

## APPENDIX H14

### B430/ARDLEY ROAD MODELLING OUTPUT

## B430/Ardley Road – Junction Assessment Results

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
<b>2023 Base</b>						
Ardley Road (E) RT	0.41	1	21	0.27	0	15
Ardley Road (E) LT	0.20	0	10	0.12	0	8
B430 (N) RT	0.07	0	8	0.08	0	8
Ardley Road (W) RT	0.31	1	16	0.22	0	14
Ardley Road (W) LT	0.06	0	6	0.04	0	6
B430 (S) RT	0.24	1	7	0.17	1	5
<b>2026 Base</b>						
Ardley Road (E) RT	0.44	1	23	0.29	0	15
Ardley Road (E) LT	0.21	0	10	0.13	0	8
B430 (N) RT	0.07	0	9	0.09	0	8
Ardley Road (W) RT	0.33	1	17	0.23	0	14
Ardley Road (W) LT	0.06	0	7	0.05	0	6
B430 (S) RT	0.26	1	7	0.19	1	5
<b>2026 Base + 50 dwellings</b>						
Ardley Road (E) RT	0.44	1	24	0.29	0	15
Ardley Road (E) LT	0.21	0	10	0.13	0	8
B430 (N) RT	0.07	0	9	0.09	0	8
Ardley Road (W) RT	0.34	1	17	0.23	0	14
Ardley Road (W) LT	0.06	0	7	0.05	0	6
B430 (S) RT	0.26	1	7	0.19	1	5
<b>2027 Base</b>						
Ardley Road (E) RT	0.45	1	24	0.29	0	15
Ardley Road (E) LT	0.22	0	11	0.13	0	8
B430 (N) RT	0.07	0	9	0.09	0	8
Ardley Road (W) RT	0.34	1	17	0.24	0	14
Ardley Road (W) LT	0.06	0	7	0.05	0	6
B430 (S) RT	0.26	1	7	0.19	1	5
<b>2027 Base + 100 dwellings</b>						
Ardley Road (E) RT	0.45	1	25	0.30	0	16
Ardley Road (E) LT	0.22	0	11	0.13	0	8
B430 (N) RT	0.07	0	9	0.09	0	8
Ardley Road (W) RT	0.35	1	18	0.24	0	15
Ardley Road (W) LT	0.06	0	7	0.05	0	6
B430 (S) RT	0.27	1	7	0.19	1	5
<b>2028 Base</b>						
Ardley Road (E) RT	0.45	1	24	0.30	0	16
Ardley Road (E) LT	0.22	0	11	0.13	0	8
B430 (N) RT	0.07	0	9	0.09	0	8
Ardley Road (W) RT	0.34	1	18	0.24	0	15
Ardley Road (W) LT	0.06	0	7	0.05	0	6
B430 (S) RT	0.27	1	7	0.19	1	5

2028 Base + 150 dwellings						
Ardley Road (E) RT	0.47	1	26	0.31	0	16
Ardley Road (E) LT	0.22	0	11	0.13	0	8
B430 (N) RT	0.07	0	9	0.09	0	8
Ardley Road (W) RT	0.36	1	19	0.25	0	15
Ardley Road (W) LT	0.07	0	7	0.05	0	6
B430 (S) RT	0.27	1	7	0.20	1	5
2031 Base						
Ardley Road (E) RT	0.48	1	26	0.31	1	16
Ardley Road (E) LT	0.23	0	11	0.14	0	8
B430 (N) RT	0.07	0	9	0.09	0	8
Ardley Road (W) RT	0.36	1	19	0.25	0	15
Ardley Road (W) LT	0.07	0	7	0.05	0	6
B430 (S) RT	0.28	1	7	0.20	1	5
2031 Base + 230 dwellings						
Ardley Road (E) RT	0.50	1	29	0.32	1	17
Ardley Road (E) LT	0.23	0	11	0.14	0	8
B430 (N) RT	0.07	0	9	0.09	0	8
Ardley Road (W) RT	0.38	1	20	0.26	0	16
Ardley Road (W) LT	0.07	0	7	0.05	0	7
B430 (S) RT	0.29	1	7	0.21	1	5

RFC is Ratio of Flow to Capacity, Queue is mean max in PCUs, Delay is seconds per PCU.

Junctions 10
PICADY 10 - Priority Intersection Module
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Path: C:\Users\NeilBateman\Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\2019\T19562 Heyford Park\Junction Assessments\Picady

Report generation date: 19/10/2023 10:57:01

- »2023, AM
- »2023, PM
- »2026, AM
- »2026, PM
- »2026 +50dw, AM
- »2026 +50dw, PM
- »2027, AM
- »2027, PM
- »2027 +100dw, AM
- »2027 +100dw, PM
- »2028, AM
- »2028, PM
- »2028 +150dw, AM
- »2028 +150dw, PM
- »2031, AM
- »2031, PM
- »2031 +230dw, AM
- »2031 +230dw, PM

**Summary of junction performance**

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
<b>2023</b>										
Stream B-C	D1	0.3	9.84	0.20	A	D2	0.1	7.48	0.12	A
Stream B-AD		0.7	21.05	0.41	C		0.4	14.40	0.27	B
Stream A-BCD		0.1	8.47	0.07	A		0.1	8.08	0.08	A
Stream D-A		0.1	6.39	0.06	A		0.0	6.11	0.04	A
Stream D-BC		0.4	15.92	0.31	C		0.3	13.41	0.22	B
Stream C-ABD		0.7	6.74	0.24	A		0.5	5.33	0.17	A
<b>2026</b>										
Stream B-C	D3	0.3	10.25	0.21	B	D4	0.1	7.60	0.13	A
Stream B-AD		0.8	22.94	0.44	C		0.4	15.09	0.29	C
Stream A-BCD		0.1	8.58	0.07	A		0.1	8.22	0.09	A
Stream D-A		0.1	6.50	0.06	A		0.0	6.22	0.05	A
Stream D-BC		0.5	16.87	0.33	C		0.3	14.00	0.23	B
Stream C-ABD		0.8	6.81	0.26	A		0.5	5.31	0.19	A
<b>2026 +50dw</b>										

Stream B-C	D5	0.3	10.30	0.21	B	D6	0.1	7.62	0.13	A
Stream B-AD		0.8	23.31	0.44	C		0.4	15.21	0.29	C
Stream A-BCD		0.1	8.62	0.07	A		0.1	8.22	0.09	A
Stream D-A		0.1	6.54	0.06	A		0.0	6.23	0.05	A
Stream D-BC		0.5	17.12	0.33	C		0.3	14.07	0.23	B
Stream C-ABD		0.8	6.76	0.26	A		0.6	5.30	0.19	A
<b>2027</b>										
Stream B-C	D7	0.3	10.35	0.21	B	D8	0.2	7.63	0.13	A
Stream B-AD		0.8	23.42	0.44	C		0.4	15.26	0.29	C
Stream A-BCD		0.1	8.60	0.07	A		0.1	8.25	0.09	A
Stream D-A		0.1	6.53	0.06	A		0.0	6.24	0.05	A
Stream D-BC		0.5	17.11	0.33	C		0.3	14.15	0.23	B
Stream C-ABD		0.8	6.83	0.26	A		0.6	5.30	0.19	A
<b>2027 +100dw</b>										
Stream B-C	D9	0.3	10.45	0.21	B	D10	0.2	7.69	0.13	A
Stream B-AD		0.8	24.19	0.45	C		0.4	15.53	0.29	C
Stream A-BCD		0.1	8.69	0.07	A		0.1	8.29	0.09	A
Stream D-A		0.1	6.61	0.06	A		0.0	6.27	0.05	A
Stream D-BC		0.5	17.67	0.34	C		0.3	14.39	0.24	B
Stream C-ABD		0.8	6.75	0.27	A		0.6	5.29	0.19	A
<b>2028</b>										
Stream B-C	D11	0.3	10.46	0.22	B	D12	0.2	7.67	0.13	A
Stream B-AD		0.8	23.93	0.45	C		0.4	15.43	0.29	C
Stream A-BCD		0.1	8.63	0.07	A		0.1	8.28	0.09	A
Stream D-A		0.1	6.56	0.06	A		0.0	6.26	0.05	A
Stream D-BC		0.5	17.36	0.34	C		0.3	14.29	0.24	B
Stream C-ABD		0.8	6.84	0.27	A		0.6	5.30	0.19	A
<b>2028 +150dw</b>										
Stream B-C	D13	0.3	10.64	0.22	B	D14	0.2	7.79	0.13	A
Stream B-AD		0.9	25.28	0.46	D		0.4	15.99	0.30	C
Stream A-BCD		0.1	8.79	0.07	A		0.1	8.34	0.09	A
Stream D-A		0.1	6.69	0.07	A		0.0	6.31	0.05	A
Stream D-BC		0.5	18.30	0.35	C		0.3	14.73	0.24	B
Stream C-ABD		0.9	6.71	0.27	A		0.6	5.29	0.20	A
<b>2031</b>										
Stream B-C	D15	0.3	10.80	0.22	B	D16	0.2	7.79	0.14	A
Stream B-AD		0.9	25.61	0.47	D		0.5	16.05	0.31	C
Stream A-BCD		0.1	8.70	0.07	A		0.1	8.39	0.09	A
Stream D-A		0.1	6.65	0.07	A		0.1	6.35	0.05	A
Stream D-BC		0.5	18.16	0.35	C		0.3	14.81	0.25	B
Stream C-ABD		0.9	6.90	0.28	A		0.6	5.29	0.20	A
<b>2031 +230dw</b>										
Stream B-C	D17	0.3	11.09	0.23	B	D18	0.2	7.96	0.14	A
Stream B-AD		1.0	27.94	0.49	D		0.5	16.85	0.32	C
Stream A-BCD		0.1	8.94	0.07	A		0.1	8.47	0.09	A
Stream D-A		0.1	6.86	0.07	A		0.1	6.42	0.05	A
Stream D-BC		0.6	19.70	0.37	C		0.3	15.45	0.26	C
Stream C-ABD		1.0	6.73	0.29	A		0.6	5.27	0.21	A

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

## File summary

### File Description

<b>Title</b>	B430-Ardley Rd
<b>Location</b>	Heyford Park
<b>Site number</b>	
<b>Date</b>	08/09/2023
<b>Version</b>	
<b>Status</b>	(new file)
<b>Identifier</b>	
<b>Client</b>	Richborough
<b>Jobnumber</b>	T19562
<b>Enumerator</b>	AzureAD\NeilBateman
<b>Description</b>	

## Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

## Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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	2023	AM	ONE HOUR	07:45	09:15	15
D2	2023	PM	ONE HOUR	16:45	18:15	15
D3	2026	AM	ONE HOUR	07:45	09:15	15
D4	2026	PM	ONE HOUR	16:45	18:15	15
D5	2026 +50dw	AM	ONE HOUR	07:45	09:15	15
D6	2026 +50dw	PM	ONE HOUR	16:45	18:15	15
D7	2027	AM	ONE HOUR	07:45	09:15	15
D8	2027	PM	ONE HOUR	16:45	18:15	15
D9	2027 +100dw	AM	ONE HOUR	07:45	09:15	15
D10	2027 +100dw	PM	ONE HOUR	16:45	18:15	15
D11	2028	AM	ONE HOUR	07:45	09:15	15
D12	2028	PM	ONE HOUR	16:45	18:15	15
D13	2028 +150dw	AM	ONE HOUR	07:45	09:15	15
D14	2028 +150dw	PM	ONE HOUR	16:45	18:15	15
D15	2031	AM	ONE HOUR	07:45	09:15	15
D16	2031	PM	ONE HOUR	16:45	18:15	15
D17	2031 +230dw	AM	ONE HOUR	07:45	09:15	15
D18	2031 +230dw	PM	ONE HOUR	16:45	18:15	15

## Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

# 2023, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		4.25	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.25	A

## Arms

### Arms

Arm	Name	Description	Arm type
A	B430 (N)		Major
B	Ardley Road (E)		Minor
C	B430 (S)		Major
D	Ardley Road (W)		Minor

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	6.40		✓	2.20	120.0	✓	3.00
C	6.60				0.0	✓	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 (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare			10.00	8.20	5.05	2.65	2.40		3.00	60	104
D	Two lanes	5.00	3.50								76	115

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
A-D	643	-	-	-	0.245	0.245	0.245	-	0.245	-	-
B-AD	575	0.102	0.258	-	-	-	0.162	0.369	0.162	0.102	0.258
B-C	732	0.109	0.276	-	-	-	-	-	-	0.109	0.276
C-B	574	0.217	0.217	-	-	-	-	-	-	0.217	0.217
D-A	836	-	-	-	0.318	0.126	0.318	-	0.126	-	-
D-BC	588	0.167	0.167	0.380	0.266	0.105	0.266	-	0.105	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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	2023	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	622	100.000
B		✓	192	100.000
C		✓	472	100.000
D		✓	125	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	22	570	30
	B	77	0	85	30
	C	368	68	0	36
	D	33	34	58	0

## Vehicle Mix

### Heavy Vehicle %

	To				
	A	B	C	D	
From	A	0	5	7	11
	B	0	0	4	3
	C	7	5	0	9
	D	3	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.20	9.84	0.3	A
B-AD	0.41	21.05	0.7	C
A-BCD	0.07	8.47	0.1	A
A-B				
A-C				
D-A	0.06	6.39	0.1	A
D-BC	0.31	15.92	0.4	C
C-ABD	0.24	6.74	0.7	A
C-D				
C-A				



### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	64	565	0.113	63	0.1	7.452	A
B-AD	81	381	0.211	79	0.3	12.000	B
A-BCD	23	549	0.041	22	0.0	7.582	A
A-B	17			17			
A-C	429			429			
D-A	25	692	0.036	25	0.0	5.551	A
D-BC	69	411	0.169	68	0.2	10.500	B
C-ABD	92	688	0.133	91	0.3	6.378	A
C-D	23			23			
C-A	240			240			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	76	529	0.144	76	0.2	8.262	A
B-AD	96	343	0.281	96	0.4	14.662	B
A-BCD	27	531	0.051	27	0.1	7.932	A
A-B	20			20			
A-C	512			512			
D-A	30	662	0.045	30	0.0	5.866	A
D-BC	83	376	0.220	82	0.3	12.261	B
C-ABD	125	715	0.175	124	0.4	6.470	A
C-D	27			27			
C-A	273			273			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	94	475	0.197	93	0.3	9.794	A
B-AD	118	290	0.406	117	0.7	20.773	C
A-BCD	33	505	0.065	33	0.1	8.456	A
A-B	24			24			
A-C	628			628			
D-A	36	618	0.059	36	0.1	6.376	A
D-BC	101	328	0.309	101	0.4	15.802	C
C-ABD	184	755	0.244	183	0.7	6.706	A
C-D	30			30			
C-A	306			306			

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	94	474	0.197	94	0.3	9.839	A
B-AD	118	290	0.406	118	0.7	21.053	C
A-BCD	33	505	0.065	33	0.1	8.466	A
A-B	24			24			
A-C	628			628			
D-A	36	617	0.059	36	0.1	6.386	A
D-BC	101	327	0.309	101	0.4	15.923	C
C-ABD	184	755	0.244	184	0.7	6.737	A
C-D	30			30			
C-A	305			305			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	76	528	0.145	77	0.2	8.308	A
B-AD	96	342	0.281	97	0.4	14.873	B
ABCD	27	530	0.051	27	0.1	7.945	A
A-B	20			20			
A-C	512			512			
D-A	30	660	0.045	30	0.0	5.881	A
D-BC	83	375	0.221	83	0.3	12.371	B
C-ABD	126	716	0.175	127	0.4	6.519	A
C-D	27			27			
C-A	272			272			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	64	564	0.113	64	0.1	7.496	A
B-AD	81	380	0.212	81	0.3	12.144	B
ABCD	23	549	0.041	23	0.0	7.595	A
A-B	17			17			
A-C	429			429			
D-A	25	691	0.036	25	0.0	5.564	A
D-BC	69	410	0.169	70	0.2	10.591	B
C-ABD	92	689	0.134	93	0.3	6.426	A
C-D	23			23			
C-A	239			239			

# 2023, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		3.05	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.05	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	2023	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	420	100.000
B		✓	148	100.000
C		✓	551	100.000
D		✓	92	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	38	346	36
	B	54	0	62	32
	C	433	51	0	67
	D	24	33	35	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	0	4	0
	B	4	0	2	0
	C	6	0	0	3
	D	0	0	3	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.12	7.48	0.1	A
B-AD	0.27	14.40	0.4	B
ABCD	0.08	8.08	0.1	A
A-B				
A-C				
D-A	0.04	6.11	0.0	A
D-BC	0.22	13.41	0.3	B
C-ABD	0.17	5.33	0.5	A
C-D				
C-A				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	47	616	0.076	46	0.1	6.440	A
B-AD	65	423	0.153	64	0.2	10.248	B
ABCD	27	535	0.051	27	0.1	7.075	A
A-B	29			29			
A-C	260			260			
D-A	18	688	0.026	18	0.0	5.370	A
D-BC	51	424	0.121	51	0.1	9.776	A
C-ABD	75	772	0.097	74	0.2	5.293	A
C-D	46			46			
C-A	294			294			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	56	593	0.094	56	0.1	6.833	A
B-AD	77	393	0.197	77	0.2	11.673	B
ABCD	32	514	0.063	32	0.1	7.470	A
A-B	34			34			
A-C	311			311			
D-A	22	658	0.033	22	0.0	5.655	A
D-BC	61	392	0.156	61	0.2	11.037	B
C-ABD	103	814	0.126	102	0.3	5.209	A
C-D	53			53			
C-A	340			340			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	68	560	0.122	68	0.1	7.465	A
B-AD	95	351	0.270	94	0.4	14.336	B
A-BCD	40	485	0.082	40	0.1	8.075	A
A-B	42			42			
A-C	381			381			
D-A	26	616	0.043	26	0.0	6.109	A
D-BC	75	348	0.215	75	0.3	13.363	B
C-ABD	153	875	0.175	152	0.5	5.156	A
C-D	61			61			
C-A	393			393			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	68	559	0.122	68	0.1	7.475	A
B-AD	95	351	0.270	95	0.4	14.402	B
A-BCD	40	485	0.082	40	0.1	8.084	A
A-B	42			42			
A-C	381			381			
D-A	26	615	0.043	26	0.0	6.114	A
D-BC	75	347	0.216	75	0.3	13.410	B
C-ABD	153	875	0.175	153	0.5	5.175	A
C-D	61			61			
C-A	393			393			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	56	592	0.094	56	0.1	6.849	A
B-AD	77	393	0.197	78	0.3	11.738	B
A-BCD	32	514	0.063	32	0.1	7.482	A
A-B	34			34			
A-C	311			311			
D-A	22	657	0.033	22	0.0	5.665	A
D-BC	61	391	0.156	61	0.2	11.090	B
C-ABD	103	815	0.127	104	0.3	5.250	A
C-D	53			53			
C-A	339			339			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	47	615	0.076	47	0.1	6.458	A
B-AD	65	423	0.153	65	0.2	10.315	B
A-BCD	27	535	0.051	27	0.1	7.088	A
A-B	29			29			
A-C	260			260			
D-A	18	688	0.026	18	0.0	5.377	A
D-BC	51	424	0.121	51	0.1	9.828	A
C-ABD	76	772	0.098	76	0.2	5.327	A
C-D	45			45			
C-A	294			294			

# 2026, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		4.52	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.52	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)
D3	2026	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	644	100.000
B		✓	199	100.000
C		✓	488	100.000
D		✓	129	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	23	590	31
	B	80	0	88	31
	C	381	70	0	37
	D	34	35	60	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	5	7	11
	B	0	0	4	3
	C	7	5	0	9
	D	3	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.21	10.25	0.3	B
B-AD	0.44	22.94	0.8	C
ABCD	0.07	8.58	0.1	A
A-B				
A-C				
D-A	0.06	6.50	0.1	A
D-BC	0.33	16.87	0.5	C
C-ABD	0.26	6.81	0.8	A
C-D				
C-A				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	66	559	0.118	66	0.1	7.580	A
B-AD	83	374	0.223	82	0.3	12.388	B
ABCD	23	546	0.043	23	0.0	7.641	A
A-B	17			17			
A-C	444			444			
D-A	26	687	0.037	26	0.0	5.603	A
D-BC	72	404	0.177	71	0.2	10.769	B
C-ABD	97	693	0.140	96	0.3	6.387	A
C-D	24			24			
C-A	247			247			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	79	521	0.152	79	0.2	8.458	A
B-AD	100	335	0.298	99	0.4	15.372	C
ABCD	28	527	0.053	28	0.1	8.008	A
A-B	20			20			
A-C	530			530			
D-A	31	655	0.047	31	0.1	5.938	A
D-BC	86	368	0.232	85	0.3	12.708	B
C-ABD	133	721	0.184	132	0.5	6.498	A
C-D	27			27			
C-A	279			279			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	97	464	0.209	97	0.3	10.191	B
B-AD	122	280	0.435	121	0.7	22.561	C
A-BCD	34	501	0.068	34	0.1	8.564	A
A-B	25			25			
A-C	650			650			
D-A	38	609	0.062	38	0.1	6.488	A
D-BC	105	319	0.329	104	0.5	16.722	C
C-ABD	197	762	0.259	196	0.8	6.775	A
C-D	30			30			
C-A	310			310			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	97	462	0.210	97	0.3	10.250	B
B-AD	122	280	0.436	122	0.8	22.936	C
A-BCD	34	500	0.068	34	0.1	8.576	A
A-B	25			25			
A-C	650			650			
D-A	38	608	0.062	38	0.1	6.500	A
D-BC	105	318	0.330	105	0.5	16.870	C
C-ABD	198	763	0.259	198	0.8	6.807	A
C-D	30			30			
C-A	310			310			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	79	520	0.152	79	0.2	8.514	A
B-AD	100	334	0.298	101	0.4	15.638	C
A-BCD	28	526	0.053	28	0.1	8.025	A
A-B	20			20			
A-C	530			530			
D-A	31	654	0.047	31	0.1	5.954	A
D-BC	86	367	0.233	86	0.3	12.837	B
C-ABD	134	722	0.185	135	0.5	6.547	A
C-D	27			27			
C-A	278			278			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	66	558	0.119	66	0.1	7.625	A
B-AD	83	374	0.223	84	0.3	12.558	B
A-BCD	23	545	0.043	23	0.1	7.659	A
A-B	17			17			
A-C	444			444			
D-A	26	686	0.038	26	0.0	5.620	A
D-BC	72	404	0.178	72	0.2	10.871	B
C-ABD	98	694	0.141	98	0.3	6.437	A
C-D	24			24			
C-A	246			246			



# 2026, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		3.16	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.16	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)
D4	2026	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	435	100.000
B		✓	153	100.000
C		✓	571	100.000
D		✓	95	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	39	359	37	
	B	56	0	64	33	
	C	449	53	0	69	
	D	25	34	36	0	

## Vehicle Mix

### Heavy Vehicle %

		To				
		A	B	C	D	
From	A	0	0	4	0	
	B	4	0	2	0	
	C	6	0	0	3	
	D	0	0	3	0	

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.13	7.60	0.1	A
B-AD	0.29	15.09	0.4	C
ABCD	0.09	8.22	0.1	A
A-B				
A-C				
D-A	0.05	6.22	0.0	A
D-BC	0.23	14.00	0.3	B
C-ABD	0.19	5.31	0.5	A
C-D				
C-A				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48	612	0.079	48	0.1	6.482	A
B-AD	67	418	0.161	66	0.2	10.470	B
ABCD	28	531	0.053	28	0.1	7.145	A
A-B	30			30			
A-C	270			270			
D-A	19	683	0.027	19	0.0	5.421	A
D-BC	53	418	0.127	52	0.1	9.980	A
C-ABD	80	780	0.102	79	0.2	5.271	A
C-D	47			47			
C-A	303			303			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	588	0.098	58	0.1	6.903	A
B-AD	80	386	0.208	80	0.3	12.028	B
ABCD	34	509	0.066	33	0.1	7.563	A
A-B	35			35			
A-C	322			322			
D-A	22	651	0.034	22	0.0	5.724	A
D-BC	63	385	0.165	63	0.2	11.358	B
C-ABD	110	824	0.134	110	0.3	5.192	A
C-D	54			54			
C-A	349			349			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	71	553	0.128	71	0.1	7.584	A
B-AD	98	343	0.287	98	0.4	15.011	C
A-BCD	41	479	0.086	41	0.1	8.209	A
A-B	43			43			
A-C	395			395			
D-A	27	607	0.045	27	0.0	6.210	A
D-BC	78	339	0.229	77	0.3	13.944	B
C-ABD	165	887	0.186	164	0.5	5.152	A
C-D	62			62			
C-A	402			402			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	71	552	0.128	71	0.1	7.596	A
B-AD	98	342	0.287	98	0.4	15.086	C
A-BCD	41	479	0.086	41	0.1	8.217	A
A-B	43			43			
A-C	395			395			
D-A	27	606	0.045	27	0.0	6.216	A
D-BC	78	339	0.229	78	0.3	14.001	B
C-ABD	165	887	0.186	165	0.5	5.174	A
C-D	62			62			
C-A	402			402			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	587	0.098	58	0.1	6.920	A
B-AD	80	386	0.208	81	0.3	12.103	B
A-BCD	34	509	0.066	34	0.1	7.576	A
A-B	35			35			
A-C	322			322			
D-A	22	650	0.034	22	0.0	5.734	A
D-BC	63	384	0.165	64	0.2	11.417	B
C-ABD	111	825	0.134	111	0.4	5.234	A
C-D	54			54			
C-A	349			349			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48	611	0.079	48	0.1	6.504	A
B-AD	67	417	0.161	67	0.2	10.546	B
A-BCD	28	531	0.053	28	0.1	7.159	A
A-B	30			30			
A-C	270			270			
D-A	19	682	0.027	19	0.0	5.430	A
D-BC	53	417	0.127	53	0.1	10.039	B
C-ABD	80	780	0.103	81	0.2	5.306	A
C-D	47			47			
C-A	303			303			

# 2026 +50dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		4.53	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.53	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)
D5	2026 +50dw	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	647	100.000
B		✓	199	100.000
C		✓	497	100.000
D		✓	129	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	23	593	31
	B	80	0	88	31
	C	390	70	0	37
	D	34	35	60	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	5	7	11
	B	0	0	4	3
	C	7	5	0	9
	D	3	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.21	10.30	0.3	B
B-AD	0.44	23.31	0.8	C
ABCD	0.07	8.62	0.1	A
A-B				
A-C				
D-A	0.06	6.54	0.1	A
D-BC	0.33	17.12	0.5	C
C-ABD	0.26	6.76	0.8	A
C-D				
C-A				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	66	558	0.119	66	0.1	7.594	A
B-AD	84	373	0.224	82	0.3	12.461	B
ABCD	23	544	0.043	23	0.0	7.666	A
A-B	17			17			
A-C	446			446			
D-A	26	685	0.037	25	0.0	5.621	A
D-BC	72	402	0.178	71	0.2	10.838	B
C-ABD	98	698	0.140	96	0.3	6.346	A
C-D	24			24			
C-A	252			252			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	79	520	0.152	79	0.2	8.481	A
B-AD	100	333	0.300	99	0.4	15.506	C
ABCD	28	525	0.053	28	0.1	8.040	A
A-B	21			21			
A-C	533			533			
D-A	31	652	0.047	31	0.1	5.963	A
D-BC	85	365	0.234	85	0.3	12.822	B
C-ABD	134	727	0.185	134	0.5	6.448	A
C-D	27			27			
C-A	285			285			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	97	462	0.210	97	0.3	10.243	B
B-AD	122	278	0.440	121	0.8	22.906	C
A-BCD	34	498	0.069	34	0.1	8.609	A
A-B	25			25			
A-C	653			653			
D-A	37	606	0.062	37	0.1	6.526	A
D-BC	105	315	0.332	104	0.5	16.969	C
C-ABD	200	769	0.260	199	0.8	6.720	A
C-D	30			30			
C-A	317			317			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	97	460	0.211	97	0.3	10.303	B
B-AD	122	278	0.440	122	0.8	23.310	C
A-BCD	34	498	0.069	34	0.1	8.621	A
A-B	25			25			
A-C	653			653			
D-A	37	604	0.062	37	0.1	6.538	A
D-BC	105	315	0.332	105	0.5	17.119	C
C-ABD	201	770	0.260	200	0.8	6.755	A
C-D	30			30			
C-A	317			317			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	79	518	0.153	79	0.2	8.539	A
B-AD	100	332	0.300	101	0.4	15.781	C
A-BCD	28	524	0.053	28	0.1	8.057	A
A-B	21			21			
A-C	533			533			
D-A	31	651	0.047	31	0.1	5.981	A
D-BC	85	365	0.234	86	0.3	12.958	B
C-ABD	135	728	0.185	136	0.5	6.500	A
C-D	27			27			
C-A	285			285			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	66	557	0.119	66	0.1	7.640	A
B-AD	84	372	0.225	84	0.3	12.631	B
A-BCD	23	544	0.043	23	0.1	7.682	A
A-B	17			17			
A-C	446			446			
D-A	26	684	0.037	26	0.0	5.636	A
D-BC	72	401	0.178	72	0.2	10.939	B
C-ABD	99	698	0.141	99	0.3	6.396	A
C-D	24			24			
C-A	252			252			

# 2026 +50dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		3.15	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.15	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)
D6	2026 +50dw	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	441	100.000
B		✓	153	100.000
C		✓	574	100.000
D		✓	95	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	39	365	37
	B	56	0	64	33
	C	452	53	0	69
	D	25	34	36	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	0	4	0
	B	4	0	2	0
	C	6	0	0	3
	D	0	0	3	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.13	7.62	0.1	A
B-AD	0.29	15.21	0.4	C
ABCD	0.09	8.22	0.1	A
A-B				
A-C				
D-A	0.05	6.23	0.0	A
D-BC	0.23	14.07	0.3	B
C-ABD	0.19	5.30	0.6	A
C-D				
C-A				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48	611	0.079	48	0.1	6.496	A
B-AD	67	416	0.161	66	0.2	10.511	B
ABCD	28	531	0.052	28	0.1	7.148	A
A-B	29			29			
A-C	275			275			
D-A	19	682	0.028	19	0.0	5.426	A
D-BC	53	417	0.126	52	0.1	9.989	A
C-ABD	80	781	0.103	79	0.2	5.269	A
C-D	47			47			
C-A	305			305			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	586	0.098	57	0.1	6.920	A
B-AD	80	384	0.208	80	0.3	12.092	B
ABCD	33	509	0.065	33	0.1	7.567	A
A-B	35			35			
A-C	328			328			
D-A	22	650	0.035	22	0.0	5.731	A
D-BC	63	383	0.164	63	0.2	11.395	B
C-ABD	111	825	0.134	110	0.3	5.190	A
C-D	54			54			
C-A	351			351			



17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	70	551	0.128	70	0.1	7.611	A
B-AD	98	340	0.288	97	0.4	15.146	C
A-BCD	41	479	0.085	41	0.1	8.215	A
A-B	43			43			
A-C	402			402			
D-A	28	606	0.045	27	0.0	6.222	A
D-BC	77	337	0.229	77	0.3	14.013	B
C-ABD	166	888	0.187	165	0.5	5.155	A
C-D	62			62			
C-A	404			404			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	70	550	0.128	70	0.1	7.623	A
B-AD	98	340	0.288	98	0.4	15.212	C
A-BCD	41	478	0.085	41	0.1	8.224	A
A-B	43			43			
A-C	402			402			
D-A	28	605	0.045	28	0.0	6.227	A
D-BC	77	337	0.229	77	0.3	14.071	B
C-ABD	167	889	0.187	166	0.6	5.175	A
C-D	62			62			
C-A	404			404			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	585	0.098	58	0.1	6.936	A
B-AD	80	384	0.208	81	0.3	12.169	B
A-BCD	33	508	0.065	33	0.1	7.580	A
A-B	35			35			
A-C	328			328			
D-A	22	650	0.035	23	0.0	5.739	A
D-BC	63	383	0.164	63	0.2	11.453	B
C-ABD	111	826	0.135	112	0.4	5.231	A
C-D	54			54			
C-A	351			351			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48	610	0.079	48	0.1	6.520	A
B-AD	67	416	0.161	67	0.2	10.585	B
A-BCD	28	531	0.053	28	0.1	7.162	A
A-B	29			29			
A-C	275			275			
D-A	19	681	0.028	19	0.0	5.436	A
D-BC	53	416	0.127	53	0.1	10.064	B
C-ABD	81	781	0.104	81	0.2	5.304	A
C-D	47			47			
C-A	305			305			

# 2027, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		4.58	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.58	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)
D7	2027	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	649	100.000
B		✓	200	100.000
C		✓	492	100.000
D		✓	130	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	23	595	31
	B	80	0	89	31
	C	384	71	0	38
	D	34	35	61	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	5	7	11
	B	0	0	4	3
	C	7	5	0	9
	D	3	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.21	10.35	0.3	B
B-AD	0.44	23.42	0.8	C
ABCD	0.07	8.60	0.1	A
A-B				
A-C				
D-A	0.06	6.53	0.1	A
D-BC	0.33	17.11	0.5	C
C-ABD	0.26	6.83	0.8	A
C-D				
C-A				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	67	558	0.120	66	0.1	7.610	A
B-AD	84	373	0.226	83	0.3	12.493	B
ABCD	24	545	0.043	23	0.0	7.655	A
A-B	17			17			
A-C	448			448			
D-A	26	686	0.038	26	0.0	5.615	A
D-BC	72	403	0.179	71	0.2	10.832	B
C-ABD	98	694	0.142	97	0.3	6.389	A
C-D	24			24			
C-A	248			248			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	80	519	0.153	80	0.2	8.506	A
B-AD	100	333	0.302	100	0.4	15.547	C
ABCD	28	526	0.054	28	0.1	8.026	A
A-B	21			21			
A-C	535			535			
D-A	31	653	0.047	31	0.1	5.956	A
D-BC	86	366	0.235	86	0.3	12.815	B
C-ABD	135	723	0.187	134	0.5	6.501	A
C-D	27			27			
C-A	280			280			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	98	461	0.212	97	0.3	10.290	B
B-AD	123	278	0.442	122	0.8	23.014	C
A-BCD	34	500	0.069	34	0.1	8.590	A
A-B	25			25			
A-C	655			655			
D-A	38	607	0.062	38	0.1	6.515	A
D-BC	106	317	0.334	105	0.5	16.953	C
C-ABD	201	764	0.262	199	0.8	6.789	A
C-D	30			30			
C-A	311			311			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	98	459	0.213	98	0.3	10.354	B
B-AD	123	278	0.443	123	0.8	23.424	C
A-BCD	34	499	0.069	34	0.1	8.602	A
A-B	25			25			
A-C	655			655			
D-A	38	606	0.063	38	0.1	6.528	A
D-BC	106	316	0.334	106	0.5	17.110	C
C-ABD	201	765	0.263	201	0.8	6.828	A
C-D	30			30			
C-A	311			311			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	80	518	0.154	80	0.2	8.563	A
B-AD	100	332	0.302	102	0.4	15.828	C
A-BCD	28	525	0.054	28	0.1	8.045	A
A-B	21			21			
A-C	535			535			
D-A	31	652	0.047	31	0.1	5.971	A
D-BC	86	366	0.236	87	0.3	12.952	B
C-ABD	136	723	0.187	137	0.5	6.557	A
C-D	27			27			
C-A	280			280			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	67	556	0.120	67	0.1	7.659	A
B-AD	84	372	0.226	85	0.3	12.656	B
A-BCD	24	545	0.043	24	0.1	7.670	A
A-B	17			17			
A-C	448			448			
D-A	26	684	0.038	26	0.0	5.632	A
D-BC	72	402	0.180	73	0.2	10.939	B
C-ABD	99	695	0.143	100	0.3	6.440	A
C-D	24			24			
C-A	247			247			

