0.00	0.23	0.23			N/A	N/A
2 - B2166 E	0.69	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	0.48	0.00	0.00	0.48	0.48			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.31	0.00	0.00	0.31	0.31			N/A	N/A
2 - B2166 E	0.98	0.07	0.85	1.75	2.27			N/A	N/A
3 - Mill Lane	0.09	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.63	0.12	0.87	1.37	1.44			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.44	0.03	0.25	0.46	0.48			N/A	N/A
2 - B2166 E	1.63	0.03	0.27	1.63	1.63			N/A	N/A
3 - Mill Lane	0.13	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	0.92	0.03	0.26	0.92	0.92			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.44	0.03	0.31	1.36	1.83			N/A	N/A
2 - B2166 E	1.65	0.03	0.27	1.65	1.65			N/A	N/A
3 - Mill Lane	0.13	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.93	0.03	0.27	0.93	1.82			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.31	0.00	0.00	0.31	0.31			N/A	N/A
2 - B2166 E	1.01	0.14	1.00	1.48	1.80			N/A	N/A
3 - Mill Lane	0.09	0.00	0.00	0.09	0.09			N/A	N/A
4 - B2166 W	0.64	0.22	0.94	1.39	1.44			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.24	0.00	0.00	0.24	0.24			N/A	N/A
2 - B2166 E	0.70	0.06	0.66	1.40	1.40			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	0.48	0.04	0.42	1.26	1.38			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	14.86	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	6	4 - B2166 W

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)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	282	100.000
2 - B2166 E		✓	489	100.000
3 - Mill Lane		✓	49	100.000
4 - B2166 W		✓	994	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	149	14	119
	2 - B2166 E	46	0	8	435
	3 - Mill Lane	6	19	0	24
	4 - B2166 W	113	867	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.47	10.39	0.9	3.7	B
2 - B2166 E	0.36	3.76	0.6	2.6	A
3 - Mill Lane	0.06	4.01	0.1	0.5	A
4 - B2166 W	0.87	22.18	6.4	32.4	C

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	212	672	835	0.254	211	0.3	5.755	A
2 - B2166 E	368	110	1530	0.241	367	0.3	3.093	A
3 - Mill Lane	37	450	1075	0.034	37	0.0	3.467	A
4 - B2166 W	748	53	1266	0.591	743	1.4	6.811	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	254	806	760	0.333	253	0.5	7.086	A
2 - B2166 E	440	132	1516	0.290	439	0.4	3.344	A
3 - Mill Lane	44	539	1023	0.043	44	0.0	3.677	A
4 - B2166 W	894	64	1259	0.710	890	2.4	9.640	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	310	978	663	0.468	309	0.9	10.121	E
2 - B2166 E	538	161	1497	0.360	538	0.6	3.750	A
3 - Mill Lane	54	659	952	0.057	54	0.1	4.008	A
4 - B2166 W	1094	78	1251	0.875	1080	6.0	19.563	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	310	989	657	0.473	310	0.9	10.386	E
2 - B2166 E	538	162	1497	0.360	538	0.6	3.755	A
3 - Mill Lane	54	661	951	0.057	54	0.1	4.011	A
4 - B2166 W	1094	78	1251	0.875	1083	6.4	22.179	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	254	823	751	0.338	255	0.5	7.285	A
2 - B2166 E	440	133	1515	0.290	440	0.4	3.352	A
3 - Mill Lane	44	541	1022	0.043	44	0.0	3.684	A
4 - B2166 W	894	64	1259	0.710	909	2.5	10.699	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	212	681	830	0.256	213	0.3	5.839	A
2 - B2166 E	368	111	1529	0.241	369	0.3	3.104	A
3 - Mill Lane	37	452	1073	0.034	37	0.0	3.472	A
4 - B2166 W	748	54	1266	0.591	753	1.5	7.074	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.34	0.00	0.00	0.34	0.34			N/A	N/A
2 - B2166 E	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	1.42	0.58	1.30	1.74	1.87			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.49	0.00	0.00	0.49	0.49			N/A	N/A
2 - B2166 E	0.41	0.00	0.00	0.41	0.41			N/A	N/A
3 - Mill Lane	0.04	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	2.36	0.06	0.80	6.26	9.64			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
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Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.86	0.03	0.26	0.86	0.86			N/A	N/A
2 - B2166 E	0.56	0.03	0.25	0.56	0.56			N/A	N/A
3 - Mill Lane	0.06	0.03	0.26	0.46	0.49			N/A	N/A
4 - B2166 W	5.97	0.04	0.40	15.74	32.36			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.88	0.03	0.29	1.17	3.71			N/A	N/A
2 - B2166 E	0.56	0.03	0.29	1.29	2.61			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	6.40	0.03	0.32	9.30	32.07			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.52	0.05	0.54	1.31	1.40			N/A	N/A
2 - B2166 E	0.41	0.00	0.00	0.41	0.41			N/A	N/A
3 - Mill Lane	0.05	0.00	0.00	0.05	0.05			N/A	N/A
4 - B2166 W	2.53	0.04	0.44	6.98	12.05			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.35	0.03	0.28	0.50	0.99			N/A	N/A
2 - B2166 E	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	1.47	0.03	0.33	3.29	7.59			N/A	N/A

CATM Flows, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	10.61	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	14	2 - B2166 E

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)
D3	CATM Flows	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	80	100.000
2 - B2166 E		✓	1223	100.000
3 - Mill Lane		✓	72	100.000
4 - B2166 W		✓	360	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	73	7	0
	2 - B2166 E	0	0	5	1218
	3 - Mill Lane	19	12	0	41
	4 - B2166 W	0	344	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.09	4.14	0.1	0.5	A
2 - B2166 E	0.83	13.19	4.8	23.5	B
3 - Mill Lane	0.14	7.15	0.2	0.5	A
4 - B2166 W	0.32	4.18	0.5	2.0	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	60	279	1031	0.058	60	0.1	3.709	A
2 - B2166 E	921	17	1622	0.568	916	1.3	5.059	A
3 - Mill Lane	54	912	836	0.065	54	0.1	4.603	A
4 - B2166 W	271	23	1263	0.215	270	0.3	3.621	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	72	334	1000	0.072	72	0.1	3.880	A
2 - B2166 E	1099	21	1620	0.679	1096	2.1	6.833	A
3 - Mill Lane	65	1092	729	0.089	65	0.1	5.415	A
4 - B2166 W	324	28	1261	0.257	323	0.3	3.839	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	88	409	958	0.092	88	0.1	4.139	A
2 - B2166 E	1347	25	1617	0.833	1336	4.6	12.395	B
3 - Mill Lane	79	1331	588	0.135	79	0.2	7.069	A
4 - B2166 W	396	34	1257	0.315	396	0.5	4.178	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	88	410	957	0.092	88	0.1	4.140	A
2 - B2166 E	1347	25	1617	0.833	1346	4.8	13.189	B
3 - Mill Lane	79	1340	582	0.136	79	0.2	7.153	A
4 - B2166 W	396	34	1257	0.315	396	0.5	4.181	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	72	335	999	0.072	72	0.1	3.884	A
2 - B2166 E	1099	21	1620	0.679	1110	2.2	7.199	A
3 - Mill Lane	65	1105	721	0.090	65	0.1	5.485	A
4 - B2166 W	324	28	1261	0.257	324	0.3	3.845	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	60	280	1030	0.058	60	0.1	3.712	A
2 - B2166 E	921	17	1622	0.568	924	1.3	5.180	A
3 - Mill Lane	54	920	831	0.065	54	0.1	4.637	A
4 - B2166 W	271	23	1263	0.215	271	0.3	3.629	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2 - B2166 E	1.30	0.56	1.11	1.45	1.73			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.27	0.00	0.00	0.27	0.27			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.08	0.03	0.25	0.45	0.48			N/A	N/A
2 - B2166 E	2.06	0.05	0.50	5.54	8.80			N/A	N/A
3 - Mill Lane	0.10	0.00	0.00	0.10	0.10			N/A	N/A
4 - B2166 W	0.34	0.00	0.00	0.34	0.34			N/A	N/A

08:00 - 08:15

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Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.10	0.03	0.26	0.47	0.49			N/A	N/A
2 - B2166 E	4.61	0.03	0.32	7.27	23.59			N/A	N/A
3 - Mill Lane	0.15	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	0.46	0.03	0.25	0.46	0.48			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - B2166 E	4.78	0.03	0.29	4.78	13.88			N/A	N/A
3 - Mill Lane	0.16	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.46	0.03	0.31	1.36	1.96			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.08	0.00	0.00	0.08	0.08			N/A	N/A
2 - B2166 E	2.16	0.05	0.52	5.80	9.21			N/A	N/A
3 - Mill Lane	0.10	0.00	0.00	0.10	0.10			N/A	N/A
4 - B2166 W	0.35	0.00	0.00	0.35	0.35			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2 - B2166 E	1.33	0.04	0.36	3.35	6.47			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.27	0.00	0.00	0.27	0.27			N/A	N/A

CATM Flows, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	6.82	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	26	1 - Vinnetrow Road

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)
D4	CATM Flows	PM	ONE HOUR	16:30	18:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	620	100.000
2 - B2166 E		✓	771	100.000
3 - Mill Lane		✓	49	100.000
4 - B2166 W		✓	315	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	606	14	0
	2 - B2166 E	0	0	8	763
	3 - Mill Lane	6	19	0	24
	4 - B2166 W	0	301	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.68	10.95	2.0	5.5	B
2 - B2166 E	0.54	4.91	1.2	1.5	A
3 - Mill Lane	0.06	4.55	0.1	0.5	A
4 - B2166 W	0.27	3.84	0.4	1.2	A

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	467	250	1077	0.433	464	0.8	5.842	A
2 - B2166 E	580	21	1588	0.365	578	0.6	3.556	A
3 - Mill Lane	37	572	1003	0.037	37	0.0	3.726	A
4 - B2166 W	237	19	1289	0.184	236	0.2	3.415	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	557	300	1049	0.531	556	1.1	7.277	A
2 - B2166 E	693	25	1586	0.437	692	0.8	4.026	A
3 - Mill Lane	44	685	936	0.047	44	0.0	4.033	A
4 - B2166 W	283	22	1287	0.220	283	0.3	3.585	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	683	367	1011	0.675	679	2.0	10.731	E
2 - B2166 E	849	31	1582	0.537	847	1.1	4.889	A
3 - Mill Lane	54	839	846	0.064	54	0.1	4.543	A
4 - B2166 W	347	27	1284	0.270	346	0.4	3.839	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	683	368	1011	0.675	682	2.0	10.954	E
2 - B2166 E	849	31	1582	0.537	849	1.2	4.909	A
3 - Mill Lane	54	840	845	0.064	54	0.1	4.547	A
4 - B2166 W	347	28	1284	0.270	347	0.4	3.841	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	557	301	1049	0.531	561	1.2	7.434	A
2 - B2166 E	693	25	1586	0.437	695	0.8	4.046	A
3 - Mill Lane	44	687	935	0.047	44	0.0	4.042	A
4 - B2166 W	283	23	1287	0.220	284	0.3	3.587	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	467	252	1076	0.434	468	0.8	5.933	A
2 - B2166 E	580	21	1588	0.365	581	0.6	3.576	A
3 - Mill Lane	37	575	1001	0.037	37	0.0	3.736	A
4 - B2166 W	237	19	1289	0.184	237	0.2	3.422	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.76	0.55	1.00	1.40	1.45			N/A	N/A
2 - B2166 E	0.57	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	0.22	0.00	0.00	0.22	0.22			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.11	0.08	0.92	1.98	2.76			N/A	N/A
2 - B2166 E	0.77	0.10	0.85	1.42	1.50			N/A	N/A
3 - Mill Lane	0.05	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.28	0.00	0.00	0.28	0.28			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
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Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	2.01	0.03	0.28	2.01	5.54			N/A	N/A
2 - B2166 E	1.14	0.03	0.26	1.14	1.14			N/A	N/A
3 - Mill Lane	0.07	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	0.37	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	2.04	0.03	0.27	2.04	2.98			N/A	N/A
2 - B2166 E	1.15	0.03	0.27	1.15	1.18			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.37	0.03	0.32	1.18	1.18			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.15	0.07	0.90	2.21	2.96			N/A	N/A
2 - B2166 E	0.78	0.48	0.97	1.40	1.45			N/A	N/A
3 - Mill Lane	0.05	0.00	0.00	0.05	0.05			N/A	N/A
4 - B2166 W	0.28	0.00	0.00	0.28	0.28			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.77	0.05	0.45	1.62	2.36			N/A	N/A
2 - B2166 E	0.58	0.07	0.73	1.35	1.42			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	0.23	0.00	0.00	0.23	0.23			N/A	N/A

Junctions 9							
ARCADY 9 - Roundabout Module							
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017							
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Filename: A27 and A259.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031 SATURN No Mitigation - No Development

Report generation date: 15/03/2017 15:12:39

»A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), AM

»A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS
A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS)										
1 - A27 North	1.4	2.96	0.56	A	A	0.6	2.26	0.36	A	A
2 - A259 Bognor Rd East	0.9	3.73	0.46	A		0.6	2.62	0.36	A	
4 - A27 South	1.2	2.97	0.52	A		1.5	3.06	0.58	A	
5 - A259 Bognor Road West	0.7	4.33	0.40	A		1.0	6.07	0.48	A	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

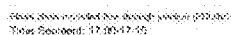
File summary

File Description

Title	A27 Bognor RBT
Location	
Site number	
Date	30/03/2015
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	UKNAW004
Description	

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	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

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

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2031 Base + Committed (SATURN FLOWS)	AM	FLAT	08:00	09:00	60	15	✓
D8	2031 Base + Committed (SATURN FLOWS)	PM	FLAT	17:00	18:00	60	15	✓

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	A27 Bognor RBT	✓	100.000	100.000

A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A259 Bognor Rd East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A27 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	5 - A259 Bognor Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Bognor Bridge Road - WSP Mitigation	Standard Roundabout	1,2,3,4,5	3.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A27 North	
2	A259 Bognor Rd East	
3	Vinnetrow Road	
4	A27 South	
5	A259 Bognor Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A27 North	8.80	12.37	112.7	43.7	84.0	32.0	
2 - A259 Bognor Rd East	7.00	11.18	63.0	30.5	84.0	44.0	
3 - Vinnetrow Road							✓
4 - A27 South	9.36	11.09	44.0	44.2	84.0	25.0	
5 - A259 Bognor Road West	4.02	8.11	55.7	27.5	84.0	37.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A27 North	0.760	3720
2 - A259 Bognor Rd East	0.654	3065
3 - Vinnetrow Road		
4 - A27 South	0.726	3447
5 - A259 Bognor Road West	0.534	2197

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2031 Base + Committed (SATURN FLOWS)	AM	FLAT	08:00	09:00	60	15	✓

Default vehicle mix	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 (%)
1 - A27 North		FLAT	✓	1523	100.000
2 - A259 Bognor Rd East		FLAT	✓	829	100.000
3 - Vinnetrow Road					
4 - A27 South		FLAT	✓	1322	100.000
5 - A259 Bognor Road West		FLAT	✓	557	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
From		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
	1 - A27 North	0	375	126	627	395
	2 - A259 Bognor Rd East	222	0	68	331	208
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	476	338	106	0	402
	5 - A259 Bognor Road West	155	138	33	231	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
From		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
	1 - A27 North	10	10	10	10	10
	2 - A259 Bognor Rd East	10	10	10	10	10
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	10	10	10	10	10
	5 - A259 Bognor Road West	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 North	0.56	2.96	1.4	A	1675	1675
2 - A259 Bognor Rd East	0.46	3.73	0.9	A	912	912
3 - Vinnetrow Road						
4 - A27 South	0.52	2.97	1.2	A	1454	1454
5 - A259 Bognor Road West	0.40	4.33	0.7	A	613	613

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1675	419	927	3015	0.556	1670	935	0.0	1.4	2.931	A
2 - A259 Bognor Rd East	912	228	1664	1976	0.461	908	933	0.0	0.9	3.695	A
3 - Vinnetrow Road			2207				365				
4 - A27 South	1454	364	904	2791	0.521	1449	1303	0.0	1.2	2.943	A
5 - A259 Bognor Road West	613	153	1252	1529	0.401	610	1102	0.0	0.7	4.293	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1675	419	931	3013	0.556	1675	938	1.4	1.4	2.960	A
2 - A259 Bognor Rd East	912	228	1670	1973	0.462	912	936	0.9	0.9	3.732	A
3 - Vinnetrow Road			2215				366				
4 - A27 South	1454	364	907	2788	0.522	1454	1308	1.2	1.2	2.967	A
5 - A259 Bognor Road West	613	153	1256	1527	0.401	613	1105	0.7	0.7	4.330	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1675	419	931	3013	0.556	1675	938	1.4	1.4	2.960	A
2 - A259 Bognor Rd East	912	228	1670	1973	0.462	912	936	0.9	0.9	3.732	A
3 - Vinnetrow Road			2215				366				
4 - A27 South	1454	364	907	2788	0.522	1454	1308	1.2	1.2	2.967	A
5 - A259 Bognor Road West	613	153	1256	1527	0.401	613	1105	0.7	0.7	4.330	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1675	419	931	3013	0.556	1675	938	1.4	1.4	2.960	A
2 - A259 Bognor Rd East	912	228	1670	1973	0.462	912	936	0.9	0.9	3.732	A
3 - Vinnetrow Road			2215				366				
4 - A27 South	1454	364	907	2788	0.522	1454	1308	1.2	1.2	2.967	A
5 - A259 Bognor Road West	613	153	1256	1527	0.401	613	1105	0.7	0.7	4.330	A

A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A259 Bognor Rd East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A27 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	5 - A259 Bognor Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Bognor Bridge Road - WSP Mitigation	Standard Roundabout	1,2,3,4,5	3.21	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 period length (min)	Time segment length (min)	Run automatically
D8	2031 Base + Committed (SATURN FLOWS)	PM	FLAT	17:00	18:00	60	15	✓

Default vehicle mix	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 (%)
1 - A27 North		FLAT	✓	904	100.000
2 - A259 Bognor Rd East		FLAT	✓	783	100.000
3 - Vinnetrow Road					
4 - A27 South		FLAT	✓	1593	100.000
5 - A259 Bognor Road West		FLAT	✓	543	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	0	358	133	292	121
	2 - A259 Bognor Rd East	272	0	130	270	111
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	569	558	215	0	251
	5 - A259 Bognor Road West	155	187	47	154	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	10	10	10	10	10
	2 - A259 Bognor Rd East	10	10	10	10	10
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	10	10	10	10	10
	5 - A259 Bognor Road West	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 North	0.36	2.26	0.6	A	994	994
2 - A259 Bognor Rd East	0.36	2.62	0.6	A	861	861
3 - Vinnetrow Road						
4 - A27 South	0.58	3.06	1.5	A	1752	1752
5 - A259 Bognor Road West	0.48	6.07	1.0	A	597	597

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	994	249	1271	2754	0.361	992	1091	0.0	0.6	2.245	A
2 - A259 Bognor Rd East	861	215	1054	2375	0.363	859	1209	0.0	0.6	2.606	A
3 - Vinnetrow Road			1338				576				
4 - A27 South	1752	438	553	3046	0.575	1746	785	0.0	1.5	3.034	A
5 - A259 Bognor Road West	597	149	1770	1253	0.477	593	530	0.0	1.0	5.967	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	994	249	1277	2749	0.362	994	1096	0.6	0.6	2.256	A
2 - A259 Bognor Rd East	861	215	1058	2373	0.363	861	1213	0.6	0.6	2.619	A
3 - Vinnetrow Road			1342				577				
4 - A27 South	1752	438	554	3045	0.576	1752	788	1.5	1.5	3.063	A
5 - A259 Bognor Road West	597	149	1775	1250	0.478	597	531	1.0	1.0	6.066	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	994	249	1277	2749	0.362	994	1096	0.6	0.6	2.256	A
2 - A259 Bognor Rd East	861	215	1058	2373	0.363	861	1213	0.6	0.6	2.619	A
3 - Vinnetrow Road			1342				577				
4 - A27 South	1752	438	554	3045	0.576	1752	788	1.5	1.5	3.063	A
5 - A259 Bognor Road West	597	149	1775	1250	0.478	597	531	1.0	1.0	6.066	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	994	249	1277	2749	0.362	994	1096	0.6	0.6	2.256	A
2 - A259 Bognor Rd East	861	215	1058	2373	0.363	861	1213	0.6	0.6	2.619	A
3 - Vinnetrow Road			1342				577				
4 - A27 South	1752	438	554	3045	0.576	1752	788	1.5	1.5	3.063	A
5 - A259 Bognor Road West	597	149	1775	1250	0.478	597	531	1.0	1.0	6.066	A

Junctions 9															
PICADY 9 - Priority Intersection Module															
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017															
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Filename: Lower Bognor Road Pagham Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN No Mitigation - With Development

Report generation date: 01/03/2017 10:34:43

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
Stream B-C	0.0	~1	0.00	0.00	A	55.10	F	-21 % [Stream B-A]	0.0	~1	0.00	0.00	A	157.09	F	-30 % [Stream B-A]
Stream B-A	28.6	63.0	219.36	1.10	F				71.0	113.4	610.78	1.34	F			
Stream C-AB	0.0	~1	0.00	0.00	A				0.2	1.2	8.28	0.11	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	19/09/2016
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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**

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	55.10	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-21	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road North		Major
B	Lower Bognor Road		Minor
C	Pagham Road South		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 - Pagham Road South	7.50			95.0	✓	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	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 - Lower Bognor Road	One lane plus flare	10.00	8.00	5.50	4.25	3.00	✓	2.00	105	85

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	635	0.108	0.273	0.172	0.391
1	B-C	666	0.095	0.241	-	-
1	C-B	629	0.228	0.228	-	-

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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road North		✓	554	100.000
B - Lower Bognor Road		✓	409	100.000
C - Pagham Road South		✓	655	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	From			
	A - Pagham Road North	0	412	142
	B - Lower Bognor Road	409	0	0
	C - Pagham Road South	655	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	From			
	A - Pagham Road North	0	2	4
	B - Lower Bognor Road	1	0	0
	C - Pagham Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.00	0.00	0.0	~1	A
B-A	1.10	219.96	28.6	80.0	F
C-AB	0.00	0.00	0.0	~1	A
C-A					
AB					
AC					

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	511	0.000	0	0.0	0.000	A
B-A	308	479	0.642	301	1.7	19.545	C
C-AB	0	526	0.000	0	0.0	0.000	A
C-A	493			493			
AB	310			310			
AC	107			107			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	474	0.000	0	0.0	0.000	A
B-A	368	450	0.816	360	3.7	36.763	E
C-AB	0	508	0.000	0	0.0	0.000	A
C-A	589			589			
AB	370			370			
AC	128			128			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	437	0.000	0	0.0	0.000	A
B-A	450	410	1.098	395	17.4	118.403	F
C-AB	0	482	0.000	0	0.0	0.000	A
C-A	721			721			
AB	454			454			
AC	156			156			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	437	0.000	0	0.0	0.000	A
B-A	450	410	1.098	406	28.8	219.953	F
C-AB	0	482	0.000	0	0.0	0.000	A
C-A	721			721			
AB	454			454			
AC	156			156			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	449	0.000	0	0.0	0.000	A
B-A	368	450	0.816	435	11.7	173.316	F
C-AB	0	508	0.000	0	0.0	0.000	A
C-A	589			589			
AB	370			370			
AC	128			128			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	496	0.000	0	0.0	0.000	A
B-A	308	479	0.642	347	1.9	33.967	D
C-AB	0	526	0.000	0	0.0	0.000	A
C-A	493			493			
AB	310			310			
AC	107			107			

Queue Variation Results for each time segment

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.69	0.37	1.50	2.66	3.16			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	3.68	0.12	1.63	8.84	12.22			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	17.40	2.93	14.34	32.71	39.76			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	28.56	5.97	24.33	52.43	63.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	11.71	0.46	7.27	27.17	35.91			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.93	0.03	0.30	1.93	8.73			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	187.09	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-30	Stream B-A

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)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road North		✓	1101	100.000
B - Lower Bognor Road		✓	441	100.000
C - Pagham Road South		✓	193	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	A - Pagham Road North	0	648	453
	B - Lower Bognor Road	441	0	0
	C - Pagham Road South	161	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	A - Pagham Road North	0	1	2
	B - Lower Bognor Road	3	0	0
	C - Pagham Road South	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.00	0.00	0.0	~1	A
B-A	1.34	619.78	71.0	113.4	F
C-AB	0.11	8.28	0.2	1.2	A
C-A					
AB					
AC					

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	435	0.000	0	0.0	0.000	A
B-A	332	443	0.750	321	2.6	27.697	D
C-AB	31	528	0.059	31	0.1	7.235	A
C-A	114			114			
AB	488			488			
AC	341			341			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	383	0.000	0	0.0	0.000	A
B-A	396	409	0.970	373	8.5	79.358	F
C-AB	40	512	0.079	40	0.1	7.625	A
C-A	133			133			
AB	583			583			
AC	407			407			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	356	0.000	0	0.0	0.000	A
B-A	486	362	1.341	359	40.0	364.727	F
C-AB	55	491	0.113	55	0.2	8.256	A
C-A	157			157			
AB	713			713			
AC	499			499			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	356	0.000	0	0.0	0.000	A
B-A	486	362	1.341	362	71.0	544.798	F
C-AB	55	491	0.113	55	0.2	8.278	A
C-A	157			157			
AB	713			713			
AC	499			499			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	382	0.000	0	0.0	0.000	A
B-A	396	409	0.970	403	69.4	610.783	F
C-AB	40	512	0.079	41	0.1	7.659	A
C-A	133			133			
AB	583			583			
AC	407			407			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	401	0.000	0	0.0	0.000	A
B-A	332	443	0.750	436	43.3	467.687	F
C-AB	31	528	0.059	32	0.1	7.259	A
C-A	114			114			
AB	488			488			
AC	341			341			

Queue Variation Results for each time segment

16:15 - 16:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	2.65	0.05	0.45	7.35	12.59			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	8.49	0.20	4.34	21.02	28.84			N/A	N/A
C-AB	0.13	0.03	0.25	0.45	0.48			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	40.02	17.34	37.43	60.86	68.89			N/A	N/A
C-AB	0.21	0.03	0.27	0.49	1.18			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	71.02	39.54	68.43	98.79	108.79			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	69.38	34.17	66.05	101.50	113.44			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A



17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	43.31	12.40	38.58	74.65	87.79			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

Junctions 9							
ARCADY 9 - Roundabout Module							
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Filename: A27 and A259.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN No Mitigation - With Development

Report generation date: 15/03/2017 15:09:55

»A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), AM

»A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS
A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS)										
1 - A27 North	1.4	3.01	0.56	A	A	0.6	2.31	0.37	A	A
2 - A259 Bognor Rd East	1.0	3.80	0.47	A		0.6	2.68	0.37	A	
4 - A27 South	1.2	2.97	0.52	A		1.5	3.06	0.58	A	
5 - A259 Bognor Road West	0.8	4.42	0.41	A		1.1	6.38	0.50	A	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

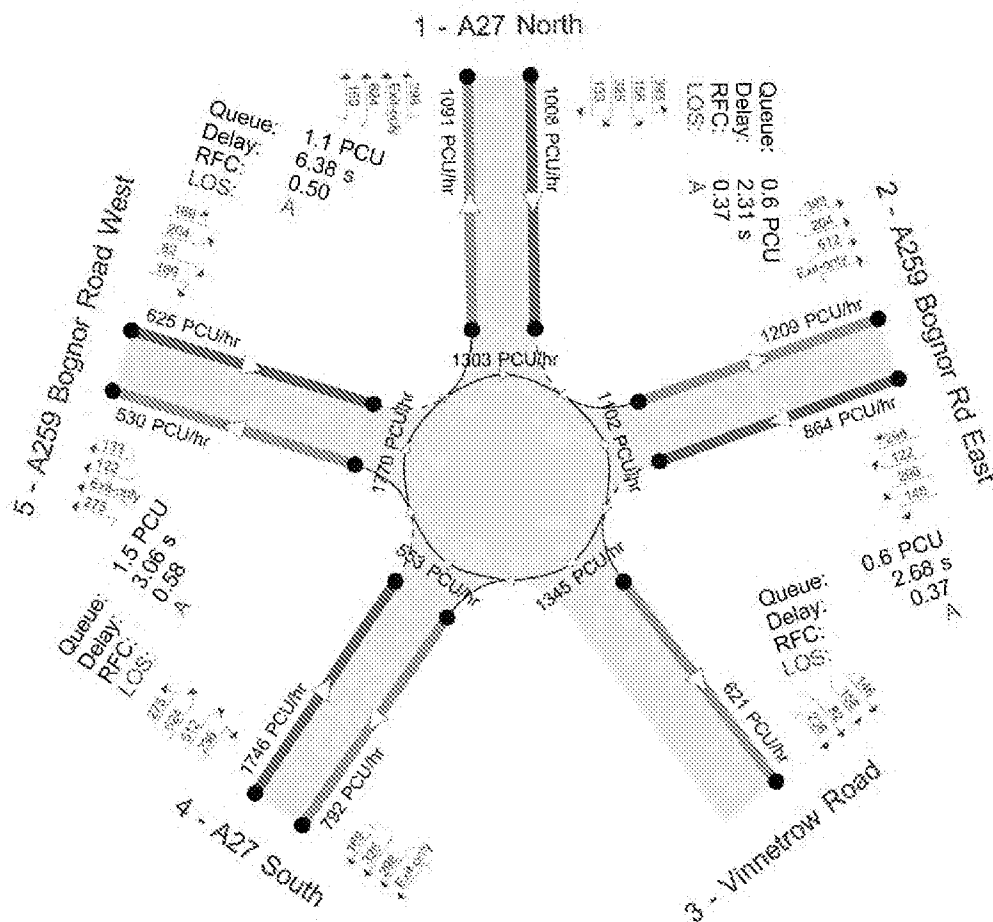
File summary

File Description

Title	A27 Bognor RBT
Location	
Site number	
Date	30/03/2015
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	UKNAW004
Description	

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	PCU	perHour	s	-Min	perMin



Flow data provided for design junction (022.000)
 Total Segments: 17 (00-17.00)

The junction diagram reflects the last run of Junctions.

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 period length (min)	Time segment length (min)	Run automatically
D7	2031 Base + Committed (SATURN FLOWS)	AM	FLAT	08:00	09:00	60	15	✓
D8	2031 Base + Committed (SATURN FLOWS)	PM	FLAT	17:00	18:00	60	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	A27 Bognor RBT	✓	100.000	100.000

A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A259 Bognor Rd East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A27 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	5 - A259 Bognor Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Bognor Bridge Road - WSP Mitigation	Standard Roundabout	1,2,3,4,5	3.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A27 North	
2	A259 Bognor Rd East	
3	Vinnetrow Road	
4	A27 South	
5	A259 Bognor Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A27 North	8.80	12.37	112.7	43.7	84.0	32.0	
2 - A259 Bognor Rd East	7.00	11.18	63.0	30.5	84.0	44.0	
3 - Vinnetrow Road							✓
4 - A27 South	9.36	11.09	44.0	44.2	84.0	25.0	
5 - A259 Bognor Road West	4.02	8.11	55.7	27.5	84.0	37.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A27 North	0.760	3720
2 - A259 Bognor Rd East	0.654	3065
3 - Vinnetrow Road		
4 - A27 South	0.726	3447
5 - A259 Bognor Road West	0.534	2197

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2031 Base + Committed (SATURN FLOWS)	AM	FLAT	08:00	09:00	60	15	✓

Default vehicle mix	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 (%)
1 - A27 North		FLAT	✓	1531	100.000
2 - A259 Bognor Rd East		FLAT	✓	831	100.000
3 - Vinnetrow Road					
4 - A27 South		FLAT	✓	1322	100.000
5 - A259 Bognor Road West		FLAT	✓	573	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
From		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
	1 - A27 North	0	375	131	630	395
	2 - A259 Bognor Rd East	222	0	69	332	208
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	476	338	106	0	402
	5 - A259 Bognor Road West	155	138	48	232	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
From		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
	1 - A27 North	10	10	10	10	10
	2 - A259 Bognor Rd East	10	10	10	10	10
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	10	10	10	10	10
	5 - A259 Bognor Road West	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 North	0.56	3.01	1.4	A	1684	1684
2 - A259 Bognor Rd East	0.47	3.80	1.0	A	914	914
3 - Vinnetrow Road						
4 - A27 South	0.52	2.97	1.2	A	1454	1454
5 - A259 Bognor Road West	0.41	4.42	0.8	A	630	630

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1684	421	944	3002	0.561	1679	935	0.0	1.4	2.980	A
2 - A259 Bognor Rd East	914	229	1690	1959	0.467	910	933	0.0	1.0	3.761	A
3 - Vinnetrow Road			2212				388				
4 - A27 South	1454	364	904	2791	0.521	1449	1308	0.0	1.2	2.943	A
5 - A259 Bognor Road West	630	158	1252	1529	0.412	627	1102	0.0	0.8	4.375	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1684	421	948	2999	0.562	1684	938	1.4	1.4	3.010	A
2 - A259 Bognor Rd East	914	229	1696	1955	0.467	914	936	1.0	1.0	3.802	A
3 - Vinnetrow Road			2221				389				
4 - A27 South	1454	364	907	2788	0.522	1454	1313	1.2	1.2	2.967	A
5 - A259 Bognor Road West	630	158	1256	1527	0.413	630	1105	0.8	0.8	4.415	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1684	421	948	2999	0.562	1684	938	1.4	1.4	3.010	A
2 - A259 Bognor Rd East	914	229	1696	1955	0.467	914	936	1.0	1.0	3.802	A
3 - Vinnetrow Road			2221				389				
4 - A27 South	1454	364	907	2788	0.522	1454	1313	1.2	1.2	2.967	A
5 - A259 Bognor Road West	630	158	1256	1527	0.413	630	1105	0.8	0.8	4.415	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1684	421	948	2999	0.562	1684	938	1.4	1.4	3.010	A
2 - A259 Bognor Rd East	914	229	1696	1955	0.467	914	936	1.0	1.0	3.802	A
3 - Vinnetrow Road			2221				389				
4 - A27 South	1454	364	907	2788	0.522	1454	1313	1.2	1.2	2.967	A
5 - A259 Bognor Road West	630	158	1256	1527	0.413	630	1105	0.8	0.8	4.415	A

A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A259 Bognor Rd East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A27 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	5 - A259 Bognor Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Bognor Bridge Road - WSP Mitigation	Standard Roundabout	1,2,3,4,5	3.30	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 period length (min)	Time segment length (min)	Run automatically
D8	2031 Base + Committed (SATURN FLOWS)	PM	FLAT	17:00	18:00	60	15	✓

Default vehicle mix	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 (%)
1 - A27 North		FLAT	✓	919	100.000
2 - A259 Bognor Rd East		FLAT	✓	788	100.000
3 - Vinnetrow Road					
4 - A27 South		FLAT	✓	1593	100.000
5 - A259 Bognor Road West		FLAT	✓	572	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
1 - A27 North		0	358	144	296	121
2 - A259 Bognor Rd East		272	0	133	272	111
3 - Vinnetrow Road		Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
4 - A27 South		569	558	215	0	251
5 - A259 Bognor Road West		155	187	75	155	0

Vehicle Mix

Heavy Vehicle Percentages

From	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
1 - A27 North		10	10	10	10	10
2 - A259 Bognor Rd East		10	10	10	10	10
3 - Vinnetrow Road		Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
4 - A27 South		10	10	10	10	10
5 - A259 Bognor Road West		10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 North	0.37	2.31	0.6	A	1011	1011
2 - A259 Bognor Rd East	0.37	2.68	0.6	A	867	867
3 - Vinnetrow Road						
4 - A27 South	0.58	3.06	1.5	A	1752	1752
5 - A259 Bognor Road West	0.50	6.38	1.1	A	629	629

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1011	253	1303	2730	0.370	1008	1091	0.0	0.6	2.298	A
2 - A259 Bognor Rd East	867	217	1102	2344	0.370	864	1209	0.0	0.6	2.672	A
3 - Vinnetrow Road			1345				621				
4 - A27 South	1752	438	553	3046	0.575	1746	792	0.0	1.5	3.034	A
5 - A259 Bognor Road West	629	157	1770	1253	0.502	625	530	0.0	1.1	6.262	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1011	253	1309	2725	0.371	1011	1096	0.6	0.6	2.309	A
2 - A259 Bognor Rd East	867	217	1107	2341	0.370	867	1213	0.6	0.6	2.685	A
3 - Vinnetrow Road			1350				624				
4 - A27 South	1752	438	554	3045	0.576	1752	795	1.5	1.5	3.063	A
5 - A259 Bognor Road West	629	157	1775	1250	0.503	629	531	1.1	1.1	6.378	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1011	253	1309	2725	0.371	1011	1096	0.6	0.6	2.309	A
2 - A259 Bognor Rd East	867	217	1107	2341	0.370	867	1213	0.6	0.6	2.685	A
3 - Vinnetrow Road			1350				624				
4 - A27 South	1752	438	554	3045	0.576	1752	795	1.5	1.5	3.063	A
5 - A259 Bognor Road West	629	157	1775	1250	0.503	629	531	1.1	1.1	6.378	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1011	253	1309	2725	0.371	1011	1096	0.6	0.6	2.309	A
2 - A259 Bognor Rd East	867	217	1107	2341	0.370	867	1213	0.6	0.6	2.685	A
3 - Vinnetrow Road			1350				624				
4 - A27 South	1752	438	554	3045	0.576	1752	795	1.5	1.5	3.063	A
5 - A259 Bognor Road West	629	157	1775	1250	0.503	629	531	1.1	1.1	6.378	A

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: B2145 B2166.j9

Path: \\eur-mpfs-02\tr_projects\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031 SATURN No Mitigation - With Development

Report generation date: 18/08/2017 11:23:47

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2031 Base + Committed (SATURN FLOWS)															
1 - B2145 North	1.2	1.5	6.54	0.55	A	87.91	F	-11 % [3 - B2145 South]	27.5	31.4	75.68	1.01	F	35.64	E	-6 % [1 - B2145 North]
2 - B2166	42.5	112.3	63.93	1.03	F				2.9	9.2	9.82	0.75	A			
3 - B2145 South	41.7	98.5	123.94	1.07	F				2.8	9.8	10.64	0.74	B			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	05/12/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	37.91	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-11	3 - B2145 South

Arms

Arms

Arm	Name	Description
1	B2145 North	
2	B2166	
3	B2145 South	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - B2145 North	3.26	7.00	11.4	46.1	30.0	16.0	
2 - B2166	2.90	7.00	21.7	25.3	30.0	15.1	
3 - B2145 South	3.58	6.71	9.0	39.5	30.0	10.3	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model:

Arm	Final slope	Final intercept (PCU/hr)
1 - B2145 North	0.673	1658
2 - B2166	0.688	1755
3 - B2145 South	0.682	1675

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

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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2145 North		✓	609	100.000
2 - B2166		✓	1388	100.000
3 - B2145 South		✓	938	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		1 - B2145 North	2 - B2166	3 - B2145 South
	1 - B2145 North	0	299	310

2 - B2166	944	0	444
3 - B2145 South	407	531	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - B2145 North	2 - B2166	3 - B2145 South	
	0	4	7	
	2	0	1	
	2	1	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.55	6.54	1.2	1.5	A
2 - B2166	1.03	83.93	42.5	112.3	F
3 - B2145 South	1.07	133.84	41.7	98.5	F

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	458	396	1316	0.348	456	0.5	4.178	A
2 - B2166	1045	232	1558	0.671	1037	2.0	6.810	A
3 - B2145 South	706	705	1168	0.604	700	1.5	7.596	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	547	473	1267	0.432	547	0.8	4.994	A
2 - B2166	1248	278	1525	0.818	1239	4.2	12.226	B
3 - B2145 South	843	843	1074	0.785	836	3.4	14.633	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	671	538	1224	0.548	669	1.2	6.457	A
2 - B2166	1528	340	1480	1.033	1438	28.7	43.823	E
3 - B2145 South	1033	978	981	1.062	951	23.8	65.687	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	671	544	1221	0.549	670	1.2	6.541	A
2 - B2166	1528	341	1479	1.033	1465	42.5	83.833	F
3 - B2145 South	1033	997	969	1.065	961	41.7	133.340	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	547	553	1215	0.451	549	0.8	5.418	A
2 - B2166	1248	279	1524	0.819	1397	5.1	44.914	E
3 - B2145 South	843	950	1000	0.843	977	8.3	98.057	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	458	415	1304	0.352	460	0.5	4.270	A
2 - B2166	1045	234	1557	0.671	1057	2.1	7.372	A
3 - B2145 South	706	719	1159	0.609	733	1.6	8.962	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.53	0.53	1.00	1.40	1.45			N/A	N/A
2 - B2166	1.99	0.26	1.19	3.49	4.36			N/A	N/A
3 - B2145 South	1.50	0.16	1.28	2.56	3.16			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.75	0.10	0.65	1.41	1.48			N/A	N/A
2 - B2166	4.20	0.06	1.04	11.82	18.70			N/A	N/A
3 - B2145 South	3.40	0.06	0.94	9.40	14.72			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.19	0.03	0.26	1.19	1.19			N/A	N/A
2 - B2166	26.75	2.15	20.07	56.63	71.59			N/A	N/A
3 - B2145 South	23.83	2.85	18.83	47.78	59.25			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.21	0.03	0.27	1.21	1.42			N/A	N/A
2 - B2166	42.50	4.08	32.61	89.24	112.27			N/A	N/A
3 - B2145 South	41.71	7.53	34.93	79.44	96.54			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.83	0.31	0.96	1.40	1.46			N/A	N/A
2 - B2166	5.14	0.04	0.44	14.38	26.60			N/A	N/A
3 - B2145 South	8.27	0.14	3.47	21.62	30.65			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.55	0.05	0.55	1.31	1.41			N/A	N/A
2 - B2166	2.09	0.03	0.29	2.09	8.81			N/A	N/A
3 - B2145 South	1.60	0.03	0.28	1.60	4.95			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	35.64	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-6	1 - B2145 North

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)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2145 North		✓	1166	100.000
2 - B2166		✓	978	100.000
3 - B2145 South		✓	878	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2145 North	2 - B2166	3 - B2145 South
From	1 - B2145 North	0	787	379
	2 - B2166	458	0	520
	3 - B2145 South	394	484	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2145 North	2 - B2166	3 - B2145 South
From	1 - B2145 North	0	2	2
	2 - B2166	3	0	1
	3 - B2145 South	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	1.01	75.98	27.5	91.4	F
2 - B2166	0.75	9.82	2.9	9.2	A
3 - B2145 South	0.74	10.64	2.8	9.8	E

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	878	362	1386	0.633	871	1.7	6.897	A
2 - B2166	736	283	1527	0.482	733	0.9	4.512	A
3 - B2145 South	661	343	1416	0.467	658	0.9	4.727	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1048	434	1339	0.783	1041	3.4	11.816	B
2 - B2166	879	338	1489	0.591	877	1.4	5.868	A
3 - B2145 South	789	411	1369	0.577	787	1.3	6.174	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1284	530	1276	1.008	1222	18.8	44.908	E
2 - B2166	1077	397	1448	0.743	1071	2.8	9.412	A
3 - B2145 South	967	502	1306	0.740	961	2.7	10.283	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1284	533	1274	1.008	1249	27.5	75.983	F
2 - B2166	1077	406	1442	0.747	1076	2.9	9.819	A
3 - B2145 South	967	504	1304	0.741	966	2.8	10.642	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1048	438	1336	0.784	1142	3.9	26.097	D
2 - B2166	879	371	1466	0.600	885	1.5	6.248	A
3 - B2145 South	789	414	1366	0.578	795	1.4	6.363	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	878	365	1384	0.634	887	1.8	7.352	A
2 - B2166	736	288	1523	0.483	739	0.9	4.601	A
3 - B2145 South	661	346	1414	0.468	663	0.9	4.808	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.69	0.36	1.49	2.67	3.19			N/A	N/A
2 - B2166	0.92	0.55	1.00	1.40	1.45			N/A	N/A
3 - B2145 South	0.87	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	3.40	0.06	0.81	9.51	15.15			N/A	N/A
2 - B2166	1.42	0.05	0.67	3.42	5.02			N/A	N/A
3 - B2145 South	1.34	0.06	0.71	3.09	4.57			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	18.84	0.64	11.70	44.61	59.23			N/A	N/A
2 - B2166	2.79	0.03	0.29	2.79	9.21			N/A	N/A
3 - B2145 South	2.73	0.03	0.29	2.73	9.82			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	27.48	0.59	16.00	67.67	91.37			N/A	N/A
2 - B2166	2.88	0.03	0.27	2.88	3.36			N/A	N/A

Junctions 9															
ARCADY 9 - Roundabout Module															
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017															
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution															

Filename: Vinnetrow Road B2166.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031 SATURN No Mitigation - With Development

Report generation date: 10/07/2017 13:22:35

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
1 - Vinnetrow Road	0.5	2.5	6.46	0.35	A	9.30	A	16 % [2 - B2166 E]	1.5	5.7	15.42	0.61	C	33.82	D	-5 % [4 - B2166 W]
2 - B2166 E	3.7	16.0	11.78	0.79	B				0.8	2.1	4.34	0.45	A			
3 - Mill Lane	0.2	0.5	7.64	0.14	A				0.1	0.5	4.38	0.06	A			
4 - B2166 W	1.2	1.5	6.56	0.54	A				18.6	79.2	56.73	0.98	F			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	10/11/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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**

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	9.30	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	16	2 - B2166 E

Arms

Arms

Arm	Name	Description
1	Vinnetrow Road	
2	B2166 E	
3	Mill Lane	
4	B2166 W	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Vinnetrow Road	3.00	6.00	5.0	30.0	30.0	35.0	
2 - B2166 E	4.00	6.00	12.0	30.0	30.0	30.0	
3 - Mill Lane	3.00	7.00	8.0	20.0	30.0	30.0	
4 - B2166 W	3.50	6.00	4.0	20.0	30.0	30.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vinnetrow Road	0.559	1219
2 - B2166 E	0.649	1633
3 - Mill Lane	0.591	1375
4 - B2166 W	0.579	1313

The slope and intercept shown above include any corrections and adjustments

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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	275	100.000
2 - B2166 E		✓	1040	100.000
3 - Mill Lane		✓	72	100.000
4 - B2166 W		✓	587	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	43	7	225
	2 - B2166 E	87	0	5	948
	3 - Mill Lane	19	12	0	41
	4 - B2166 W	60	511	16	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.35	6.46	0.5	2.5	A
2 - B2166 E	0.79	11.78	3.7	16.0	B
3 - Mill Lane	0.14	7.64	0.2	0.5	A
4 - B2166 W	0.54	6.56	1.2	1.5	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	207	404	967	0.214	206	0.3	4.726	A
2 - B2166 E	783	186	1507	0.520	779	1.1	4.916	A
3 - Mill Lane	54	943	814	0.067	54	0.1	4.735	A
4 - B2166 W	442	88	1219	0.363	440	0.6	4.607	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	247	484	921	0.268	247	0.4	5.335	A
2 - B2166 E	935	223	1483	0.631	933	1.7	6.517	A
3 - Mill Lane	65	1130	703	0.092	65	0.1	5.638	A
4 - B2166 W	528	106	1209	0.437	527	0.8	5.271	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	303	592	860	0.352	302	0.5	6.439	A
2 - B2166 E	1145	272	1450	0.790	1138	3.6	11.268	B
3 - Mill Lane	79	1379	555	0.143	79	0.2	7.563	A
4 - B2166 W	646	129	1196	0.541	645	1.2	6.517	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	303	593	860	0.352	303	0.5	6.463	A
2 - B2166 E	1145	273	1449	0.790	1145	3.7	11.775	B
3 - Mill Lane	79	1387	550	0.144	79	0.2	7.641	A
4 - B2166 W	646	130	1195	0.541	646	1.2	6.557	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	247	486	920	0.269	248	0.4	5.359	A
2 - B2166 E	935	224	1482	0.631	943	1.7	6.765	A
3 - Mill Lane	65	1141	697	0.093	65	0.1	5.701	A
4 - B2166 W	528	107	1208	0.437	529	0.8	5.314	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	207	407	965	0.215	207	0.3	4.756	A
2 - B2166 E	783	187	1506	0.520	786	1.1	5.014	A
3 - Mill Lane	54	951	809	0.067	54	0.1	4.769	A
4 - B2166 W	442	89	1219	0.363	443	0.6	4.645	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2 - B2166 E	1.07	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.56	0.55	1.00	1.40	1.45			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - B2166 E	1.68	0.05	0.58	4.28	6.58			N/A	N/A
3 - Mill Lane	0.10	0.00	0.00	0.10	0.10			N/A	N/A
4 - B2166 W	0.77	0.11	0.87	1.41	1.47			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.54	0.03	0.25	0.54	0.54			N/A	N/A
2 - B2166 E	3.55	0.03	0.30	3.55	16.01			N/A	N/A
3 - Mill Lane	0.17	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	1.16	0.03	0.26	1.16	1.16			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.54	0.03	0.30	1.38	2.52			N/A	N/A
2 - B2166 E	3.65	0.03	0.28	3.65	7.36			N/A	N/A
3 - Mill Lane	0.17	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	1.17	0.03	0.27	1.17	1.22			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.37	0.00	0.00	0.37	0.37			N/A	N/A
2 - B2166 E	1.74	0.06	0.72	4.40	6.62			N/A	N/A
3 - Mill Lane	0.10	0.00	0.00	0.10	0.10			N/A	N/A
4 - B2166 W	0.78	0.19	0.93	1.40	1.46			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2 - B2166 E	1.10	0.04	0.38	2.77	4.86			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.57	0.06	0.63	1.33	1.42			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	33.82	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-5	4 - B2166 W

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)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	327	100.000
2 - B2166 E		✓	606	100.000
3 - Mill Lane		✓	49	100.000
4 - B2166 W		✓	1111	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	194	14	119
	2 - B2166 E	46	0	8	552
	3 - Mill Lane	6	19	0	24
	4 - B2166 W	113	984	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.61	15.42	1.5	5.7	D
2 - B2166 E	0.45	4.34	0.8	2.1	A
3 - Mill Lane	0.06	4.38	0.1	0.5	A
4 - B2166 W	0.98	56.73	18.6	79.2	F

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	246	759	787	0.313	244	0.5	6.611	A
2 - B2166 E	456	110	1530	0.298	455	0.4	3.347	A
3 - Mill Lane	37	537	1023	0.036	37	0.0	3.648	A
4 - B2166 W	836	53	1266	0.661	829	1.9	8.102	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	294	908	703	0.418	293	0.7	8.756	A
2 - B2166 E	545	132	1516	0.359	544	0.6	3.702	A
3 - Mill Lane	44	644	961	0.046	44	0.0	3.925	A
4 - B2166 W	999	64	1260	0.793	992	3.6	13.117	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	360	1081	606	0.595	357	1.4	14.336	B
2 - B2166 E	667	160	1498	0.445	666	0.8	4.325	A
3 - Mill Lane	54	787	877	0.062	54	0.1	4.374	A
4 - B2166 W	1223	78	1251	0.978	1180	14.3	37.588	E

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	360	1104	593	0.608	360	1.5	15.416	C
2 - B2166 E	667	161	1497	0.446	667	0.8	4.338	A
3 - Mill Lane	54	789	876	0.062	54	0.1	4.380	A
4 - B2166 W	1223	78	1251	0.978	1206	18.6	56.725	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	294	966	670	0.438	297	0.8	9.703	A
2 - B2166 E	545	134	1515	0.360	546	0.6	3.721	A
3 - Mill Lane	44	647	959	0.046	44	0.0	3.932	A
4 - B2166 W	999	64	1260	0.793	1056	4.1	21.776	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	246	773	779	0.316	247	0.5	6.791	A
2 - B2166 E	456	111	1529	0.298	457	0.4	3.357	A
3 - Mill Lane	37	541	1022	0.036	37	0.0	3.655	A
4 - B2166 W	836	54	1266	0.661	845	2.0	8.723	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.45	0.00	0.00	0.45	0.45			N/A	N/A
2 - B2166 E	0.42	0.00	0.00	0.42	0.42			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	1.90	0.58	1.30	2.76	3.22			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.71	0.10	0.83	1.38	1.45			N/A	N/A
2 - B2166 E	0.56	0.08	0.78	1.36	1.43			N/A	N/A
3 - Mill Lane	0.05	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	3.59	0.06	1.16	9.80	14.97			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.41	0.03	0.28	1.41	3.33			N/A	N/A
2 - B2166 E	0.80	0.03	0.25	0.80	0.80			N/A	N/A
3 - Mill Lane	0.07	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	14.28	0.18	6.29	37.73	53.39			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.50	0.03	0.29	1.50	5.68			N/A	N/A
2 - B2166 E	0.80	0.03	0.27	0.80	2.12			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	18.56	0.12	5.34	52.70	79.17			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.80	0.08	0.80	1.49	1.53			N/A	N/A
2 - B2166 E	0.57	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.05	0.00	0.00	0.05	0.05			N/A	N/A
4 - B2166 W	4.14	0.04	0.43	11.46	21.33			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.47	0.04	0.38	1.30	1.47			N/A	N/A
2 - B2166 E	0.43	0.00	0.00	0.43	0.43			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	2.00	0.03	0.31	2.93	9.97			N/A	N/A



3 - B2145 South	2.80	0.03	0.27	2.80	4.14			N/A	N/A
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17:38 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	3.94	0.04	0.41	10.69	20.64			N/A	N/A
2 - B2166	1.52	0.07	1.00	3.35	4.68			N/A	N/A
3 - B2145 South	1.39	0.06	0.87	3.04	4.38			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.77	0.03	0.29	1.77	7.62			N/A	N/A
2 - B2166	0.94	0.04	0.42	2.23	3.57			N/A	N/A
3 - B2145 South	0.89	0.04	0.41	2.04	3.37			N/A	N/A