# 2027, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		3.19	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.19	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)
D8	2027	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	439	100.000
B		✓	155	100.000
C		✓	576	100.000
D		✓	96	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	40	362	38
	B	56	0	65	33
	C	453	53	0	70
	D	25	34	37	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	0	4	0
	B	4	0	2	0
	C	6	0	0	3
	D	0	0	3	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.13	7.63	0.2	A
B-AD	0.29	15.26	0.4	C
ABCD	0.09	8.25	0.1	A
A-B				
A-C				
D-A	0.05	6.24	0.0	A
D-BC	0.23	14.15	0.3	B
C-ABD	0.19	5.30	0.6	A
C-D				
C-A				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	611	0.080	48	0.1	6.498	A
B-AD	68	416	0.163	67	0.2	10.527	B
ABCD	28	531	0.053	28	0.1	7.161	A
A-B	30			30			
A-C	272			272			
D-A	19	681	0.028	19	0.0	5.432	A
D-BC	54	417	0.128	53	0.1	10.030	B
C-ABD	81	782	0.103	80	0.2	5.267	A
C-D	47			47			
C-A	305			305			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	587	0.099	58	0.1	6.925	A
B-AD	81	384	0.210	81	0.3	12.118	B
ABCD	34	508	0.067	34	0.1	7.584	A
A-B	36			36			
A-C	325			325			
D-A	23	650	0.035	23	0.0	5.740	A
D-BC	64	383	0.167	64	0.2	11.436	B
C-ABD	112	826	0.135	111	0.3	5.189	A
C-D	54			54			
C-A	352			352			

**17:15 - 17:30**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	71	551	0.129	71	0.1	7.619	A
B-AD	99	341	0.291	98	0.4	15.179	C
A-BCD	41	478	0.087	41	0.1	8.240	A
A-B	44			44			
A-C	398			398			
D-A	28	605	0.046	28	0.0	6.235	A
D-BC	78	337	0.232	78	0.3	14.086	B
C-ABD	167	890	0.188	167	0.5	5.155	A
C-D	63			63			
C-A	404			404			

**17:30 - 17:45**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	71	551	0.130	71	0.2	7.631	A
B-AD	99	340	0.291	99	0.4	15.258	C
A-BCD	41	478	0.087	41	0.1	8.249	A
A-B	44			44			
A-C	398			398			
D-A	28	604	0.046	28	0.0	6.240	A
D-BC	78	336	0.233	78	0.3	14.147	B
C-ABD	168	890	0.189	168	0.6	5.175	A
C-D	62			62			
C-A	404			404			

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	586	0.099	58	0.1	6.940	A
B-AD	81	384	0.210	81	0.3	12.195	B
A-BCD	34	508	0.067	34	0.1	7.598	A
A-B	36			36			
A-C	325			325			
D-A	23	649	0.035	23	0.0	5.748	A
D-BC	64	382	0.167	64	0.2	11.497	B
C-ABD	112	827	0.136	113	0.4	5.229	A
C-D	54			54			
C-A	351			351			

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	610	0.080	49	0.1	6.520	A
B-AD	68	416	0.163	68	0.2	10.603	B
A-BCD	28	530	0.053	28	0.1	7.175	A
A-B	30			30			
A-C	272			272			
D-A	19	681	0.028	19	0.0	5.442	A
D-BC	54	416	0.129	54	0.2	10.089	B
C-ABD	81	782	0.104	82	0.2	5.302	A
C-D	47			47			
C-A	305			305			

# 2027 +100dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		4.62	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.62	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)
D9	2027 +100dw	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	655	100.000
B		✓	200	100.000
C		✓	512	100.000
D		✓	130	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	23	601	31
	B	80	0	89	31
	C	403	71	0	38
	D	34	35	61	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	5	7	11
	B	0	0	4	3
	C	7	5	0	9
	D	3	0	0	0



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.21	10.45	0.3	B
B-AD	0.45	24.19	0.8	C
ABCD	0.07	8.69	0.1	A
A-B				
A-C				
D-A	0.06	6.61	0.1	A
D-BC	0.34	17.67	0.5	C
C-ABD	0.27	6.75	0.8	A
C-D				
C-A				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	67	557	0.120	66	0.1	7.629	A
B-AD	84	369	0.227	82	0.3	12.633	B
ABCD	23	542	0.043	23	0.0	7.703	A
A-B	17			17			
A-C	452			452			
D-A	26	681	0.038	25	0.0	5.653	A
D-BC	72	398	0.181	71	0.2	10.983	B
C-ABD	101	704	0.144	100	0.3	6.313	A
C-D	25			25			
C-A	260			260			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	80	518	0.154	80	0.2	8.540	A
B-AD	100	328	0.304	99	0.4	15.821	C
ABCD	28	522	0.053	28	0.1	8.090	A
A-B	21			21			
A-C	540			540			
D-A	31	648	0.047	31	0.1	6.007	A
D-BC	86	361	0.239	86	0.3	13.068	B
C-ABD	140	735	0.190	139	0.5	6.421	A
C-D	28			28			
C-A	293			293			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	98	458	0.214	98	0.3	10.377	B
B-AD	122	272	0.449	121	0.8	23.735	C
A-BCD	34	494	0.069	34	0.1	8.680	A
A-B	25			25			
A-C	662			662			
D-A	37	600	0.062	37	0.1	6.594	A
D-BC	106	310	0.341	105	0.5	17.493	C
C-ABD	209	780	0.268	208	0.8	6.707	A
C-D	31			31			
C-A	324			324			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	98	456	0.215	98	0.3	10.445	B
B-AD	122	272	0.449	122	0.8	24.195	C
A-BCD	34	494	0.069	34	0.1	8.693	A
A-B	25			25			
A-C	662			662			
D-A	37	598	0.063	37	0.1	6.608	A
D-BC	106	309	0.342	106	0.5	17.671	C
C-ABD	210	781	0.269	210	0.8	6.747	A
C-D	31			31			
C-A	323			323			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	80	516	0.155	80	0.2	8.602	A
B-AD	100	328	0.305	101	0.5	16.124	C
A-BCD	28	521	0.054	28	0.1	8.110	A
A-B	21			21			
A-C	540			540			
D-A	31	646	0.047	31	0.1	6.026	A
D-BC	86	360	0.240	87	0.3	13.215	B
C-ABD	140	736	0.191	142	0.5	6.475	A
C-D	28			28			
C-A	292			292			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	67	555	0.121	67	0.1	7.676	A
B-AD	84	368	0.227	84	0.3	12.812	B
A-BCD	23	541	0.043	23	0.1	7.720	A
A-B	17			17			
A-C	452			452			
D-A	26	680	0.038	26	0.0	5.668	A
D-BC	72	398	0.182	73	0.2	11.091	B
C-ABD	102	705	0.145	103	0.3	6.364	A
C-D	24			24			
C-A	259			259			

# 2027 +100dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		3.17	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.17	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)
D10	2027 +100dw	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	453	100.000
B		✓	154	100.000
C		✓	582	100.000
D		✓	96	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	40	375	38
	B	56	0	65	33
	C	459	53	0	70
	D	25	34	37	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	0	3	0
	B	4	0	2	0
	C	6	0	0	3
	D	0	0	3	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.13	7.69	0.2	A
B-AD	0.29	15.53	0.4	C
ABCD	0.09	8.29	0.1	A
A-B				
A-C				
D-A	0.05	6.27	0.0	A
D-BC	0.24	14.39	0.3	B
C-ABD	0.19	5.29	0.6	A
C-D				
C-A				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	609	0.080	49	0.1	6.522	A
B-AD	67	413	0.162	66	0.2	10.621	B
ABCD	29	530	0.054	28	0.1	7.180	A
A-B	30			30			
A-C	282			282			
D-A	19	680	0.028	19	0.0	5.444	A
D-BC	53	414	0.129	53	0.1	10.114	B
C-ABD	81	784	0.104	80	0.2	5.256	A
C-D	47			47			
C-A	310			310			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	584	0.100	58	0.1	6.960	A
B-AD	80	380	0.211	80	0.3	12.259	B
ABCD	34	507	0.067	34	0.1	7.610	A
A-B	36			36			
A-C	337			337			
D-A	22	648	0.035	22	0.0	5.756	A
D-BC	64	379	0.168	64	0.2	11.564	B
C-ABD	113	828	0.136	112	0.3	5.177	A
C-D	54			54			
C-A	356			356			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	72	548	0.131	71	0.2	7.676	A
B-AD	98	335	0.292	97	0.4	15.451	C
A-BCD	42	477	0.088	42	0.1	8.277	A
A-B	44			44			
A-C	413			413			
D-A	28	603	0.046	27	0.0	6.260	A
D-BC	78	332	0.235	78	0.3	14.329	B
C-ABD	169	893	0.190	168	0.6	5.144	A
C-D	62			62			
C-A	409			409			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	72	547	0.131	72	0.2	7.690	A
B-AD	98	335	0.292	98	0.4	15.534	C
A-BCD	42	476	0.088	42	0.1	8.286	A
A-B	44			44			
A-C	413			413			
D-A	28	602	0.046	28	0.0	6.266	A
D-BC	78	332	0.235	78	0.3	14.389	B
C-ABD	170	893	0.190	170	0.6	5.168	A
C-D	62			62			
C-A	409			409			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	583	0.100	59	0.1	6.979	A
B-AD	80	380	0.211	81	0.3	12.342	B
A-BCD	34	507	0.067	34	0.1	7.620	A
A-B	36			36			
A-C	337			337			
D-A	22	647	0.035	23	0.0	5.767	A
D-BC	64	379	0.168	64	0.2	11.628	B
C-ABD	113	829	0.136	114	0.4	5.218	A
C-D	54			54			
C-A	356			356			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	608	0.080	49	0.1	6.544	A
B-AD	67	412	0.163	67	0.2	10.696	B
A-BCD	29	529	0.054	29	0.1	7.197	A
A-B	30			30			
A-C	282			282			
D-A	19	679	0.028	19	0.0	5.454	A
D-BC	53	413	0.129	54	0.2	10.176	B
C-ABD	82	784	0.104	82	0.2	5.293	A
C-D	47			47			
C-A	309			309			

# 2028, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		4.65	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.65	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)
D11	2028	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	654	100.000
B		✓	202	100.000
C		✓	496	100.000
D		✓	131	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	23	599	32
	B	81	0	89	32
	C	387	71	0	38
	D	35	36	61	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	5	7	11
	B	0	0	4	3
	C	7	5	0	9
	D	3	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.22	10.46	0.3	B
B-AD	0.45	23.93	0.8	C
ABCD	0.07	8.63	0.1	A
A-B				
A-C				
D-A	0.06	6.56	0.1	A
D-BC	0.34	17.36	0.5	C
C-ABD	0.27	6.84	0.8	A
C-D				
C-A				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	67	556	0.121	67	0.1	7.641	A
B-AD	85	371	0.228	84	0.3	12.580	B
ABCD	24	544	0.044	24	0.1	7.671	A
A-B	17			17			
A-C	451			451			
D-A	26	685	0.038	26	0.0	5.628	A
D-BC	73	401	0.181	72	0.2	10.899	B
C-ABD	100	695	0.143	98	0.3	6.393	A
C-D	24			24			
C-A	250			250			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	80	518	0.155	80	0.2	8.555	A
B-AD	101	331	0.306	101	0.4	15.726	C
ABCD	28	525	0.054	28	0.1	8.045	A
A-B	21			21			
A-C	539			539			
D-A	31	652	0.048	31	0.1	5.973	A
D-BC	87	365	0.238	87	0.3	12.926	B
C-ABD	137	724	0.189	136	0.5	6.511	A
C-D	28			28			
C-A	282			282			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	98	458	0.215	98	0.3	10.394	B
B-AD	124	276	0.450	122	0.8	23.488	C
A-BCD	35	498	0.070	35	0.1	8.616	A
A-B	25			25			
A-C	660			660			
D-A	38	605	0.063	38	0.1	6.543	A
D-BC	106	314	0.339	106	0.5	17.188	C
C-ABD	204	766	0.266	203	0.8	6.807	A
C-D	31			31			
C-A	312			312			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	98	456	0.216	98	0.3	10.461	B
B-AD	124	275	0.450	124	0.8	23.933	C
A-BCD	35	498	0.070	35	0.1	8.628	A
A-B	25			25			
A-C	660			660			
D-A	38	604	0.063	38	0.1	6.555	A
D-BC	106	314	0.339	106	0.5	17.355	C
C-ABD	204	767	0.267	204	0.8	6.845	A
C-D	30			30			
C-A	311			311			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	80	516	0.156	81	0.2	8.614	A
B-AD	101	330	0.306	103	0.5	16.025	C
A-BCD	28	524	0.054	28	0.1	8.064	A
A-B	21			21			
A-C	539			539			
D-A	31	650	0.048	31	0.1	5.992	A
D-BC	87	364	0.239	88	0.3	13.071	B
C-ABD	138	725	0.190	139	0.5	6.562	A
C-D	27			27			
C-A	281			281			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	67	555	0.121	67	0.1	7.689	A
B-AD	85	370	0.229	85	0.3	12.760	B
A-BCD	24	544	0.044	24	0.1	7.685	A
A-B	17			17			
A-C	451			451			
D-A	26	683	0.038	26	0.0	5.645	A
D-BC	73	401	0.182	73	0.2	11.007	B
C-ABD	100	696	0.144	101	0.3	6.441	A
C-D	24			24			
C-A	249			249			



# 2028, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		3.21	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.21	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)
D12	2028	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	442	100.000
B		✓	156	100.000
C		✓	581	100.000
D		✓	97	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	40	365	38
	B	57	0	65	34
	C	456	54	0	71
	D	25	35	37	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	0	4	0
	B	4	0	2	0
	C	6	0	0	3
	D	0	0	3	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.13	7.67	0.2	A
B-AD	0.29	15.43	0.4	C
ABCD	0.09	8.28	0.1	A
A-B				
A-C				
D-A	0.05	6.26	0.0	A
D-BC	0.24	14.29	0.3	B
C-ABD	0.19	5.30	0.6	A
C-D				
C-A				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	610	0.081	49	0.1	6.514	A
B-AD	68	415	0.164	67	0.2	10.581	B
ABCD	29	530	0.054	28	0.1	7.177	A
A-B	30			30			
A-C	274			274			
D-A	19	680	0.028	19	0.0	5.444	A
D-BC	54	415	0.130	53	0.1	10.081	B
C-ABD	82	784	0.105	81	0.2	5.262	A
C-D	48			48			
C-A	308			308			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	59	585	0.100	59	0.1	6.947	A
B-AD	81	383	0.213	81	0.3	12.204	B
ABCD	34	507	0.067	34	0.1	7.606	A
A-B	36			36			
A-C	328			328			
D-A	23	648	0.035	23	0.0	5.756	A
D-BC	64	381	0.169	64	0.2	11.513	B
C-ABD	113	828	0.137	113	0.4	5.186	A
C-D	55			55			
C-A	354			354			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	72	550	0.131	72	0.2	7.654	A
B-AD	100	339	0.295	99	0.4	15.351	C
A-BCD	42	477	0.088	42	0.1	8.272	A
A-B	44			44			
A-C	401			401			
D-A	28	603	0.046	28	0.0	6.259	A
D-BC	79	335	0.236	78	0.3	14.233	B
C-ABD	170	893	0.191	169	0.6	5.154	A
C-D	63			63			
C-A	406			406			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	72	549	0.131	72	0.2	7.667	A
B-AD	100	338	0.295	100	0.4	15.433	C
A-BCD	42	476	0.088	42	0.1	8.281	A
A-B	44			44			
A-C	401			401			
D-A	28	602	0.046	28	0.0	6.265	A
D-BC	79	334	0.236	79	0.3	14.293	B
C-ABD	171	893	0.191	171	0.6	5.179	A
C-D	63			63			
C-A	406			406			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	59	584	0.100	59	0.1	6.966	A
B-AD	81	383	0.213	82	0.3	12.285	B
A-BCD	34	507	0.067	34	0.1	7.620	A
A-B	36			36			
A-C	328			328			
D-A	23	647	0.035	23	0.0	5.767	A
D-BC	64	381	0.169	65	0.2	11.576	B
C-ABD	114	829	0.137	115	0.4	5.229	A
C-D	55			55			
C-A	353			353			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	609	0.081	49	0.1	6.539	A
B-AD	68	415	0.165	69	0.2	10.661	B
A-BCD	29	529	0.054	29	0.1	7.192	A
A-B	30			30			
A-C	274			274			
D-A	19	679	0.028	19	0.0	5.454	A
D-BC	54	415	0.130	54	0.2	10.140	B
C-ABD	83	784	0.105	83	0.2	5.300	A
C-D	47			47			
C-A	307			307			

# 2028 +150dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		4.74	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.74	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)
D13	2028 +150dw	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	664	100.000
B		✓	202	100.000
C		✓	524	100.000
D		✓	132	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	23	609	32
	B	81	0	89	32
	C	415	71	0	38
	D	35	36	61	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	5	7	11
	B	0	0	4	3
	C	7	5	0	9
	D	3	0	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.22	10.64	0.3	B
B-AD	0.46	25.28	0.9	D
ABCD	0.07	8.79	0.1	A
A-B				
A-C				
D-A	0.07	6.69	0.1	A
D-BC	0.35	18.30	0.5	C
C-ABD	0.27	6.71	0.9	A
C-D				
C-A				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	67	553	0.121	66	0.1	7.684	A
B-AD	85	366	0.233	84	0.3	12.819	B
ABCD	24	539	0.045	24	0.1	7.749	A
A-B	17			17			
A-C	458			458			
D-A	26	677	0.039	26	0.0	5.692	A
D-BC	73	394	0.185	72	0.2	11.145	B
C-ABD	103	710	0.145	102	0.3	6.274	A
C-D	24			24			
C-A	267			267			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	80	514	0.156	80	0.2	8.624	A
B-AD	102	325	0.313	101	0.4	16.182	C
ABCD	29	519	0.056	29	0.1	8.156	A
A-B	21			21			
A-C	547			547			
D-A	31	643	0.049	31	0.1	6.061	A
D-BC	87	356	0.245	87	0.3	13.340	B
C-ABD	142	742	0.192	142	0.5	6.381	A
C-D	28			28			
C-A	301			301			

**08:15 - 08:30**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	98	452	0.217	98	0.3	10.559	B
B-AD	124	268	0.464	123	0.8	24.746	C
A-BCD	35	491	0.072	35	0.1	8.772	A
A-B	25			25			
A-C	670			670			
D-A	39	594	0.065	38	0.1	6.679	A
D-BC	107	304	0.351	106	0.5	18.095	C
C-ABD	215	789	0.272	213	0.8	6.673	A
C-D	30			30			
C-A	332			332			

**08:30 - 08:45**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	98	450	0.218	98	0.3	10.637	B
B-AD	124	268	0.465	124	0.9	25.281	D
A-BCD	35	490	0.072	35	0.1	8.786	A
A-B	25			25			
A-C	670			670			
D-A	39	592	0.065	39	0.1	6.694	A
D-BC	107	303	0.352	107	0.5	18.297	C
C-ABD	215	789	0.273	215	0.9	6.711	A
C-D	30			30			
C-A	331			331			

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	80	512	0.156	80	0.2	8.689	A
B-AD	102	324	0.313	103	0.5	16.523	C
A-BCD	29	518	0.056	29	0.1	8.175	A
A-B	21			21			
A-C	547			547			
D-A	31	641	0.049	32	0.1	6.082	A
D-BC	87	355	0.245	88	0.3	13.507	B
C-ABD	143	743	0.193	145	0.5	6.434	A
C-D	27			27			
C-A	300			300			

**09:00 - 09:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	67	551	0.122	67	0.1	7.736	A
B-AD	85	365	0.233	86	0.3	13.010	B
A-BCD	24	538	0.045	24	0.1	7.770	A
A-B	17			17			
A-C	458			458			
D-A	26	676	0.039	26	0.0	5.708	A
D-BC	73	394	0.186	73	0.2	11.257	B
C-ABD	104	711	0.146	104	0.3	6.324	A
C-D	24			24			
C-A	266			266			

# 2028 +150dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		3.23	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.23	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)
D14	2028 +150dw	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	463	100.000
B		✓	156	100.000
C		✓	592	100.000
D		✓	97	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	40	385	38
	B	57	0	65	34
	C	467	54	0	71
	D	25	35	37	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	0	3	0
	B	4	0	2	0
	C	6	0	0	3
	D	0	0	3	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.13	7.79	0.2	A
B-AD	0.30	15.99	0.4	C
ABCD	0.09	8.34	0.1	A
A-B				
A-C				
D-A	0.05	6.31	0.0	A
D-BC	0.24	14.73	0.3	B
C-ABD	0.20	5.29	0.6	A
C-D				
C-A				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	605	0.081	49	0.1	6.571	A
B-AD	69	410	0.167	68	0.2	10.753	B
ABCD	29	528	0.054	28	0.1	7.209	A
A-B	30			30			
A-C	290			290			
D-A	19	677	0.028	19	0.0	5.467	A
D-BC	54	410	0.132	54	0.2	10.223	B
C-ABD	84	787	0.106	83	0.2	5.250	A
C-D	48			48			
C-A	314			314			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	579	0.101	58	0.1	7.025	A
B-AD	82	376	0.217	81	0.3	12.481	B
ABCD	34	505	0.068	34	0.1	7.649	A
A-B	36			36			
A-C	346			346			
D-A	22	644	0.035	22	0.0	5.788	A
D-BC	65	376	0.172	65	0.2	11.739	B
C-ABD	116	833	0.140	116	0.4	5.173	A
C-D	55			55			
C-A	361			361			



17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	72	542	0.132	71	0.2	7.773	A
B-AD	100	331	0.303	100	0.4	15.894	C
A-BCD	42	474	0.088	42	0.1	8.334	A
A-B	44			44			
A-C	424			424			
D-A	28	598	0.046	27	0.0	6.307	A
D-BC	79	328	0.242	79	0.3	14.656	B
C-ABD	176	898	0.196	175	0.6	5.154	A
C-D	63			63			
C-A	413			413			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	72	541	0.132	72	0.2	7.787	A
B-AD	100	331	0.303	100	0.4	15.989	C
A-BCD	42	473	0.088	42	0.1	8.343	A
A-B	44			44			
A-C	424			424			
D-A	28	598	0.046	28	0.0	6.314	A
D-BC	79	327	0.242	79	0.3	14.725	B
C-ABD	176	899	0.196	176	0.6	5.178	A
C-D	63			63			
C-A	413			413			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	578	0.101	59	0.1	7.044	A
B-AD	82	376	0.217	82	0.3	12.571	B
A-BCD	34	504	0.068	34	0.1	7.660	A
A-B	36			36			
A-C	346			346			
D-A	22	643	0.035	23	0.0	5.799	A
D-BC	65	375	0.173	65	0.2	11.809	B
C-ABD	117	834	0.140	118	0.4	5.219	A
C-D	55			55			
C-A	360			360			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	604	0.081	49	0.1	6.597	A
B-AD	69	409	0.167	69	0.2	10.836	B
A-BCD	29	527	0.054	29	0.1	7.224	A
A-B	30			30			
A-C	290			290			
D-A	19	676	0.028	19	0.0	5.475	A
D-BC	54	410	0.132	54	0.2	10.289	B
C-ABD	84	788	0.107	85	0.2	5.288	A
C-D	48			48			
C-A	314			314			

# 2031, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		4.87	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.87	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)
D15	2031	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	670	100.000
B		✓	206	100.000
C		✓	508	100.000
D		✓	135	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	24	614	32	
	B	83	0	91	32	
	C	396	73	0	39	
	D	36	37	62	0	

## Vehicle Mix

### Heavy Vehicle %

		To				
		A	B	C	D	
From	A	0	5	7	11	
	B	0	0	4	3	
	C	7	5	0	9	
	D	3	0	0	0	

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.22	10.80	0.3	B
B-AD	0.47	25.61	0.9	D
ABCD	0.07	8.70	0.1	A
A-B				
A-C				
D-A	0.07	6.65	0.1	A
D-BC	0.35	18.16	0.5	C
C-ABD	0.28	6.90	0.9	A
C-D				
C-A				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	69	551	0.124	68	0.1	7.733	A
B-AD	87	366	0.236	85	0.3	12.874	B
ABCD	24	542	0.044	24	0.1	7.705	A
A-B	18			18			
A-C	462			462			
D-A	27	681	0.040	27	0.0	5.669	A
D-BC	75	397	0.188	74	0.2	11.103	B
C-ABD	103	699	0.148	102	0.3	6.394	A
C-D	25			25			
C-A	254			254			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	82	512	0.160	82	0.2	8.703	A
B-AD	103	325	0.318	103	0.5	16.288	C
ABCD	29	522	0.055	29	0.1	8.098	A
A-B	22			22			
A-C	552			552			
D-A	32	647	0.050	32	0.1	6.031	A
D-BC	89	359	0.248	89	0.3	13.278	B
C-ABD	143	728	0.196	142	0.5	6.528	A
C-D	28			28			
C-A	286			286			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	100	449	0.223	100	0.3	10.720	B
B-AD	127	268	0.472	125	0.9	25.044	D
A-BCD	35	495	0.071	35	0.1	8.691	A
A-B	26			26			
A-C	676			676			
D-A	40	598	0.066	39	0.1	6.634	A
D-BC	109	308	0.354	108	0.5	17.955	C
C-ABD	214	772	0.277	212	0.8	6.860	A
C-D	31			31			
C-A	315			315			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	100	447	0.224	100	0.3	10.803	B
B-AD	127	268	0.472	127	0.9	25.608	D
A-BCD	35	494	0.071	35	0.1	8.705	A
A-B	26			26			
A-C	676			676			
D-A	40	597	0.066	40	0.1	6.648	A
D-BC	109	307	0.355	109	0.5	18.155	C
C-ABD	215	773	0.278	215	0.9	6.904	A
C-D	31			31			
C-A	314			314			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	82	509	0.161	82	0.2	8.771	A
B-AD	103	325	0.319	105	0.5	16.644	C
A-BCD	29	521	0.055	29	0.1	8.119	A
A-B	22			22			
A-C	552			552			
D-A	32	645	0.050	32	0.1	6.049	A
D-BC	89	358	0.248	90	0.3	13.444	B
C-ABD	144	729	0.197	145	0.5	6.586	A
C-D	28			28			
C-A	285			285			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	69	550	0.125	69	0.1	7.787	A
B-AD	87	366	0.237	87	0.3	13.071	B
A-BCD	24	541	0.045	24	0.1	7.728	A
A-B	18			18			
A-C	462			462			
D-A	27	679	0.040	27	0.0	5.685	A
D-BC	75	396	0.188	75	0.2	11.221	B
C-ABD	104	699	0.149	105	0.3	6.447	A
C-D	25			25			
C-A	253			253			

# 2031, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		3.31	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.31	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)
D16	2031	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	454	100.000
B		✓	160	100.000
C		✓	596	100.000
D		✓	100	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	41	374	39
	B	58	0	67	35
	C	468	55	0	72
	D	26	36	38	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	0	4	0
	B	4	0	2	0
	C	6	0	0	3
	D	0	0	3	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.14	7.79	0.2	A
B-AD	0.31	16.05	0.5	C
ABCD	0.09	8.39	0.1	A
A-B				
A-C				
D-A	0.05	6.35	0.1	A
D-BC	0.25	14.81	0.3	B
C-ABD	0.20	5.29	0.6	A
C-D				
C-A				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	50	607	0.083	50	0.1	6.568	A
B-AD	70	411	0.171	69	0.2	10.773	B
ABCD	29	527	0.056	29	0.1	7.233	A
A-B	31			31			
A-C	282			282			
D-A	20	676	0.029	19	0.0	5.485	A
D-BC	55	411	0.135	55	0.2	10.252	B
C-ABD	86	790	0.109	85	0.2	5.248	A
C-D	49			49			
C-A	314			314			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	60	581	0.104	60	0.1	7.020	A
B-AD	84	378	0.222	83	0.3	12.512	B
ABCD	35	504	0.070	35	0.1	7.680	A
A-B	37			37			
A-C	337			337			
D-A	23	643	0.036	23	0.0	5.811	A
D-BC	66	376	0.176	66	0.2	11.784	B
C-ABD	119	836	0.143	119	0.4	5.175	A
C-D	56			56			
C-A	361			361			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	74	544	0.136	74	0.2	7.775	A
B-AD	102	332	0.308	102	0.4	15.952	C
A-BCD	43	472	0.091	43	0.1	8.380	A
A-B	45			45			
A-C	412			412			
D-A	29	596	0.048	29	0.1	6.342	A
D-BC	81	328	0.247	81	0.3	14.744	B
C-ABD	180	902	0.200	179	0.6	5.160	A
C-D	64			64			
C-A	412			412			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	74	543	0.136	74	0.2	7.791	A
B-AD	102	332	0.309	102	0.5	16.053	C
A-BCD	43	472	0.091	43	0.1	8.390	A
A-B	45			45			
A-C	412			412			
D-A	29	596	0.048	29	0.1	6.349	A
D-BC	81	328	0.247	81	0.3	14.814	B
C-ABD	181	903	0.200	181	0.6	5.184	A
C-D	64			64			
C-A	412			412			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	60	580	0.104	60	0.1	7.041	A
B-AD	84	377	0.222	84	0.3	12.604	B
A-BCD	35	503	0.070	35	0.1	7.695	A
A-B	37			37			
A-C	337			337			
D-A	23	642	0.036	23	0.0	5.823	A
D-BC	66	375	0.176	67	0.2	11.854	B
C-ABD	120	837	0.143	121	0.4	5.222	A
C-D	56			56			
C-A	360			360			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	50	606	0.083	51	0.1	6.592	A
B-AD	70	410	0.171	70	0.2	10.857	B
A-BCD	29	526	0.056	29	0.1	7.251	A
A-B	31			31			
A-C	282			282			
D-A	20	675	0.029	20	0.0	5.495	A
D-BC	55	410	0.135	56	0.2	10.317	B
C-ABD	87	790	0.109	87	0.3	5.287	A
C-D	49			49			
C-A	314			314			

# 2031 +230dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		5.03	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.03	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)
D17	2031 +230dw	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	684	100.000
B		✓	206	100.000
C		✓	552	100.000
D		✓	135	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	24	628	32	
	B	83	0	91	32	
	C	440	73	0	39	
	D	36	37	62	0	

## Vehicle Mix

### Heavy Vehicle %

		To				
		A	B	C	D	
From	A	0	5	7	11	
	B	0	0	4	3	
	C	7	5	0	9	
	D	3	0	0	0	



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.23	11.09	0.3	B
B-AD	0.49	27.94	1.0	D
ABCD	0.07	8.94	0.1	A
A-B				
A-C				
D-A	0.07	6.86	0.1	A
D-BC	0.37	19.70	0.6	C
C-ABD	0.29	6.73	1.0	A
C-D				
C-A				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	69	548	0.125	68	0.1	7.790	A
B-AD	87	358	0.242	85	0.3	13.250	B
ABCD	24	534	0.045	24	0.1	7.830	A
A-B	18			18			
A-C	473			473			
D-A	27	670	0.040	27	0.0	5.766	A
D-BC	75	386	0.193	74	0.2	11.475	B
C-ABD	110	722	0.152	108	0.4	6.225	A
C-D	25			25			
C-A	281			281			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	82	507	0.161	82	0.2	8.802	A
B-AD	103	315	0.328	103	0.5	17.020	C
ABCD	29	512	0.056	29	0.1	8.260	A
A-B	22			22			
A-C	565			565			
D-A	32	634	0.051	32	0.1	6.166	A
D-BC	89	347	0.257	89	0.3	13.924	B
C-ABD	154	756	0.203	153	0.5	6.346	A
C-D	28			28			
C-A	315			315			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	100	440	0.228	100	0.3	10.989	B
B-AD	127	256	0.494	125	0.9	27.194	D
A-BCD	35	483	0.073	35	0.1	8.921	A
A-B	26			26			
A-C	691			691			
D-A	40	581	0.068	40	0.1	6.845	A
D-BC	109	292	0.373	108	0.6	19.440	C
C-ABD	234	807	0.290	233	0.9	6.686	A
C-D	30			30			
C-A	343			343			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	100	438	0.229	100	0.3	11.092	B
B-AD	127	256	0.494	127	1.0	27.945	D
A-BCD	35	482	0.073	35	0.1	8.937	A
A-B	26			26			
A-C	691			691			
D-A	40	580	0.068	40	0.1	6.863	A
D-BC	109	292	0.374	109	0.6	19.703	C
C-ABD	235	808	0.291	235	1.0	6.733	A
C-D	30			30			
C-A	342			342			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	82	504	0.162	82	0.2	8.880	A
B-AD	103	315	0.328	105	0.5	17.455	C
A-BCD	29	511	0.056	29	0.1	8.283	A
A-B	22			22			
A-C	565			565			
D-A	32	632	0.051	32	0.1	6.188	A
D-BC	89	346	0.258	90	0.4	14.128	B
C-ABD	154	758	0.204	156	0.6	6.408	A
C-D	28			28			
C-A	314			314			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	69	546	0.125	69	0.2	7.846	A
B-AD	87	357	0.242	87	0.3	13.473	B
A-BCD	24	533	0.045	24	0.1	7.850	A
A-B	18			18			
A-C	473			473			
D-A	27	668	0.041	27	0.0	5.786	A
D-BC	75	386	0.193	75	0.2	11.611	B
C-ABD	111	722	0.154	112	0.4	6.283	A
C-D	25			25			
C-A	280			280			

# 2031 +230dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	Two-way	Two-way	Two-way		3.32	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.32	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)
D18	2031 +230dw	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	484	100.000
B		✓	160	100.000
C		✓	610	100.000
D		✓	100	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	41	404	39
	B	58	0	67	35
	C	483	55	0	72
	D	26	36	38	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	0	3	0
	B	4	0	2	0
	C	6	0	0	3
	D	0	0	3	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.14	7.96	0.2	A
B-AD	0.32	16.85	0.5	C
ABCD	0.09	8.47	0.1	A
A-B				
A-C				
D-A	0.05	6.42	0.1	A
D-BC	0.26	15.45	0.3	C
C-ABD	0.21	5.27	0.6	A
C-D				
C-A				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	50	600	0.084	50	0.1	6.644	A
B-AD	70	403	0.174	69	0.2	11.011	B
ABCD	29	524	0.056	29	0.1	7.271	A
A-B	31			31			
A-C	304			304			
D-A	20	672	0.029	19	0.0	5.517	A
D-BC	56	404	0.138	55	0.2	10.452	B
C-ABD	87	794	0.110	86	0.2	5.231	A
C-D	48			48			
C-A	324			324			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	60	573	0.105	60	0.1	7.127	A
B-AD	84	369	0.227	83	0.3	12.900	B
ABCD	35	501	0.070	35	0.1	7.732	A
A-B	37			37			
A-C	363			363			
D-A	23	638	0.037	23	0.0	5.856	A
D-BC	67	368	0.181	66	0.2	12.103	B
C-ABD	122	841	0.145	122	0.4	5.159	A
C-D	55			55			
C-A	371			371			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	74	534	0.138	74	0.2	7.944	A
B-AD	102	321	0.319	102	0.5	16.736	C
A-BCD	43	469	0.092	43	0.1	8.455	A
A-B	45			45			
A-C	445			445			
D-A	29	590	0.049	29	0.1	6.411	A
D-BC	81	318	0.256	81	0.3	15.363	C
C-ABD	186	909	0.205	185	0.6	5.154	A
C-D	63			63			
C-A	422			422			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	74	533	0.138	74	0.2	7.961	A
B-AD	102	321	0.319	102	0.5	16.850	C
A-BCD	43	468	0.092	43	0.1	8.466	A
A-B	45			45			
A-C	445			445			
D-A	29	589	0.049	29	0.1	6.419	A
D-BC	81	318	0.256	81	0.3	15.447	C
C-ABD	187	910	0.206	187	0.6	5.178	A
C-D	63			63			
C-A	422			422			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	60	572	0.105	60	0.1	7.152	A
B-AD	84	368	0.227	84	0.3	13.004	B
A-BCD	35	500	0.070	35	0.1	7.746	A
A-B	37			37			
A-C	363			363			
D-A	23	637	0.037	23	0.0	5.866	A
D-BC	67	367	0.181	67	0.2	12.186	B
C-ABD	123	842	0.146	124	0.4	5.207	A
C-D	55			55			
C-A	370			370			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	50	599	0.084	51	0.1	6.671	A
B-AD	70	403	0.174	70	0.2	11.103	B
A-BCD	29	523	0.056	29	0.1	7.286	A
A-B	31			31			
A-C	304			304			
D-A	20	671	0.029	20	0.0	5.528	A
D-BC	56	403	0.138	56	0.2	10.525	B
C-ABD	88	794	0.111	89	0.3	5.268	A
C-D	48			48			
C-A	323			323			

## APPENDIX H15

### CHILGROVE DRIVE/UNNAMED ROAD/CAMP ROAD MODELLING OUTPUT

## Chilgrove Drive/Unnamed Road/Camp Road – Junction Assessment Results

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
<b>2023 Base</b>						
Unnamed Road (E) RT	0.38	1	12	0.28	0	9
Unnamed Road (E) LT	0.11	0	7	0.05	0	6
Unnamed Road (S) RT	0.07	0	6	0.06	0	6
<b>2026 Base</b>						
Unnamed Road (E) RT	0.40	1	13	0.29	0	10
Unnamed Road (E) LT	0.11	0	7	0.05	0	6
Unnamed Road (S) RT	0.07	0	6	0.07	0	6
<b>2026 Base + 50 dwellings</b>						
Unnamed Road (E) RT	0.41	1	13	0.31	1	10
Unnamed Road (E) LT	0.12	0	7	0.05	0	6
Unnamed Road (S) RT	0.07	0	6	0.07	0	6
<b>2027 Base</b>						
Unnamed Road (E) RT	0.40	1	13	0.30	0	10
Unnamed Road (E) LT	0.12	0	7	0.05	0	6
Unnamed Road (S) RT	0.07	0	6	0.07	0	6
<b>2027 Base + 100 dwellings</b>						
Unnamed Road (E) RT	0.42	1	13	0.33	1	10
Unnamed Road (E) LT	0.12	0	7	0.05	0	6
Unnamed Road (S) RT	0.07	0	6	0.07	0	6
<b>2028 Base</b>						
Unnamed Road (E) RT	0.41	1	13	0.30	0	10
Unnamed Road (E) LT	0.12	0	7	0.06	0	6
Unnamed Road (S) RT	0.07	0	6	0.07	0	6
<b>2028 Base + 150 dwellings</b>						
Unnamed Road (E) RT	0.44	1	14	0.35	1	11
Unnamed Road (E) LT	0.12	0	7	0.06	0	6
Unnamed Road (S) RT	0.07	0	6	0.07	0	6
<b>2031 Base</b>						
Unnamed Road (E) RT	0.41	1	13	0.31	1	10
Unnamed Road (E) LT	0.12	0	7	0.06	0	6
Unnamed Road (S) RT	0.07	0	6	0.07	0	6
<b>2031 Base + 230 dwellings</b>						
Unnamed Road (E) RT	0.46	1	15	0.38	1	11
Unnamed Road (E) LT	0.13	0	8	0.06	0	6
Unnamed Road (S) RT	0.08	0	6	0.07	0	6

RFC is Ratio of Flow to Capacity, Queue is mean max in PCUs, Delay is seconds per PCU.