Existing Layouts - 2031 With
Mitigation - No Development

Junctions 9															
PICADY 9 - Priority Intersection Module															
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Filename: Lower Bognor Road and Pagham Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031 SATURN With Mitigation - No Development

Report generation date: 01/03/2017 10:56:46

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
Stream B-C	0.0	~1	0.00	0.00	A	21.44	C	-11 % [Stream B-A]	0.0	0.5	15.75	0.04	C	9.28	A	-1 % [Stream B-A]
Stream B-A	8.5	33.3	75.52	0.93	F				3.4	17.6	37.31	0.79	E			
Stream C-AB	0.0	~1	0.00	0.00	A				0.1	0.5	9.17	0.09	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	19/09/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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**

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	21.44	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-11	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road North		Major
B	Lower Bognor Road		Minor
C	Pagham Road South		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 - Pagham Road South	7.50			95.0	✓	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	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 - Lower Bognor Road	One lane plus flare	10.00	8.00	5.50	4.25	3.00	✓	2.00	105	85

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	635	0.108	0.273	0.172	0.391
1	B-C	666	0.095	0.241	-	-
1	C-B	629	0.228	0.228	-	-

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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road North		✓	529	100.000
B - Lower Bognor Road		✓	394	100.000
C - Pagham Road South		✓	454	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	From			
	A - Pagham Road North	0	467	62
	B - Lower Bognor Road	394	0	0
	C - Pagham Road South	454	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	From			
	A - Pagham Road North	0	2	4
	B - Lower Bognor Road	1	0	0
	C - Pagham Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.00	0.00	0.0	~1	A
B-A	0.00	75.52	8.5	39.8	F
C-AB	0.00	0.00	0.0	~1	A
C-A					
AB					
AC					

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	531	0.000	0	0.0	0.000	A
B-A	297	518	0.573	291	1.3	15.559	C
C-AB	0	531	0.000	0	0.0	0.000	A
C-A	342			342			
AB	352			352			
AC	47			47			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	501	0.000	0	0.0	0.000	A
B-A	354	497	0.713	350	2.3	23.925	C
C-AB	0	513	0.000	0	0.0	0.000	A
C-A	408			408			
AB	420			420			
AC	56			56			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	457	0.000	0	0.0	0.000	A
B-A	434	467	0.929	415	7.0	55.781	F
C-AB	0	488	0.000	0	0.0	0.000	A
C-A	500			500			
AB	514			514			
AC	68			68			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	451	0.000	0	0.0	0.000	A
B-A	434	467	0.929	428	8.5	75.516	F
C-AB	0	488	0.000	0	0.0	0.000	A
C-A	500			500			
AB	514			514			
AC	68			68			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	492	0.000	0	0.0	0.000	A
B-A	354	497	0.713	377	2.7	34.433	D
C-AB	0	513	0.000	0	0.0	0.000	A
C-A	408			408			
AB	420			420			
AC	56			56			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	528	0.000	0	0.0	0.000	A
B-A	297	518	0.573	302	1.4	17.041	C
C-AB	0	531	0.000	0	0.0	0.000	A
C-A	342			342			
A-B	352			352			
A-C	47			47			

Queue Variation Results for each time segment

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.29	0.56	1.14	1.55	1.78			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	2.29	0.09	1.37	5.27	7.31			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	6.96	0.10	2.28	18.81	27.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	8.48	0.06	1.45	24.60	39.83			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	2.73	0.04	0.40	7.41	13.82			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.39	0.03	0.31	2.38	7.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	9.28	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-1	Stream B-A

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)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road North		✓	921	100.000
B - Lower Bognor Road		✓	320	100.000
C - Pagham Road South		✓	76	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	A - Pagham Road North	0	643	278
	B - Lower Bognor Road	312	0	8
	C - Pagham Road South	44	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	A - Pagham Road North	0	1	2
	B - Lower Bognor Road	3	0	0
	C - Pagham Road South	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.04	15.75	0.0	0.5	C
B-A	0.79	37.31	3.4	17.6	E
C-AB	0.09	9.17	0.1	0.5	A
C-A					
AB					
AC					

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	6	476	0.013	6	0.0	7.666	A
B-A	235	494	0.476	231	0.9	13.537	E
C-AB	26	493	0.052	26	0.1	7.696	A
C-A	31			31			
AB	484			484			
AC	209			209			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	7	405	0.018	7	0.0	9.038	A
B-A	280	470	0.597	278	1.4	18.568	C
C-AB	31	468	0.067	31	0.1	8.250	A
C-A	37			37			
AB	578			578			
AC	250			250			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	9	252	0.035	9	0.0	14.777	B
B-A	344	437	0.786	337	3.1	33.664	C
C-AB	40	432	0.092	40	0.1	9.157	A
C-A	44			44			
AB	708			708			
AC	306			306			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	9	237	0.037	9	0.0	15.745	C
B-A	344	437	0.786	343	3.4	37.307	E
C-AB	40	432	0.092	40	0.1	9.167	A
C-A	44			44			
AB	708			708			
AC	306			306			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	7	394	0.018	7	0.0	9.312	A
B-A	280	470	0.597	288	1.6	20.467	B
C-AB	31	468	0.067	32	0.1	8.264	A
C-A	37			37			
AB	578			578			
AC	250			250			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	6	471	0.013	6	0.0	7.743	A
B-A	235	494	0.476	237	0.9	14.168	B
C-AB	26	493	0.052	26	0.1	7.709	A
C-A	31			31			
AB	484			484			
AC	209			209			

Queue Variation Results for each time segment

16:15 - 16:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.88	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	1.41	0.10	1.13	2.68	3.54			N/A	N/A
C-AB	0.08	0.03	0.25	0.45	0.48			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	3.15	0.04	0.39	8.34	16.55			N/A	N/A
C-AB	0.12	0.03	0.26	0.47	0.50			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	3.37	0.03	0.32	5.90	17.64			N/A	N/A
C-AB	0.12	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	1.55	0.04	0.43	4.07	6.84			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A



17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.93	0.03	0.34	2.15	4.50			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

Junctions 9							
ARCADY 9 - Roundabout Module							
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017							
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution							

Filename: A27 and A259.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN With Mitigation - No Development

Report generation date: 01/03/2017 10:53:46

»A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), AM

»A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS
A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS)										
1 - A27 North	1.5	3.04	0.58	A	A	0.8	2.51	0.43	A	A
2 - A259 Bognor Rd East	3.6	8.33	0.77	A		1.1	3.36	0.50	A	
4 - A27 South	1.4	3.78	0.56	A		1.3	2.90	0.53	A	
5 - A259 Bognor Road West	1.0	5.61	0.49	A		1.5	7.40	0.58	A	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

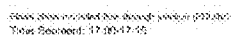
File summary

File Description

Title	A27 Bognor RBT
Location	
Site number	
Date	30/03/2015
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	UKNAW004
Description	

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	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

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 period length (min)	Time segment length (min)	Run automatically
D7	2031 Base + Committed (SATURN FLOWS)	AM	FLAT	08:00	09:00	60	15	✓
D8	2031 Base + Committed (SATURN FLOWS)	PM	FLAT	17:00	18:00	60	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	A27 Bognor RBT	✓	100.000	100.000

A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A259 Bognor Rd East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A27 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	5 - A259 Bognor Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Bognor Bridge Road - WSP Mitigation	Standard Roundabout	1,2,3,4,5	5.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A27 North	
2	A259 Bognor Rd East	
3	Vinnetrow Road	
4	A27 South	
5	A259 Bognor Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A27 North	8.80	12.37	112.7	43.7	84.0	32.0	
2 - A259 Bognor Rd East	7.00	11.18	63.0	30.5	84.0	44.0	
3 - Vinnetrow Road							✓
4 - A27 South	9.36	11.09	44.0	44.2	84.0	25.0	
5 - A259 Bognor Road West	4.02	8.11	55.7	27.5	84.0	37.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A27 North	0.760	3720
2 - A259 Bognor Rd East	0.654	3065
3 - Vinnetrow Road		
4 - A27 South	0.726	3447
5 - A259 Bognor Road West	0.534	2197

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2031 Base + Committed (SATURN FLOWS)	AM	FLAT	08:00	09:00	60	15	✓

Default vehicle mix	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 (%)
1 - A27 North		FLAT	✓	1644	100.000
2 - A259 Bognor Rd East		FLAT	✓	1425	100.000
3 - Vinnetrow Road					
4 - A27 South		FLAT	✓	1190	100.000
5 - A259 Bognor Road West		FLAT	✓	606	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
From		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
	1 - A27 North	0	470	39	665	470
	2 - A259 Bognor Rd East	543	0	31	499	352
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	506	327	30	0	327
	5 - A259 Bognor Road West	236	153	0	217	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
From		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
	1 - A27 North	10	10	10	10	10
	2 - A259 Bognor Rd East	10	10	10	10	10
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	10	10	10	10	10
	5 - A259 Bognor Road West	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 North	0.58	3.04	1.5	A	1808	1808
2 - A259 Bognor Rd East	0.77	8.33	3.6	A	1568	1568
3 - Vinnetrow Road						
4 - A27 South	0.56	3.78	1.4	A	1309	1309
5 - A259 Bognor Road West	0.49	5.61	1.0	A	667	667

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1808	452	796	3115	0.581	1802	1404	0.0	1.5	3.003	A
2 - A259 Bognor Rd East	1568	392	1557	2046	0.766	1554	1041	0.0	3.5	7.832	A
3 - Vinnetrow Road			3001				109				
4 - A27 South	1309	327	1491	2365	0.554	1304	1510	0.0	1.4	3.715	A
5 - A259 Bognor Road West	667	167	1537	1377	0.484	663	1257	0.0	1.0	5.513	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1808	452	800	3112	0.581	1808	1413	1.5	1.5	3.036	A
2 - A259 Bognor Rd East	1568	392	1563	2042	0.767	1567	1045	3.5	3.6	8.317	A
3 - Vinnetrow Road			3020				110				
4 - A27 South	1309	327	1501	2357	0.555	1309	1519	1.4	1.4	3.776	A
5 - A259 Bognor Road West	667	167	1546	1372	0.486	667	1264	1.0	1.0	5.612	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1808	452	800	3112	0.581	1808	1413	1.5	1.5	3.036	A
2 - A259 Bognor Rd East	1568	392	1563	2042	0.767	1567	1045	3.6	3.6	8.327	A
3 - Vinnetrow Road			3020				110				
4 - A27 South	1309	327	1501	2357	0.555	1309	1519	1.4	1.4	3.777	A
5 - A259 Bognor Road West	667	167	1547	1372	0.486	667	1264	1.0	1.0	5.612	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1808	452	800	3112	0.581	1808	1413	1.5	1.5	3.036	A
2 - A259 Bognor Rd East	1568	392	1563	2042	0.767	1567	1045	3.6	3.6	8.335	A
3 - Vinnetrow Road			3021				110				
4 - A27 South	1309	327	1501	2357	0.555	1309	1519	1.4	1.4	3.777	A
5 - A259 Bognor Road West	667	167	1547	1372	0.486	667	1264	1.0	1.0	5.612	A

A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A259 Bognor Rd East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A27 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	5 - A259 Bognor Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Bognor Bridge Road - WSP Mitigation	Standard Roundabout	1,2,3,4,5	3.64	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 period length (min)	Time segment length (min)	Run automatically
D8	2031 Base + Committed (SATURN FLOWS)	PM	FLAT	17:00	18:00	60	15	✓

Default vehicle mix	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 (%)
1 - A27 North		FLAT	✓	1070	100.000
2 - A259 Bognor Rd East		FLAT	✓	1052	100.000
3 - Vinnetrow Road					
4 - A27 South		FLAT	✓	1422	100.000
5 - A259 Bognor Road West		FLAT	✓	678	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	0	397	35	493	145
	2 - A259 Bognor Rd East	358	0	45	502	147
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	533	599	71	0	219
	5 - A259 Bognor Road West	192	216	0	270	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	10	10	10	10	10
	2 - A259 Bognor Rd East	10	10	10	10	10
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	10	10	10	10	10
	5 - A259 Bognor Road West	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 North	0.43	2.51	0.8	A	1177	1177
2 - A259 Bognor Rd East	0.50	3.36	1.1	A	1157	1157
3 - Vinnetrow Road						
4 - A27 South	0.53	2.90	1.3	A	1564	1564
5 - A259 Bognor Road West	0.58	7.40	1.5	A	746	746

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1177	294	1265	2758	0.427	1174	1186	0.0	0.8	2.493	A
2 - A259 Bognor Rd East	1157	289	1111	2338	0.495	1153	1328	0.0	1.1	3.328	A
3 - Vinnetrow Road			2098				166				
4 - A27 South	1564	391	713	2930	0.534	1559	1386	0.0	1.3	2.878	A
5 - A259 Bognor Road West	746	186	1711	1284	0.581	740	560	0.0	1.5	7.200	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1177	294	1272	2753	0.427	1177	1191	0.8	0.8	2.511	A
2 - A259 Bognor Rd East	1157	289	1115	2335	0.496	1157	1333	1.1	1.1	3.360	A
3 - Vinnetrow Road			2106				166				
4 - A27 South	1564	391	715	2928	0.534	1564	1391	1.3	1.3	2.902	A
5 - A259 Bognor Road West	746	186	1717	1281	0.582	746	562	1.5	1.5	7.394	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1177	294	1272	2753	0.427	1177	1191	0.8	0.8	2.511	A
2 - A259 Bognor Rd East	1157	289	1115	2335	0.496	1157	1333	1.1	1.1	3.360	A
3 - Vinnetrow Road			2106				166				
4 - A27 South	1564	391	715	2928	0.534	1564	1391	1.3	1.3	2.902	A
5 - A259 Bognor Road West	746	186	1717	1281	0.582	746	562	1.5	1.5	7.397	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1177	294	1272	2753	0.427	1177	1191	0.8	0.8	2.511	A
2 - A259 Bognor Rd East	1157	289	1115	2335	0.496	1157	1333	1.1	1.1	3.360	A
3 - Vinnetrow Road			2106				166				
4 - A27 South	1564	391	715	2928	0.534	1564	1391	1.3	1.3	2.902	A
5 - A259 Bognor Road West	746	186	1717	1281	0.582	746	562	1.5	1.5	7.397	A

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: B2145 and B2166.j9

Path: \\neur-mpfs-02\tr_projects\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031 SATURN With Mitigation - No Development

Report generation date: 18/08/2017 11:38:02

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
1 - B2145 North	1.7	2.0	8.18	0.64	A	16.50	C	2 %	39.6	102.3	163.19	1.04	F	48.93	E	-8 %
2 - B2166	3.0	11.2	10.59	0.76	B			[3 - B2145 South]	1.1	1.5	5.60	0.52	A			[1 - B2145 North]
3 - B2145 South	8.1	44.8	28.17	0.96	D				1.8	2.6	6.69	0.64	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	05/12/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	16.50	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	2	3 - B2145 South

Arms

Arms

Arm	Name	Description
1	B2145 North	
2	B2166	
3	B2145 South	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - B2145 North	3.26	7.00	11.4	46.1	30.0	16.0	
2 - B2166	2.90	7.00	21.7	25.3	30.0	15.1	
3 - B2145 South	3.58	6.71	9.0	39.5	30.0	10.3	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model:

Arm	Final slope	Final intercept (PCU/hr)
1 - B2145 North	0.673	1658
2 - B2166	0.688	1755
3 - B2145 South	0.682	1675

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

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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2145 North		✓	695	100.000
2 - B2166		✓	958	100.000
3 - B2145 South		✓	1001	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		1 - B2145 North	2 - B2166	3 - B2145 South
	1 - B2145 North	0	277	418

2 - B2166	572	0	386
3 - B2145 South	487	514	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - B2145 North	2 - B2166	3 - B2145 South	
1 - B2145 North	0	4	7	
2 - B2166	2	0	1	
3 - B2145 South	2	1	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.64	8.18	1.7	2.0	A
2 - B2166	0.76	10.59	3.0	11.2	B
3 - B2145 South	0.99	28.17	8.1	44.3	D

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	523	384	1320	0.396	521	0.7	4.488	A
2 - B2166	721	313	1501	0.481	718	0.9	4.576	A
3 - B2145 South	754	428	1357	0.555	749	1.2	5.868	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	625	460	1272	0.491	624	1.0	5.545	A
2 - B2166	861	375	1456	0.592	859	1.4	6.013	A
3 - B2145 South	900	513	1300	0.692	896	2.2	8.838	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	765	556	1210	0.632	762	1.7	7.983	A
2 - B2166	1055	458	1395	0.756	1049	3.0	10.206	B
3 - B2145 South	1102	626	1222	0.692	1082	7.3	22.961	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	765	564	1205	0.635	765	1.7	8.182	A
2 - B2166	1055	460	1394	0.757	1054	3.0	10.593	B
3 - B2145 South	1102	630	1220	0.804	1099	8.1	28.169	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	625	474	1263	0.495	628	1.0	5.696	A
2 - B2166	861	378	1454	0.592	867	1.5	6.200	A
3 - B2145 South	900	518	1296	0.694	923	2.3	10.204	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	523	389	1317	0.397	525	0.7	4.550	A
2 - B2166	721	315	1499	0.481	723	0.9	4.655	A
3 - B2145 South	754	432	1355	0.556	758	1.3	6.070	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.65	0.55	1.00	1.40	1.45			N/A	N/A
2 - B2166	0.92	0.55	1.00	1.40	1.45			N/A	N/A
3 - B2145 South	1.23	0.56	1.13	1.52	1.77			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.95	0.08	0.65	1.65	1.99			N/A	N/A
2 - B2166	1.43	0.05	0.63	3.46	5.14			N/A	N/A
3 - B2145 South	2.18	0.05	0.49	5.90	9.47			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.68	0.03	0.27	1.68	1.68			N/A	N/A
2 - B2166	2.96	0.03	0.29	2.96	11.23			N/A	N/A
3 - B2145 South	7.26	0.05	0.49	20.81	37.36			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.72	0.03	0.27	1.72	1.72			N/A	N/A
2 - B2166	3.03	0.03	0.27	3.03	4.55			N/A	N/A
3 - B2145 South	8.10	0.04	0.37	18.35	44.60			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.99	0.11	0.96	1.54	1.87			N/A	N/A
2 - B2166	1.48	0.06	0.85	3.41	4.87			N/A	N/A
3 - B2145 South	2.35	0.04	0.42	6.42	11.49			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.66	0.05	0.52	1.47	1.50			N/A	N/A
2 - B2166	0.94	0.04	0.40	2.26	3.72			N/A	N/A
3 - B2145 South	1.27	0.03	0.31	2.19	6.47			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	48.33	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-8	1 - B2145 North

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)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2145 North		✓	1178	100.000
2 - B2166		✓	640	100.000
3 - B2145 South		✓	866	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2145 North	2 - B2166	3 - B2145 South
From	1 - B2145 North	0	655	523
	2 - B2166	215	0	425
	3 - B2145 South	349	517	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2145 North	2 - B2166	3 - B2145 South
From	1 - B2145 North	0	2	2
	2 - B2166	3	0	1
	3 - B2145 South	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	1.04	193.18	39.6	192.3	F
2 - B2166	0.52	5.60	1.1	1.5	A
3 - B2145 South	0.64	6.69	1.8	2.6	A

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	887	387	1370	0.647	880	1.8	7.241	A
2 - B2166	482	391	1457	0.331	480	0.5	3.677	A
3 - B2145 South	652	161	1544	0.422	649	0.7	4.011	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1059	464	1319	0.803	1051	3.8	13.030	B
2 - B2166	575	467	1404	0.410	575	0.7	4.336	A
3 - B2145 South	779	193	1522	0.512	777	1.0	4.829	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1297	568	1251	1.037	1213	24.8	64.192	F
2 - B2166	705	539	1354	0.520	703	1.1	5.513	A
3 - B2145 South	953	236	1492	0.639	951	1.7	6.621	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1297	569	1250	1.038	1238	39.6	113.194	F
2 - B2166	705	549	1347	0.523	705	1.1	5.804	A
3 - B2145 South	953	237	1491	0.639	953	1.8	6.690	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1059	466	1318	0.804	1199	4.6	48.086	E
2 - B2166	575	532	1359	0.423	577	0.7	4.612	A
3 - B2145 South	779	194	1521	0.512	781	1.1	4.886	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	887	390	1368	0.648	898	1.9	7.825	A
2 - B2166	482	399	1451	0.332	483	0.5	3.723	A
3 - B2145 South	652	162	1543	0.423	653	0.7	4.051	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.79	0.24	1.02	2.98	3.80			N/A	N/A
2 - B2166	0.49	0.00	0.00	0.49	0.49			N/A	N/A
3 - B2145 South	0.73	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	3.80	0.06	0.97	10.61	16.74			N/A	N/A
2 - B2166	0.69	0.10	0.83	1.37	1.44			N/A	N/A
3 - B2145 South	1.04	0.07	0.84	1.89	2.63			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	24.77	2.12	18.74	51.92	65.42			N/A	N/A
2 - B2166	1.07	0.03	0.26	1.07	1.07			N/A	N/A
3 - B2145 South	1.74	0.03	0.27	1.74	1.74			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	39.60	4.11	30.71	82.15	102.89			N/A	N/A
2 - B2166	1.09	0.03	0.27	1.09	1.53			N/A	N/A

3 - B2145 South	1.75	0.03	0.27	1.75	1.75			N/A	N/A
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17:38 - 17:48

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	4.65	0.04	0.43	12.80	24.25			N/A	N/A
2 - B2166	0.74	0.50	0.97	1.39	1.45			N/A	N/A
3 - B2145 South	1.06	0.13	1.02	1.63	1.92			N/A	N/A

17:48 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.88	0.03	0.29	1.88	7.43			N/A	N/A
2 - B2166	0.50	0.05	0.46	1.28	1.39			N/A	N/A
3 - B2145 South	0.74	0.06	0.65	1.05	1.61			N/A	N/A

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: Vinnetrow Road and B2166.j9

Path: \\neur-mpfs-02\tr_projects\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031 SATURN With Mitigation - No Development

Report generation date: 18/08/2017 12:15:48

»2031 Base + Committed (SATURN FLOWS), AM
 »2031 Base + Committed (SATURN FLOWS), PM
 »CATM Flows, AM
 »CATM Flows, PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
1 - Vinnetrow Road	0.2	1.0	5.06	0.20	A	8.80	A	23 % [2 - B2166 E]	0.3	1.3	7.06	0.24	A	14.66	B	7 % [4 - B2166 W]
2 - B2166 E	2.8	10.6	11.29	0.74	E				0.5	2.0	4.15	0.32	A			
3 - Mill Lane	0.1	0.5	5.17	0.10	A				0.1	0.5	3.42	0.05	A			
4 - B2166 W	1.1	1.5	6.72	0.54	A				5.8	29.5	20.31	0.86	C			
CATM Flows																
1 - Vinnetrow Road	0.1	0.5	4.14	0.09	A	79.66	F	-10 % [2 - B2166 E]	2.0	5.5	10.95	0.68	E	8.43	A	26 % [1 - Vinnetrow Road]
2 - B2166 E	41.0	106.1	109.21	1.04	F				2.0	3.3	8.54	0.67	A			
3 - Mill Lane	0.1	0.5	6.69	0.13	A				0.1	0.5	4.55	0.06	A			
4 - B2166 W	0.5	2.0	4.18	0.32	A				0.4	1.2	3.84	0.27	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	10/11/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15
D3	CATM Flows	AM	ONE HOUR	07:30	09:00	15
D4	CATM Flows	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	8.80	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	23	2 - B2166 E

Arms

Arms

Arm	Name	Description
1	Vinnetrow Road	
2	B2166 E	
3	Mill Lane	
4	B2166 W	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Vinnetrow Road	3.00	6.00	5.0	30.0	30.0	35.0	
2 - B2166 E	3.50	6.00	4.0	20.0	30.0	30.0	
3 - Mill Lane	3.00	7.00	8.0	20.0	30.0	30.0	
4 - B2166 W	3.50	6.00	4.0	20.0	30.0	30.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vinnetrow Road	0.559	1219
2 - B2166 E	0.579	1313
3 - Mill Lane	0.591	1375
4 - B2166 W	0.579	1313

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

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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	160	100.000
2 - B2166 E		✓	833	100.000
3 - Mill Lane		✓	72	100.000
4 - B2166 W		✓	560	100.000

Origin-Destination Data

Demand (Veh/hr)

	To
--	----

	From	1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
		0	66	7	87
		151	0	5	677
		19	12	0	41
		81	463	16	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To			
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
		0	3	0	2
		3	0	0	0
		0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.20	5.06	0.2	1.0	A
2 - B2166 E	0.74	11.29	2.8	10.6	B
3 - Mill Lane	0.10	5.17	0.1	0.5	A
4 - B2166 W	0.54	6.72	1.1	1.5	A

Main Results for each time segment

07:00 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	120	368	985	0.122	120	0.1	4.160	A
2 - B2166 E	627	82	1258	0.499	623	1.0	5.639	A
3 - Mill Lane	54	685	967	0.056	54	0.1	3.940	A
4 - B2166 W	422	136	1189	0.355	419	0.5	4.665	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	144	441	944	0.152	144	0.2	4.498	A
2 - B2166 E	749	99	1248	0.600	747	1.5	7.152	A
3 - Mill Lane	65	821	887	0.073	65	0.1	4.380	A
4 - B2166 W	503	163	1173	0.429	503	0.7	5.359	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	176	539	888	0.198	176	0.2	5.052	A
2 - B2166 E	917	121	1235	0.743	912	2.8	10.964	B
3 - Mill Lane	79	1002	778	0.102	79	0.1	5.146	A
4 - B2166 W	617	199	1153	0.535	615	1.1	6.675	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	176	541	888	0.198	176	0.2	5.059	A
2 - B2166 E	917	121	1235	0.743	917	2.8	11.291	B
3 - Mill Lane	79	1007	775	0.102	79	0.1	5.170	A
4 - B2166 W	617	200	1152	0.535	617	1.1	6.719	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	144	443	943	0.153	144	0.2	4.509	A
2 - B2166 E	749	99	1248	0.600	754	1.5	7.361	A
3 - Mill Lane	65	828	882	0.073	65	0.1	4.406	A
4 - B2166 W	503	165	1173	0.429	505	0.8	5.402	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	120	370	983	0.123	121	0.1	4.175	A
2 - B2166 E	627	83	1257	0.499	629	1.0	5.749	A
3 - Mill Lane	54	691	964	0.056	54	0.1	3.958	A
4 - B2166 W	422	137	1188	0.355	422	0.6	4.707	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.14	0.00	0.00	0.14	0.14			N/A	N/A
2 - B2166 E	0.98	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	0.55	0.55	1.00	1.40	1.45			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.18	0.00	0.00	0.18	0.18			N/A	N/A
2 - B2166 E	1.47	0.06	0.84	3.41	4.88			N/A	N/A
3 - Mill Lane	0.08	0.03	0.26	0.46	0.49			N/A	N/A
4 - B2166 W	0.74	0.11	0.87	1.39	1.46			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.25	0.03	0.25	0.46	0.48			N/A	N/A
2 - B2166 E	2.76	0.03	0.29	2.76	10.60			N/A	N/A
3 - Mill Lane	0.11	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	1.13	0.03	0.26	1.13	1.13			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.25	0.03	0.28	0.55	1.03			N/A	N/A
2 - B2166 E	2.82	0.03	0.27	2.82	4.20			N/A	N/A
3 - Mill Lane	0.11	0.00	0.00	0.11	0.11			N/A	N/A
4 - B2166 W	1.14	0.03	0.27	1.14	1.44			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.18	0.00	0.00	0.18	0.18			N/A	N/A
2 - B2166 E	1.53	0.06	0.85	3.59	5.15			N/A	N/A
3 - Mill Lane	0.08	0.00	0.00	0.08	0.08			N/A	N/A
4 - B2166 W	0.76	0.18	0.92	1.39	1.45			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.14	0.00	0.00	0.14	0.14			N/A	N/A
2 - B2166 E	1.01	0.04	0.42	2.46	3.92			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	0.55	0.06	0.59	1.32	1.41			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	14.66	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	7	4 - B2166 W

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)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	143	100.000
2 - B2166 E		✓	364	100.000
3 - Mill Lane		✓	49	100.000
4 - B2166 W		✓	973	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	127	14	2
	2 - B2166 E	57	0	8	299
	3 - Mill Lane	6	19	0	24
	4 - B2166 W	105	854	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.24	7.06	0.3	1.3	A
2 - B2166 E	0.32	4.15	0.5	2.0	A
3 - Mill Lane	0.05	3.42	0.1	0.5	A
4 - B2166 W	0.85	20.31	5.8	25.5	C

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	108	663	844	0.128	107	0.1	4.877	A
2 - B2166 E	274	22	1273	0.215	273	0.3	3.596	A
3 - Mill Lane	37	268	1181	0.031	37	0.0	3.146	A
4 - B2166 W	733	61	1261	0.581	727	1.4	6.678	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	129	794	770	0.167	128	0.2	5.610	A
2 - B2166 E	327	27	1271	0.258	327	0.3	3.815	A
3 - Mill Lane	44	322	1150	0.038	44	0.0	3.255	A
4 - B2166 W	875	74	1254	0.698	871	2.2	9.325	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	157	965	673	0.234	157	0.3	6.967	A
2 - B2166 E	401	33	1267	0.316	400	0.5	4.151	A
3 - Mill Lane	54	394	1107	0.049	54	0.1	3.417	A
4 - B2166 W	1071	90	1244	0.854	1059	5.4	18.254	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	157	975	667	0.236	157	0.3	7.057	A
2 - B2166 E	401	33	1267	0.316	401	0.5	4.155	A
3 - Mill Lane	54	394	1107	0.049	54	0.1	3.417	A
4 - B2166 W	1071	90	1244	0.881	1070	5.8	20.307	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	129	809	761	0.169	129	0.2	5.696	A
2 - B2166 E	327	27	1270	0.258	328	0.3	3.822	A
3 - Mill Lane	44	322	1149	0.038	44	0.0	3.259	A
4 - B2166 W	875	74	1254	0.698	888	2.4	10.191	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	108	671	839	0.128	108	0.1	4.924	A
2 - B2166 E	274	23	1273	0.215	274	0.3	3.607	A
3 - Mill Lane	37	270	1180	0.031	37	0.0	3.150	A
4 - B2166 W	733	62	1261	0.581	736	1.4	6.917	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - B2166 E	0.27	0.00	0.00	0.27	0.27			N/A	N/A
3 - Mill Lane	0.03	0.00	0.00	0.03	0.03			N/A	N/A
4 - B2166 W	1.36	0.57	1.21	1.66	1.83			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - B2166 E	0.34	0.00	0.00	0.34	0.34			N/A	N/A
3 - Mill Lane	0.04	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	2.23	0.06	0.78	5.88	9.01			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road									
2 - B2166 E									
3 - Mill Lane									
4 - B2166 W									

1 - Vinnetrow Road	0.30	0.03	0.26	0.46	0.48			N/A	N/A
2 - B2166 E	0.46	0.03	0.25	0.46	0.48			N/A	N/A
3 - Mill Lane	0.05	0.03	0.26	0.46	0.49			N/A	N/A
4 - B2166 W	5.43	0.04	0.38	13.35	29.46			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.31	0.03	0.31	1.05	1.32			N/A	N/A
2 - B2166 E	0.46	0.03	0.31	1.36	1.97			N/A	N/A
3 - Mill Lane	0.05	0.00	0.00	0.05	0.05			N/A	N/A
4 - B2166 W	5.76	0.03	0.31	6.52	27.03			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - B2166 E	0.35	0.00	0.00	0.35	0.35			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	2.39	0.05	0.45	6.59	11.16			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - B2166 E	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3 - Mill Lane	0.03	0.00	0.00	0.03	0.03			N/A	N/A
4 - B2166 W	1.41	0.03	0.34	3.28	7.23			N/A	N/A

CATM Flows, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	73.58	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-10	2 - B2166 E

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)
D3	CATM Flows	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	80	100.000
2 - B2166 E		✓	1223	100.000
3 - Mill Lane		✓	72	100.000
4 - B2166 W		✓	360	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	73	7	0
	2 - B2166 E	0	0	5	1218
	3 - Mill Lane	19	12	0	41
	4 - B2166 W	0	344	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.09	4.14	0.1	0.5	A
2 - B2166 E	1.04	103.31	41.0	105.1	F
3 - Mill Lane	0.13	6.69	0.1	0.5	A
4 - B2166 W	0.32	4.18	0.5	2.0	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	60	279	1031	0.058	60	0.1	3.709	A
2 - B2166 E	921	17	1303	0.707	911	2.3	8.993	A
3 - Mill Lane	54	908	838	0.065	54	0.1	4.588	A
4 - B2166 W	271	23	1263	0.215	270	0.3	3.621	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	72	334	1000	0.072	72	0.1	3.880	A
2 - B2166 E	1099	21	1301	0.845	1089	4.9	16.225	C
3 - Mill Lane	65	1085	734	0.088	65	0.1	5.381	A
4 - B2166 W	324	28	1261	0.257	323	0.3	3.839	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	88	409	958	0.092	88	0.1	4.139	A
2 - B2166 E	1347	25	1298	1.037	1263	25.9	55.843	F
3 - Mill Lane	79	1257	631	0.126	79	0.1	6.516	A
4 - B2166 W	396	34	1257	0.315	396	0.5	4.178	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	88	410	957	0.092	88	0.1	4.140	A
2 - B2166 E	1347	25	1298	1.037	1286	41.0	105.313	F
3 - Mill Lane	79	1281	618	0.128	79	0.1	6.685	A
4 - B2166 W	396	34	1257	0.315	396	0.5	4.181	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	72	335	999	0.072	72	0.1	3.882	A
2 - B2166 E	1099	21	1301	0.845	1236	6.8	85.511	F
3 - Mill Lane	65	1231	647	0.100	65	0.1	6.186	A
4 - B2166 W	324	28	1261	0.257	324	0.3	3.846	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	60	280	1030	0.058	60	0.1	3.712	A
2 - B2166 E	921	17	1303	0.707	938	2.5	10.307	B
3 - Mill Lane	54	934	823	0.066	54	0.1	4.686	A
4 - B2166 W	271	23	1263	0.215	271	0.3	3.629	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2 - B2166 E	2.33	0.47	1.54	3.92	4.86			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.27	0.00	0.00	0.27	0.27			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.08	0.03	0.25	0.45	0.48			N/A	N/A
2 - B2166 E	4.91	0.08	1.32	13.28	19.68			N/A	N/A
3 - Mill Lane	0.10	0.00	0.00	0.10	0.10			N/A	N/A
4 - B2166 W	0.34	0.00	0.00	0.34	0.34			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker

1 - Vinnetrow Road	0.10	0.03	0.26	0.47	0.49			N/A	N/A
2 - B2166 E	25.89	2.34	19.72	53.96	67.83			N/A	N/A
3 - Mill Lane	0.14	0.03	0.26	0.46	0.49			N/A	N/A
4 - B2166 W	0.46	0.03	0.25	0.46	0.48			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - B2166 E	41.00	4.39	31.93	84.79	106.07			N/A	N/A
3 - Mill Lane	0.15	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.46	0.03	0.31	1.36	1.96			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.08	0.00	0.00	0.08	0.08			N/A	N/A
2 - B2166 E	6.84	0.05	0.87	19.82	33.52			N/A	N/A
3 - Mill Lane	0.11	0.00	0.00	0.11	0.11			N/A	N/A
4 - B2166 W	0.35	0.00	0.00	0.35	0.35			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2 - B2166 E	2.49	0.03	0.30	2.97	11.82			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.27	0.00	0.00	0.27	0.27			N/A	N/A

CATM Flows, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	8.43	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	26	1 - Vinnetrow Road

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)
D4	CATM Flows	PM	ONE HOUR	16:30	18:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	620	100.000
2 - B2166 E		✓	771	100.000
3 - Mill Lane		✓	49	100.000
4 - B2166 W		✓	315	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	606	14	0
	2 - B2166 E	0	0	8	763
	3 - Mill Lane	6	19	0	24
	4 - B2166 W	0	301	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.68	10.95	2.0	5.5	B
2 - B2166 E	0.67	8.54	2.0	3.3	A
3 - Mill Lane	0.06	4.55	0.1	0.5	A
4 - B2166 W	0.27	3.84	0.4	1.2	A

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	467	250	1077	0.433	464	0.8	5.842	A
2 - B2166 E	580	21	1276	0.455	577	0.8	5.131	A
3 - Mill Lane	37	571	1003	0.037	37	0.0	3.723	A
4 - B2166 W	237	19	1289	0.184	236	0.2	3.415	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	557	300	1049	0.531	556	1.1	7.277	A
2 - B2166 E	693	25	1273	0.544	692	1.2	6.175	A
3 - Mill Lane	44	685	937	0.047	44	0.0	4.032	A
4 - B2166 W	283	22	1287	0.220	283	0.3	3.585	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	683	367	1011	0.675	679	2.0	10.731	B
2 - B2166 E	849	31	1270	0.668	846	2.0	8.424	A
3 - Mill Lane	54	837	847	0.064	54	0.1	4.537	A
4 - B2166 W	347	27	1264	0.270	346	0.4	3.839	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	683	368	1011	0.675	682	2.0	10.954	B
2 - B2166 E	849	31	1270	0.668	849	2.0	8.541	A
3 - Mill Lane	54	840	845	0.064	54	0.1	4.547	A
4 - B2166 W	347	28	1264	0.270	347	0.4	3.841	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	557	301	1049	0.531	561	1.2	7.431	A
2 - B2166 E	693	25	1273	0.544	696	1.2	6.274	A
3 - Mill Lane	44	689	934	0.047	44	0.0	4.046	A
4 - B2166 W	283	23	1287	0.220	284	0.3	3.587	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	467	252	1076	0.434	468	0.8	5.933	A
2 - B2166 E	580	21	1276	0.455	582	0.8	5.200	A
3 - Mill Lane	37	576	1001	0.037	37	0.0	3.737	A
4 - B2166 W	237	19	1289	0.184	237	0.2	3.422	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.76	0.55	1.00	1.40	1.45			N/A	N/A
2 - B2166 E	0.83	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	0.22	0.00	0.00	0.22	0.22			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.11	0.08	0.92	1.98	2.76			N/A	N/A
2 - B2166 E	1.18	0.07	0.91	2.30	3.08			N/A	N/A
3 - Mill Lane	0.05	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.28	0.00	0.00	0.28	0.28			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker

1 - Vinnetrow Road	2.01	0.03	0.28	2.01	5.54			N/A	N/A
2 - B2166 E	1.96	0.03	0.27	1.96	3.28			N/A	N/A
3 - Mill Lane	0.07	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	0.37	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	2.04	0.03	0.27	2.04	2.98			N/A	N/A
2 - B2166 E	1.99	0.03	0.27	1.99	1.99			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.37	0.03	0.32	1.18	1.18			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.15	0.07	0.90	2.21	2.96			N/A	N/A
2 - B2166 E	1.21	0.09	1.01	2.17	2.88			N/A	N/A
3 - Mill Lane	0.05	0.00	0.00	0.05	0.05			N/A	N/A
4 - B2166 W	0.28	0.00	0.00	0.28	0.28			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.77	0.05	0.45	1.62	2.36			N/A	N/A
2 - B2166 E	0.84	0.05	0.56	1.67	2.30			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	0.23	0.00	0.00	0.23	0.23			N/A	N/A

Existing Layouts - 2031 With
Mitigation With Development

Junctions 9															
PICADY 9 - Priority Intersection Module															
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017															
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution															

Filename: Lower Bognor Road Pagham Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031 SATURN With Mitigation - With Development

Report generation date: 01/03/2017 10:50:47

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
Stream B-C	0.0	~1	0.00	0.00	A	49.44	E	-21 % [Stream B-A]	1.1	1.5	608.14	0.98	F	20.82	C	-13 % [Stream B-A]
Stream B-A	20.6	60.4	212.16	1.09	F				8.4	36.3	34.11	0.34	F			
Stream C-AB	0.0	~1	0.00	0.00	A				0.2	1.2	8.20	0.11	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	19/09/2016
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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**

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	43.43	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-21	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road North		Major
B	Lower Bognor Road		Minor
C	Pagham Road South		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 - Pagham Road South	7.50			95.0	✓	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	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 - Lower Bognor Road	One lane plus flare	10.00	8.00	5.50	4.25	3.00	✓	2.00	105	85

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	635	0.108	0.273	0.172	0.391
1	B-C	666	0.095	0.241	-	-
1	C-B	629	0.228	0.228	-	-

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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road North		✓	617	100.000
B - Lower Bognor Road		✓	394	100.000
C - Pagham Road South		✓	672	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	From			
	A - Pagham Road North	0	467	150
	B - Lower Bognor Road	394	0	0
	C - Pagham Road South	672	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	From			
	A - Pagham Road North	0	2	4
	B - Lower Bognor Road	1	0	0
	C - Pagham Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.00	0.00	0.0	~1	A
B-A	1.00	213.16	26.6	60.4	F
C-AB	0.00	0.00	0.0	~1	A
C-A					
AB					
AC					

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	509	0.000	0	0.0	0.000	A
B-A	297	471	0.630	290	1.6	19.303	C
C-AB	0	515	0.000	0	0.0	0.000	A
C-A	506			506			
AB	352			352			
AC	113			113			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	470	0.000	0	0.0	0.000	A
B-A	354	440	0.805	347	3.5	35.887	E
C-AB	0	495	0.000	0	0.0	0.000	A
C-A	604			604			
AB	420			420			
AC	135			135			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	431	0.000	0	0.0	0.000	A
B-A	434	398	1.090	382	16.3	116.563	F
C-AB	0	466	0.000	0	0.0	0.000	A
C-A	740			740			
AB	514			514			
AC	165			165			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	431	0.000	0	0.0	0.000	A
B-A	434	398	1.090	393	26.6	213.157	F
C-AB	0	466	0.000	0	0.0	0.000	A
C-A	740			740			
AB	514			514			
AC	165			165			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	444	0.000	0	0.0	0.000	A
B-A	354	440	0.805	424	9.1	160.182	F
C-AB	0	495	0.000	0	0.0	0.000	A
C-A	604			604			
AB	420			420			
AC	135			135			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	497	0.000	0	0.0	0.000	A
B-A	297	471	0.630	326	1.8	28.994	D
C-AB	0	515	0.000	0	0.0	0.000	A
C-A	506			506			
AB	352			352			
AC	113			113			

Queue Variation Results for each time segment

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.61	0.39	1.44	2.47	2.91			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	3.45	0.11	1.48	8.31	11.54			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	16.35	2.44	13.27	31.23	38.18			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	26.58	4.92	22.26	49.85	60.36			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	9.06	0.18	4.29	23.03	32.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.82	0.03	0.29	1.82	8.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	20.82	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-13	Stream B-A

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)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road North		✓	1084	100.000
B - Lower Bognor Road		✓	320	100.000
C - Pagham Road South		✓	193	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
From	A - Pagham Road North	0	643	441
	B - Lower Bognor Road	312	0	8
	C - Pagham Road South	161	32	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
From	A - Pagham Road North	0	1	2
	B - Lower Bognor Road	3	0	0
	C - Pagham Road South	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.95	405.14	1.1	1.5	F
B-A	0.94	94.11	8.4	36.9	F
C-AB	0.11	8.20	0.2	1.2	A
C-A					
AB					
AC					

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	6	432	0.014	6	0.0	8.454	A
B-A	235	446	0.527	231	1.1	16.440	C
C-AB	31	531	0.059	31	0.1	7.194	A
C-A	114			114			
AB	484			484			
AC	332			332			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	7	330	0.022	7	0.0	11.147	B
B-A	280	412	0.680	277	2.0	25.917	D
C-AB	40	515	0.078	40	0.1	7.574	A
C-A	133			133			
AB	578			578			
AC	396			396			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	9	63	0.139	8	0.1	64.754	F
B-A	344	366	0.938	325	6.7	67.116	F
C-AB	55	495	0.111	55	0.2	8.180	A
C-A	157			157			
AB	708			708			
AC	486			486			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	9	9	0.947	5	1.1	405.144	F
B-A	344	366	0.938	337	8.4	94.112	F
C-AB	55	495	0.112	55	0.2	8.200	A
C-A	157			157			
AB	708			708			
AC	486			486			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	7	280	0.026	11	0.0	13.602	B
B-A	280	412	0.681	305	2.3	33.107	E
C-AB	40	515	0.078	41	0.1	7.602	A
C-A	133			133			
AB	578			578			
AC	396			396			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	6	423	0.014	6	0.0	8.634	A
B-A	235	445	0.527	240	1.2	17.867	C
C-AB	31	531	0.059	31	0.1	7.215	A
C-A	114			114			
AB	484			484			
AC	332			332			

Queue Variation Results for each time segment

16:15 - 16:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	1.07	0.55	1.02	1.44	1.49			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	1.96	0.09	1.25	4.41	6.05			N/A	N/A
C-AB	0.13	0.03	0.25	0.45	0.48			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.03	0.27	0.49	0.99			N/A	N/A
B-A	6.70	0.12	2.72	17.42	24.72			N/A	N/A
C-AB	0.20	0.03	0.27	0.49	1.17			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.08	0.55	1.00	1.40	1.45			N/A	N/A
B-A	8.42	0.08	1.79	23.97	36.87			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	2.34	0.04	0.39	6.21	11.85			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A



17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	1.16	0.03	0.30	1.57	5.60			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

Junctions 9							
ARCADY 9 - Roundabout Module							
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017							
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Filename: A27 A259.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031 SATURN With Mitigation - With Development

Report generation date: 01/03/2017 10:49:35

»A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), AM

»A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS
A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS)										
1 - A27 North	1.6	3.08	0.59	A	A	0.9	2.58	0.44	A	A
2 - A259 Bognor Rd East	3.7	8.68	0.78	A		1.1	3.47	0.50	A	
4 - A27 South	1.4	3.78	0.56	A		1.3	2.90	0.53	A	
5 - A259 Bognor Road West	1.1	5.74	0.50	A		1.7	7.83	0.61	A	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

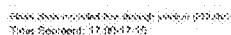
File summary

File Description

Title	A27 Bognor RBT
Location	
Site number	
Date	30/03/2015
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	UKNAW004
Description	

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	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

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 period length (min)	Time segment length (min)	Run automatically
D7	2031 Base + Committed (SATURN FLOWS)	AM	FLAT	08:00	09:00	60	15	✓
D8	2031 Base + Committed (SATURN FLOWS)	PM	FLAT	17:00	18:00	60	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	A27 Bognor RBT	✓	100.000	100.000

A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A259 Bognor Rd East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A27 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	5 - A259 Bognor Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Bognor Bridge Road - WSP Mitigation	Standard Roundabout	1,2,3,4,5	5.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A27 North	
2	A259 Bognor Rd East	
3	Vinnetrow Road	
4	A27 South	
5	A259 Bognor Road West	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - A27 North	8.80	12.37	112.7	43.7	84.0	32.0	
2 - A259 Bognor Rd East	7.00	11.18	63.0	30.5	84.0	44.0	
3 - Vinnetrow Road							✓
4 - A27 South	9.36	11.09	44.0	44.2	84.0	25.0	
5 - A259 Bognor Road West	4.02	8.11	55.7	27.5	84.0	37.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A27 North	0.760	3720
2 - A259 Bognor Rd East	0.654	3065
3 - Vinnetrow Road		
4 - A27 South	0.726	3447
5 - A259 Bognor Road West	0.534	2197

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2031 Base + Committed (SATURN FLOWS)	AM	FLAT	08:00	09:00	60	15	✓

Default vehicle mix	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 (%)
1 - A27 North		FLAT	✓	1652	100.000
2 - A259 Bognor Rd East		FLAT	✓	1428	100.000
3 - Vinnetrow Road					
4 - A27 South		FLAT	✓	1190	100.000
5 - A259 Bognor Road West		FLAT	✓	620	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
From		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
	1 - A27 North	0	470	44	668	470
	2 - A259 Bognor Rd East	543	0	33	500	352
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	506	327	30	0	327
	5 - A259 Bognor Road West	236	153	14	217	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
From		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
	1 - A27 North	10	10	10	10	10
	2 - A259 Bognor Rd East	10	10	10	10	10
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	10	10	10	10	10
	5 - A259 Bognor Road West	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 North	0.59	3.08	1.6	A	1817	1817
2 - A259 Bognor Rd East	0.78	8.68	3.7	A	1571	1571
3 - Vinnetrow Road						
4 - A27 South	0.56	3.78	1.4	A	1309	1309
5 - A259 Bognor Road West	0.50	5.74	1.1	A	682	682

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1817	454	811	3104	0.586	1811	1404	0.0	1.5	3.048	A
2 - A259 Bognor Rd East	1571	393	1581	2031	0.774	1556	1041	0.0	3.6	8.120	A
3 - Vinnetrow Road			3005				132				
4 - A27 South	1309	327	1491	2365	0.554	1304	1514	0.0	1.4	3.714	A
5 - A259 Bognor Road West	682	171	1537	1377	0.495	678	1257	0.0	1.1	5.629	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1817	454	815	3100	0.586	1817	1413	1.5	1.6	3.085	A
2 - A259 Bognor Rd East	1571	393	1587	2027	0.775	1570	1045	3.6	3.7	8.663	A
3 - Vinnetrow Road			3025				133				
4 - A27 South	1309	327	1501	2357	0.555	1309	1523	1.4	1.4	3.776	A
5 - A259 Bognor Road West	682	171	1546	1372	0.497	682	1264	1.1	1.1	5.737	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1817	454	815	3100	0.586	1817	1413	1.6	1.6	3.085	A
2 - A259 Bognor Rd East	1571	393	1587	2027	0.775	1571	1045	3.7	3.7	8.675	A
3 - Vinnetrow Road			3025				133				
4 - A27 South	1309	327	1501	2357	0.555	1309	1523	1.4	1.4	3.777	A
5 - A259 Bognor Road West	682	171	1547	1372	0.497	682	1264	1.1	1.1	5.737	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1817	454	815	3100	0.586	1817	1413	1.6	1.6	3.085	A
2 - A259 Bognor Rd East	1571	393	1587	2027	0.775	1571	1045	3.7	3.7	8.680	A
3 - Vinnetrow Road			3025				133				
4 - A27 South	1309	327	1501	2357	0.555	1309	1523	1.4	1.4	3.777	A
5 - A259 Bognor Road West	682	171	1547	1372	0.497	682	1264	1.1	1.1	5.738	A

A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A259 Bognor Rd East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A27 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	5 - A259 Bognor Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Bognor Bridge Road - WSP Mitigation	Standard Roundabout	1,2,3,4,5	3.77	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 period length (min)	Time segment length (min)	Run automatically
D8	2031 Base + Committed (SATURN FLOWS)	PM	FLAT	17:00	18:00	60	15	✓

Default vehicle mix	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 (%)
1 - A27 North		FLAT	✓	1086	100.000
2 - A259 Bognor Rd East		FLAT	✓	1057	100.000
3 - Vinnetrow Road					
4 - A27 South		FLAT	✓	1422	100.000
5 - A259 Bognor Road West		FLAT	✓	705	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	0	397	47	497	145
	2 - A259 Bognor Rd East	358	0	48	504	147
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	533	599	71	0	219
	5 - A259 Bognor Road West	192	216	26	271	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	10	10	10	10	10
	2 - A259 Bognor Rd East	10	10	10	10	10
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	10	10	10	10	10
	5 - A259 Bognor Road West	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 North	0.44	2.58	0.9	A	1195	1195
2 - A259 Bognor Rd East	0.50	3.47	1.1	A	1163	1163
3 - Vinnetrow Road						
4 - A27 South	0.53	2.90	1.3	A	1564	1564
5 - A259 Bognor Road West	0.61	7.83	1.7	A	776	776

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1195	299	1294	2736	0.437	1191	1186	0.0	0.8	2.558	A
2 - A259 Bognor Rd East	1163	291	1158	2308	0.504	1158	1328	0.0	1.1	3.433	A
3 - Vinnetrow Road			2105				210				
4 - A27 South	1564	391	712	2930	0.534	1559	1393	0.0	1.3	2.878	A
5 - A259 Bognor Road West	776	194	1711	1284	0.604	769	560	0.0	1.6	7.593	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1195	299	1301	2731	0.437	1195	1191	0.8	0.9	2.577	A
2 - A259 Bognor Rd East	1163	291	1163	2304	0.505	1163	1333	1.1	1.1	3.467	A
3 - Vinnetrow Road			2114				211				
4 - A27 South	1564	391	715	2928	0.534	1564	1399	1.3	1.3	2.902	A
5 - A259 Bognor Road West	776	194	1717	1281	0.605	775	562	1.6	1.7	7.827	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1195	299	1301	2731	0.437	1195	1191	0.9	0.9	2.577	A
2 - A259 Bognor Rd East	1163	291	1163	2304	0.505	1163	1333	1.1	1.1	3.467	A
3 - Vinnetrow Road			2114				211				
4 - A27 South	1564	391	715	2928	0.534	1564	1399	1.3	1.3	2.902	A
5 - A259 Bognor Road West	776	194	1717	1281	0.605	775	562	1.7	1.7	7.830	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1195	299	1301	2731	0.437	1195	1191	0.9	0.9	2.577	A
2 - A259 Bognor Rd East	1163	291	1163	2304	0.505	1163	1333	1.1	1.1	3.467	A
3 - Vinnetrow Road			2114				211				
4 - A27 South	1564	391	715	2928	0.534	1564	1399	1.3	1.3	2.902	A
5 - A259 Bognor Road West	776	194	1717	1281	0.605	775	562	1.7	1.7	7.831	A

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017
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Filename: B2145 B2166.j9

Path: \\eur-mpfs-02\tr_projects\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031 SATURN With Mitigation - With Development

Report generation date: 18/08/2017 11:40:49

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
1 - B2145 North	2.1	3.9	9.19	0.68	A	48.32	E	-8 %	83.5	156.3	218.77	1.14	F	93.15	F	-14 %
2 - B2166	10.5	57.7	31.30	0.93	D			[3 - B2145 South]	1.5	1.9	6.65	0.61	A			[1 - B2145 North]
3 - B2145 South	32.7	91.1	39.81	1.03	F				2.2	3.8	8.15	0.69	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	05/12/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	48.32	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-8	3 - B2145 South

Arms

Arms

Arm	Name	Description
1	B2145 North	
2	B2166	
3	B2145 South	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - B2145 North	3.26	7.00	11.4	46.1	30.0	16.0	
2 - B2166	2.90	7.00	21.7	25.3	30.0	15.1	
3 - B2145 South	3.58	6.71	9.0	39.5	30.0	10.3	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model:

Arm	Final slope	Final intercept (PCU/hr)
1 - B2145 North	0.673	1658
2 - B2166	0.688	1755
3 - B2145 South	0.682	1675

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

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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2145 North		✓	746	100.000
2 - B2166		✓	1175	100.000
3 - B2145 South		✓	1014	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		1 - B2145 North	2 - B2166	3 - B2145 South
	1 - B2145 North	0	328	418

2 - B2166	759	0	416
3 - B2145 South	487	527	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	1 - B2145 North	2 - B2166	3 - B2145 South	
	1 - B2145 North	0	4	7
	2 - B2166	2	0	1
	3 - B2145 South	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.68	9.19	2.1	3.9	A
2 - B2166	0.93	31.30	10.5	57.7	D
3 - B2145 South	1.03	39.61	32.7	91.1	F

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	562	394	1316	0.427	559	0.7	4.737	A
2 - B2166	885	313	1500	0.590	879	1.4	5.746	A
3 - B2145 South	763	568	1262	0.605	757	1.5	7.051	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	671	470	1266	0.530	669	1.1	6.012	A
2 - B2166	1056	375	1455	0.726	1052	2.6	8.822	A
3 - B2145 South	912	679	1186	0.769	905	3.1	12.539	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	821	545	1219	0.674	818	2.0	8.900	A
2 - B2166	1294	458	1395	0.928	1267	9.2	24.321	C
3 - B2145 South	1116	819	1090	1.024	1048	20.2	52.683	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	821	554	1212	0.677	821	2.1	9.187	A
2 - B2166	1294	460	1393	0.928	1288	10.5	31.297	C
3 - B2145 South	1116	832	1081	1.033	1066	32.7	98.819	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	671	534	1226	0.547	674	1.2	6.565	A
2 - B2166	1056	378	1453	0.727	1087	2.8	10.621	B
3 - B2145 South	912	702	1170	0.779	1027	3.9	38.468	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	562	402	1311	0.429	564	0.8	4.829	A
2 - B2166	885	316	1498	0.591	890	1.5	5.967	A
3 - B2145 South	763	575	1257	0.607	773	1.6	7.565	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.74	0.55	1.00	1.40	1.45			N/A	N/A
2 - B2166	1.42	0.56	1.32	1.82	1.96			N/A	N/A
3 - B2145 South	1.50	0.24	1.33	2.39	2.89			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.11	0.07	0.85	2.11	2.91			N/A	N/A
2 - B2166	2.56	0.05	0.49	7.03	11.51			N/A	N/A
3 - B2145 South	3.14	0.05	0.72	8.75	14.00			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.01	0.03	0.27	2.01	3.93			N/A	N/A
2 - B2166	9.20	0.06	1.26	26.90	44.87			N/A	N/A
3 - B2145 South	20.22	1.42	14.24	44.56	57.33			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.06	0.03	0.27	2.06	2.06			N/A	N/A
2 - B2166	10.53	0.04	0.43	27.92	57.70			N/A	N/A
3 - B2145 South	32.71	2.12	23.84	71.31	91.12			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.23	0.10	1.05	2.08	2.80			N/A	N/A
2 - B2166	2.76	0.04	0.41	7.57	13.87			N/A	N/A
3 - B2145 South	3.90	0.04	0.41	10.67	20.30			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.76	0.05	0.47	1.52	2.07			N/A	N/A
2 - B2166	1.46	0.03	0.31	2.32	7.38			N/A	N/A
3 - B2145 South	1.58	0.03	0.28	1.58	5.81			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	98.13	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-14	1 - B2145 North

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)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2145 North		✓	1275	100.000
2 - B2166		✓	757	100.000
3 - B2145 South		✓	886	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - B2145 North	2 - B2166	3 - B2145 South
From	1 - B2145 North	0	752	523
	2 - B2166	313	0	444
	3 - B2145 South	349	537	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - B2145 North	2 - B2166	3 - B2145 South
From	1 - B2145 North	0	2	2
	2 - B2166	3	0	1
	3 - B2145 South	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	1.14	218.77	93.5	156.3	F
2 - B2166	0.61	6.65	1.5	1.9	A
3 - B2145 South	0.69	8.15	2.2	3.8	A

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	960	402	1360	0.706	951	2.3	8.607	A
2 - B2166	570	390	1455	0.392	567	0.6	4.045	A
3 - B2145 South	667	235	1493	0.447	664	0.8	4.325	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1146	482	1308	0.877	1131	6.1	18.948	C
2 - B2166	681	464	1404	0.485	679	0.9	4.961	A
3 - B2145 South	796	281	1461	0.545	795	1.2	5.393	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1404	589	1237	1.135	1224	51.9	95.940	F
2 - B2166	833	502	1378	0.605	831	1.5	6.561	A
3 - B2145 South	976	344	1417	0.688	972	2.1	8.005	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1404	591	1236	1.135	1234	35.5	216.787	F
2 - B2166	833	506	1375	0.606	833	1.5	6.646	A
3 - B2145 South	976	345	1417	0.689	975	2.2	8.149	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1146	485	1306	0.878	1292	57.1	210.825	F
2 - B2166	681	530	1358	0.501	683	1.0	5.342	A
3 - B2145 South	796	282	1460	0.546	800	1.2	5.489	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	960	405	1358	0.707	1178	2.6	47.502	E
2 - B2166	570	483	1391	0.410	571	0.7	4.399	A
3 - B2145 South	667	236	1492	0.447	669	0.8	4.361	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.32	0.12	1.09	4.93	6.63			N/A	N/A
2 - B2166	0.64	0.55	1.00	1.40	1.45			N/A	N/A
3 - B2145 South	0.80	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	6.07	0.09	1.81	16.50	24.31			N/A	N/A
2 - B2166	0.93	0.08	0.87	1.54	1.90			N/A	N/A
3 - B2145 South	1.18	0.06	0.79	2.53	3.55			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	51.02	19.37	47.10	81.38	93.38			N/A	N/A
2 - B2166	1.50	0.03	0.26	1.50	1.50			N/A	N/A
3 - B2145 South	2.15	0.03	0.27	2.15	3.79			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	93.51	44.23	88.78	139.21	156.27			N/A	N/A
2 - B2166	1.52	0.03	0.27	1.52	1.52			N/A	N/A

3 - B2145 South	2.18	0.03	0.27	2.18	2.18			N/A	N/A
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17:38 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	57.13	29.08	54.49	82.26	91.54			N/A	N/A
2 - B2166	1.02	0.20	1.02	1.36	1.71			N/A	N/A
3 - B2145 South	1.22	0.09	1.01	2.20	2.91			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.58	0.03	0.29	2.58	8.71			N/A	N/A
2 - B2166	0.70	0.07	0.71	1.09	1.09			N/A	N/A
3 - B2145 South	0.82	0.05	0.49	1.66	2.35			N/A	N/A

Junctions 9															
ARCADY 9 - Roundabout Module															
Version: 9.0.1.4646 [I] © Copyright TRL Limited, 2017															
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Filename: Vinnetrow Road B2166.j9

Path: \\eur-mpfs-02\tr_projects\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031 SATURN With Mitigation - With Development

Report generation date: 18/08/2017 15:57:54

»2031 Base + Committed (SATURN FLOWS), AM
 »2031 Base + Committed (SATURN FLOWS), PM
 »CATM Flows, AM
 »CATM Flows, PM
 »CATM Flows + Development, AM
 »CATM Flows + Development, PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
1 - Vinnetrow Road	0.3	1.3	5.30	0.23	A	8.24	A	25 % [2 - B2166 E]	0.5	2.0	8.49	0.33	A	31.74	D	-4 % [4 - B2166 W]
2 - B2166 E	2.9	9.1	9.22	0.75	A				0.5	2.3	3.43	0.34	A			
3 - Mill Lane	0.1	0.5	6.50	0.13	A				0.1	0.5	3.68	0.05	A			
4 - B2166 W	1.5	1.7	7.70	0.59	A				15.7	73.3	48.56	0.36	E			
CATM Flows																
1 - Vinnetrow Road	0.1	0.5	3.98	0.09	A	10.60	B	14 % [2 - B2166 E]	1.8	3.6	9.86	0.65	A	6.44	A	30 % [1 - Vinnetrow Road]
2 - B2166 E	4.8	23.8	13.19	0.83	B				1.2	1.5	4.91	0.54	A			
3 - Mill Lane	0.2	0.5	7.15	0.14	A				0.1	0.5	4.55	0.06	A			
4 - B2166 W	0.5	2.0	4.18	0.32	A				0.4	1.2	3.84	0.27	A			
CATM Flows + Development																
1 - Vinnetrow Road	0.1	0.5	4.26	0.12	A	26.94	D	-1 % [2 - B2166 E]	2.8	12.6	14.45	0.75	B	8.29	A	15 % [1 - Vinnetrow Road]
2 - B2166 E	14.7	75.8	36.41	0.96	E				1.5	2.0	5.78	0.61	A			
3 - Mill Lane	0.2	0.5	9.17	0.17	A				0.1	0.5	4.95	0.07	A			
4 - B2166 W	0.6	2.6	4.52	0.37	A				0.6	2.6	4.44	0.37	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	10/11/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
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✓	✓	Delay	0.85	36.00	20.00
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Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15
D3	CATM Flows	AM	ONE HOUR	07:30	09:00	15
D4	CATM Flows	PM	ONE HOUR	16:30	18:00	15
D5	CATM Flows + Development	AM	ONE HOUR	07:30	09:00	15
D6	CATM Flows + Development	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	8.24	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	25	2 - B2166 E

Arms

Arms

Arm	Name	Description
1	Vinnetrow Road	
2	B2166 E	
3	Mill Lane	
4	B2166 W	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Vinnetrow Road	3.00	6.00	6.0	20.0	30.0	30.0	
2 - B2166 E	4.00	6.00	12.0	30.0	30.0	30.0	
3 - Mill Lane	3.00	7.00	8.0	20.0	30.0	30.0	
4 - B2166 W	3.50	6.00	4.0	20.0	30.0	30.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vinnetrow Road	0.568	1259
2 - B2166 E	0.649	1633
3 - Mill Lane	0.591	1375
4 - B2166 W	0.579	1313

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

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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	184	100.000
2 - B2166 E		✓	1051	100.000
3 - Mill Lane		✓	72	100.000
4 - B2166 W		✓	623	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	90	7	87
	2 - B2166 E	151	0	5	895
	3 - Mill Lane	19	12	0	41
	4 - B2166 W	81	526	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.23	5.30	0.3	1.3	A
2 - B2166 E	0.75	9.22	2.9	9.1	A
3 - Mill Lane	0.13	6.50	0.1	0.5	A
4 - B2166 W	0.59	7.70	1.5	1.7	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	139	415	993	0.140	138	0.2	4.210	A
2 - B2166 E	791	82	1572	0.503	787	1.0	4.563	A
3 - Mill Lane	54	849	870	0.062	54	0.1	4.408	A
4 - B2166 W	469	136	1190	0.394	466	0.6	4.960	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	165	497	946	0.175	165	0.2	4.612	A
2 - B2166 E	945	99	1562	0.605	943	1.5	5.800	A
3 - Mill Lane	65	1016	771	0.084	65	0.1	5.098	A
4 - B2166 W	560	163	1174	0.477	559	0.9	5.842	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	203	608	882	0.230	202	0.3	5.291	A
2 - B2166 E	1157	121	1547	0.748	1152	2.9	8.985	A
3 - Mill Lane	79	1242	637	0.125	79	0.1	6.456	A
4 - B2166 W	686	200	1153	0.595	684	1.4	7.629	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	203	610	881	0.230	203	0.3	5.303	A
2 - B2166 E	1157	121	1547	0.748	1157	2.9	9.219	A
3 - Mill Lane	79	1247	633	0.125	79	0.1	6.495	A
4 - B2166 W	686	200	1153	0.595	686	1.5	7.704	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	165	500	944	0.175	166	0.2	4.627	A
2 - B2166 E	945	99	1561	0.605	950	1.6	5.941	A
3 - Mill Lane	65	1024	766	0.084	65	0.1	5.134	A

4 - B2166 W	560	164	1174	0.477	562	0.9	5.910	A
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08:48 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	139	418	991	0.140	139	0.2	4.226	A
2 - B2166 E	791	83	1572	0.503	793	1.0	4.636	A
3 - Mill Lane	54	855	867	0.063	54	0.1	4.432	A
4 - B2166 W	469	137	1189	0.394	470	0.7	5.014	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2 - B2166 E	1.00	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.64	0.55	1.00	1.40	1.45			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.21	0.00	0.00	0.21	0.21			N/A	N/A
2 - B2166 E	1.51	0.05	0.66	3.70	5.55			N/A	N/A
3 - Mill Lane	0.09	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.90	0.09	0.89	1.33	1.73			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.30	0.03	0.25	0.46	0.48			N/A	N/A
2 - B2166 E	2.86	0.03	0.28	2.86	9.12			N/A	N/A
3 - Mill Lane	0.14	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	1.44	0.03	0.27	1.44	1.44			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.30	0.03	0.31	1.01	1.29			N/A	N/A
2 - B2166 E	2.91	0.03	0.27	2.91	2.91			N/A	N/A
3 - Mill Lane	0.14	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	1.45	0.03	0.27	1.45	1.45			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.21	0.00	0.00	0.21	0.21			N/A	N/A
2 - B2166 E	1.56	0.07	0.96	3.54	4.96			N/A	N/A
3 - Mill Lane	0.09	0.00	0.00	0.09	0.09			N/A	N/A
4 - B2166 W	0.92	0.13	0.95	1.22	1.65			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2 - B2166 E	1.02	0.04	0.43	2.47	3.86			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.66	0.06	0.62	1.05	1.05			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	31.74	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-4	4 - B2166 W

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)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	188	100.000
2 - B2166 E		✓	481	100.000
3 - Mill Lane		✓	49	100.000
4 - B2166 W		✓	1090	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	172	14	2
	2 - B2166 E	57	0	8	416
	3 - Mill Lane	6	19	0	24
	4 - B2166 W	105	971	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.33	8.49	0.5	2.0	A
2 - B2166 E	0.34	3.43	0.5	2.3	A
3 - Mill Lane	0.05	3.68	0.1	0.5	A
4 - B2166 W	0.33	49.53	15.7	73.2	E

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	142	749	829	0.171	141	0.2	5.225	A
2 - B2166 E	362	22	1586	0.228	361	0.3	2.936	A
3 - Mill Lane	37	356	1129	0.033	37	0.0	3.294	A
4 - B2166 W	821	62	1261	0.651	813	1.8	7.916	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	169	897	744	0.227	169	0.3	6.254	A
2 - B2166 E	432	27	1583	0.273	432	0.4	3.128	A
3 - Mill Lane	44	427	1088	0.040	44	0.0	3.447	A
4 - B2166 W	980	74	1254	0.781	974	3.4	12.563	E

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	207	1072	643	0.322	206	0.5	8.224	A
2 - B2166 E	530	32	1579	0.335	529	0.5	3.425	A
3 - Mill Lane	54	522	1032	0.052	54	0.1	3.681	A
4 - B2166 W	1200	90	1244	0.965	1163	12.6	34.472	D

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	207	1094	631	0.328	207	0.5	8.494	A
2 - B2166 E	530	33	1579	0.335	530	0.5	3.429	A
3 - Mill Lane	54	523	1031	0.052	54	0.1	3.682	A
4 - B2166 W	1200	90	1244	0.965	1188	15.7	48.566	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	169	945	716	0.236	170	0.3	6.596	A
2 - B2166 E	432	28	1582	0.273	433	0.4	3.132	A
3 - Mill Lane	44	428	1087	0.041	44	0.0	3.449	A
4 - B2166 W	980	74	1254	0.781	1027	3.8	18.689	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	142	763	821	0.172	142	0.2	5.305	A
2 - B2166 E	362	23	1586	0.228	362	0.3	2.945	A
3 - Mill Lane	37	358	1128	0.033	37	0.0	3.297	A
4 - B2166 W	821	62	1261	0.651	828	1.9	8.460	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - B2166 E	0.29	0.00	0.00	0.29	0.29			N/A	N/A
3 - Mill Lane	0.03	0.00	0.00	0.03	0.03			N/A	N/A
4 - B2166 W	1.82	0.59	1.24	2.58	2.92			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.29	0.00	0.00	0.29	0.29			N/A	N/A
2 - B2166 E	0.37	0.00	0.00	0.37	0.37			N/A	N/A
3 - Mill Lane	0.04	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	3.37	0.06	1.08	9.20	14.12			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
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Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.47	0.03	0.26	0.47	0.48			N/A	N/A
2 - B2166 E	0.50	0.03	0.25	0.50	0.50			N/A	N/A
3 - Mill Lane	0.05	0.03	0.26	0.46	0.49			N/A	N/A
4 - B2166 W	12.57	0.12	4.35	34.60	50.62			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.48	0.03	0.32	1.44	1.98			N/A	N/A
2 - B2166 E	0.50	0.03	0.30	1.37	2.29			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	15.69	0.08	2.53	45.96	73.33			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.31	0.00	0.00	0.31	0.31			N/A	N/A
2 - B2166 E	0.38	0.00	0.00	0.38	0.38			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	3.83	0.04	0.42	10.56	19.66			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.21	0.00	0.00	0.21	0.21			N/A	N/A
2 - B2166 E	0.30	0.00	0.00	0.30	0.30			N/A	N/A
3 - Mill Lane	0.03	0.00	0.00	0.03	0.03			N/A	N/A
4 - B2166 W	1.91	0.03	0.31	2.96	9.65			N/A	N/A

CATM Flows, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	10.60	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	14	2 - B2166 E

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)
D3	CATM Flows	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	80	100.000
2 - B2166 E		✓	1223	100.000
3 - Mill Lane		✓	72	100.000
4 - B2166 W		✓	360	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	73	7	0
	2 - B2166 E	0	0	5	1218
	3 - Mill Lane	19	12	0	41
	4 - B2166 W	0	344	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.09	3.98	0.1	0.5	A
2 - B2166 E	0.83	13.19	4.8	23.5	B
3 - Mill Lane	0.14	7.15	0.2	0.5	A
4 - B2166 W	0.32	4.18	0.5	2.0	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	60	279	1067	0.056	60	0.1	3.575	A
2 - B2166 E	921	17	1622	0.568	916	1.3	5.059	A
3 - Mill Lane	54	912	836	0.065	54	0.1	4.603	A
4 - B2166 W	271	23	1263	0.215	270	0.3	3.621	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	72	334	1035	0.069	72	0.1	3.735	A
2 - B2166 E	1099	21	1620	0.679	1096	2.1	6.833	A
3 - Mill Lane	65	1092	729	0.089	65	0.1	5.415	A
4 - B2166 W	324	28	1261	0.257	323	0.3	3.839	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	88	409	993	0.089	88	0.1	3.978	A
2 - B2166 E	1347	25	1617	0.833	1336	4.6	12.395	B
3 - Mill Lane	79	1331	588	0.135	79	0.2	7.069	A
4 - B2166 W	396	34	1257	0.315	396	0.5	4.178	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	88	410	993	0.089	88	0.1	3.980	A
2 - B2166 E	1347	25	1617	0.833	1346	4.8	13.189	B
3 - Mill Lane	79	1340	582	0.136	79	0.2	7.153	A
4 - B2166 W	396	34	1257	0.315	396	0.5	4.181	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	72	335	1035	0.069	72	0.1	3.738	A
2 - B2166 E	1099	21	1620	0.679	1110	2.2	7.199	A
3 - Mill Lane	65	1105	721	0.090	65	0.1	5.487	A
4 - B2166 W	324	28	1261	0.257	324	0.3	3.845	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	60	280	1066	0.057	60	0.1	3.582	A
2 - B2166 E	921	17	1622	0.568	924	1.3	5.180	A
3 - Mill Lane	54	920	831	0.065	54	0.1	4.637	A
4 - B2166 W	271	23	1263	0.215	271	0.3	3.629	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2 - B2166 E	1.30	0.56	1.11	1.45	1.73			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.27	0.00	0.00	0.27	0.27			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.07	0.03	0.25	0.45	0.48			N/A	N/A
2 - B2166 E	2.06	0.05	0.50	5.54	8.80			N/A	N/A
3 - Mill Lane	0.10	0.00	0.00	0.10	0.10			N/A	N/A
4 - B2166 W	0.34	0.00	0.00	0.34	0.34			N/A	N/A

08:00 - 08:15

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Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.10	0.03	0.26	0.47	0.49			N/A	N/A
2 - B2166 E	4.61	0.03	0.32	7.27	23.59			N/A	N/A
3 - Mill Lane	0.15	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	0.46	0.03	0.25	0.46	0.48			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - B2166 E	4.78	0.03	0.29	4.78	13.88			N/A	N/A
3 - Mill Lane	0.16	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.46	0.03	0.31	1.36	1.96			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.08	0.00	0.00	0.08	0.08			N/A	N/A
2 - B2166 E	2.16	0.05	0.52	5.80	9.21			N/A	N/A
3 - Mill Lane	0.10	0.00	0.00	0.10	0.10			N/A	N/A
4 - B2166 W	0.35	0.00	0.00	0.35	0.35			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2 - B2166 E	1.33	0.04	0.36	3.35	6.47			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.27	0.00	0.00	0.27	0.27			N/A	N/A

CATM Flows, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	6.44	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	30	1 - Vinnetrow Road

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)
D4	CATM Flows	PM	ONE HOUR	16:30	18:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	620	100.000
2 - B2166 E		✓	771	100.000
3 - Mill Lane		✓	49	100.000
4 - B2166 W		✓	315	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	606	14	0
	2 - B2166 E	0	0	8	763
	3 - Mill Lane	6	19	0	24
	4 - B2166 W	0	301	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.65	9.86	1.8	3.6	A
2 - B2166 E	0.54	4.91	1.2	1.5	A
3 - Mill Lane	0.06	4.55	0.1	0.5	A
4 - B2166 W	0.27	3.84	0.4	1.2	A

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	467	250	1115	0.419	464	0.7	5.508	A
2 - B2166 E	580	21	1588	0.365	578	0.6	3.556	A
3 - Mill Lane	37	572	1003	0.037	37	0.0	3.726	A
4 - B2166 W	237	19	1289	0.184	236	0.2	3.415	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	557	300	1086	0.513	556	1.0	6.775	A
2 - B2166 E	693	25	1586	0.437	692	0.8	4.026	A
3 - Mill Lane	44	685	936	0.047	44	0.0	4.033	A
4 - B2166 W	283	22	1287	0.220	283	0.3	3.585	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	683	367	1047	0.652	680	1.8	9.703	A
2 - B2166 E	849	31	1582	0.537	847	1.1	4.890	A
3 - Mill Lane	54	839	846	0.064	54	0.1	4.543	A
4 - B2166 W	347	27	1284	0.270	346	0.4	3.839	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	683	368	1047	0.652	683	1.8	9.865	A
2 - B2166 E	849	31	1582	0.537	849	1.2	4.909	A
3 - Mill Lane	54	840	845	0.064	54	0.1	4.547	A
4 - B2166 W	347	28	1284	0.270	347	0.4	3.841	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	557	301	1086	0.513	560	1.1	6.892	A
2 - B2166 E	693	25	1586	0.437	695	0.8	4.048	A
3 - Mill Lane	44	687	935	0.047	44	0.0	4.042	A
4 - B2166 W	283	23	1287	0.220	284	0.3	3.590	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	467	252	1114	0.419	468	0.7	5.588	A
2 - B2166 E	580	21	1588	0.365	581	0.6	3.579	A
3 - Mill Lane	37	575	1001	0.037	37	0.0	3.736	A
4 - B2166 W	237	19	1289	0.184	237	0.2	3.425	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.71	0.55	1.00	1.40	1.45			N/A	N/A
2 - B2166 E	0.57	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	0.22	0.00	0.00	0.22	0.22			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.04	0.08	0.91	1.81	2.38			N/A	N/A
2 - B2166 E	0.77	0.10	0.85	1.42	1.50			N/A	N/A
3 - Mill Lane	0.05	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.28	0.00	0.00	0.28	0.28			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
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Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.82	0.03	0.27	1.82	3.56			N/A	N/A
2 - B2166 E	1.14	0.03	0.26	1.14	1.14			N/A	N/A
3 - Mill Lane	0.07	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	0.37	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.84	0.03	0.27	1.84	2.25			N/A	N/A
2 - B2166 E	1.15	0.03	0.27	1.15	1.18			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.37	0.03	0.32	1.18	1.18			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.07	0.08	0.93	1.85	2.48			N/A	N/A
2 - B2166 E	0.78	0.48	0.97	1.40	1.45			N/A	N/A
3 - Mill Lane	0.05	0.00	0.00	0.05	0.05			N/A	N/A
4 - B2166 W	0.28	0.00	0.00	0.28	0.28			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.73	0.05	0.48	1.37	1.90			N/A	N/A
2 - B2166 E	0.58	0.07	0.73	1.35	1.42			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	0.23	0.00	0.00	0.23	0.23			N/A	N/A

CATM Flows + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	26.94	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-1	2 - B2166 E

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)
D5	CATM Flows + Development	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	100	100.000
2 - B2166 E		✓	1401	100.000
3 - Mill Lane		✓	72	100.000
4 - B2166 W		✓	419	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	93	7	0
	2 - B2166 E	0	0	5	1396
	3 - Mill Lane	19	12	0	41
	4 - B2166 W	0	403	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.12	4.26	0.1	0.5	A
2 - B2166 E	0.35	39.41	14.7	75.5	E
3 - Mill Lane	0.17	9.17	0.2	0.5	A
4 - B2166 W	0.37	4.52	0.6	2.6	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	75	323	1041	0.072	75	0.1	3.726	A
2 - B2166 E	1055	17	1622	0.650	1047	1.8	6.189	A
3 - Mill Lane	54	1044	758	0.072	54	0.1	5.111	A
4 - B2166 W	315	23	1263	0.250	314	0.3	3.788	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	90	387	1005	0.089	90	0.1	3.934	A
2 - B2166 E	1259	21	1620	0.777	1253	3.3	9.659	A
3 - Mill Lane	65	1249	637	0.102	65	0.1	6.292	A
4 - B2166 W	377	28	1261	0.299	376	0.4	4.069	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	110	474	955	0.115	110	0.1	4.258	A
2 - B2166 E	1543	25	1617	0.954	1507	12.3	26.599	C
3 - Mill Lane	79	1501	487	0.163	79	0.2	8.803	A
4 - B2166 W	461	34	1257	0.367	461	0.6	4.518	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	110	475	955	0.115	110	0.1	4.260	A
2 - B2166 E	1543	25	1617	0.954	1533	14.7	16.413	E
3 - Mill Lane	79	1528	472	0.168	79	0.2	9.171	A
4 - B2166 W	461	34	1257	0.367	461	0.6	4.524	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	90	388	1004	0.090	90	0.1	3.940	A
2 - B2166 E	1259	21	1620	0.777	1303	3.7	12.802	B
3 - Mill Lane	65	1299	607	0.107	65	0.1	6.648	A
4 - B2166 W	377	28	1260	0.299	377	0.4	4.078	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	75	325	1040	0.072	75	0.1	3.734	A
2 - B2166 E	1055	17	1622	0.650	1062	1.9	6.506	A
3 - Mill Lane	54	1058	749	0.072	54	0.1	5.182	A
4 - B2166 W	315	23	1263	0.250	316	0.3	3.801	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.08	0.00	0.00	0.08	0.08			N/A	N/A
2 - B2166 E	1.82	0.58	1.23	2.64	2.97			N/A	N/A
3 - Mill Lane	0.08	0.00	0.00	0.08	0.08			N/A	N/A
4 - B2166 W	0.33	0.00	0.00	0.33	0.33			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.10	0.03	0.25	0.45	0.48			N/A	N/A
2 - B2166 E	3.34	0.05	0.72	9.34	15.03			N/A	N/A
3 - Mill Lane	0.11	0.00	0.00	0.11	0.11			N/A	N/A
4 - B2166 W	0.42	0.00	0.00	0.42	0.42			N/A	N/A

08:00 - 08:15

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Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.13	0.03	0.26	0.46	0.49			N/A	N/A
2 - B2166 E	12.30	0.09	2.63	35.41	54.75			N/A	N/A
3 - Mill Lane	0.19	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	0.58	0.03	0.25	0.58	0.58			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2 - B2166 E	14.68	0.06	1.11	42.88	75.81			N/A	N/A
3 - Mill Lane	0.20	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.58	0.03	0.29	1.18	2.61			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - B2166 E	3.67	0.04	0.43	10.17	18.75			N/A	N/A
3 - Mill Lane	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - B2166 W	0.43	0.00	0.00	0.43	0.43			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.08	0.00	0.00	0.08	0.08			N/A	N/A
2 - B2166 E	1.90	0.03	0.31	3.10	9.69			N/A	N/A
3 - Mill Lane	0.08	0.00	0.00	0.08	0.08			N/A	N/A
4 - B2166 W	0.33	0.00	0.00	0.33	0.33			N/A	N/A

CATM Flows + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	8.29	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	15	1 - Vinnetrow Road

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)
D6	CATM Flows + Development	PM	ONE HOUR	16:30	18:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	660	100.000
2 - B2166 E		✓	871	100.000
3 - Mill Lane		✓	49	100.000
4 - B2166 W		✓	430	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	646	14	0
	2 - B2166 E	0	0	8	863
	3 - Mill Lane	6	19	0	24
	4 - B2166 W	0	416	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.75	14.45	2.8	12.6	B
2 - B2166 E	0.61	5.78	1.5	2.0	A
3 - Mill Lane	0.07	4.95	0.1	0.5	A
4 - B2166 W	0.37	4.44	0.6	2.6	A

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	497	337	1065	0.466	493	0.9	6.259	A
2 - B2166 E	656	21	1588	0.413	653	0.7	3.837	A
3 - Mill Lane	37	647	959	0.038	37	0.0	3.904	A
4 - B2166 W	324	19	1289	0.251	322	0.3	3.719	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	593	403	1027	0.578	591	1.3	8.229	A
2 - B2166 E	783	25	1586	0.494	782	1.0	4.474	A
3 - Mill Lane	44	775	884	0.050	44	0.1	4.286	A
4 - B2166 W	387	22	1287	0.300	386	0.4	3.995	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	727	494	975	0.745	721	2.8	13.866	E
2 - B2166 E	959	31	1582	0.606	957	1.5	5.735	A
3 - Mill Lane	54	948	782	0.069	54	0.1	4.943	A
4 - B2166 W	473	27	1284	0.369	473	0.6	4.436	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	727	494	975	0.746	726	2.8	14.451	E
2 - B2166 E	959	31	1582	0.606	959	1.5	5.777	A
3 - Mill Lane	54	950	781	0.069	54	0.1	4.952	A
4 - B2166 W	473	28	1284	0.369	473	0.6	4.442	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	593	404	1026	0.578	599	1.4	8.537	A
2 - B2166 E	783	25	1586	0.494	785	1.0	4.511	A
3 - Mill Lane	44	778	882	0.050	44	0.1	4.297	A
4 - B2166 W	387	23	1287	0.300	387	0.4	4.003	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	497	338	1064	0.467	499	0.9	6.393	A
2 - B2166 E	656	21	1588	0.413	657	0.7	3.869	A
3 - Mill Lane	37	651	957	0.039	37	0.0	3.914	A
4 - B2166 W	324	19	1289	0.251	324	0.3	3.734	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.86	0.55	1.00	1.40	1.45			N/A	N/A
2 - B2166 E	0.70	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	0.33	0.00	0.00	0.33	0.33			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.34	0.06	0.87	2.89	4.06			N/A	N/A
2 - B2166 E	0.97	0.08	0.86	1.67	2.04			N/A	N/A
3 - Mill Lane	0.05	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.43	0.00	0.00	0.43	0.43			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
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Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	2.76	0.03	0.30	2.79	12.58			N/A	N/A
2 - B2166 E	1.51	0.03	0.26	1.51	1.51			N/A	N/A
3 - Mill Lane	0.07	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	0.58	0.03	0.25	0.58	0.58			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	2.84	0.03	0.28	2.84	7.40			N/A	N/A
2 - B2166 E	1.53	0.03	0.26	1.53	1.53			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.58	0.03	0.29	1.17	2.62			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.40	0.06	0.69	3.33	4.89			N/A	N/A
2 - B2166 E	0.99	0.20	1.00	1.26	1.65			N/A	N/A
3 - Mill Lane	0.05	0.00	0.00	0.05	0.05			N/A	N/A
4 - B2166 W	0.43	0.00	0.00	0.43	0.43			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.89	0.04	0.38	2.12	3.66			N/A	N/A
2 - B2166 E	0.71	0.07	0.74	1.00	1.00			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	0.34	0.00	0.00	0.34	0.34			N/A	N/A

Existing Layouts
2031 Base + Committed & 2031
Base + Committed + Dev

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646 []
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Filename: AM_PM_Pagham Road-Hook Lane.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\20170523 Revised Models & Flows

Report generation date: 23/05/2017 16:18:10

- »2031 Base + Committed Development, AM
- »2031 Base + Committed Development, PM
- »2031 Base + Committed + ALL Development, AM
- »2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2031 Base + Committed Development													
Stream B-C	0.2	8.76	0.16	A	5.46	A	37 %	0.7	10.09	0.43	B	4.01	A	65 %
Stream B-A	0.9	15.39	0.48	C			[Stream B-A]	0.1	11.54	0.06	B			[Stream B-A]
Stream C-AB	0.5	5.06	0.23	A			0.4	6.95	0.24	A				
	2031 Base + Committed + ALL Development													
Stream B-C	0.3	9.13	0.20	A	5.68	A	28 %	0.9	11.16	0.47	B	4.30	A	51 %
Stream B-A	1.0	17.42	0.50	C			[Stream B-A]	0.1	12.58	0.06	B			[Stream B-A]
Stream C-AB	0.7	5.58	0.33	A			0.5	7.27	0.29	A				

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Pagham Road/Hook Lane
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing Layout
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
Description	

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	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	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
D7	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Committed Development	PM	ONE HOUR	16:45	18:15	15	✓
D9	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	15	✓
D10	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2031 Base + Committed Development, 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	5.46	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	37	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road NE		Major
B	Hook Lane		Minor
C	Pagham Road SW		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 - Pagham Road SW	7.30			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	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 - Hook Lane	One lane plus flare	10.00	6.30	5.70	3.65	3.65	✓	2.00	61	65

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	593	0.102	0.258	0.162	0.368
1	B-C	649	0.094	0.237	-	-
1	C-B	719	0.263	0.263	-	-

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
D7	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	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 - Pagham Road NE		ONE HOUR	✓	84	100.000
B - Hook Lane		ONE HOUR	✓	267	100.000
C - Pagham Road SW		ONE HOUR	✓	470	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road NE	B - Hook Lane	C - Pagham Road SW
From	A - Pagham Road NE	0	9	75
	B - Hook Lane	197	0	70
	C - Pagham Road SW	357	113	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road NE	B - Hook Lane	C - Pagham Road SW
From	A - Pagham Road NE	0	11	16
	B - Hook Lane	1	0	7
	C - Pagham Road SW	3	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-C	0.16	8.76	0.2	A	64	96
B-A	0.48	15.39	0.9	C	181	271
C-AB	0.23	5.06	0.5	A	167	250
C-A					265	397
A-B					8	12
A-C					69	103

Main Results for each time segment

07:45 - 08:00

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-C	53	13	543	0.097	52	0.0	0.1	7.329	A
B-A	148	37	495	0.300	147	0.0	0.4	10.299	B
C-AB	124	31	861	0.144	123	0.0	0.2	4.876	A
C-A	230	58			230				
A-B	7	2			7				
A-C	56	14			56				

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-C	63	16	524	0.120	63	0.1	0.1	7.807	A
B-A	177	44	476	0.372	176	0.4	0.6	11.987	B
C-AB	159	40	889	0.179	159	0.2	0.3	4.931	A
C-A	263	66			263				
A-B	8	2			8				
A-C	67	17			67				

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-C	77	19	489	0.158	77	0.1	0.2	8.727	A
B-A	217	54	451	0.481	216	0.6	0.9	15.231	C
C-AB	216	54	929	0.233	216	0.3	0.5	5.051	A
C-A	301	75			301				
A-B	10	2			10				
A-C	83	21			83				

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-C	77	19	488	0.158	77	0.2	0.2	8.759	A
B-A	217	54	451	0.481	217	0.9	0.9	15.393	C
C-AB	217	54	929	0.233	217	0.5	0.5	5.062	A
C-A	301	75			301				
A-B	10	2			10				
A-C	83	21			83				

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-C	63	16	523	0.120	63	0.2	0.1	7.838	A
B-A	177	44	476	0.372	178	0.9	0.6	12.144	B
C-AB	160	40	889	0.179	160	0.5	0.3	4.951	A
C-A	263	66			263				
A-B	8	2			8				
A-C	67	17			67				

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-C	53	13	542	0.097	53	0.1	0.1	7.366	A
B-A	148	37	494	0.300	149	0.6	0.4	10.448	B
C-AB	124	31	861	0.144	124	0.3	0.2	4.899	A
C-A	230	57			230				
A-B	7	2			7				
A-C	56	14			56				

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.43	10.09	0.7	B	222	333
B-A	0.06	11.54	0.1	B	17	26
C-AB	0.24	6.95	0.4	A	129	194
C-A					97	146
A-B					38	56
A-C					320	480

Main Results for each time segment

16:45 - 17:00

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-C	182	46	663	0.275	181	0.0	0.4	7.442	A
B-A	14	4	389	0.037	14	0.0	0.0	9.586	A
C-AB	101	25	683	0.148	101	0.0	0.2	6.169	A
C-A	85	21			85				
A-B	31	8			31				
A-C	263	66			263				

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-C	218	54	646	0.337	217	0.4	0.5	8.374	A
B-A	17	4	367	0.047	17	0.0	0.0	10.291	B
C-AB	125	31	682	0.184	125	0.2	0.3	6.467	A
C-A	97	24			97				
A-B	37	9			37				
A-C	314	78			314				

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-C	266	67	623	0.427	266	0.5	0.7	10.034	B
B-A	21	5	333	0.063	21	0.0	0.1	11.530	B
C-AB	161	40	680	0.237	161	0.3	0.4	6.935	A
C-A	111	28			111				
A-B	45	11			45				
A-C	384	96			384				

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-C	266	67	623	0.428	266	0.7	0.7	10.086	B
B-A	21	5	333	0.063	21	0.1	0.1	11.545	B
C-AB	161	40	680	0.237	161	0.4	0.4	6.949	A
C-A	111	28			111				
A-B	45	11			45				
A-C	384	96			384				

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-C	218	54	646	0.337	218	0.7	0.5	8.432	A
B-A	17	4	366	0.047	17	0.1	0.0	10.306	B
C-AB	125	31	682	0.184	126	0.4	0.3	6.492	A
C-A	97	24			97				

A-B	37	9			37				
A-C	314	78			314				

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-C	182	46	663	0.275	183	0.5	0.4	7.504	A
B-A	14	4	389	0.037	14	0.0	0.0	9.611	A
C-AB	101	25	683	0.148	102	0.3	0.2	6.199	A
C-A	84	21			84				
A-B	31	8			31				
A-C	263	66			263				

2031 Base + Committed + ALL Development, 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	5.68	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	28	Stream B-A

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
D9	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	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 - Pagham Road NE		ONE HOUR	✓	119	100.000
B - Hook Lane		ONE HOUR	✓	276	100.000
C - Pagham Road SW		ONE HOUR	✓	561	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - Pagham Road NE	B - Hook Lane	C - Pagham Road SW
	A - Pagham Road NE	0	9	110
	B - Hook Lane	185	0	91
	C - Pagham Road SW	412	149	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - Pagham Road NE	B - Hook Lane	C - Pagham Road SW
	A - Pagham Road NE	0	11	11
	B - Hook Lane	1	0	6
	C - Pagham Road SW	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-C	0.20	9.13	0.3	A	84	125
B-A	0.50	17.42	1.0	C	170	255
C-AB	0.33	5.58	0.7	A	237	356
C-A					277	416
A-B					8	12
A-C					101	151

Main Results for each time segment

07:45 - 08:00

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-C	69	17	558	0.123	68	0.0	0.1	7.340	A
B-A	139	35	465	0.300	138	0.0	0.4	10.952	B
C-AB	173	43	881	0.197	172	0.0	0.3	5.072	A
C-A	249	62			249				
A-B	7	2			7				
A-C	83	21			83				

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-C	82	20	536	0.153	82	0.1	0.2	7.916	A
B-A	166	42	442	0.376	166	0.4	0.6	12.998	B
C-AB	226	56	914	0.247	225	0.3	0.5	5.232	A
C-A	278	70			278				
A-B	8	2			8				
A-C	99	25			99				

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-C	100	25	496	0.202	100	0.2	0.3	9.082	A
B-A	204	51	410	0.496	202	0.6	1.0	17.178	C
C-AB	312	78	960	0.325	311	0.5	0.7	5.556	A
C-A	305	76			305				
A-B	10	2			10				
A-C	121	30			121				

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-C	100	25	495	0.203	100	0.3	0.3	9.129	A
B-A	204	51	410	0.497	204	1.0	1.0	17.417	C
C-AB	313	78	960	0.326	313	0.7	0.7	5.580	A
C-A	305	76			305				
A-B	10	2			10				
A-C	121	30			121				

08:45 - 09:00

	Total	Junction							
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Stream	Demand (Veh/hr)	Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	82	20	535	0.153	82	0.3	0.2	7.959	A
B-A	166	42	442	0.377	168	1.0	0.6	13.210	B
C-AB	226	57	914	0.248	227	0.7	0.5	5.262	A
C-A	278	69			278				
A-B	8	2			8				
A-C	99	25			99				

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-C	69	17	556	0.123	69	0.2	0.1	7.384	A
B-A	139	35	464	0.300	140	0.6	0.4	11.126	B
C-AB	174	43	882	0.197	174	0.5	0.4	5.104	A
C-A	249	62			249				
A-B	7	2			7				
A-C	83	21			83				

2031 Base + Committed + ALL Development, 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	4.30	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	51	Stream B-A

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
D10	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:45	18:15	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 - Pagham Road NE		ONE HOUR	✓	432	100.000
B - Hook Lane		ONE HOUR	✓	279	100.000
C - Pagham Road SW		ONE HOUR	✓	302	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - Pagham Road NE	B - Hook Lane	C - Pagham Road SW
	A - Pagham Road NE	0	39	393
	B - Hook Lane	18	0	261
	C - Pagham Road SW	169	133	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - Pagham Road NE	B - Hook Lane	C - Pagham Road SW
	A - Pagham Road NE	0	0	4
	B - Hook Lane	0	0	2
	C - Pagham Road SW	5	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-C	0.47	11.16	0.9	S	239	359
B-A	0.06	12.58	0.1	S	17	25
C-AB	0.29	7.27	0.5	A	159	238
C-A					118	177
A-B					36	54
A-C					361	541

Main Results for each time segment

16:45 - 17:00

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-C	196	49	654	0.300	195	0.0	0.4	7.812	A
B-A	14	3	373	0.036	13	0.0	0.0	10.000	A
C-AB	123	31	694	0.177	122	0.0	0.3	6.286	A
C-A	105	26			105				
A-B	29	7			29				
A-C	296	74			296				

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-C	235	59	636	0.369	234	0.4	0.6	8.953	A
B-A	16	4	347	0.047	16	0.0	0.0	10.890	S
C-AB	153	38	694	0.221	153	0.3	0.3	6.646	A
C-A	118	30			118				
A-B	35	9			35				
A-C	353	88			353				

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-C	287	72	610	0.471	286	0.6	0.9	11.082	S
B-A	20	5	306	0.065	20	0.0	0.1	12.561	S
C-AB	200	50	696	0.288	200	0.3	0.5	7.247	A
C-A	132	33			132				
A-B	43	11			43				
A-C	433	108			433				

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-C	287	72	610	0.471	287	0.9	0.9	11.160	S
B-A	20	5	306	0.065	20	0.1	0.1	12.583	S
C-AB	200	50	696	0.288	200	0.5	0.5	7.271	A
C-A	132	33			132				
A-B	43	11			43				
A-C	433	108			433				

17:45 - 18:00

	Total	Junction							
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Stream	Demand (Veh/hr)	Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	235	59	635	0.369	236	0.9	0.6	9.033	A
B-A	16	4	346	0.047	16	0.1	0.0	10.912	E
C-AB	153	38	695	0.221	154	0.5	0.4	6.680	A
C-A	118	30			118				
A-B	35	9			35				
A-C	353	88			353				

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-C	196	49	654	0.301	197	0.6	0.4	7.894	A
B-A	14	3	373	0.036	14	0.0	0.0	10.025	E
C-AB	123	31	694	0.177	123	0.4	0.3	6.321	A
C-A	104	26			104				
A-B	29	7			29				
A-C	296	74			296				

Junctions 9														
PICADY 9 - Priority Intersection Module														
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Filename: Rose Green Road-Carlton Avenue.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\20170523 Revised Models & Flows

Report generation date: 10/07/2017 09:18:56

- »2031 Base + Committed Development, AM
- »2031 Base + Committed Development, PM
- »2031 Base + Committed +ALL Development, AM
- »2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2031 Base + Committed Development													
Stream B-ACD	2.0	34.30	0.68	D	45.38	E	-16 % [Stream D-BC]	1.0	22.57	0.50	D	53.94	F	-17 % [Stream D-BC]
Stream A-BCD	0.0	6.35	0.01	A				0.0	5.59	0.02	A			
Stream D-A	3.2	289.28	0.99	F				6.1	288.28	1.02	F			
Stream D-BC	12.1	106.65	0.98	F				15.5	132.03	1.01	F			
Stream C-ABD	0.3	5.20	0.11	A				0.3	4.86	0.13	A			
	2031 Base + Committed + ALL Development													
Stream B-ACD	1.9	35.10	0.67	E	49.97	E	-17 % [Stream D-BC]							
Stream A-BCD	0.0	6.66	0.01	A										
Stream D-A	3.4	287.52	1.02	F										
Stream D-BC	15.2	131.65	1.01	F										
Stream C-ABD	0.3	4.90	0.12	A										
	2031 Base + Committed + ALL Development													
Stream B-ACD								0.9	23.66	0.50	D	73.13	F	-21 % [Stream D-BC]
Stream A-BCD								0.0	5.46	0.02	A			
Stream D-A								7.3	284.08	1.05	F			
Stream D-BC								23.9	188.49	1.07	F			
Stream C-ABD								0.3	4.84	0.13	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Rose Green Road/Carlton Avenue
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing Junction
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
Description	

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	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	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
D7	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Committed Development	PM	ONE HOUR	17:00	18:30	15	✓
D9	2031 Base + Committed +ALL Development	AM	ONE HOUR	07:45	09:15	15	✓
D10	2031 Base + Committed + ALL Development	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

2031 Base + Committed Development, 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	Right-Left Stagger	Two-way	45.33	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-16	Stream D-BC

Arms

Arms

Arm	Name	Description	Arm type
A	Grosvenor Gardens		Major
B	Carlton Avenue		Minor
C	Rose Green Road W		Major
D	Rose Green Road N		Minor

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)
A - Grosvenor Gardens	7.32			100.0	✓	0.00
C - Rose Green Road W	7.59			127.8	✓	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)	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 - Carlton Avenue	One lane	3.00								23	51
D - Rose Green Road N	One lane plus flare		10.00	8.35	7.22	7.10	7.10	✓	3.00	27	21

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/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
1	A-D	632	-	-	-	0.231	0.231	0.231	-	0.231	-	-
1	B-AD	510	0.086	0.219	-	-	-	0.138	0.312	0.138	0.086	0.219
1	B-C	656	0.094	0.237	-	-	-	-	-	-	0.094	0.237
1	C-B	648	0.234	0.234	-	-	-	-	-	-	0.234	0.234
1	D-A	634	-	-	-	0.232	0.092	0.232	-	0.092	-	-
1	D-BC	596	0.163	0.163	0.370	0.259	0.102	0.259	-	0.102	-	-

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
D7	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	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 - Grosvenor Gardens		ONE HOUR	✓	250	100.000
B - Carlton Avenue		ONE HOUR	✓	200	100.000
C - Rose Green Road W		ONE HOUR	✓	432	100.000
D - Rose Green Road N		ONE HOUR	✓	427	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
From A - Grosvenor Gardens	0	15	231	4
From B - Carlton Avenue	57	0	56	87
From C - Rose Green Road W	197	37	0	198
From D - Rose Green Road N	40	62	325	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
From A - Grosvenor Gardens	0	0	0	25
From B - Carlton Avenue	0	0	0	1
From C - Rose Green Road W	1	0	0	1
From D - Rose Green Road N	3	0	2	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-ACD	0.68	34.30	2.0	D	184	275
A-BCD	0.01	6.35	0.0	A	6	9
AB					14	20
AC					210	315
D-A	0.99	260.33	3.2	F	37	55
D-BC	0.98	108.65	12.1	F	355	533
C-ABD	0.11	5.20	0.3	A	67	100
C-D					165	248
C-A					165	247

Main Results for each time segment

07:45 - 08:00

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-ACD	151	38	399	0.377	148	0.0	0.6	14.233	B
A-BCD	4	1	571	0.008	4	0.0	0.0	6.354	A
AB	11	3			11				
AC	173	43			173				
D-A	30	8	435	0.069	30	0.0	0.1	8.870	A
D-BC	291	73	484	0.601	286	0.0	1.4	17.643	C
C-ABD	46	12	743	0.062	46	0.0	0.1	5.161	A
C-D	140	35			140				
C-A	139	35			139				

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-ACD	180	45	369	0.487	179	0.6	0.9	18.733	C
A-BCD	6	1	585	0.010	6	0.0	0.0	6.244	A
AB	13	3			13				
AC	206	51			206				
D-A	36	9	335	0.107	36	0.1	0.1	12.012	B
D-BC	348	87	464	0.749	343	1.4	2.7	28.499	D
C-ABD	62	16	765	0.081	62	0.1	0.2	5.118	A
C-D	163	41			163				
C-A	163	41			163				

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-ACD	220	55	329	0.670	216	0.9	1.8	31.065	D
A-BCD	8	2	606	0.013	8	0.0	0.0	6.056	A
AB	16	4			16				
AC	251	63			251				
D-A	44	11	45	0.989	33	0.1	2.8	209.627	F
D-BC	426	107	437	0.978	401	2.7	9.0	71.922	F
C-ABD	90	22	799	0.113	89	0.2	0.3	5.078	A
C-D	193	48			193				
C-A	192	48			192				

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-ACD	220	55	323	0.681	220	1.8	2.0	34.299	D
A-BCD	8	2	606	0.013	8	0.0	0.0	6.025	A
AB	16	4			16				
AC	251	63			251				
D-A	44	11	52	0.843	42	2.8	3.2	260.381	F
D-BC	426	107	436	0.977	414	9.0	12.1	166.852	F
C-ABD	91	23	794	0.114	91	0.3	0.3	5.123	A
C-D	193	48			193				
C-A	192	48			192				



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-ACD	180	45	360	0.499	184	2.0	1.0	20.792	C
A-BCD	6	1	585	0.010	6	0.0	0.0	6.165	A
AB	13	3			13				
AC	206	51			206				
D-A	36	9	254	0.141	48	3.2	0.2	18.453	C
D-BC	348	87	464	0.751	382	12.1	3.5	54.055	F
C-ABD	63	16	758	0.083	63	0.3	0.2	5.197	A
C-D	163	41			163				
C-A	162	41			162				

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-ACD	151	38	396	0.380	152	1.0	0.6	14.870	B
A-BCD	4	1	571	0.008	4	0.0	0.0	6.316	A
AB	11	3			11				
AC	173	43			173				
D-A	30	8	422	0.071	30	0.2	0.1	9.200	A
D-BC	291	73	484	0.602	299	3.5	1.6	20.168	C
C-ABD	47	12	741	0.063	47	0.2	0.1	5.195	A
C-D	140	35			140				
C-A	139	35			139				

2031 Base + Committed Development, 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	Right-Left Stagger	Two-way	53.34	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-17	Stream D-BC

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
D8	2031 Base + Committed Development	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 - Grosvenor Gardens		ONE HOUR	✓	236	100.000
B - Carlton Avenue		ONE HOUR	✓	146	100.000
C - Rose Green Road W		ONE HOUR	✓	532	100.000
D - Rose Green Road N		ONE HOUR	✓	487	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
	A - Grosvenor Gardens	0	38	192	6
	B - Carlton Avenue	43	0	47	56
	C - Rose Green Road W	271	38	0	223
	D - Rose Green Road N	98	55	334	0