# Junctions 10

## PICADY 10 - Priority Intersection Module

Version: 10.1.0.1820

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**Filename:** T19562 - Camp Rd-Chilgrove Drive Priority v2.j10

**Path:** C:\Users\NeilBateman\Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\2019\T19562 Heyford Park\Junction Assessments\Picady

**Report generation date:** 19/10/2023 10:46:42

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»2023, AM  
»2023, PM  
»2026, AM  
»2026, PM  
»2026 + 50dw, AM  
»2026 + 50dw, PM  
»2027, AM  
»2027, PM  
»2027 + 100dw, AM  
»2027 + 100dw, PM  
»2028, AM  
»2028, PM  
»2028 + 150dw, AM  
»2028 + 150dw, PM  
»2031, AM  
»2031, PM  
»2031 + 230dw, AM  
»2031 + 230dw, PM



### Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
<b>2023</b>												
Stream B-A	D1	0.7	12.11	0.38	B	3.29	D2	0.4	9.46	0.28	A	2.56
Stream C-AB		0.1	6.01	0.07	A			0.1	5.67	0.06	A	
Stream B-C		0.1	6.78	0.11	A			0.1	5.85	0.05	A	
<b>2026</b>												
Stream B-A	D3	0.7	12.57	0.40	B	3.39	D4	0.4	9.71	0.29	A	2.61
Stream C-AB		0.1	6.02	0.07	A			0.1	5.67	0.07	A	
Stream B-C		0.1	6.92	0.11	A			0.1	5.93	0.05	A	
<b>2026 + 50dw</b>												
Stream B-A	D5	0.7	12.86	0.41	B	3.43	D6	0.5	9.95	0.31	A	2.70
Stream C-AB		0.1	6.05	0.07	A			0.1	5.66	0.07	A	
Stream B-C		0.1	7.02	0.12	A			0.1	6.00	0.05	A	
<b>2027</b>												
Stream B-A	D7	0.7	12.72	0.40	B	3.43	D8	0.4	9.75	0.30	A	2.62
Stream C-AB		0.1	6.02	0.07	A			0.1	5.67	0.07	A	
Stream B-C		0.1	6.98	0.12	A			0.1	5.94	0.05	A	
<b>2027 + 100dw</b>												
Stream B-A	D9	0.8	13.32	0.42	B	3.51	D10	0.5	10.25	0.33	B	2.81
Stream C-AB		0.1	6.08	0.07	A			0.1	5.65	0.07	A	
Stream B-C		0.1	7.19	0.12	A			0.1	6.09	0.05	A	
<b>2028</b>												
Stream B-A	D11	0.7	12.81	0.41	B	3.45	D12	0.4	9.84	0.30	A	2.65
Stream C-AB		0.1	6.02	0.07	A			0.1	5.66	0.07	A	
Stream B-C		0.1	7.01	0.12	A			0.1	5.97	0.06	A	
<b>2028 + 150dw</b>												
Stream B-A	D13	0.8	13.76	0.44	B	3.57	D14	0.5	10.61	0.35	B	2.92
Stream C-AB		0.1	6.10	0.07	A			0.1	5.64	0.07	A	
Stream B-C		0.1	7.34	0.12	A			0.1	6.20	0.06	A	
<b>2031</b>												
Stream B-A	D15	0.7	13.10	0.41	B	3.49	D16	0.5	10.02	0.31	B	2.68
Stream C-AB		0.1	6.04	0.07	A			0.1	5.67	0.07	A	
Stream B-C		0.1	7.11	0.12	A			0.1	6.02	0.06	A	
<b>2031 + 230dw</b>												
Stream B-A	D17	0.9	14.75	0.46	B	3.75	D18	0.6	11.30	0.38	B	3.13
Stream C-AB		0.1	6.15	0.08	A			0.1	5.63	0.07	A	
Stream B-C		0.1	7.68	0.13	A			0.1	6.39	0.06	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.

## File summary

### File Description

<b>Title</b>	Camp Road/Chilgrove Drive Priority
<b>Location</b>	Heyford Park
<b>Site number</b>	
<b>Date</b>	18/07/2022
<b>Version</b>	
<b>Status</b>	(new file)
<b>Identifier</b>	
<b>Client</b>	Richborough Estates
<b>Jobnumber</b>	T19562
<b>Enumerator</b>	James Parker
<b>Description</b>	

### Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

### Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

### 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	2023	AM	ONE HOUR	07:45	09:15	15	✓
D2	2023	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 + 50dw	AM	ONE HOUR	07:45	09:15	15	✓
D6	2026 + 50dw	PM	ONE HOUR	16:45	18:15	15	✓
D7	2027	AM	ONE HOUR	07:45	09:15	15	✓
D8	2027	PM	ONE HOUR	16:45	18:15	15	✓
D9	2027 + 100dw	AM	ONE HOUR	07:45	09:15	15	✓
D10	2027 + 100dw	PM	ONE HOUR	16:45	18:15	15	✓
D11	2028	AM	ONE HOUR	07:45	09:15	15	✓
D12	2028	PM	ONE HOUR	16:45	18:15	15	✓
D13	2028 + 150dw	AM	ONE HOUR	07:45	09:15	15	✓
D14	2028 + 150dw	PM	ONE HOUR	16:45	18:15	15	✓
D15	2031	AM	ONE HOUR	07:45	09:15	15	✓
D16	2031	PM	ONE HOUR	16:45	18:15	15	✓
D17	2031 + 230dw	AM	ONE HOUR	07:45	09:15	15	✓
D18	2031 + 230dw	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

# 2023, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		3.29	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.29	A

## Arms

### Arms

Arm	Name	Description	Arm type
A	Camp Road (W)		Major
B	Unnamed Road (E)		Minor
C	Camp Road (S)		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.20			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	One lane plus flare	10.00	5.90	4.00	3.40	3.10	✓	1.00	30	249

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	669	0.121	0.306	0.192	0.436
B-C	800	0.122	0.307	-	-
C-B	626	0.240	0.240	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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	2023	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	407	100.000
B		ONE HOUR	✓	239	100.000
C		ONE HOUR	✓	204	100.000

## Origin-Destination Data

### Demand (PCU/hr)

From	To		
	A	B	C
A	0	168	239
B	178	0	61
C	176	28	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

From	To		
	A	B	C
A	0	7	6
B	7	0	0
C	8	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-A	0.38	12.11	0.7	B	163	245
C-A					153	229
C-AB	0.07	6.01	0.1	A	35	52
A-B					154	231
A-C					219	329
B-C	0.11	6.78	0.1	A	56	84

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	134	34	564	0.238	133	0.0	0.3	8.904	A
C-A	127	32			127				
C-AB	27	7	644	0.041	26	0.0	0.1	5.915	A
A-B	126	32			126				
A-C	180	45			180				
B-C	46	11	678	0.068	46	0.0	0.1	5.687	A

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	160	40	543	0.295	160	0.3	0.4	10.030	B
C-A	150	38			150				
C-AB	33	8	649	0.051	33	0.1	0.1	5.948	A
A-B	151	38			151				
A-C	215	54			215				
B-C	55	14	648	0.085	55	0.1	0.1	6.072	A

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	196	49	514	0.381	195	0.4	0.6	12.052	B
C-A	181	45			181				
C-AB	44	11	656	0.067	44	0.1	0.1	5.998	A
A-B	185	46			185				
A-C	263	66			263				
B-C	67	17	599	0.112	67	0.1	0.1	6.766	A

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	196	49	514	0.381	196	0.6	0.7	12.113	B
C-A	181	45			181				
C-AB	44	11	656	0.067	44	0.1	0.1	6.012	A
A-B	185	46			185				
A-C	263	66			263				
B-C	67	17	598	0.112	67	0.1	0.1	6.778	A

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	160	40	543	0.295	161	0.7	0.5	10.098	B
C-A	150	38			150				
C-AB	33	8	649	0.051	34	0.1	0.1	5.972	A
A-B	151	38			151				
A-C	215	54			215				
B-C	55	14	647	0.085	55	0.1	0.1	6.086	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	134	34	564	0.238	134	0.5	0.3	8.980	A
C-A	127	32			127				
C-AB	27	7	644	0.041	27	0.1	0.1	5.933	A
A-B	126	32			126				
A-C	180	45			180				
B-C	46	11	677	0.068	46	0.1	0.1	5.705	A

# 2023, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		2.56	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.56	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
D2	2023	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	294	100.000
B		ONE HOUR	✓	171	100.000
C		ONE HOUR	✓	209	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	137	157
	B	141	0	30
	C	181	28	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	6	0
	B	4	0	0
	C	3	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-A	0.28	9.46	0.4	A	129	194
C-A					157	236
C-AB	0.06	5.67	0.1	A	34	52
A-B					126	189
A-C					144	216
B-C	0.05	5.85	0.1	A	28	41

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	106	27	590	0.180	105	0.0	0.2	7.703	A
C-A	131	33			131				
C-AB	27	7	666	0.040	26	0.0	0.1	5.662	A
A-B	103	26			103				
A-C	118	30			118				
B-C	23	6	698	0.032	22	0.0	0.0	5.330	A

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	127	32	574	0.221	126	0.2	0.3	8.363	A
C-A	155	39			155				
C-AB	33	8	674	0.049	33	0.1	0.1	5.653	A
A-B	123	31			123				
A-C	141	35			141				
B-C	27	7	678	0.040	27	0.0	0.0	5.529	A

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	155	39	551	0.282	155	0.3	0.4	9.441	A
C-A	187	47			187				
C-AB	44	11	687	0.063	43	0.1	0.1	5.641	A
A-B	151	38			151				
A-C	173	43			173				
B-C	33	8	648	0.051	33	0.0	0.1	5.852	A

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	155	39	551	0.282	155	0.4	0.4	9.462	A
C-A	187	47			187				
C-AB	44	11	687	0.063	44	0.1	0.1	5.645	A
A-B	151	38			151				
A-C	173	43			173				
B-C	33	8	648	0.051	33	0.1	0.1	5.855	A



**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	127	32	574	0.221	127	0.4	0.3	8.392	A
C-A	155	39			155				
C-AB	33	8	674	0.049	33	0.1	0.1	5.662	A
A-B	123	31			123				
A-C	141	35			141				
B-C	27	7	677	0.040	27	0.1	0.0	5.536	A

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	106	27	590	0.180	106	0.3	0.2	7.740	A
C-A	131	33			131				
C-AB	27	7	666	0.040	27	0.1	0.1	5.671	A
A-B	103	26			103				
A-C	118	30			118				
B-C	23	6	697	0.032	23	0.0	0.0	5.339	A

# 2026, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		3.39	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.39	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
D3	2026	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	421	100.000
B		ONE HOUR	✓	245	100.000
C		ONE HOUR	✓	211	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	174	247
	B	184	0	61
	C	182	29	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	7	6
	B	7	0	0
	C	8	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-A	0.40	12.57	0.7	B	169	253
C-A					157	236
C-AB	0.07	6.02	0.1	A	36	54
A-B					160	239
A-C					227	340
B-C	0.11	6.92	0.1	A	56	84

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	139	35	561	0.247	137	0.0	0.3	9.064	A
C-A	131	33			131				
C-AB	28	7	645	0.043	27	0.0	0.1	5.922	A
A-B	131	33			131				
A-C	186	46			186				
B-C	46	11	672	0.068	46	0.0	0.1	5.742	A

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	165	41	539	0.307	165	0.3	0.5	10.279	B
C-A	155	39			155				
C-AB	35	9	650	0.054	35	0.1	0.1	5.957	A
A-B	156	39			156				
A-C	222	56			222				
B-C	55	14	640	0.086	55	0.1	0.1	6.153	A

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	203	51	509	0.398	202	0.5	0.7	12.500	B
C-A	186	47			186				
C-AB	46	12	658	0.070	46	0.1	0.1	6.012	A
A-B	192	48			192				
A-C	272	68			272				
B-C	67	17	588	0.114	67	0.1	0.1	6.910	A

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	203	51	509	0.398	203	0.7	0.7	12.574	B
C-A	186	47			186				
C-AB	46	12	658	0.070	46	0.1	0.1	6.024	A
A-B	192	48			192				
A-C	272	68			272				
B-C	67	17	587	0.114	67	0.1	0.1	6.924	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	165	41	539	0.307	166	0.7	0.5	10.355	B
C-A	155	39			155				
C-AB	35	9	650	0.054	35	0.1	0.1	5.982	A
A-B	156	39			156				
A-C	222	56			222				
B-C	55	14	639	0.086	55	0.1	0.1	6.167	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	139	35	561	0.247	139	0.5	0.4	9.145	A
C-A	131	33			131				
C-AB	28	7	645	0.043	28	0.1	0.1	5.941	A
A-B	131	33			131				
A-C	186	46			186				
B-C	46	11	671	0.068	46	0.1	0.1	5.762	A

# 2026, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		2.61	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.61	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
D4	2026	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	305	100.000
B		ONE HOUR	✓	177	100.000
C		ONE HOUR	✓	217	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	142	163
	B	146	0	31
	C	188	29	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	6	0
	B	4	0	0
	C	3	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-A	0.29	9.71	0.4	A	134	201
C-A					163	245
C-AB	0.07	5.67	0.1	A	36	54
A-B					130	195
A-C					150	224
B-C	0.05	5.93	0.1	A	28	43

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	110	27	587	0.187	109	0.0	0.2	7.810	A
C-A	136	34			136				
C-AB	28	7	668	0.042	27	0.0	0.1	5.658	A
A-B	107	27			107				
A-C	123	31			123				
B-C	23	6	694	0.034	23	0.0	0.0	5.364	A

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	131	33	570	0.230	131	0.2	0.3	8.522	A
C-A	160	40			160				
C-AB	35	9	677	0.051	35	0.1	0.1	5.647	A
A-B	128	32			128				
A-C	147	37			147				
B-C	28	7	673	0.041	28	0.0	0.0	5.577	A

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	161	40	546	0.294	160	0.3	0.4	9.689	A
C-A	193	48			193				
C-AB	46	11	690	0.066	46	0.1	0.1	5.636	A
A-B	156	39			156				
A-C	179	45			179				
B-C	34	9	642	0.053	34	0.0	0.1	5.925	A

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	161	40	546	0.294	161	0.4	0.4	9.713	A
C-A	193	48			193				
C-AB	46	11	690	0.066	46	0.1	0.1	5.644	A
A-B	156	39			156				
A-C	179	45			179				
B-C	34	9	641	0.053	34	0.1	0.1	5.929	A

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	131	33	570	0.230	132	0.4	0.3	8.553	A
C-A	160	40			160				
C-AB	35	9	677	0.052	35	0.1	0.1	5.661	A
A-B	128	32			128				
A-C	147	37			147				
B-C	28	7	673	0.041	28	0.1	0.0	5.582	A

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	110	27	587	0.187	110	0.3	0.2	7.856	A
C-A	136	34			136				
C-AB	28	7	668	0.042	28	0.1	0.1	5.669	A
A-B	107	27			107				
A-C	123	31			123				
B-C	23	6	693	0.034	23	0.0	0.0	5.374	A

# 2026 + 50dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		3.43	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.43	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
D5	2026 + 50dw	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	436	100.000
B		ONE HOUR	✓	248	100.000
C		ONE HOUR	✓	213	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	183	253
	B	187	0	61
	C	184	29	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	7	6
	B	7	0	0
	C	8	0	0



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-A	0.41	12.86	0.7	B	172	257
C-A					159	239
C-AB	0.07	6.05	0.1	A	36	55
A-B					168	252
A-C					232	348
B-C	0.12	7.02	0.1	A	56	84

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	141	35	558	0.252	139	0.0	0.4	9.160	A
C-A	133	33			133				
C-AB	28	7	644	0.043	28	0.0	0.1	5.938	A
A-B	138	34			138				
A-C	190	48			190				
B-C	46	11	668	0.069	46	0.0	0.1	5.780	A

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	168	42	536	0.313	168	0.4	0.5	10.431	B
C-A	156	39			156				
C-AB	35	9	648	0.054	35	0.1	0.1	5.976	A
A-B	165	41			165				
A-C	227	57			227				
B-C	55	14	635	0.086	55	0.1	0.1	6.208	A

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	206	51	505	0.407	205	0.5	0.7	12.778	B
C-A	188	47			188				
C-AB	46	12	656	0.071	46	0.1	0.1	6.033	A
A-B	201	50			201				
A-C	279	70			279				
B-C	67	17	581	0.116	67	0.1	0.1	7.008	A

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	206	51	505	0.407	206	0.7	0.7	12.858	B
C-A	188	47			188				
C-AB	46	12	656	0.071	46	0.1	0.1	6.048	A
A-B	201	50			201				
A-C	279	70			279				
B-C	67	17	580	0.116	67	0.1	0.1	7.024	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	168	42	536	0.313	169	0.7	0.5	10.516	B
C-A	156	39			156				
C-AB	35	9	648	0.054	35	0.1	0.1	6.002	A
A-B	165	41			165				
A-C	227	57			227				
B-C	55	14	633	0.087	55	0.1	0.1	6.226	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	141	35	558	0.252	141	0.5	0.4	9.247	A
C-A	132	33			132				
C-AB	28	7	644	0.043	28	0.1	0.1	5.955	A
A-B	138	34			138				
A-C	190	48			190				
B-C	46	11	667	0.069	46	0.1	0.1	5.798	A

# 2026 + 50dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		2.70	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.70	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
D6	2026 + 50dw	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	310	100.000
B		ONE HOUR	✓	184	100.000
C		ONE HOUR	✓	221	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	145	165
	B	153	0	31
	C	192	29	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	6	0
	B	4	0	0
	C	3	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-A	0.31	9.95	0.5	A	140	211
C-A					166	250
C-AB	0.07	5.66	0.1	A	36	55
A-B					133	200
A-C					151	227
B-C	0.05	6.00	0.1	A	28	43

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	115	29	586	0.196	114	0.0	0.3	7.913	A
C-A	139	35			139				
C-AB	28	7	669	0.042	28	0.0	0.1	5.650	A
A-B	109	27			109				
A-C	124	31			124				
B-C	23	6	690	0.034	23	0.0	0.0	5.399	A

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	138	34	569	0.242	137	0.3	0.3	8.668	A
C-A	164	41			164				
C-AB	35	9	678	0.052	35	0.1	0.1	5.636	A
A-B	130	33			130				
A-C	148	37			148				
B-C	28	7	668	0.042	28	0.0	0.0	5.624	A

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	168	42	545	0.309	168	0.3	0.5	9.925	A
C-A	197	49			197				
C-AB	46	12	692	0.067	46	0.1	0.1	5.623	A
A-B	160	40			160				
A-C	182	45			182				
B-C	34	9	634	0.054	34	0.0	0.1	5.998	A

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	168	42	545	0.309	168	0.5	0.5	9.953	A
C-A	197	49			197				
C-AB	46	12	692	0.067	46	0.1	0.1	5.632	A
A-B	160	40			160				
A-C	182	45			182				
B-C	34	9	634	0.054	34	0.1	0.1	6.001	A

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	138	34	569	0.242	138	0.5	0.3	8.703	A
C-A	164	41			164				
C-AB	35	9	678	0.052	35	0.1	0.1	5.650	A
A-B	130	33			130				
A-C	148	37			148				
B-C	28	7	667	0.042	28	0.1	0.0	5.630	A

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	115	29	586	0.196	116	0.3	0.3	7.958	A
C-A	138	35			138				
C-AB	28	7	669	0.042	28	0.1	0.1	5.661	A
A-B	109	27			109				
A-C	124	31			124				
B-C	23	6	689	0.034	23	0.0	0.0	5.410	A

# 2027, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		3.43	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.43	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
D7	2027	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	424	100.000
B		ONE HOUR	✓	248	100.000
C		ONE HOUR	✓	213	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	175	249
	B	186	0	62
	C	184	29	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	7	6
	B	7	0	0
	C	8	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-A	0.40	12.72	0.7	B	171	256
C-A					159	239
C-AB	0.07	6.02	0.1	A	36	55
A-B					161	241
A-C					228	343
B-C	0.12	6.98	0.1	A	57	85

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	140	35	560	0.250	139	0.0	0.4	9.115	A
C-A	133	33			133				
C-AB	28	7	646	0.043	28	0.0	0.1	5.918	A
A-B	132	33			132				
A-C	187	47			187				
B-C	47	12	671	0.070	46	0.0	0.1	5.760	A

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	167	42	538	0.311	167	0.4	0.5	10.360	B
C-A	156	39			156				
C-AB	35	9	651	0.054	35	0.1	0.1	5.952	A
A-B	157	39			157				
A-C	224	56			224				
B-C	56	14	638	0.087	56	0.1	0.1	6.181	A

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	205	51	508	0.404	204	0.5	0.7	12.684	B
C-A	188	47			188				
C-AB	46	12	659	0.070	46	0.1	0.1	6.004	A
A-B	193	48			193				
A-C	274	69			274				
B-C	68	17	585	0.117	68	0.1	0.1	6.963	A

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	205	51	507	0.404	205	0.7	0.7	12.719	B
C-A	188	47			188				
C-AB	46	12	659	0.070	46	0.1	0.1	6.018	A
A-B	193	48			193				
A-C	274	69			274				
B-C	68	17	584	0.117	68	0.1	0.1	6.977	A

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	167	42	538	0.311	168	0.7	0.5	10.440	B
C-A	156	39			156				
C-AB	35	9	651	0.054	35	0.1	0.1	5.980	A
A-B	157	39			157				
A-C	224	56			224				
B-C	56	14	637	0.088	56	0.1	0.1	6.196	A

**09:00 - 09:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	140	35	560	0.250	141	0.5	0.4	9.199	A
C-A	132	33			132				
C-AB	28	7	646	0.043	28	0.1	0.1	5.937	A
A-B	132	33			132				
A-C	187	47			187				
B-C	47	12	670	0.070	47	0.1	0.1	5.778	A



# 2027, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		2.62	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.62	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
D8	2027	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	306	100.000
B		ONE HOUR	✓	178	100.000
C		ONE HOUR	✓	218	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	142	164
	B	147	0	31
	C	189	29	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	6	0
	B	4	0	0
	C	3	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-A	0.30	9.75	0.4	A	135	202
C-A					164	246
C-AB	0.07	5.67	0.1	A	36	54
A-B					130	195
A-C					150	226
B-C	0.05	5.94	0.1	A	28	43

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	111	28	587	0.189	110	0.0	0.2	7.830	A
C-A	136	34			136				
C-AB	28	7	668	0.042	28	0.0	0.1	5.656	A
A-B	107	27			107				
A-C	123	31			123				
B-C	23	6	693	0.034	23	0.0	0.0	5.370	A

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	132	33	570	0.232	132	0.2	0.3	8.547	A
C-A	161	40			161				
C-AB	35	9	677	0.052	35	0.1	0.1	5.646	A
A-B	128	32			128				
A-C	147	37			147				
B-C	28	7	672	0.041	28	0.0	0.0	5.585	A

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	162	40	546	0.297	161	0.3	0.4	9.728	A
C-A	194	49			194				
C-AB	46	11	690	0.066	46	0.1	0.1	5.634	A
A-B	156	39			156				
A-C	181	45			181				
B-C	34	9	640	0.053	34	0.0	0.1	5.938	A

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	162	40	546	0.297	162	0.4	0.4	9.754	A
C-A	194	49			194				
C-AB	46	11	690	0.066	46	0.1	0.1	5.640	A
A-B	156	39			156				
A-C	181	45			181				
B-C	34	9	640	0.053	34	0.1	0.1	5.941	A

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	132	33	570	0.232	133	0.4	0.3	8.577	A
C-A	161	40			161				
C-AB	35	9	677	0.052	35	0.1	0.1	5.656	A
A-B	128	32			128				
A-C	147	37			147				
B-C	28	7	672	0.041	28	0.1	0.0	5.592	A

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	111	28	587	0.189	111	0.3	0.2	7.872	A
C-A	136	34			136				
C-AB	28	7	668	0.042	28	0.1	0.1	5.667	A
A-B	107	27			107				
A-C	123	31			123				
B-C	23	6	693	0.034	23	0.0	0.0	5.378	A

# 2027 + 100dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		3.51	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.51	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	2027 + 100dw	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	455	100.000
B		ONE HOUR	✓	254	100.000
C		ONE HOUR	✓	216	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	194	261
	B	192	0	62
	C	187	29	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	7	6
	B	7	0	0
	C	8	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-A	0.42	13.32	0.8	B	176	264
C-A					162	242
C-AB	0.07	6.08	0.1	A	37	55
A-B					178	267
A-C					239	359
B-C	0.12	7.19	0.1	A	57	85

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	145	36	555	0.260	143	0.0	0.4	9.312	A
C-A	135	34			135				
C-AB	28	7	642	0.044	28	0.0	0.1	5.956	A
A-B	146	37			146				
A-C	196	49			196				
B-C	47	12	663	0.070	46	0.0	0.1	5.838	A

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	173	43	532	0.324	172	0.4	0.5	10.672	B
C-A	159	40			159				
C-AB	35	9	647	0.055	35	0.1	0.1	5.996	A
A-B	174	44			174				
A-C	235	59			235				
B-C	56	14	627	0.089	56	0.1	0.1	6.296	A

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	211	53	500	0.422	210	0.5	0.8	13.227	B
C-A	191	48			191				
C-AB	47	12	654	0.071	47	0.1	0.1	6.063	A
A-B	214	53			214				
A-C	287	72			287				
B-C	68	17	570	0.120	68	0.1	0.1	7.170	A

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	211	53	500	0.422	211	0.8	0.8	13.320	B
C-A	191	48			191				
C-AB	47	12	654	0.072	47	0.1	0.1	6.078	A
A-B	214	53			214				
A-C	287	72			287				
B-C	68	17	569	0.120	68	0.1	0.1	7.187	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	173	43	532	0.324	174	0.8	0.5	10.765	B
C-A	159	40			159				
C-AB	35	9	647	0.055	35	0.1	0.1	6.027	A
A-B	174	44			174				
A-C	235	59			235				
B-C	56	14	626	0.089	56	0.1	0.1	6.315	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	145	36	555	0.260	145	0.5	0.4	9.408	A
C-A	135	34			135				
C-AB	28	7	642	0.044	28	0.1	0.1	5.974	A
A-B	146	37			146				
A-C	196	49			196				
B-C	47	12	661	0.071	47	0.1	0.1	5.857	A

# 2027 + 100dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		2.81	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.81	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	2027 + 100dw	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	317	100.000
B		ONE HOUR	✓	192	100.000
C		ONE HOUR	✓	226	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	149	168
	B	161	0	31
	C	197	29	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	6	0
	B	4	0	0
	C	3	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-A	0.33	10.25	0.5	B	148	222
C-A					171	256
C-AB	0.07	5.65	0.1	A	37	55
A-B					137	205
A-C					154	231
B-C	0.05	6.09	0.1	A	28	43

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	121	30	585	0.207	120	0.0	0.3	8.036	A
C-A	142	36			142				
C-AB	28	7	670	0.042	28	0.0	0.1	5.640	A
A-B	112	28			112				
A-C	126	32			126				
B-C	23	6	685	0.034	23	0.0	0.0	5.442	A

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	145	36	567	0.255	144	0.3	0.4	8.850	A
C-A	168	42			168				
C-AB	35	9	680	0.052	35	0.1	0.1	5.625	A
A-B	134	33			134				
A-C	151	38			151				
B-C	28	7	661	0.042	28	0.0	0.0	5.682	A

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	177	44	542	0.327	177	0.4	0.5	10.221	B
C-A	202	51			202				
C-AB	47	12	694	0.067	46	0.1	0.1	5.609	A
A-B	164	41			164				
A-C	185	46			185				
B-C	34	9	625	0.055	34	0.0	0.1	6.088	A

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	177	44	542	0.327	177	0.5	0.5	10.254	B
C-A	202	51			202				
C-AB	47	12	694	0.067	47	0.1	0.1	5.618	A
A-B	164	41			164				
A-C	185	46			185				
B-C	34	9	625	0.055	34	0.1	0.1	6.092	A



**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	145	36	567	0.255	145	0.5	0.4	8.890	A
C-A	168	42			168				
C-AB	35	9	680	0.052	36	0.1	0.1	5.639	A
A-B	134	33			134				
A-C	151	38			151				
B-C	28	7	661	0.042	28	0.1	0.0	5.688	A

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	121	30	585	0.207	122	0.4	0.3	8.088	A
C-A	142	36			142				
C-AB	28	7	670	0.042	28	0.1	0.1	5.649	A
A-B	112	28			112				
A-C	126	32			126				
B-C	23	6	684	0.034	23	0.0	0.0	5.453	A

# 2028, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		3.45	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.45	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	2028	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	428	100.000
B		ONE HOUR	✓	249	100.000
C		ONE HOUR	✓	214	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	177	251
	B	187	0	62
	C	185	29	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	7	6
	B	7	0	0
	C	8	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-A	0.41	12.81	0.7	B	172	257
C-A					160	240
C-AB	0.07	6.02	0.1	A	36	55
A-B					162	244
A-C					230	345
B-C	0.12	7.01	0.1	A	57	85

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	141	35	559	0.252	139	0.0	0.4	9.146	A
C-A	133	33			133				
C-AB	28	7	645	0.043	28	0.0	0.1	5.920	A
A-B	133	33			133				
A-C	189	47			189				
B-C	47	12	670	0.070	46	0.0	0.1	5.772	A

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	168	42	537	0.313	168	0.4	0.5	10.408	B
C-A	157	39			157				
C-AB	35	9	651	0.054	35	0.1	0.1	5.953	A
A-B	159	40			159				
A-C	226	56			226				
B-C	56	14	636	0.088	56	0.1	0.1	6.199	A

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	206	51	506	0.407	205	0.5	0.7	12.736	B
C-A	189	47			189				
C-AB	46	12	658	0.070	46	0.1	0.1	6.008	A
A-B	195	49			195				
A-C	276	69			276				
B-C	68	17	583	0.117	68	0.1	0.1	6.994	A

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	206	51	506	0.407	206	0.7	0.7	12.813	B
C-A	189	47			189				
C-AB	46	12	659	0.070	46	0.1	0.1	6.024	A
A-B	195	49			195				
A-C	276	69			276				
B-C	68	17	582	0.117	68	0.1	0.1	7.009	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	168	42	537	0.313	169	0.7	0.5	10.490	B
C-A	157	39			157				
C-AB	35	9	651	0.054	35	0.1	0.1	5.981	A
A-B	159	40			159				
A-C	226	56			226				
B-C	56	14	635	0.088	56	0.1	0.1	6.216	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	141	35	559	0.252	141	0.5	0.4	9.234	A
C-A	133	33			133				
C-AB	28	7	645	0.043	28	0.1	0.1	5.940	A
A-B	133	33			133				
A-C	189	47			189				
B-C	47	12	669	0.070	47	0.1	0.1	5.792	A

# 2028, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		2.65	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.65	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	2028	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	309	100.000
B		ONE HOUR	✓	181	100.000
C		ONE HOUR	✓	220	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	144	165
	B	149	0	32
	C	191	29	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	6	0
	B	4	0	0
	C	3	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-A	0.30	9.84	0.4	A	137	205
C-A					166	248
C-AB	0.07	5.66	0.1	A	36	54
A-B					132	198
A-C					151	227
B-C	0.06	5.97	0.1	A	29	44

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	112	28	586	0.191	111	0.0	0.2	7.869	A
C-A	138	34			138				
C-AB	28	7	668	0.042	28	0.0	0.1	5.652	A
A-B	108	27			108				
A-C	124	31			124				
B-C	24	6	693	0.035	24	0.0	0.0	5.381	A

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	134	33	569	0.236	134	0.2	0.3	8.601	A
C-A	163	41			163				
C-AB	35	9	678	0.052	35	0.1	0.1	5.639	A
A-B	129	32			129				
A-C	148	37			148				
B-C	29	7	671	0.043	29	0.0	0.0	5.601	A

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	164	41	544	0.301	164	0.3	0.4	9.815	A
C-A	196	49			196				
C-AB	46	12	691	0.067	46	0.1	0.1	5.629	A
A-B	159	40			159				
A-C	182	45			182				
B-C	35	9	639	0.055	35	0.0	0.1	5.964	A

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	164	41	544	0.301	164	0.4	0.4	9.841	A
C-A	196	49			196				
C-AB	46	12	691	0.067	46	0.1	0.1	5.633	A
A-B	159	40			159				
A-C	182	45			182				
B-C	35	9	638	0.055	35	0.1	0.1	5.968	A

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	134	33	569	0.236	134	0.4	0.3	8.635	A
C-A	163	41			163				
C-AB	35	9	678	0.052	35	0.1	0.1	5.651	A
A-B	129	32			129				
A-C	148	37			148				
B-C	29	7	671	0.043	29	0.1	0.0	5.606	A

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	112	28	586	0.191	112	0.3	0.2	7.912	A
C-A	138	34			138				
C-AB	28	7	668	0.042	28	0.1	0.1	5.663	A
A-B	108	27			108				
A-C	124	31			124				
B-C	24	6	692	0.035	24	0.0	0.0	5.391	A

# 2028 + 150dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		3.57	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.57	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
D13	2028 + 150dw	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	474	100.000
B		ONE HOUR	✓	258	100.000
C		ONE HOUR	✓	220	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	205	269
	B	196	0	62
	C	191	29	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	7	6
	B	7	0	0
	C	8	0	0



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-A	0.44	13.76	0.8	B	180	270
C-A					165	247
C-AB	0.07	6.10	0.1	A	37	56
A-B					188	282
A-C					247	370
B-C	0.12	7.34	0.1	A	57	85

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	148	37	552	0.267	146	0.0	0.4	9.452	A
C-A	137	34			137				
C-AB	28	7	641	0.044	28	0.0	0.1	5.971	A
A-B	154	39			154				
A-C	203	51			203				
B-C	47	12	657	0.071	46	0.0	0.1	5.890	A

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	176	44	529	0.333	176	0.4	0.5	10.898	B
C-A	162	41			162				
C-AB	36	9	645	0.055	36	0.1	0.1	6.015	A
A-B	184	46			184				
A-C	242	60			242				
B-C	56	14	620	0.090	56	0.1	0.1	6.374	A

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	216	54	496	0.435	215	0.5	0.8	13.656	B
C-A	195	49			195				
C-AB	47	12	652	0.072	47	0.1	0.1	6.082	A
A-B	226	56			226				
A-C	296	74			296				
B-C	68	17	560	0.122	68	0.1	0.1	7.317	A