Vehicle Mix

Heavy Vehicles Percentages

		To			
From		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
	A - Grosvenor Gardens	0	0	1	0
	B - Carlton Avenue	0	0	0	2
	C - Rose Green Road W	0	0	0	1
	D - Rose Green Road N	0	0	1	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-ACD	0.50	22.57	1.0	C	134	201
ABCD	0.02	5.59	0.0	A	8	12
AB					34	52
AC					174	261
D-A	1.00	298.38	6.1	F	90	135
D-BC	1.01	132.09	15.5	F	357	535
C-ABD	0.13	4.86	0.3	A	79	119
C-D					184	277
C-A					224	336

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-ACD	110	27	399	0.275	108	0.0	0.4	12.319	B
ABCD	6	2	650	0.009	6	0.0	0.0	5.589	A
AB	28	7			28				
AC	143	36			143				
D-A	74	18	444	0.166	73	0.0	0.2	9.692	A
D-BC	293	73	479	0.612	287	0.0	1.5	18.234	C
C-ABD	54	13	798	0.067	53	0.0	0.1	4.832	A
C-D	157	39			157				
C-A	190	48			190				

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-ACD	131	33	369	0.356	131	0.4	0.5	15.073	C
ABCD	8	2	656	0.012	8	0.0	0.0	5.554	A
AB	34	8			34				
AC	171	43			171				
D-A	88	22	345	0.256	88	0.2	0.3	13.962	B
D-BC	350	87	457	0.766	344	1.5	2.9	30.530	D
C-ABD	74	18	832	0.088	73	0.1	0.2	4.748	A
C-D	183	46			183				
C-A	222	55			222				

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-ACD	161	40	327	0.492	159	0.5	0.9	21.313	C
A-BCD	11	3	665	0.016	11	0.0	0.0	5.499	A
AB	41	10			41				
AC	208	52			208				
D-A	108	27	106	1.022	89	0.3	5.0	152.927	F
D-BC	428	107	425	1.007	397	2.9	10.8	82.376	F
C-ABD	110	27	882	0.125	109	0.2	0.3	4.665	A
C-D	215	54			215				
C-A	261	65			261				

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-ACD	161	40	320	0.503	161	0.9	1.0	22.569	C
A-BCD	11	3	665	0.016	11	0.0	0.0	5.503	A
AB	41	10			41				
AC	208	52			208				
D-A	108	27	115	0.938	104	5.0	6.1	208.377	F
D-BC	428	107	424	1.003	410	10.8	15.5	132.085	F
C-ABD	111	28	877	0.127	111	0.3	0.3	4.708	A
C-D	214	54			214				
C-A	260	65			260				

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-ACD	131	33	357	0.368	133	1.0	0.6	16.180	C
A-BCD	8	2	655	0.012	8	0.0	0.0	5.561	A
AB	34	8			34				
AC	171	43			171				
D-A	88	22	240	0.367	110	6.1	0.6	31.982	D
D-BC	350	87	455	0.768	396	15.5	4.0	74.000	F
C-ABD	75	19	822	0.091	75	0.3	0.2	4.829	A
C-D	182	46			182				
C-A	221	55			221				

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-ACD	110	27	396	0.278	111	0.6	0.4	12.670	B
A-BCD	6	2	650	0.010	6	0.0	0.0	5.594	A
AB	28	7			28				
AC	143	36			143				
D-A	74	18	430	0.172	75	0.6	0.2	10.210	B
D-BC	293	73	478	0.612	302	4.0	1.7	21.371	C
C-ABD	54	14	796	0.068	54	0.2	0.1	4.860	A
C-D	156	39			156				
C-A	190	48			190				

2031 Base + Committed +ALL Development, 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	Right-Left Stagger	Two-way	43.37	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-17	Stream D-BC

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
D9	2031 Base + Committed +ALL Development	AM	ONE HOUR	07:45	09:15	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 - Grosvenor Gardens		ONE HOUR	✓	258	100.000
B - Carlton Avenue		ONE HOUR	✓	189	100.000
C - Rose Green Road W		ONE HOUR	✓	515	100.000
D - Rose Green Road N		ONE HOUR	✓	422	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
	A - Grosvenor Gardens	0	15	240	3
	B - Carlton Avenue	54	0	53	82
	C - Rose Green Road W	243	35	0	237
	D - Rose Green Road N	38	58	326	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
	A - Grosvenor Gardens	0	0	0	33
	B - Carlton Avenue	0	0	0	1
	C - Rose Green Road W	0	0	0	1
	D - Rose Green Road N	3	0	2	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-ACD	0.67	35.10	1.9	E	173	260
ABCD	0.01	6.66	0.0	A	5	7
AB					14	20
AC					218	327
D-A	1.00	287.50	3.4	F	35	52
D-BC	1.01	131.65	15.2	F	352	529
C-ABD	0.12	4.90	0.3	A	72	108
C-D					198	297
C-A					203	304

Main Results for each time segment

07:45 - 08:00

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-ACD	142	36	390	0.365	140	0.0	0.6	14.263	E
ABCD	3	1	544	0.006	3	0.0	0.0	6.657	A
AB	11	3			11				
AC	180	45			180				
D-A	29	7	424	0.067	28	0.0	0.1	9.093	A
D-BC	289	72	473	0.611	283	0.0	1.5	18.429	C
C-ABD	49	12	788	0.062	48	0.0	0.1	4.867	A
C-D	167	42			167				
C-A	172	43			172				

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-ACD	170	42	359	0.473	169	0.6	0.9	18.801	C
ABCD	5	1	559	0.008	5	0.0	0.0	6.532	A
AB	13	3			13				
AC	214	53			214				
D-A	34	9	314	0.109	34	0.1	0.1	12.828	B
D-BC	345	86	451	0.766	340	1.5	2.9	30.876	D
C-ABD	67	17	819	0.081	67	0.1	0.2	4.783	A
C-D	196	49			196				
C-A	201	50			201				

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-ACD	208	52	315	0.660	204	0.9	1.8	31.453	C
A-BCD	6	2	582	0.011	6	0.0	0.0	6.310	A
AB	16	4			16				
AC	261	65			261				
D-A	42	10	41	1.322	31	0.1	2.9	253.231	F
D-BC	423	106	420	1.006	392	2.9	10.7	82.665	F
C-ABD	99	25	866	0.115	99	0.2	0.3	4.694	A
C-D	231	58			231				
C-A	237	59			237				

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-ACD	208	52	309	0.674	207	1.8	1.9	35.100	E
A-BCD	6	2	581	0.011	6	0.0	0.0	6.261	A
AB	16	4			16				
AC	261	65			261				
D-A	42	10	48	0.869	40	2.9	3.4	287.522	F
D-BC	423	106	420	1.007	405	10.7	15.2	131.661	F
C-ABD	100	25	862	0.117	100	0.3	0.3	4.737	A
C-D	230	58			230				
C-A	236	59			236				

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-ACD	170	42	347	0.489	174	1.9	1.0	21.158	C
A-BCD	5	1	559	0.008	5	0.0	0.0	6.419	A
AB	13	3			13				
AC	214	53			214				
D-A	34	9	195	0.176	47	3.4	0.2	26.325	D
D-BC	345	86	450	0.767	390	15.2	4.0	73.543	F
C-ABD	68	17	810	0.084	68	0.3	0.2	4.863	A
C-D	195	49			195				
C-A	200	50			200				

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-ACD	142	36	387	0.368	144	1.0	0.6	14.911	B
A-BCD	4	1	544	0.006	4	0.0	0.0	6.601	A
AB	11	3			11				
AC	180	45			180				
D-A	29	7	408	0.070	29	0.2	0.1	9.515	A
D-BC	289	72	473	0.612	298	4.0	1.7	21.623	C
C-ABD	49	12	785	0.063	49	0.2	0.1	4.896	A
C-D	167	42			167				
C-A	171	43			171				

2031 Base + Committed + ALL Development, 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	Right-Left Stagger	Two-way	73.13	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-21	Stream D-BC

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
D10	2031 Base + Committed + ALL Development	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 - Grosvenor Gardens		ONE HOUR	✓	269	100.000
B - Carlton Avenue		ONE HOUR	✓	135	100.000
C - Rose Green Road W		ONE HOUR	✓	550	100.000
D - Rose Green Road N		ONE HOUR	✓	496	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
	A - Grosvenor Gardens	0	36	227	6
	B - Carlton Avenue	40	0	43	52
	C - Rose Green Road W	280	36	0	234
	D - Rose Green Road N	91	51	354	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
	A - Grosvenor Gardens	0	0	0	0
	B - Carlton Avenue	0	0	0	2
	C - Rose Green Road W	0	0	0	1
	D - Rose Green Road N	0	0	1	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-ACD	0.50	23.66	0.9	C	124	186
ABCD	0.02	5.46	0.0	A	9	13
AB					33	49
AC					206	308
D-A	1.09	234.60	7.3	F	84	125
D-BC	1.07	188.49	23.9	F	372	557
C-ABD	0.13	4.84	0.3	A	79	118
C-D					194	291
C-A					232	348

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-ACD	102	25	389	0.262	100	0.0	0.3	12.429	B
ABCD	6	2	666	0.010	6	0.0	0.0	5.456	A
AB	27	7			27				
AC	169	42			169				
D-A	69	17	428	0.160	68	0.0	0.2	9.972	A
D-BC	305	76	473	0.644	298	0.0	1.7	19.852	C
C-ABD	52	13	802	0.065	52	0.0	0.1	4.797	A
C-D	165	41			165				
C-A	197	49			197				

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-ACD	121	30	356	0.341	121	0.3	0.5	15.273	C
ABCD	8	2	675	0.012	8	0.0	0.0	5.397	A
AB	32	8			32				
AC	202	50			202				
D-A	82	20	305	0.268	81	0.2	0.4	16.047	C
D-BC	364	91	450	0.809	357	1.7	3.5	35.907	E
C-ABD	73	18	837	0.087	72	0.1	0.2	4.709	A
C-D	192	48			192				
C-A	230	57			230				

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-ACD	149	37	310	0.479	147	0.5	0.9	21.876	C
ABCD	11	3	690	0.017	11	0.0	0.0	5.308	A
AB	39	10			39				
AC	246	61			246				
D-A	100	25	92	1.088	79	0.4	5.6	183.419	F
D-BC	446	111	418	1.067	400	3.5	15.1	105.986	F
C-ABD	110	27	889	0.123	109	0.2	0.3	4.621	A
C-D	226	56			226				
C-A	270	68			270				

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-ACD	149	37	300	0.495	148	0.9	0.9	23.662	C
ABCD	11	3	689	0.017	11	0.0	0.0	5.310	A
AB	39	10			39				
AC	246	61			246				
D-A	100	25	101	0.989	93	5.6	7.3	284.832	F
D-BC	446	111	417	1.063	411	15.1	23.3	188.484	F
C-ABD	112	28	882	0.127	112	0.3	0.3	4.680	A
C-D	225	56			225				
C-A	269	67			269				

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-ACD	121	30	337	0.361	123	0.9	0.6	16.956	C
ABCD	8	2	675	0.012	8	0.0	0.0	5.401	A
AB	32	8			32				
AC	202	50			202				
D-A	82	20	108	0.757	94	7.3	4.3	217.635	F
D-BC	364	91	448	0.812	432	23.8	7.0	140.345	F
C-ABD	75	19	822	0.091	75	0.3	0.2	4.829	A
C-D	191	48			191				
C-A	229	57			229				

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-ACD	102	25	382	0.266	102	0.6	0.4	12.895	B
ABCD	6	2	666	0.010	6	0.0	0.0	5.460	A
AB	27	7			27				
AC	169	42			169				
D-A	69	17	401	0.171	85	4.3	0.2	11.997	B
D-BC	305	76	473	0.645	325	7.0	1.9	27.159	D
C-ABD	53	13	797	0.066	53	0.2	0.1	4.841	A
C-D	164	41			164				
C-A	197	49			197				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646 []
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Filename: AM_PM_Sefter Road-Hook Lane.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\20170523 Revised Models & Flows

Report generation date: 23/05/2017 12:02:28

- »2031 Base + Committed Development, AM
- »2031 Base + Committed Development, PM
- »2031 Base + Committed + ALL Development, AM
- »2031 Base + Committed + ALL Development, PM
- »2031 Base + Committed + ALL Development (SENSITIVITY), AM
- »2031 Base + Committed + ALL Development (SENSITIVITY), PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2031 Base + Committed Development													
Stream B-C	0.0	7.42	0.02	A	3.22	A	51 %	0.0	6.79	0.01	A	2.48	A	57 %
Stream B-A	0.7	13.62	0.42	B			[Stream B-A]	0.6	13.08	0.38	B			[Stream B-A]
Stream C-AB	0.0	7.82	0.02	A			0.2	5.39	0.10	A	[Stream B-A]			
	2031 Base + Committed + ALL Development													
Stream B-C	0.0	8.55	0.02	A	5.10	A	23 %	0.0	7.27	0.02	A	3.02	A	39 %
Stream B-A	1.3	18.72	0.58	C			[Stream B-A]	0.8	15.31	0.46	C			[Stream B-A]
Stream C-AB	0.0	7.30	0.02	A			0.2	5.46	0.10	A	[Stream B-A]			
	2031 Base + Committed + ALL Development (SENSITIVITY)													
Stream B-C	0.0	0.00	0.00	A	4.52	A	31 %	0.0	0.00	0.00	A	2.88	A	43 %
Stream B-A	1.2	16.70	0.55	C			[Stream B-A]	0.8	14.64	0.45	B			[Stream B-A]
Stream C-AB	0.0	7.31	0.02	A			0.2	5.46	0.10	A	[Stream B-A]			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Sefter Road/Hook Lane
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing layout
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.petitt
Description	

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	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	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
D7	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Committed Development	PM	ONE HOUR	17:00	18:30	15	✓
D9	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	15	✓
D10	2031 Base + Committed + ALL Development	PM	ONE HOUR	17:00	18:30	15	✓
D11	2031 Base + Committed + ALL Development (SENSITIVITY)	AM	ONE HOUR	07:45	09:15	15	✓
D12	2031 Base + Committed + ALL Development (SENSITIVITY)	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

2031 Base + Committed Development, 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	3.22	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	51	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Sefter Road SE		Major
B	Hook Lane		Minor
C	Sefter Road NW		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 - Sefter Road NW	7.20			90.0	✓	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	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 - Hook Lane	One lane plus flare	10.00	9.60	5.70	3.98	3.68	✓	2.00	47	39

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	591	0.102	0.258	0.162	0.368
1	B-C	677	0.098	0.248	-	-
1	C-B	626	0.230	0.230	-	-

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
D7	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	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 - Sefter Road SE		ONE HOUR	✓	494	100.000
B - Hook Lane		ONE HOUR	✓	184	100.000
C - Sefter Road NW		ONE HOUR	✓	106	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Sefter Road SE	B - Hook Lane	C - Sefter Road NW
From	A - Sefter Road SE	0	197	297
	B - Hook Lane	175	0	9
	C - Sefter Road NW	99	7	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Sefter Road SE	B - Hook Lane	C - Sefter Road NW
From	A - Sefter Road SE	0	2	1
	B - Hook Lane	1	0	0
	C - Sefter Road NW	1	29	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-C	0.02	7.42	0.0	A	8	12
B-A	0.42	13.62	0.7	B	161	241
C-AB	0.02	7.82	0.0	A	8	12
C-A					89	134
A-B					181	271
A-C					273	409

Main Results for each time segment

07:45 - 08:00

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-C	7	2	563	0.012	7	0.0	0.0	6.473	A
B-A	132	33	497	0.265	130	0.0	0.4	9.774	A
C-AB	6	2	475	0.013	6	0.0	0.0	7.676	A
C-A	74	18			74				
A-B	148	37			148				
A-C	224	56			224				

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-C	8	2	537	0.015	8	0.0	0.0	6.808	A
B-A	157	39	480	0.328	157	0.4	0.5	11.111	B
C-AB	8	2	474	0.016	8	0.0	0.0	7.746	A
C-A	88	22			88				
A-B	177	44			177				
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-C	10	2	496	0.020	10	0.0	0.0	7.409	A
B-A	193	48	457	0.422	192	0.5	0.7	13.532	B
C-AB	10	3	472	0.021	10	0.0	0.0	7.817	A
C-A	107	27			107				
A-B	217	54			217				
A-C	327	82			327				

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-C	10	2	495	0.020	10	0.0	0.0	7.418	A
B-A	193	48	457	0.422	193	0.7	0.7	13.623	B
C-AB	10	3	473	0.021	10	0.0	0.0	7.785	A
C-A	107	27			107				
A-B	217	54			217				
A-C	327	82			327				

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-C	8	2	536	0.015	8	0.0	0.0	6.820	A
B-A	157	39	480	0.328	158	0.7	0.5	11.209	B
C-AB	8	2	474	0.016	8	0.0	0.0	7.677	A
C-A	88	22			88				
A-B	177	44			177				
A-C	267	67			267				

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-C	7	2	562	0.012	7	0.0	0.0	6.484	A
B-A	132	33	497	0.265	132	0.5	0.4	9.877	A
C-AB	6	2	475	0.013	6	0.0	0.0	7.646	A
C-A	74	18			74				
A-B	148	37			148				
A-C	224	56			224				

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.79	0.0	A	6	8
B-A	0.38	13.08	0.6	B	139	208
C-AB	0.10	5.39	0.2	A	58	88
C-A					263	394
A-B					287	431
A-C					120	180

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-C	5	1	590	0.008	4	0.0	0.0	6.149	A
B-A	114	28	487	0.233	112	0.0	0.3	9.584	A
C-AB	43	11	712	0.060	42	0.0	0.1	5.379	A
C-A	221	55			221				
A-B	236	59			236				
A-C	99	25			99				

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-C	5	1	569	0.009	5	0.0	0.0	6.381	A
B-A	136	34	468	0.290	135	0.3	0.4	10.815	B
C-AB	56	14	731	0.076	55	0.1	0.1	5.333	A
C-A	259	65			259				
A-B	281	70			281				
A-C	118	29			118				

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-C	7	2	537	0.012	7	0.0	0.0	6.784	A
B-A	166	42	442	0.377	165	0.4	0.6	13.005	B
C-AB	77	19	758	0.101	77	0.1	0.2	5.286	A
C-A	309	77			309				
A-B	345	86			345				
A-C	144	36			144				

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-C	7	2	537	0.012	7	0.0	0.0	6.790	A
B-A	166	42	441	0.377	166	0.6	0.6	13.078	B
C-AB	77	19	758	0.101	77	0.2	0.2	5.290	A
C-A	308	77			308				
A-B	345	86			345				
A-C	144	36			144				

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-C	5	1	569	0.009	5	0.0	0.0	6.390	A
B-A	136	34	468	0.290	136	0.6	0.4	10.892	B
C-AB	56	14	731	0.076	56	0.2	0.1	5.342	A
C-A	259	65			259				

A-B	281	70			281				
A-C	118	29			118				

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-C	5	1	589	0.008	5	0.0	0.0	6.156	A
B-A	114	28	487	0.234	114	0.4	0.3	9.671	A
C-AB	43	11	712	0.060	43	0.1	0.1	5.386	A
C-A	221	55			221				
A-B	236	59			236				
A-C	99	25			99				

2031 Base + Committed + ALL Development, 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	5.10	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	23	Stream B-A

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
D9	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	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 - Sefter Road SE		ONE HOUR	✓	511	100.000
B - Hook Lane		ONE HOUR	✓	247	100.000
C - Sefter Road NW		ONE HOUR	✓	138	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - Sefter Road SE	B - Hook Lane	C - Sefter Road NW
	A - Sefter Road SE	0	217	294
	B - Hook Lane	238	0	9
	C - Sefter Road NW	130	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - Sefter Road SE	B - Hook Lane	C - Sefter Road NW
	A - Sefter Road SE	0	2	1
	B - Hook Lane	0	0	0
	C - Sefter Road NW	1	25	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-C	0.02	8.55	0.0	A	8	12
B-A	0.58	18.72	1.3	C	218	328
C-AB	0.02	7.30	0.0	A	10	15
C-A					117	175
A-B					199	299
A-C					270	405

Main Results for each time segment

07:45 - 08:00

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-C	7	2	541	0.013	7	0.0	0.0	6.734	A
B-A	179	45	497	0.360	177	0.0	0.6	11.169	B
C-AB	7	2	503	0.015	7	0.0	0.0	7.258	A
C-A	96	24			96				
A-B	163	41			163				
A-C	221	55			221				

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-C	8	2	503	0.016	8	0.0	0.0	7.271	A
B-A	214	53	479	0.447	213	0.6	0.8	13.481	B
C-AB	9	2	505	0.019	9	0.0	0.0	7.288	A
C-A	115	29			115				
A-B	195	49			195				
A-C	264	66			264				

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-C	10	2	433	0.023	10	0.0	0.0	8.505	A
B-A	262	66	454	0.577	260	0.8	1.3	18.354	C
C-AB	12	3	507	0.024	12	0.0	0.0	7.303	A
C-A	140	35			140				
A-B	239	60			239				
A-C	324	81			324				

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-C	10	2	431	0.023	10	0.0	0.0	8.552	A
B-A	262	66	454	0.577	262	1.3	1.3	18.716	C
C-AB	12	3	507	0.024	12	0.0	0.0	7.273	A
C-A	140	35			140				
A-B	239	60			239				
A-C	324	81			324				

08:45 - 09:00

	Total	Junction							
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Stream	Demand (Veh/hr)	Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	501	0.016	8	0.0	0.0	7.307	A
B-A	214	53	479	0.447	216	1.3	0.8	13.788	E
C-AB	9	2	505	0.019	9	0.0	0.0	7.220	A
C-A	115	29			115				
A-B	195	49			195				
A-C	264	66			264				

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-C	7	2	540	0.013	7	0.0	0.0	6.756	A
B-A	179	45	497	0.360	180	0.8	0.6	11.396	E
C-AB	7	2	504	0.015	8	0.0	0.0	7.228	A
C-A	96	24			96				
A-B	163	41			163				
A-C	221	55			221				

2031 Base + Committed + ALL Development, 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	3.02	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	39	Stream B-A

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
D10	2031 Base + Committed + ALL Development	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 - Sefter Road SE		ONE HOUR	✓	506	100.000
B - Hook Lane		ONE HOUR	✓	186	100.000
C - Sefter Road NW		ONE HOUR	✓	344	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - Sefter Road SE	B - Hook Lane	C - Sefter Road NW
	A - Sefter Road SE	0	353	153
	B - Hook Lane	179	0	7
	C - Sefter Road NW	308	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - Sefter Road SE	B - Hook Lane	C - Sefter Road NW
	A - Sefter Road SE	0	1	2
	B - Hook Lane	1	0	0
	C - Sefter Road NW	0	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-C	0.02	7.27	0.0	A	6	10
B-A	0.46	15.31	0.8	C	164	246
C-AB	0.10	5.46	0.2	A	56	83
C-A					260	390
A-B					324	486
A-C					140	211

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-C	5	1	574	0.009	5	0.0	0.0	6.328	A
B-A	135	34	481	0.280	133	0.0	0.4	10.320	B
C-AB	41	10	700	0.058	40	0.0	0.1	5.456	A
C-A	218	55			218				
A-B	266	66			266				
A-C	115	29			115				

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-C	6	2	548	0.011	6	0.0	0.0	6.644	A
B-A	161	40	460	0.350	160	0.4	0.5	11.979	B
C-AB	53	13	717	0.074	53	0.1	0.1	5.422	A
C-A	256	64			256				
A-B	317	79			317				
A-C	138	34			138				

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-C	8	2	504	0.015	8	0.0	0.0	7.256	A
B-A	197	49	432	0.456	196	0.5	0.8	15.158	C
C-AB	73	18	742	0.099	73	0.1	0.2	5.385	A
C-A	305	76			305				
A-B	389	97			389				
A-C	168	42			168				

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-C	8	2	503	0.015	8	0.0	0.0	7.270	A
B-A	197	49	432	0.456	197	0.8	0.8	15.307	C
C-AB	73	18	742	0.099	73	0.2	0.2	5.390	A
C-A	305	76			305				
A-B	389	97			389				
A-C	168	42			168				

18:00 - 18:15

	Total	Junction							
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Stream	Demand (Veh/hr)	Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	547	0.012	6	0.0	0.0	6.656	A
B-A	161	40	460	0.350	162	0.8	0.5	12.122	B
C-AB	53	13	717	0.074	53	0.2	0.1	5.429	A
C-A	256	64			256				
A-B	317	79			317				
A-C	138	34			138				

18:18 - 18:38

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-C	5	1	573	0.009	5	0.0	0.0	6.339	A
B-A	135	34	480	0.281	135	0.5	0.4	10.453	B
C-AB	41	10	700	0.058	41	0.1	0.1	5.465	A
C-A	218	55			218				
A-B	266	66			266				
A-C	115	29			115				

2031 Base + Committed + ALL Development (SENSITIVITY), 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	4.52	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	31	Stream B-A

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
D11	2031 Base + Committed + ALL Development (SENSITIVITY)	AM	ONE HOUR	07:45	09:15	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 - Sefter Road SE		ONE HOUR	✓	512	100.000
B - Hook Lane		ONE HOUR	✓	238	100.000
C - Sefter Road NW		ONE HOUR	✓	138	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Sefter Road SE	B - Hook Lane	C - Sefter Road NW
From	A - Sefter Road SE	0	357	155
	B - Hook Lane	238	0	0
	C - Sefter Road NW	130	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Sefter Road SE	B - Hook Lane	C - Sefter Road NW
From	A - Sefter Road SE	0	1	3
	B - Hook Lane	0	0	0
	C - Sefter Road NW	1	25	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-C	0.00	0.00	0.0	A	0	0
B-A	0.55	16.70	1.2	C	218	328
C-AB	0.02	7.31	0.0	A	10	15
C-A					117	175
A-B					328	491
A-C					142	213

Main Results for each time segment

07:45 - 08:00

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-C	0	0	566	0.000	0	0.0	0.0	0.000	A
B-A	179	45	513	0.349	177	0.0	0.5	10.648	B
C-AB	7	2	503	0.015	7	0.0	0.0	7.261	A
C-A	96	24			96				
A-B	269	67			269				
A-C	117	29			117				

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-C	0	0	543	0.000	0	0.0	0.0	0.000	A
B-A	214	53	498	0.430	213	0.5	0.7	12.595	B
C-AB	9	2	505	0.019	9	0.0	0.0	7.293	A
C-A	115	29			115				
A-B	321	80			321				
A-C	139	35			139				

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-C	0	0	511	0.000	0	0.0	0.0	0.000	A
B-A	262	66	477	0.549	260	0.7	1.2	16.453	C
C-AB	12	3	507	0.024	12	0.0	0.0	7.308	A
C-A	140	35			140				
A-B	393	98			393				
A-C	171	43			171				

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-C	0	0	511	0.000	0	0.0	0.0	0.000	A
B-A	262	66	477	0.549	262	1.2	1.2	16.700	C
C-AB	12	3	507	0.024	12	0.0	0.0	7.278	A
C-A	140	35			140				
A-B	393	98			393				
A-C	171	43			171				

08:45 - 09:00

	Total	Junction							
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Stream	Demand (Veh/hr)	Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	542	0.000	0	0.0	0.0	0.000	A
B-A	214	53	498	0.430	216	1.2	0.8	12.824	E
C-AB	9	2	505	0.019	9	0.0	0.0	7.225	A
C-A	115	29			115				
A-B	321	80			321				
A-C	139	35			139				

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-C	0	0	565	0.000	0	0.0	0.0	0.000	A
B-A	179	45	513	0.349	180	0.8	0.5	10.841	E
C-AB	7	2	503	0.015	8	0.0	0.0	7.232	A
C-A	96	24			96				
A-B	269	67			269				
A-C	117	29			117				

2031 Base + Committed + ALL Development (SENSITIVITY), 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	2.88	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	43	Stream B-A

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
D12	2031 Base + Committed + ALL Development (SENSITIVITY)	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 - Sefter Road SE		ONE HOUR	✓	508	100.000
B - Hook Lane		ONE HOUR	✓	179	100.000
C - Sefter Road NW		ONE HOUR	✓	344	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Sefter Road SE	B - Hook Lane	C - Sefter Road NW
From	A - Sefter Road SE	0	415	93
	B - Hook Lane	179	0	0
	C - Sefter Road NW	308	36	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Sefter Road SE	B - Hook Lane	C - Sefter Road NW
From	A - Sefter Road SE	0	0	2
	B - Hook Lane	1	0	0
	C - Sefter Road NW	0	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-C	0.00	0.00	0.0	A	0	0
B-A	0.45	14.64	0.8	B	164	246
C-AB	0.10	5.46	0.2	A	56	83
C-A					260	390
A-B					381	571
A-C					85	128

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-C	0	0	585	0.000	0	0.0	0.0	0.000	A
B-A	135	34	488	0.276	133	0.0	0.4	10.110	B
C-AB	41	10	700	0.058	40	0.0	0.1	5.452	A
C-A	218	55			218				
A-B	312	78			312				
A-C	70	18			70				

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-C	0	0	565	0.000	0	0.0	0.0	0.000	A
B-A	161	40	469	0.343	160	0.4	0.5	11.644	B
C-AB	53	13	718	0.074	53	0.1	0.1	5.416	A
C-A	256	64			256				
A-B	373	93			373				
A-C	84	21			84				

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-C	0	0	538	0.000	0	0.0	0.0	0.000	A
B-A	197	49	443	0.445	196	0.5	0.8	14.513	B
C-AB	73	18	743	0.099	73	0.1	0.2	5.378	A
C-A	306	76			306				
A-B	457	114			457				
A-C	102	26			102				

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-C	0	0	537	0.000	0	0.0	0.0	0.000	A
B-A	197	49	443	0.445	197	0.8	0.8	14.637	B
C-AB	73	18	743	0.099	73	0.2	0.2	5.385	A
C-A	305	76			305				
A-B	457	114			457				
A-C	102	26			102				

18:00 - 18:15

	Total	Junction							
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Stream	Demand (Veh/hr)	Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	0	0	565	0.000	0	0.0	0.0	0.000	A
B-A	161	40	469	0.343	162	0.8	0.5	11.770	E
C-AB	53	13	718	0.074	53	0.2	0.1	5.422	A
C-A	256	64			256				
A-B	373	93			373				
A-C	84	21			84				

18:18 - 18:38

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-C	0	0	584	0.000	0	0.0	0.0	0.000	A
B-A	135	34	488	0.276	135	0.5	0.4	10.234	E
C-AB	41	10	701	0.058	41	0.1	0.1	5.461	A
C-A	218	55			218				
A-B	312	78			312				
A-C	70	18			70				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646 []

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Filename: AM_PM_Pagham Road-Sefter Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\20170523 Revised Models & Flows

Report generation date: 23/05/2017 11:31:17

- »2031 Base + Committed Development, AM
- »2031 Base + Committed Development, PM
- »2031 Base + Committed + ALL Development, AM
- »2031 Base + Committed + ALL Development, PM
- »2031 Base + Committed + ALL Development (SENSITIVITY), AM
- »2031 Base + Committed + ALL Development (SENSITIVITY), PM

Summary of junction performance

	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
Stream B-AC	34.2	273.96	1.14	F	97.71	F	-27 % [Stream B-AC]	0.8	18.39	0.44	C	2.49	A	31 % [Stream B-AC]
Stream C-AB	0.0	3.83	0.01	A				0.0	6.00	0.00	A			
Stream B-AC	65.0	612.05	1.31	F	197.43	F	-34 % [Stream B-AC]	1.2	25.17	0.54	D	3.25	A	11 % [Stream B-AC]
Stream C-AB	0.0	3.70	0.01	A				0.0	5.79	0.01	A			
Stream B-AC	8.6	105.59	0.95	F	23.02	C	-17 % [Stream B-AC]	0.5	17.85	0.34	C	1.43	A	33 % [Stream B-AC]
Stream C-AB	0.0	3.47	0.01	A				0.0	5.37	0.01	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Pagham Road/Sefter Road
Location	
Site number	
Date	15/06/2016
Version	
Status	Existing Layout
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
Description	

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	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	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
D7	2031 Base + Committed Development	AM	ONE HOUR	07:15	08:45	15	✓
D8	2031 Base + Committed Development	PM	ONE HOUR	17:00	18:30	15	✓
D9	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:15	08:45	15	✓
D10	2031 Base + Committed + ALL Development	PM	ONE HOUR	17:00	18:30	15	✓
D11	2031 Base + Committed + ALL Development (SENSITIVITY)	AM	ONE HOUR	07:15	08:45	15	✓
D12	2031 Base + Committed + ALL Development (SENSITIVITY)	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

2031 Base + Committed Development, 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	87.71	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-27	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road N		Major
B	Sefter Road		Minor
C	Pagham Road S		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 - Pagham Road S	6.00			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 - Sefter Road	One lane	3.20	22	30

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	509	0.093	0.235	0.148	0.335
1	B-C	656	0.101	0.254	-	-
1	C-B	719	0.278	0.278	-	-

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
D7	2031 Base + Committed Development	AM	ONE HOUR	07:15	08:45	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 - Pagham Road N		ONE HOUR	✓	147	100.000
B - Sefter Road		ONE HOUR	✓	397	100.000
C - Pagham Road S		ONE HOUR	✓	565	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
A - Pagham Road N		0	80	67
B - Sefter Road		397	0	0
C - Pagham Road S		561	4	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
A - Pagham Road N		0	0	9
B - Sefter Road		1	0	0
C - Pagham Road S		1	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	1.14	273.98	34.2	F	364	546
C-AB	0.01	3.83	0.0	A	8	12
C-A					511	766
A-B					73	110
A-C					61	92

Main Results for each time segment

07:15 - 07:30

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	299	75	423	0.707	290	0.0	2.2	25.703	D
C-AB	5	1	946	0.006	5	0.0	0.0	3.825	A
C-A	420	105			420				
A-B	60	15			60				
A-C	50	13			50				

07:30 - 07:45

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	357	89	407	0.877	346	2.2	5.0	50.961	F
C-AB	7	2	992	0.007	7	0.0	0.0	3.653	A
C-A	501	125			501				
A-B	72	18			72				
A-C	60	15			60				

07:45 - 08:00

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	437	109	385	1.138	375	5.0	20.5	145.698	F
C-AB	11	3	1057	0.010	11	0.0	0.0	3.439	A
C-A	611	153			611				
A-B	88	22			88				
A-C	74	18			74				

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	437	109	385	1.138	382	20.5	34.2	273.984	F
C-AB	11	3	1057	0.010	11	0.0	0.0	3.440	A
C-A	611	153			611				
A-B	88	22			88				
A-C	74	18			74				

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	357	89	407	0.877	395	34.2	24.8	289.810	F
C-AB	7	2	992	0.007	7	0.0	0.0	3.656	A
C-A	501	125			501				
A-B	72	18			72				
A-C	60	15			60				

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	299	75	423	0.707	385	24.8	3.0	118.308	F
C-AB	5	1	946	0.006	5	0.0	0.0	3.826	A
C-A	420	105			420				
A-B	60	15			60				
A-C	50	13			50				

2031 Base + Committed Development, 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	2.49	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	31	Stream B-AC

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
D8	2031 Base + Committed Development	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 - Pagham Road N		ONE HOUR	✓	735	100.000
B - Sefter Road		ONE HOUR	✓	137	100.000
C - Pagham Road S		ONE HOUR	✓	145	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
	A - Pagham Road N	0	347	388
	B - Sefter Road	131	0	6
	C - Pagham Road S	143	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
	A - Pagham Road N	0	0	2
	B - Sefter Road	1	0	17
	C - Pagham Road S	5	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	0.44	18.39	0.8	C	126	189
C-AB	0.00	6.00	0.0	A	2	4
C-A					131	196
A-B					318	478
A-C					356	534

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	103	26	397	0.260	102	0.0	0.3	12.135	B
C-AB	2	0.45	635	0.003	2	0.0	0.0	5.682	A
C-A	107	27			107				
A-B	261	65			261				
A-C	292	73			292				

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	123	31	376	0.328	123	0.3	0.5	14.184	B
C-AB	2	0.57	621	0.004	2	0.0	0.0	5.809	A
C-A	128	32			128				
A-B	312	78			312				
A-C	349	87			349				

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	151	38	346	0.435	150	0.5	0.7	18.207	C
C-AB	3	0.75	603	0.005	3	0.0	0.0	5.988	A
C-A	157	39			157				
A-B	382	96			382				
A-C	427	107			427				

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	151	38	346	0.435	151	0.7	0.8	18.394	C
C-AB	3	0.75	603	0.005	3	0.0	0.0	5.995	A
C-A	157	39			157				
A-B	382	96			382				
A-C	427	107			427				

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	123	31	376	0.328	124	0.8	0.5	14.364	B
C-AB	2	0.57	621	0.004	2	0.0	0.0	5.825	A
C-A	128	32			128				
A-B	312	78			312				
A-C	349	87			349				

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	103	26	397	0.260	104	0.5	0.4	12.295	B
C-AB	2	0.45	635	0.003	2	0.0	0.0	5.690	A
C-A	107	27			107				
A-B	261	65			261				
A-C	292	73			292				

2031 Base + Committed + ALL Development, 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	197.43	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-34	Stream B-AC

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
D9	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:15	08:45	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 - Pagham Road N		ONE HOUR	✓	218	100.000
B - Sefter Road		ONE HOUR	✓	425	100.000
C - Pagham Road S		ONE HOUR	✓	662	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
	A - Pagham Road N	0	95	123
	B - Sefter Road	423	0	2
	C - Pagham Road S	658	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
	A - Pagham Road N	0	0	5
	B - Sefter Road	0	0	0
	C - Pagham Road S	1	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	1.31	812.05	85.8	F	390	585
C-AB	0.01	3.70	0.0	A	9	14
C-A					598	898
A-B					87	131
A-C					113	169

Main Results for each time segment

07:15 - 07:30

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	320	80	406	0.788	307	0.0	3.1	33.344	D
C-AB	6	2	980	0.006	6	0.0	0.0	3.693	A
C-A	492	123			492				
A-B	72	18			72				
A-C	93	23			93				

07:30 - 07:45

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	382	96	386	0.991	357	3.1	9.5	84.650	F
C-AB	8	2	1034	0.008	8	0.0	0.0	3.507	A
C-A	587	147			587				
A-B	85	21			85				
A-C	111	28			111				

07:45 - 08:00

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	468	117	358	1.308	355	9.5	37.7	261.502	F
C-AB	13	3	1110	0.011	13	0.0	0.0	3.278	A
C-A	716	179			716				
A-B	105	26			105				
A-C	135	34			135				

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	468	117	358	1.308	357	37.7	65.4	522.948	F
C-AB	13	3	1110	0.011	13	0.0	0.0	3.279	A
C-A	716	179			716				
A-B	105	26			105				
A-C	135	34			135				

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	382	96	386	0.991	381	65.4	65.8	812.048	F
C-AB	8	2	1034	0.008	8	0.0	0.0	3.510	A
C-A	587	147			587				
A-B	85	21			85				
A-C	111	28			111				

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	320	80	406	0.788	400	65.6	45.6	503.303	F
C-AB	6	2	980	0.006	6	0.0	0.0	3.695	A
C-A	492	123			492				
A-B	72	18			72				
A-C	93	23			93				

2031 Base + Committed + ALL Development, 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	3.25	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	11	Stream B-AC

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
D10	2031 Base + Committed + ALL Development	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 - Pagham Road N		ONE HOUR	✓	841	100.000
B - Sefter Road		ONE HOUR	✓	154	100.000
C - Pagham Road S		ONE HOUR	✓	213	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
	A - Pagham Road N	0	364	477
	B - Sefter Road	147	0	7
	C - Pagham Road S	209	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
	A - Pagham Road N	0	0	1
	B - Sefter Road	1	0	14
	C - Pagham Road S	3	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	0.54	25.17	1.2	D	141	212
C-AB	0.01	5.79	0.0	A	5	8
C-A					190	285
A-B					334	501
A-C					438	657

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	116	29	374	0.310	114	0.0	0.4	13.769	B
C-AB	4	1	650	0.006	4	0.0	0.0	5.571	A
C-A	156	39			156				
A-B	274	69			274				
A-C	359	90			359				

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	138	35	348	0.398	138	0.4	0.6	17.043	C
C-AB	5	1	640	0.008	5	0.0	0.0	5.662	A
C-A	186	47			186				
A-B	327	82			327				
A-C	429	107			429				

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	170	42	312	0.543	168	0.6	1.1	24.575	C
C-AB	7	2	629	0.011	7	0.0	0.0	5.781	A
C-A	228	57			228				
A-B	401	100			401				
A-C	525	131			525				

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	170	42	312	0.543	169	1.1	1.2	25.170	D
C-AB	7	2	629	0.011	7	0.0	0.0	5.788	A
C-A	228	57			228				
A-B	401	100			401				
A-C	525	131			525				

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	138	35	348	0.398	140	1.2	0.7	17.487	C
C-AB	5	1	640	0.008	5	0.0	0.0	5.673	A
C-A	186	47			186				
A-B	327	82			327				
A-C	429	107			429				

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	116	29	374	0.310	117	0.7	0.5	14.051	B
C-AB	4	1	650	0.006	4	0.0	0.0	5.579	A
C-A	156	39			156				
A-B	274	69			274				
A-C	359	90			359				

2031 Base + Committed + ALL Development (SENSITIVITY), 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	23.02	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-17	Stream B-AC

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
D11	2031 Base + Committed + ALL Development (SENSITIVITY)	AM	ONE HOUR	07:15	08:45	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 - Pagham Road N		ONE HOUR	✓	218	100.000
B - Sefter Road		ONE HOUR	✓	285	100.000
C - Pagham Road S		ONE HOUR	✓	802	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
	A - Pagham Road N	0	95	123
	B - Sefter Road	283	0	2
	C - Pagham Road S	798	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
	A - Pagham Road N	0	0	5
	B - Sefter Road	1	0	0
	C - Pagham Road S	1	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	0.95	195.59	8.6	F	262	392
C-AB	0.01	3.47	0.0	A	11	17
C-A					725	1087
A-B					87	131
A-C					113	169

Main Results for each time segment

07:15 - 07:30

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	215	54	387	0.555	210	0.0	1.2	19.872	C
C-AB	7	2	1046	0.007	7	0.0	0.0	3.464	A
C-A	597	149			597				
A-B	72	18			72				
A-C	93	23			93				

07:30 - 07:45

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	256	64	364	0.705	252	1.2	2.2	31.259	D
C-AB	10	3	1113	0.009	10	0.0	0.0	3.261	A
C-A	711	178			711				
A-B	85	21			85				
A-C	111	28			111				

07:45 - 08:00

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	314	78	332	0.946	295	2.2	6.8	74.885	F
C-AB	16	4	1208	0.013	16	0.0	0.0	3.018	A
C-A	867	217			867				
A-B	105	26			105				
A-C	135	34			135				

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	314	78	332	0.946	306	6.8	8.6	105.587	F
C-AB	16	4	1208	0.013	16	0.0	0.0	3.021	A
C-A	867	217			867				
A-B	105	26			105				
A-C	135	34			135				

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	256	64	364	0.705	280	8.6	2.7	50.550	F
C-AB	10	3	1113	0.009	10	0.0	0.0	3.266	A
C-A	711	178			711				
A-B	85	21			85				
A-C	111	28			111				

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	215	54	387	0.555	220	2.7	1.3	22.265	D
C-AB	7	2	1046	0.007	7	0.0	0.0	3.465	A
C-A	597	149			597				
A-B	72	18			72				
A-C	93	23			93				

2031 Base + Committed + ALL Development (SENSITIVITY), 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	1.43	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	33	Stream B-AC

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
D12	2031 Base + Committed + ALL Development (SENSITIVITY)	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 - Pagham Road N		ONE HOUR	✓	841	100.000
B - Sefter Road		ONE HOUR	✓	94	100.000
C - Pagham Road S		ONE HOUR	✓	273	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
	A - Pagham Road N	0	364	477
	B - Sefter Road	87	0	7
	C - Pagham Road S	269	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
	A - Pagham Road N	0	0	1
	B - Sefter Road	1	0	14
	C - Pagham Road S	3	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	0.34	17.85	0.5	C	86	129
C-AB	0.01	5.37	0.0	A	6	9
C-A					245	367
A-B					334	501
A-C					438	657

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	71	18	370	0.191	70	0.0	0.2	11.965	B
C-AB	4	1	681	0.006	4	0.0	0.0	5.317	A
C-A	201	50			201				
A-B	274	69			274				
A-C	359	90			359				

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	85	21	343	0.247	84	0.2	0.3	13.907	B
C-AB	6	1	679	0.008	6	0.0	0.0	5.344	A
C-A	240	60			240				
A-B	327	82			327				
A-C	429	107			429				

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	103	26	305	0.339	103	0.3	0.5	17.735	C
C-AB	8	2	678	0.012	8	0.0	0.0	5.368	A
C-A	293	73			293				
A-B	401	100			401				
A-C	525	131			525				

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	103	26	305	0.339	103	0.5	0.5	17.854	C
C-AB	8	2	678	0.012	8	0.0	0.0	5.373	A
C-A	293	73			293				
A-B	401	100			401				
A-C	525	131			525				

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	85	21	343	0.247	85	0.5	0.3	14.020	B
C-AB	6	1	679	0.008	6	0.0	0.0	5.358	A
C-A	240	60			240				
A-B	327	82			327				
A-C	429	107			429				

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	71	18	370	0.191	71	0.3	0.2	12.069	B
C-AB	4	1	681	0.006	4	0.0	0.0	5.323	A
C-A	201	50			201				
A-B	274	69			274				
A-C	359	90			359				

Basic Results Summary

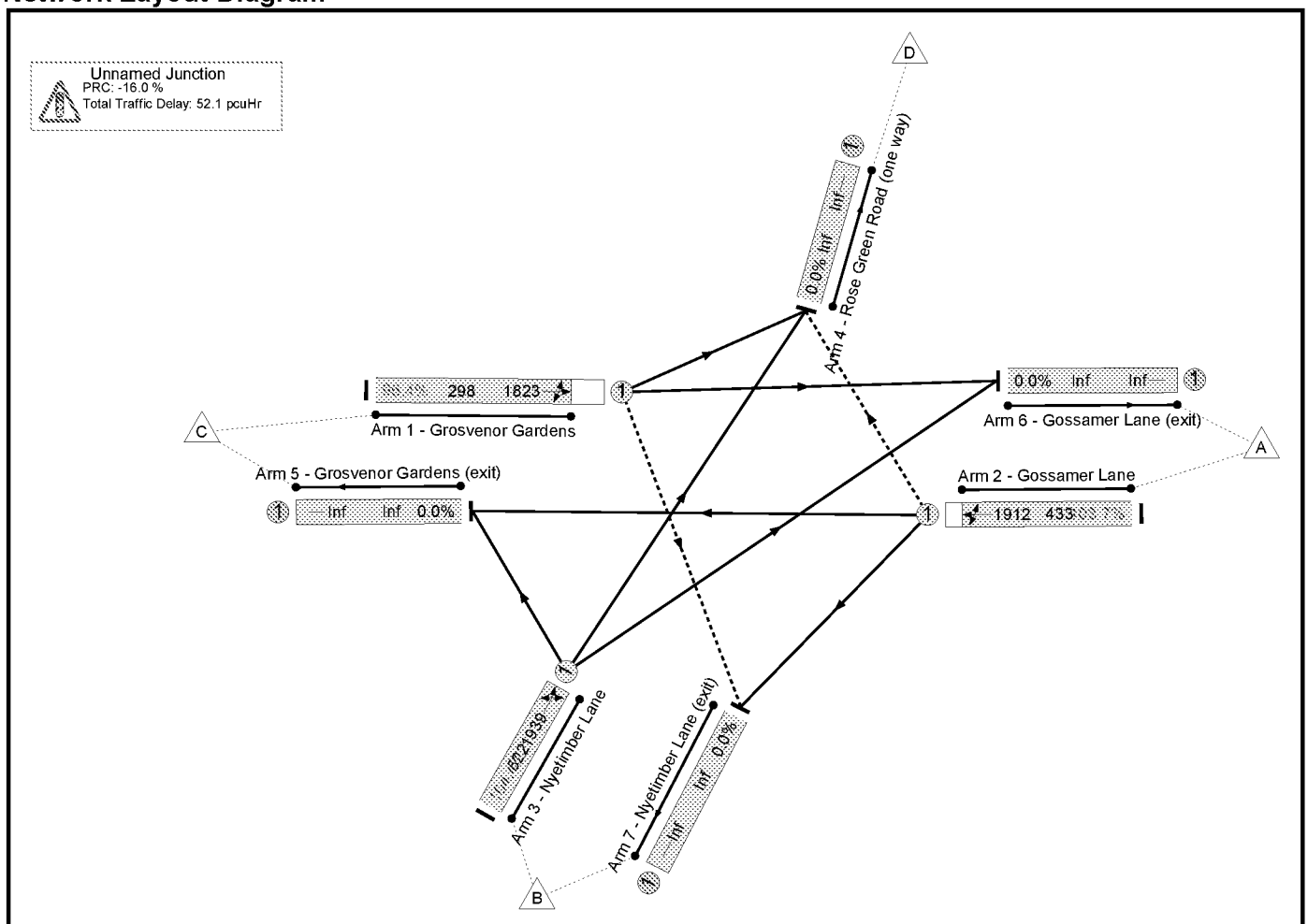
Basic Results Summary

User and Project Details

Project:	Land West of Hook Lane, Pagham
Title:	Grosvenor Gdns-Gossamer La-Nyetimber La-Rose Green Rd
Location:	Grosvenor Gdns-Gossamer La-Nyetimber La-Rose Green Rd, Bognor Regis
File name:	Grosvenor-Gossamer_revB.lsg3x
Author:	P Pettitt
Company:	RPS Group
Address:	Milton Park, Oxfordshire
Notes:	

Scenario 13: '2031 Base + Committed AM' (FG13: '2031 Base + Committed AM', Plan 2: 'Double Cycle')

Network Layout Diagram



Basic Results Summary

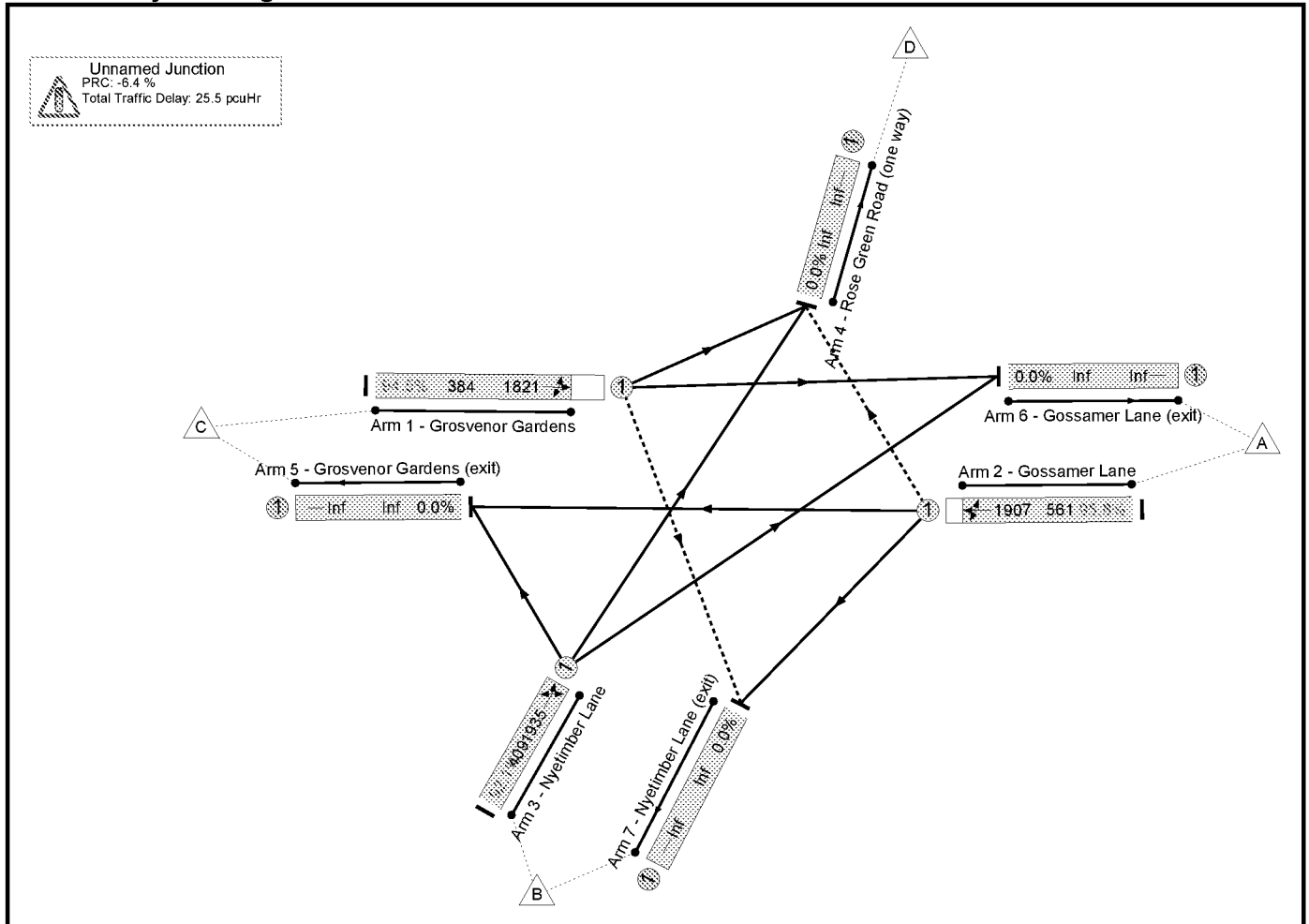
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Grosvenor Gdns-Gossamer La-Nyetimber La-Rose Green Rd	-	-	-		-	-	-	-	-	-	104.4%	81	0	30	52.1	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	104.4%	81	0	30	52.1	-	-
1/1	Grosvenor Gardens Left Ahead Right	O	A		2	31	-	287	1823	298	96.4%	44	0	23	7.9	99.6	11.2
2/1	Gossamer Lane Right Ahead Left	O	B		2	31	-	449	1912	433	103.7%	36	0	7	20.2	162.1	25.6
3/1	Nyetimber Lane Ahead Left Right	U	C		2	26	-	545	1939	522	104.4%	-	-	-	23.9	158.1	31.4
C1 PRC for Signalled Lanes (%): -16.0 PRC Over All Lanes (%): -16.0 Total Delay for Signalled Lanes (pcuHr): 52.09 Total Delay Over All Lanes(pcuHr): 52.09 Cycle Time (s): 104																	