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	216	54	496	0.435	216	0.8	0.8	13.764	B
C-A	195	49			195				
C-AB	47	12	653	0.072	47	0.1	0.1	6.100	A
A-B	226	56			226				
A-C	296	74			296				
B-C	68	17	559	0.122	68	0.1	0.1	7.336	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	176	44	528	0.333	177	0.8	0.5	11.003	B
C-A	162	41			162				
C-AB	36	9	645	0.055	36	0.1	0.1	6.043	A
A-B	184	46			184				
A-C	242	60			242				
B-C	56	14	619	0.090	56	0.1	0.1	6.395	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	148	37	552	0.267	148	0.5	0.4	9.555	A
C-A	137	34			137				
C-AB	28	7	641	0.044	28	0.1	0.1	5.989	A
A-B	154	39			154				
A-C	203	51			203				
B-C	47	12	656	0.071	47	0.1	0.1	5.912	A

# 2028 + 150dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		2.92	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.92	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
D14	2028 + 150dw	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	327	100.000
B		ONE HOUR	✓	201	100.000
C		ONE HOUR	✓	232	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	155	172
	B	169	0	32
	C	203	29	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	6	0
	B	4	0	0
	C	3	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-A	0.35	10.61	0.5	B	155	233
C-A					176	264
C-AB	0.07	5.64	0.1	A	37	56
A-B					142	213
A-C					158	237
B-C	0.06	6.20	0.1	A	29	44

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	127	32	583	0.218	126	0.0	0.3	8.179	A
C-A	146	37			146				
C-AB	28	7	672	0.042	28	0.0	0.1	5.630	A
A-B	117	29			117				
A-C	129	32			129				
B-C	24	6	680	0.035	24	0.0	0.0	5.487	A

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	152	38	564	0.269	152	0.3	0.4	9.060	A
C-A	173	43			173				
C-AB	36	9	682	0.052	36	0.1	0.1	5.615	A
A-B	139	35			139				
A-C	155	39			155				
B-C	29	7	655	0.044	29	0.0	0.0	5.747	A

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	186	47	539	0.345	185	0.4	0.5	10.568	B
C-A	208	52			208				
C-AB	47	12	696	0.068	47	0.1	0.1	5.598	A
A-B	171	43			171				
A-C	189	47			189				
B-C	35	9	616	0.057	35	0.0	0.1	6.195	A

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	186	47	539	0.345	186	0.5	0.5	10.606	B
C-A	208	52			208				
C-AB	47	12	696	0.068	47	0.1	0.1	5.602	A
A-B	171	43			171				
A-C	189	47			189				
B-C	35	9	616	0.057	35	0.1	0.1	6.201	A

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	152	38	564	0.269	153	0.5	0.4	9.107	A
C-A	173	43			173				
C-AB	36	9	682	0.052	36	0.1	0.1	5.626	A
A-B	139	35			139				
A-C	155	39			155				
B-C	29	7	654	0.044	29	0.1	0.0	5.756	A

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	127	32	583	0.218	128	0.4	0.3	8.236	A
C-A	146	37			146				
C-AB	28	7	672	0.042	28	0.1	0.1	5.641	A
A-B	117	29			117				
A-C	129	32			129				
B-C	24	6	679	0.035	24	0.0	0.0	5.499	A

# 2031, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		3.49	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.49	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
D15	2031	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	438	100.000
B		ONE HOUR	✓	253	100.000
C		ONE HOUR	✓	219	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	181	257
	B	189	0	64
	C	189	30	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	7	6
	B	7	0	0
	C	8	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-A	0.41	13.10	0.7	B	173	260
C-A					163	244
C-AB	0.07	6.04	0.1	A	38	57
A-B					166	249
A-C					236	354
B-C	0.12	7.11	0.1	A	59	88

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	142	36	556	0.256	141	0.0	0.4	9.242	A
C-A	136	34			136				
C-AB	29	7	646	0.045	29	0.0	0.1	5.929	A
A-B	136	34			136				
A-C	193	48			193				
B-C	48	12	668	0.072	48	0.0	0.1	5.805	A

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	170	42	534	0.318	169	0.4	0.5	10.559	B
C-A	160	40			160				
C-AB	37	9	651	0.056	36	0.1	0.1	5.966	A
A-B	163	41			163				
A-C	231	58			231				
B-C	58	14	633	0.091	57	0.1	0.1	6.250	A

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	208	52	502	0.414	207	0.5	0.7	13.010	B
C-A	193	48			193				
C-AB	48	12	659	0.073	48	0.1	0.1	6.025	A
A-B	199	50			199				
A-C	283	71			283				
B-C	70	18	578	0.122	70	0.1	0.1	7.092	A

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	208	52	502	0.414	208	0.7	0.7	13.097	B
C-A	193	48			193				
C-AB	48	12	659	0.073	48	0.1	0.1	6.037	A
A-B	199	50			199				
A-C	283	71			283				
B-C	70	18	577	0.122	70	0.1	0.1	7.108	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	170	42	534	0.318	171	0.7	0.5	10.646	B
C-A	160	40			160				
C-AB	37	9	651	0.056	37	0.1	0.1	5.995	A
A-B	163	41			163				
A-C	231	58			231				
B-C	58	14	632	0.091	58	0.1	0.1	6.267	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	142	36	556	0.256	143	0.5	0.4	9.332	A
C-A	136	34			136				
C-AB	29	7	646	0.045	29	0.1	0.1	5.947	A
A-B	136	34			136				
A-C	193	48			193				
B-C	48	12	666	0.072	48	0.1	0.1	5.826	A



# 2031, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		2.68	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.68	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
D16	2031	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	318	100.000
B		ONE HOUR	✓	184	100.000
C		ONE HOUR	✓	225	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	148	170
	B	152	0	32
	C	195	30	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

	To			
	A	B	C	
From	A	0	6	0
	B	4	0	0
	C	3	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-A	0.31	10.02	0.5	B	139	209
C-A					169	253
C-AB	0.07	5.67	0.1	A	38	57
A-B					136	204
A-C					156	234
B-C	0.06	6.02	0.1	A	29	44

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	114	29	584	0.196	113	0.0	0.3	7.944	A
C-A	140	35			140				
C-AB	29	7	669	0.043	29	0.0	0.1	5.658	A
A-B	111	28			111				
A-C	128	32			128				
B-C	24	6	690	0.035	24	0.0	0.0	5.406	A

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	137	34	566	0.241	136	0.3	0.3	8.710	A
C-A	166	41			166				
C-AB	36	9	678	0.054	36	0.1	0.1	5.649	A
A-B	133	33			133				
A-C	153	38			153				
B-C	29	7	667	0.043	29	0.0	0.0	5.635	A

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	167	42	541	0.309	167	0.3	0.5	9.990	A
C-A	200	50			200				
C-AB	48	12	692	0.069	48	0.1	0.1	5.637	A
A-B	163	41			163				
A-C	187	47			187				
B-C	35	9	633	0.056	35	0.0	0.1	6.017	A

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	167	42	541	0.309	167	0.5	0.5	10.019	B
C-A	200	50			200				
C-AB	48	12	692	0.069	48	0.1	0.1	5.643	A
A-B	163	41			163				
A-C	187	47			187				
B-C	35	9	633	0.056	35	0.1	0.1	6.020	A

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	137	34	566	0.242	137	0.5	0.3	8.746	A
C-A	166	41			166				
C-AB	36	9	678	0.054	37	0.1	0.1	5.659	A
A-B	133	33			133				
A-C	153	38			153				
B-C	29	7	667	0.043	29	0.1	0.0	5.643	A

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	114	29	584	0.196	115	0.3	0.3	7.989	A
C-A	140	35			140				
C-AB	29	7	669	0.043	29	0.1	0.1	5.669	A
A-B	111	28			111				
A-C	128	32			128				
B-C	24	6	689	0.035	24	0.0	0.0	5.415	A

# 2031 + 230dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		3.75	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.75	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
D17	2031 + 230dw	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	508	100.000
B		ONE HOUR	✓	268	100.000
C		ONE HOUR	✓	228	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	224	284
	B	204	0	64
	C	198	30	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	7	6
	B	7	0	0
	C	8	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-A	0.46	14.75	0.9	B	187	281
C-A					170	255
C-AB	0.08	6.15	0.1	A	39	58
A-B					206	308
A-C					261	391
B-C	0.13	7.68	0.1	A	59	88

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	154	38	546	0.282	152	0.0	0.4	9.747	A
C-A	142	36			142				
C-AB	29	7	639	0.046	29	0.0	0.1	6.007	A
A-B	169	42			169				
A-C	214	53			214				
B-C	48	12	648	0.074	48	0.0	0.1	5.997	A

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	183	46	521	0.352	183	0.4	0.6	11.378	B
C-A	168	42			168				
C-AB	37	9	643	0.058	37	0.1	0.1	6.059	A
A-B	201	50			201				
A-C	255	64			255				
B-C	58	14	608	0.095	57	0.1	0.1	6.542	A

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	225	56	486	0.462	223	0.6	0.9	14.604	B
C-A	201	50			201				
C-AB	50	12	650	0.077	50	0.1	0.1	6.138	A
A-B	247	62			247				
A-C	313	78			313				
B-C	70	18	541	0.130	70	0.1	0.1	7.652	A

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	225	56	486	0.462	225	0.9	0.9	14.745	B
C-A	201	50			201				
C-AB	50	12	650	0.077	50	0.1	0.1	6.154	A
A-B	247	62			247				
A-C	313	78			313				
B-C	70	18	539	0.131	70	0.1	0.1	7.677	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	183	46	521	0.352	185	0.9	0.6	11.508	B
C-A	168	42			168				
C-AB	37	9	643	0.058	38	0.1	0.1	6.088	A
A-B	201	50			201				
A-C	255	64			255				
B-C	58	14	606	0.095	58	0.1	0.1	6.566	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	154	38	545	0.282	154	0.6	0.4	9.864	A
C-A	142	36			142				
C-AB	30	7	639	0.046	30	0.1	0.1	6.028	A
A-B	169	42			169				
A-C	214	53			214				
B-C	48	12	646	0.075	48	0.1	0.1	6.022	A

# 2031 + 230dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		3.13	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.13	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
D18	2031 + 230dw	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	343	100.000
B		ONE HOUR	✓	215	100.000
C		ONE HOUR	✓	244	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	164	179
	B	183	0	32
	C	214	30	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	6	0
	B	4	0	0
	C	3	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-A	0.38	11.30	0.6	B	168	252
C-A					185	277
C-AB	0.07	5.63	0.1	A	39	59
A-B					150	226
A-C					164	246
B-C	0.06	6.39	0.1	A	29	44

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	138	34	579	0.238	136	0.0	0.3	8.442	A
C-A	154	39			154				
C-AB	30	7	675	0.044	29	0.0	0.1	5.618	A
A-B	123	31			123				
A-C	135	34			135				
B-C	24	6	671	0.036	24	0.0	0.0	5.564	A

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	165	41	559	0.294	164	0.3	0.4	9.458	A
C-A	182	45			182				
C-AB	38	9	685	0.055	37	0.1	0.1	5.599	A
A-B	147	37			147				
A-C	161	40			161				
B-C	29	7	643	0.045	29	0.0	0.0	5.858	A

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	201	50	533	0.378	201	0.4	0.6	11.244	B
C-A	219	55			219				
C-AB	50	12	701	0.071	50	0.1	0.1	5.580	A
A-B	181	45			181				
A-C	197	49			197				
B-C	35	9	599	0.059	35	0.0	0.1	6.387	A

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	201	50	533	0.378	201	0.6	0.6	11.297	B
C-A	219	55			219				
C-AB	50	12	701	0.071	50	0.1	0.1	5.589	A
A-B	181	45			181				
A-C	197	49			197				
B-C	35	9	598	0.059	35	0.1	0.1	6.394	A



17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	165	41	559	0.294	165	0.6	0.4	9.518	A
C-A	182	45			182				
C-AB	38	9	685	0.055	38	0.1	0.1	5.615	A
A-B	147	37			147				
A-C	161	40			161				
B-C	29	7	642	0.045	29	0.1	0.0	5.868	A

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-A	138	34	579	0.238	138	0.4	0.3	8.510	A
C-A	154	38			154				
C-AB	30	7	675	0.044	30	0.1	0.1	5.629	A
A-B	123	31			123				
A-C	135	34			135				
B-C	24	6	670	0.036	24	0.0	0.0	5.576	A

## **APPENDIX H16**

### **B430/UNNAMED ROAD MODELLING OUTPUT**

## B430/Unnamed Road – Junction Assessment Results

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
<b>2023 Base</b>						
Unnamed Road LT	0.30	1	8	0.28	0	8
Unnamed Road RT	0.02	0	13	0.01	0	9
B430 (N) RT	0.35	1	8	0.26	0	7
<b>2026 Base</b>						
Unnamed Road LT	0.32	1	8	0.29	0	8
Unnamed Road RT	0.02	0	13	0.01	0	9
B430 (N) RT	0.36	1	8	0.27	0	7
<b>2026 Base + 50 dwellings</b>						
Unnamed Road LT	0.33	1	8	0.29	0	8
Unnamed Road RT	0.02	0	13	0.01	0	10
B430 (N) RT	0.37	1	8	0.28	0	8
<b>2027 Base</b>						
Unnamed Road LT	0.32	1	8	0.29	0	8
Unnamed Road RT	0.02	0	13	0.01	0	10
B430 (N) RT	0.37	1	8	0.27	0	8
<b>2027 Base + 100 dwellings</b>						
Unnamed Road LT	0.35	1	8	0.30	1	8
Unnamed Road RT	0.02	0	13	0.01	0	10
B430 (N) RT	0.38	1	8	0.30	0	8
<b>2028 Base</b>						
Unnamed Road LT	0.32	1	8	0.29	0	8
Unnamed Road RT	0.02	0	13	0.01	0	10
B430 (N) RT	0.37	1	8	0.28	0	8
<b>2028 Base + 150 dwellings</b>						
Unnamed Road LT	0.36	1	8	0.31	1	9
Unnamed Road RT	0.02	0	14	0.01	0	10
B430 (N) RT	0.38	1	8	0.31	1	8
<b>2031 Base</b>						
Unnamed Road LT	0.33	1	8	0.30	1	8
Unnamed Road RT	0.02	0	14	0.01	0	10
B430 (N) RT	0.38	1	8	0.29	0	8
<b>2031 Base + 230 dwellings</b>						
Unnamed Road LT	0.40	1	9	0.33	1	9
Unnamed Road RT	0.02	0	14	0.01	0	10
B430 (N) RT	0.40	1	9	0.33	1	8

RFC is Ratio of Flow to Capacity, Queue is mean max in PCUs, Delay is seconds per PCU.

# Junctions 10

## PICADY 10 - Priority Intersection Module

Version: 10.1.0.1820

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**Filename:** T19562 - B430-unnamed road.j10

**Path:** C:\Users\NeilBateman\Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\2019\T19562 Heyford Park\Junction Assessments\Picady

**Report generation date:** 19/10/2023 10:28:43

- 
- »2023 Surveys, AM
  - »2023 Surveys, PM
  - »2026 Base, AM
  - »2026 Base, PM
  - »2026 Base + 50dw, AM
  - »2026 Base + 50dw, PM
  - »2027 Base, AM
  - »2027 Base, PM
  - »2027 Base + 100dw, AM
  - »2027 Base + 100dw, PM
  - »2028 Base, AM
  - »2028 Base, PM
  - »2028 Base + 150dw, AM
  - »2028 Base + 150dw, PM
  - »2031 Base, AM
  - »2031 Base, PM
  - »2031 Base + 230dw, AM
  - »2031 Base + 230dw, PM

### Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
<b>2023 Surveys</b>										
Stream B-C	D1	0.5	7.65	0.30	A	D2	0.4	8.02	0.28	A
Stream B-A		0.0	12.89	0.02	B		0.0	9.30	0.01	A
Stream C-AB		0.6	7.89	0.35	A		0.4	7.31	0.26	A
<b>2026 Base</b>										
Stream B-C	D3	0.5	7.81	0.32	A	D4	0.4	8.21	0.29	A
Stream B-A		0.0	13.21	0.02	B		0.0	9.49	0.01	A
Stream C-AB		0.6	8.08	0.36	A		0.4	7.47	0.27	A
<b>2026 Base + 50dw</b>										
Stream B-C	D5	0.5	7.97	0.33	A	D6	0.4	8.29	0.29	A
Stream B-A		0.0	13.27	0.02	B		0.0	9.56	0.01	A
Stream C-AB		0.6	8.14	0.37	A		0.4	7.58	0.28	A
<b>2027 Base</b>										
Stream B-C	D7	0.5	7.84	0.32	A	D8	0.4	8.26	0.29	A
Stream B-A		0.0	13.29	0.02	B		0.0	9.53	0.01	A
Stream C-AB		0.6	8.13	0.37	A		0.4	7.50	0.27	A
<b>2027 Base + 100dw</b>										
Stream B-C	D9	0.6	8.19	0.35	A	D10	0.5	8.38	0.30	A
Stream B-A		0.0	13.42	0.02	B		0.0	9.68	0.01	A
Stream C-AB		0.6	8.25	0.38	A		0.4	7.73	0.30	A
<b>2028 Base</b>										
Stream B-C	D11	0.5	7.88	0.32	A	D12	0.4	8.30	0.29	A
Stream B-A		0.0	13.38	0.02	B		0.0	9.58	0.01	A
Stream C-AB		0.6	8.18	0.37	A		0.4	7.54	0.28	A
<b>2028 Base + 150dw</b>										
Stream B-C	D13	0.6	8.43	0.36	A	D14	0.5	8.50	0.31	A
Stream B-A		0.0	13.57	0.02	B		0.0	9.80	0.01	A
Stream C-AB		0.7	8.36	0.38	A		0.5	7.89	0.31	A
<b>2031 Base</b>										
Stream B-C	D15	0.5	8.01	0.33	A	D16	0.5	8.43	0.30	A
Stream B-A		0.0	13.64	0.02	B		0.0	9.73	0.01	A
Stream C-AB		0.6	8.33	0.38	A		0.4	7.66	0.29	A
<b>2031 Base + 230dw</b>										
Stream B-C	D17	0.7	8.92	0.40	A	D18	0.5	8.77	0.33	A
Stream B-A		0.0	13.97	0.02	B		0.0	10.08	0.01	B
Stream C-AB		0.7	8.62	0.40	A		0.5	8.23	0.33	A

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

## File summary

### File Description

<b>Title</b>	B430 - Unnamed Road
<b>Location</b>	Heyford Park
<b>Site number</b>	
<b>Date</b>	19/10/2023
<b>Version</b>	
<b>Status</b>	(new file)
<b>Identifier</b>	
<b>Client</b>	Richborough
<b>Jobnumber</b>	T19562
<b>Enumerator</b>	AzureAD\NeilBateman
<b>Description</b>	

## Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

## Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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	2023 Surveys	AM	ONE HOUR	07:45	09:15	15
D2	2023 Surveys	PM	ONE HOUR	16:45	18:15	15
D3	2026 Base	AM	ONE HOUR	07:45	09:15	15
D4	2026 Base	PM	ONE HOUR	16:45	18:15	15
D5	2026 Base + 50dw	AM	ONE HOUR	07:45	09:15	15
D6	2026 Base + 50dw	PM	ONE HOUR	16:45	18:15	15
D7	2027 Base	AM	ONE HOUR	07:45	09:15	15
D8	2027 Base	PM	ONE HOUR	16:45	18:15	15
D9	2027 Base + 100dw	AM	ONE HOUR	07:45	09:15	15
D10	2027 Base + 100dw	PM	ONE HOUR	16:45	18:15	15
D11	2028 Base	AM	ONE HOUR	07:45	09:15	15
D12	2028 Base	PM	ONE HOUR	16:45	18:15	15
D13	2028 Base + 150dw	AM	ONE HOUR	07:45	09:15	15
D14	2028 Base + 150dw	PM	ONE HOUR	16:45	18:15	15
D15	2031 Base	AM	ONE HOUR	07:45	09:15	15
D16	2031 Base	PM	ONE HOUR	16:45	18:15	15
D17	2031 Base + 230dw	AM	ONE HOUR	07:45	09:15	15
D18	2031 Base + 230dw	PM	ONE HOUR	16:45	18:15	15

## Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

# 2023 Surveys, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B430 - Unnamed Road	T-Junction	Two-way	Two-way	Two-way		2.97	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.97	A

## Arms

### Arms

Arm	Name	Description	Arm type
A	B430 (S)		Major
B	Unnamed Road	Unnamed Road leading to Chilgrove Drive	Minor
C	B430 (N)		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.00		✓	3.50	250.0	✓	12.00

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	One lane plus flare	10.00	10.00	6.17	3.90	3.25		3.00	97	99

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	600	0.100	0.252	0.159	0.360
B-C	785	0.110	0.278	-	-
C-B	820	0.290	0.290	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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	2023 Surveys	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	238	100.000
B		✓	201	100.000
C		✓	718	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	5	233
	B	5	0	196
	C	481	237	0

## Vehicle Mix

### Heavy Vehicle %

	To			
	A	B	C	
From	A	0	67	8
	B	25	0	5
	C	6	6	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.30	7.65	0.5	A
B-A	0.02	12.89	0.0	B
C-AB	0.35	7.89	0.6	A
C-A				
A-B				
A-C				



### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	148	734	0.201	147	0.3	6.424	A
B-A	4	433	0.009	4	0.0	10.474	B
C-AB	178	768	0.232	177	0.3	6.441	A
C-A	362			362			
A-B	4			4			
A-C	175			175			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	176	724	0.243	176	0.3	6.896	A
B-A	4	400	0.011	4	0.0	11.368	B
C-AB	213	758	0.281	213	0.4	6.989	A
C-A	432			432			
A-B	4			4			
A-C	209			209			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	216	710	0.304	215	0.5	7.633	A
B-A	6	355	0.016	5	0.0	12.879	B
C-AB	261	744	0.351	260	0.6	7.873	A
C-A	530			530			
A-B	6			6			
A-C	257			257			

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	216	710	0.304	216	0.5	7.649	A
B-A	6	355	0.016	6	0.0	12.888	B
C-AB	261	744	0.351	261	0.6	7.893	A
C-A	530			530			
A-B	6			6			
A-C	257			257			

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	176	724	0.243	177	0.3	6.916	A
B-A	4	400	0.011	5	0.0	11.382	B
C-AB	213	758	0.281	214	0.4	7.012	A
C-A	432			432			
A-B	4			4			
A-C	209			209			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	148	734	0.201	148	0.3	6.453	A
B-A	4	433	0.009	4	0.0	10.494	B
C-AB	178	768	0.232	179	0.3	6.477	A
C-A	362			362			
A-B	4			4			
A-C	175			175			

# 2023 Surveys, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B430 - Unnamed Road	T-Junction	Two-way	Two-way	Two-way		2.75	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.75	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	2023 Surveys	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	377	100.000
B		✓	170	100.000
C		✓	392	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	371
	B	2	0	168
	C	226	166	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	20	5
	B	0	0	8
	C	4	5	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.28	8.02	0.4	A
B-A	0.01	9.30	0.0	A
C-AB	0.26	7.31	0.4	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	126	706	0.179	126	0.2	6.688	A
B-A	2	457	0.003	1	0.0	7.907	A
C-AB	125	738	0.169	124	0.2	6.147	A
C-A	170			170			
A-B	5			5			
A-C	279			279			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	151	691	0.219	151	0.3	7.198	A
B-A	2	429	0.004	2	0.0	8.435	A
C-AB	149	722	0.207	149	0.3	6.592	A
C-A	203			203			
A-B	5			5			
A-C	334			334			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	185	669	0.276	185	0.4	8.010	A
B-A	2	390	0.006	2	0.0	9.293	A
C-AB	183	700	0.261	182	0.4	7.299	A
C-A	249			249			
A-B	7			7			
A-C	408			408			

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	185	669	0.276	185	0.4	8.024	A
B-A	2	389	0.006	2	0.0	9.296	A
C-AB	183	700	0.261	183	0.4	7.307	A
C-A	249			249			
A-B	7			7			
A-C	408			408			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	151	691	0.219	151	0.3	7.215	A
B-A	2	428	0.004	2	0.0	8.442	A
C-AB	149	722	0.207	150	0.3	6.609	A
C-A	203			203			
A-B	5			5			
A-C	334			334			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	126	706	0.179	127	0.2	6.715	A
B-A	2	456	0.003	2	0.0	7.916	A
C-AB	125	738	0.169	125	0.2	6.169	A
C-A	170			170			
A-B	5			5			
A-C	279			279			

# 2026 Base, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B430 - Unnamed Road	T-Junction	Two-way	Two-way	Two-way		3.03	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.03	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)
D3	2026 Base	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	246	100.000
B		✓	208	100.000
C		✓	743	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	5	241
	B	5	0	203
	C	498	245	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	67	8
	B	25	0	5
	C	6	6	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.32	7.81	0.5	A
B-A	0.02	13.21	0.0	B
C-AB	0.36	8.08	0.6	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	153	732	0.209	152	0.3	6.501	A
B-A	4	428	0.009	4	0.0	10.616	B
C-AB	184	767	0.241	183	0.3	6.525	A
C-A	375			375			
A-B	4			4			
A-C	181			181			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	182	722	0.253	182	0.4	6.999	A
B-A	4	393	0.011	4	0.0	11.571	B
C-AB	220	756	0.291	220	0.4	7.110	A
C-A	448			448			
A-B	4			4			
A-C	217			217			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	224	707	0.316	223	0.5	7.795	A
B-A	6	346	0.016	5	0.0	13.203	B
C-AB	270	742	0.364	269	0.6	8.061	A
C-A	548			548			
A-B	6			6			
A-C	265			265			

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	224	707	0.316	223	0.5	7.811	A
B-A	6	346	0.016	6	0.0	13.213	B
C-AB	270	742	0.364	270	0.6	8.083	A
C-A	548			548			
A-B	6			6			
A-C	265			265			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	182	722	0.253	183	0.4	7.021	A
B-A	4	393	0.011	5	0.0	11.584	B
C-AB	220	756	0.291	221	0.4	7.135	A
C-A	448			448			
A-B	4			4			
A-C	217			217			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	153	732	0.209	153	0.3	6.531	A
B-A	4	427	0.009	4	0.0	10.635	B
C-AB	184	767	0.241	185	0.3	6.565	A
C-A	375			375			
A-B	4			4			
A-C	181			181			



# 2026 Base, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B430 - Unnamed Road	T-Junction	Two-way	Two-way	Two-way		2.81	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.81	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)
D4	2026 Base	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	391	100.000
B		✓	176	100.000
C		✓	406	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	385
	B	2	0	174
	C	234	172	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	20	5
	B	0	0	8
	C	4	5	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.29	8.21	0.4	A
B-A	0.01	9.49	0.0	A
C-AB	0.27	7.47	0.4	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	131	703	0.186	130	0.2	6.775	A
B-A	2	451	0.003	1	0.0	8.000	A
C-AB	129	735	0.176	129	0.2	6.224	A
C-A	176			176			
A-B	5			5			
A-C	290			290			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	156	687	0.228	156	0.3	7.319	A
B-A	2	422	0.004	2	0.0	8.562	A
C-AB	155	718	0.215	154	0.3	6.698	A
C-A	210			210			
A-B	5			5			
A-C	346			346			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	192	665	0.288	191	0.4	8.193	A
B-A	2	382	0.006	2	0.0	9.485	A
C-AB	189	695	0.272	189	0.4	7.456	A
C-A	258			258			
A-B	7			7			
A-C	424			424			

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	192	665	0.288	192	0.4	8.209	A
B-A	2	382	0.006	2	0.0	9.489	A
C-AB	189	695	0.272	189	0.4	7.467	A
C-A	258			258			
A-B	7			7			
A-C	424			424			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	156	687	0.228	157	0.3	7.340	A
B-A	2	422	0.004	2	0.0	8.568	A
C-AB	155	718	0.215	155	0.3	6.715	A
C-A	210			210			
A-B	5			5			
A-C	346			346			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	131	703	0.186	131	0.2	6.803	A
B-A	2	451	0.003	2	0.0	8.009	A
C-AB	129	735	0.176	130	0.2	6.249	A
C-A	176			176			
A-B	5			5			
A-C	290			290			

# 2026 Base + 50dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B430 - Unnamed Road	T-Junction	Two-way	Two-way	Two-way		3.12	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.12	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)
D5	2026 Base + 50dw	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	246	100.000
B		✓	217	100.000
C		✓	746	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	5	241
	B	5	0	212
	C	498	248	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	67	8
	B	25	0	5
	C	6	6	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.33	7.97	0.5	A
B-A	0.02	13.27	0.0	B
C-AB	0.37	8.14	0.6	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	160	732	0.218	158	0.3	6.575	A
B-A	4	427	0.009	4	0.0	10.638	B
C-AB	187	767	0.244	185	0.3	6.550	A
C-A	375			375			
A-B	4			4			
A-C	181			181			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	191	722	0.264	190	0.4	7.106	A
B-A	4	392	0.011	4	0.0	11.603	B
C-AB	223	756	0.295	223	0.4	7.146	A
C-A	448			448			
A-B	4			4			
A-C	217			217			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	233	707	0.330	233	0.5	7.955	A
B-A	6	345	0.016	5	0.0	13.261	B
C-AB	273	742	0.368	272	0.6	8.116	A
C-A	548			548			
A-B	6			6			
A-C	265			265			

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	233	707	0.330	233	0.5	7.974	A
B-A	6	345	0.016	6	0.0	13.272	B
C-AB	273	742	0.368	273	0.6	8.140	A
C-A	548			548			
A-B	6			6			
A-C	265			265			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	191	722	0.264	191	0.4	7.129	A
B-A	4	392	0.011	5	0.0	11.617	B
C-AB	223	756	0.295	224	0.4	7.172	A
C-A	448			448			
A-B	4			4			
A-C	217			217			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	160	732	0.218	160	0.3	6.609	A
B-A	4	426	0.009	4	0.0	10.657	B
C-AB	187	767	0.244	187	0.3	6.588	A
C-A	375			375			
A-B	4			4			
A-C	181			181			

# 2026 Base + 50dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B430 - Unnamed Road	T-Junction	Two-way	Two-way	Two-way		2.90	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.90	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)
D6	2026 Base + 50dw	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	391	100.000
B		✓	180	100.000
C		✓	413	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	385
	B	2	0	178
	C	234	179	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	20	5
	B	0	0	8
	C	4	5	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.29	8.29	0.4	A
B-A	0.01	9.56	0.0	A
C-AB	0.28	7.58	0.4	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	134	703	0.191	133	0.3	6.811	A
B-A	2	450	0.003	1	0.0	8.034	A
C-AB	135	735	0.183	134	0.2	6.279	A
C-A	176			176			
A-B	5			5			
A-C	290			290			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	160	687	0.233	160	0.3	7.369	A
B-A	2	420	0.004	2	0.0	8.610	A
C-AB	161	718	0.224	161	0.3	6.774	A
C-A	210			210			
A-B	5			5			
A-C	346			346			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	196	665	0.295	195	0.4	8.270	A
B-A	2	379	0.006	2	0.0	9.558	A
C-AB	197	695	0.283	197	0.4	7.571	A
C-A	258			258			
A-B	7			7			
A-C	424			424			

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	196	665	0.295	196	0.4	8.286	A
B-A	2	379	0.006	2	0.0	9.562	A
C-AB	197	695	0.283	197	0.4	7.583	A
C-A	258			258			
A-B	7			7			
A-C	424			424			



17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	160	687	0.233	160	0.3	7.388	A
B-A	2	420	0.004	2	0.0	8.617	A
C-AB	161	718	0.224	161	0.3	6.792	A
C-A	210			210			
A-B	5			5			
A-C	346			346			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	134	703	0.191	134	0.3	6.839	A
B-A	2	449	0.003	2	0.0	8.042	A
C-AB	135	735	0.183	135	0.2	6.305	A
C-A	176			176			
A-B	5			5			
A-C	290			290			

# 2027 Base, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B430 - Unnamed Road	T-Junction	Two-way	Two-way	Two-way		3.05	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.05	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)
D7	2027 Base	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	248	100.000
B		✓	209	100.000
C		✓	749	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	5	243
	B	5	0	204
	C	502	247	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	67	8
	B	25	0	5
	C	6	6	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.32	7.84	0.5	A
B-A	0.02	13.29	0.0	B
C-AB	0.37	8.13	0.6	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	154	732	0.210	152	0.3	6.514	A
B-A	4	426	0.009	4	0.0	10.652	B
C-AB	186	766	0.243	185	0.3	6.546	A
C-A	378			378			
A-B	4			4			
A-C	183			183			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	183	721	0.254	183	0.4	7.018	A
B-A	4	392	0.011	4	0.0	11.621	B
C-AB	222	756	0.294	222	0.4	7.141	A
C-A	451			451			
A-B	4			4			
A-C	218			218			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	225	707	0.318	224	0.5	7.822	A
B-A	6	344	0.016	5	0.0	13.284	B
C-AB	272	741	0.367	271	0.6	8.108	A
C-A	553			553			
A-B	6			6			
A-C	268			268			

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	225	707	0.318	225	0.5	7.839	A
B-A	6	344	0.016	6	0.0	13.295	B
C-AB	272	741	0.367	272	0.6	8.132	A
C-A	553			553			
A-B	6			6			
A-C	268			268			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	183	721	0.254	184	0.4	7.042	A
B-A	4	391	0.011	5	0.0	11.637	B
C-AB	222	756	0.294	223	0.4	7.167	A
C-A	451			451			
A-B	4			4			
A-C	218			218			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	154	732	0.210	154	0.3	6.545	A
B-A	4	425	0.009	4	0.0	10.671	B
C-AB	186	766	0.243	186	0.3	6.584	A
C-A	378			378			
A-B	4			4			
A-C	183			183			

# 2027 Base, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B430 - Unnamed Road	T-Junction	Two-way	Two-way	Two-way		2.82	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.82	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)
D8	2027 Base	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	394	100.000
B		✓	178	100.000
C		✓	409	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	388
	B	2	0	176
	C	236	173	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	20	5
	B	0	0	8
	C	4	5	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.29	8.26	0.4	A
B-A	0.01	9.53	0.0	A
C-AB	0.27	7.50	0.4	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	133	702	0.189	132	0.2	6.800	A
B-A	2	450	0.003	1	0.0	8.019	A
C-AB	130	734	0.177	129	0.2	6.239	A
C-A	178			178			
A-B	5			5			
A-C	292			292			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	158	686	0.231	158	0.3	7.354	A
B-A	2	421	0.004	2	0.0	8.589	A
C-AB	156	718	0.217	155	0.3	6.718	A
C-A	212			212			
A-B	5			5			
A-C	349			349			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	194	664	0.292	193	0.4	8.247	A
B-A	2	380	0.006	2	0.0	9.526	A
C-AB	190	695	0.274	190	0.4	7.486	A
C-A	260			260			
A-B	7			7			
A-C	427			427			

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	194	664	0.292	194	0.4	8.263	A
B-A	2	380	0.006	2	0.0	9.530	A
C-AB	190	695	0.274	190	0.4	7.498	A
C-A	260			260			
A-B	7			7			
A-C	427			427			

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	158	686	0.231	159	0.3	7.376	A
B-A	2	421	0.004	2	0.0	8.596	A
C-AB	156	718	0.217	156	0.3	6.733	A
C-A	212			212			
A-B	5			5			
A-C	349			349			

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	133	702	0.189	133	0.3	6.831	A
B-A	2	450	0.003	2	0.0	8.029	A
C-AB	130	734	0.177	131	0.2	6.264	A
C-A	178			178			
A-B	5			5			
A-C	292			292			

# 2027 Base + 100dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B430 - Unnamed Road	T-Junction	Two-way	Two-way	Two-way		3.23	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.23	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)
D9	2027 Base + 100dw	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	248	100.000
B		✓	228	100.000
C		✓	755	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	5	243
	B	5	0	223
	C	502	253	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	67	8
	B	25	0	5
	C	6	6	0



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.35	8.19	0.6	A
B-A	0.02	13.42	0.0	B
C-AB	0.38	8.25	0.6	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	168	732	0.229	167	0.3	6.674	A
B-A	4	424	0.009	4	0.0	10.696	B
C-AB	190	766	0.249	189	0.3	6.595	A
C-A	378			378			
A-B	4			4			
A-C	183			183			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	200	721	0.278	200	0.4	7.248	A
B-A	4	389	0.012	4	0.0	11.688	B
C-AB	227	756	0.301	227	0.5	7.211	A
C-A	451			451			
A-B	4			4			
A-C	218			218			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	246	707	0.347	245	0.6	8.173	A
B-A	6	341	0.016	5	0.0	13.407	B
C-AB	279	741	0.376	278	0.6	8.210	A
C-A	553			553			
A-B	6			6			
A-C	268			268			