Basic Results Summary

Scenario 14: '2031 Base + Committed PM' (FG14: '2031 Base + Committed PM', Plan 2: 'Double Cycle')

Network Layout Diagram



Basic Results Summary

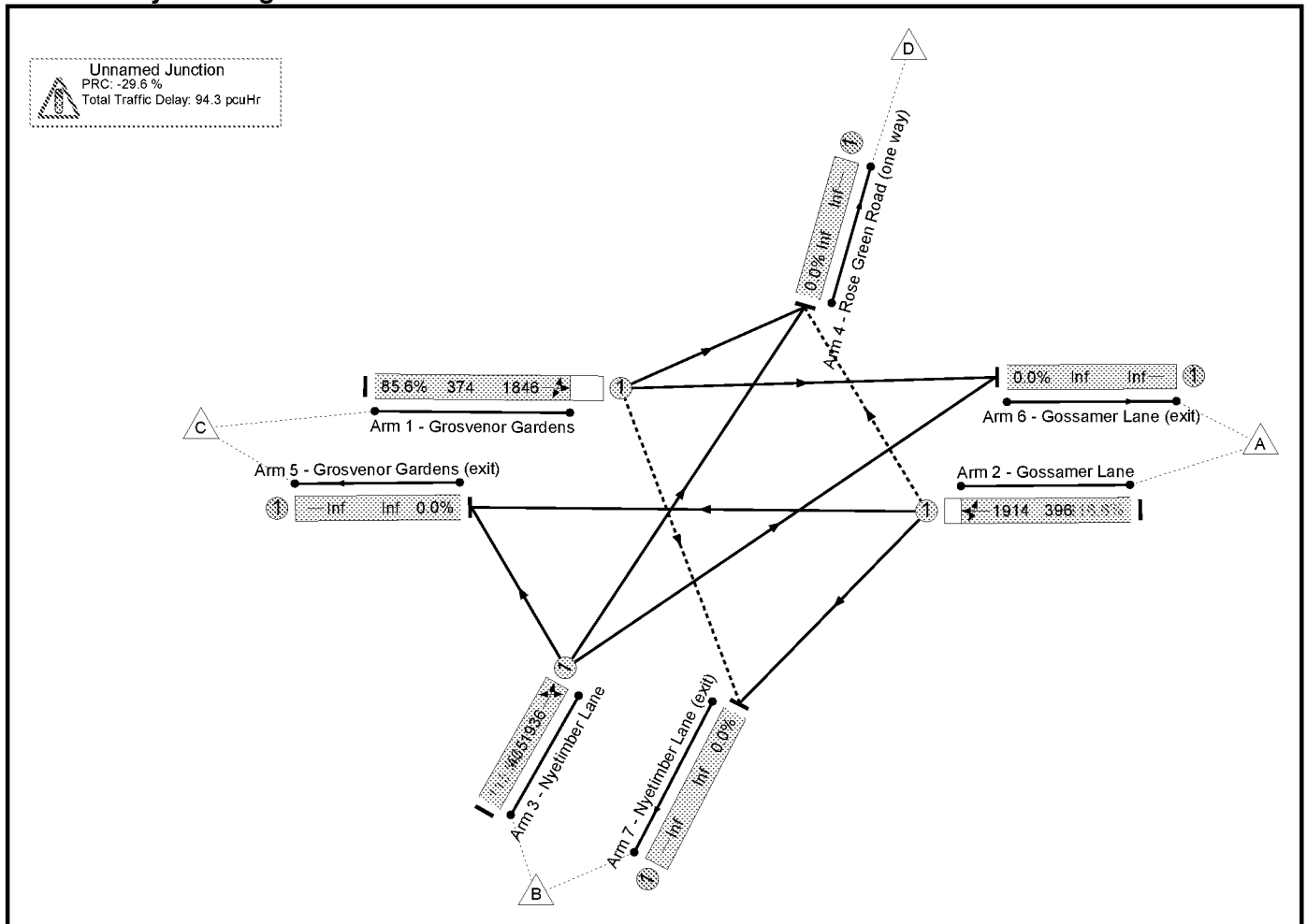
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network: Grosvenor Gdns-Gossamer La-Nyetimber La-Rose Green Rd	-	-	-		-	-	-	-	-	-	95.8%	98	0	30	25.5	-	-	
Unnamed Junction	-	-	-		-	-	-	-	-	-	95.8%	98	0	30	25.5	-	-	
1/1	Grosvenor Gardens Left Ahead Right	O	A		2	37	-	363	1821	384	94.5%	62	0	27	7.3	72.2	11.7	
2/1	Gossamer Lane Right Ahead Left	O	B		2	37	-	537	1907	561	95.8%	36	0	3	11.1	74.4	17.2	
3/1	Nyetimber Lane Ahead Left Right	U	C		2	20	-	377	1935	409	92.1%	-	-	-	7.1	68.2	12.0	
C1		PRC for Signalled Lanes (%):					-6.4	Total Delay for Signalled Lanes (pcuHr):					25.52	Cycle Time (s): 104				
		PRC Over All Lanes (%):					-6.4	Total Delay Over All Lanes(pcuHr):					25.52					

Basic Results Summary

Scenario 15: '2031 Base + Committed + All Dev AM' (FG15: '2031 Base + Committed + All Dev AM', Plan 2: 'Double Cycle')

Network Layout Diagram



Basic Results Summary

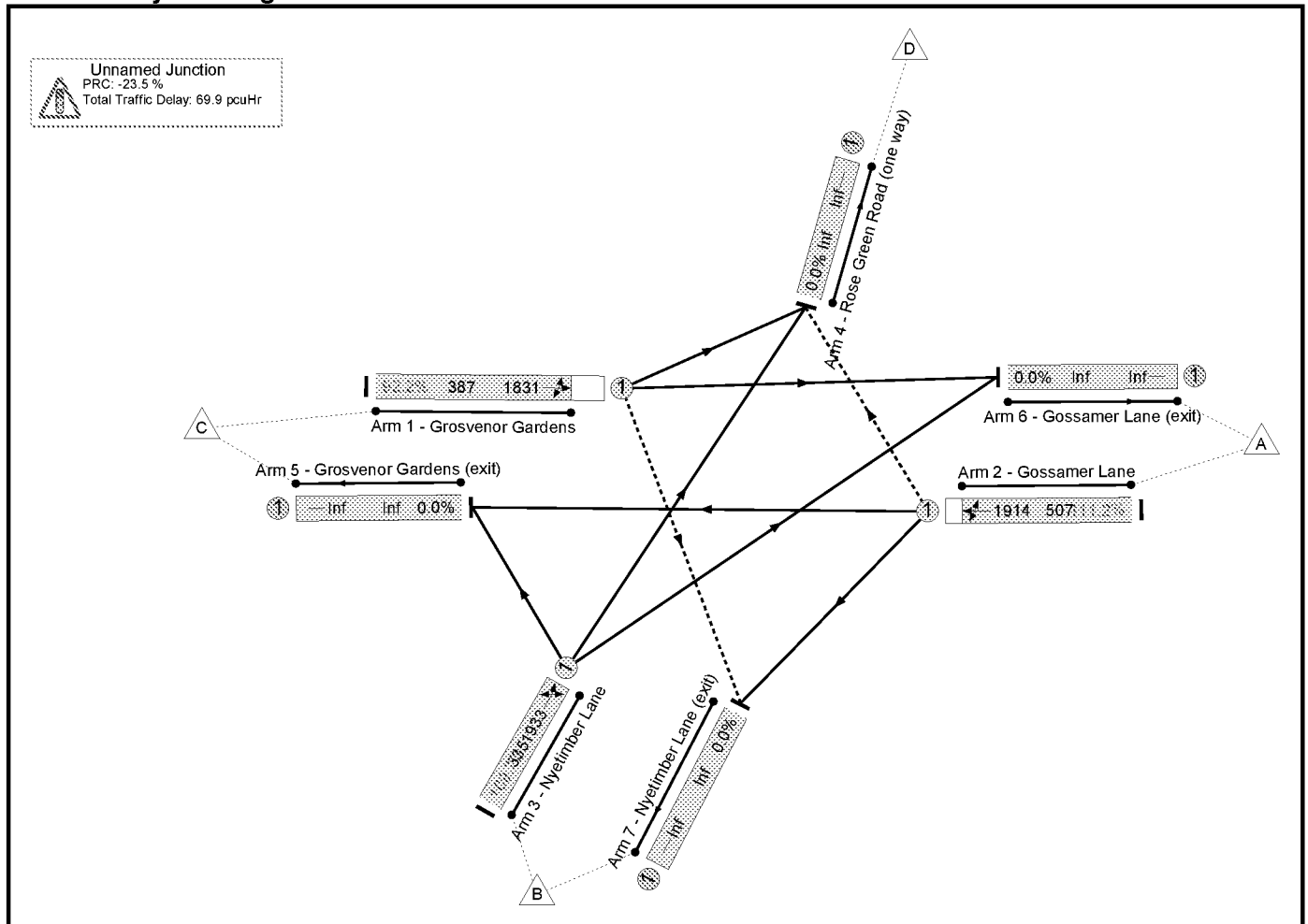
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Grosvenor Gdns-Gossamer La-Nyetimber La-Rose Green Rd	-	-	-		-	-	-	-	-	-	116.6%	83	0	18	94.3	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	116.6%	83	0	18	94.3	-	-
1/1	Grosvenor Gardens Left Ahead Right	O	A		2	34	-	320	1846	374	85.6%	50	0	14	4.1	46.5	7.9
2/1	Gossamer Lane Right Ahead Left	O	B		2	34	-	462	1914	396	115.8%	32	0	5	42.7	332.6	49.4
3/1	Nyetimber Lane Ahead Left Right	U	C		2	23	-	538	1936	465	115.5%	-	-	-	47.4	317.5	52.0
C1 PRC for Signalled Lanes (%): -29.6 PRC Over All Lanes (%): -29.6 Total Delay for Signalled Lanes (pcuHr): 94.26 Total Delay Over All Lanes(pcuHr): 94.26 Cycle Time (s): 104																	

Basic Results Summary

Scenario 16: '2031 Base + Committed + All Dev PM' (FG16: '2031 Base + Committed + All Dev PM', Plan 2: 'Double Cycle')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Grosvenor Gdns-Gossamer La-Nyetimber La-Rose Green Rd	-	-	-		-	-	-	-	-	-	111.2%	89	0	24	69.9	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	111.2%	89	0	24	69.9	-	-
1/1	Grosvenor Gardens Left Ahead Right	O	A		2	41	-	357	1831	387	92.2%	60	0	21	6.0	60.1	10.1
2/1	Gossamer Lane Right Ahead Left	O	B		2	41	-	564	1914	507	111.2%	29	0	3	39.1	249.6	48.2
3/1	Nyetimber Lane Ahead Left Right	U	C		2	16	-	367	1933	335	108.7%	-	-	-	24.8	243.5	27.9
C1 PRC for Signalled Lanes (%): -23.5 PRC Over All Lanes (%): -23.5 Total Delay for Signalled Lanes (pcuHr): 69.90 Total Delay Over All Lanes(pcuHr): 69.90 Cycle Time (s): 104																	

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.1.4648 [J]
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Filename: AM_PM_Gossamer Lane-Aldwick Road-Barrack Lane.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207 Revised Traffic Flows\20170207_2031 Base and Committed Development

Report generation date: 07/02/2017 15:57:33

»2031 Base + Committed Development, AM

»2031 Base + Committed Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed Development														
1 - Aldwick Road	0.2	4.33	0.19	A	4.19	A	175 %	1.7	9.67	0.63	A	7.89	A	33 %
2 - Aldwick Street	0.3	3.72	0.21	A			[3 - Barrack Lane]	1.3	8.41	0.57	A			[1 - Aldwick Road]
3 - Barrack Lane	0.2	4.78	0.19	A				0.4	7.05	0.28	A			
4 - Gossamer Lane	0.4	4.16	0.28	A				0.7	5.33	0.42	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Gossamer Lane/Aldwick Road/Barrack Lane
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing junction
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
Description	

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	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	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
D7	2031 Base + Committed Development	AM	ONE HOUR	08:00	09:30	15	✓

D8	2031 Base + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓
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Analysis Set Details

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

2031 Base + Committed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	4.19	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	175	3 - Barrack Lane

Arms

Arms

Arm	Name	Description
1	Aldwick Road	
2	Aldwick Street	
3	Barrack Lane	
4	Gossamer Lane	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Aldwick Road	3.70	4.50	8.1	8.8	24.0	28.5	
2 - Aldwick Street	4.10	5.50	1.3	16.9	24.0	18.5	
3 - Barrack Lane	3.50	5.10	1.7	12.2	24.0	25.5	
4 - Gossamer Lane	3.70	5.60	1.8	20.9	24.0	17.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Aldwick Road	0.548	1231
2 - Aldwick Street	0.606	1379
3 - Barrack Lane	0.547	1163
4 - Gossamer Lane	0.597	1312

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

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
D7	2031 Base + Committed Development	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 (%)
1 - Aldwick Road		ONE HOUR	✓	174	100.000
2 - Aldwick Street		ONE HOUR	✓	235	100.000

3 - Barrack Lane	ONE HOUR	✓	162	100.000
4 - Gossamer Lane	ONE HOUR	✓	307	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Aldwick Road	2 - Aldwick Street	3 - Barrack Lane	4 - Gossamer Lane
From	1 - Aldwick Road	0	21	35	118
	2 - Aldwick Street	27	0	29	179
	3 - Barrack Lane	59	48	0	55
	4 - Gossamer Lane	106	192	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Aldwick Road	2 - Aldwick Street	3 - Barrack Lane	4 - Gossamer Lane
From	1 - Aldwick Road	0	12	3	5
	2 - Aldwick Street	5	0	4	3
	3 - Barrack Lane	6	3	0	0
	4 - Gossamer Lane	2	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Aldwick Road	0.19	4.33	0.2	A	160	239
2 - Aldwick Street	0.21	3.72	0.3	A	216	323
3 - Barrack Lane	0.19	4.78	0.2	A	149	223
4 - Gossamer Lane	0.28	4.16	0.4	A	282	423

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	131	33	187	1069	0.123	130	144	0.0	0.1	3.834	A
2 - Aldwick Street	177	44	121	1260	0.140	176	196	0.0	0.2	3.320	A
3 - Barrack Lane	122	30	243	994	0.123	121	55	0.0	0.1	4.122	A
4 - Gossamer Lane	231	58	100	1233	0.188	230	264	0.0	0.2	3.587	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	156	39	224	1050	0.149	156	172	0.1	0.2	4.030	A
2 - Aldwick Street	211	53	146	1245	0.170	211	234	0.2	0.2	3.480	A
3 - Barrack Lane	146	36	291	968	0.150	145	66	0.1	0.2	4.378	A
4 - Gossamer Lane	276	69	120	1220	0.226	276	316	0.2	0.3	3.810	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	192	48	274	1023	0.187	191	211	0.2	0.2	4.327	A
2 - Aldwick Street	259	65	178	1225	0.211	258	287	0.2	0.3	3.723	A
3 - Barrack Lane	178	45	356	932	0.191	178	80	0.2	0.2	4.776	A
4 - Gossamer Lane	338	85	147	1204	0.281	338	387	0.3	0.4	4.154	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	192	48	274	1023	0.187	192	211	0.2	0.2	4.330	A
2 - Aldwick Street	259	65	178	1225	0.211	259	287	0.3	0.3	3.723	A
3 - Barrack Lane	178	45	357	932	0.191	178	80	0.2	0.2	4.779	A
4 - Gossamer Lane	338	85	148	1204	0.281	338	388	0.4	0.4	4.158	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	156	39	224	1049	0.149	157	173	0.2	0.2	4.033	A
2 - Aldwick Street	211	53	146	1245	0.170	212	235	0.3	0.2	3.485	A
3 - Barrack Lane	146	36	292	967	0.151	146	66	0.2	0.2	4.384	A
4 - Gossamer Lane	276	69	121	1220	0.226	276	317	0.4	0.3	3.817	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	131	33	188	1068	0.123	131	145	0.2	0.1	3.842	A
2 - Aldwick Street	177	44	122	1260	0.140	177	197	0.2	0.2	3.327	A
3 - Barrack Lane	122	30	244	994	0.123	122	55	0.2	0.1	4.131	A
4 - Gossamer Lane	231	58	101	1232	0.188	231	265	0.3	0.2	3.596	A

2031 Base + Committed Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	7.89	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	33	1 - Aldwick Road

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
D8	2031 Base + Committed Development	PM	ONE HOUR	16:30	18:00	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 (%)
1 - Aldwick Road		ONE HOUR	✓	572	100.000
2 - Aldwick Street		ONE HOUR	✓	510	100.000
3 - Barrack Lane		ONE HOUR	✓	176	100.000
4 - Gossamer Lane		ONE HOUR	✓	452	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Aldwick Road	2 - Aldwick Street	3 - Barrack Lane	4 - Gossamer Lane
	1 - Aldwick Road	0	49	245	278
	2 - Aldwick Street	54	0	71	385
	3 - Barrack Lane	97	43	0	36
	4 - Gossamer Lane	147	270	35	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Aldwick Road	2 - Aldwick Street	3 - Barrack Lane	4 - Gossamer Lane
	1 - Aldwick Road	0	5	1	2
	2 - Aldwick Street	2	0	2	1
	3 - Barrack Lane	4	3	0	0
	4 - Gossamer Lane	2	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Aldwick Road	0.63	9.67	1.7	A	525	787
2 - Aldwick Street	0.57	8.41	1.3	A	468	702
3 - Barrack Lane	0.28	7.05	0.4	A	161	242
4 - Gossamer Lane	0.42	5.33	0.7	A	415	622

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	431	108	261	1068	0.403	428	223	0.0	0.7	5.602	A
2 - Aldwick Street	384	96	418	1109	0.346	382	271	0.0	0.5	4.940	A
3 - Barrack Lane	133	33	537	840	0.158	132	263	0.0	0.2	5.075	A
4 - Gossamer Lane	340	85	145	1214	0.280	339	523	0.0	0.4	4.105	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	514	129	312	1040	0.494	513	267	0.7	1.0	6.817	A
2 - Aldwick Street	458	115	501	1058	0.433	458	325	0.5	0.8	5.985	A
3 - Barrack Lane	158	40	643	783	0.202	158	315	0.2	0.3	5.757	A
4 - Gossamer Lane	406	102	174	1197	0.340	406	627	0.4	0.5	4.549	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	630	157	382	1002	0.628	627	327	1.0	1.6	9.527	A
2 - Aldwick Street	562	140	612	991	0.567	559	398	0.8	1.3	8.306	A
3 - Barrack Lane	194	48	786	706	0.275	193	385	0.3	0.4	7.019	A
4 - Gossamer Lane	498	124	213	1173	0.424	497	767	0.5	0.7	5.319	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	630	157	383	1002	0.629	630	328	1.6	1.7	9.669	A
2 - Aldwick Street	562	140	614	989	0.568	561	399	1.3	1.3	8.415	A
3 - Barrack Lane	194	48	789	704	0.275	194	386	0.4	0.4	7.053	A
4 - Gossamer Lane	498	124	214	1172	0.424	498	770	0.7	0.7	5.334	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	514	129	314	1039	0.495	517	269	1.7	1.0	6.927	A
2 - Aldwick Street	458	115	504	1056	0.434	461	326	1.3	0.8	6.068	A
3 - Barrack Lane	158	40	648	780	0.203	159	317	0.4	0.3	5.793	A
4 - Gossamer Lane	406	102	175	1196	0.340	407	631	0.7	0.5	4.568	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	431	108	262	1067	0.404	432	225	1.0	0.7	5.680	A
2 - Aldwick Street	384	96	421	1106	0.347	385	273	0.8	0.5	4.998	A
3 - Barrack Lane	133	33	541	838	0.158	133	265	0.3	0.2	5.109	A
4 - Gossamer Lane	340	85	146	1214	0.280	341	528	0.5	0.4	4.128	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.1.4648 []
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Filename: AM_PM_Gossamer Lane-Aldwick Road-Barrack Lane.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\20170207_2031 Base and Committed and ALL Development

Report generation date: 09/03/2017 11:06:39

»2031 Base + Committed + ALL Development, AM

»2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed + ALL Development														
1 - Aldwick Road	0.2	4.46	0.19	A	4.33	A	145 % [4 - Gossamer Lane]	1.5	8.96	0.60	A	7.54	A	37 % [2 - Aldwick Street]
2 - Aldwick Street	0.3	3.75	0.22	A				1.3	8.22	0.57	A			
3 - Barrack Lane	0.2	4.72	0.18	A				0.3	6.90	0.25	A			
4 - Gossamer Lane	0.5	4.49	0.34	A				0.7	5.30	0.43	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Gossamer Lane/Aldwick Road/Barrack Lane
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing junction
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.petit
Description	

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	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	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
D7	2031 Base + Committed + ALL Development	AM	ONE HOUR	08:00	09:30	15	✓

D8	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:30	18:00	15	✓
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Analysis Set Details

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

2031 Base + Committed + ALL Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	4.33	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	145	4 - Gossamer Lane

Arms

Arms

Arm	Name	Description
1	Aldwick Road	
2	Aldwick Street	
3	Barrack Lane	
4	Gossamer Lane	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Aldwick Road	3.70	4.50	8.1	8.8	24.0	28.5	
2 - Aldwick Street	4.10	5.50	1.3	16.9	24.0	18.5	
3 - Barrack Lane	3.50	5.10	1.7	12.2	24.0	25.5	
4 - Gossamer Lane	3.70	5.60	1.8	20.9	24.0	17.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Aldwick Road	0.548	1231
2 - Aldwick Street	0.606	1379
3 - Barrack Lane	0.547	1163
4 - Gossamer Lane	0.597	1312

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

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
D7	2031 Base + Committed + ALL Development	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 (%)

1 - Aldwick Road	ONE HOUR	✓	170	100.000
2 - Aldwick Street	ONE HOUR	✓	242	100.000
3 - Barrack Lane	ONE HOUR	✓	149	100.000
4 - Gossamer Lane	ONE HOUR	✓	372	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	1 - Aldwick Road	2 - Aldwick Street	3 - Barrack Lane	4 - Gossamer Lane
From 1 - Aldwick Road	0	19	33	118
From 2 - Aldwick Street	25	0	27	190
From 3 - Barrack Lane	54	44	0	51
From 4 - Gossamer Lane	118	245	9	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1 - Aldwick Road	2 - Aldwick Street	3 - Barrack Lane	4 - Gossamer Lane
From 1 - Aldwick Road	0	12	3	5
From 2 - Aldwick Street	5	0	4	3
From 3 - Barrack Lane	6	3	0	0
From 4 - Gossamer Lane	2	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Aldwick Road	0.19	4.46	0.2	A	156	234
2 - Aldwick Street	0.22	3.75	0.3	A	222	333
3 - Barrack Lane	0.18	4.72	0.2	A	137	205
4 - Gossamer Lane	0.34	4.49	0.5	A	341	512

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	128	32	223	1050	0.122	127	148	0.0	0.1	3.898	A
2 - Aldwick Street	182	46	120	1261	0.144	182	231	0.0	0.2	3.332	A
3 - Barrack Lane	112	28	250	991	0.113	112	52	0.0	0.1	4.094	A
4 - Gossamer Lane	280	70	92	1238	0.226	279	269	0.0	0.3	3.748	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	153	38	268	1027	0.149	153	177	0.1	0.2	4.118	A
2 - Aldwick Street	218	54	144	1247	0.174	217	277	0.2	0.2	3.496	A
3 - Barrack Lane	134	33	299	963	0.139	134	62	0.1	0.2	4.339	A
4 - Gossamer Lane	334	84	110	1227	0.273	334	322	0.3	0.4	4.032	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	187	47	328	995	0.188	187	217	0.2	0.2	4.452	A

2 - Aldwick Street	266	67	176	1227	0.217	266	339	0.2	0.3	3.746	A
3 - Barrack Lane	164	41	366	926	0.177	164	76	0.2	0.2	4.719	A
4 - Gossamer Lane	410	102	135	1211	0.338	409	395	0.4	0.5	4.483	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	187	47	328	995	0.188	187	217	0.2	0.2	4.455	A
2 - Aldwick Street	266	67	176	1227	0.217	266	339	0.3	0.3	3.746	A
3 - Barrack Lane	164	41	367	926	0.177	164	76	0.2	0.2	4.722	A
4 - Gossamer Lane	410	102	135	1211	0.338	410	395	0.5	0.5	4.489	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	153	38	268	1027	0.149	153	177	0.2	0.2	4.122	A
2 - Aldwick Street	218	54	144	1247	0.175	218	277	0.3	0.2	3.499	A
3 - Barrack Lane	134	33	300	963	0.139	134	62	0.2	0.2	4.345	A
4 - Gossamer Lane	334	84	111	1227	0.273	335	323	0.5	0.4	4.039	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	128	32	225	1050	0.122	128	148	0.2	0.1	3.907	A
2 - Aldwick Street	182	46	121	1261	0.144	182	232	0.2	0.2	3.339	A
3 - Barrack Lane	112	28	251	990	0.113	112	52	0.2	0.1	4.102	A
4 - Gossamer Lane	280	70	93	1238	0.226	280	271	0.4	0.3	3.760	A

2031 Base + Committed + ALL Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	7.54	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	37	2 - Aldwick Street

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
D8	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:30	18:00	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 (%)
1 - Aldwick Road		ONE HOUR	✓	542	100.000
2 - Aldwick Street		ONE HOUR	✓	518	100.000
3 - Barrack Lane		ONE HOUR	✓	161	100.000
4 - Gossamer Lane		ONE HOUR	✓	459	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Aldwick Road	2 - Aldwick Street	3 - Barrack Lane	4 - Gossamer Lane
	1 - Aldwick Road	0	45	224	273
	2 - Aldwick Street	49	0	65	404
	3 - Barrack Lane	88	39	0	34
	4 - Gossamer Lane	144	282	33	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Aldwick Road	2 - Aldwick Street	3 - Barrack Lane	4 - Gossamer Lane
	1 - Aldwick Road	0	5	1	2
	2 - Aldwick Street	2	0	2	1
	3 - Barrack Lane	4	3	0	0
	4 - Gossamer Lane	2	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Aldwick Road	0.60	8.96	1.5	A	497	746
2 - Aldwick Street	0.57	8.22	1.3	A	475	713
3 - Barrack Lane	0.25	6.90	0.3	A	148	222
4 - Gossamer Lane	0.43	5.30	0.7	A	421	632

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	408	102	265	1065	0.383	406	210	0.0	0.6	5.437	A
2 - Aldwick Street	390	97	397	1122	0.348	388	274	0.0	0.5	4.893	A
3 - Barrack Lane	121	30	543	837	0.145	121	241	0.0	0.2	5.021	A
4 - Gossamer Lane	346	86	132	1223	0.283	344	532	0.0	0.4	4.088	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	487	122	318	1037	0.470	486	252	0.6	0.9	6.524	A
2 - Aldwick Street	466	116	475	1074	0.434	465	329	0.5	0.8	5.904	A
3 - Barrack Lane	145	36	651	779	0.186	145	289	0.2	0.2	5.675	A
4 - Gossamer Lane	413	103	158	1207	0.342	412	638	0.4	0.5	4.527	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	597	149	389	999	0.598	594	309	0.9	1.5	8.857	A
2 - Aldwick Street	570	143	581	1009	0.565	568	402	0.8	1.3	8.123	A
3 - Barrack Lane	177	44	796	701	0.253	177	353	0.2	0.3	6.867	A
4 - Gossamer Lane	505	126	193	1185	0.426	504	780	0.5	0.7	5.282	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	597	149	390	998	0.598	597	309	1.5	1.5	8.961	A
2 - Aldwick Street	570	143	583	1008	0.566	570	403	1.3	1.3	8.221	A
3 - Barrack Lane	177	44	799	699	0.254	177	354	0.3	0.3	6.898	A
4 - Gossamer Lane	505	126	194	1185	0.427	505	783	0.7	0.7	5.297	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	487	122	319	1036	0.470	490	253	1.5	0.9	6.611	A
2 - Aldwick Street	466	116	479	1072	0.435	468	330	1.3	0.8	5.981	A
3 - Barrack Lane	145	36	656	776	0.186	145	291	0.3	0.2	5.707	A
4 - Gossamer Lane	413	103	159	1206	0.342	413	642	0.7	0.5	4.545	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	408	102	267	1065	0.383	409	212	0.9	0.6	5.501	A
2 - Aldwick Street	390	97	400	1119	0.348	391	276	0.8	0.5	4.949	A
3 - Barrack Lane	121	30	548	835	0.145	121	243	0.2	0.2	5.049	A
4 - Gossamer Lane	346	86	133	1222	0.283	346	537	0.5	0.4	4.111	A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646 []
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Filename: AM_PM_Nyetimber Lane & Pagham Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207 Revised Traffic Flows\20170207_2031 Base and Committed Development

Report generation date: 07/02/2017 15:08:15

»2031 Base and Committed Development, AM

»2031 Base and Committed Development, PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base and Committed Development																
Stream B-AC	0.5	2.3	11.28	0.34	B	2.83	A	79 %	0.6	2.8	15.27	0.37	C	2.14	A	29 %
Stream C-AB	0.2	1.1	4.86	0.10	A			[Stream B-AC]	0.5	1.4	7.72	0.24	A			[Stream B-AC]

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	19/09/2016
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	2031 Base and Committed Development	AM	ONE HOUR	07:45	09:15	15
D2	2031 Base and Committed Development	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base and Committed Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Nyetimber Lane j/w Pagham Road	T-Junction	Two-way	2.83	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	79	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road North		Major
B	Nyetimber Lane		Minor
C	Pagham Road South		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 - Pagham Road South	7.30			200.0	✓	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 - Nyetimber Lane	One lane	4.00	60	45

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	571	0.098	0.246	0.156	0.354
1	B-C	718	0.104	0.262	-	-
1	C-B	690	0.252	0.252	-	-

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)
D1	2031 Base and Committed Development	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road North		✓	190	100.000
B - Nyetimber Lane		✓	147	100.000
C - Pagham Road South		✓	346	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South
From	A - Pagham Road North	0	33	157
	B - Nyetimber Lane	107	0	40
	C - Pagham Road South	301	45	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South
From	A - Pagham Road North	0	7	9
	B - Nyetimber Lane	1	0	7
	C - Pagham Road South	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.34	11.28	0.5	2.3	B
C-AB	0.10	4.86	0.2	1.1	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	111	516	0.214	110	0.3	8.827	A
C-AB	47	790	0.060	47	0.1	4.843	A
C-A	213			213			
A-B	25			25			
A-C	118			118			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	132	502	0.263	132	0.4	9.726	A
C-AB	61	811	0.075	61	0.1	4.794	A
C-A	250			250			
A-B	30			30			
A-C	141			141			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	162	481	0.336	161	0.5	11.235	B
C-AB	82	840	0.098	82	0.2	4.739	A
C-A	299			299			
A-B	36			36			
A-C	173			173			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	162	481	0.336	162	0.5	11.278	B
C-AB	82	841	0.098	82	0.2	4.749	A

C-A	299			299			
A-B	36			36			
A-C	173			173			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	132	502	0.264	133	0.4	9.775	A
C-AB	61	811	0.075	61	0.1	4.815	A
C-A	250			250			
A-B	30			30			
A-C	141			141			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	111	516	0.214	111	0.3	8.890	A
C-AB	48	790	0.060	48	0.1	4.858	A
C-A	213			213			
A-B	25			25			
A-C	118			118			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C-AB	0.13	0.03	0.26	0.47	0.52			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.50	0.03	0.26	0.50	0.50			N/A	N/A
C-AB	0.18	0.03	0.27	0.49	1.07			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.50	0.03	0.30	1.34	2.29			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.28	0.00	0.00	0.28	0.28			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

2031 Base and Committed Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Nyetimber Lane j/w Pagham Road	T-Junction	Two-way	2.14	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	29	Stream B-AC

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)
D2	2031 Base and Committed Development	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road North		✓	915	100.000
B - Nyetimber Lane		✓	128	100.000
C - Pagham Road South		✓	300	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South
	A - Pagham Road North	0	121	794
	B - Nyetimber Lane	39	0	89
	C - Pagham Road South	220	80	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South
	A - Pagham Road North	0	0	2
	B - Nyetimber Lane	0	0	2
	C - Pagham Road South	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.37	15.27	0.6	2.8	C
C-AB	0.24	7.72	0.5	1.4	A
C-A					
A-B					
A-C					

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	96	469	0.206	95	0.3	9.617	A
C-AB	82	630	0.130	81	0.2	6.557	A
C-A	144			144			
A-B	91			91			
A-C	598			598			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	115	431	0.267	115	0.4	11.378	B
C-AB	106	622	0.170	105	0.3	6.964	A
C-A	164			164			
A-B	109			109			
A-C	714			714			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	141	377	0.374	140	0.6	15.151	C
C-AB	146	613	0.238	145	0.5	7.688	A
C-A	184			184			
A-B	133			133			
A-C	874			874			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	141	377	0.374	141	0.6	15.268	C
C-AB	146	614	0.238	146	0.5	7.723	A
C-A	184			184			
A-B	133			133			
A-C	874			874			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	115	430	0.267	116	0.4	11.478	B
C-AB	106	622	0.170	107	0.3	7.015	A
C-A	164			164			
A-B	109			109			
A-C	714			714			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	96	469	0.206	97	0.3	9.695	A
C-AB	82	630	0.130	82	0.2	6.597	A
C-A	144			144			
A-B	91			91			
A-C	598			598			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker

B-AC	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C-AB	0.29	0.00	0.00	0.29	0.29			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.58	0.03	0.26	0.58	0.58			N/A	N/A
C-AB	0.47	0.03	0.26	0.47	0.50			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.59	0.03	0.30	1.46	2.78			N/A	N/A
C-AB	0.48	0.04	0.39	1.30	1.45			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.37	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.30	0.00	0.00	0.30	0.30			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.26	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646 []
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Filename: AM_PM_Nyetimber Lane & Pagham Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic

Flows\20170207_2031 Base and Committed and ALL Development

Report generation date: 09/03/2017 10:04:17

»2031 Base + Committed + ALL Development, AM

»2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed + ALL Development																
Stream B-AC	0.7	3.0	13.16	0.41	B	3.33	A	50 %	0.9	4.0	18.03	0.47	C	2.92	A	19 %
Stream C-AB	0.5	1.4	5.14	0.22	A			[Stream B-AC]	0.8	2.9	8.28	0.33	A			[Stream B-AC]

There are warnings associated with one or more model runs. - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	19/09/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	15
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed + ALL Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Nyetimber Lane j/w Pagham Road	T-Junction	Two-way	3.33	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	50	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road North		Major
B	Nyetimber Lane		Minor
C	Pagham Road South		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 - Pagham Road South	7.30			200.0	✓	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 - Nyetimber Lane	One lane	4.00	60	45

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	571	0.098	0.246	0.156	0.354
1	B-C	718	0.104	0.262	-	-
1	C-B	690	0.252	0.252	-	-

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)
D1	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road North		✓	240	100.000
B - Nyetimber Lane		✓	170	100.000

C - Pagham Road South	✓	488	100.000
-----------------------	---	-----	---------

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South	
A - Pagham Road North	0	30	210	
B - Nyetimber Lane	99	0	71	
C - Pagham Road South	398	90	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South	
A - Pagham Road North	0	7	9	
B - Nyetimber Lane	1	0	7	
C - Pagham Road South	6	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.41	13.16	0.7	3.0	B
C-AB	0.22	5.14	0.5	1.4	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	128	508	0.252	127	0.3	9.398	A
C-AB	106	827	0.129	105	0.2	4.987	A
C-A	261			261			
A-B	23			23			
A-C	158			158			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	153	489	0.313	152	0.4	10.691	B
C-AB	140	856	0.163	139	0.3	5.021	A
C-A	299			299			
A-B	27			27			
A-C	189			189			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	187	461	0.406	186	0.7	13.072	B
C-AB	195	897	0.217	194	0.5	5.121	A
C-A	343			343			
A-B	33			33			
A-C	231			231			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	187	461	0.406	187	0.7	13.157	B

C-AB	195	897	0.217	195	0.5	5.139	A
C-A	342			342			
A-B	33			33			
A-C	231			231			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	153	488	0.313	154	0.5	10.781	E
C-AB	140	856	0.163	140	0.3	5.057	A
C-A	299			299			
A-B	27			27			
A-C	189			189			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	128	508	0.252	128	0.3	9.494	A
C-AB	107	627	0.129	107	0.2	5.016	A
C-A	261			261			
A-B	23			23			
A-C	158			158			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C-AB	0.31	0.00	0.00	0.31	0.31			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.67	0.03	0.26	0.67	0.67			N/A	N/A
C-AB	0.47	0.03	0.26	0.47	0.50			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.68	0.03	0.29	1.25	3.02			N/A	N/A
C-AB	0.47	0.04	0.41	1.25	1.38			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.04	0.38	1.21	1.35			N/A	N/A
C-AB	0.33	0.00	0.00	0.33	0.33			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.27	0.48	0.69			N/A	N/A
C-AB	0.24	0.00	0.00	0.24	0.24			N/A	N/A

2031 Base + Committed + ALL Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Nyetimber Lane j/w Pagham Road	T-Junction	Two-way	2.92	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	19	Stream B-AC

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)
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road North		✓	939	100.000
B - Nyetimber Lane		✓	160	100.000
C - Pagham Road South		✓	380	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South
	A - Pagham Road North	0	111	828
	B - Nyetimber Lane	36	0	124
	C - Pagham Road South	275	105	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South
	A - Pagham Road North	0	0	2
	B - Nyetimber Lane	0	0	2
	C - Pagham Road South	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.47	18.03	0.9	4.0	C
C-AB	0.33	8.28	0.8	2.9	A
C-A					
A-B					

A-C					
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Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	120	473	0.255	119	0.3	10.126	B
C-AB	116	655	0.177	114	0.3	6.669	A
C-A	170			170			
A-B	84			84			
A-C	623			623			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	144	433	0.332	143	0.5	12.386	B
C-AB	152	653	0.233	152	0.5	7.180	A
C-A	189			189			
A-B	100			100			
A-C	744			744			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	176	376	0.469	175	0.9	17.765	C
C-AB	217	654	0.331	215	0.8	8.213	A
C-A	202			202			
A-B	122			122			
A-C	912			912			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	176	376	0.469	176	0.9	18.025	C
C-AB	217	654	0.332	217	0.8	8.279	A
C-A	201			201			
A-B	122			122			
A-C	912			912			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	144	433	0.332	145	0.5	12.572	B
C-AB	153	654	0.234	154	0.5	7.261	A
C-A	189			189			
A-B	100			100			
A-C	744			744			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	120	473	0.255	121	0.3	10.248	B
C-AB	116	655	0.177	117	0.3	6.716	A
C-A	170			170			
A-B	84			84			
A-C	623			623			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C-AB	0.30	0.00	0.00	0.30	0.30			N/A	N/A

17:00 - 17:15

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Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.49	0.00	0.00	0.49	0.49			N/A	N/A
C-AB	0.45	0.00	0.00	0.45	0.45			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.85	0.03	0.27	0.85	1.06			N/A	N/A
C-AB	0.78	0.03	0.26	0.78	0.78			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.87	0.03	0.29	1.44	3.96			N/A	N/A
C-AB	0.79	0.04	0.40	1.81	2.88			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.51	0.05	0.46	1.28	1.39			N/A	N/A
C-AB	0.47	0.00	0.00	0.47	0.47			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.03	0.31	0.96	1.23			N/A	N/A
C-AB	0.31	0.00	0.00	0.31	0.31			N/A	N/A

Proposed Site Accesses - 2031 With Development & Sensitivity Test

Junctions 9													
PICADY 9 - Priority Intersection Module													
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017													
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Filename: AM_PMHook Lane Site Access.j9

Path: \\eur-mpfs-02\tr_projects\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031 Base and Committed and ALL Development (SENSITIVITY)

Report generation date: 11/07/2017 12:04:40

»2031 Base + Committed + ALL Development (SENSITIVITY), AM

»2031 Base + Committed + ALL Development (SENSITIVITY), PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed + ALL Development (SENSITIVITY)														
Stream B-AC	0.1	6.90	0.09	A	3.15	A	111 %	0.0	6.69	0.05	A	1.56	A	130 %
Stream C-AB	0.6	6.91	0.32	A			[Stream C-AB]	0.4	5.30	0.22	A			[Stream C-AB]

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Hook Lane Proposed Site Access
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Proposed
Identifier	
Client	Hallam Land Management
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
Description	Based on Drg No 5

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	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	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	2031 Base + Committed + ALL Development (SENSITIVITY)	AM	ONE HOUR	07:45	09:15	15	✓
D2	2031 Base + Committed + ALL Development (SENSITIVITY)	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2031 Base + Committed + ALL Development (SENSITIVITY), 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	3.15	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	111	Stream C-AB

Arms

Arms

Arm	Name	Description	Arm type
A	Hook Lane S		Major
B	Site Access		Minor
C	Hook Lane N		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 - Hook Lane N	7.30			150.0	✓	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 - Site Access	One lane	3.00	40	40

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	510	0.088	0.222	0.139	0.317
1	B-C	649	0.094	0.237	-	-
1	C-B	661	0.242	0.242	-	-

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	2031 Base + Committed + ALL Development (SENSITIVITY)	AM	ONE HOUR	07:45	09:15	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 - Hook Lane S		ONE HOUR	✓	157	100.000
B - Site Access		ONE HOUR	✓	48	100.000
C - Hook Lane N		ONE HOUR	✓	365	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Hook Lane S	B - Site Access	C - Hook Lane N
From	A - Hook Lane S	0	11	146
	B - Site Access	5	0	43
	C - Hook Lane N	208	157	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Hook Lane S	B - Site Access	C - Hook Lane N
From	A - Hook Lane S	0	0	1
	B - Site Access	0	0	0
	C - Hook Lane N	1	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	0.09	6.90	0.1	A	44	66
C-AB	0.32	6.91	0.6	A	195	293
C-A					140	209
AB					10	15
AC					134	201

Main Results for each time segment

07:45 - 08:00

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	36	9	593	0.061	36	0.0	0.1	6.453	A
C-AB	150	38	733	0.205	149	0.0	0.3	6.157	A
C-A	124	31			124				
AB	8	2			8				
AC	110	27			110				

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	43	11	586	0.074	43	0.1	0.1	6.634	A
C-AB	189	47	748	0.252	188	0.3	0.4	6.434	A
C-A	140	35			140				
AB	10	2			10				
AC	131	33			131				

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	53	13	575	0.092	53	0.1	0.1	6.897	A
C-AB	247	62	768	0.321	246	0.4	0.6	6.893	A
C-A	155	39			155				
AB	12	3			12				
AC	161	40			161				

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	53	13	575	0.092	53	0.1	0.1	6.897	A
C-AB	247	62	769	0.321	247	0.6	0.6	6.913	A
C-A	155	39			155				
AB	12	3			12				
AC	161	40			161				

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	43	11	586	0.074	43	0.1	0.1	6.637	A
C-AB	189	47	748	0.252	190	0.6	0.4	6.464	A
C-A	139	35			139				
AB	10	2			10				
AC	131	33			131				

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	36	9	593	0.061	36	0.1	0.1	6.461	A
C-AB	151	38	733	0.205	151	0.4	0.3	6.195	A
C-A	124	31			124				
AB	8	2			8				
AC	110	27			110				

2031 Base + Committed + ALL Development (SENSITIVITY), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.56	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	130	Stream C-AB

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	2031 Base + Committed + ALL Development (SENSITIVITY)	PM	ONE HOUR	16:45	18:15	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 - Hook Lane S		ONE HOUR	✓	172	100.000
B - Site Access		ONE HOUR	✓	24	100.000
C - Hook Lane N		ONE HOUR	✓	451	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Hook Lane S	B - Site Access	C - Hook Lane N
From	A - Hook Lane S	0	11	161
	B - Site Access	3	0	21
	C - Hook Lane N	355	96	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Hook Lane S	B - Site Access	C - Hook Lane N
From	A - Hook Lane S	0	0	0
	B - Site Access	0	0	0
	C - Hook Lane N	0	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	0.05	6.69	0.0	A	22	33
C-AB	0.22	5.30	0.4	A	147	221
C-A					267	400
A-B					10	15
A-C					148	222

Main Results for each time segment

16:45 - 17:00

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	5	585	0.031	18	0.0	0.0	6.341	A
C-AB	108	27	803	0.135	107	0.0	0.2	5.171	A
C-A	231	58			231				
A-B	8	2			8				
A-C	121	30			121				

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	22	5	577	0.037	22	0.0	0.0	6.483	A
C-AB	140	35	832	0.169	140	0.2	0.3	5.206	A
C-A	265	66			265				
A-B	10	2			10				
A-C	145	36			145				

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	26	7	564	0.047	26	0.0	0.0	6.690	A
C-AB	192	48	873	0.220	192	0.3	0.4	5.292	A
C-A	304	76			304				
A-B	12	3			12				
A-C	177	44			177				

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	26	7	564	0.047	26	0.0	0.0	6.690	A
C-AB	192	48	873	0.220	192	0.4	0.4	5.299	A
C-A	304	76			304				
A-B	12	3			12				
A-C	177	44			177				



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	22	5	577	0.037	22	0.0	0.0	6.487	A
C-AB	141	35	833	0.169	141	0.4	0.3	5.218	A
C-A	265	66			265				
AB	10	2			10				
AC	145	36			145				

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	18	5	585	0.031	18	0.0	0.0	6.348	A
C-AB	109	27	804	0.135	109	0.3	0.2	5.191	A
C-A	231	58			231				
AB	8	2			8				
AC	121	30			121				

Junctions 9							
PICADY 9 - Priority Intersection Module							
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017							
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Filename: AM_PM_Pagham Road Site Access.j9

Path: \\eur-mpfs-02\tr_projects\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031 Base and Committed and ALL Development (SENSITIVITY)

Report generation date: 11/07/2017 12:06:28

»2031 Base + Committed + ALL Development, AM

»2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed + ALL Development														
Stream B-AC	1.0	16.87	0.51	C	3.63	A	31 % [Stream B-AC]	0.4	11.96	0.27	B	1.57	A	71 % [Stream B-AC]
Stream C-AB	0.0	5.53	0.00	A				0.0	6.62	0.01	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Pagham Road Proposed Site Access
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Proposed
Identifier	
Client	Hallam Land Management
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
Description	Based on Drg No 2

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	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	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	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	15	✓
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2031 Base + Committed + ALL Development, 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	3.63	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	31	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road N		Major
B	Site Access		Minor
C	Pagham Road S		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 - Pagham Road S	6.00			200.0	✓	1.00

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 - Site Access	One lane	3.00	120	120

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	578	0.105	0.266	0.167	0.380
1	B-C	699	0.107	0.271	-	-
1	C-B	690	0.267	0.267	-	-

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	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	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 - Pagham Road N		ONE HOUR	✓	125	100.000
B - Site Access		ONE HOUR	✓	202	100.000
C - Pagham Road S		ONE HOUR	✓	597	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road N	B - Site Access	C - Pagham Road S
From	A - Pagham Road N	0	27	98
	B - Site Access	197	0	5
	C - Pagham Road S	595	2	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road N	B - Site Access	C - Pagham Road S
From	A - Pagham Road N	0	0	6
	B - Site Access	0	0	0
	C - Pagham Road S	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	0.51	16.87	1.0	D	185	278
C-AB	0.00	5.53	0.0	A	2	3
C-A					546	819
AB					25	37
AC					90	135

Main Results for each time segment

07:45 - 08:00

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	152	38	482	0.316	150	0.0	0.5	10.810	D
C-AB	2	0.38	664	0.002	1	0.0	0.0	5.429	A
C-A	448	112			448				
AB	20	5			20				
AC	74	18			74				

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	182	45	462	0.393	181	0.5	0.6	12.760	B
C-AB	2	0.45	660	0.003	2	0.0	0.0	5.470	A
C-A	535	134			535				
A-B	24	6			24				
A-C	88	22			88				

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	222	56	436	0.511	221	0.6	1.0	16.649	C
C-AB	2	0.55	653	0.003	2	0.0	0.0	5.527	A
C-A	655	164			655				
A-B	30	7			30				
A-C	108	27			108				

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	222	56	436	0.511	222	1.0	1.0	16.866	C
C-AB	2	0.55	653	0.003	2	0.0	0.0	5.527	A
C-A	655	164			655				
A-B	30	7			30				
A-C	108	27			108				

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	182	45	462	0.393	183	1.0	0.7	12.960	B
C-AB	2	0.45	660	0.003	2	0.0	0.0	5.472	A
C-A	535	134			535				
A-B	24	6			24				
A-C	88	22			88				

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	152	38	482	0.316	153	0.7	0.5	10.979	B
C-AB	2	0.38	664	0.002	2	0.0	0.0	5.431	A
C-A	448	112			448				
A-B	20	5			20				
A-C	74	18			74				

2031 Base + Committed + ALL Development, 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	1.57	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	71	Stream B-AC

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	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:45	18:15	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 - Pagham Road N		ONE HOUR	✓	484	100.000
B - Site Access		ONE HOUR	✓	100	100.000
C - Pagham Road S		ONE HOUR	✓	187	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road N	B - Site Access	C - Pagham Road S
From	A - Pagham Road N	0	51	433
	B - Site Access	97	0	3
	C - Pagham Road S	183	4	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road N	B - Site Access	C - Pagham Road S
From	A - Pagham Road N	0	0	1
	B - Site Access	0	0	0
	C - Pagham Road S	3	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	0.27	11.96	0.4	E	92	138
C-AB	0.01	6.62	0.0	A	4	6
C-A					168	252
AB					47	70
AC					397	596

Main Results for each time segment

16:45 - 17:00

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	75	19	465	0.162	75	0.0	0.2	9.206	B
C-AB	3	0.75	592	0.005	3	0.0	0.0	6.109	A
C-A	138	34			138				
AB	38	10			38				
AC	326	81			326				

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	90	22	442	0.203	90	0.2	0.3	10.202	B
C-AB	4	0.90	573	0.006	4	0.0	0.0	6.316	A
C-A	165	41			165				
AB	46	11			46				
AC	389	97			389				

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	110	28	411	0.268	110	0.3	0.4	11.930	B
C-AB	4	1	548	0.008	4	0.0	0.0	6.625	A
C-A	201	50			201				
AB	56	14			56				
AC	477	119			477				

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	110	28	411	0.268	110	0.4	0.4	11.963	B
C-AB	4	1	548	0.008	4	0.0	0.0	6.625	A
C-A	201	50			201				
AB	56	14			56				
AC	477	119			477				



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	90	22	442	0.203	90	0.4	0.3	10.240	B
C-AB	4	0.90	574	0.006	4	0.0	0.0	6.318	A
C-A	165	41			165				
AB	46	11			46				
AC	389	97			389				

18:00 - 18:15

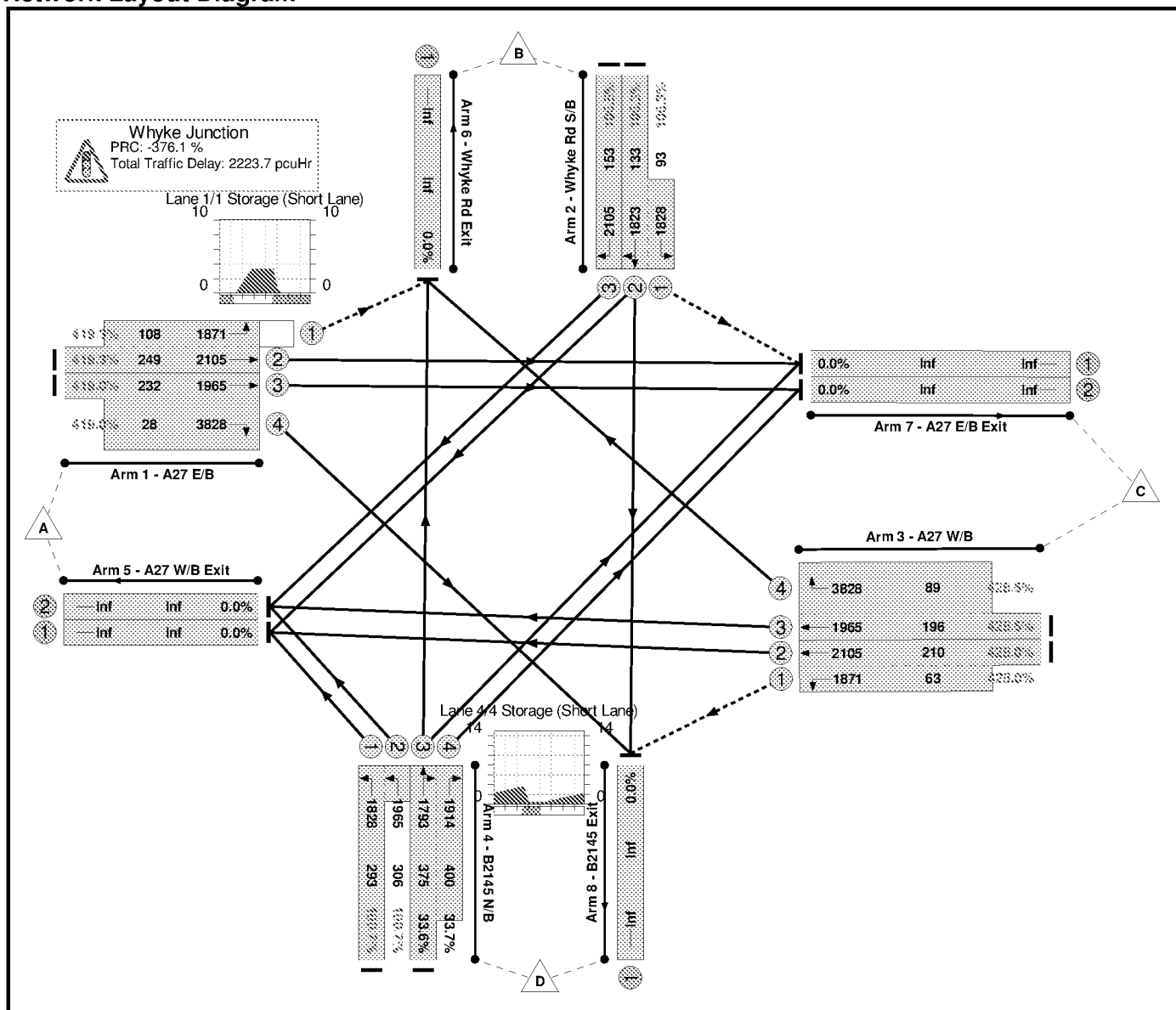
Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	75	19	465	0.162	76	0.3	0.2	9.254	A
C-AB	3	0.75	592	0.005	3	0.0	0.0	6.111	A
C-A	138	34			138				
AB	38	10			38				
AC	326	81			326				

A27 Whyke Hill Junction - Original Layout

Basic Results Summary

Scenario 15: '2031 SE AM_No Pagham Devs 'J'' (FG5: '2031 SE AM Peak_No Pagham Dev', Plan 2: 'J Called')

Network Layout Diagram

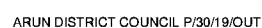


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	428.5%	50	220	0	2223.7	-	-
Whyke Junction	-	-	-		-	-	-	-	-	-	428.5%	50	220	0	2223.7	-	-
1/2+1/1	A27 E/B Left Ahead	U+O	A H		1	12:63	-	1494	2105:1871	249+108	419.3 : 419.3%	0	108	0	650.5 (457.3+193.2)	1567.4 (1578.4:1541.9)	670.3
1/3+1/4	A27 E/B Ahead Right	U	A C		1	12:7	-	1089	1965:3828	232+28	419.0 : 419.0%	-	-	-	476.4 (426.7+49.7)	1574.8 (1578.7:1542.2)	491.0
2/2+2/1	Whyke Rd S/B Right Left Ahead	U+O	E -		1	7	-	240	1823:1828	133+93	106.3 : 106.3%	32	67	0	14.6 (9.6+5.0)	218.4 (244.0:182.0)	16.7
2/3	Whyke Rd S/B Right	U	E		1	7	-	163	2105	153	106.5%	-	-	-	12.2	270.4	14.8
3/2+3/1	A27 W/B Ahead Left	U+O	B -		1	10	-	1172	2105:1871	210+63	423.0 : 423.0%	17	46	0	511.4 (397.7+113.8)	1571.0 (1588.8:1511.6)	544.5
3/3+3/4	A27 W/B Ahead Right	U	B D		1	10:7	-	1225	1965:3828	196+89	428.5 : 428.5%	-	-	-	535.8 (371.7+164.1)	1574.5 (1589.3:1542.1)	550.3
4/1+4/2	B2145 N/B Left	U	G		1	30	-	603	1828:1965	293+306	100.7 : 100.7%	-	-	-	19.9 (9.7+10.2)	118.9 (118.9:118.9)	29.9
4/3+4/4	B2145 N/B Ahead Right	U	F		1	22	-	261	1793:1914	375+400	33.6 : 33.7%	-	-	-	2.9 (1.4+1.5)	40.5 (40.5:40.5)	3.7
C1 - Whyke					PRC for Signalled Lanes (%):			-376.1	Total Delay for Signalled Lanes (pcuHr):			2223.69	Cycle Time (s): 110				
					PRC Over All Lanes (%):			-376.1	Total Delay Over All Lanes(pcuHr):			2223.69					

Network Layout Diagram



Basic Results Summary

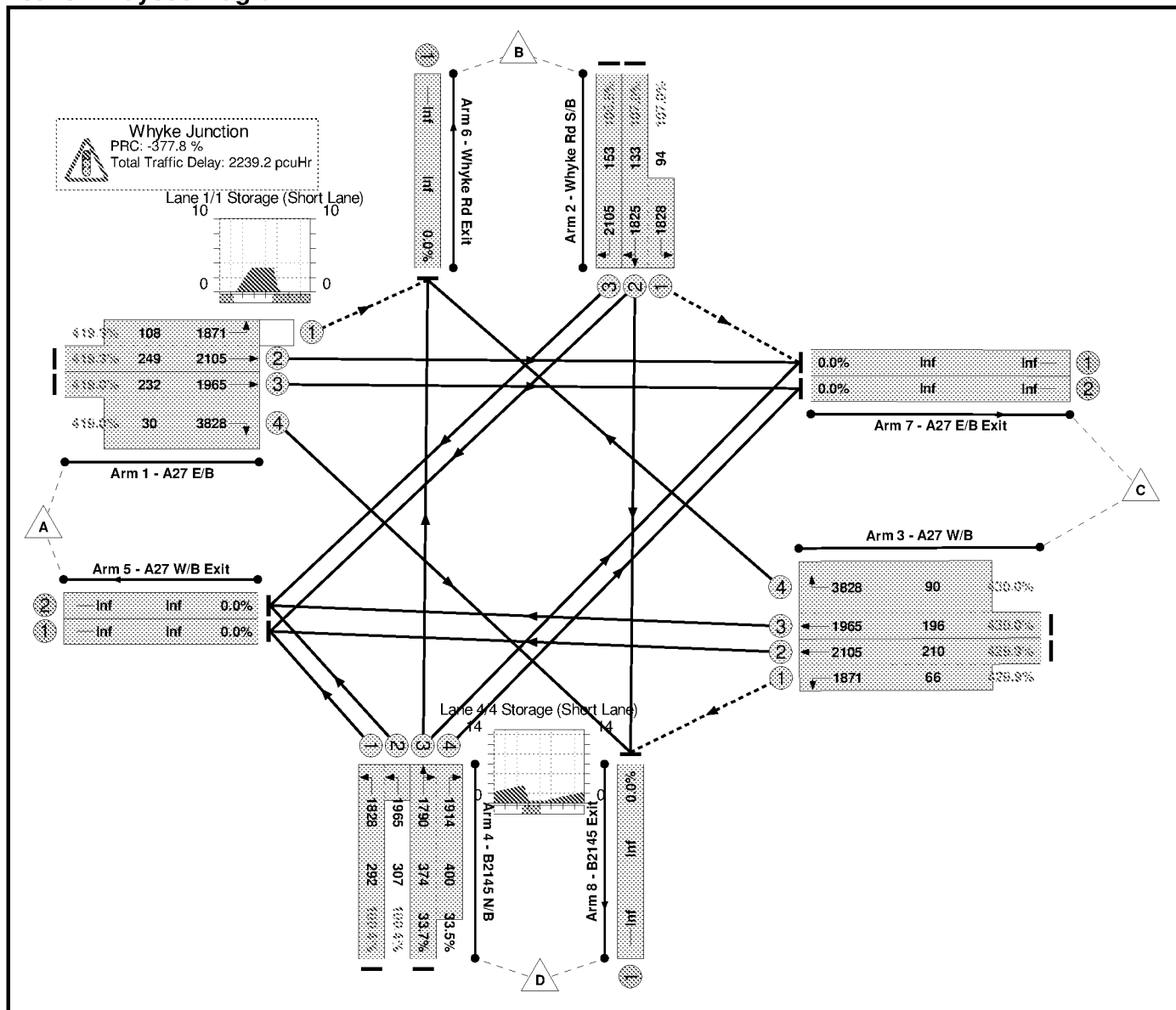
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	464.1%	44	177	0	2419.4	-	-
Whyke Junction	-	-	-		-	-	-	-	-	-	464.1%	44	177	0	2419.4	-	-
1/2+1/1	A27 E/B Left Ahead	U+O	A H		1	12:63	-	1408	2105:1871	249+101	402.8 : 402.8%	0	101	0	605.4 (433.9+171.5)	1548.0 (1558.9:1520.9)	624.1
1/3+1/4	A27 E/B Ahead Right	U	A C		1	12:7	-	1303	1965:3828	232+91	402.6 : 402.6%	-	-	-	560.4 (404.9+155.5)	1548.2 (1558.9:1521.1)	575.8
2/2+2/1	Whyke Rd S/B Right Left Ahead	U+O	E -		1	7	-	405	1847:1828	134+68	200.3 : 200.3%	29	39	0	118.0 (79.9+38.0)	1048.8 (1069.8:1007.2)	130.2
2/3	Whyke Rd S/B Right	U	E		1	7	-	306	2105	153	199.9%	-	-	-	91.2	1072.8	90.9
3/2+3/1	A27 W/B Ahead Left	U+O	B -		1	10	-	1224	2105:1871	210+53	464.1 : 464.1%	15	38	0	547.7 (441.1+106.6)	1610.8 (1625.2:1553.9)	581.2
3/3+3/4	A27 W/B Ahead Right	U	B D		1	10:7	-	1085	1965:3828	196+37	464.1 : 464.1%	-	-	-	487.8 (411.8+76.0)	1618.4 (1625.4:1581.6)	502.1
4/1+4/2	B2145 N/B Left	U	G		1	30	-	277	1828:1965	289+309	46.3 : 46.3%	-	-	-	2.8 (1.4+1.5)	36.7 (36.7:36.6)	5.2
4/3+4/4	B2145 N/B Ahead Right	U	F		1	22	-	492	1893:1914	396+400	61.9 : 61.7%	-	-	-	6.2 (3.1+3.1)	45.4 (45.4:45.4)	7.6
C1 - Whyke					PRC for Signalled Lanes (%): -415.7			PRC Over All Lanes (%): -415.7		Total Delay for Signalled Lanes (pcuHr): 2419.42			Total Delay Over All Lanes(pcuHr): 2419.42		Cycle Time (s): 110		

Basic Results Summary

Scenario 21: '2031 Max SE AM_No Pagham Dev 'J'' (FG7: '2031 Max SE AM Peak_No Pagham Dev', Plan 2: 'J Called')

Network Layout Diagram



Basic Results Summary

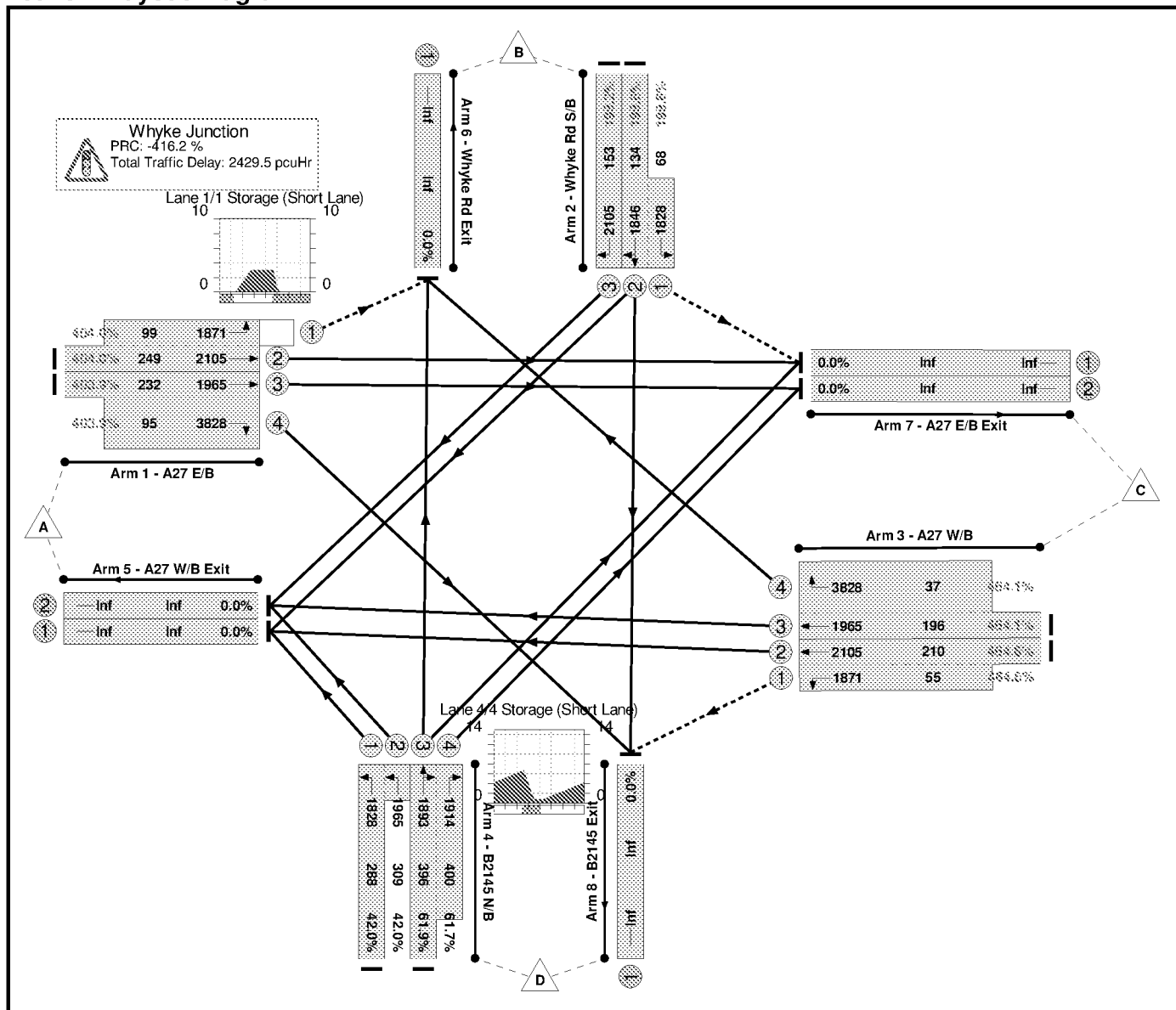
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	430.0%	51	224	0	2239.2	-	-
Whyke Junction	-	-	-		-	-	-	-	-	-	430.0%	51	224	0	2239.2	-	-
1/2+1/1	A27 E/B Left Ahead	U+O	A H		1	12:63	-	1496	2105:1871	249+108	419.3 : 419.3%	0	108	0	651.3 (457.3+194.0)	1567.3 (1578.4:1541.9)	671.2
1/3+1/4	A27 E/B Ahead Right	U	A C		1	12:7	-	1097	1965:3828	232+30	419.0 : 419.0%	-	-	-	479.8 (426.7+53.1)	1574.5 (1578.6:1542.1)	494.5
2/2+2/1	Whyke Rd S/B Right Left Ahead	U+O	E -		1	7	-	243	1825:1828	133+94	107.0 : 107.0%	33	68	0	15.2 (9.9+5.3)	225.5 (251.8:188.6)	17.4
2/3	Whyke Rd S/B Right	U	E		1	7	-	163	2105	153	106.5%	-	-	-	12.2	270.4	14.8
3/2+3/1	A27 W/B Ahead Left	U+O	B -		1	10	-	1187	2105:1871	210+66	429.9 : 429.9%	18	48	0	518.5 (399.9+118.6)	1572.6 (1590.9:1514.0)	552.2
3/3+3/4	A27 W/B Ahead Right	U	B D		1	10:7	-	1233	1965:3828	196+90	430.0 : 430.0%	-	-	-	539.8 (373.4+166.4)	1576.1 (1590.9:1543.9)	554.5
4/1+4/2	B2145 N/B Left	U	G		1	30	-	601	1828:1965	292+307	100.4 : 100.4%	-	-	-	19.4 (9.4+9.9)	116.0 (116.0:116.0)	29.3
4/3+4/4	B2145 N/B Ahead Right	U	F		1	22	-	260	1790:1914	374+400	33.7 : 33.5%	-	-	-	2.9 (1.4+1.5)	40.5 (40.5:40.5)	3.7
C1 - Whyke					PRC for Signalled Lanes (%):			-377.8	Total Delay for Signalled Lanes (pcuHr):			2239.21	Cycle Time (s): 110				
					PRC Over All Lanes (%):			-377.8	Total Delay Over All Lanes(pcuHr):			2239.21					

Basic Results Summary

Scenario 24: '2031 Max SE PM_No Pagham dev 'J' (FG8: '2031 Max SE PM Peak_No Pagham Dev', Plan 2: 'J Called')

Network Layout Diagram

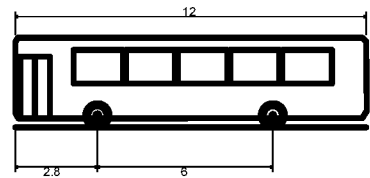
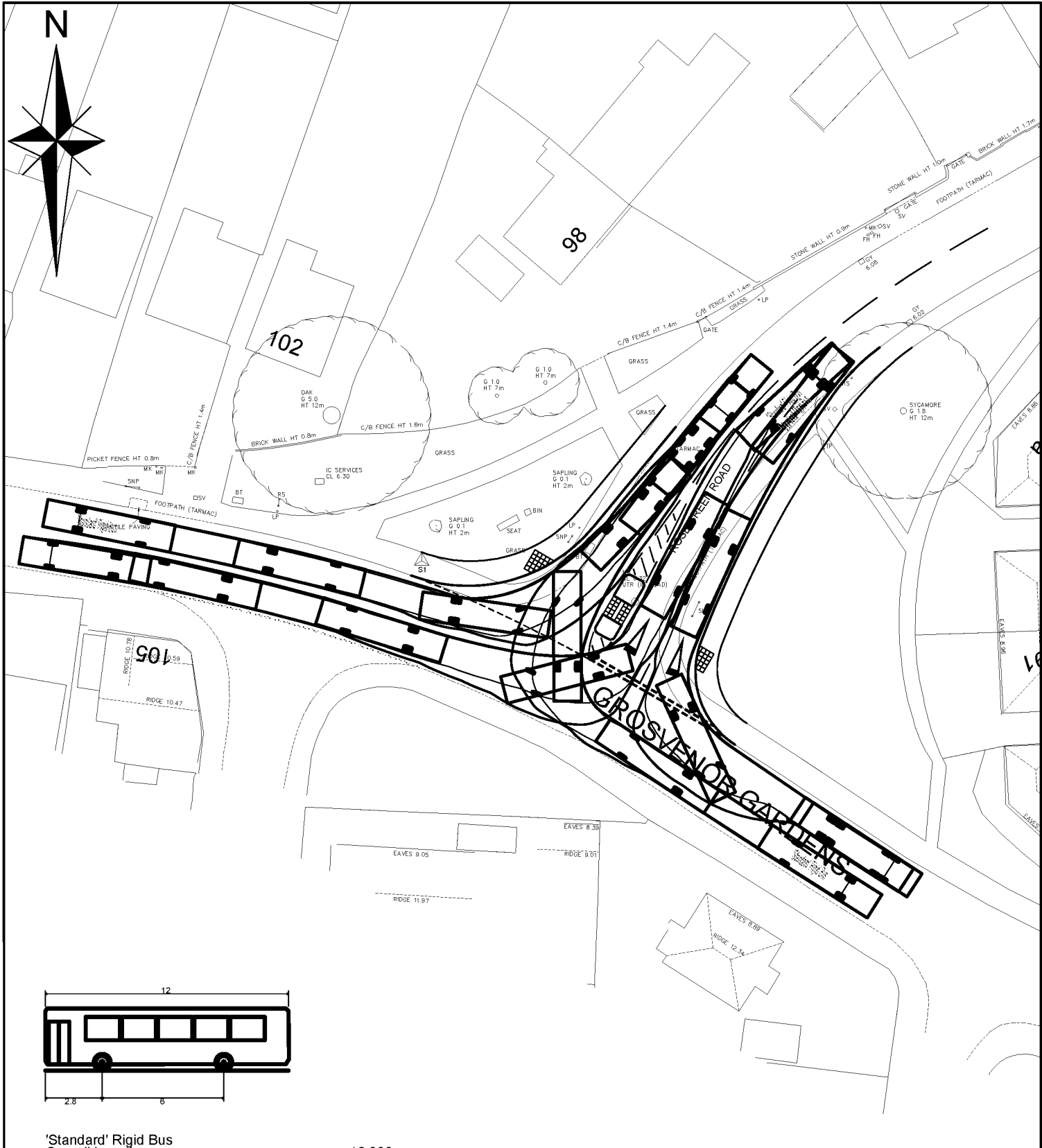
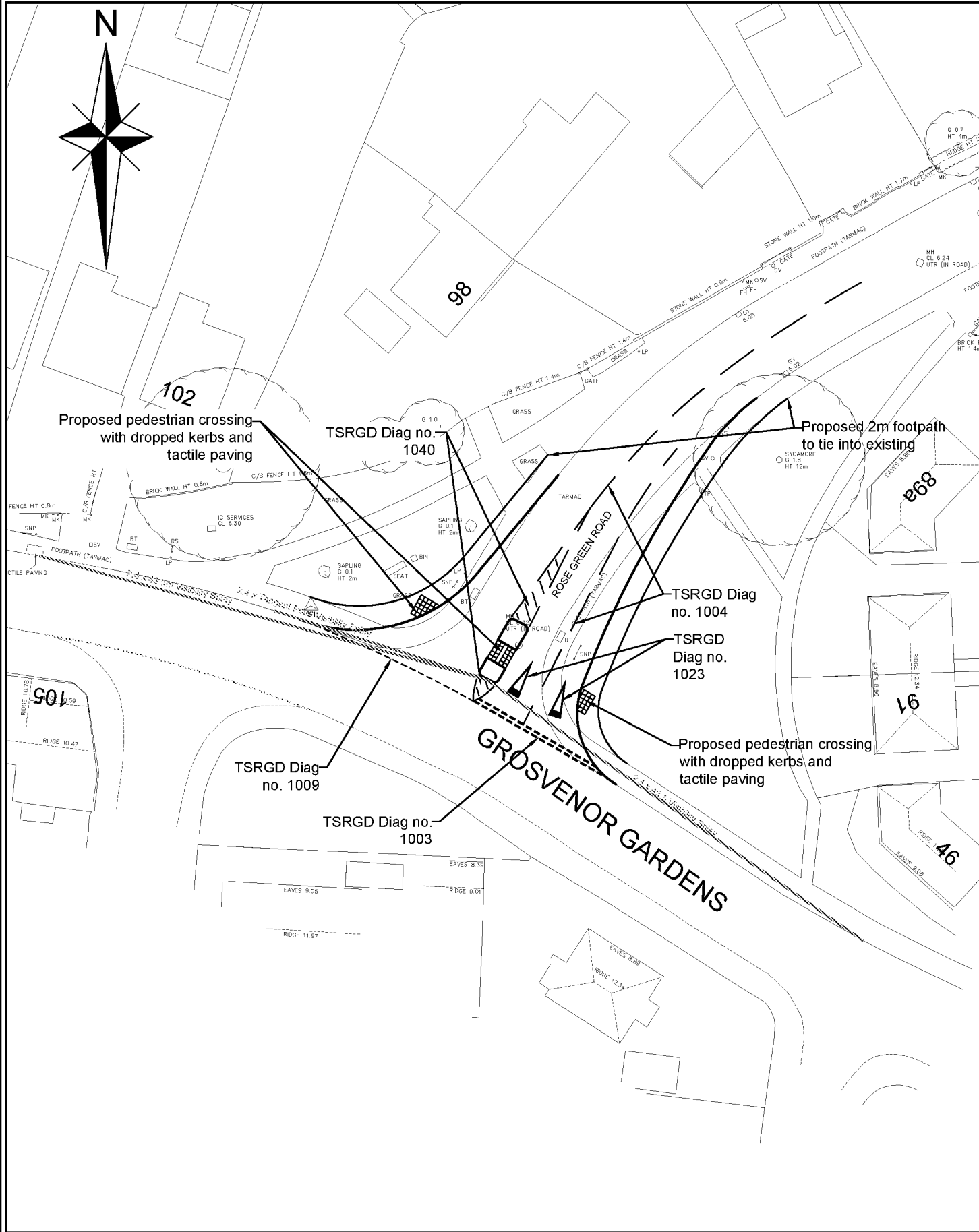


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	464.6%	45	177	0	2429.5	-	-
Whyke Junction	-	-	-		-	-	-	-	-	-	464.6%	45	177	0	2429.5	-	-
1/2+1/1	A27 E/B Left Ahead	U+O	A H		1	12:63	-	1406	2105:1871	249+99	404.0 : 404.0%	0	99	0	605.2 (435.6+169.6)	1549.6 (1560.4:1522.5)	623.9
1/3+1/4	A27 E/B Ahead Right	U	A C		1	12:7	-	1323	1965:3828	232+95	403.9 : 403.9%	-	-	-	569.4 (406.6+162.9)	1549.5 (1560.4:1522.8)	585.2
2/2+2/1	Whyke Rd S/B Right Left Ahead	U+O	E -		1	7	-	404	1846:1828	134+68	199.6 : 199.6%	30	39	0	117.3 (79.4+37.9)	1045.5 (1066.7:1003.8)	129.6
2/3	Whyke Rd S/B Right	U	E		1	7	-	305	2105	153	199.2%	-	-	-	90.6	1069.5	90.3
3/2+3/1	A27 W/B Ahead Left	U+O	B -		1	10	-	1232	2105:1871	210+55	464.6 : 464.6%	15	39	0	551.3 (441.6+109.7)	1610.9 (1625.6:1554.4)	585.0
3/3+3/4	A27 W/B Ahead Right	U	B D		1	10:7	-	1083	1965:3828	196+37	464.1 : 464.1%	-	-	-	486.9 (411.8+75.1)	1618.5 (1625.4:1581.6)	501.2
4/1+4/2	B2145 N/B Left	U	G		1	30	-	251	1828:1965	288+309	42.0 : 42.0%	-	-	-	2.5 (1.2+1.3)	35.9 (35.9:35.9)	4.4
4/3+4/4	B2145 N/B Ahead Right	U	F		1	22	-	492	1893:1914	396+400	61.9 : 61.7%	-	-	-	6.2 (3.1+3.1)	45.4 (45.4:45.4)	7.6
C1 - Whyke					PRC for Signalled Lanes (%): -416.2			PRC Over All Lanes (%): -416.2			Total Delay for Signalled Lanes (pcuHr): 2429.46			Total Delay Over All Lanes(pcuHr): 2429.46			Cycle Time (s): 110

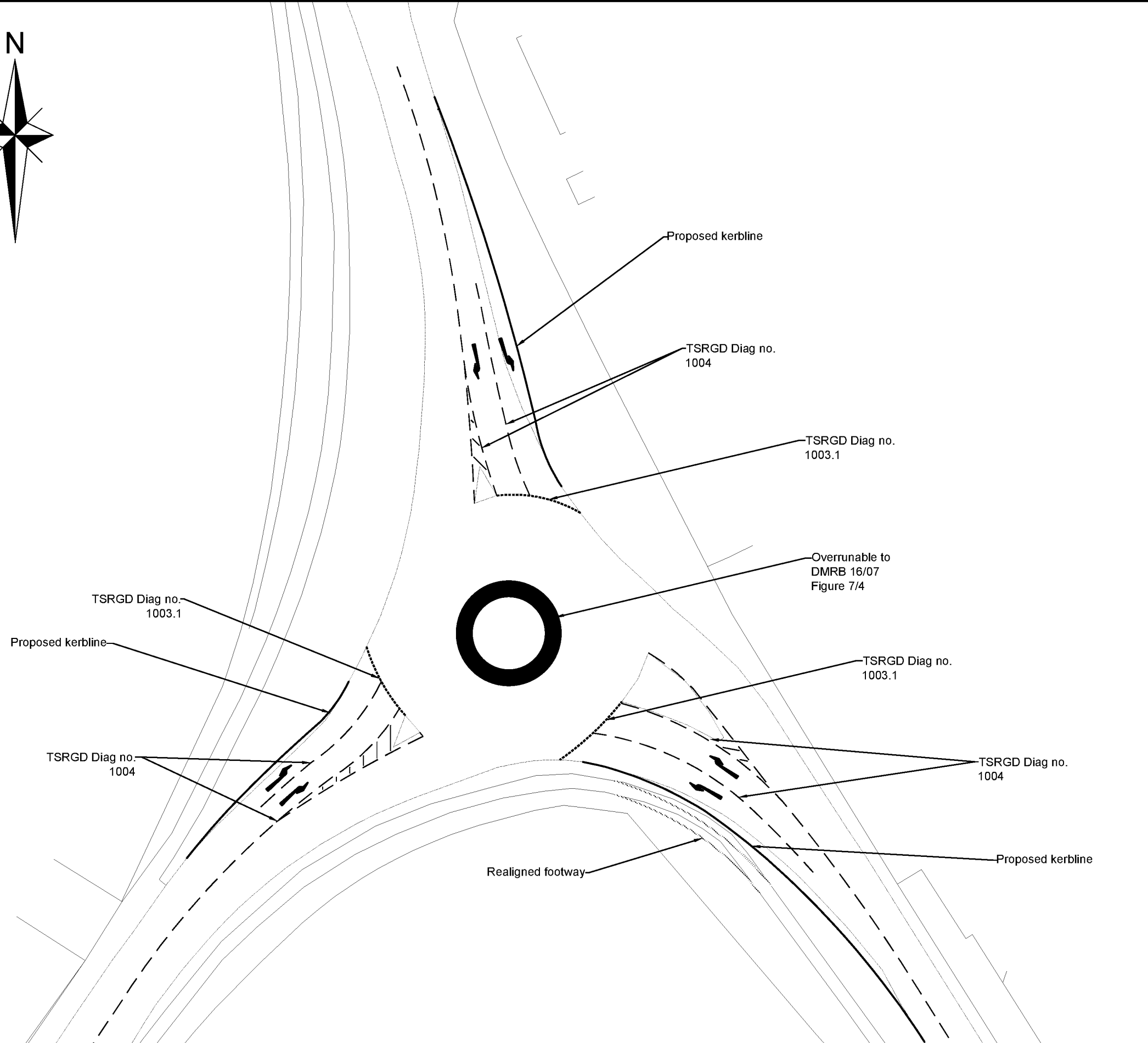
Appendix K – Proposed Mitigation Measures



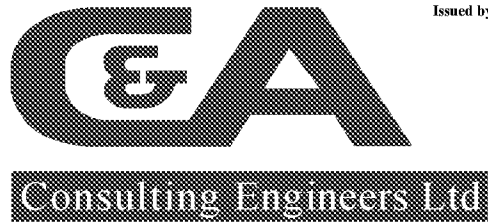
'Standard' Rigid Bus
Overall Length 12.000m
Overall Width 2.550m
Overall Body Height 3.069m
Min Body Ground Clearance 0.309m
Track Width 2.350m
Lock to Lock Time 4.00s
Wall to Wall Turning Radius 10.771m

A	Tracking updated with 12m bus	PL	TMS	GAC	Feb 17
Rev	Amendments	Dm	Chk	App	Date

 Issued by ☒ Aldershot Enterprise Centre Mandora House Louise Margaret Road Aldershot, Hampshire GU11 2PW 01252 939000 ☐ Office 17, Wealden Place Bradbourne Vale Road Sevenoaks, Kent TN13 3QQ 01732 448120	Job Title	Land at Sefter Road Bognor Regis	Client Taylor Wimpey Strategic Land	Scale	1:500@A3	Date	Oct 16	Designed	BL
	Drawing Title	J4 - Rose Green Road / Grosvenor Gardens Proposed Junction Layout		Drawn	BL	Checked	TMS	Approved	GAC
				Job No	12-018	Drawing No	12-018-036	Rev	A



Rev	Amendments				Date
		Dm	Chk	App	



Issued by ☒

Landmark House
Station Road
Hook
Hampshire
RG27 9HA
01252 939001

☐

Park House, Park Farm
East Malling Trust Estate
Bradbourne Lane
Aylesford Kent ME20 6SN
01732 448120

Job Title

Land at Sefter Road
Bognor Regis

Drawing Title

J8 - B2166 / B2145 Roundabout
Proposed Junction Layout

Client

Taylor Wimpey
Strategic Land

Scale
1:500@A3

Date
Apr 17

Designed
PL

Drawn
PL

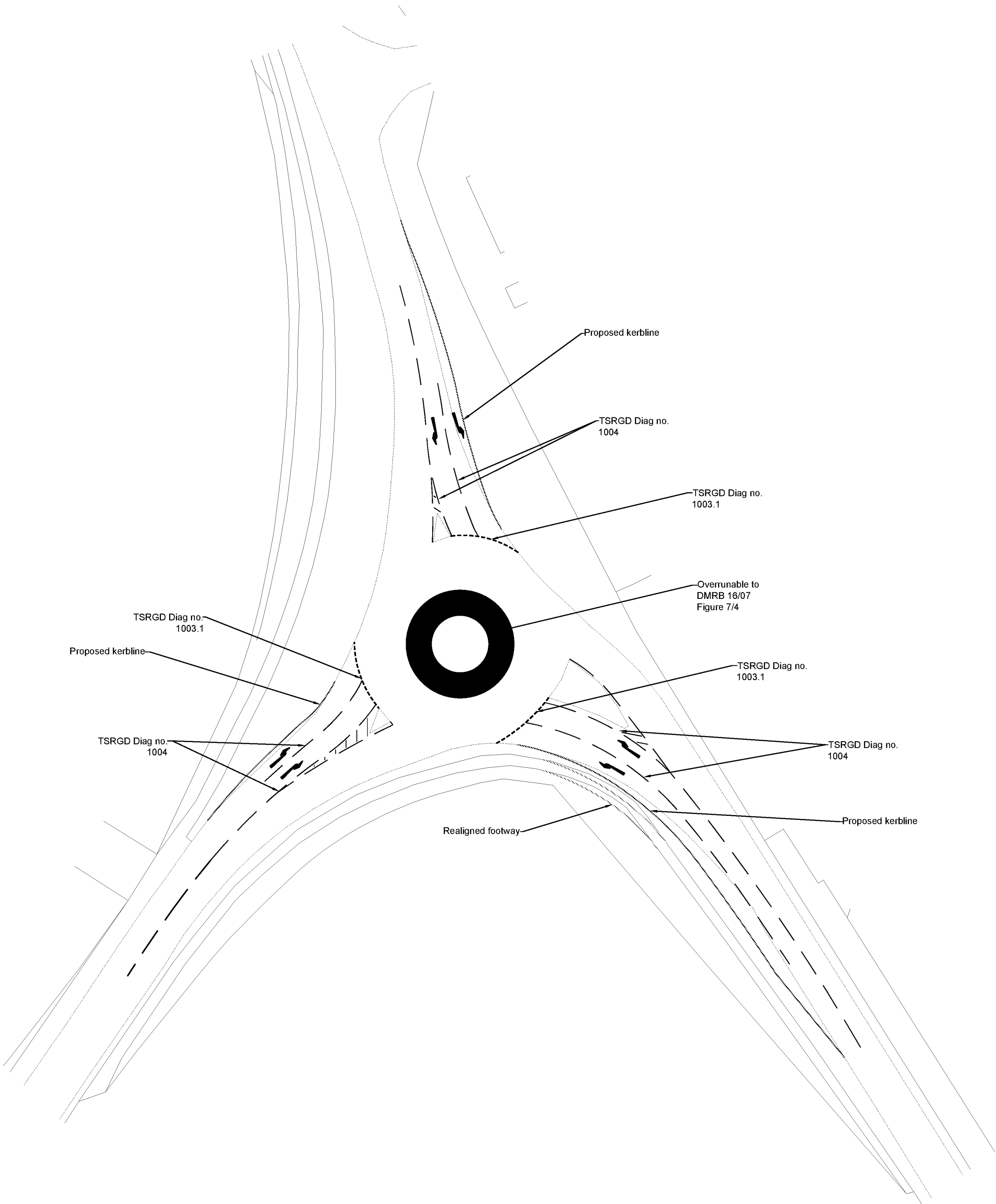
Checked
TMS

Approved
GAC

Job No
12-018

Drawing No
12-018-045

Rev
-



NOTES

B	Minor amendments.	PL	TMS	GAC	Aug 17
A	Line markings corrected.	PL	TMS	GAC	Jul 17
Rev	Amendments	Drm	Chk	App	Date



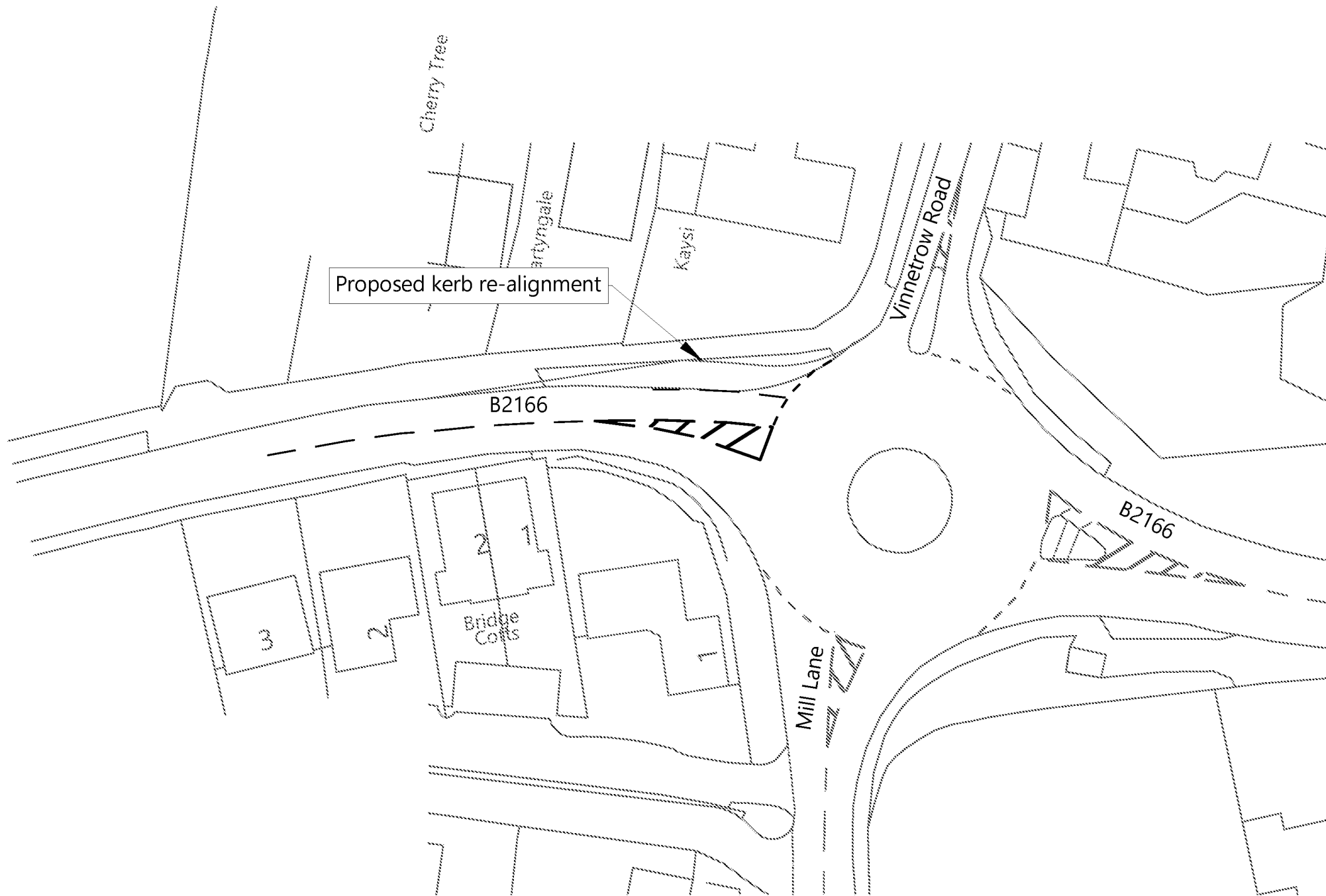
Landmark House Station Road Hook Hampshire RG27 9HA 01256 630420	☒ Issued by enquiries@c-a.uk.com www.c-a.uk.com	☐ Park House Park Farm East Malling Trust Estate Bradbourne Lane Aylesford Kent ME20 6SN 01732 448120
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Job Title
Land at Sefter Road Bognor Regis

Drawing Title
Proposed Junction 8 B2166 / B2145 Modification

Client
Taylor Wimpey Strategic Land

Scale 1:500@A2	Date Aug 17	Designed PL
Drawn PL	Checked TMS	Approved GAC
Job No 12-018	Drawing No 12-018-045	Rev B



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ISSUE	REASON FOR REVISION	DATE

PROJECT: PAGHAM SOUTH, PAGHAM		
CLIENT: HANBURY PM Ltd		
PROJECT REFERENCE: 1616	DRAWING NUMBER: 14	SCALE: 1:500 @ A3

Highgate Transportation www.highgatetransportation.co.uk Box 13, 42 Triangle West Park Street, Bristol BS8 1ES 07973 375 937 / 07595 892 217 © Highgate Transportation Limited		
TITLE: PROPOSED MITIGATION WORKS - B2166 VINNETROW ROAD		
DATE: 17/03/17	DRAWN BY: FB	CHECKED: DT

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: B2145 B2166.j9

Path: \\neur-mpfs-02\tr_projects\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031 SATURN No Mitigation - With Development\Proposed Improvements

Report generation date: 18/08/2017 11:50:45

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM							PM								
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2031 Base + Committed (SATURN FLOWS)															
1 - B2145 North	1.0	1.8	5.45	0.50	A	30.32	D	- 5 % [3 - B2145 ASouth]	9.0	48.5	26.79	0.81	D	14.36	B	2 % [1 - B2145 North]
2 - B2166	4.9	23.7	11.96	0.84	B				1.5	2.0	5.14	0.81	A			
3 - B2145 ASouth	21.3	77.2	74.36	1.09	F				2.1	3.5	8.07	0.88	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	05/12/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B2166 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	30.32	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-5	3 - B2145 ASouth

Arms

Arms

Arm	Name	Description
1	B2145 North	
2	B2166	
3	B2145 ASouth	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - B2145 North	3.13	7.10	21.0	36.4	30.0	17.8	
2 - B2166	2.83	7.86	52.8	24.4	30.0	16.8	
3 - B2145 ASouth	3.58	6.70	15.1	32.9	30.0	10.6	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B2145 North	0.700	1808
2 - B2166	0.764	2136
3 - B2145 ASouth	0.705	1797

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

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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2145 North		✓	609	100.000
2 - B2166		✓	1388	100.000
3 - B2145 ASouth		✓	938	100.000

Origin-Destination Data

Demand (Veh/hr)

	To

From		1 - B2145 North	2 - B2166	3 - B2145 ASouth
	1 - B2145 North	0	299	310
	2 - B2166	944	0	444
	3 - B2145 ASouth	407	531	0

Vehicle Mix

Heavy Vehicle Percentages

From		To		
		1 - B2145 North	2 - B2166	3 - B2145 ASouth
	1 - B2145 North	0	4	7
	2 - B2166	2	0	1
	3 - B2145 ASouth	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.50	5.45	1.0	1.8	A
2 - B2166	0.84	11.96	4.9	23.7	B
3 - B2145 ASouth	1.09	74.28	21.3	77.2	F

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	458	397	1447	0.317	457	0.5	3.628	A
2 - B2166	1045	232	1914	0.546	1040	1.2	4.097	A
3 - B2145 ASouth	706	707	1271	0.556	701	1.2	6.270	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	547	475	1395	0.392	547	0.6	4.239	A
2 - B2166	1248	278	1877	0.665	1245	1.9	5.664	A
3 - B2145 ASouth	843	847	1172	0.719	838	2.5	10.632	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	671	557	1340	0.500	669	1.0	5.352	A
2 - B2166	1528	341	1827	0.836	1517	4.8	11.216	B
3 - B2145 ASouth	1033	1032	1041	0.992	983	14.9	43.835	E

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	671	570	1331	0.504	670	1.0	5.447	A
2 - B2166	1528	341	1827	0.837	1528	4.9	11.962	B
3 - B2145 ASouth	1033	1039	1036	0.997	1007	21.3	74.582	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	547	519	1365	0.401	549	0.7	4.415	A
2 - B2166	1248	279	1876	0.665	1259	2.0	5.941	A
3 - B2145 ASouth	843	857	1165	0.724	917	2.8	18.742	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	458	403	1443	0.318	459	0.5	3.661	A
2 - B2166	1045	234	1913	0.546	1048	1.2	4.178	A
3 - B2145 ASouth	706	713	1267	0.557	712	1.3	6.557	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
2 - B2166	1.19	0.58	1.05	1.47	1.47			N/A	N/A
3 - B2145 ASouth	1.23	0.29	1.16	1.76	1.96			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.64	0.10	0.83	1.37	1.43			N/A	N/A
2 - B2166	1.95	0.04	0.45	5.26	8.78			N/A	N/A
3 - B2145 ASouth	2.46	0.05	0.48	6.78	11.19			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.99	0.03	0.26	0.99	0.99			N/A	N/A
2 - B2166	4.75	0.03	0.32	6.78	23.68			N/A	N/A
3 - B2145 ASouth	14.87	0.32	8.21	36.75	49.96			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.01	0.03	0.27	1.01	1.84			N/A	N/A
2 - B2166	4.92	0.03	0.28	4.92	13.14			N/A	N/A
3 - B2145 ASouth	21.27	0.27	10.38	55.35	77.23			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.67	0.40	0.97	1.39	1.45			N/A	N/A
2 - B2166	2.02	0.05	0.58	5.37	8.40			N/A	N/A
3 - B2145 ASouth	2.76	0.04	0.37	7.11	14.57			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.47	0.04	0.39	1.22	1.36			N/A	N/A
2 - B2166	1.22	0.04	0.36	2.98	5.87			N/A	N/A
3 - B2145 ASouth	1.28	0.03	0.28	1.28	4.82			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B2166 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	14.36	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	2	1 - B2145 North

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)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2145 North		✓	1166	100.000
2 - B2166		✓	978	100.000
3 - B2145 ASouth		✓	878	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		1 - B2145 North	2 - B2166	3 - B2145 ASouth
	1 - B2145 North	0	787	379
	2 - B2166	458	0	520
	3 - B2145 ASouth	394	484	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		1 - B2145 North	2 - B2166	3 - B2145 ASouth
	1 - B2145 North	0	2	2
	2 - B2166	3	0	1
	3 - B2145 ASouth	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.51	26.79	9.0	48.5	D
2 - B2166	0.81	5.14	1.5	2.0	A
3 - B2145 ASouth	0.68	8.07	2.1	3.5	A

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	878	363	1524	0.576	872	1.3	5.485	A
2 - B2166	736	284	1879	0.392	734	0.6	3.137	A
3 - B2145 ASouth	661	344	1527	0.433	658	0.8	4.127	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1048	434	1474	0.711	1044	2.4	8.282	A
2 - B2166	879	339	1836	0.479	878	0.9	3.754	A
3 - B2145 ASouth	789	411	1479	0.534	788	1.1	5.197	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1284	531	1408	0.912	1281	8.0	21.759	C
2 - B2166	1077	410	1782	0.604	1074	1.5	5.067	A
3 - B2145 ASouth	967	503	1413	0.684	963	2.1	7.926	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1284	533	1407	0.913	1280	9.0	26.791	C
2 - B2166	1077	416	1778	0.606	1077	1.5	5.135	A
3 - B2145 ASouth	967	504	1412	0.684	967	2.1	8.070	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1048	437	1472	0.712	1074	2.6	9.580	A
2 - B2166	879	349	1829	0.481	882	0.9	3.808	A
3 - B2145 ASouth	789	413	1478	0.534	793	1.2	5.288	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	878	365	1522	0.577	883	1.4	5.673	A
2 - B2166	736	287	1878	0.392	737	0.6	3.162	A
3 - B2145 ASouth	661	345	1526	0.433	663	0.8	4.176	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.34	0.56	1.24	1.72	1.89			N/A	N/A
2 - B2166	0.64	0.55	1.00	1.40	1.45			N/A	N/A
3 - B2145 ASouth	0.76	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.39	0.05	0.48	6.54	10.70			N/A	N/A
2 - B2166	0.91	0.07	0.79	1.81	1.98			N/A	N/A
3 - B2145 ASouth	1.13	0.06	0.77	2.37	3.31			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	8.05	0.05	0.53	23.20	41.36			N/A	N/A
2 - B2166	1.51	0.03	0.26	1.51	1.51			N/A	N/A
3 - B2145 ASouth	2.11	0.03	0.27	2.11	3.50			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	8.97	0.04	0.37	20.62	49.51			N/A	N/A

2 - B2166	1.52	0.03	0.26	1.52	1.52			N/A	N/A
3 - B2145 ASouth	2.14	0.03	0.27	2.14	2.14			N/A	N/A

17:38 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.55	0.04	0.42	7.00	12.61			N/A	N/A
2 - B2166	0.93	0.28	0.99	1.31	1.31			N/A	N/A
3 - B2145 ASouth	1.16	0.09	0.99	1.98	2.72			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.38	0.03	0.31	2.41	7.05			N/A	N/A
2 - B2166	0.65	0.07	0.71	1.37	1.45			N/A	N/A
3 - B2145 ASouth	0.77	0.05	0.48	1.53	2.06			N/A	N/A

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017
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Filename: B2145 B2166.j9

Path: \\eur-mpfs-02\tr_projects\JNY8840 - Land West of Hook Lane, Pagham, near Bognor

Regis\Transport\Picady\Revised Traffic Flows\2031 SATURN With Mitigation - With Development\Proposed Improvements

Report generation date: 18/08/2017 11:53:45

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM							PM								
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2031 Base + Committed (SATURN FLOWS)															
1 - B2145 North	1.6	1.9	7.13	0.62	A	19.67	C	-2% [3 - B2145 Sth]	37.1	100.8	30.25	1.03	F	42.63	E	-7% [1 - B2145 North]
2 - B2166	2.9	7.7	8.20	0.75	A				1.0	1.5	4.28	0.50	A			
3 - B2145 Sth	12.4	63.2	42.56	0.95	E				1.7	2.6	6.50	0.64	A			

There are warnings associated with one or more model runs - see the 'Data Error and Warnings' table for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	05/12/2016
Version	
Status	(new file)
Identifier	
Client	
Job number	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

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

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B2166 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	19.67	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-2	3 - B2145 Sth

Arms

Arms

Arm	Name	Description
1	B2145 North	
2	B2166	
3	B2145 Sth	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - B2145 North	3.13	7.10	21.0	36.4	30.0	17.8	
2 - B2166	2.83	7.86	52.8	24.4	30.0	16.8	
3 - B2145 Sth	3.58	6.70	15.1	32.9	30.0	10.6	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B2145 North	0.700	1808
2 - B2166	0.764	2136
3 - B2145 Sth	0.705	1797

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

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)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2145 North		✓	746	100.000
2 - B2166		✓	1175	100.000
3 - B2145 Sth		✓	1014	100.000

Origin-Destination Data

Demand (Veh/hr)

	To
--	----

		1 - B2145 North	2 - B2166	3 - B2145 Sth
From	1 - B2145 North	0	328	418
	2 - B2166	759	0	416
	3 - B2145 Sth	487	527	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - B2145 North	2 - B2166	3 - B2145 Sth
From	1 - B2145 North	0	4	7
	2 - B2166	2	0	1
	3 - B2145 Sth	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.82	7.13	1.6	1.9	A
2 - B2166	0.75	8.20	2.9	7.7	A
3 - B2145 Sth	0.35	42.59	12.4	83.2	E

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	562	394	1447	0.388	559	0.6	4.043	A
2 - B2166	885	313	1850	0.478	881	0.9	3.702	A
3 - B2145 Sth	763	569	1368	0.558	758	1.2	5.860	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	671	471	1395	0.481	669	0.9	4.951	A
2 - B2166	1056	375	1800	0.587	1054	1.4	4.815	A
3 - B2145 Sth	912	681	1289	0.707	907	2.3	9.328	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	821	564	1334	0.616	819	1.6	6.956	A
2 - B2166	1294	459	1733	0.747	1288	2.8	7.968	A
3 - B2145 Sth	1116	832	1182	0.845	1085	10.2	30.378	D

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	821	576	1326	0.620	821	1.6	7.133	A
2 - B2166	1294	460	1732	0.747	1293	2.9	8.205	A
3 - B2145 Sth	1116	836	1179	0.847	1108	12.4	42.583	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	671	494	1380	0.486	673	1.0	5.111	A
2 - B2166	1056	377	1798	0.587	1062	1.4	4.927	A
3 - B2145 Sth	912	686	1285	0.709	951	2.5	11.980	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	562	399	1444	0.389	563	0.6	4.093	A
2 - B2166	885	315	1848	0.479	887	0.9	3.754	A