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	246	707	0.347	246	0.6	8.195	A
B-A	6	341	0.016	6	0.0	13.418	B
C-AB	279	741	0.376	279	0.6	8.248	A
C-A	553			553			
A-B	6			6			
A-C	268			268			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	200	721	0.278	201	0.4	7.276	A
B-A	4	389	0.012	5	0.0	11.703	B
C-AB	227	756	0.301	228	0.5	7.241	A
C-A	451			451			
A-B	4			4			
A-C	218			218			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	168	732	0.229	168	0.3	6.712	A
B-A	4	424	0.009	4	0.0	10.716	B
C-AB	190	766	0.249	191	0.4	6.639	A
C-A	378			378			
A-B	4			4			
A-C	183			183			

# 2027 Base + 100dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B430 - Unnamed Road	T-Junction	Two-way	Two-way	Two-way		2.99	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.99	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)
D10	2027 Base + 100dw	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	394	100.000
B		✓	184	100.000
C		✓	423	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	388
	B	2	0	182
	C	236	187	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	20	5
	B	0	0	8
	C	4	5	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.30	8.38	0.5	A
B-A	0.01	9.68	0.0	A
C-AB	0.30	7.73	0.4	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	137	702	0.195	136	0.3	6.852	A
B-A	2	447	0.003	1	0.0	8.088	A
C-AB	141	734	0.192	140	0.2	6.347	A
C-A	178			178			
A-B	5			5			
A-C	292			292			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	164	686	0.238	163	0.3	7.427	A
B-A	2	416	0.004	2	0.0	8.685	A
C-AB	168	718	0.234	168	0.3	6.872	A
C-A	212			212			
A-B	5			5			
A-C	349			349			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	200	664	0.302	200	0.5	8.363	A
B-A	2	374	0.006	2	0.0	9.674	A
C-AB	206	695	0.296	205	0.4	7.720	A
C-A	260			260			
A-B	7			7			
A-C	427			427			

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	200	664	0.302	200	0.5	8.381	A
B-A	2	374	0.006	2	0.0	9.678	A
C-AB	206	695	0.296	206	0.4	7.735	A
C-A	260			260			
A-B	7			7			
A-C	427			427			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	164	686	0.238	164	0.3	7.450	A
B-A	2	416	0.004	2	0.0	8.691	A
C-AB	168	718	0.234	169	0.3	6.889	A
C-A	212			212			
A-B	5			5			
A-C	349			349			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	137	702	0.195	137	0.3	6.886	A
B-A	2	446	0.003	2	0.0	8.098	A
C-AB	141	734	0.192	141	0.3	6.373	A
C-A	178			178			
A-B	5			5			
A-C	292			292			

# 2028 Base, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B430 - Unnamed Road	T-Junction	Two-way	Two-way	Two-way		3.07	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.07	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)
D11	2028 Base	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	250	100.000
B		✓	211	100.000
C		✓	755	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	5	245
	B	5	0	206
	C	506	249	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	67	8
	B	25	0	5
	C	6	6	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.32	7.88	0.5	A
B-A	0.02	13.38	0.0	B
C-AB	0.37	8.18	0.6	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	155	731	0.212	154	0.3	6.536	A
B-A	4	425	0.009	4	0.0	10.687	B
C-AB	187	766	0.245	186	0.3	6.568	A
C-A	381			381			
A-B	4			4			
A-C	184			184			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	185	721	0.257	185	0.4	7.048	A
B-A	4	390	0.012	4	0.0	11.672	B
C-AB	224	755	0.296	223	0.4	7.165	A
C-A	455			455			
A-B	4			4			
A-C	220			220			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	227	706	0.321	226	0.5	7.868	A
B-A	6	342	0.016	5	0.0	13.368	B
C-AB	274	741	0.370	273	0.6	8.157	A
C-A	557			557			
A-B	6			6			
A-C	270			270			

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	227	706	0.321	227	0.5	7.885	A
B-A	6	342	0.016	6	0.0	13.378	B
C-AB	274	741	0.370	274	0.6	8.181	A
C-A	557			557			
A-B	6			6			
A-C	270			270			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	185	721	0.257	186	0.4	7.070	A
B-A	4	390	0.012	5	0.0	11.686	B
C-AB	224	755	0.296	225	0.5	7.201	A
C-A	455			455			
A-B	4			4			
A-C	220			220			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	155	731	0.212	155	0.3	6.569	A
B-A	4	424	0.009	4	0.0	10.709	B
C-AB	187	766	0.245	188	0.3	6.606	A
C-A	381			381			
A-B	4			4			
A-C	184			184			



# 2028 Base, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B430 - Unnamed Road	T-Junction	Two-way	Two-way	Two-way		2.84	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.84	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)
D12	2028 Base	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	397	100.000
B		✓	179	100.000
C		✓	413	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	391
	B	2	0	177
	C	238	175	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	20	5
	B	0	0	8
	C	4	5	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.29	8.30	0.4	A
B-A	0.01	9.58	0.0	A
C-AB	0.28	7.54	0.4	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	133	702	0.190	132	0.3	6.817	A
B-A	2	449	0.003	1	0.0	8.043	A
C-AB	132	734	0.180	131	0.2	6.261	A
C-A	179			179			
A-B	5			5			
A-C	294			294			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	159	686	0.232	159	0.3	7.377	A
B-A	2	419	0.004	2	0.0	8.623	A
C-AB	157	717	0.219	157	0.3	6.749	A
C-A	214			214			
A-B	5			5			
A-C	352			352			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	195	663	0.294	194	0.4	8.282	A
B-A	2	378	0.006	2	0.0	9.577	A
C-AB	193	694	0.278	192	0.4	7.533	A
C-A	262			262			
A-B	7			7			
A-C	430			430			

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	195	663	0.294	195	0.4	8.299	A
B-A	2	378	0.006	2	0.0	9.581	A
C-AB	193	694	0.278	193	0.4	7.545	A
C-A	262			262			
A-B	7			7			
A-C	430			430			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	159	686	0.232	160	0.3	7.399	A
B-A	2	419	0.004	2	0.0	8.628	A
C-AB	157	717	0.219	158	0.3	6.767	A
C-A	214			214			
A-B	5			5			
A-C	352			352			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	133	702	0.190	134	0.3	6.845	A
B-A	2	449	0.003	2	0.0	8.051	A
C-AB	132	734	0.180	132	0.2	6.287	A
C-A	179			179			
A-B	5			5			
A-C	294			294			

# 2028 Base + 150dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B430 - Unnamed Road	T-Junction	Two-way	Two-way	Two-way		3.35	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.35	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)
D13	2028 Base + 150dw	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	250	100.000
B		✓	239	100.000
C		✓	764	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	5	245
	B	5	0	234
	C	506	258	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	67	8
	B	25	0	5
	C	6	6	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.36	8.43	0.6	A
B-A	0.02	13.57	0.0	B
C-AB	0.38	8.36	0.7	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	176	731	0.241	175	0.3	6.783	A
B-A	4	422	0.009	4	0.0	10.754	B
C-AB	194	766	0.254	193	0.4	6.644	A
C-A	381			381			
A-B	4			4			
A-C	184			184			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	210	721	0.292	210	0.4	7.388	A
B-A	4	387	0.012	4	0.0	11.776	B
C-AB	232	755	0.307	232	0.5	7.280	A
C-A	455			455			
A-B	4			4			
A-C	220			220			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	258	706	0.365	257	0.6	8.402	A
B-A	6	337	0.016	5	0.0	13.559	B
C-AB	284	741	0.384	283	0.7	8.332	A
C-A	557			557			
A-B	6			6			
A-C	270			270			

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	258	706	0.365	258	0.6	8.427	A
B-A	6	337	0.016	6	0.0	13.571	B
C-AB	284	741	0.384	284	0.7	8.359	A
C-A	557			557			
A-B	6			6			
A-C	270			270			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	210	721	0.292	211	0.4	7.426	A
B-A	4	386	0.012	5	0.0	11.793	B
C-AB	232	755	0.307	233	0.5	7.314	A
C-A	455			455			
A-B	4			4			
A-C	220			220			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	176	731	0.241	177	0.3	6.821	A
B-A	4	421	0.009	4	0.0	10.775	B
C-AB	194	766	0.254	195	0.4	6.686	A
C-A	381			381			
A-B	4			4			
A-C	184			184			

# 2028 Base + 150dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B430 - Unnamed Road	T-Junction	Two-way	Two-way	Two-way		3.09	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.09	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)
D14	2028 Base + 150dw	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	397	100.000
B		✓	189	100.000
C		✓	433	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	391
	B	2	0	187
	C	238	195	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	20	5
	B	0	0	8
	C	4	5	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.31	8.50	0.5	A
B-A	0.01	9.80	0.0	A
C-AB	0.31	7.89	0.5	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	141	702	0.201	140	0.3	6.905	A
B-A	2	444	0.003	1	0.0	8.143	A
C-AB	147	734	0.200	146	0.3	6.419	A
C-A	179			179			
A-B	5			5			
A-C	294			294			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	168	686	0.245	168	0.3	7.503	A
B-A	2	413	0.004	2	0.0	8.762	A
C-AB	175	717	0.245	175	0.3	6.973	A
C-A	214			214			
A-B	5			5			
A-C	352			352			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	206	663	0.310	205	0.5	8.479	A
B-A	2	370	0.006	2	0.0	9.793	A
C-AB	215	694	0.310	214	0.5	7.876	A
C-A	262			262			
A-B	7			7			
A-C	430			430			

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	206	663	0.310	206	0.5	8.499	A
B-A	2	370	0.006	2	0.0	9.799	A
C-AB	215	694	0.310	215	0.5	7.893	A
C-A	262			262			
A-B	7			7			
A-C	430			430			



17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	168	686	0.245	169	0.4	7.529	A
B-A	2	412	0.004	2	0.0	8.769	A
C-AB	175	717	0.245	176	0.3	6.992	A
C-A	214			214			
A-B	5			5			
A-C	352			352			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	141	702	0.201	141	0.3	6.938	A
B-A	2	443	0.003	2	0.0	8.154	A
C-AB	147	734	0.200	147	0.3	6.447	A
C-A	179			179			
A-B	5			5			
A-C	294			294			

# 2031 Base, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B430 - Unnamed Road	T-Junction	Two-way	Two-way	Two-way		3.12	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.12	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)
D15	2031 Base	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	256	100.000
B		✓	216	100.000
C		✓	773	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	5	251
	B	5	0	211
	C	518	255	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	67	8
	B	25	0	5
	C	6	6	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.33	8.01	0.5	A
B-A	0.02	13.64	0.0	B
C-AB	0.38	8.33	0.6	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	159	730	0.218	158	0.3	6.591	A
B-A	4	420	0.009	4	0.0	10.796	B
C-AB	192	764	0.251	191	0.4	6.633	A
C-A	390			390			
A-B	4			4			
A-C	189			189			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	190	719	0.264	189	0.4	7.128	A
B-A	4	385	0.012	4	0.0	11.829	B
C-AB	229	754	0.304	229	0.5	7.264	A
C-A	466			466			
A-B	4			4			
A-C	226			226			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	232	704	0.330	232	0.5	7.989	A
B-A	6	336	0.016	5	0.0	13.624	B
C-AB	281	739	0.380	280	0.6	8.307	A
C-A	570			570			
A-B	6			6			
A-C	276			276			

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	232	704	0.330	232	0.5	8.008	A
B-A	6	335	0.016	6	0.0	13.635	B
C-AB	281	739	0.380	281	0.6	8.333	A
C-A	570			570			
A-B	6			6			
A-C	276			276			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	190	719	0.264	190	0.4	7.151	A
B-A	4	384	0.012	5	0.0	11.844	B
C-AB	229	754	0.304	230	0.5	7.298	A
C-A	466			466			
A-B	4			4			
A-C	226			226			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	159	730	0.218	159	0.3	6.625	A
B-A	4	420	0.009	4	0.0	10.816	B
C-AB	192	764	0.251	192	0.4	6.677	A
C-A	390			390			
A-B	4			4			
A-C	189			189			

# 2031 Base, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B430 - Unnamed Road	T-Junction	Two-way	Two-way	Two-way		2.88	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.88	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)
D16	2031 Base	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	407	100.000
B		✓	183	100.000
C		✓	423	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	401
	B	2	0	181
	C	244	179	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	20	5
	B	0	0	8
	C	4	5	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.30	8.43	0.5	A
B-A	0.01	9.73	0.0	A
C-AB	0.29	7.66	0.4	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	136	700	0.195	135	0.3	6.876	A
B-A	2	445	0.003	1	0.0	8.111	A
C-AB	135	732	0.184	134	0.2	6.324	A
C-A	184			184			
A-B	5			5			
A-C	302			302			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	163	683	0.238	162	0.3	7.461	A
B-A	2	415	0.004	2	0.0	8.716	A
C-AB	161	714	0.225	161	0.3	6.825	A
C-A	219			219			
A-B	5			5			
A-C	360			360			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	199	660	0.302	199	0.5	8.415	A
B-A	2	373	0.006	2	0.0	9.721	A
C-AB	197	690	0.285	197	0.4	7.649	A
C-A	269			269			
A-B	7			7			
A-C	442			442			

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	199	660	0.302	199	0.5	8.433	A
B-A	2	372	0.006	2	0.0	9.725	A
C-AB	197	690	0.285	197	0.4	7.661	A
C-A	269			269			
A-B	7			7			
A-C	442			442			

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	163	683	0.238	163	0.3	7.484	A
B-A	2	415	0.004	2	0.0	8.724	A
C-AB	161	714	0.225	161	0.3	6.841	A
C-A	219			219			
A-B	5			5			
A-C	360			360			

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	136	700	0.195	137	0.3	6.910	A
B-A	2	445	0.003	2	0.0	8.121	A
C-AB	135	732	0.184	135	0.2	6.339	A
C-A	184			184			
A-B	5			5			
A-C	302			302			

# 2031 Base + 230dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B430 - Unnamed Road	T-Junction	Two-way	Two-way	Two-way		3.58	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.58	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)
D17	2031 Base + 230dw	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	256	100.000
B		✓	260	100.000
C		✓	787	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	5	251
	B	5	0	255
	C	518	269	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	67	8
	B	25	0	5
	C	6	6	0



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.40	8.92	0.7	A
B-A	0.02	13.97	0.0	B
C-AB	0.40	8.62	0.7	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	192	730	0.263	190	0.4	6.989	A
B-A	4	416	0.009	4	0.0	10.905	B
C-AB	203	764	0.265	201	0.4	6.754	A
C-A	390			390			
A-B	4			4			
A-C	189			189			

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	229	719	0.319	229	0.5	7.700	A
B-A	4	379	0.012	4	0.0	12.001	B
C-AB	242	754	0.321	241	0.5	7.443	A
C-A	466			466			
A-B	4			4			
A-C	226			226			

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	281	704	0.399	280	0.7	8.892	A
B-A	6	328	0.017	5	0.0	13.956	B
C-AB	296	739	0.401	295	0.7	8.592	A
C-A	570			570			
A-B	6			6			
A-C	276			276			

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	281	704	0.399	281	0.7	8.924	A
B-A	6	328	0.017	6	0.0	13.971	B
C-AB	296	739	0.401	296	0.7	8.624	A
C-A	570			570			
A-B	6			6			
A-C	276			276			

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	229	719	0.319	230	0.5	7.738	A
B-A	4	379	0.012	5	0.0	12.021	B
C-AB	242	754	0.321	243	0.5	7.480	A
C-A	466			466			
A-B	4			4			
A-C	226			226			

**09:00 - 09:15**

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	192	730	0.263	192	0.4	7.040	A
B-A	4	416	0.009	4	0.0	10.930	B
C-AB	203	764	0.265	203	0.4	6.801	A
C-A	390			390			
A-B	4			4			
A-C	189			189			

# 2031 Base + 230dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B430 - Unnamed Road	T-Junction	Two-way	Two-way	Two-way		3.28	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.28	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)
D18	2031 Base + 230dw	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	407	100.000
B		✓	199	100.000
C		✓	454	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	401
	B	2	0	197
	C	244	210	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	20	5
	B	0	0	8
	C	4	5	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.33	8.77	0.5	A
B-A	0.01	10.08	0.0	B
C-AB	0.33	8.23	0.5	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	148	700	0.212	147	0.3	7.023	A
B-A	2	437	0.003	1	0.0	8.269	A
C-AB	158	732	0.216	157	0.3	6.565	A
C-A	184			184			
A-B	5			5			
A-C	302			302			

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	177	683	0.259	177	0.4	7.672	A
B-A	2	404	0.004	2	0.0	8.939	A
C-AB	189	714	0.264	188	0.4	7.184	A
C-A	219			219			
A-B	5			5			
A-C	360			360			

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	217	660	0.329	216	0.5	8.747	A
B-A	2	360	0.006	2	0.0	10.073	B
C-AB	231	690	0.335	231	0.5	8.211	A
C-A	269			269			
A-B	7			7			
A-C	442			442			

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	217	660	0.329	217	0.5	8.769	A
B-A	2	359	0.006	2	0.0	10.080	B
C-AB	231	690	0.335	231	0.5	8.232	A
C-A	269			269			
A-B	7			7			
A-C	442			442			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	177	683	0.259	178	0.4	7.700	A
B-A	2	404	0.004	2	0.0	8.948	A
C-AB	189	714	0.264	189	0.4	7.208	A
C-A	219			219			
A-B	5			5			
A-C	360			360			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	148	700	0.212	149	0.3	7.060	A
B-A	2	436	0.003	2	0.0	8.281	A
C-AB	158	732	0.216	158	0.3	6.599	A
C-A	184			184			
A-B	5			5			
A-C	302			302			

## APPENDIX H17

### B4030/UNNAMED ROAD MODELLING OUTPUT

## B4030/Unnamed Road – Junction Assessment Results

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
<b>2023 Base</b>						
Unnamed Road LT	0.40	1	10	0.24	0	7
Unnamed Road RT	0.24	0	15	0.11	0	12
B4030 (S) RT	0.29	1	8	0.30	1	8
<b>2026 Base</b>						
Unnamed Road LT	0.42	1	10	0.24	0	7
Unnamed Road RT	0.26	0	15	0.12	0	13
B4030 (S) RT	0.31	1	8	0.32	1	8
<b>2026 Base + 50 dwellings</b>						
Unnamed Road LT	0.43	1	10	0.25	0	7
Unnamed Road RT	0.26	0	16	0.12	0	13
B4030 (S) RT	0.31	1	9	0.32	1	8
<b>2027 Base</b>						
Unnamed Road LT	0.43	1	10	0.25	0	7
Unnamed Road RT	0.26	0	16	0.12	0	13
B4030 (S) RT	0.31	1	9	0.32	1	8
<b>2027 Base + 100 dwellings</b>						
Unnamed Road LT	0.44	1	11	0.25	0	7
Unnamed Road RT	0.27	0	16	0.12	0	13
B4030 (S) RT	0.31	1	9	0.33	1	9
<b>2028 Base</b>						
Unnamed Road LT	0.43	1	10	0.25	0	7
Unnamed Road RT	0.27	0	16	0.12	0	13
B4030 (S) RT	0.31	1	9	0.32	1	8
<b>2028 Base + 150 dwellings</b>						
Unnamed Road LT	0.46	1	11	0.26	0	7
Unnamed Road RT	0.27	0	16	0.12	0	13
B4030 (S) RT	0.32	1	9	0.34	1	9
<b>2031 Base</b>						
Unnamed Road LT	0.44	1	11	0.26	0	7
Unnamed Road RT	0.28	0	16	0.12	0	13
B4030 (S) RT	0.32	1	9	0.33	1	9
<b>2031 Base + 230 dwellings</b>						
Unnamed Road LT	0.49	1	12	0.27	0	7
Unnamed Road RT	0.29	0	17	0.13	0	13
B4030 (S) RT	0.33	1	9	0.36	1	9

RFC is Ratio of Flow to Capacity, Queue is mean max in PCUs, Delay is seconds per PCU.

# Junctions 10

## PICADY 10 - Priority Intersection Module

Version: 10.1.0.1820

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**Filename:** T19562 - B4030-Unnamed Road - Existing v3 12102023.j10

**Path:** C:\Users\NeilBateman\Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\2019\T19562 Heyford Park\Junction Assessments\Picady

**Report generation date:** 19/10/2023 10:43:13

- 
- »2023 Survey, AM
  - »2023 Survey, PM
  - »2026 Base, AM
  - »2026 Base, PM
  - »2026 Base +50dw, AM
  - »2026 Base +50dw, PM
  - »2027 Base, AM
  - »2027 Base, PM
  - »2027 Base +100dw, AM
  - »2027 Base +100dw, PM
  - »2028 Base, AM
  - »2028 Base, PM
  - »2028 Base +150dw, AM
  - »2028 Base +150dw, PM
  - »2031 Base, AM
  - »2031 Base, PM
  - »2031 Base +230dw, AM
  - »2031 Base +230dw, PM



### Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
<b>2023 Survey</b>										
Stream B-C	D1	0.7	9.82	0.40	A	D2	0.3	6.97	0.24	A
Stream B-A		0.3	14.88	0.24	B		0.1	12.36	0.11	B
Stream C-AB		0.5	8.35	0.29	A		0.5	8.19	0.30	A
<b>2026 Base</b>										
Stream B-C	D3	0.8	10.22	0.42	B	D4	0.3	7.08	0.24	A
Stream B-A		0.4	15.49	0.26	C		0.1	12.61	0.12	B
Stream C-AB		0.5	8.48	0.31	A		0.5	8.33	0.32	A
<b>2026 Base +50dw</b>										
Stream B-C	D5	0.8	10.39	0.43	B	D6	0.3	7.12	0.25	A
Stream B-A		0.4	15.69	0.26	C		0.1	12.70	0.12	B
Stream C-AB		0.5	8.52	0.31	A		0.5	8.41	0.32	A
<b>2027 Base</b>										
Stream B-C	D7	0.8	10.29	0.43	B	D8	0.3	7.14	0.25	A
Stream B-A		0.4	15.59	0.26	C		0.1	12.70	0.12	B
Stream C-AB		0.5	8.51	0.31	A		0.5	8.38	0.32	A
<b>2027 Base +100dw</b>										
Stream B-C	D9	0.8	10.53	0.44	B	D10	0.3	7.19	0.25	A
Stream B-A		0.4	15.99	0.27	C		0.1	12.86	0.12	B
Stream C-AB		0.5	8.59	0.31	A		0.5	8.53	0.33	A
<b>2028 Base</b>										
Stream B-C	D11	0.8	10.41	0.43	B	D12	0.3	7.16	0.25	A
Stream B-A		0.4	15.78	0.27	C		0.1	12.75	0.12	B
Stream C-AB		0.5	8.55	0.31	A		0.5	8.41	0.32	A
<b>2028 Base +150dw</b>										
Stream B-C	D13	0.9	10.84	0.46	B	D14	0.4	7.23	0.26	A
Stream B-A		0.4	16.39	0.27	C		0.1	13.02	0.12	B
Stream C-AB		0.5	8.65	0.32	A		0.5	8.66	0.34	A
<b>2031 Base</b>										
Stream B-C	D15	0.8	10.74	0.44	B	D16	0.4	7.26	0.26	A
Stream B-A		0.4	16.27	0.28	C		0.1	12.96	0.12	B
Stream C-AB		0.5	8.65	0.32	A		0.5	8.53	0.33	A
<b>2031 Base +230dw</b>										
Stream B-C	D17	1.0	11.53	0.49	B	D18	0.4	7.39	0.27	A
Stream B-A		0.4	17.35	0.29	C		0.2	13.38	0.13	B
Stream C-AB		0.6	8.82	0.33	A		0.6	8.92	0.36	A

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

## File summary

### File Description

<b>Title</b>	B4030/Unnamed Road
<b>Location</b>	Heyford Park
<b>Site number</b>	
<b>Date</b>	17/10/2023
<b>Version</b>	
<b>Status</b>	(new file)
<b>Identifier</b>	
<b>Client</b>	Richborough Estates
<b>Jobnumber</b>	T19562
<b>Enumerator</b>	James Parker
<b>Description</b>	

## Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

## Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

## 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	2023 Survey	AM	ONE HOUR	07:45	09:15	15	✓
D2	2023 Survey	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Base +50dw	AM	ONE HOUR	07:45	09:15	15	✓
D6	2026 Base +50dw	PM	ONE HOUR	16:45	18:15	15	✓
D7	2027 Base	AM	ONE HOUR	07:45	09:15	15	✓
D8	2027 Base	PM	ONE HOUR	16:45	18:15	15	✓
D9	2027 Base +100dw	AM	ONE HOUR	07:45	09:15	15	✓
D10	2027 Base +100dw	PM	ONE HOUR	16:45	18:15	15	✓
D11	2028 Base	AM	ONE HOUR	07:45	09:15	15	✓
D12	2028 Base	PM	ONE HOUR	16:45	18:15	15	✓
D13	2028 Base +150dw	AM	ONE HOUR	07:45	09:15	15	✓
D14	2028 Base +150dw	PM	ONE HOUR	16:45	18:15	15	✓
D15	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓
D16	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓
D17	2031 Base +230dw	AM	ONE HOUR	07:45	09:15	15	✓
D18	2031 Base +230dw	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

# 2023 Survey, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		5.92	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.92	A

## Arms

### Arms

Arm	Name	Description	Arm type
A	B4030 (W)	Lower Heyford Rd	Major
B	Unnamed		Minor
C	B4030 (E)		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.50		✓	2.75	125.0	✓	2.00

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	One lane plus flare	5.92	5.11	4.50	4.08	3.75	✓	1.00	138	105

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	474	0.084	0.213	0.134	0.305
B-C	756	0.113	0.286	-	-
C-B	685	0.260	0.260	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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	2023 Survey	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	174	100.000
B		ONE HOUR	✓	313	100.000
C		ONE HOUR	✓	340	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	36	138
	B	74	0	239
	C	170	170	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	3	4
	B	4	0	6
	C	10	7	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.40	9.82	0.7	A	219	329
B-A	0.24	14.88	0.3	B	68	102
C-AB	0.29	8.35	0.5	A	159	239
C-A					153	229
A-B					33	50
A-C					127	190

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	180	45	694	0.259	178	0.0	0.4	7.386	A
B-A	56	14	386	0.144	55	0.0	0.2	11.274	B
C-AB	129	32	657	0.197	128	0.0	0.3	7.271	A
C-A	127	32			127				
A-B	27	7			27				
A-C	104	26			104				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	215	54	677	0.317	214	0.4	0.5	8.233	A
B-A	67	17	365	0.182	66	0.2	0.2	12.505	B
C-AB	155	39	655	0.237	155	0.3	0.3	7.707	A
C-A	150	38			150				
A-B	32	8			32				
A-C	124	31			124				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	263	66	652	0.404	262	0.5	0.7	9.770	A
B-A	81	20	333	0.244	81	0.2	0.3	14.817	B
C-AB	193	48	654	0.295	192	0.3	0.5	8.337	A
C-A	182	45			182				
A-B	40	10			40				
A-C	152	38			152				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	263	66	651	0.404	263	0.7	0.7	9.825	A
B-A	81	20	333	0.245	81	0.3	0.3	14.880	B
C-AB	193	48	654	0.295	193	0.5	0.5	8.354	A
C-A	182	45			182				
A-B	40	10			40				
A-C	152	38			152				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	215	54	677	0.318	216	0.7	0.5	8.292	A
B-A	67	17	365	0.182	67	0.3	0.2	12.570	B
C-AB	155	39	655	0.237	156	0.5	0.3	7.731	A
C-A	150	38			150				
A-B	32	8			32				
A-C	124	31			124				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	180	45	693	0.260	180	0.5	0.4	7.455	A
B-A	56	14	386	0.144	56	0.2	0.2	11.350	B
C-AB	129	32	657	0.197	129	0.3	0.3	7.305	A
C-A	127	32			127				
A-B	27	7			27				
A-C	104	26			104				

# 2023 Survey, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.16	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.16	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
D2	2023 Survey	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	194	100.000
B		ONE HOUR	✓	183	100.000
C		ONE HOUR	✓	321	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	35	159
	B	34	0	149
	C	147	174	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	3
	B	3	0	3
	C	7	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.24	6.97	0.3	A	137	205
B-A	0.11	12.36	0.1	B	31	47
C-AB	0.30	8.19	0.5	A	162	243
C-A					132	198
A-B					32	48
A-C					146	219

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	112	28	723	0.155	111	0.0	0.2	6.056	A
B-A	26	6	378	0.068	25	0.0	0.1	10.516	B
C-AB	132	33	652	0.202	131	0.0	0.3	7.040	A
C-A	110	27			110				
A-B	26	7			26				
A-C	120	30			120				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	134	33	712	0.188	134	0.2	0.2	6.413	A
B-A	31	8	361	0.085	30	0.1	0.1	11.218	B
C-AB	158	40	648	0.245	158	0.3	0.3	7.497	A
C-A	130	33			130				
A-B	31	8			31				
A-C	143	36			143				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	164	41	696	0.236	164	0.2	0.3	6.960	A
B-A	37	9	337	0.111	37	0.1	0.1	12.348	B
C-AB	196	49	645	0.304	196	0.3	0.5	8.172	A
C-A	157	39			157				
A-B	39	10			39				
A-C	175	44			175				

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	164	41	696	0.236	164	0.3	0.3	6.970	A
B-A	37	9	337	0.111	37	0.1	0.1	12.363	B
C-AB	196	49	645	0.304	196	0.5	0.5	8.190	A
C-A	157	39			157				
A-B	39	10			39				
A-C	175	44			175				



**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	134	33	711	0.188	134	0.3	0.2	6.428	A
B-A	31	8	361	0.085	31	0.1	0.1	11.236	B
C-AB	158	40	648	0.244	159	0.5	0.3	7.520	A
C-A	130	33			130				
A-B	31	8			31				
A-C	143	36			143				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	112	28	722	0.155	112	0.2	0.2	6.082	A
B-A	26	6	377	0.068	26	0.1	0.1	10.544	B
C-AB	132	33	652	0.202	132	0.3	0.3	7.071	A
C-A	110	27			110				
A-B	26	7			26				
A-C	120	30			120				

# 2026 Base, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.13	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.13	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
D3	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	180	100.000
B		ONE HOUR	✓	324	100.000
C		ONE HOUR	✓	352	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	37	143
	B	77	0	247
	C	176	176	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	3	4
	B	4	0	6
	C	10	7	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.42	10.22	0.8	B	227	340
B-A	0.26	15.49	0.4	C	71	106
C-AB	0.31	8.48	0.5	A	165	248
C-A					158	237
A-B					34	51
A-C					131	197

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	186	46	690	0.269	184	0.0	0.4	7.519	A
B-A	58	14	383	0.151	57	0.0	0.2	11.462	B
C-AB	134	33	657	0.204	133	0.0	0.3	7.341	A
C-A	131	33			131				
A-B	28	7			28				
A-C	108	27			108				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	222	56	673	0.330	222	0.4	0.5	8.443	A
B-A	69	17	361	0.192	69	0.2	0.2	12.809	B
C-AB	161	40	654	0.246	161	0.3	0.4	7.800	A
C-A	155	39			155				
A-B	33	8			33				
A-C	129	32			129				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	272	68	646	0.421	271	0.5	0.8	10.158	B
B-A	85	21	327	0.259	84	0.2	0.4	15.405	C
C-AB	200	50	655	0.306	200	0.4	0.5	8.465	A
C-A	187	47			187				
A-B	41	10			41				
A-C	157	39			157				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	272	68	645	0.422	272	0.8	0.8	10.224	B
B-A	85	21	327	0.260	85	0.4	0.4	15.485	C
C-AB	200	50	655	0.306	200	0.5	0.5	8.483	A
C-A	187	47			187				
A-B	41	10			41				
A-C	157	39			157				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	222	56	672	0.330	223	0.8	0.5	8.509	A
B-A	69	17	361	0.192	70	0.4	0.3	12.886	B
C-AB	161	40	655	0.246	162	0.5	0.4	7.827	A
C-A	155	39			155				
A-B	33	8			33				
A-C	129	32			129				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	186	46	689	0.270	186	0.5	0.4	7.595	A
B-A	58	14	383	0.151	58	0.3	0.2	11.546	B
C-AB	134	33	657	0.204	134	0.4	0.3	7.379	A
C-A	131	33			131				
A-B	28	7			28				
A-C	108	27			108				

# 2026 Base, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.24	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.24	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
D4	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	201	100.000
B		ONE HOUR	✓	189	100.000
C		ONE HOUR	✓	332	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
From		A	B	C
	A	0	36	165
	B	35	0	154
	C	152	180	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
From		A	B	C
	A	0	0	3
	B	3	0	3
	C	7	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.24	7.08	0.3	A	141	212
B-A	0.12	12.61	0.1	B	32	48
C-AB	0.32	8.33	0.5	A	168	252
C-A					136	205
A-B					33	50
A-C					151	227

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	116	29	721	0.161	115	0.0	0.2	6.111	A
B-A	26	7	375	0.070	26	0.0	0.1	10.633	B
C-AB	137	34	651	0.210	136	0.0	0.3	7.111	A
C-A	113	28			113				
A-B	27	7			27				
A-C	124	31			124				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	138	35	710	0.195	138	0.2	0.2	6.488	A
B-A	31	8	357	0.088	31	0.1	0.1	11.378	B
C-AB	164	41	647	0.254	164	0.3	0.3	7.594	A
C-A	134	34			134				
A-B	32	8			32				
A-C	148	37			148				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	170	42	693	0.245	169	0.2	0.3	7.071	A
B-A	39	10	333	0.116	38	0.1	0.1	12.592	B
C-AB	204	51	645	0.316	203	0.3	0.5	8.312	A
C-A	162	40			162				
A-B	40	10			40				
A-C	182	45			182				

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	170	42	693	0.245	170	0.3	0.3	7.082	A
B-A	39	10	333	0.116	39	0.1	0.1	12.608	B
C-AB	204	51	645	0.316	204	0.5	0.5	8.331	A
C-A	162	40			162				
A-B	40	10			40				
A-C	182	45			182				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	138	35	709	0.195	139	0.3	0.3	6.504	A
B-A	31	8	357	0.088	32	0.1	0.1	11.398	B
C-AB	164	41	648	0.254	165	0.5	0.4	7.619	A
C-A	134	34			134				
A-B	32	8			32				
A-C	148	37			148				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	116	29	721	0.161	116	0.3	0.2	6.138	A
B-A	26	7	374	0.070	26	0.1	0.1	10.664	B
C-AB	137	34	651	0.210	137	0.4	0.3	7.148	A
C-A	113	28			113				
A-B	27	7			27				
A-C	124	31			124				

# 2026 Base +50dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.24	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.24	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
D5	2026 Base +50dw	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	180	100.000
B		ONE HOUR	✓	330	100.000
C		ONE HOUR	✓	354	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	37	143
	B	77	0	253
	C	176	178	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	3	4
	B	4	0	6
	C	10	7	0



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.43	10.39	0.8	B	232	348
B-A	0.26	15.69	0.4	C	71	106
C-AB	0.31	8.52	0.5	A	167	251
C-A					158	237
A-B					34	51
A-C					131	197

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	190	48	692	0.275	189	0.0	0.4	7.591	A
B-A	58	14	381	0.152	57	0.0	0.2	11.532	B
C-AB	135	34	657	0.206	134	0.0	0.3	7.360	A
C-A	131	33			131				
A-B	28	7			28				
A-C	108	27			108				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	227	57	674	0.337	227	0.4	0.5	8.522	A
B-A	69	17	359	0.193	69	0.2	0.2	12.913	B
C-AB	163	41	655	0.249	163	0.3	0.4	7.826	A
C-A	155	39			155				
A-B	33	8			33				
A-C	129	32			129				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	279	70	646	0.431	278	0.5	0.8	10.318	B
B-A	85	21	324	0.262	84	0.2	0.4	15.603	C
C-AB	203	51	655	0.309	202	0.4	0.5	8.502	A
C-A	187	47			187				
A-B	41	10			41				
A-C	157	39			157				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	279	70	646	0.431	279	0.8	0.8	10.390	B
B-A	85	21	323	0.262	85	0.4	0.4	15.689	C
C-AB	203	51	655	0.309	203	0.5	0.5	8.520	A
C-A	187	47			187				
A-B	41	10			41				
A-C	157	39			157				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	227	57	673	0.338	228	0.8	0.5	8.597	A
B-A	69	17	358	0.193	70	0.4	0.3	12.994	B
C-AB	163	41	655	0.249	163	0.5	0.4	7.854	A
C-A	155	39			155				
A-B	33	8			33				
A-C	129	32			129				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	190	48	691	0.276	191	0.5	0.4	7.647	A
B-A	58	14	381	0.152	58	0.3	0.2	11.620	B
C-AB	135	34	657	0.206	136	0.4	0.3	7.399	A
C-A	131	33			131				
A-B	28	7			28				
A-C	108	27			108				

# 2026 Base +50dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.30	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.30	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
D6	2026 Base +50dw	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	201	100.000
B		ONE HOUR	✓	192	100.000
C		ONE HOUR	✓	336	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	36	165
	B	35	0	157
	C	152	184	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	3
	B	3	0	3
	C	7	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.25	7.12	0.3	A	144	216
B-A	0.12	12.70	0.1	B	32	48
C-AB	0.32	8.41	0.5	A	172	258
C-A					136	204
A-B					33	50
A-C					151	227

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	118	30	722	0.164	117	0.0	0.2	6.125	A
B-A	26	7	373	0.071	26	0.0	0.1	10.682	B
C-AB	140	35	651	0.215	139	0.0	0.3	7.151	A
C-A	113	28			113				
A-B	27	7			27				
A-C	124	31			124				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	141	35	710	0.199	141	0.2	0.3	6.511	A
B-A	31	8	355	0.089	31	0.1	0.1	11.444	B
C-AB	168	42	648	0.259	168	0.3	0.4	7.647	A
C-A	134	34			134				
A-B	32	8			32				
A-C	148	37			148				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	173	43	694	0.249	173	0.3	0.3	7.106	A
B-A	39	10	331	0.117	38	0.1	0.1	12.684	B
C-AB	208	52	646	0.323	208	0.4	0.5	8.388	A
C-A	161	40			161				
A-B	40	10			40				
A-C	182	45			182				

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	173	43	694	0.249	173	0.3	0.3	7.117	A
B-A	39	10	330	0.117	39	0.1	0.1	12.702	B
C-AB	208	52	646	0.323	208	0.5	0.5	8.407	A
C-A	161	40			161				
A-B	40	10			40				
A-C	182	45			182				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	141	35	710	0.199	141	0.3	0.3	6.523	A
B-A	31	8	355	0.089	32	0.1	0.1	11.464	B
C-AB	168	42	648	0.259	168	0.5	0.4	7.676	A
C-A	134	34			134				
A-B	32	8			32				
A-C	148	37			148				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	118	30	721	0.164	118	0.3	0.2	6.149	A
B-A	26	7	373	0.071	26	0.1	0.1	10.714	B
C-AB	140	35	651	0.214	140	0.4	0.3	7.191	A
C-A	113	28			113				
A-B	27	7			27				
A-C	124	31			124				

# 2027 Base, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.15	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.15	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
D7	2027 Base	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	182	100.000
B		ONE HOUR	✓	326	100.000
C		ONE HOUR	✓	354	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	38	144
	B	77	0	249
	C	177	177	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	3	4
	B	4	0	6
	C	10	7	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.43	10.29	0.8	B	228	343
B-A	0.26	15.59	0.4	C	71	106
C-AB	0.31	8.51	0.5	A	166	249
C-A					159	238
A-B					35	52
A-C					132	198

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	187	47	690	0.272	186	0.0	0.4	7.540	A
B-A	58	14	382	0.152	57	0.0	0.2	11.499	B
C-AB	135	34	656	0.205	134	0.0	0.3	7.355	A
C-A	132	33			132				
A-B	29	7			29				
A-C	108	27			108				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	224	56	673	0.333	223	0.4	0.5	8.474	A
B-A	69	17	360	0.192	69	0.2	0.2	12.865	B
C-AB	162	41	654	0.248	162	0.3	0.4	7.819	A
C-A	156	39			156				
A-B	34	9			34				
A-C	129	32			129				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	274	69	645	0.425	273	0.5	0.8	10.225	B
B-A	85	21	325	0.261	84	0.2	0.4	15.515	C
C-AB	202	50	654	0.308	201	0.4	0.5	8.493	A
C-A	188	47			188				
A-B	42	10			42				
A-C	159	40			159				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	274	69	645	0.425	274	0.8	0.8	10.294	B
B-A	85	21	325	0.261	85	0.4	0.4	15.592	C
C-AB	202	50	655	0.308	202	0.5	0.5	8.510	A
C-A	188	47			188				
A-B	42	10			42				
A-C	159	40			159				

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	224	56	672	0.333	225	0.8	0.5	8.547	A
B-A	69	17	359	0.193	70	0.4	0.3	12.944	B
C-AB	162	41	654	0.248	163	0.5	0.4	7.845	A
C-A	156	39			156				
A-B	34	9			34				
A-C	129	32			129				

**09:00 - 09:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	187	47	689	0.272	188	0.5	0.4	7.620	A
B-A	58	14	382	0.152	58	0.3	0.2	11.587	B
C-AB	135	34	656	0.205	135	0.4	0.3	7.394	A
C-A	132	33			132				
A-B	29	7			29				
A-C	108	27			108				



# 2027 Base, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.27	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.27	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
D8	2027 Base	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	203	100.000
B		ONE HOUR	✓	192	100.000
C		ONE HOUR	✓	336	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	37	166
	B	36	0	156
	C	154	182	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	3
	B	3	0	3
	C	7	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.25	7.14	0.3	A	143	215
B-A	0.12	12.70	0.1	B	33	50
C-AB	0.32	8.38	0.5	A	170	255
C-A					138	207
A-B					34	51
A-C					152	228

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	117	29	720	0.163	117	0.0	0.2	6.142	A
B-A	27	7	374	0.072	27	0.0	0.1	10.665	B
C-AB	138	35	651	0.212	137	0.0	0.3	7.135	A
C-A	115	29			115				
A-B	28	7			28				
A-C	125	31			125				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	140	35	708	0.198	140	0.2	0.3	6.529	A
B-A	32	8	357	0.091	32	0.1	0.1	11.431	B
C-AB	166	42	647	0.257	166	0.3	0.4	7.626	A
C-A	136	34			136				
A-B	33	8			33				
A-C	149	37			149				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	172	43	691	0.248	171	0.3	0.3	7.128	A
B-A	40	10	332	0.119	39	0.1	0.1	12.679	B
C-AB	206	52	645	0.320	206	0.4	0.5	8.358	A
C-A	164	41			164				
A-B	41	10			41				
A-C	183	46			183				

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	172	43	691	0.249	172	0.3	0.3	7.139	A
B-A	40	10	332	0.120	40	0.1	0.1	12.697	B
C-AB	206	52	645	0.320	206	0.5	0.5	8.378	A
C-A	164	41			164				
A-B	41	10			41				
A-C	183	46			183				

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	140	35	708	0.198	141	0.3	0.3	6.542	A
B-A	32	8	356	0.091	33	0.1	0.1	11.454	B
C-AB	166	42	647	0.257	167	0.5	0.4	7.655	A
C-A	136	34			136				
A-B	33	8			33				
A-C	149	37			149				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	117	29	719	0.163	118	0.3	0.2	6.166	A
B-A	27	7	374	0.072	27	0.1	0.1	10.696	B
C-AB	138	35	651	0.212	139	0.4	0.3	7.173	A
C-A	115	29			115				
A-B	28	7			28				
A-C	125	31			125				

# 2027 Base +100dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.34	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.34	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	2027 Base +100dw	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	182	100.000
B		ONE HOUR	✓	338	100.000
C		ONE HOUR	✓	358	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	38	144
	B	77	0	261
	C	177	181	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	3	4
	B	4	0	5
	C	10	7	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.44	10.53	0.8	B	239	359
B-A	0.27	15.99	0.4	C	71	106
C-AB	0.31	8.59	0.5	A	170	255
C-A					159	238
A-B					35	52
A-C					132	198

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	196	49	693	0.284	195	0.0	0.4	7.566	A
B-A	58	14	378	0.153	57	0.0	0.2	11.633	B
C-AB	138	34	657	0.210	137	0.0	0.3	7.395	A
C-A	132	33			132				
A-B	29	7			29				
A-C	108	27			108				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	235	59	675	0.348	234	0.4	0.6	8.558	A
B-A	69	17	355	0.195	69	0.2	0.2	13.065	B
C-AB	166	41	655	0.253	165	0.3	0.4	7.872	A
C-A	156	39			156				
A-B	34	9			34				
A-C	129	32			129				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	287	72	647	0.444	286	0.6	0.8	10.450	B
B-A	85	21	319	0.266	84	0.2	0.4	15.897	C
C-AB	206	52	655	0.315	206	0.4	0.5	8.565	A
C-A	188	47			188				
A-B	42	10			42				
A-C	159	40			159				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	287	72	646	0.445	287	0.8	0.8	10.532	B
B-A	85	21	319	0.266	85	0.4	0.4	15.988	C
C-AB	206	52	655	0.315	206	0.5	0.5	8.587	A
C-A	188	47			188				
A-B	42	10			42				
A-C	159	40			159				

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	235	59	674	0.348	236	0.8	0.6	8.639	A
B-A	69	17	355	0.195	70	0.4	0.3	13.155	B
C-AB	166	41	655	0.253	166	0.5	0.4	7.899	A
C-A	156	39			156				
A-B	34	9			34				
A-C	129	32			129				

**09:00 - 09:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	196	49	692	0.284	197	0.6	0.4	7.648	A
B-A	58	14	378	0.153	58	0.3	0.2	11.724	B
C-AB	138	34	657	0.210	138	0.4	0.3	7.437	A
C-A	132	33			132				
A-B	29	7			29				
A-C	108	27			108				

# 2027 Base +100dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.40	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.40	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	2027 Base +100dw	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	203	100.000
B		ONE HOUR	✓	196	100.000
C		ONE HOUR	✓	344	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	37	166
	B	36	0	160
	C	154	190	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	3
	B	3	0	3
	C	7	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.25	7.19	0.3	A	147	220
B-A	0.12	12.86	0.1	B	33	50
C-AB	0.33	8.53	0.5	A	178	267
C-A					138	207
A-B					34	51
A-C					152	228

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	120	30	721	0.167	120	0.0	0.2	6.161	A
B-A	27	7	371	0.073	27	0.0	0.1	10.752	B
C-AB	144	36	651	0.222	143	0.0	0.3	7.213	A
C-A	115	29			115				
A-B	28	7			28				
A-C	125	31			125				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	144	36	709	0.203	144	0.2	0.3	6.553	A
B-A	32	8	353	0.092	32	0.1	0.1	11.545	B
C-AB	174	43	648	0.268	173	0.3	0.4	7.733	A
C-A	136	34			136				
A-B	33	8			33				
A-C	149	37			149				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	176	44	692	0.255	176	0.3	0.3	7.177	A
B-A	40	10	328	0.121	39	0.1	0.1	12.845	B
C-AB	216	54	647	0.334	215	0.4	0.5	8.512	A
C-A	163	41			163				
A-B	41	10			41				
A-C	183	46			183				

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	176	44	692	0.255	176	0.3	0.3	7.188	A
B-A	40	10	328	0.121	40	0.1	0.1	12.864	B
C-AB	216	54	647	0.334	216	0.5	0.5	8.533	A
C-A	163	41			163				
A-B	41	10			41				
A-C	183	46			183				



**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	144	36	709	0.203	144	0.3	0.3	6.574	A
B-A	32	8	353	0.092	33	0.1	0.1	11.569	B
C-AB	174	43	648	0.268	174	0.5	0.4	7.764	A
C-A	136	34			136				
A-B	33	8			33				
A-C	149	37			149				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	120	30	720	0.167	121	0.3	0.2	6.186	A
B-A	27	7	371	0.073	27	0.1	0.1	10.787	B
C-AB	144	36	652	0.222	145	0.4	0.3	7.257	A
C-A	115	29			115				
A-B	28	7			28				
A-C	125	31			125				

# 2028 Base, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.22	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.22	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	2028 Base	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	183	100.000
B		ONE HOUR	✓	329	100.000
C		ONE HOUR	✓	358	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	38	145
	B	78	0	251
	C	179	179	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	3	4
	B	4	0	6
	C	10	7	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.43	10.41	0.8	B	230	345
B-A	0.27	15.78	0.4	C	72	107
C-AB	0.31	8.55	0.5	A	168	252
C-A					160	241
A-B					35	52
A-C					133	200

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	189	47	689	0.274	187	0.0	0.4	7.579	A
B-A	59	15	381	0.154	58	0.0	0.2	11.553	B
C-AB	136	34	656	0.208	135	0.0	0.3	7.377	A
C-A	133	33			133				
A-B	29	7			29				
A-C	109	27			109				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	226	56	672	0.336	225	0.4	0.5	8.534	A
B-A	70	18	359	0.196	70	0.2	0.2	12.954	B
C-AB	164	41	654	0.251	164	0.3	0.4	7.848	A
C-A	158	39			158				
A-B	34	9			34				
A-C	130	33			130				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	276	69	643	0.430	275	0.5	0.8	10.339	B
B-A	86	21	324	0.265	85	0.2	0.4	15.692	C
C-AB	204	51	655	0.312	203	0.4	0.5	8.532	A
C-A	190	48			190				
A-B	42	10			42				
A-C	160	40			160				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	276	69	643	0.430	276	0.8	0.8	10.411	B
B-A	86	21	323	0.266	86	0.4	0.4	15.779	C
C-AB	204	51	655	0.311	204	0.5	0.5	8.550	A
C-A	190	48			190				
A-B	42	10			42				
A-C	160	40			160				

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	226	56	671	0.336	227	0.8	0.5	8.610	A
B-A	70	18	358	0.196	71	0.4	0.3	13.041	B
C-AB	164	41	655	0.250	164	0.5	0.4	7.874	A
C-A	158	39			158				
A-B	34	9			34				
A-C	130	33			130				

**09:00 - 09:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	189	47	688	0.275	190	0.5	0.4	7.660	A
B-A	59	15	381	0.154	59	0.3	0.2	11.644	B
C-AB	136	34	656	0.208	137	0.4	0.3	7.419	A
C-A	133	33			133				
A-B	29	7			29				
A-C	109	27			109				

# 2028 Base, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.28	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.28	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	2028 Base	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	205	100.000
B		ONE HOUR	✓	193	100.000
C		ONE HOUR	✓	338	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	37	168
	B	36	0	157
	C	155	183	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	3
	B	3	0	3
	C	7	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.25	7.16	0.3	A	144	216
B-A	0.12	12.75	0.1	B	33	50
C-AB	0.32	8.41	0.5	A	171	257
C-A					139	209
A-B					34	51
A-C					154	231

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	118	30	720	0.164	117	0.0	0.2	6.151	A
B-A	27	7	373	0.073	27	0.0	0.1	10.692	B
C-AB	139	35	651	0.214	138	0.0	0.3	7.150	A
C-A	115	29			115				
A-B	28	7			28				
A-C	126	32			126				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	141	35	708	0.199	141	0.2	0.3	6.543	A
B-A	32	8	356	0.091	32	0.1	0.1	11.468	B
C-AB	167	42	647	0.258	167	0.3	0.4	7.646	A
C-A	137	34			137				
A-B	33	8			33				
A-C	151	38			151				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	173	43	691	0.250	173	0.3	0.3	7.149	A
B-A	40	10	331	0.120	39	0.1	0.1	12.733	B
C-AB	207	52	645	0.322	207	0.4	0.5	8.386	A
C-A	165	41			165				
A-B	41	10			41				
A-C	185	46			185				

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	173	43	691	0.250	173	0.3	0.3	7.160	A
B-A	40	10	330	0.120	40	0.1	0.1	12.751	B
C-AB	207	52	645	0.322	207	0.5	0.5	8.407	A
C-A	165	41			165				
A-B	41	10			41				
A-C	185	46			185				

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	141	35	707	0.200	141	0.3	0.3	6.558	A
B-A	32	8	355	0.091	33	0.1	0.1	11.490	B
C-AB	167	42	647	0.258	168	0.5	0.4	7.675	A
C-A	137	34			137				
A-B	33	8			33				
A-C	151	38			151				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	118	30	719	0.164	118	0.3	0.2	6.178	A
B-A	27	7	373	0.073	27	0.1	0.1	10.724	B
C-AB	139	35	651	0.214	139	0.4	0.3	7.191	A
C-A	115	29			115				
A-B	28	7			28				
A-C	126	32			126				

# 2028 Base +150dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.52	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.52	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
D13	2028 Base +150dw	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	183	100.000
B		ONE HOUR	✓	347	100.000
C		ONE HOUR	✓	363	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	38	145
	B	78	0	269
	C	179	184	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	3	4
	B	4	0	5
	C	10	7	0



## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.46	10.84	0.9	B	247	370
B-A	0.27	16.39	0.4	C	72	107
C-AB	0.32	8.65	0.5	A	173	259
C-A					160	240
A-B					35	52
A-C					133	200

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	203	51	693	0.292	201	0.0	0.4	7.655	A
B-A	59	15	376	0.156	58	0.0	0.2	11.742	B
C-AB	140	35	657	0.213	139	0.0	0.3	7.425	A
C-A	133	33			133				
A-B	29	7			29				
A-C	109	27			109				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	242	60	675	0.358	241	0.4	0.6	8.708	A
B-A	70	18	352	0.199	70	0.2	0.3	13.257	B
C-AB	169	42	655	0.258	168	0.3	0.4	7.914	A
C-A	158	39			158				
A-B	34	9			34				
A-C	130	33			130				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	296	74	645	0.459	295	0.6	0.9	10.750	B
B-A	86	21	315	0.273	85	0.3	0.4	16.287	C
C-AB	210	53	656	0.320	210	0.4	0.5	8.624	A
C-A	190	47			190				
A-B	42	10			42				
A-C	160	40			160				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	296	74	645	0.459	296	0.9	0.9	10.839	B
B-A	86	21	314	0.273	86	0.4	0.4	16.392	C
C-AB	210	53	656	0.320	210	0.5	0.5	8.646	A
C-A	190	47			190				
A-B	42	10			42				
A-C	160	40			160				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	242	60	674	0.359	243	0.9	0.6	8.798	A
B-A	70	18	351	0.200	71	0.4	0.3	13.352	B
C-AB	169	42	655	0.257	169	0.5	0.4	7.944	A
C-A	158	39			158				
A-B	34	9			34				
A-C	130	33			130				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	203	51	692	0.293	203	0.6	0.4	7.747	A
B-A	59	15	375	0.156	59	0.3	0.2	11.847	B
C-AB	140	35	657	0.213	140	0.4	0.3	7.470	A
C-A	133	33			133				
A-B	29	7			29				
A-C	109	27			109				

# 2028 Base +150dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.48	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.48	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
D14	2028 Base +150dw	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	205	100.000
B		ONE HOUR	✓	199	100.000
C		ONE HOUR	✓	351	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	37	168
	B	36	0	163
	C	155	196	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	3
	B	3	0	3
	C	7	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.26	7.23	0.4	A	150	224
B-A	0.12	13.02	0.1	B	33	50
C-AB	0.34	8.66	0.5	A	184	276
C-A					138	207
A-B					34	51
A-C					154	231

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	123	31	721	0.170	122	0.0	0.2	6.177	A
B-A	27	7	369	0.073	27	0.0	0.1	10.830	B
C-AB	149	37	651	0.229	148	0.0	0.3	7.272	A
C-A	115	29			115				
A-B	28	7			28				
A-C	126	32			126				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	147	37	709	0.207	146	0.2	0.3	6.584	A
B-A	32	8	351	0.092	32	0.1	0.1	11.647	B
C-AB	179	45	648	0.277	179	0.3	0.4	7.823	A
C-A	136	34			136				
A-B	33	8			33				
A-C	151	38			151				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	179	45	692	0.259	179	0.3	0.4	7.224	A
B-A	40	10	325	0.122	39	0.1	0.1	12.998	B
C-AB	223	56	647	0.345	222	0.4	0.5	8.641	A
C-A	163	41			163				
A-B	41	10			41				
A-C	185	46			185				

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	179	45	692	0.259	179	0.4	0.4	7.235	A
B-A	40	10	324	0.122	40	0.1	0.1	13.018	B
C-AB	223	56	648	0.344	223	0.5	0.5	8.664	A
C-A	163	41			163				
A-B	41	10			41				
A-C	185	46			185				

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	147	37	709	0.207	147	0.4	0.3	6.603	A
B-A	32	8	350	0.092	33	0.1	0.1	11.672	B
C-AB	179	45	649	0.276	180	0.5	0.4	7.856	A
C-A	136	34			136				
A-B	33	8			33				
A-C	151	38			151				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	123	31	721	0.170	123	0.3	0.2	6.208	A
B-A	27	7	369	0.074	27	0.1	0.1	10.866	B
C-AB	149	37	652	0.229	149	0.4	0.3	7.322	A
C-A	115	29			115				
A-B	28	7			28				
A-C	126	32			126				

# 2031 Base, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.38	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.38	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
D15	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	188	100.000
B		ONE HOUR	✓	337	100.000
C		ONE HOUR	✓	366	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	39	149
	B	80	0	257
	C	183	183	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	3	4
	B	4	0	6
	C	10	7	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.44	10.74	0.8	B	236	354
B-A	0.28	16.27	0.4	C	73	110
C-AB	0.32	8.65	0.5	A	172	258
C-A					164	246
A-B					36	54
A-C					137	205

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	193	48	687	0.282	192	0.0	0.4	7.679	A
B-A	60	15	379	0.159	59	0.0	0.2	11.698	B
C-AB	139	35	656	0.213	138	0.0	0.3	7.426	A
C-A	136	34			136				
A-B	29	7			29				
A-C	112	28			112				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	231	58	669	0.346	230	0.4	0.6	8.697	A
B-A	72	18	355	0.203	72	0.2	0.3	13.194	B
C-AB	168	42	654	0.257	168	0.3	0.4	7.916	A
C-A	161	40			161				
A-B	35	9			35				
A-C	134	33			134				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	283	71	639	0.443	282	0.6	0.8	10.690	B
B-A	88	22	319	0.277	88	0.3	0.4	16.173	C
C-AB	209	52	655	0.319	209	0.4	0.5	8.625	A
C-A	194	48			194				
A-B	43	11			43				
A-C	164	41			164				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	283	71	638	0.443	283	0.8	0.8	10.739	B
B-A	88	22	318	0.277	88	0.4	0.4	16.273	C
C-AB	209	52	655	0.319	209	0.5	0.5	8.645	A
C-A	194	48			194				
A-B	43	11			43				
A-C	164	41			164				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	231	58	668	0.346	232	0.8	0.6	8.782	A
B-A	72	18	355	0.203	72	0.4	0.3	13.289	B
C-AB	168	42	654	0.257	168	0.5	0.4	7.944	A
C-A	161	40			161				
A-B	35	9			35				
A-C	134	33			134				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	193	48	686	0.282	194	0.6	0.4	7.767	A
B-A	60	15	378	0.159	61	0.3	0.2	11.796	B
C-AB	139	35	656	0.212	140	0.4	0.3	7.469	A
C-A	136	34			136				
A-B	29	7			29				
A-C	112	28			112				



# 2031 Base, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.35	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.35	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
D16	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	210	100.000
B		ONE HOUR	✓	198	100.000
C		ONE HOUR	✓	347	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
From		A	B	C
	A	0	38	172
	B	37	0	161
	C	159	188	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
From		A	B	C
	A	0	0	3
	B	3	0	3
	C	7	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.26	7.26	0.4	A	148	222
B-A	0.12	12.96	0.1	B	34	51
C-AB	0.33	8.53	0.5	A	176	264
C-A					142	213
A-B					35	52
A-C					158	237

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	121	30	718	0.169	120	0.0	0.2	6.196	A
B-A	28	7	371	0.075	28	0.0	0.1	10.785	B
C-AB	143	36	650	0.220	142	0.0	0.3	7.210	A
C-A	118	30			118				
A-B	29	7			29				
A-C	129	32			129				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	145	36	706	0.205	145	0.2	0.3	6.603	A
B-A	33	8	353	0.094	33	0.1	0.1	11.597	B
C-AB	172	43	647	0.266	171	0.3	0.4	7.730	A
C-A	140	35			140				
A-B	34	9			34				
A-C	155	39			155				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	177	44	688	0.258	177	0.3	0.4	7.246	A
B-A	41	10	327	0.125	41	0.1	0.1	12.939	B
C-AB	214	53	645	0.331	213	0.4	0.5	8.503	A
C-A	168	42			168				
A-B	42	10			42				
A-C	189	47			189				

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	177	44	688	0.258	177	0.4	0.4	7.258	A
B-A	41	10	327	0.125	41	0.1	0.1	12.958	B
C-AB	214	53	645	0.331	214	0.5	0.5	8.526	A
C-A	168	42			168				
A-B	42	10			42				
A-C	189	47			189				

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	145	36	705	0.205	145	0.4	0.3	6.621	A
B-A	33	8	353	0.094	33	0.1	0.1	11.623	B
C-AB	172	43	647	0.266	172	0.5	0.4	7.757	A
C-A	140	35			140				
A-B	34	9			34				
A-C	155	39			155				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	121	30	717	0.169	121	0.3	0.2	6.226	A
B-A	28	7	371	0.075	28	0.1	0.1	10.818	B
C-AB	143	36	650	0.220	143	0.4	0.3	7.254	A
C-A	118	30			118				
A-B	29	7			29				
A-C	129	32			129				

# 2031 Base +230dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.91	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.91	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
D17	2031 Base +230dw	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	188	100.000
B		ONE HOUR	✓	364	100.000
C		ONE HOUR	✓	375	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	39	149
	B	80	0	284
	C	183	192	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	3	4
	B	4	0	5
	C	10	7	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.49	11.53	1.0	B	261	391
B-A	0.29	17.35	0.4	C	73	110
C-AB	0.33	8.82	0.6	A	181	271
C-A					163	245
A-B					36	54
A-C					137	205

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	214	53	692	0.309	212	0.0	0.5	7.846	A
B-A	60	15	370	0.163	59	0.0	0.2	12.018	B
C-AB	146	37	657	0.223	145	0.0	0.3	7.511	A
C-A	136	34			136				
A-B	29	7			29				
A-C	112	28			112				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	255	64	673	0.380	255	0.5	0.6	9.029	A
B-A	72	18	345	0.209	72	0.2	0.3	13.696	B
C-AB	176	44	655	0.269	176	0.3	0.4	8.036	A
C-A	161	40			161				
A-B	35	9			35				
A-C	134	33			134				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	313	78	641	0.488	311	0.6	1.0	11.412	B
B-A	88	22	304	0.289	88	0.3	0.4	17.216	C
C-AB	220	55	657	0.335	220	0.4	0.6	8.798	A
C-A	193	48			193				
A-B	43	11			43				
A-C	164	41			164				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	313	78	640	0.488	313	1.0	1.0	11.530	B
B-A	88	22	304	0.290	88	0.4	0.4	17.352	C
C-AB	220	55	657	0.335	220	0.6	0.6	8.820	A
C-A	193	48			193				
A-B	43	11			43				
A-C	164	41			164				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	255	64	672	0.380	257	1.0	0.7	9.139	A
B-A	72	18	344	0.209	72	0.4	0.3	13.815	B
C-AB	176	44	655	0.269	177	0.6	0.4	8.069	A
C-A	161	40			161				
A-B	35	9			35				
A-C	134	33			134				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	214	53	691	0.310	215	0.7	0.5	7.950	A
B-A	60	15	370	0.163	61	0.3	0.2	12.126	B
C-AB	146	37	657	0.223	147	0.4	0.3	7.565	A
C-A	136	34			136				
A-B	29	7			29				
A-C	112	28			112				

# 2031 Base +230dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		4.66	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.66	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
D18	2031 Base +230dw	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	210	100.000
B		ONE HOUR	✓	208	100.000
C		ONE HOUR	✓	366	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		A	B	C
From	A	0	38	172
	B	37	0	171
	C	159	207	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	3
	B	3	0	3
	C	7	2	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.27	7.39	0.4	A	157	235
B-A	0.13	13.38	0.2	B	34	51
C-AB	0.36	8.92	0.6	A	195	292
C-A					141	212
A-B					35	52
A-C					158	237

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	32	721	0.179	128	0.0	0.2	6.246	A
B-A	28	7	364	0.076	28	0.0	0.1	10.995	B
C-AB	158	39	651	0.242	156	0.0	0.3	7.401	A
C-A	118	29			118				
A-B	29	7			29				
A-C	129	32			129				

#### 17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	154	38	708	0.217	153	0.2	0.3	6.681	A
B-A	33	8	345	0.096	33	0.1	0.1	11.879	B
C-AB	190	47	649	0.293	189	0.3	0.4	7.994	A
C-A	139	35			139				
A-B	34	9			34				
A-C	155	39			155				

#### 17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	188	47	690	0.273	188	0.3	0.4	7.373	A
B-A	41	10	318	0.128	41	0.1	0.1	13.355	B
C-AB	237	59	649	0.365	236	0.4	0.6	8.891	A
C-A	166	42			166				
A-B	42	10			42				
A-C	189	47			189				

#### 17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	188	47	690	0.273	188	0.4	0.4	7.388	A
B-A	41	10	318	0.128	41	0.1	0.2	13.379	B
C-AB	237	59	649	0.365	237	0.6	0.6	8.919	A
C-A	166	42			166				
A-B	42	10			42				
A-C	189	47			189				



**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	154	38	708	0.217	154	0.4	0.3	6.700	A
B-A	33	8	345	0.096	33	0.2	0.1	11.910	B
C-AB	190	47	649	0.292	191	0.6	0.4	8.031	A
C-A	139	35			139				
A-B	34	9			34				
A-C	155	39			155				

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	32	720	0.179	129	0.3	0.2	6.278	A
B-A	28	7	364	0.077	28	0.1	0.1	11.037	B
C-AB	158	39	652	0.242	158	0.4	0.3	7.455	A
C-A	118	29			118				
A-B	29	7			29				
A-C	129	32			129				

## **APPENDIX H18**

### **B4030/B430 (MIDDLETON STONEY) MODELLING OUTPUT**

## B4030-B430 Middleton Stoney Signals – Junction Assessment Results

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	Sat (%)	Queue	Delay (s)	Sat (%)	Queue	Delay (s)
<b>2023 Base</b>						
B4030 Bicester Road	83.5	15	62	73.1	12	54
B430 Oxford Road	47.9	7	43	66.6	12	43
B4030 Heyford Road	83.0	15	63	72.7	11	57
B430 Ardley Road	78.9	16	51	39.6	7	35
Cycle Time (s)	120			120		
PRC (%)	7.7			23.2		
Delay (PCUhr)	24.02			17.91		
<b>2026 Base</b>						
B4030 Bicester Road	83.8	16	61	75.7	13	55
B430 Oxford Road	51.1	8	44	69.1	13	44
B4030 Heyford Road	85.8	16	67	75.4	12	59
B430 Ardley Road	83.7	18	57	41.0	7	36
Cycle Time (s)	120			120		
PRC (%)	4.9			18.8		
Delay (PCUhr)	26.09			19.08		
<b>2026 Base + 50 dwellings</b>						
B4030 Bicester Road	86.6	17	66	76.0	13	56
B430 Oxford Road	51.3	8	45	69.6	13	44
B4030 Heyford Road	84.3	15	64	76.1	12	59
B430 Ardley Road	83.7	18	57	41.0	7	36
Cycle Time (s)	120			120		
PRC (%)	4.0			18.3		
Delay (PCUhr)	26.47			19.27		
<b>2027 Base</b>						
B4030 Bicester Road	84.4	16	62	76.6	13	56
B430 Oxford Road	51.3	8	45	69.6	13	44
B4030 Heyford Road	86.4	16	68	76.1	12	59
B430 Ardley Road	84.6	18	58	41.1	7	36
Cycle Time (s)	120			120		
PRC (%)	4.2			17.5		
Delay (PCUhr)	26.66			19.37		
<b>2027 Base + 100 dwellings</b>						
B4030 Bicester Road	87.4	17	68	77.0	13	56
B430 Oxford Road	51.9	8	45	70.4	13	44
B4030 Heyford Road	86.2	16	67	77.0	12	60
B430 Ardley Road	84.6	18	58	41.1	7	36
Cycle Time (s)	120			120		
PRC (%)	3.0			16.9		
Delay (PCUhr)	27.49			19.68		

2028 Base						
B4030 Bicester Road	85.2	16	63	77.0	13	56
B430 Oxford Road	51.7	8	45	70.2	13	44
B4030 Heyford Road	87.3	16	70	76.5	12	59
B430 Ardley Road	85.3	18	59	41.8	7	36
Cycle Time (s)	120			120		
PRC (%)	3.2			16.9		
Delay (PCUhr)	27.34			19.64		
2028 Base + 150 dwellings						
B4030 Bicester Road	88.0	17	69	77.8	13	57
B430 Oxford Road	52.4	8	45	73.4	14	47
B4030 Heyford Road	88.0	17	70	75.5	12	57
B430 Ardley Road	85.3	18	59	42.9	7	37
Cycle Time (s)	120			120		
PRC (%)	2.2			15.7		
Delay (PCUhr)	28.49			20.21		
2031 Base						
B4030 Bicester Road	87.2	17	66	76.5	13	55
B430 Oxford Road	52.9	8	45	73.6	14	47
B4030 Heyford Road	89.4	17	75	78.4	12	61
B430 Ardley Road	87.1	19	61	43.8	8	37
Cycle Time (s)	120			120		
PRC (%)	0.6			14.8		
Delay (PCUhr)	29.32			20.53		
2031 Base + 230 dwellings						
B4030 Bicester Road	90.4	18	74	80.1	14	59
B430 Oxford Road	62.8	8	47	75.8	15	48
B4030 Heyford Road	89.4	18	72	77.9	13	59
B430 Ardley Road	89.6	20	67	43.8	8	37
Cycle Time (s)	120			120		
PRC (%)	-0.4			12.4		
Delay (PCUhr)	31.65			21.43		

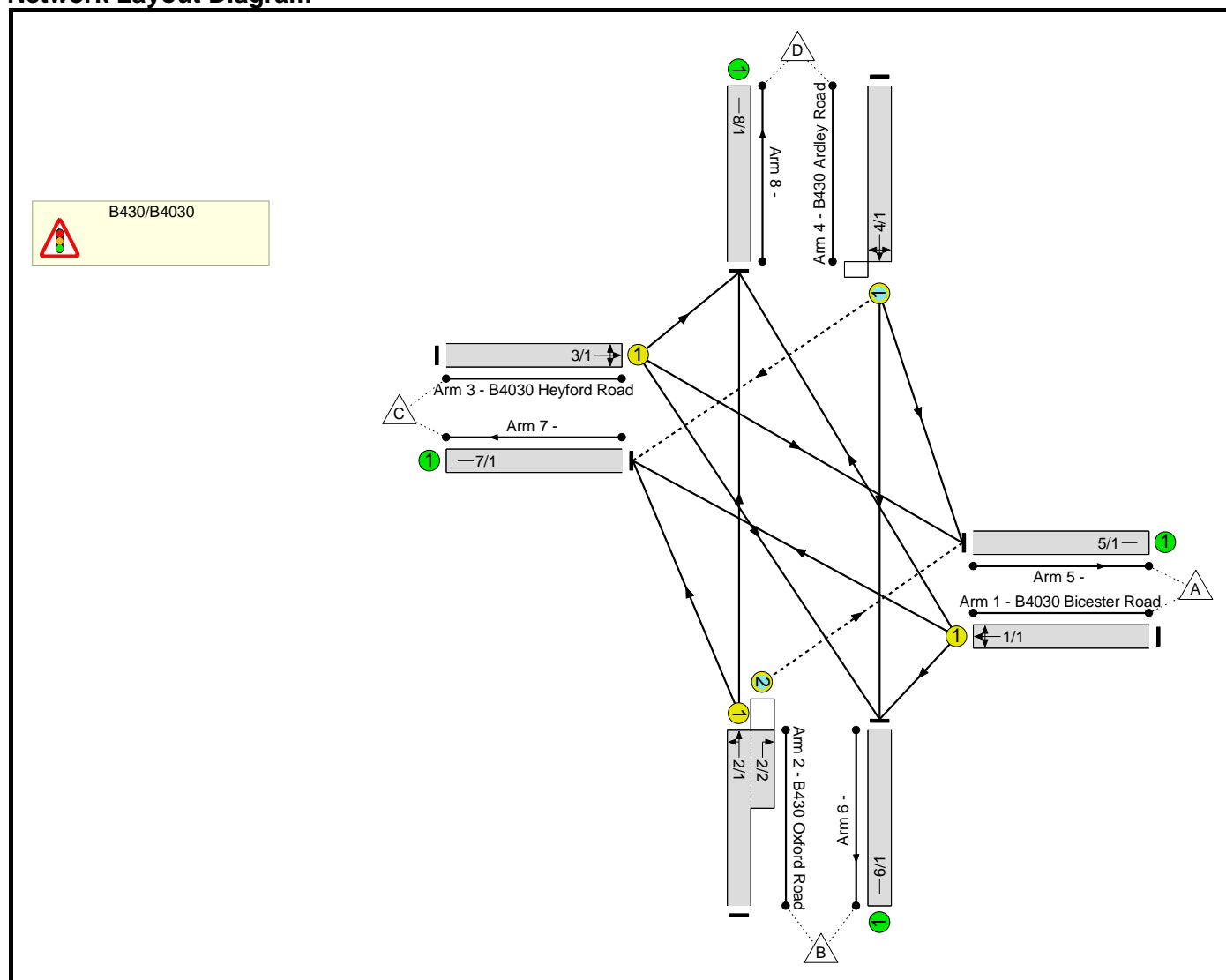
Sat % is saturation, Queue is mean max in PCUs, Delay is seconds per PCU.