3 - B2145 Sth	763	573	1365	0.559	768	1.3	6.080	A
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Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.63	0.55	1.00	1.40	1.45			N/A	N/A
2 - B2166	0.91	0.55	1.00	1.40	1.45			N/A	N/A
3 - B2145 Sth	1.24	0.53	1.17	1.66	1.66			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.92	0.08	0.84	1.54	1.91			N/A	N/A
2 - B2166	1.40	0.05	0.49	3.51	5.40			N/A	N/A
3 - B2145 Sth	2.34	0.05	0.48	6.40	10.49			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.57	0.03	0.27	1.57	1.57			N/A	N/A
2 - B2166	2.85	0.03	0.28	2.85	7.70			N/A	N/A
3 - B2145 Sth	10.24	0.08	2.26	29.30	45.03			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.61	0.03	0.27	1.61	1.61			N/A	N/A
2 - B2166	2.90	0.03	0.27	2.90	2.90			N/A	N/A
3 - B2145 Sth	12.40	0.06	1.11	36.28	63.17			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.96	0.14	0.97	1.29	1.68			N/A	N/A
2 - B2166	1.44	0.07	1.00	3.01	4.23			N/A	N/A
3 - B2145 Sth	2.53	0.04	0.39	6.75	12.92			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.64	0.05	0.58	1.08	1.08			N/A	N/A
2 - B2166	0.93	0.04	0.43	2.11	3.33			N/A	N/A
3 - B2145 Sth	1.29	0.03	0.30	1.41	5.91			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B2166 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	42.63	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-7	1 - B2145 North

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)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2145 North		✓	1275	100.000
2 - B2166		✓	757	100.000
3 - B2145 Sth		✓	886	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - B2145 North	2 - B2166	3 - B2145 Sth
From	1 - B2145 North	0	752	523
	2 - B2166	313	0	444
	3 - B2145 Sth	349	537	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1 - B2145 North	2 - B2166	3 - B2145 Sth
From	1 - B2145 North	0	2	2
	2 - B2166	3	0	1
	3 - B2145 Sth	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	1.93	60.25	37.1	103.8	F
2 - B2166	0.50	4.28	1.0	1.5	A
3 - B2145 Sth	0.64	6.50	1.7	2.6	A

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	960	403	1496	0.642	953	1.8	6.543	A
2 - B2166	570	391	1799	0.317	568	0.5	2.921	A
3 - B2145 Sth	667	235	1608	0.415	664	0.7	3.804	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1146	482	1442	0.795	1139	3.7	11.592	B
2 - B2166	681	467	1741	0.391	680	0.6	3.392	A
3 - B2145 Sth	796	281	1575	0.506	795	1.0	4.611	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1404	590	1368	1.028	1323	23.8	48.489	E
2 - B2166	833	543	1683	0.495	832	1.0	4.226	A
3 - B2145 Sth	976	344	1529	0.638	973	1.7	6.431	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1404	591	1367	1.027	1351	37.1	80.264	F
2 - B2166	833	554	1674	0.498	833	1.0	4.282	A
3 - B2145 Sth	976	345	1529	0.638	975	1.7	6.499	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1146	484	1440	0.796	1277	4.3	35.257	E
2 - B2166	681	524	1697	0.401	682	0.7	3.552	A
3 - B2145 Sth	796	282	1574	0.506	799	1.0	4.663	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	960	405	1494	0.642	970	1.8	6.986	A
2 - B2166	570	398	1794	0.318	571	0.5	2.947	A
3 - B2145 Sth	667	236	1607	0.415	668	0.7	3.840	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.75	0.24	1.49	2.91	3.70			N/A	N/A
2 - B2166	0.46	0.00	0.00	0.46	0.46			N/A	N/A
3 - B2145 Sth	0.70	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	3.66	0.05	0.77	10.28	16.59			N/A	N/A
2 - B2166	0.64	0.09	0.80	1.36	1.43			N/A	N/A
3 - B2145 Sth	1.01	0.07	0.82	1.86	2.58			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	23.78	1.36	17.13	51.83	66.31			N/A	N/A
2 - B2166	0.97	0.03	0.26	0.97	0.97			N/A	N/A
3 - B2145 Sth	1.73	0.03	0.27	1.73	1.73			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North									
2 - B2166									
3 - B2145 Sth									

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	37.06	2.39	26.95	81.06	103.64			N/A	N/A
2 - B2166	0.99	0.03	0.27	0.99	1.49			N/A	N/A
3 - B2145 Sth	1.74	0.03	0.27	1.74	1.74			N/A	N/A

17:38 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	4.30	0.04	0.41	11.68	22.64			N/A	N/A
2 - B2166	0.67	0.55	1.00	1.40	1.45			N/A	N/A
3 - B2145 Sth	1.03	0.13	1.01	1.56	1.86			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.83	0.03	0.29	1.83	7.30			N/A	N/A
2 - B2166	0.47	0.00	0.00	0.47	0.47			N/A	N/A
3 - B2145 Sth	0.71	0.06	0.64	1.48	1.52			N/A	N/A

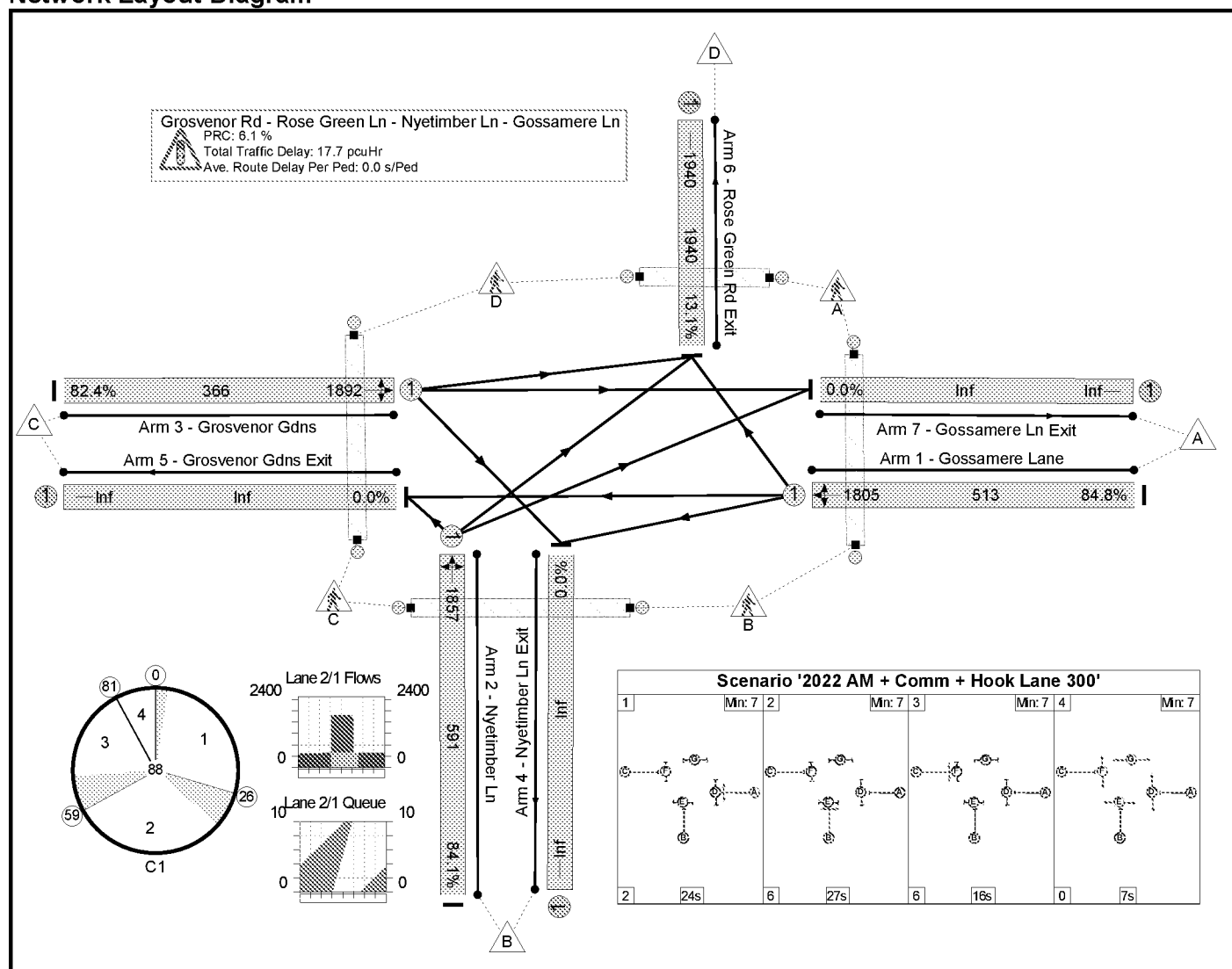
Basic Results Summary

User and Project Details

Project:	12-018 Sefter Road, Bognor Regis
Title:	Rose Green Rd, Gossamer Ln, Nyetimber Ln
Location:	
File name:	Site 6 Rose Green Road - Gr Ln - N Ln 2031 Cumulative Assessment 65s Vs optimised.lsg3x
Author:	TJMS
Company:	C&A Consulting Engineers Ltd
Address:	
Notes:	

Scenario 1: '2022 AM + Comm + Hook Lane 300' (FG1: '2022 + Committed + Hook Lane 300 Dwell 80 Bed Care', Plan 1: 'With Ped Stage')

Network Layout Diagram



Basic Results Summary

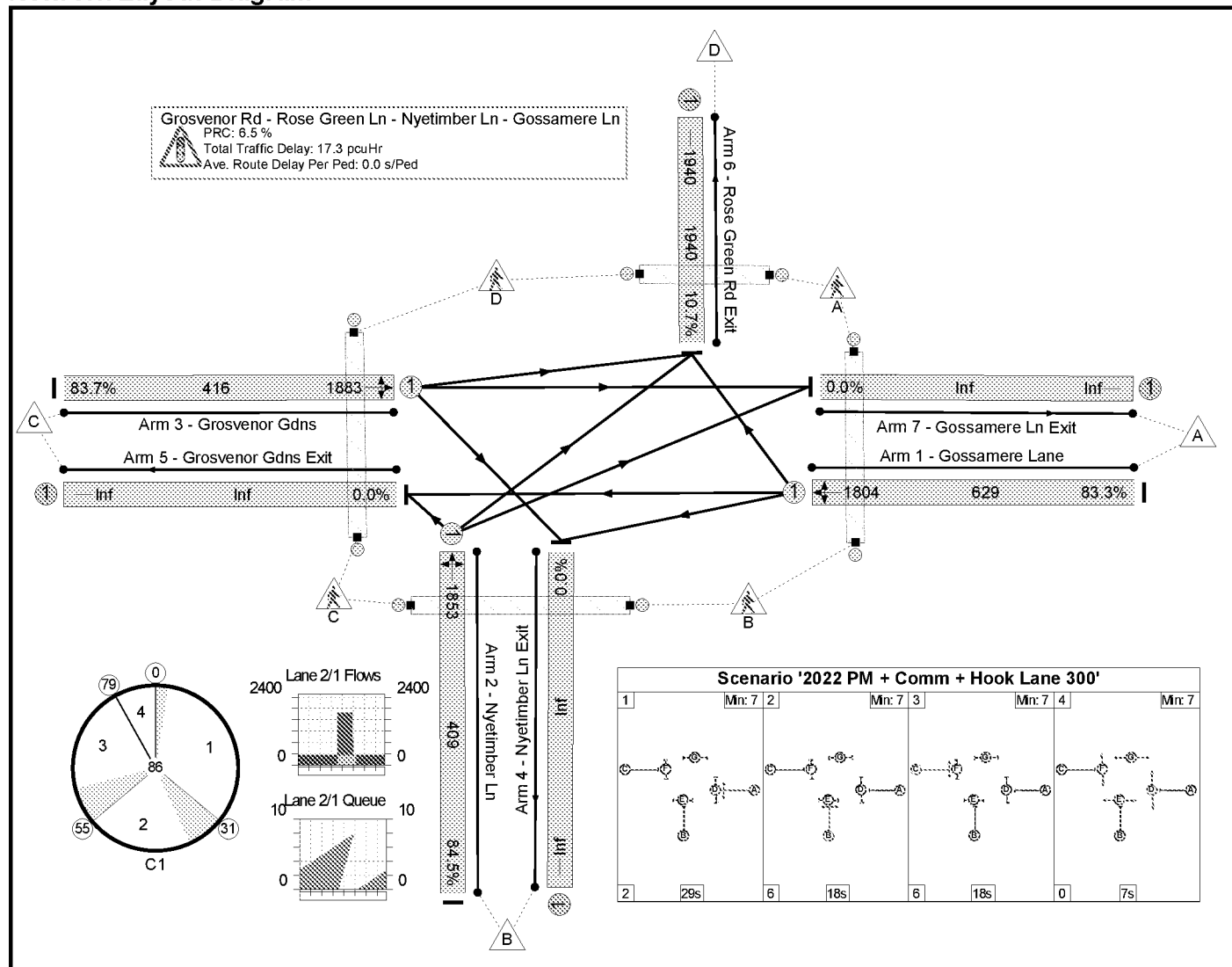
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rose Green Rd, Gossamer Ln, Nyetimber Ln	-	-	-		-	-	-	-	-	-	84.8%	0	0	0	17.7	-	-
Grosvenor Rd - Rose Green Ln - Nyetimber Ln - Gossamere Ln	-	-	-		-	-	-	-	-	-	84.8%	0	0	0	17.7	-	-
1/1	Gossamere Lane Left Ahead Right	U	A		1	24	-	435	1805	513	84.8%	-	-	-	6.2	51.4	12.6
2/1	Nyetimber Ln Left Ahead Right	U	B		1	27	-	497	1857	591	84.1%	-	-	-	6.4	46.1	13.7
3/1	Grosvenor Gdns Right Left Ahead	U	C		1	16	-	301	1892	366	82.4%	-	-	-	5.0	60.2	9.2
6/1	Rose Green Rd Exit	U	-		-	-	-	255	1940	1940	13.1%	-	-	-	0.1	1.1	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	7	-	0	-	5727	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5727	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P3	Unnamed Ped Link	-	F		1	7	-	0	-	5727	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P4	Unnamed Ped Link	-	G		1	7	-	0	-	5727	0.0%	-	-	-	0.0	0.0	0.0
C1		PRC for Signalled Lanes (%):		6.1		Total Delay for Signalled Lanes (pcuHr):		17.61		Cycle Time (s):		88					
		PRC Over All Lanes (%):		6.1		Total Delay Over All Lanes (pcuHr):		17.69									

Basic Results Summary

Scenario 2: '2022 PM + Comm + Hook Lane 300' (FG2: '2022 + Committed + Hook Lane 300 Dwell 80 bed Care', Plan 1: 'With Ped Stage')

Network Layout Diagram



Basic Results Summary

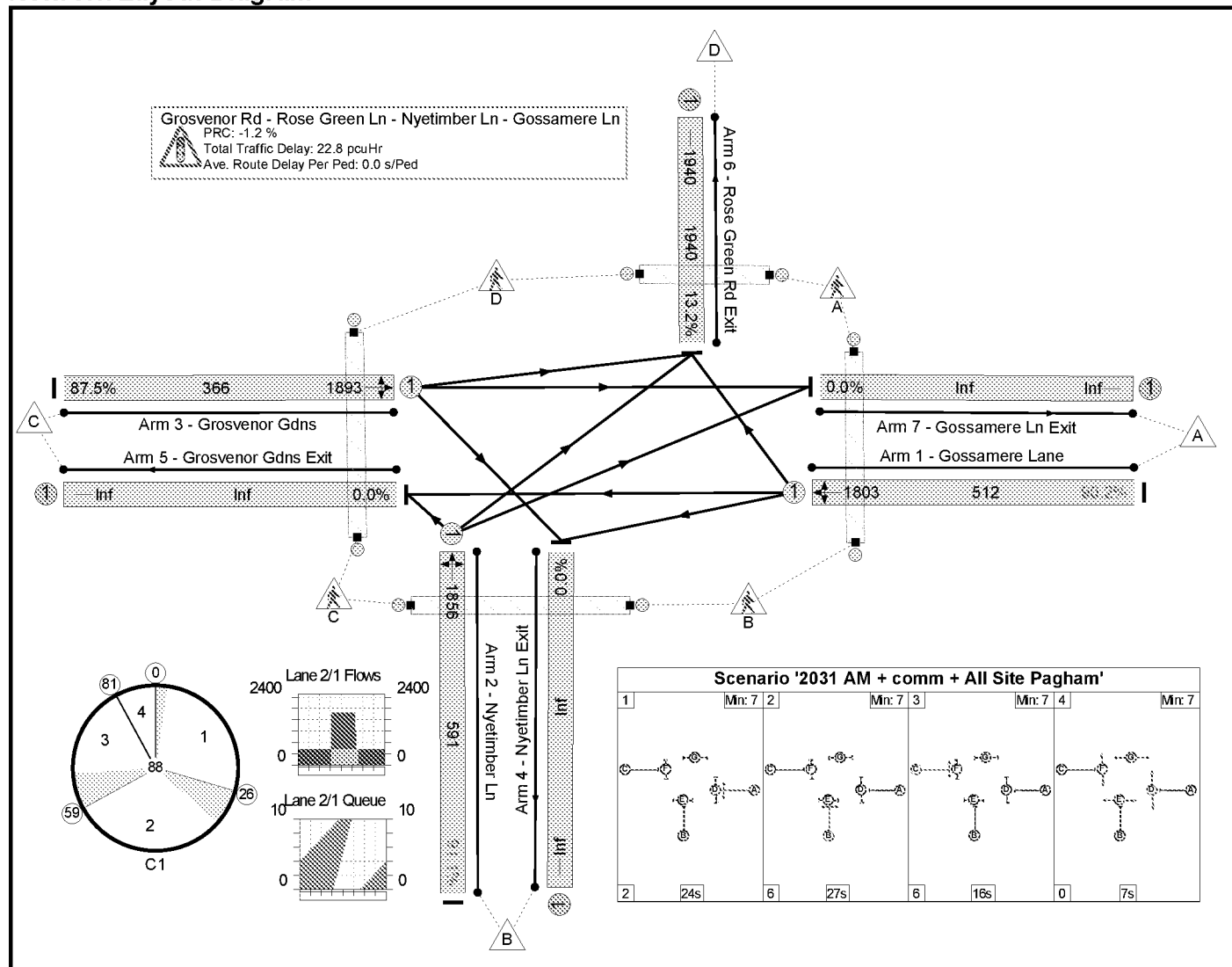
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rose Green Rd, Gossamer Ln, Nyetimber Ln	-	-	-		-	-	-	-	-	-	84.5%	0	0	0	17.3	-	-
Grosvenor Rd - Rose Green Ln - Nyetimber Ln - Gossamere Ln	-	-	-		-	-	-	-	-	-	84.5%	0	0	0	17.3	-	-
1/1	Gossamere Lane Left Ahead Right	U	A		1	29	-	524	1804	629	83.3%	-	-	-	6.1	42.1	13.7
2/1	Nyetimber Ln Left Ahead Right	U	B		1	18	-	346	1853	409	84.5%	-	-	-	5.6	58.4	10.4
3/1	Grosvenor Gdns Right Left Ahead	U	C		1	18	-	348	1883	416	83.7%	-	-	-	5.5	56.7	10.3
6/1	Rose Green Rd Exit	U	-		-	-	-	207	1940	1940	10.7%	-	-	-	0.1	1.0	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	7	-	0	-	5860	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5860	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P3	Unnamed Ped Link	-	F		1	7	-	0	-	5860	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P4	Unnamed Ped Link	-	G		1	7	-	0	-	5860	0.0%	-	-	-	0.0	0.0	0.0
C1		PRC for Signalled Lanes (%):		6.5		Total Delay for Signalled Lanes (pcuHr):		17.22		Cycle Time (s):		86					
		PRC Over All Lanes (%):		6.5		Total Delay Over All Lanes (pcuHr):		17.28									

Basic Results Summary

Scenario 3: '2031 AM + comm + All Site Pagham' (FG3: '2031 AM + Comm + All Sites Pagham', Plan 1: 'With Ped Stage')

Network Layout Diagram



Basic Results Summary

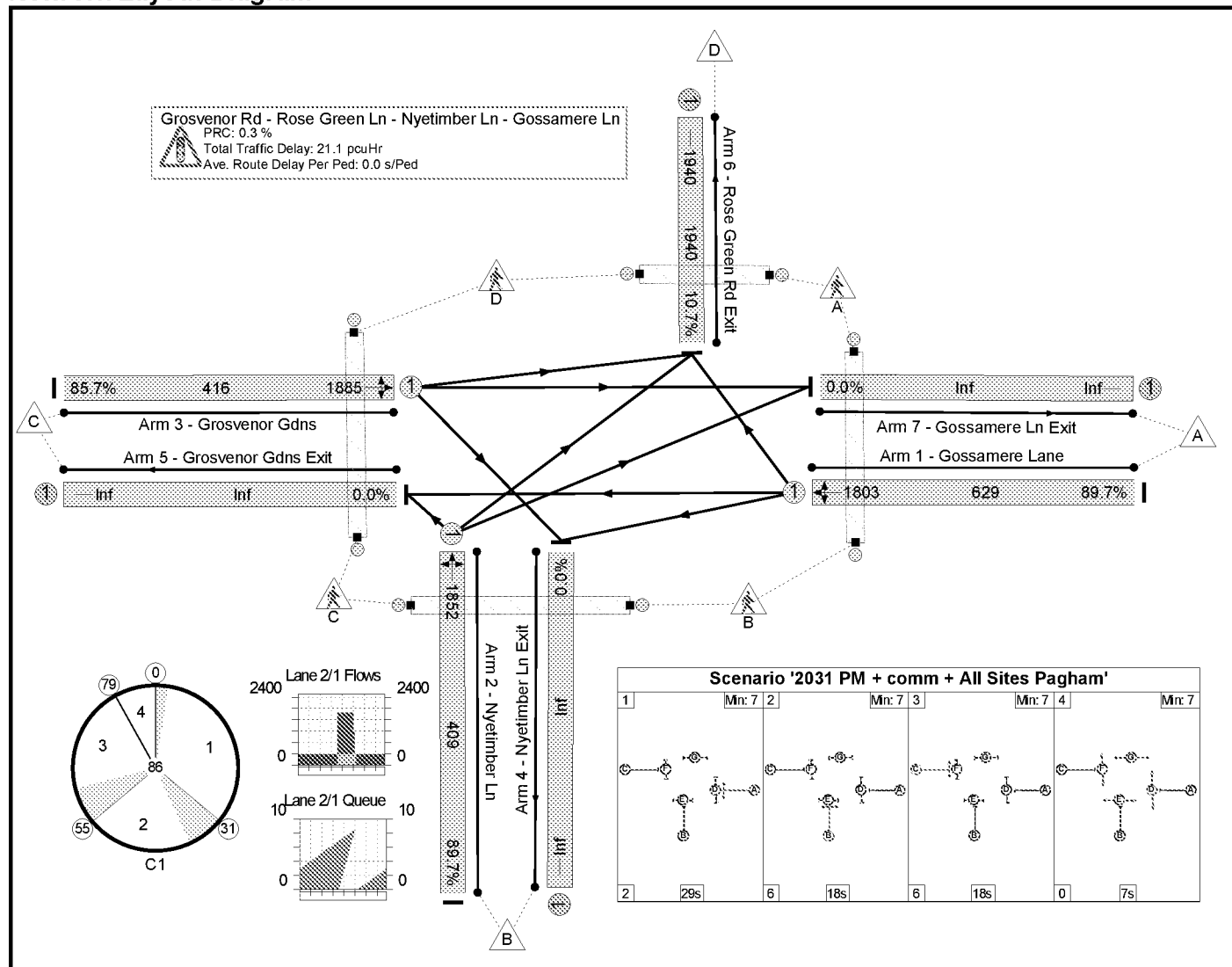
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rose Green Rd, Gossamer Ln, Nyetimber Ln	-	-	-		-	-	-	-	-	-	91.1%	0	0	0	22.8	-	-
Grosvenor Rd - Rose Green Ln - Nyetimber Ln - Gossamere Ln	-	-	-		-	-	-	-	-	-	91.1%	0	0	0	22.8	-	-
1/1	Gossamere Lane Left Ahead Right	U	A		1	24	-	462	1803	512	90.2%	-	-	-	7.9	61.3	14.8
2/1	Nyetimber Ln Left Ahead Right	U	B		1	27	-	538	1856	591	91.1%	-	-	-	8.7	58.2	16.9
3/1	Grosvenor Gdns Right Left Ahead	U	C		1	16	-	320	1893	366	87.5%	-	-	-	6.1	69.2	10.6
6/1	Rose Green Rd Exit	U	-		-	-	-	257	1940	1940	13.2%	-	-	-	0.1	1.1	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	7	-	0	-	5727	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5727	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P3	Unnamed Ped Link	-	F		1	7	-	0	-	5727	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P4	Unnamed Ped Link	-	G		1	7	-	0	-	5727	0.0%	-	-	-	0.0	0.0	0.0
C1		PRC for Signalled Lanes (%):		-1.2		Total Delay for Signalled Lanes (pcuHr):		22.70		Cycle Time (s):		88					
		PRC Over All Lanes (%):		-1.2		Total Delay Over All Lanes (pcuHr):		22.78									

Basic Results Summary

Scenario 4: '2031 PM + comm + All Sites Pagham' (FG4: '2031 PM + Comm + All Sites Pagham', Plan 1: 'With Ped Stage')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Rose Green Rd, Gossamer Ln, Nyetimber Ln	-	-	-		-	-	-	-	-	-	89.7%	0	0	0	21.1	-	-
Grosvenor Rd - Rose Green Ln - Nyetimber Ln - Gossamere Ln	-	-	-		-	-	-	-	-	-	89.7%	0	0	0	21.1	-	-
1/1	Gossamere Lane Left Ahead Right	U	A		1	29	-	564	1803	629	89.7%	-	-	-	8.0	51.3	16.6
2/1	Nyetimber Ln Left Ahead Right	U	B		1	18	-	367	1852	409	89.7%	-	-	-	7.0	68.9	12.2
3/1	Grosvenor Gdns Right Left Ahead	U	C		1	18	-	357	1885	416	85.7%	-	-	-	5.9	59.9	10.9
6/1	Rose Green Rd Exit	U	-		-	-	-	207	1940	1940	10.7%	-	-	-	0.1	1.0	0.1
Ped Link: P1	Unnamed Ped Link	-	D		1	7	-	0	-	5860	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P2	Unnamed Ped Link	-	E		1	7	-	0	-	5860	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P3	Unnamed Ped Link	-	F		1	7	-	0	-	5860	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P4	Unnamed Ped Link	-	G		1	7	-	0	-	5860	0.0%	-	-	-	0.0	0.0	0.0
C1		PRC for Signalled Lanes (%):		0.3		Total Delay for Signalled Lanes (pcuHr):		21.00		Cycle Time (s):		86					
		PRC Over All Lanes (%):		0.3		Total Delay Over All Lanes(pcuHr):		21.06									

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646 [J]
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Filename: Rose Green Road-Carlton Avenue_Proposed Improve.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\20170523 Revised Models & Flows

Report generation date: 10/07/2017 09:11:35

- »2031 Base + Committed Development, AM
- »2031 Base + Committed Development, PM
- »2031 Base + Committed +ALL Development, AM
- »2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2031 Base + Committed Development													
Stream B-ACD	1.9	33.31	0.67	D	20.01	C	-5 % [Stream D-BC]	1.0	21.97	0.50	C	19.91	C	-7 % [Stream D-BC]
Stream A-BCD	0.0	6.35	0.01	A				0.0	5.60	0.02	A			
Stream D-A	0.2	17.80	0.18	C				0.8	26.63	0.45	C			
Stream D-BC	5.2	47.32	0.66	E				6.1	55.46	0.66	F			
Stream C-ABD	0.3	5.18	0.11	A				0.3	4.85	0.13	A			
	2031 Base + Committed +ALL Development													
Stream B-ACD	1.9	33.83	0.66	D	21.56	C	-7 % [Stream D-BC]							
Stream A-BCD	0.0	6.66	0.01	A										
Stream D-A	0.3	25.09	0.23	D										
Stream D-BC	6.2	57.02	0.66	F										
Stream C-ABD	0.3	4.89	0.12	A										
	2031 Base + Committed + ALL Development													
Stream B-ACD								0.9	22.72	0.48	C	33.28	C	-11 % [Stream D-BC]
Stream A-BCD								0.0	5.46	0.02	A			
Stream D-A								4.3	140.78	0.96	F			
Stream D-BC								9.1	78.62	0.64	F			
Stream C-ABD								0.3	4.82	0.12	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Rose Green Road/Carlton Avenue
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing Junction
Identifier	
Client	
Jobnumber	JNY8840

Enumerator	EUR\pauline.pettitt
Description	

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	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	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
D7	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Committed Development	PM	ONE HOUR	17:00	18:30	15	✓
D9	2031 Base + Committed +ALL Development	AM	ONE HOUR	07:45	09:15	15	✓
D10	2031 Base + Committed + ALL Development	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

2031 Base + Committed Development, 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	Right-Left Stagger	Two-way	20.01	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-5	Stream D-BC

Arms

Arms

Arm	Name	Description	Arm type
A	Grosvenor Gardens		Major
B	Carlton Avenue		Minor
C	Rose Green Road W		Major
D	Rose Green Road N		Minor

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)
A - Grosvenor Gardens	7.32			100.0	✓	0.00
C - Rose Green Road W	7.59			127.8	✓	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)	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 - Carlton Avenue	One lane	3.00								22	51
D - Rose Green Road N	One lane plus flare		10.00	7.54	6.71	6.47	6.47		5.00	70	127

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/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
1	A-D	632	-	-	-	0.231	0.231	0.231	-	0.231	-	-
1	B-AD	510	0.086	0.218	-	-	-	0.137	0.312	0.137	0.086	0.218
1	B-C	656	0.094	0.237	-	-	-	-	-	-	0.094	0.237
1	C-B	648	0.234	0.234	-	-	-	-	-	-	0.234	0.234
1	D-A	664	-	-	-	0.243	0.096	0.243	-	0.096	-	-
1	D-BC	677	0.185	0.185	0.420	0.294	0.116	0.294	-	0.116	-	-

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
D7	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	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 - Grosvenor Gardens		ONE HOUR	✓	250	100.000
B - Carlton Avenue		ONE HOUR	✓	200	100.000
C - Rose Green Road W		ONE HOUR	✓	432	100.000
D - Rose Green Road N		ONE HOUR	✓	427	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
	A - Grosvenor Gardens	0	15	231	4
	B - Carlton Avenue	57	0	56	87
	C - Rose Green Road W	197	37	0	198
	D - Rose Green Road N	40	62	325	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
	A - Grosvenor Gardens	0	0	0	25
	B - Carlton Avenue	0	0	0	1
	C - Rose Green Road W	1	0	0	1
	D - Rose Green Road N	3	0	2	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-ACD	0.67	33.31	1.9	D	184	275
A-BCD	0.01	6.35	0.0	A	6	9
A-B					14	20
A-C					210	315
D-A	0.18	17.80	0.2	C	37	55
D-BC	0.86	47.32	5.2	E	355	533
C-ABD	0.11	5.18	0.3	A	66	100
C-D					165	248
C-A					165	247

Main Results for each time segment

07:45 - 08:00

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-ACD	151	38	399	0.378	148	0.0	0.6	14.245	B
A-BCD	4	1	571	0.008	4	0.0	0.0	6.354	A
A-B	11	3			11				
A-C	173	43			173				
D-A	30	8	497	0.061	30	0.0	0.1	7.704	A
D-BC	291	73	550	0.530	287	0.0	1.1	13.474	B
C-ABD	46	12	743	0.062	46	0.0	0.1	5.161	A
C-D	140	35			140				
C-A	139	35			139				

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-ACD	180	45	369	0.487	179	0.6	0.9	18.723	C
A-BCD	6	1	585	0.010	6	0.0	0.0	6.244	A
A-B	13	3			13				
A-C	206	51			206				
D-A	36	9	445	0.081	36	0.1	0.1	8.787	A
D-BC	348	87	527	0.660	345	1.1	1.8	19.421	C
C-ABD	62	16	766	0.081	62	0.1	0.2	5.118	A
C-D	163	41			163				
C-A	163	41			163				

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-ACD	220	55	329	0.669	217	0.9	1.8	30.928	D
A-BCD	8	2	606	0.013	8	0.0	0.0	6.056	A
A-B	16	4			16				
A-C	251	63			251				
D-A	44	11	279	0.158	44	0.1	0.2	15.282	C
D-BC	426	107	496	0.859	415	1.8	4.7	39.583	E
C-ABD	90	22	799	0.112	89	0.2	0.2	5.073	A
C-D	193	48			193				
C-A	192	48			192				

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-ACD	220	55	327	0.674	220	1.8	1.9	33.308	D
A-BCD	8	2	606	0.013	8	0.0	0.0	6.025	A
A-B	16	4			16				
A-C	251	63			251				
D-A	44	11	246	0.179	44	0.2	0.2	17.800	C
D-BC	426	107	495	0.866	424	4.7	5.2	47.317	E
C-ABD	90	23	797	0.113	90	0.2	0.3	5.097	A
C-D	193	48			193				
C-A	192	48			192				

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-ACD	180	45	366	0.491	184	1.9	1.0	20.132	C
A-BCD	6	1	585	0.010	6	0.0	0.0	6.164	A
A-B	13	3			13				
A-C	206	51			206				
D-A	36	9	431	0.084	36	0.2	0.1	9.147	A
D-BC	348	87	526	0.661	361	5.2	2.1	23.107	C
C-ABD	63	16	763	0.082	63	0.3	0.2	5.155	A
C-D	163	41			163				

C-A	162	41			162				
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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-ACD	151	38	397	0.379	152	1.0	0.6	14.797	B
A-BCD	4	1	571	0.008	4	0.0	0.0	6.316	A
A-B	11	3			11				
A-C	173	43			173				
D-A	30	8	493	0.061	30	0.1	0.1	7.780	A
D-BC	291	73	549	0.530	295	2.1	1.2	14.339	B
C-ABD	47	12	742	0.063	47	0.2	0.1	5.184	A
C-D	140	35			140				
C-A	139	35			139				

2031 Base + Committed Development, 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	Right-Left Stagger	Two-way	19.91	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-7	Stream D-BC

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
D8	2031 Base + Committed Development	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 - Grosvenor Gardens		ONE HOUR	✓	236	100.000
B - Carlton Avenue		ONE HOUR	✓	146	100.000
C - Rose Green Road W		ONE HOUR	✓	532	100.000
D - Rose Green Road N		ONE HOUR	✓	487	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
	A - Grosvenor Gardens	0	38	192	6
	B - Carlton Avenue	43	0	47	56
	C - Rose Green Road W	271	38	0	223
	D - Rose Green Road N	98	55	334	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
	A - Grosvenor Gardens	0	0	1	0
	B - Carlton Avenue	0	0	0	2
	C - Rose Green Road W	0	0	0	1
	D - Rose Green Road N	0	0	1	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-ACD	0.50	21.97	1.0	C	134	201
A-BCD	0.02	5.60	0.0	A	8	12
A-B					34	52
A-C					174	261
D-A	0.45	26.63	0.8	C	90	135
D-BC	0.88	55.46	6.1	F	357	535
C-ABD	0.13	4.85	0.3	A	79	119
C-D					185	277
C-A					224	337

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-ACD	110	27	399	0.275	108	0.0	0.4	12.327	E
A-BCD	6	2	650	0.009	6	0.0	0.0	5.589	A
A-B	28	7			28				
A-C	143	36			143				
D-A	74	18	503	0.147	73	0.0	0.2	8.354	A
D-BC	293	73	544	0.538	288	0.0	1.1	13.856	E
C-ABD	54	13	798	0.067	53	0.0	0.1	4.832	A
C-D	157	39			157				
C-A	190	48			190				

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-ACD	131	33	369	0.356	131	0.4	0.5	15.066	C
A-BCD	8	2	656	0.012	8	0.0	0.0	5.554	A
A-B	34	8			34				
A-C	171	43			171				
D-A	88	22	450	0.196	88	0.2	0.2	9.924	A
D-BC	350	87	519	0.674	346	1.1	1.9	20.472	C
C-ABD	74	18	832	0.088	73	0.1	0.2	4.745	A
C-D	183	46			183				
C-A	222	56			222				

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-ACD	161	40	327	0.491	159	0.5	0.9	21.236	C
A-BCD	11	3	665	0.016	11	0.0	0.0	5.499	A
A-B	41	10			41				
A-C	208	52			208				
D-A	108	27	280	0.385	106	0.2	0.6	20.523	C
D-BC	428	107	485	0.834	415	1.9	5.4	44.552	E
C-ABD	110	27	882	0.124	109	0.2	0.3	4.661	A
C-D	215	54			215				
C-A	261	65			261				

17:45 - 18:00

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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-ACD	161	40	324	0.496	161	0.9	1.0	21.975	C
A-BCD	11	3	665	0.016	11	0.0	0.0	5.505	A
A-B	41	10			41				
A-C	208	52			208				
D-A	108	27	242	0.447	107	0.6	0.8	26.635	D
D-BC	428	107	484	0.834	425	5.4	6.1	88.456	F
C-ABD	110	28	880	0.125	110	0.3	0.3	4.682	A
C-D	215	54			215				
C-A	261	65			261				

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-ACD	131	33	364	0.360	133	1.0	0.6	15.636	C
A-BCD	8	2	655	0.012	8	0.0	0.0	5.563	A
A-B	34	8			34				
A-C	171	43			171				
D-A	86	22	433	0.203	90	0.8	0.3	10.561	B
D-BC	350	87	519	0.674	365	6.1	2.2	25.499	D
C-ABD	74	19	829	0.089	75	0.3	0.2	4.780	A
C-D	182	46			182				
C-A	222	55			222				

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-ACD	110	27	397	0.277	111	0.6	0.4	12.606	B
A-BCD	6	2	650	0.010	6	0.0	0.0	5.596	A
A-B	28	7			28				
A-C	143	36			143				
D-A	74	18	499	0.148	74	0.3	0.2	8.484	A
D-BC	293	73	544	0.539	297	2.2	1.2	14.824	B
C-ABD	54	13	797	0.068	54	0.2	0.1	4.853	A
C-D	156	39			156				
C-A	190	48			190				

2031 Base + Committed +ALL Development, 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	Right-Left Stagger	Two-way	21.56	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-7	Stream D-BC

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
D9	2031 Base + Committed +ALL Development	AM	ONE HOUR	07:45	09:15	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 - Grosvenor Gardens		ONE HOUR	✓	258	100.000
B - Carlton Avenue		ONE HOUR	✓	189	100.000
C - Rose Green Road W		ONE HOUR	✓	515	100.000
D - Rose Green Road N		ONE HOUR	✓	422	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
	A - Grosvenor Gardens	0	15	240	3
	B - Carlton Avenue	54	0	53	82
	C - Rose Green Road W	243	35	0	237
	D - Rose Green Road N	38	58	326	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
	A - Grosvenor Gardens	0	0	0	33
	B - Carlton Avenue	0	0	0	1
	C - Rose Green Road W	0	0	0	1

D - Rose Green Road N	3	0	2	0
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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-ACD	0.66	33.83	1.9	D	173	260
A-BCD	0.01	6.66	0.0	A	5	7
A-B					14	20
A-C					218	327
D-A	0.23	25.09	0.3	D	35	52
D-BC	0.89	57.92	6.2	F	352	529
C-ABD	0.12	4.89	0.3	A	72	108
C-D					198	297
C-A					203	304

Main Results for each time segment

07:45 - 08:00

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-ACD	142	36	390	0.365	140	0.0	0.6	14.275	B
A-BCD	3	1	544	0.006	3	0.0	0.0	6.657	A
A-B	11	3			11				
A-C	180	45			180				
D-A	29	7	487	0.059	28	0.0	0.1	7.850	A
D-BC	289	72	537	0.538	285	0.0	1.1	14.017	B
C-ABD	49	12	788	0.062	48	0.0	0.1	4.867	A
C-D	167	42			167				
C-A	172	43			172				

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-ACD	170	42	359	0.473	169	0.6	0.9	18.790	C
A-BCD	5	1	559	0.008	5	0.0	0.0	6.532	A
A-B	13	3			13				
A-C	214	53			214				
D-A	34	9	430	0.079	34	0.1	0.1	9.091	A
D-BC	345	86	512	0.674	342	1.1	1.9	20.773	C
C-ABD	67	17	820	0.081	66	0.1	0.2	4.779	A
C-D	196	49			196				
C-A	201	50			201				

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-ACD	208	52	316	0.658	205	0.9	1.8	31.299	D
A-BCD	6	2	582	0.011	6	0.0	0.0	6.310	A
A-B	16	4			16				
A-C	261	65			261				
D-A	42	10	233	0.180	41	0.1	0.2	18.771	C
D-BC	423	106	477	0.885	409	1.9	5.4	45.431	E
C-ABD	99	25	867	0.114	99	0.2	0.3	4.687	A
C-D	231	58			231				
C-A	237	59			237				

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-ACD	208	52	313	0.665	208	1.8	1.9	33.830	D
A-BCD	6	2	581	0.011	6	0.0	0.0	6.263	A
A-B	16	4			16				
A-C	261	65			261				
D-A	42	10	185	0.226	42	0.2	0.3	25.091	D
D-BC	423	106	477	0.887	420	5.4	6.2	57.022	F
C-ABD	100	25	865	0.115	100	0.3	0.3	4.710	A
C-D	231	58			231				
C-A	237	59			237				

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-ACD	170	42	355	0.479	174	1.9	1.0	20.264	C
A-BCD	5	1	559	0.008	5	0.0	0.0	6.419	A
A-B	13	3			13				
A-C	214	53			214				
D-A	34	9	410	0.083	35	0.3	0.1	9.628	A
D-BC	345	86	511	0.675	361	6.2	2.2	26.118	C
C-ABD	67	17	816	0.082	68	0.3	0.2	4.815	A
C-D	195	49			195				
C-A	200	50			200				

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-ACD	142	36	388	0.367	144	1.0	0.6	14.816	B
A-BCD	4	1	544	0.006	4	0.0	0.0	6.603	A
A-B	11	3			11				
A-C	180	45			180				
D-A	29	7	482	0.059	29	0.1	0.1	7.937	A
D-BC	289	72	537	0.539	293	2.2	1.2	15.029	C
C-ABD	49	12	786	0.062	49	0.2	0.1	4.886	A
C-D	167	42			167				
C-A	171	43			171				

2031 Base + Committed + ALL Development, 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	Right-Left Stagger	Two-way	33.28	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-11	Stream D-BC

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
D10	2031 Base + Committed + ALL Development	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 - Grosvenor Gardens		ONE HOUR	✓	269	100.000
B - Carlton Avenue		ONE HOUR	✓	135	100.000
C - Rose Green Road W		ONE HOUR	✓	550	100.000
D - Rose Green Road N		ONE HOUR	✓	496	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
	A - Grosvenor Gardens	0	36	227	6
	B - Carlton Avenue	40	0	43	52
	C - Rose Green Road W	280	36	0	234
	D - Rose Green Road N	91	51	354	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
	A - Grosvenor Gardens	0	0	0	0
	B - Carlton Avenue	0	0	0	2
	C - Rose Green Road W	0	0	0	1

D - Rose Green Road N	0	0	1	0
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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-ACD	0.48	22.72	0.9	C	124	186
A-BCD	0.02	5.46	0.0	A	9	13
A-B					33	49
A-C					206	308
D-A	0.86	140.79	4.3	F	84	125
D-BC	0.84	78.62	9.1	F	372	557
C-ABD	0.12	4.82	0.3	A	78	118
C-D					194	291
C-A					232	348

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-ACD	102	25	388	0.262	100	0.0	0.3	12.438	B
A-BCD	6	2	666	0.010	6	0.0	0.0	5.456	A
A-B	27	7			27				
A-C	169	42			169				
D-A	69	17	495	0.138	68	0.0	0.2	8.419	A
D-BC	305	76	538	0.567	300	0.0	1.3	14.847	B
C-ABD	52	13	802	0.065	52	0.0	0.1	4.797	A
C-D	165	41			165				
C-A	197	49			197				

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-ACD	121	30	356	0.341	121	0.3	0.5	15.268	C
A-BCD	8	2	675	0.012	8	0.0	0.0	5.397	A
A-B	32	8			32				
A-C	202	50			202				
D-A	62	20	431	0.190	62	0.2	0.2	10.303	E
D-BC	364	91	511	0.712	360	1.3	2.3	23.134	C
C-ABD	72	18	838	0.087	72	0.1	0.2	4.707	A
C-D	192	48			192				
C-A	230	57			230				

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-ACD	149	37	311	0.478	147	0.5	0.9	21.757	C
A-BCD	11	3	690	0.017	11	0.0	0.0	5.308	A
A-B	39	10			39				
A-C	246	61			246				
D-A	100	25	188	0.533	97	0.2	1.0	38.273	E
D-BC	446	111	476	0.936	426	2.3	7.4	55.799	F
C-ABD	109	27	890	0.123	109	0.2	0.3	4.615	A
C-D	226	56			226				
C-A	270	68			270				

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-ACD	149	37	307	0.485	148	0.9	0.9	22.721	C
A-BCD	11	3	689	0.017	11	0.0	0.0	5.312	A
A-B	39	10			39				
A-C	246	61			246				
D-A	100	25	104	0.960	87	1.0	4.3	140.787	F
D-BC	446	111	475	0.938	439	7.4	9.1	78.822	F
C-ABD	110	26	887	0.125	110	0.3	0.3	4.645	A
C-D	225	56			225				
C-A	270	67			270				

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-ACD	121	30	349	0.348	123	0.9	0.5	16.011	C
A-BCD	8	2	675	0.012	8	0.0	0.0	5.400	A
A-B	32	8			32				
A-C	202	50			202				
D-A	82	20	397	0.206	98	4.3	0.3	12.661	B
D-BC	364	91	511	0.712	390	9.1	2.7	34.310	C
C-ABD	73	18	832	0.088	74	0.3	0.2	4.753	A
C-D	192	48			192				
C-A	229	57			229				

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-ACD	102	25	386	0.263	102	0.5	0.4	12.731	B
A-BCD	6	2	666	0.010	6	0.0	0.0	5.459	A
A-B	27	7			27				
A-C	169	42			169				
D-A	69	17	489	0.140	69	0.3	0.2	8.567	A
D-BC	305	76	537	0.568	310	2.7	1.4	16.218	C
C-ABD	53	13	801	0.066	53	0.2	0.1	4.819	A
C-D	164	41			164				
C-A	197	49			197				

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.1.4646 []

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Filename: Vinnetrow Road B2166.j9

Path: \\neur-mpfs-02\tr_projects\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031 SATURN With Mitigation - With Development\Proposed Improvements

Report generation date: 18/08/2017 16:00:06

*2031 Base + Mitigation + Dev (SATURN FLOWS), AM

»2031 Base + Mitigation + Dev(SATURN FLOWS), PM

»CATM Flows, AM

*CATM Flows, PM

*CATM Flows + Development, AM

- CATM Flows + Development, PM

Summary of junction performance

	AM								PM									
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity		
2031 Base + Mitigation + Dev (SATURN FLOWS)																		
1 - Vinnetrow Road	0.3	1.3	5.58	0.24	A	7.30	A	25 % [2 - B2166 E]										
2 - B2166 E	2.9	9.1	9.22	0.75	A													
3 - Mill Lane	0.1	0.5	6.50	0.13	A													
4 - B2166 W	0.9	1.8	4.74	0.47	A													
2031 Base + Mitigation + Dev (SATURN FLOWS)																		
1 - Vinnetrow Road									0.5	2.4	9.29	0.35	A	8.13	A	21 % [4 - B2166 W]		
2 - B2166 E									0.5	2.3	3.43	0.34	A					
3 - Mill Lane									0.1	0.5	3.68	0.05	A					
4 - B2166 W									3.3	12.8	10.22	0.77	B					
CATM Flows																		
1 - Vinnetrow Road	0.1	0.5	4.14	0.09	A	10.37	B	14 % [2 - B2166 E]	2.0	5.5	10.95	0.68	B	6.65	A	[1 - Vinnetrow Road]		
2 - B2166 E	4.8	23.6	13.19	0.83	B				1.2	1.5	4.91	0.54	A					
3 - Mill Lane	0.2	0.5	7.15	0.14	A				0.1	0.5	4.55	0.06	A					
4 - B2166 W	0.3	1.4	3.08	0.25	A				0.3	1.2	2.88	0.22	A					
CATM Flows + Development																		
1 - Vinnetrow Road	0.1	0.5	4.44	0.12	A	26.68	D	-1 % [2 - B2166 E]	3.3	16.1	16.80	0.77	C	8.79	A	12 % [1 - Vinnetrow Road]		
2 - B2166 E	14.7	75.8	35.41	0.85	B				1.5	2.0	5.78	0.61	A					
3 - Mill Lane	0.2	0.5	9.17	0.17	A				0.1	0.5	4.95	0.07	A					
4 - B2166 W	0.4	1.6	3.27	0.30	A				0.4	1.6	3.21	0.30	A					

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description	
Title	(untitled)
Location	
Site number	
Date	10/11/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
Description	

Units

A horizontal timeline with a dashed line and vertical tick marks. The timeline is labeled with years: 1990, 1995, 2000, 2005, 2010, 2015, 2020, 2025, 2030, 2035, 2040, 2045, 2050, 2055, 2060, 2065, 2070, 2075, 2080, 2085, 2090, 2095, 2100.