Full Input Data And Results  
Full Input Data And Results

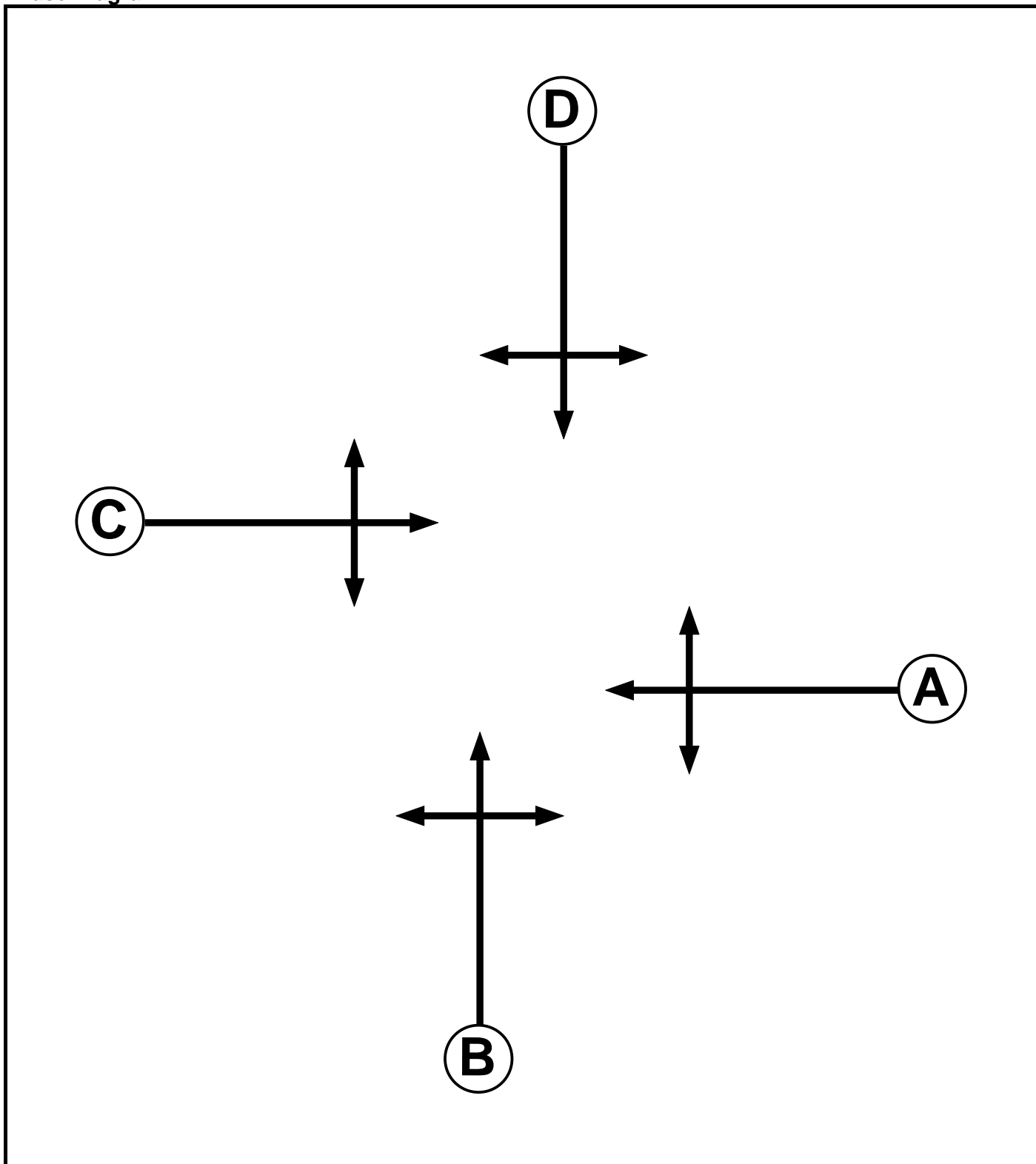
User and Project Details

Project:	Heyford Park
Title:	B430/B4030
Location:	
Client:	Richborough Estates
Site Ref(s):	T19562
Date Started:	25/10/2023
Additional detail:	
File name:	T19562 - B430-B4030 Middleton Stoney.lsg3x
Author:	James Parker
Company:	Hub Transport Planning Ltd
Address:	

Network Layout Diagram



Phase Diagram



## Full Input Data And Results

### Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7

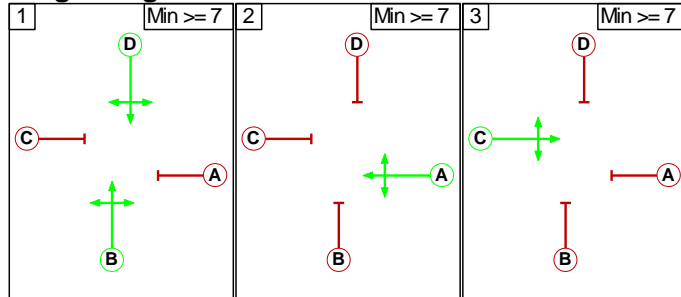
### Phase Intergreens Matrix

		Starting Phase				
		A	B	C	D	
Terminating Phase	A	5	8	7		
	B	5	8	-		
	C	8	7	5		
	D	8	-	5		

### Phases in Stage

Stage No.	Phases in Stage
1	B D
2	A
3	C

### Stage Diagram



### Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

### Prohibited Stage Change

		To Stage		
		1	2	3
From Stage	1	8	8	8
	2	7	8	
	3	7	8	

Full Input Data And Results

**Give-Way Lane Input Data**

Junction: B430/B4030											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/2 (B430 Oxford Road)	5/1 (Right)	1439	0	4/1	1.09	To 5/1 (Left) To 6/1 (Ahead)	2.00	-	0.50	2	2.00
4/1 (B430 Ardley Road)	7/1 (Right)	1439	0	2/1	1.09	To 7/1 (Left) To 8/1 (Ahead)	1.00	1.00	0.50	2	1.00



Full Input Data And Results

**Lane Input Data**

Junction: B430/B4030												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (B4030 Bicester Road)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 6 Left	13.00
											Arm 7 Ahead	30.00
											Arm 8 Right	30.00
2/1 (B430 Oxford Road)	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 7 Left	30.00
											Arm 8 Ahead	Inf
2/2 (B430 Oxford Road)	O	B	2	3	5.0	Geom	-	3.00	0.00	N	Arm 5 Right	10.00
3/1 (B4030 Heyford Road)	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Ahead	30.00
											Arm 6 Right	30.00
											Arm 8 Left	7.00
4/1 (B430 Ardley Road)	O	D	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 5 Left	12.00
											Arm 6 Ahead	Inf
											Arm 7 Right	8.00
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

**Traffic Flow Groups**

Flow Group	Start Time	End Time	Duration	Formula
1: '2023 Base AM'	08:00	09:00	01:00	
2: '2023 Base PM'	17:00	18:00	01:00	
3: '2026 Base AM'	08:00	09:00	01:00	
4: '2026 Base PM'	17:00	18:00	01:00	
5: '2026 Base AM + 50 dwellings'	08:00	09:00	01:00	
6: '2026 Base PM + 50 dwellings'	17:00	18:00	01:00	
7: '2027 Base AM'	08:00	09:00	01:00	
8: '2027 Base PM'	17:00	18:00	01:00	
9: '2027 Base AM + 100 dwellings'	08:00	09:00	01:00	
10: '2027 Base PM + 100 dwellings'	17:00	18:00	01:00	
11: '2028 Base AM'	08:00	09:00	01:00	

Full Input Data And Results

12: '2028 Base PM'	17:00	18:00	01:00	
13: '2028 Base AM + 150 dwellings'	08:00	09:00	01:00	
14: '2028 Base PM + 150 dwellings'	17:00	18:00	01:00	
15: '2031 Base AM'	08:00	09:00	01:00	
16: '2031 Base PM'	17:00	18:00	01:00	
17: '2031 Base AM + 230 dwellings'	08:00	09:00	01:00	
18: '2031 Base PM + 230 dwellings'	17:00	18:00	01:00	

Scenario 1: '2023 Base AM' (FG1: '2023 Base AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	80	266	68	414
	B	44	0	77	158	279
	C	289	94	0	7	390
	D	69	394	12	0	475
	Tot.	402	568	355	233	1558

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 1: 2023 Base AM
<b>Junction: B430/B4030</b>	
1/1	414
2/1 (with short)	279(In) 235(Out)
2/2 (short)	44
3/1	390
4/1	475
5/1	402
6/1	568
7/1	355
8/1	233

**Lane Saturation Flows**

<b>Junction: B430/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 Bicester Road)	3.00	0.00	Y	Arm 6 Left	13.00	19.3 %	1802	1802
				Arm 7 Ahead	30.00	64.3 %		
				Arm 8 Right	30.00	16.4 %		
2/1 (B430 Oxford Road)	3.00	0.00	Y	Arm 7 Left	30.00	32.8 %	1884	1884
				Arm 8 Ahead	Inf	67.2 %		
2/2 (B430 Oxford Road)	3.00	0.00	N	Arm 5 Right	10.00	100.0 %	1787	1787
3/1 (B4030 Heyford Road)	3.00	0.00	Y	Arm 5 Ahead	30.00	74.1 %	1819	1819
				Arm 6 Right	30.00	24.1 %		
				Arm 8 Left	7.00	1.8 %		
4/1 (B430 Ardley Road)	3.30	0.00	Y	Arm 5 Left	12.00	14.5 %	1901	1901
				Arm 6 Ahead	Inf	82.9 %		
				Arm 7 Right	8.00	2.5 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

**Scenario 2: '2023 Base PM'** (FG2: '2023 Base PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	36	261	56	353
B	76	0	64	294	434	
C	242	62	0	14	318	
D	55	188	11	0	254	
Tot.	373	286	336	364	1359	

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 2: 2023 Base PM
<b>Junction: B430/B4030</b>	
1/1	353
2/1 (with short)	434(In) 358(Out)
2/2 (short)	76
3/1	318
4/1	254
5/1	373
6/1	286
7/1	336
8/1	364

**Lane Saturation Flows**

<b>Junction: B430/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 Bicester Road)	3.00	0.00	Y	Arm 6 Left	13.00	10.2 %	1812	1812
				Arm 7 Ahead	30.00	73.9 %		
				Arm 8 Right	30.00	15.9 %		
2/1 (B430 Oxford Road)	3.00	0.00	Y	Arm 7 Left	30.00	17.9 %	1898	1898
				Arm 8 Ahead	Inf	82.1 %		
2/2 (B430 Oxford Road)	3.00	0.00	N	Arm 5 Right	10.00	100.0 %	1787	1787
3/1 (B4030 Heyford Road)	3.00	0.00	Y	Arm 5 Ahead	30.00	76.1 %	1811	1811
				Arm 6 Right	30.00	19.5 %		
				Arm 8 Left	7.00	4.4 %		
4/1 (B430 Ardley Road)	3.30	0.00	Y	Arm 5 Left	12.00	21.7 %	1879	1879
				Arm 6 Ahead	Inf	74.0 %		
				Arm 7 Right	8.00	4.3 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

**Scenario 3: '2026 Base AM'** (FG3: '2026 Base AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	83	275	70	428
B	46	0	80	164	290	
C	299	97	0	7	403	
D	71	408	12	0	491	
Tot.	416	588	367	241	1612	

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 3: 2026 Base AM
<b>Junction: B430/B4030</b>	
1/1	428
2/1 (with short)	290(In) 244(Out)
2/2 (short)	46
3/1	403
4/1	491
5/1	416
6/1	588
7/1	367
8/1	241

**Lane Saturation Flows**

<b>Junction: B430/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 Bicester Road)	3.00	0.00	Y	Arm 6 Left	13.00	19.4 %	1802	1802
				Arm 7 Ahead	30.00	64.3 %		
				Arm 8 Right	30.00	16.4 %		
2/1 (B430 Oxford Road)	3.00	0.00	Y	Arm 7 Left	30.00	32.8 %	1884	1884
				Arm 8 Ahead	Inf	67.2 %		
2/2 (B430 Oxford Road)	3.00	0.00	N	Arm 5 Right	10.00	100.0 %	1787	1787
3/1 (B4030 Heyford Road)	3.00	0.00	Y	Arm 5 Ahead	30.00	74.2 %	1819	1819
				Arm 6 Right	30.00	24.1 %		
				Arm 8 Left	7.00	1.7 %		
4/1 (B430 Ardley Road)	3.30	0.00	Y	Arm 5 Left	12.00	14.5 %	1902	1902
				Arm 6 Ahead	Inf	83.1 %		
				Arm 7 Right	8.00	2.4 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

**Scenario 4: '2026 Base PM'** (FG4: '2026 Base PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	37	271	58	366
	B	79	0	66	305	450
	C	251	64	0	15	330
	D	57	195	11	0	263
	Tot.	387	296	348	378	1409



Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 4: 2026 Base PM
<b>Junction: B430/B4030</b>	
1/1	366
2/1 (with short)	450(In) 371(Out)
2/2 (short)	79
3/1	330
4/1	263
5/1	387
6/1	296
7/1	348
8/1	378

**Lane Saturation Flows**

<b>Junction: B430/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 Bicester Road)	3.00	0.00	Y	Arm 6 Left	13.00	10.1 %	1812	1812
				Arm 7 Ahead	30.00	74.0 %		
				Arm 8 Right	30.00	15.8 %		
2/1 (B430 Oxford Road)	3.00	0.00	Y	Arm 7 Left	30.00	17.8 %	1898	1898
				Arm 8 Ahead	Inf	82.2 %		
2/2 (B430 Oxford Road)	3.00	0.00	N	Arm 5 Right	10.00	100.0 %	1787	1787
3/1 (B4030 Heyford Road)	3.00	0.00	Y	Arm 5 Ahead	30.00	76.1 %	1811	1811
				Arm 6 Right	30.00	19.4 %		
				Arm 8 Left	7.00	4.5 %		
4/1 (B430 Ardley Road)	3.30	0.00	Y	Arm 5 Left	12.00	21.7 %	1879	1879
				Arm 6 Ahead	Inf	74.1 %		
				Arm 7 Right	8.00	4.2 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

**Scenario 5: '2026 Base AM + 50dw'** (FG5: '2026 Base AM + 50 dwellings', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	83	276	70	429
	B	46	0	81	164	291
	C	301	101	0	7	409
	D	71	408	12	0	491
	Tot.	418	592	369	241	1620

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 5: 2026 Base AM + 50dw
<b>Junction: B430/B4030</b>	
1/1	429
2/1 (with short)	291(In) 245(Out)
2/2 (short)	46
3/1	409
4/1	491
5/1	418
6/1	592
7/1	369
8/1	241

**Lane Saturation Flows**

<b>Junction: B430/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 Bicester Road)	3.00	0.00	Y	Arm 6 Left	13.00	19.3 %	1802	1802
				Arm 7 Ahead	30.00	64.3 %		
				Arm 8 Right	30.00	16.3 %		
2/1 (B430 Oxford Road)	3.00	0.00	Y	Arm 7 Left	30.00	33.1 %	1884	1884
				Arm 8 Ahead	Inf	66.9 %		
2/2 (B430 Oxford Road)	3.00	0.00	N	Arm 5 Right	10.00	100.0 %	1787	1787
3/1 (B4030 Heyford Road)	3.00	0.00	Y	Arm 5 Ahead	30.00	73.6 %	1819	1819
				Arm 6 Right	30.00	24.7 %		
				Arm 8 Left	7.00	1.7 %		
4/1 (B430 Ardley Road)	3.30	0.00	Y	Arm 5 Left	12.00	14.5 %	1902	1902
				Arm 6 Ahead	Inf	83.1 %		
				Arm 7 Right	8.00	2.4 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

**Scenario 6: '2026 Base PM + 50dw'** (FG6: '2026 Base PM + 50 dwellings', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	37	272	58	367
	B	79	0	69	305	453
	C	252	66	0	15	333
	D	57	195	11	0	263
	Tot.	388	298	352	378	1416

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 6: 2026 Base PM + 50dw
<b>Junction: B430/B4030</b>	
1/1	367
2/1 (with short)	453(In) 374(Out)
2/2 (short)	79
3/1	333
4/1	263
5/1	388
6/1	298
7/1	352
8/1	378

**Lane Saturation Flows**

<b>Junction: B430/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 Bicester Road)	3.00	0.00	Y	Arm 6 Left	13.00	10.1 %	1812	1812
				Arm 7 Ahead	30.00	74.1 %		
				Arm 8 Right	30.00	15.8 %		
2/1 (B430 Oxford Road)	3.00	0.00	Y	Arm 7 Left	30.00	18.4 %	1897	1897
				Arm 8 Ahead	Inf	81.6 %		
2/2 (B430 Oxford Road)	3.00	0.00	N	Arm 5 Right	10.00	100.0 %	1787	1787
3/1 (B4030 Heyford Road)	3.00	0.00	Y	Arm 5 Ahead	30.00	75.7 %	1811	1811
				Arm 6 Right	30.00	19.8 %		
				Arm 8 Left	7.00	4.5 %		
4/1 (B430 Ardley Road)	3.30	0.00	Y	Arm 5 Left	12.00	21.7 %	1879	1879
				Arm 6 Ahead	Inf	74.1 %		
				Arm 7 Right	8.00	4.2 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

**Scenario 7: '2027 Base AM'** (FG7: '2027 Base AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	83	277	71	431
B	46	0	80	165	291	
C	301	98	0	7	406	
D	72	411	13	0	496	
Tot.	419	592	370	243	1624	

**Traffic Lane Flows**

Lane	Scenario 7: 2027 Base AM
<b>Junction: B430/B4030</b>	
1/1	431
2/1 (with short)	291(In) 245(Out)
2/2 (short)	46
3/1	406
4/1	496
5/1	419
6/1	592
7/1	370
8/1	243

**Lane Saturation Flows**

<b>Junction: B430/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 Bicester Road)	3.00	0.00	Y	Arm 6 Left	13.00	19.3 %	1802	1802
				Arm 7 Ahead	30.00	64.3 %		
				Arm 8 Right	30.00	16.5 %		
2/1 (B430 Oxford Road)	3.00	0.00	Y	Arm 7 Left	30.00	32.7 %	1884	1884
				Arm 8 Ahead	Inf	67.3 %		
2/2 (B430 Oxford Road)	3.00	0.00	N	Arm 5 Right	10.00	100.0 %	1787	1787
3/1 (B4030 Heyford Road)	3.00	0.00	Y	Arm 5 Ahead	30.00	74.1 %	1819	1819
				Arm 6 Right	30.00	24.1 %		
				Arm 8 Left	7.00	1.7 %		
4/1 (B430 Ardley Road)	3.30	0.00	Y	Arm 5 Left	12.00	14.5 %	1901	1901
				Arm 6 Ahead	Inf	82.9 %		
				Arm 7 Right	8.00	2.6 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

**Scenario 8: '2027 Base PM'** (FG8: '2027 Base PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	38	273	59	370
	B	79	0	67	307	453
	C	253	65	0	15	333
	D	57	196	11	0	264
	Tot.	389	299	351	381	1420



Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 8: 2027 Base PM
<b>Junction: B430/B4030</b>	
1/1	370
2/1 (with short)	453(In) 374(Out)
2/2 (short)	79
3/1	333
4/1	264
5/1	389
6/1	299
7/1	351
8/1	381

**Lane Saturation Flows**

<b>Junction: B430/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 Bicester Road)	3.00	0.00	Y	Arm 6 Left	13.00	10.3 %	1812	1812
				Arm 7 Ahead	30.00	73.8 %		
				Arm 8 Right	30.00	15.9 %		
2/1 (B430 Oxford Road)	3.00	0.00	Y	Arm 7 Left	30.00	17.9 %	1898	1898
				Arm 8 Ahead	Inf	82.1 %		
2/2 (B430 Oxford Road)	3.00	0.00	N	Arm 5 Right	10.00	100.0 %	1787	1787
3/1 (B4030 Heyford Road)	3.00	0.00	Y	Arm 5 Ahead	30.00	76.0 %	1811	1811
				Arm 6 Right	30.00	19.5 %		
				Arm 8 Left	7.00	4.5 %		
4/1 (B430 Ardley Road)	3.30	0.00	Y	Arm 5 Left	12.00	21.6 %	1880	1880
				Arm 6 Ahead	Inf	74.2 %		
				Arm 7 Right	8.00	4.2 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

**Scenario 9: '2027 Base AM + 100dw'** (FG9: '2027 Base AM + 100 dwellings', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	83	279	71	433
B	46	0	83	165	294	
C	305	106	0	7	418	
D	72	411	13	0	496	
Tot.	423	600	375	243	1641	

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 9: 2027 Base AM + 100dw
<b>Junction: B430/B4030</b>	
1/1	433
2/1 (with short)	294(In) 248(Out)
2/2 (short)	46
3/1	418
4/1	496
5/1	423
6/1	600
7/1	375
8/1	243

**Lane Saturation Flows**

<b>Junction: B430/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 Bicester Road)	3.00	0.00	Y	Arm 6 Left	13.00	19.2 %	1802	1802
				Arm 7 Ahead	30.00	64.4 %		
				Arm 8 Right	30.00	16.4 %		
2/1 (B430 Oxford Road)	3.00	0.00	Y	Arm 7 Left	30.00	33.5 %	1883	1883
				Arm 8 Ahead	Inf	66.5 %		
2/2 (B430 Oxford Road)	3.00	0.00	N	Arm 5 Right	10.00	100.0 %	1787	1787
3/1 (B4030 Heyford Road)	3.00	0.00	Y	Arm 5 Ahead	30.00	73.0 %	1819	1819
				Arm 6 Right	30.00	25.4 %		
				Arm 8 Left	7.00	1.7 %		
4/1 (B430 Ardley Road)	3.30	0.00	Y	Arm 5 Left	12.00	14.5 %	1901	1901
				Arm 6 Ahead	Inf	82.9 %		
				Arm 7 Right	8.00	2.6 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

**Scenario 10: '2027 Base PM + 100dw'** (FG10: '2027 Base PM + 100 dwellings', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	38	275	59	372
	B	79	0	72	307	458
	C	254	68	0	15	337
	D	57	196	11	0	264
	Tot.	390	302	358	381	1431

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 10: 2027 Base PM + 100dw
<b>Junction: B430/B4030</b>	
1/1	372
2/1 (with short)	458(In) 379(Out)
2/2 (short)	79
3/1	337
4/1	264
5/1	390
6/1	302
7/1	358
8/1	381

**Lane Saturation Flows**

<b>Junction: B430/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 Bicester Road)	3.00	0.00	Y	Arm 6 Left	13.00	10.2 %	1812	1812
				Arm 7 Ahead	30.00	73.9 %		
				Arm 8 Right	30.00	15.9 %		
2/1 (B430 Oxford Road)	3.00	0.00	Y	Arm 7 Left	30.00	19.0 %	1897	1897
				Arm 8 Ahead	Inf	81.0 %		
2/2 (B430 Oxford Road)	3.00	0.00	N	Arm 5 Right	10.00	100.0 %	1787	1787
3/1 (B4030 Heyford Road)	3.00	0.00	Y	Arm 5 Ahead	30.00	75.4 %	1811	1811
				Arm 6 Right	30.00	20.2 %		
				Arm 8 Left	7.00	4.5 %		
				Arm 5 Left	12.00	21.6 %		
4/1 (B430 Ardley Road)	3.30	0.00	Y	Arm 6 Ahead	Inf	74.2 %	1880	1880
				Arm 7 Right	8.00	4.2 %		
5/1				Infinite Saturation Flow			Inf	Inf
6/1				Infinite Saturation Flow			Inf	Inf
7/1				Infinite Saturation Flow			Inf	Inf
8/1				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

**Scenario 11: '2028 Base AM'** (FG11: '2028 Base AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	84	280	71	435
B	46	0	81	166	293	
C	304	99	0	7	410	
D	73	414	13	0	500	
Tot.	423	597	374	244	1638	

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 11: 2028 Base AM
<b>Junction: B430/B4030</b>	
1/1	435
2/1 (with short)	293(In) 247(Out)
2/2 (short)	46
3/1	410
4/1	500
5/1	423
6/1	597
7/1	374
8/1	244

**Lane Saturation Flows**

<b>Junction: B430/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 Bicester Road)	3.00	0.00	Y	Arm 6 Left	13.00	19.3 %	1802	1802
				Arm 7 Ahead	30.00	64.4 %		
				Arm 8 Right	30.00	16.3 %		
2/1 (B430 Oxford Road)	3.00	0.00	Y	Arm 7 Left	30.00	32.8 %	1884	1884
				Arm 8 Ahead	Inf	67.2 %		
2/2 (B430 Oxford Road)	3.00	0.00	N	Arm 5 Right	10.00	100.0 %	1787	1787
3/1 (B4030 Heyford Road)	3.00	0.00	Y	Arm 5 Ahead	30.00	74.1 %	1819	1819
				Arm 6 Right	30.00	24.1 %		
				Arm 8 Left	7.00	1.7 %		
				Arm 5 Left	12.00	14.6 %		
4/1 (B430 Ardley Road)	3.30	0.00	Y	Arm 6 Ahead	Inf	82.8 %	1901	1901
				Arm 7 Right	8.00	2.6 %		
5/1				Infinite Saturation Flow			Inf	Inf
6/1				Infinite Saturation Flow			Inf	Inf
7/1				Infinite Saturation Flow			Inf	Inf
8/1				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

**Scenario 12: '2028 Base PM'** (FG12: '2028 Base PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	38	275	59	372
	B	80	0	67	310	457
	C	255	65	0	15	335
	D	58	198	12	0	268
	Tot.	393	301	354	384	1432



Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 12: 2028 Base PM
<b>Junction: B430/B4030</b>	
1/1	372
2/1 (with short)	457(In) 377(Out)
2/2 (short)	80
3/1	335
4/1	268
5/1	393
6/1	301
7/1	354
8/1	384

**Lane Saturation Flows**

<b>Junction: B430/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 Bicester Road)	3.00	0.00	Y	Arm 6 Left	13.00	10.2 %	1812	1812
				Arm 7 Ahead	30.00	73.9 %		
				Arm 8 Right	30.00	15.9 %		
2/1 (B430 Oxford Road)	3.00	0.00	Y	Arm 7 Left	30.00	17.8 %	1898	1898
				Arm 8 Ahead	Inf	82.2 %		
2/2 (B430 Oxford Road)	3.00	0.00	N	Arm 5 Right	10.00	100.0 %	1787	1787
3/1 (B4030 Heyford Road)	3.00	0.00	Y	Arm 5 Ahead	30.00	76.1 %	1811	1811
				Arm 6 Right	30.00	19.4 %		
				Arm 8 Left	7.00	4.5 %		
				Arm 5 Left	12.00	21.6 %		
4/1 (B430 Ardley Road)	3.30	0.00	Y	Arm 6 Ahead	Inf	73.9 %	1878	1878
				Arm 7 Right	8.00	4.5 %		
5/1				Infinite Saturation Flow			Inf	Inf
6/1				Infinite Saturation Flow			Inf	Inf
7/1				Infinite Saturation Flow			Inf	Inf
8/1				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

**Scenario 13: '2028 Base AM + 150dw'** (FG13: '2028 Base AM + 150 dwellings', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	84	281	71	436
B	46	0	85	166	297	
C	309	111	0	7	427	
D	73	414	13	0	500	
Tot.	428	609	379	244	1660	

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 13: 2028 Base AM + 150dw
<b>Junction: B430/B4030</b>	
1/1	436
2/1 (with short)	297(In) 251(Out)
2/2 (short)	46
3/1	427
4/1	500
5/1	428
6/1	609
7/1	379
8/1	244

**Lane Saturation Flows**

<b>Junction: B430/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 Bicester Road)	3.00	0.00	Y	Arm 6 Left	13.00	19.3 %	1802	1802
				Arm 7 Ahead	30.00	64.4 %		
				Arm 8 Right	30.00	16.3 %		
2/1 (B430 Oxford Road)	3.00	0.00	Y	Arm 7 Left	30.00	33.9 %	1883	1883
				Arm 8 Ahead	Inf	66.1 %		
2/2 (B430 Oxford Road)	3.00	0.00	N	Arm 5 Right	10.00	100.0 %	1787	1787
3/1 (B4030 Heyford Road)	3.00	0.00	Y	Arm 5 Ahead	30.00	72.4 %	1819	1819
				Arm 6 Right	30.00	26.0 %		
				Arm 8 Left	7.00	1.6 %		
				Arm 5 Left	12.00	14.6 %		
4/1 (B430 Ardley Road)	3.30	0.00	Y	Arm 6 Ahead	Inf	82.8 %	1901	1901
				Arm 7 Right	8.00	2.6 %		
5/1				Infinite Saturation Flow			Inf	Inf
6/1				Infinite Saturation Flow			Inf	Inf
7/1				Infinite Saturation Flow			Inf	Inf
8/1				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

**Scenario 14: '2028 Base PM + 150dw'** (FG14: '2028 Base PM + 150 dwellings', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	38	279	59	376
B	80	0	76	310	466	
C	257	70	0	15	342	
D	58	198	12	0	268	
Tot.	395	306	367	384	1452	

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 14: 2028 Base PM + 150dw
<b>Junction: B430/B4030</b>	
1/1	376
2/1 (with short)	466(In) 386(Out)
2/2 (short)	80
3/1	342
4/1	268
5/1	395
6/1	306
7/1	367
8/1	384

**Lane Saturation Flows**

<b>Junction: B430/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 Bicester Road)	3.00	0.00	Y	Arm 6 Left	13.00	10.1 %	1812	1812
				Arm 7 Ahead	30.00	74.2 %		
				Arm 8 Right	30.00	15.7 %		
2/1 (B430 Oxford Road)	3.00	0.00	Y	Arm 7 Left	30.00	19.7 %	1896	1896
				Arm 8 Ahead	Inf	80.3 %		
2/2 (B430 Oxford Road)	3.00	0.00	N	Arm 5 Right	10.00	100.0 %	1787	1787
3/1 (B4030 Heyford Road)	3.00	0.00	Y	Arm 5 Ahead	30.00	75.1 %	1811	1811
				Arm 6 Right	30.00	20.5 %		
				Arm 8 Left	7.00	4.4 %		
				Arm 5 Left	12.00	21.6 %		
4/1 (B430 Ardley Road)	3.30	0.00	Y	Arm 6 Ahead	Inf	73.9 %	1878	1878
				Arm 7 Right	8.00	4.5 %		
5/1				Infinite Saturation Flow			Inf	Inf
6/1				Infinite Saturation Flow			Inf	Inf
7/1				Infinite Saturation Flow			Inf	Inf
8/1				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

**Scenario 15: '2031 Base AM'** (FG15: '2031 Base AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	86	286	73	445
B	47	0	83	170	300	
C	311	101	0	8	420	
D	74	424	13	0	511	
Tot.	432	611	382	251	1676	

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 15: 2031 Base AM
<b>Junction: B430/B4030</b>	
1/1	445
2/1 (with short)	300(In) 253(Out)
2/2 (short)	47
3/1	420
4/1	511
5/1	432
6/1	611
7/1	382
8/1	251

**Lane Saturation Flows**

<b>Junction: B430/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 Bicester Road)	3.00	0.00	Y	Arm 6 Left	13.00	19.3 %	1802	1802
				Arm 7 Ahead	30.00	64.3 %		
				Arm 8 Right	30.00	16.4 %		
2/1 (B430 Oxford Road)	3.00	0.00	Y	Arm 7 Left	30.00	32.8 %	1884	1884
				Arm 8 Ahead	Inf	67.2 %		
2/2 (B430 Oxford Road)	3.00	0.00	N	Arm 5 Right	10.00	100.0 %	1787	1787
3/1 (B4030 Heyford Road)	3.00	0.00	Y	Arm 5 Ahead	30.00	74.0 %	1818	1818
				Arm 6 Right	30.00	24.0 %		
				Arm 8 Left	7.00	1.9 %		
				Arm 5 Left	12.00	14.5 %		
4/1 (B430 Ardley Road)	3.30	0.00	Y	Arm 6 Ahead	Inf	83.0 %	1902	1902
				Arm 7 Right	8.00	2.5 %		
5/1				Infinite Saturation Flow			Inf	Inf
6/1				Infinite Saturation Flow			Inf	Inf
7/1				Infinite Saturation Flow			Inf	Inf
8/1				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

**Scenario 16: '2031 Base PM'** (FG16: '2031 Base PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	39	282	60	381
B	82	0	69	317	468	
C	261	67	0	15	343	
D	59	203	12	0	274	
Tot.	402	309	363	392	1466	



Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 16: 2031 Base PM
<b>Junction: B430/B4030</b>	
1/1	381
2/1 (with short)	468(In) 386(Out)
2/2 (short)	82
3/1	343
4/1	274
5/1	402
6/1	309
7/1	363
8/1	392

**Lane Saturation Flows**

<b>Junction: B430/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 Bicester Road)	3.00	0.00	Y	Arm 6 Left	13.00	10.2 %	1812	1812
				Arm 7 Ahead	30.00	74.0 %		
				Arm 8 Right	30.00	15.7 %		
2/1 (B430 Oxford Road)	3.00	0.00	Y	Arm 7 Left	30.00	17.9 %	1898	1898
				Arm 8 Ahead	Inf	82.1 %		
2/2 (B430 Oxford Road)	3.00	0.00	N	Arm 5 Right	10.00	100.0 %	1787	1787
3/1 (B4030 Heyford Road)	3.00	0.00	Y	Arm 5 Ahead	30.00	76.1 %	1811	1811
				Arm 6 Right	30.00	19.5 %		
				Arm 8 Left	7.00	4.4 %		
				Arm 5 Left	12.00	21.5 %		
4/1 (B430 Ardley Road)	3.30	0.00	Y	Arm 6 Ahead	Inf	74.1 %	1879	1879
				Arm 7 Right	8.00	4.4 %		
5/1				Infinite Saturation Flow			Inf	Inf
6/1				Infinite Saturation Flow			Inf	Inf
7/1				Infinite Saturation Flow			Inf	Inf
8/1				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

**Scenario 17: '2031 Base AM + 230dw'** (FG17: '2031 Base AM + 230 dwellings', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	86	289	73	448
B	47	0	89	170	306	
C	320	119	0	8	447	
D	74	424	13	0	511	
Tot.	441	629	391	251	1712	

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 17: 2031 Base AM + 230dw
<b>Junction: B430/B4030</b>	
1/1	448
2/1 (with short)	306(In) 259(Out)
2/2 (short)	47
3/1	447
4/1	511
5/1	441
6/1	629
7/1	391
8/1	251

**Lane Saturation Flows**

<b>Junction: B430/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 Bicester Road)	3.00	0.00	Y	Arm 6 Left	13.00	19.2 %	1802	1802
				Arm 7 Ahead	30.00	64.5 %		
				Arm 8 Right	30.00	16.3 %		
2/1 (B430 Oxford Road)	3.00	0.00	Y	Arm 7 Left	30.00	34.4 %	1883	1883
				Arm 8 Ahead	Inf	65.6 %		
2/2 (B430 Oxford Road)	3.00	0.00	N	Arm 5 Right	10.00	100.0 %	1787	1787
3/1 (B4030 Heyford Road)	3.00	0.00	Y	Arm 5 Ahead	30.00	71.6 %	1819	1819
				Arm 6 Right	30.00	26.6 %		
				Arm 8 Left	7.00	1.8 %		
				Arm 5 Left	12.00	14.5 %		
4/1 (B430 Ardley Road)	3.30	0.00	Y	Arm 6 Ahead	Inf	83.0 %	1902	1902
				Arm 7 Right	8.00	2.5 %		
5/1				Infinite Saturation Flow			Inf	Inf
6/1				Infinite Saturation Flow			Inf	Inf
7/1				Infinite Saturation Flow			Inf	Inf
8/1				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