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

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	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)
D1	2031 Base + Mitigation + Dev (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Mitigation + Dev(SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15
D3	CATM Flows	AM	ONE HOUR	07:30	09:00	15
D4	CATM Flows	PM	ONE HOUR	16:30	18:00	15
D5	CATM Flows + Development	AM	ONE HOUR	07:30	09:00	15
D6	CATM Flows + Development	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Mitigation + Dev (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	7.30	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	25	2 - B2166 E

Arms

Arms

Arm	Name	Description
1	Vinnetrow Road	
2	B2166 E	
3	Mill Lane	
4	B2166 W	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Vinnetrow Road	3.00	6.00	5.0	30.0	30.0	35.0	
2 - B2166 E	4.00	6.00	12.0	30.0	30.0	30.0	
3 - Mill Lane	3.00	7.00	8.0	20.0	30.0	30.0	
4 - B2166 W	3.50	6.00	18.0	15.0	30.0	17.0	

Slope / Intercept / Capacity

Roundabout Slope and intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vinnetrow Road	0.559	1219
2 - B2166 E	0.649	1633
3 - Mill Lane	0.591	1375
4 - B2166 W	0.653	1631

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

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)
D1	2031 Base + Mitigation + Dev (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	184	100.000
2 - B2166 E		✓	1051	100.000
3 - Mill Lane		✓	72	100.000
4 - B2166 W		✓	623	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	90	7	87
	2 - B2166 E	151	0	5	895
	3 - Mill Lane	19	12	0	41
	4 - B2166 W	81	526	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.24	5.58	0.3	1.3	A
2 - B2166 E	0.75	9.22	2.9	9.1	A
3 - Mill Lane	0.13	6.50	0.1	0.5	A
4 - B2166 W	0.47	4.74	0.9	1.8	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	139	415	957	0.145	138	0.2	4.391	A
2 - B2166 E	791	82	1572	0.503	787	1.0	4.563	A
3 - Mill Lane	54	849	870	0.062	54	0.1	4.408	A
4 - B2166 W	469	136	1486	0.316	467	0.5	3.526	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	165	497	911	0.182	165	0.2	4.826	A
2 - B2166 E	945	99	1562	0.605	943	1.5	5.800	A
3 - Mill Lane	65	1016	771	0.084	65	0.1	5.098	A
4 - B2166 W	560	163	1469	0.381	559	0.6	3.956	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	203	609	848	0.239	202	0.3	5.569	A
2 - B2166 E	1157	121	1547	0.748	1152	2.9	8.985	A
3 - Mill Lane	79	1242	637	0.125	79	0.1	6.456	A
4 - B2166 W	686	200	1445	0.475	685	0.9	4.726	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	203	610	848	0.239	203	0.3	5.579	A
2 - B2166 E	1157	121	1547	0.748	1157	2.9	9.219	A
3 - Mill Lane	79	1247	633	0.125	79	0.1	6.495	A
4 - B2166 W	686	200	1445	0.475	686	0.9	4.742	A

08:30 - 08:45

	Total Demand	Circulating flow	Capacity		Throughput	End queue		
--	--------------	------------------	----------	--	------------	-----------	--	--

Arm	(Veh/hr)	(Veh/hr)	(Veh/hr)	RFC	(Veh/hr)	(Veh)	Delay (s)	LOS
1 - Vinnetrow Road	165	499	910	0.182	166	0.2	4.840	A
2 - B2166 E	945	99	1561	0.605	950	1.6	5.944	A
3 - Mill Lane	65	1024	766	0.084	65	0.1	5.136	A
4 - B2166 W	560	164	1468	0.381	561	0.6	3.975	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	139	418	956	0.145	139	0.2	4.408	A
2 - B2166 E	791	83	1572	0.503	793	1.0	4.638	A
3 - Mill Lane	54	855	867	0.063	54	0.1	4.434	A
4 - B2166 W	469	137	1486	0.316	470	0.5	3.544	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.17	0.00	0.00	0.17	0.17			N/A	N/A
2 - B2166 E	1.00	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.46	0.00	0.00	0.46	0.46			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.22	0.00	0.00	0.22	0.22			N/A	N/A
2 - B2166 E	1.51	0.05	0.66	3.70	5.55			N/A	N/A
3 - Mill Lane	0.09	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.61	0.10	0.83	1.37	1.43			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.31	0.03	0.25	0.46	0.48			N/A	N/A
2 - B2166 E	2.86	0.03	0.28	2.86	9.12			N/A	N/A
3 - Mill Lane	0.14	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	0.89	0.03	0.26	0.89	0.89			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.31	0.03	0.31	1.08	1.35			N/A	N/A
2 - B2166 E	2.91	0.03	0.27	2.91	2.91			N/A	N/A
3 - Mill Lane	0.14	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.90	0.03	0.27	0.90	1.75			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.22	0.00	0.00	0.22	0.22			N/A	N/A
2 - B2166 E	1.56	0.07	0.96	3.54	4.96			N/A	N/A
3 - Mill Lane	0.09	0.00	0.00	0.09	0.09			N/A	N/A
4 - B2166 W	0.62	0.55	1.00	1.40	1.45			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.17	0.00	0.00	0.17	0.17			N/A	N/A
2 - B2166 E	1.02	0.04	0.43	2.47	3.86			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.46	0.00	0.00	0.46	0.46			N/A	N/A

2031 Base + Mitigation + Dev(SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	8.13	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	21	4 - B2166 W

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)
D2	2031 Base + Mitigation + Dev(SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	188	100.000
2 - B2166 E		✓	481	100.000
3 - Mill Lane		✓	49	100.000
4 - B2166 W		✓	1090	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	172	14	2
	2 - B2166 E	57	0	8	416
	3 - Mill Lane	6	19	0	24
	4 - B2166 W	105	971	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.35	9.29	0.5	2.4	A
2 - B2166 E	0.34	3.43	0.5	2.3	A
3 - Mill Lane	0.05	3.68	0.1	0.5	A
4 - B2166 W	0.77	10.22	3.3	12.8	E

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	142	752	794	0.178	141	0.2	5.504	A
2 - B2166 E	362	22	1586	0.228	361	0.3	2.936	A
3 - Mill Lane	37	356	1129	0.033	37	0.0	3.294	A
4 - B2166 W	821	62	1570	0.523	816	1.1	4.748	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	169	900	710	0.238	169	0.3	6.647	A
2 - B2166 E	432	27	1583	0.273	432	0.4	3.128	A
3 - Mill Lane	44	427	1088	0.040	44	0.0	3.447	A
4 - B2166 W	980	74	1562	0.627	978	1.7	6.132	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	207	1100	597	0.347	206	0.5	9.182	A
2 - B2166 E	530	33	1579	0.335	529	0.5	3.426	A
3 - Mill Lane	54	522	1032	0.052	54	0.1	3.681	A
4 - B2166 W	1200	90	1551	0.774	1194	3.3	9.889	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	207	1105	594	0.348	207	0.5	9.294	A
2 - B2166 E	530	33	1579	0.335	530	0.5	3.429	A
3 - Mill Lane	54	523	1031	0.052	54	0.1	3.682	A
4 - B2166 W	1200	90	1551	0.774	1200	3.3	10.221	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	169	908	705	0.240	170	0.3	6.731	A
2 - B2166 E	432	27	1583	0.273	433	0.4	3.133	A
3 - Mill Lane	44	428	1087	0.041	44	0.0	3.449	A
4 - B2166 W	980	74	1562	0.627	986	1.7	6.322	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	142	758	790	0.179	142	0.2	5.554	A
2 - B2166 E	362	23	1586	0.228	362	0.3	2.945	A
3 - Mill Lane	37	358	1128	0.033	37	0.0	3.300	A
4 - B2166 W	821	62	1570	0.523	823	1.1	4.833	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.22	0.00	0.00	0.22	0.22			N/A	N/A
2 - B2166 E	0.29	0.00	0.00	0.29	0.29			N/A	N/A
3 - Mill Lane	0.03	0.00	0.00	0.03	0.03			N/A	N/A
4 - B2166 W	1.08	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.31	0.00	0.00	0.31	0.31			N/A	N/A
2 - B2166 E	0.37	0.00	0.00	0.37	0.37			N/A	N/A
3 - Mill Lane	0.04	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	1.65	0.05	0.60	4.19	6.42			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
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Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.52	0.03	0.26	0.52	0.52			N/A	N/A
2 - B2166 E	0.50	0.03	0.25	0.50	0.50			N/A	N/A
3 - Mill Lane	0.05	0.03	0.26	0.46	0.49			N/A	N/A
4 - B2166 W	3.26	0.03	0.29	3.26	12.80			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.53	0.03	0.31	1.48	2.39			N/A	N/A
2 - B2166 E	0.50	0.03	0.30	1.37	2.29			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	3.34	0.03	0.27	3.34	4.40			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.32	0.00	0.00	0.32	0.32			N/A	N/A
2 - B2166 E	0.38	0.00	0.00	0.38	0.38			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	1.71	0.06	0.86	4.15	6.08			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.22	0.00	0.00	0.22	0.22			N/A	N/A
2 - B2166 E	0.30	0.00	0.00	0.30	0.30			N/A	N/A
3 - Mill Lane	0.03	0.00	0.00	0.03	0.03			N/A	N/A
4 - B2166 W	1.11	0.04	0.41	2.78	4.64			N/A	N/A

CATM Flows, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	10.37	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	14	2 - B2166 E

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)
D3	CATM Flows	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	80	100.000
2 - B2166 E		✓	1223	100.000
3 - Mill Lane		✓	72	100.000
4 - B2166 W		✓	360	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	73	7	0
	2 - B2166 E	0	0	5	1218
	3 - Mill Lane	19	12	0	41
	4 - B2166 W	0	344	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.09	4.14	0.1	0.5	A
2 - B2166 E	0.83	13.19	4.8	23.5	B
3 - Mill Lane	0.14	7.15	0.2	0.5	A
4 - B2166 W	0.25	3.08	0.3	1.4	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	60	279	1030	0.058	60	0.1	3.709	A
2 - B2166 E	921	17	1622	0.568	916	1.3	5.059	A
3 - Mill Lane	54	912	836	0.065	54	0.1	4.603	A
4 - B2166 W	271	23	1570	0.173	270	0.2	2.767	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	72	334	1000	0.072	72	0.1	3.880	A
2 - B2166 E	1099	21	1620	0.679	1096	2.1	6.833	A
3 - Mill Lane	65	1092	729	0.089	65	0.1	5.415	A
4 - B2166 W	324	28	1567	0.206	323	0.3	2.893	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	88	409	958	0.092	88	0.1	4.139	A
2 - B2166 E	1347	25	1617	0.833	1336	4.6	12.395	B
3 - Mill Lane	79	1331	588	0.135	79	0.2	7.069	A
4 - B2166 W	396	34	1564	0.254	396	0.3	3.083	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	88	410	957	0.092	88	0.1	4.140	A
2 - B2166 E	1347	25	1617	0.833	1346	4.8	13.189	B
3 - Mill Lane	79	1340	582	0.136	79	0.2	7.153	A
4 - B2166 W	396	34	1563	0.254	396	0.3	3.083	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	72	335	999	0.072	72	0.1	3.883	A
2 - B2166 E	1099	21	1620	0.679	1110	2.2	7.196	A
3 - Mill Lane	65	1105	721	0.090	65	0.1	5.487	A
4 - B2166 W	324	28	1567	0.206	324	0.3	2.897	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	60	280	1030	0.058	60	0.1	3.715	A
2 - B2166 E	921	17	1622	0.568	924	1.3	5.180	A
3 - Mill Lane	54	920	831	0.065	54	0.1	4.636	A
4 - B2166 W	271	23	1570	0.173	271	0.2	2.771	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2 - B2166 E	1.30	0.56	1.11	1.45	1.73			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.21	0.00	0.00	0.21	0.21			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.08	0.03	0.25	0.45	0.48			N/A	N/A
2 - B2166 E	2.06	0.05	0.50	5.54	8.80			N/A	N/A
3 - Mill Lane	0.10	0.00	0.00	0.10	0.10			N/A	N/A
4 - B2166 W	0.26	0.00	0.00	0.26	0.26			N/A	N/A

08:00 - 08:15

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Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.10	0.03	0.26	0.47	0.49			N/A	N/A
2 - B2166 E	4.61	0.03	0.32	7.27	23.59			N/A	N/A
3 - Mill Lane	0.15	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	0.34	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - B2166 E	4.78	0.03	0.29	4.78	13.88			N/A	N/A
3 - Mill Lane	0.16	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.34	0.03	0.32	1.14	1.40			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.08	0.00	0.00	0.08	0.08			N/A	N/A
2 - B2166 E	2.16	0.05	0.52	5.80	9.21			N/A	N/A
3 - Mill Lane	0.10	0.00	0.00	0.10	0.10			N/A	N/A
4 - B2166 W	0.26	0.00	0.00	0.26	0.26			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.06	0.00	0.00	0.06	0.06			N/A	N/A
2 - B2166 E	1.33	0.04	0.36	3.35	6.47			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.21	0.00	0.00	0.21	0.21			N/A	N/A

CATM Flows, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	6.65	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	26	1 - Vinnetrow Road

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)
D4	CATM Flows	PM	ONE HOUR	16:30	18:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	620	100.000
2 - B2166 E		✓	771	100.000
3 - Mill Lane		✓	49	100.000
4 - B2166 W		✓	315	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	606	14	0
	2 - B2166 E	0	0	8	763
	3 - Mill Lane	6	19	0	24
	4 - B2166 W	0	301	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.68	10.95	2.0	5.5	B
2 - B2166 E	0.54	4.91	1.2	1.5	A
3 - Mill Lane	0.06	4.55	0.1	0.5	A
4 - B2166 W	0.22	2.88	0.3	1.2	A

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	467	251	1077	0.433	464	0.8	5.843	A
2 - B2166 E	580	21	1588	0.365	578	0.6	3.556	A
3 - Mill Lane	37	572	1003	0.037	37	0.0	3.726	A
4 - B2166 W	237	19	1602	0.148	236	0.2	2.634	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	557	300	1049	0.531	556	1.1	7.277	A
2 - B2166 E	693	25	1586	0.437	692	0.8	4.026	A
3 - Mill Lane	44	685	936	0.047	44	0.0	4.033	A
4 - B2166 W	283	22	1600	0.177	283	0.2	2.733	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	683	367	1011	0.675	679	2.0	10.733	E
2 - B2166 E	849	31	1582	0.537	847	1.1	4.889	A
3 - Mill Lane	54	839	846	0.064	54	0.1	4.543	A
4 - B2166 W	347	27	1596	0.217	347	0.3	2.880	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	683	368	1011	0.675	682	2.0	10.954	E
2 - B2166 E	849	31	1582	0.537	849	1.2	4.909	A
3 - Mill Lane	54	840	845	0.064	54	0.1	4.547	A
4 - B2166 W	347	28	1596	0.217	347	0.3	2.880	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	557	301	1049	0.531	561	1.2	7.430	A
2 - B2166 E	693	25	1586	0.437	695	0.8	4.048	A
3 - Mill Lane	44	687	935	0.047	44	0.0	4.040	A
4 - B2166 W	283	23	1600	0.177	283	0.2	2.736	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	467	252	1076	0.434	468	0.8	5.933	A
2 - B2166 E	580	21	1588	0.365	581	0.6	3.579	A
3 - Mill Lane	37	575	1001	0.037	37	0.0	3.733	A
4 - B2166 W	237	19	1602	0.148	237	0.2	2.637	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.76	0.55	1.00	1.40	1.45			N/A	N/A
2 - B2166 E	0.57	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	0.17	0.00	0.00	0.17	0.17			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.11	0.08	0.92	1.98	2.77			N/A	N/A
2 - B2166 E	0.77	0.10	0.85	1.42	1.50			N/A	N/A
3 - Mill Lane	0.05	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.21	0.00	0.00	0.21	0.21			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
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Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	2.01	0.03	0.28	2.01	5.55			N/A	N/A
2 - B2166 E	1.14	0.03	0.26	1.14	1.14			N/A	N/A
3 - Mill Lane	0.07	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	0.28	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	2.04	0.03	0.27	2.04	2.98			N/A	N/A
2 - B2166 E	1.15	0.03	0.27	1.15	1.18			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.28	0.03	0.29	0.80	1.16			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.15	0.07	0.90	2.21	2.96			N/A	N/A
2 - B2166 E	0.78	0.48	0.97	1.40	1.45			N/A	N/A
3 - Mill Lane	0.05	0.00	0.00	0.05	0.05			N/A	N/A
4 - B2166 W	0.22	0.00	0.00	0.22	0.22			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.77	0.05	0.45	1.62	2.36			N/A	N/A
2 - B2166 E	0.58	0.07	0.73	1.35	1.42			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	0.17	0.00	0.00	0.17	0.17			N/A	N/A

CATM Flows + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	26.68	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-1	2 - B2166 E

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)
D5	CATM Flows + Development	AM	ONE HOUR	07:30	09:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	100	100.000
2 - B2166 E		✓	1401	100.000
3 - Mill Lane		✓	72	100.000
4 - B2166 W		✓	419	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	93	7	0
	2 - B2166 E	0	0	5	1396
	3 - Mill Lane	19	12	0	41
	4 - B2166 W	0	403	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.12	4.44	0.1	0.5	A
2 - B2166 E	0.35	39.41	14.7	75.5	E
3 - Mill Lane	0.17	9.17	0.2	0.5	A
4 - B2166 W	0.30	3.27	0.4	1.6	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	75	323	1005	0.075	75	0.1	3.870	A
2 - B2166 E	1055	17	1622	0.650	1047	1.8	6.189	A
3 - Mill Lane	54	1044	758	0.072	54	0.1	5.111	A
4 - B2166 W	315	23	1570	0.201	314	0.3	2.864	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	90	387	969	0.093	90	0.1	4.092	A
2 - B2166 E	1259	21	1620	0.777	1253	3.3	9.659	A
3 - Mill Lane	65	1249	637	0.102	65	0.1	6.292	A
4 - B2166 W	377	28	1567	0.240	376	0.3	3.023	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	110	474	921	0.120	110	0.1	4.440	A
2 - B2166 E	1543	25	1617	0.954	1507	12.3	26.600	C
3 - Mill Lane	79	1501	487	0.163	79	0.2	8.803	A
4 - B2166 W	461	34	1563	0.295	461	0.4	3.266	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	110	475	921	0.120	110	0.1	4.441	A
2 - B2166 E	1543	25	1617	0.954	1533	14.7	30.413	E
3 - Mill Lane	79	1528	472	0.168	79	0.2	9.171	A
4 - B2166 W	461	34	1563	0.295	461	0.4	3.266	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	90	388	969	0.093	90	0.1	4.097	A
2 - B2166 E	1259	21	1620	0.777	1303	3.7	12.804	B
3 - Mill Lane	65	1299	607	0.107	65	0.1	6.648	A
4 - B2166 W	377	28	1567	0.240	377	0.3	3.025	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	75	325	1004	0.075	75	0.1	3.875	A
2 - B2166 E	1055	17	1622	0.650	1062	1.9	6.503	A
3 - Mill Lane	54	1058	749	0.072	54	0.1	5.180	A
4 - B2166 W	315	23	1570	0.201	316	0.3	2.870	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.08	0.00	0.00	0.08	0.08			N/A	N/A
2 - B2166 E	1.82	0.58	1.23	2.64	2.97			N/A	N/A
3 - Mill Lane	0.08	0.00	0.00	0.08	0.08			N/A	N/A
4 - B2166 W	0.25	0.00	0.00	0.25	0.25			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - B2166 E	3.34	0.05	0.72	9.34	15.03			N/A	N/A
3 - Mill Lane	0.11	0.00	0.00	0.11	0.11			N/A	N/A
4 - B2166 W	0.32	0.00	0.00	0.32	0.32			N/A	N/A

08:00 - 08:15

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Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.14	0.03	0.26	0.46	0.49			N/A	N/A
2 - B2166 E	12.30	0.09	2.63	35.41	54.75			N/A	N/A
3 - Mill Lane	0.19	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	0.42	0.03	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.14	0.03	0.25	0.45	0.48			N/A	N/A
2 - B2166 E	14.68	0.06	1.11	42.88	75.81			N/A	N/A
3 - Mill Lane	0.20	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.42	0.03	0.32	1.34	1.63			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.10	0.00	0.00	0.10	0.10			N/A	N/A
2 - B2166 E	3.67	0.04	0.43	10.17	18.75			N/A	N/A
3 - Mill Lane	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - B2166 W	0.32	0.00	0.00	0.32	0.32			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.08	0.00	0.00	0.08	0.08			N/A	N/A
2 - B2166 E	1.90	0.03	0.31	3.10	9.69			N/A	N/A
3 - Mill Lane	0.08	0.00	0.00	0.08	0.08			N/A	N/A
4 - B2166 W	0.25	0.00	0.00	0.25	0.25			N/A	N/A

CATM Flows + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	8.79	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	12	1 - Vinnetrow Road

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)
D6	CATM Flows + Development	PM	ONE HOUR	16:30	18:00	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Vinnetrow Road		✓	660	100.000
2 - B2166 E		✓	871	100.000
3 - Mill Lane		✓	49	100.000
4 - B2166 W		✓	430	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	646	14	0
	2 - B2166 E	0	0	8	863
	3 - Mill Lane	6	19	0	24
	4 - B2166 W	0	416	14	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.77	16.80	3.3	16.1	C
2 - B2166 E	0.61	5.78	1.5	2.0	A
3 - Mill Lane	0.07	4.95	0.1	0.5	A
4 - B2166 W	0.30	3.21	0.4	1.6	A

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	497	337	1028	0.483	493	0.9	6.683	A
2 - B2166 E	656	21	1588	0.413	653	0.7	3.837	A
3 - Mill Lane	37	647	959	0.038	37	0.0	3.904	A
4 - B2166 W	324	19	1602	0.202	323	0.3	2.809	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	593	403	991	0.599	591	1.5	8.961	A
2 - B2166 E	783	25	1586	0.494	782	1.0	4.474	A
3 - Mill Lane	44	775	884	0.050	44	0.1	4.286	A
4 - B2166 W	387	22	1600	0.242	386	0.3	2.966	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	727	494	939	0.773	720	3.2	15.906	C
2 - B2166 E	959	31	1582	0.606	957	1.5	5.735	A
3 - Mill Lane	54	948	782	0.069	54	0.1	4.943	A
4 - B2166 W	473	27	1596	0.297	473	0.4	3.205	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	727	494	939	0.774	726	3.3	16.804	C
2 - B2166 E	959	31	1582	0.606	959	1.5	5.777	A
3 - Mill Lane	54	950	781	0.069	54	0.1	4.952	A
4 - B2166 W	473	28	1596	0.297	473	0.4	3.205	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	593	404	990	0.599	600	1.5	9.390	A
2 - B2166 E	783	25	1586	0.494	785	1.0	4.511	A
3 - Mill Lane	44	778	882	0.050	44	0.1	4.297	A
4 - B2166 W	387	23	1600	0.242	387	0.3	2.968	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	497	338	1028	0.484	499	0.9	6.842	A
2 - B2166 E	656	21	1588	0.413	657	0.7	3.871	A
3 - Mill Lane	37	651	957	0.039	37	0.0	3.914	A
4 - B2166 W	324	19	1602	0.202	324	0.3	2.818	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.92	0.55	1.00	1.40	1.45			N/A	N/A
2 - B2166 E	0.70	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	0.25	0.00	0.00	0.25	0.25			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.46	0.06	0.87	3.32	4.74			N/A	N/A
2 - B2166 E	0.97	0.08	0.86	1.67	2.04			N/A	N/A
3 - Mill Lane	0.05	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.32	0.00	0.00	0.32	0.32			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
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Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	3.17	0.03	0.32	4.86	16.07			N/A	N/A
2 - B2166 E	1.51	0.03	0.26	1.51	1.51			N/A	N/A
3 - Mill Lane	0.07	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	0.42	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

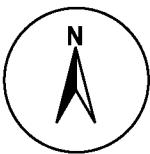
Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	3.29	0.03	0.29	3.29	10.92			N/A	N/A
2 - B2166 E	1.53	0.03	0.26	1.53	1.53			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.42	0.03	0.32	1.34	1.65			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.53	0.05	0.52	3.86	5.93			N/A	N/A
2 - B2166 E	0.99	0.20	1.00	1.26	1.65			N/A	N/A
3 - Mill Lane	0.05	0.00	0.00	0.05	0.05			N/A	N/A
4 - B2166 W	0.32	0.00	0.00	0.32	0.32			N/A	N/A

17:45 - 18:00

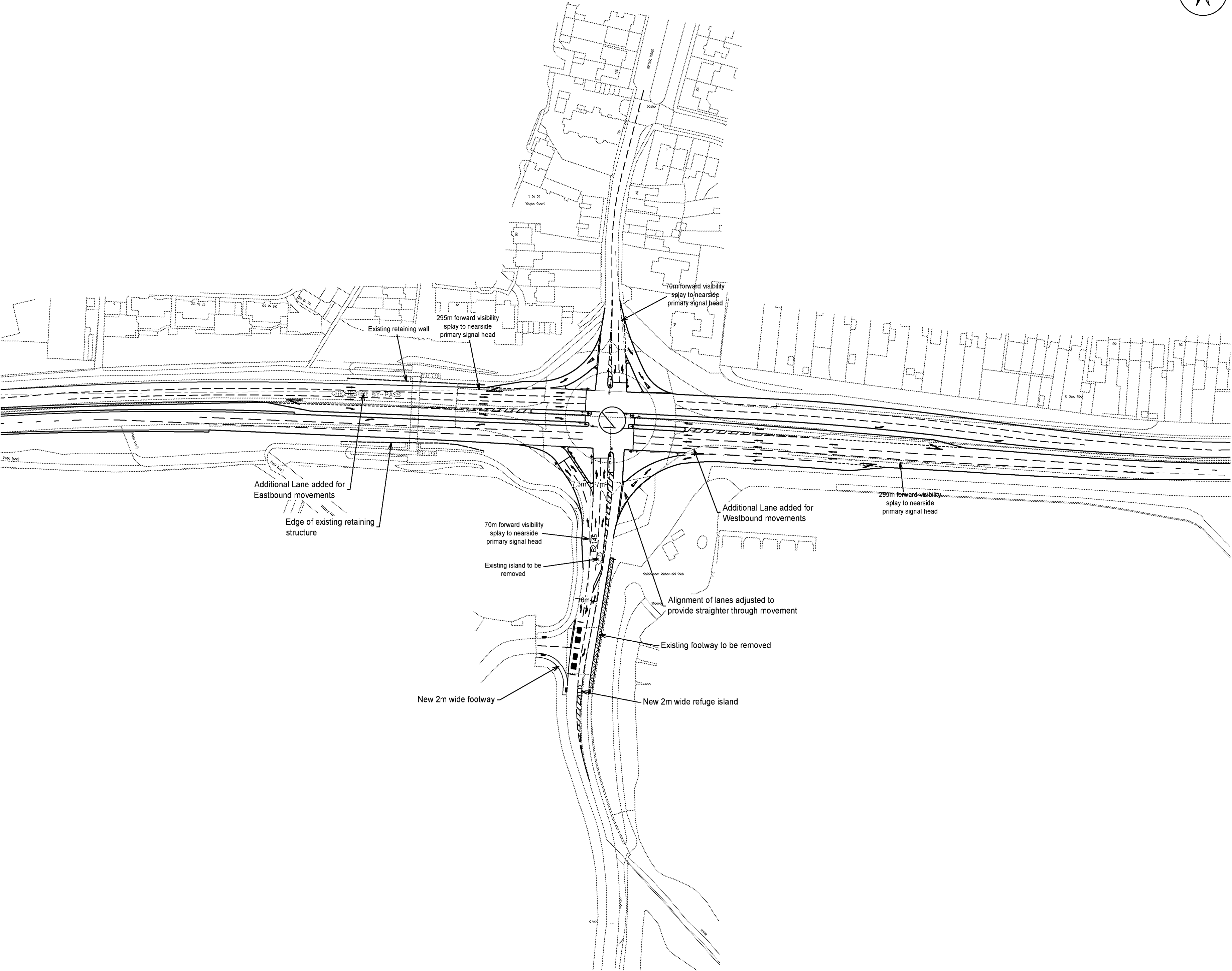
Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.95	0.04	0.36	2.33	4.26			N/A	N/A
2 - B2166 E	0.71	0.07	0.74	1.00	1.00			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	0.25	0.00	0.00	0.25	0.25			N/A	N/A



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 3. This drawing is to be read in conjunction with all relevant scheme drawings.

Key:

----- Highway boundary



B	Further A2145 proposals	AJ	MRA	17-10-17
A	Adjust signal positions, islands and stop lines	AJ	MRA	09-08-17
Rev	Description	By	CB	Date



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Client Hallam Land Management

Project Sites at Hook Lane/ Pagham Road and Sefter Road, Pagham

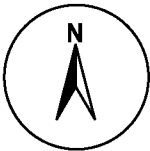
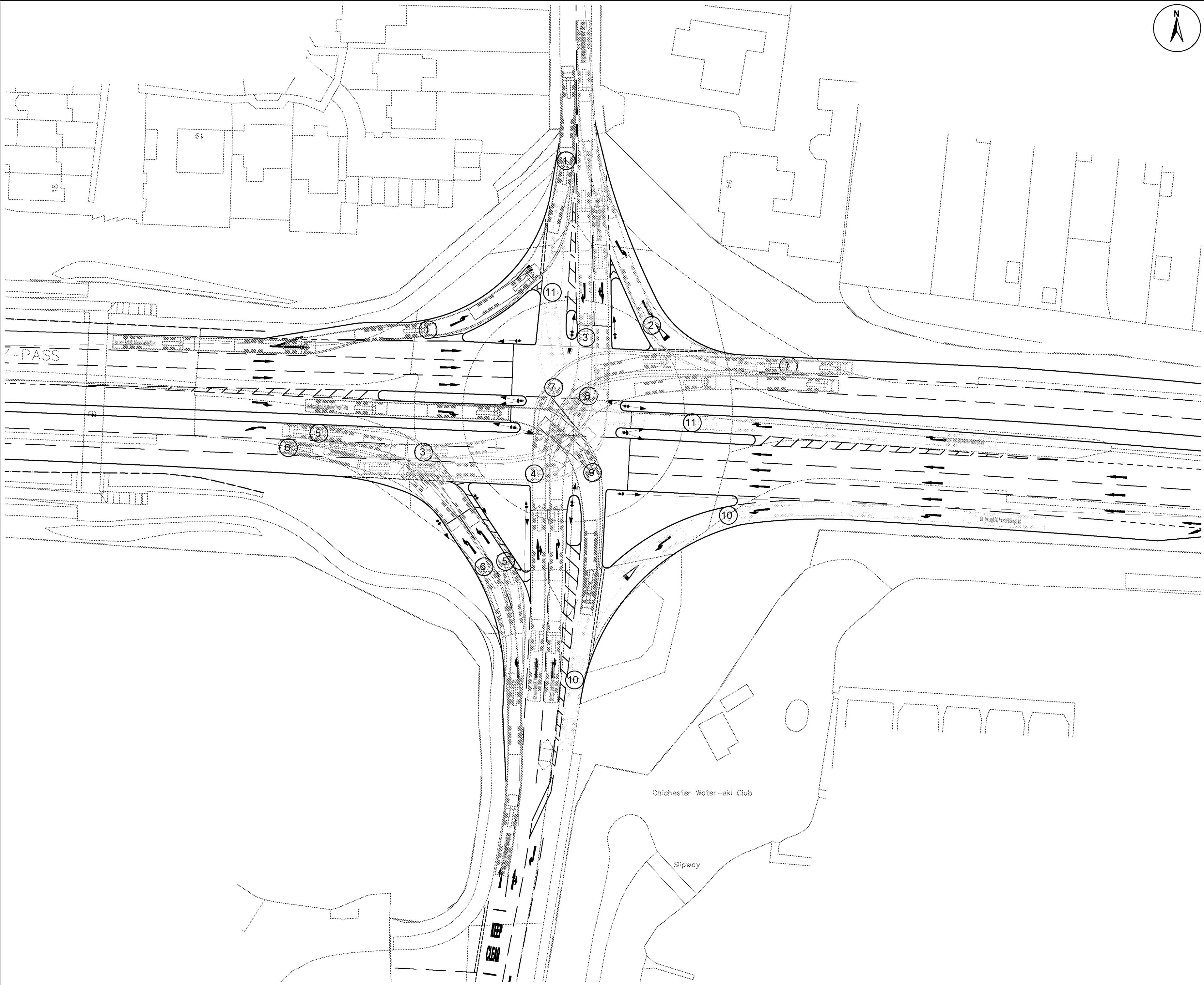
Title Further improvements to the existing signalised scheme at the A27 Whyke Hill Junction

Status	Drawn By	PM/Checked by
INFORMATION	AJ	MRA
Project Number	Scale @ A2	Date Created
JNY8840	1:1250	02.08.17

RPS Drawing/Figure Number
JNY8840-19

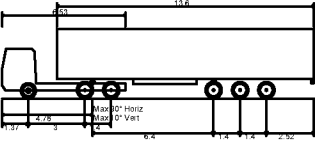
Rev
B

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Vehicle Profile



Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 18.50m
Overall Width 2.55m
Overall Body Height 3.88m
Min Body Ground Clearance 0.41m
Max Track Width 2.50m
Lock-to-lock time 8.00s
Curb to Curb Turning Radius 6.530m

Key:

Highway boundary

B	Further A2145 proposals	AJ	MRA	17:10:17
A	Adjust signal positions, islands and stop lines	AJ	MRA	09:08:17
Rev	Description	By	CB	Date



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Client Hallam Land Management

Project Sites at Hook Lane/ Pagham Road and Sefter Road, Pagham

Title Further improvements to the existing signalised scheme at the A27 Whyke Hill Junction - Swept Path Analysis

Status	Drawn By	PM/Checked By
INFORMATION	AJ	MRA
Project Number	Scale @ A2	Date Created
JNY8840	1:500	09.08.17

RPS Drawing/Figure Number	Rev
JNY8840-19 Tracks	B

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Basic Results Summary

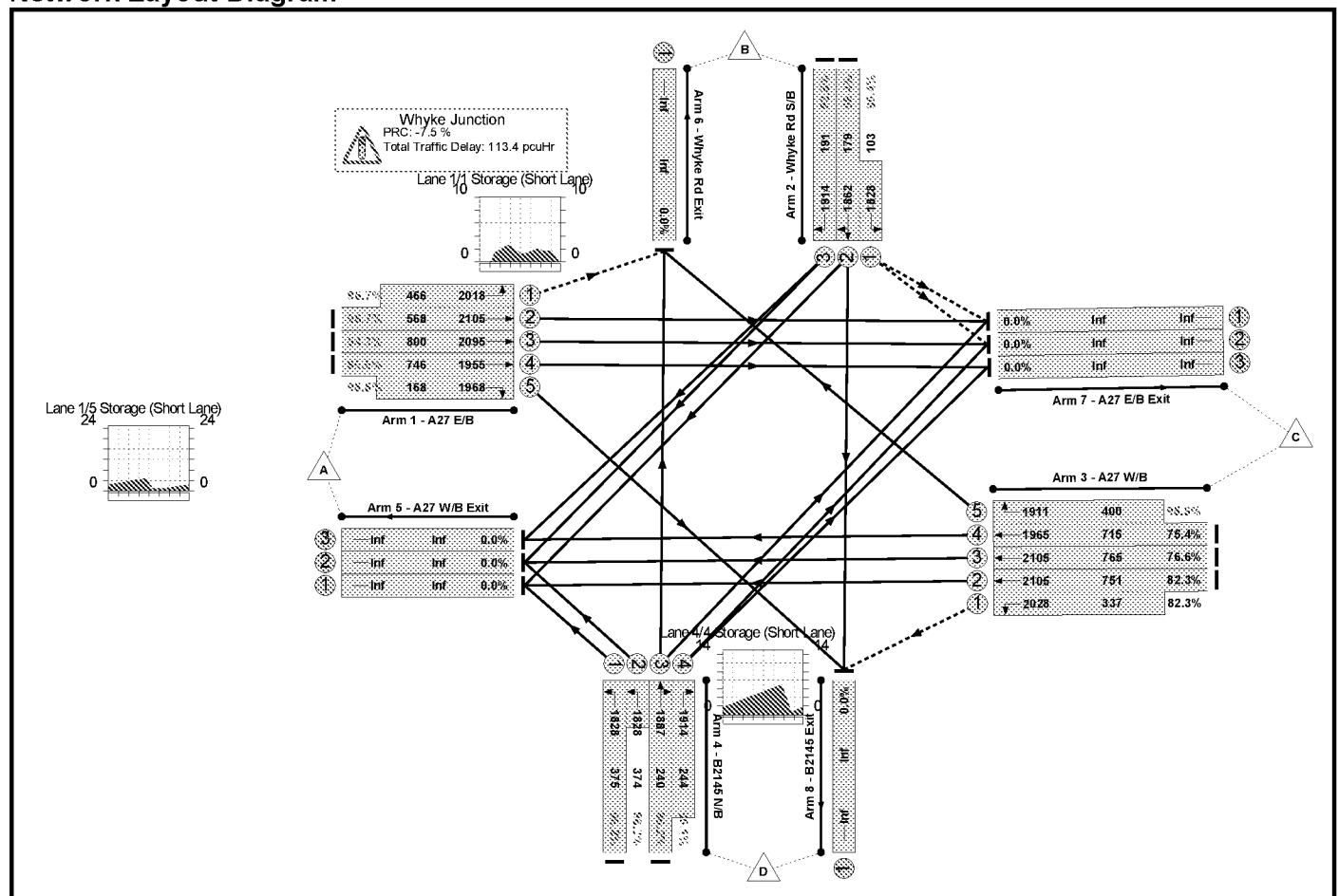
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
File name:	Whyke Hill - Amended RPS Model 10-8-17_With footbridge.lsg3x
Author:	
Company:	
Address:	
Notes:	

Scenario 5: '2031 SE AM_+ Pagham Devs - Road Only' (FG5: '2031 SE AM Peak - With Pagham Dev', Plan 1: 'Road Only')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Total Delay (pcuHr)
Network	-	-	96.7%	-	-	113.4
Whyke Junction	-	-	96.7%	-	-	113.4
1/2+1/1	A27 E/B Left Ahead	U+O	96.7 : 96.7%	32.1	55.6 (64.2:45.2)	15.4 (9.8+5.7)
1/3	A27 E/B Ahead	U	94.3%	28.6	63.5	13.3
1/4+1/5	A27 E/B Ahead Right	U	95.5 : 95.5%	28.9	65.8 (65.0:69.4)	16.0 (12.9+3.1)
2/2+2/1	Whyke Rd S/B Right Left Ahead	U+O	96.4 : 96.4%	11.4	114.9 (129.9:88.8)	8.7 (6.2+2.4)
2/3	Whyke Rd S/B Right	U	92.5%	9.3	129.7	6.4
3/2+3/1	A27 W/B Ahead Left	U+O	82.3 : 82.3%	19.3	30.9 (40.7:9.1)	7.7 (7.0+0.7)
3/3	A27 W/B Ahead	U	76.6%	17.4	40.7	6.6
3/4+3/5	A27 W/B Ahead Right	U	75.4 : 95.9%	16.7	45.0 (39.8:52.2)	11.5 (6.0+5.6)
4/1+4/2	B2145 N/B Left	U	96.2 : 96.2%	26.4	72.7 (72.7:72.7)	14.6 (7.3+7.3)
4/3+4/4	B2145 N/B Ahead Right	U	96.2 : 96.1%	14.2	102.5 (102.5:102.4)	13.2 (6.6+6.7)
C1 - Whyke PRC for Signalled Lanes (%): -7.5 PRC Over All Lanes (%): -7.5 Total Delay for Signalled Lanes (pcuHr): 113.38 Total Delay Over All Lanes(pcuHr): 113.38 Cycle Time (s): 110						

Basic Results Summary

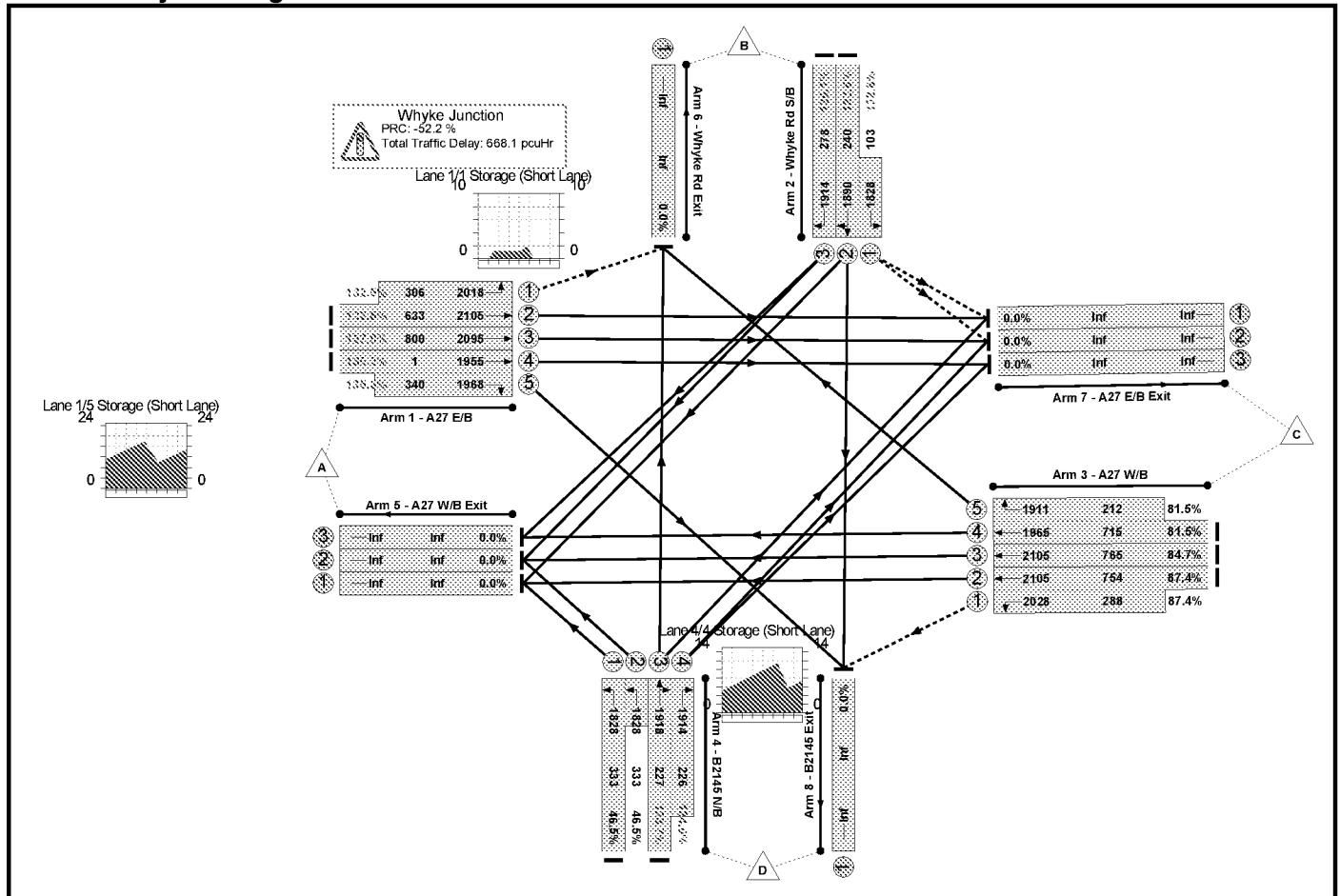
Traffic Flows, Actual

Actual Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	451	2016	160	2627
	B	273	0	99	77	449
	C	1743	383	0	277	2403
	D	721	135	330	0	1186
	Tot.	2737	969	2445	514	6665

Scenario 6: '2031 SE PM_+ Pagham Devs - Road Only' (FG6: '2031 SE PM Peak - With Pagham Dev', Plan 1: 'Road Only')

Network Layout Diagram



Basic Results Summary

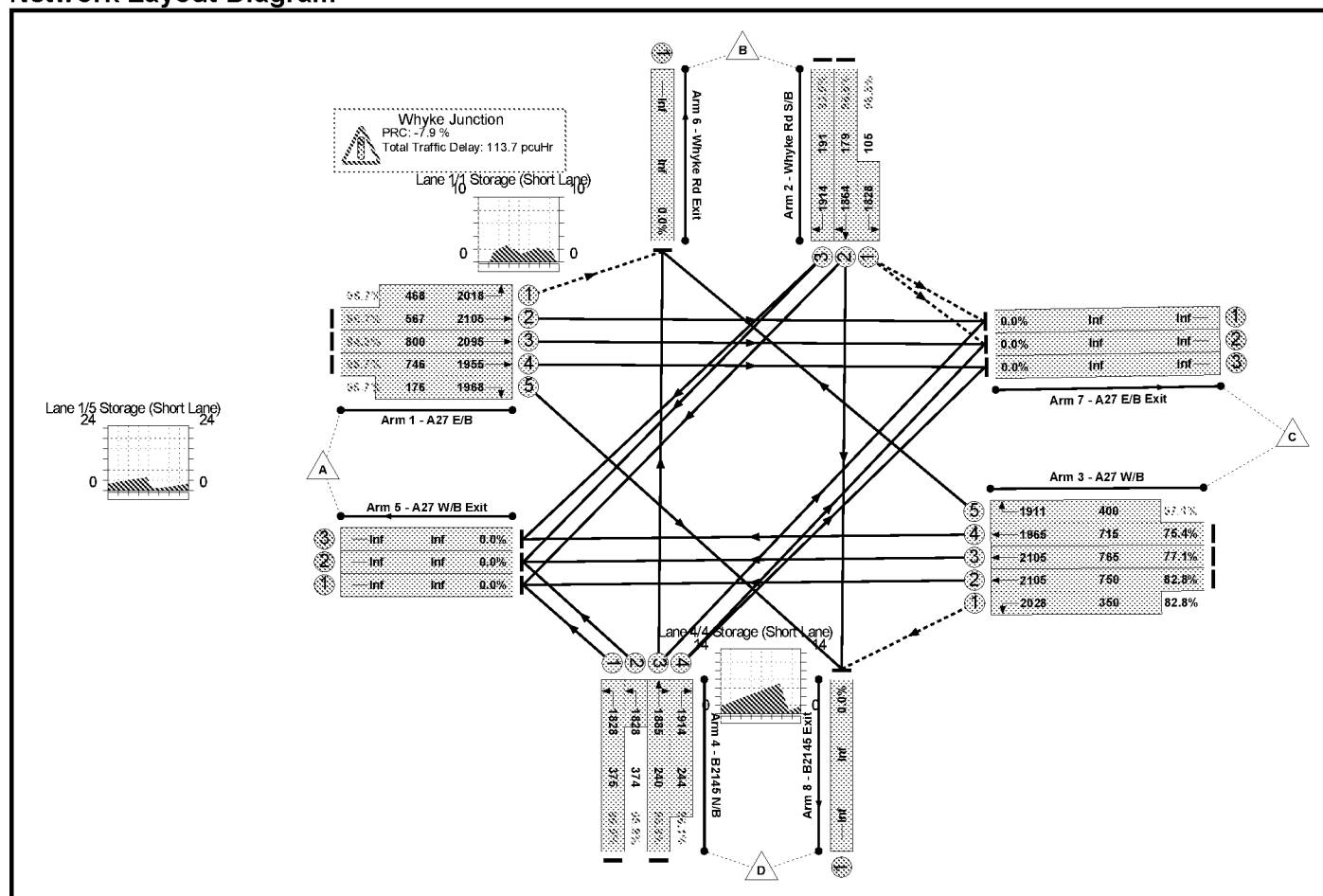
Network Results

Item	Lane Description	Lane Type	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Total Delay (pcuHr)
Network	-	-	137.0%	-	-	668.1
Whyke Junction	-	-	137.0%	-	-	668.1
1/2+1/1	A27 E/B Left Ahead	U+O	132.5 : 132.5%	247.9	520.4 (527.3:506.3)	180.0 (122.9+57.1)
1/3	A27 E/B Ahead	U	137.0%	192.4	578.3	176.1
1/4+1/5	A27 E/B Ahead Right	U	135.3 : 135.3%	79.9	570.8 (505.7:571.1)	73.3 (0.3+73.0)
2/2+2/1	Whyke Rd S/B Right Left Ahead	U+O	132.6 : 132.6%	98.1	545.2 (557.5:516.6)	68.8 (49.2+19.5)
2/3	Whyke Rd S/B Right	U	126.1%	53.4	489.3	47.7
3/2+3/1	A27 W/B Ahead Left	U+O	87.4 : 87.4%	21.8	36.5 (45.4:13.0)	9.2 (8.3+0.9)
3/3	A27 W/B Ahead	U	84.7%	20.8	46.8	8.4
3/4+3/5	A27 W/B Ahead Right	U	81.5 : 81.5%	18.1	44.1 (41.9:51.6)	9.2 (6.8+2.5)
4/1+4/2	B2145 N/B Left	U	46.5 : 46.5%	4.6	33.8 (33.8:33.8)	2.9 (1.5+1.5)
4/3+4/4	B2145 N/B Ahead Right	U	133.7 : 134.0%	90.1	549.4 (547.9:550.9)	92.5 (46.1+46.4)
C1 - Whyke		PRC for Signalled Lanes (%):	-52.2	Total Delay for Signalled Lanes (pcuHr):	668.06	Cycle Time (s): 110
		PRC Over All Lanes (%):	-52.2	Total Delay Over All Lanes(pcuHr):	668.06	

Basic Results Summary
Traffic Flows, Actual
Actual Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	406	1937	460	2803
	B	478	0	136	191	805
	C	1889	173	0	252	2314
	D	310	228	378	0	916
	Tot.	2677	807	2451	903	6838

Scenario 7: '2031 Max SE AM_+ Pagham Dev - Road Only' (FG7: '2031 Max SE AM Peak - With Pagham Dev', Plan 1: 'Road Only')
Network Layout Diagram



Basic Results Summary

Network Results

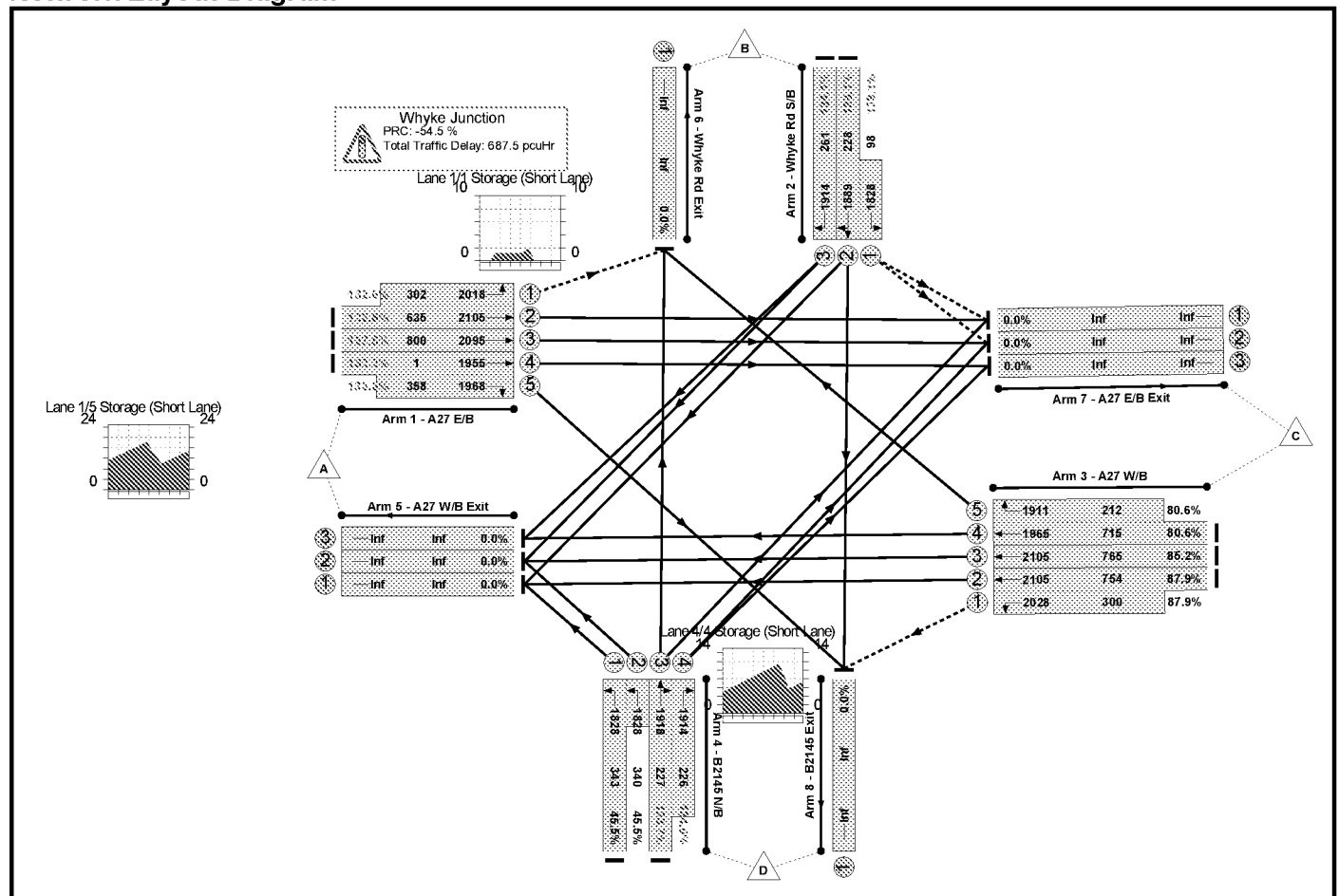
Item	Lane Description	Lane Type	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Total Delay (pcuHr)
Network	-	-	97.1%	-	-	113.7
Whyke Junction	-	-	97.1%	-	-	113.7
1/2+1/1	A27 E/B Left Ahead	U+O	96.7 : 96.7%	32.0	55.4 (64.0:45.1)	15.4 (9.7+5.7)
1/3	A27 E/B Ahead	U	94.3%	28.6	63.5	13.3
1/4+1/5	A27 E/B Ahead Right	U	95.7 : 95.7%	29.1	66.2 (65.3:69.8)	16.2 (13.0+3.3)
2/2+2/1	Whyke Rd S/B Right Left Ahead	U+O	96.5 : 96.5%	11.4	114.5 (129.7:88.6)	8.7 (6.2+2.5)
2/3	Whyke Rd S/B Right	U	93.0%	9.5	132.3	6.5
3/2+3/1	A27 W/B Ahead Left	U+O	82.8 : 82.8%	19.4	30.8 (40.9:9.3)	7.8 (7.0+0.7)
3/3	A27 W/B Ahead	U	77.1%	17.5	41.0	6.7
3/4+3/5	A27 W/B Ahead Right	U	75.4 : 97.1%	16.8	45.3 (40.1:52.5)	11.7 (6.0+5.7)
4/1+4/2	B2145 N/B Left	U	95.9 : 95.9%	25.9	71.4 (71.4:71.4)	14.3 (7.1+7.1)
4/3+4/4	B2145 N/B Ahead Right	U	95.9 : 96.1%	14.0	101.6 (101.6:101.6)	13.1 (6.5+6.6)
C1 - Whyke PRC for Signalled Lanes (%): -7.9 PRC Over All Lanes (%): -7.9 Total Delay for Signalled Lanes (pcuHr): 113.72 Total Delay Over All Lanes(pcuHr): 113.72 Cycle Time (s): 110						

Basic Results Summary
Traffic Flows, Actual
Actual Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	453	2016	168	2637
	B	272	0	101	79	452
	C	1750	388	0	290	2428
	D	719	133	331	0	1183
	Tot.	2741	974	2448	537	6700

Scenario 8: '2031 Max SE PM_+ Pagham dev - Road Only' (FG8: '2031 Max SE PM Peak - With Pagham Dev', Plan 1: 'Road Only')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Deg Sat (%)	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Total Delay (pcuHr)
Network	-	-	139.1%	-	-	687.5
Whyke Junction	-	-	139.1%	-	-	687.5
1/2+1/1	A27 E/B Left Ahead	U+O	132.5 : 132.6%	248.2	521.5 (528.3:507.3)	180.1 (123.6+56.5)
1/3	A27 E/B Ahead	U	137.5%	194.6	583.5	178.3
1/4+1/5	A27 E/B Ahead Right	U	133.3 : 133.3%	79.9	548.6 (485.7:548.7)	72.8 (0.1+72.7)
2/2+2/1	Whyke Rd S/B Right Left Ahead	U+O	139.1 : 139.1%	94.1	615.4 (627.9:586.3)	77.4 (55.3+22.2)
2/3	Whyke Rd S/B Right	U	134.1%	62.2	581.8	56.6
3/2+3/1	A27 W/B Ahead Left	U+O	87.9 : 87.9%	22.2	36.6 (45.8:13.3)	9.4 (8.4+1.0)
3/3	A27 W/B Ahead	U	85.2%	21.0	47.4	8.6
3/4+3/5	A27 W/B Ahead Right	U	80.6 : 80.6%	17.9	43.4 (41.3:50.2)	9.0 (6.6+2.4)
4/1+4/2	B2145 N/B Left	U	45.5 : 45.5%	4.5	32.8 (32.8:32.8)	2.8 (1.4+1.4)
4/3+4/4	B2145 N/B Ahead Right	U	133.7 : 134.0%	90.1	549.2 (547.7:550.7)	92.4 (46.1+46.3)
C1 - Whyke		PRC for Signalled Lanes (%):	-54.5	Total Delay for Signalled Lanes (pcuHr):	687.48	Cycle Time (s): 110
		PRC Over All Lanes (%):	-54.5	Total Delay Over All Lanes(pcuHr):	687.48	

Basic Results Summary
Traffic Flows, Actual
Actual Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	401	1943	477	2821
	B	478	0	136	189	803
	C	1890	171	0	264	2325
	D	311	228	378	0	917
	Tot.	2679	800	2457	930	6866

Contact

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