**Scenario 18: '2031 Base PM + 230dw'** (FG18: '2031 Base PM + 230 dwellings', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	39	288	60	387
	B	82	0	82	317	481
	C	264	74	0	15	353
	D	59	203	12	0	274
	Tot.	405	316	382	392	1495

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 18: 2031 Base PM + 230dw
<b>Junction: B430/B4030</b>	
1/1	387
2/1 (with short)	481(In) 399(Out)
2/2 (short)	82
3/1	353
4/1	274
5/1	405
6/1	316
7/1	382
8/1	392

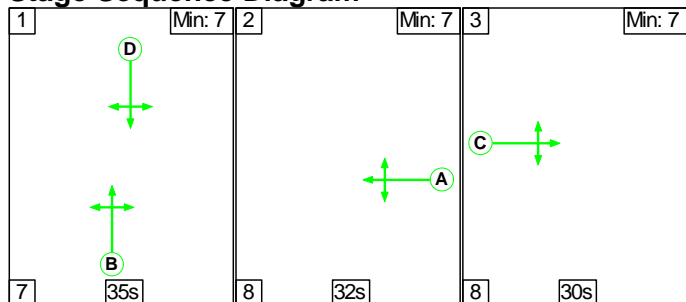
**Lane Saturation Flows**

<b>Junction: B430/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 Bicester Road)	3.00	0.00	Y	Arm 6 Left	13.00	10.1 %	1812	1812
				Arm 7 Ahead	30.00	74.4 %		
				Arm 8 Right	30.00	15.5 %		
2/1 (B430 Oxford Road)	3.00	0.00	Y	Arm 7 Left	30.00	20.6 %	1896	1896
				Arm 8 Ahead	Inf	79.4 %		
2/2 (B430 Oxford Road)	3.00	0.00	N	Arm 5 Right	10.00	100.0 %	1787	1787
3/1 (B4030 Heyford Road)	3.00	0.00	Y	Arm 5 Ahead	30.00	74.8 %	1812	1812
				Arm 6 Right	30.00	21.0 %		
				Arm 8 Left	7.00	4.2 %		
				Arm 5 Left	12.00	21.5 %		
4/1 (B430 Ardley Road)	3.30	0.00	Y	Arm 6 Ahead	Inf	74.1 %	1879	1879
				Arm 7 Right	8.00	4.4 %		
5/1				Infinite Saturation Flow			Inf	Inf
6/1				Infinite Saturation Flow			Inf	Inf
7/1				Infinite Saturation Flow			Inf	Inf
8/1				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

Scenario 1: '2023 Base AM' (FG1: '2023 Base AM', Plan 1: 'Network Control Plan 1')

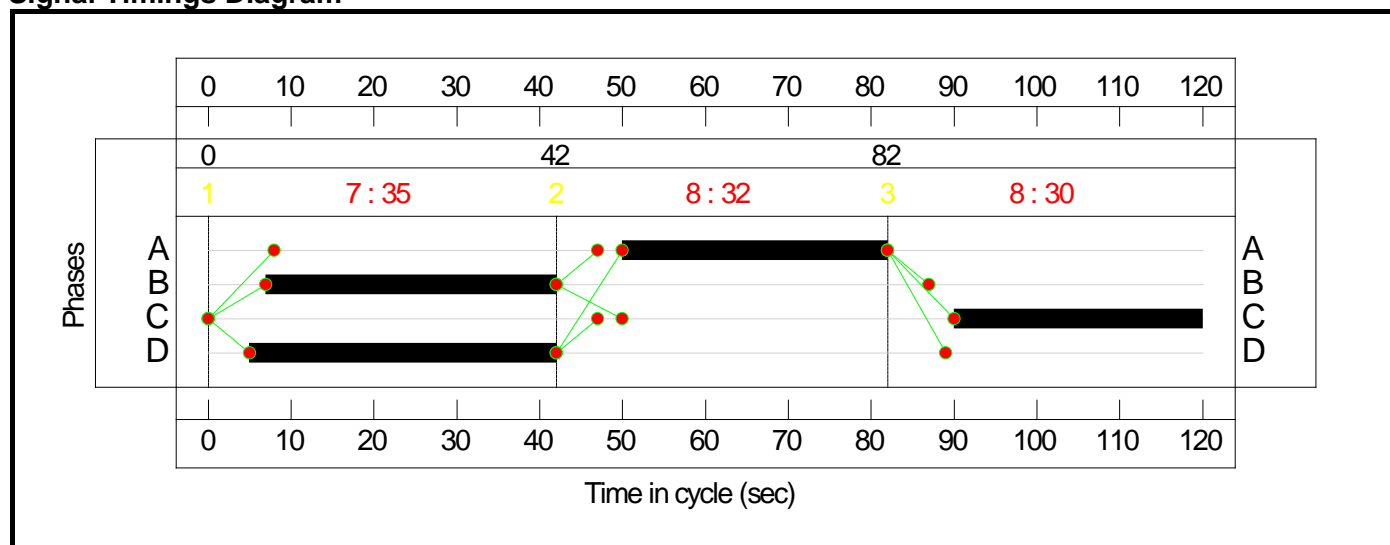
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	35	32	30
Change Point	0	42	82

Signal Timings Diagram



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network: B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>83.5%</b>
<b>B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>83.5%</b>
1/1	B4030 Bicester Road Left Ahead Right	U	N/A	N/A	A		1	32	-	414	1802	496	83.5%
2/1+2/2	B430 Oxford Road Right Left Ahead	U+O	N/A	N/A	B		1	35	-	279	1884:1787	491+92	47.9 : 47.9%
3/1	B4030 Heyford Road Ahead Right Left	U	N/A	N/A	C		1	30	-	390	1819	470	83.0%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	D		1	37	-	475	1901	602	78.9%
5/1		U	N/A	N/A	-		-	-	-	402	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	568	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	355	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	233	Inf	Inf	0.0%

Full Input Data And Results

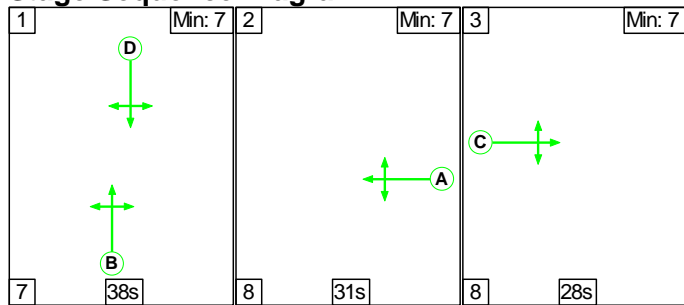
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network: B430/B4030</b>	-	-	56	0	0	16.8	7.0	0.3	24.0	-	-	-	-
<b>B430/B4030</b>	-	-	56	0	0	16.8	7.0	0.3	24.0	-	-	-	-
1/1	414	414	-	-	-	4.7	2.4	-	7.1	61.8	12.9	2.4	15.3
2/1+2/2	279	279	44	0	0	2.6	0.5	0.3	3.3	42.6	6.6	0.5	7.0
3/1	390	390	-	-	-	4.6	2.3	-	6.9	63.3	12.2	2.3	14.5
4/1	475	475	12	0	0	4.9	1.8	0.0	6.8	51.2	14.4	1.8	16.2
5/1	402	402	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	568	568	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	355	355	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	233	233	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1      PRC for Signalled Lanes (%): 7.7      Total Delay for Signalled Lanes (pcuHr): 24.02      Cycle Time (s): 120                      PRC Over All Lanes (%): 7.7      Total Delay Over All Lanes(pcuHr): 24.02</p>													



Full Input Data And Results

Scenario 2: '2023 Base PM' (FG2: '2023 Base PM', Plan 1: 'Network Control Plan 1')

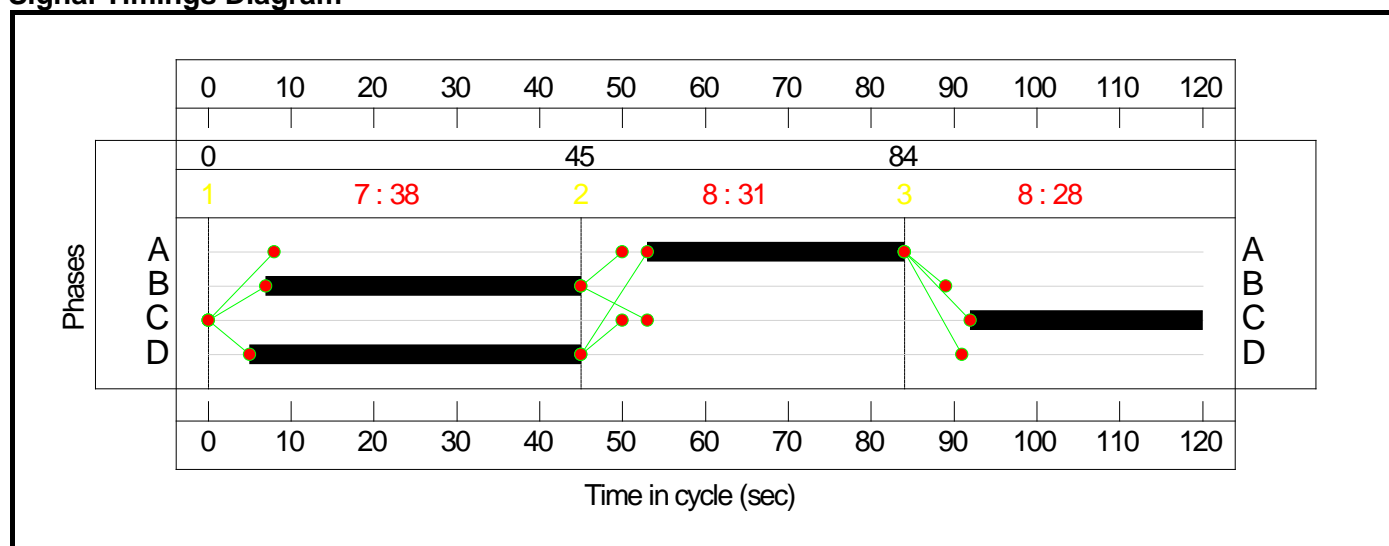
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	38	31	28
Change Point	0	45	84

Signal Timings Diagram



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network: B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>73.1%</b>
<b>B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>73.1%</b>
1/1	B4030 Bicester Road Left Ahead Right	U	N/A	N/A	A		1	31	-	353	1812	483	73.1%
2/1+2/2	B430 Oxford Road Right Left Ahead	U+O	N/A	N/A	B		1	38	-	434	1898:1787	537+114	66.6 : 66.6%
3/1	B4030 Heyford Road Ahead Right Left	U	N/A	N/A	C		1	28	-	318	1811	438	72.7%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	D		1	40	-	254	1879	642	39.6%
5/1		U	N/A	N/A	-		-	-	-	373	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	286	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	336	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	364	Inf	Inf	0.0%

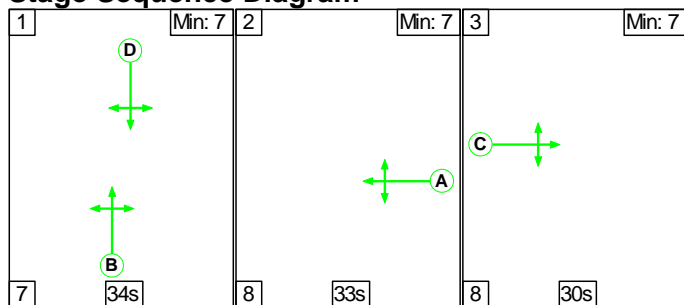
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network: B430/B4030</b>	-	-	<b>87</b>	<b>0</b>	<b>0</b>	<b>13.8</b>	<b>3.9</b>	<b>0.1</b>	<b>17.9</b>	-	-	-	-
<b>B430/B4030</b>	-	-	<b>87</b>	<b>0</b>	<b>0</b>	<b>13.8</b>	<b>3.9</b>	<b>0.1</b>	<b>17.9</b>	-	-	-	-
1/1	353	353	-	-	-	3.9	1.3	-	5.3	53.6	10.7	1.3	12.0
2/1+2/2	434	434	76	0	0	4.1	1.0	0.1	5.2	42.8	11.1	1.0	12.1
3/1	318	318	-	-	-	3.7	1.3	-	5.0	56.6	9.7	1.3	11.0
4/1	254	254	11	0	0	2.1	0.3	0.0	2.5	35.3	6.4	0.3	6.7
5/1	373	373	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	286	286	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	336	336	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	364	364	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1      PRC for Signalled Lanes (%): 23.2      Total Delay for Signalled Lanes (pcuHr): 17.91      Cycle Time (s): 120                      PRC Over All Lanes (%): 23.2      Total Delay Over All Lanes(pcuHr): 17.91</p>													

Full Input Data And Results

Scenario 3: '2026 Base AM' (FG3: '2026 Base AM', Plan 1: 'Network Control Plan 1')

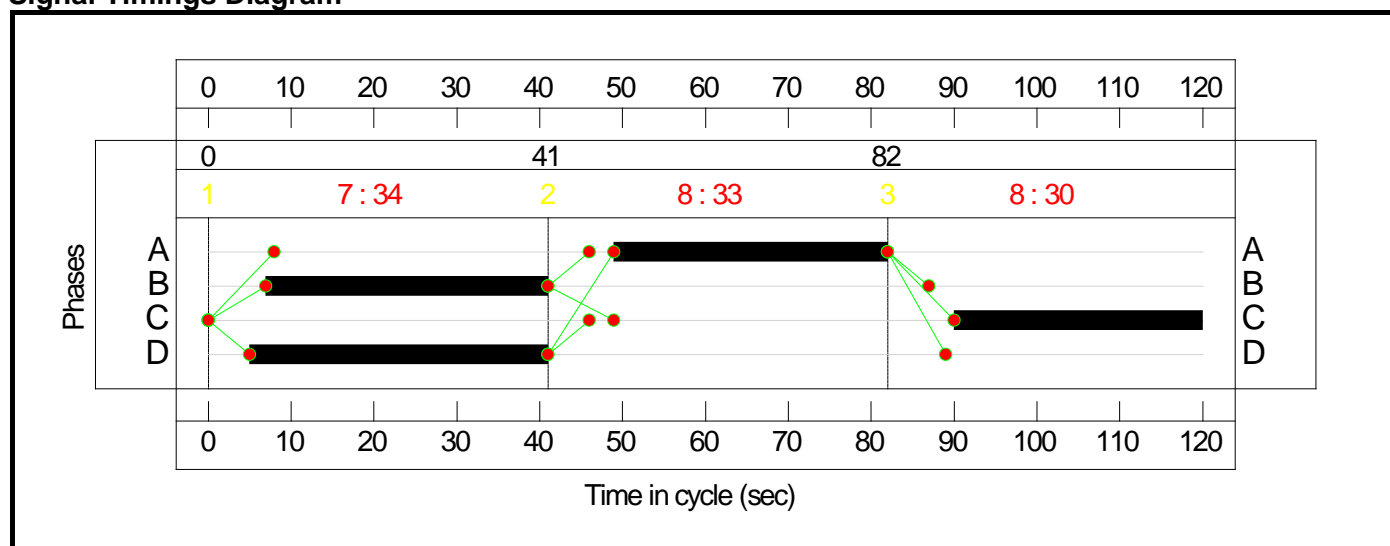
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	34	33	30
Change Point	0	41	82

Signal Timings Diagram



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network: B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>85.8%</b>
<b>B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>85.8%</b>
1/1	B4030 Bicester Road Left Ahead Right	U	N/A	N/A	A		1	33	-	428	1802	511	83.8%
2/1+2/2	B430 Oxford Road Right Left Ahead	U+O	N/A	N/A	B		1	34	-	290	1884:1787	477+90	51.1 : 51.1%
3/1	B4030 Heyford Road Ahead Right Left	U	N/A	N/A	C		1	30	-	403	1819	470	85.8%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	D		1	36	-	491	1902	586	83.7%
5/1		U	N/A	N/A	-		-	-	-	416	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	588	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	367	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	241	Inf	Inf	0.0%

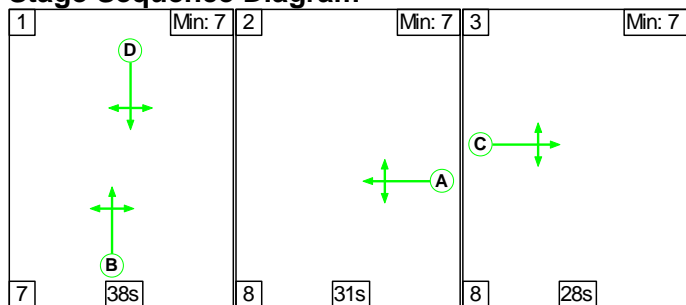
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)														
<b>Network: B430/B4030</b>	-	-	58	0	0	17.6	8.2	0.3	26.1	-	-	-	-														
<b>B430/B4030</b>	-	-	58	0	0	17.6	8.2	0.3	26.1	-	-	-	-														
1/1	428	428	-	-	-	4.8	2.4	-	7.3	61.0	13.3	2.4	15.8														
2/1+2/2	290	290	46	0	0	2.8	0.5	0.3	3.6	44.4	7.0	0.5	7.5														
3/1	403	403	-	-	-	4.7	2.8	-	7.5	67.2	12.8	2.8	15.5														
4/1	491	491	12	0	0	5.3	2.4	0.0	7.7	56.7	15.1	2.4	17.6														
5/1	416	416	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0														
6/1	588	588	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0														
7/1	367	367	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0														
8/1	241	241	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0														
<table style="width:100%; border:none;"> <tr> <td style="width:20%;">C1</td> <td style="width:20%;">PRC for Signalled Lanes (%):</td> <td style="width:10%;">4.9</td> <td style="width:20%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width:10%;">26.09</td> <td style="width:20%;">Cycle Time (s):</td> <td>120</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>4.9</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>26.09</td> <td></td> <td></td> </tr> </table>														C1	PRC for Signalled Lanes (%):	4.9	Total Delay for Signalled Lanes (pcuHr):	26.09	Cycle Time (s):	120		PRC Over All Lanes (%):	4.9	Total Delay Over All Lanes(pcuHr):	26.09		
C1	PRC for Signalled Lanes (%):	4.9	Total Delay for Signalled Lanes (pcuHr):	26.09	Cycle Time (s):	120																					
	PRC Over All Lanes (%):	4.9	Total Delay Over All Lanes(pcuHr):	26.09																							

Full Input Data And Results

Scenario 4: '2026 Base PM' (FG4: '2026 Base PM', Plan 1: 'Network Control Plan 1')

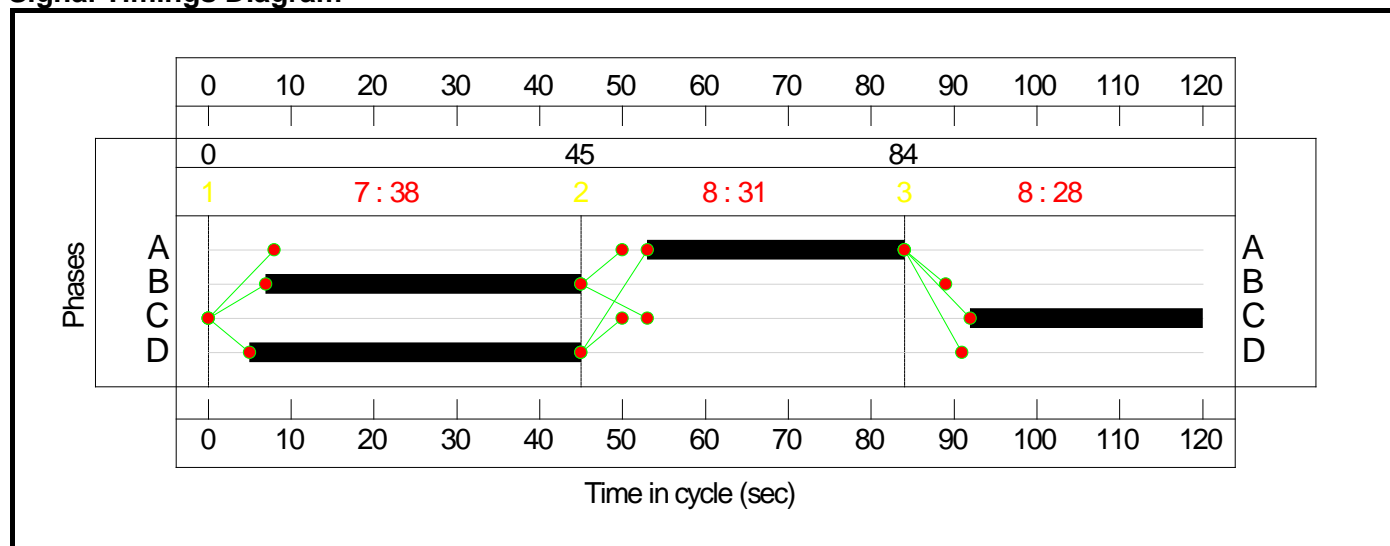
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	38	31	28
Change Point	0	45	84

Signal Timings Diagram



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network: B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>75.7%</b>
<b>B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>75.7%</b>
1/1	B4030 Bicester Road Left Ahead Right	U	N/A	N/A	A		1	31	-	366	1812	483	75.7%
2/1+2/2	B430 Oxford Road Right Left Ahead	U+O	N/A	N/A	B		1	38	-	450	1898:1787	537+114	69.1 : 69.1%
3/1	B4030 Heyford Road Ahead Right Left	U	N/A	N/A	C		1	28	-	330	1811	438	75.4%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	D		1	40	-	263	1879	642	41.0%
5/1		U	N/A	N/A	-		-	-	-	387	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	296	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	348	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	378	Inf	Inf	0.0%

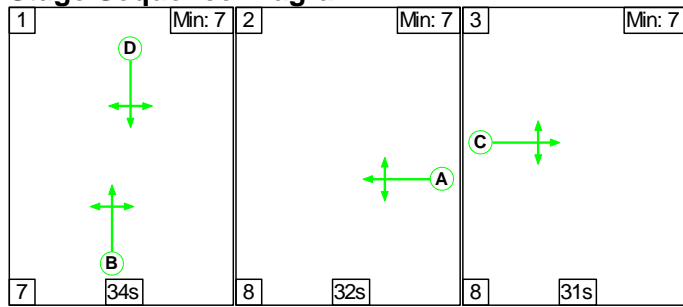




Full Input Data And Results

**Scenario 5: '2026 Base AM + 50dw'** (FG5: '2026 Base AM + 50 dwellings', Plan 1: 'Network Control Plan 1')

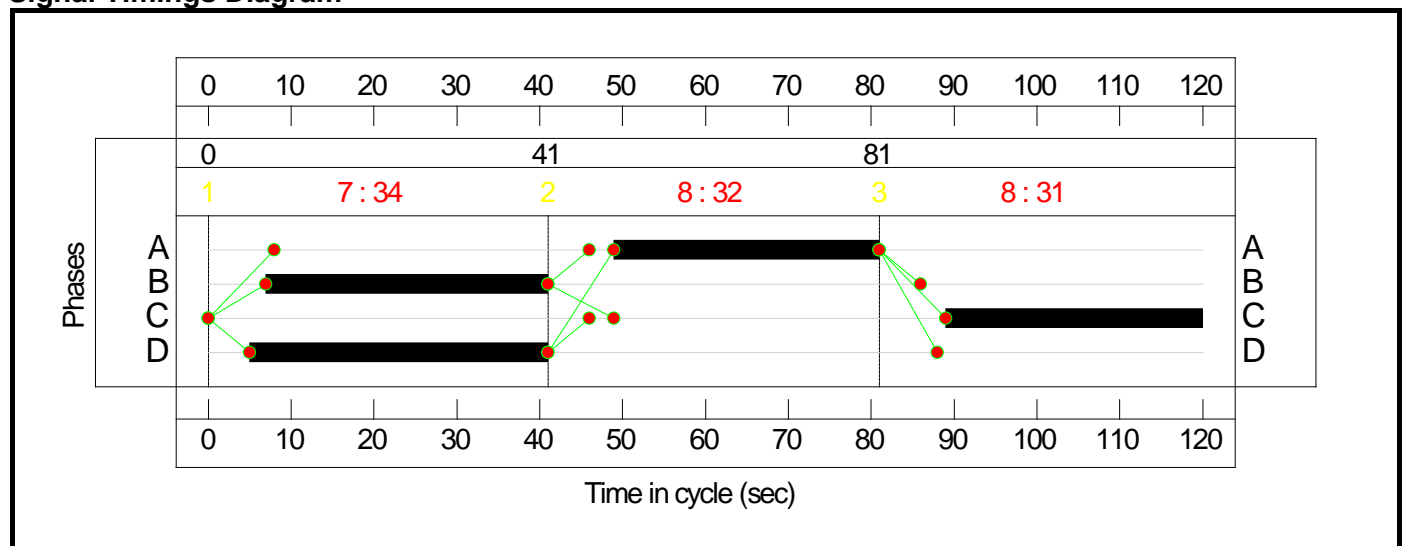
**Stage Sequence Diagram**



**Stage Timings**

Stage	1	2	3
Duration	34	32	31
Change Point	0	41	81

**Signal Timings Diagram**



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network: B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>86.6%</b>
<b>B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>86.6%</b>
1/1	B4030 Bicester Road Left Ahead Right	U	N/A	N/A	A		1	32	-	429	1802	496	86.6%
2/1+2/2	B430 Oxford Road Right Left Ahead	U+O	N/A	N/A	B		1	34	-	291	1884:1787	478+90	51.3 : 51.3%
3/1	B4030 Heyford Road Ahead Right Left	U	N/A	N/A	C		1	31	-	409	1819	485	84.3%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	D		1	36	-	491	1902	586	83.7%
5/1		U	N/A	N/A	-		-	-	-	418	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	592	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	369	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	241	Inf	Inf	0.0%

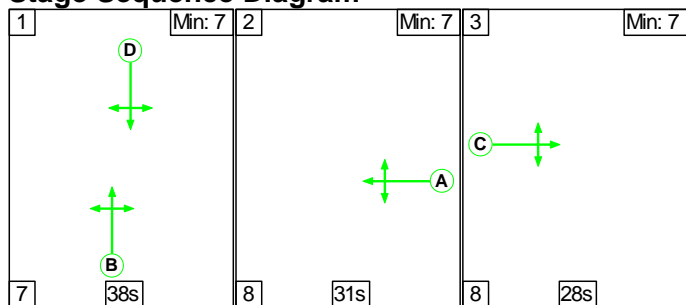
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network: B430/B4030</b>	-	-	<b>58</b>	<b>0</b>	<b>0</b>	<b>17.7</b>	<b>8.5</b>	<b>0.3</b>	<b>26.5</b>	-	-	-	-
<b>B430/B4030</b>	-	-	<b>58</b>	<b>0</b>	<b>0</b>	<b>17.7</b>	<b>8.5</b>	<b>0.3</b>	<b>26.5</b>	-	-	-	-
1/1	429	429	-	-	-	4.9	3.0	-	7.9	66.2	13.6	3.0	16.5
2/1+2/2	291	291	46	0	0	2.8	0.5	0.3	3.6	44.5	7.0	0.5	7.5
3/1	409	409	-	-	-	4.7	2.5	-	7.3	63.8	12.8	2.5	15.4
4/1	491	491	12	0	0	5.3	2.4	0.0	7.7	56.7	15.1	2.4	17.6
5/1	418	418	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	592	592	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	369	369	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	241	241	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):	4.0	Total Delay for Signalled Lanes (pcuHr):			26.47	Cycle Time (s): 120				
			PRC Over All Lanes (%):	4.0	Total Delay Over All Lanes(pcuHr):			26.47					

Full Input Data And Results

Scenario 6: '2026 Base PM + 50dw' (FG6: '2026 Base PM + 50 dwellings', Plan 1: 'Network Control Plan 1')

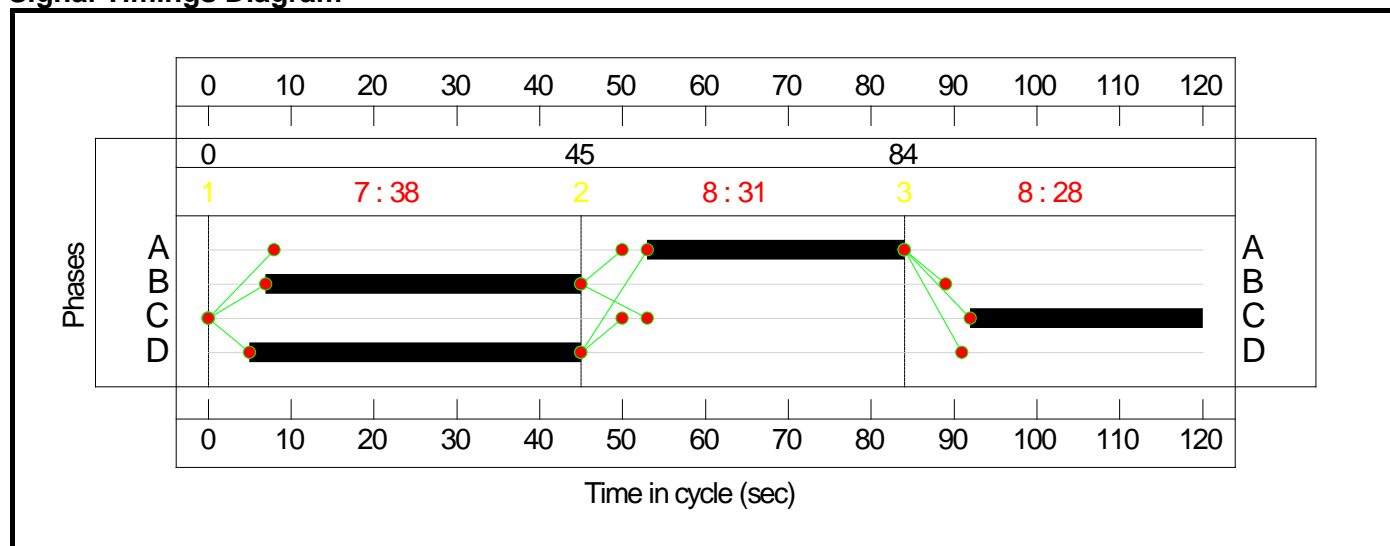
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	38	31	28
Change Point	0	45	84

Signal Timings Diagram



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network: B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>76.1%</b>
<b>B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>76.1%</b>
1/1	B4030 Bicester Road Left Ahead Right	U	N/A	N/A	A		1	31	-	367	1812	483	76.0%
2/1+2/2	B430 Oxford Road Right Left Ahead	U+O	N/A	N/A	B		1	38	-	453	1897:1787	537+114	69.6 : 69.6%
3/1	B4030 Heyford Road Ahead Right Left	U	N/A	N/A	C		1	28	-	333	1811	438	76.1%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	D		1	40	-	263	1879	642	41.0%
5/1		U	N/A	N/A	-		-	-	-	388	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	298	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	352	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	378	Inf	Inf	0.0%

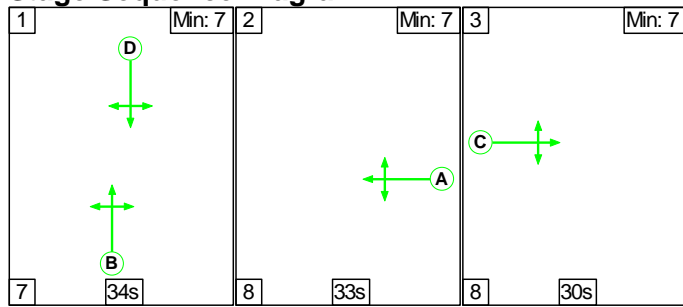
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network: B430/B4030</b>	-	-	<b>90</b>	<b>0</b>	<b>0</b>	<b>14.5</b>	<b>4.6</b>	<b>0.2</b>	<b>19.3</b>	-	-	-	-
<b>B430/B4030</b>	-	-	<b>90</b>	<b>0</b>	<b>0</b>	<b>14.5</b>	<b>4.6</b>	<b>0.2</b>	<b>19.3</b>	-	-	-	-
1/1	367	367	-	-	-	4.1	1.5	-	5.7	55.6	11.2	1.5	12.8
2/1+2/2	453	453	79	0	0	4.3	1.1	0.1	5.5	44.1	11.9	1.1	13.0
3/1	333	333	-	-	-	3.9	1.5	-	5.5	59.0	10.3	1.5	11.8
4/1	263	263	11	0	0	2.2	0.3	0.0	2.6	35.6	6.6	0.3	7.0
5/1	388	388	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	298	298	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	352	352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	378	378	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		18.3	Total Delay for Signalled Lanes (pcuHr):		19.27	Cycle Time (s): 120				
			PRC Over All Lanes (%):		18.3	Total Delay Over All Lanes(pcuHr):		19.27					

Full Input Data And Results

Scenario 7: '2027 Base AM' (FG7: '2027 Base AM', Plan 1: 'Network Control Plan 1')

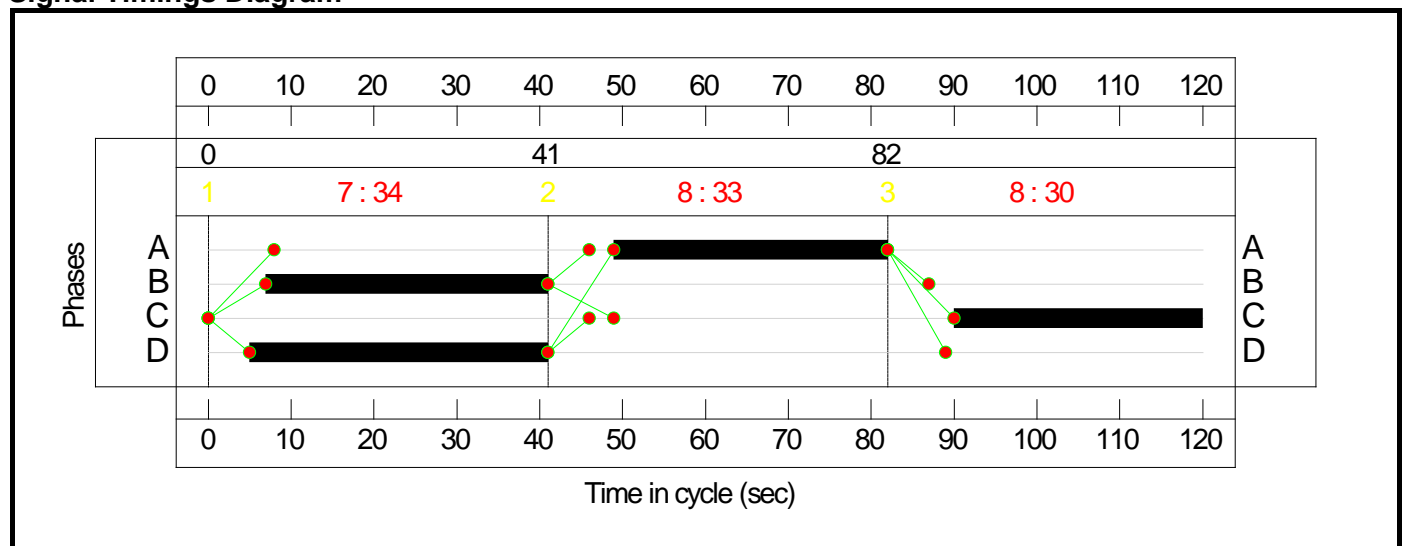
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	34	33	30
Change Point	0	41	82

Signal Timings Diagram





Full Input Data And Results

**Network Results**

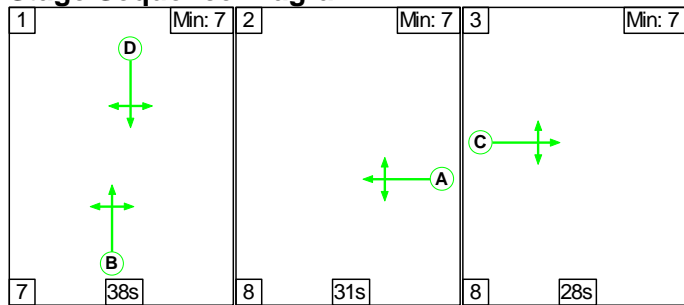
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network: B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>86.4%</b>
<b>B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>86.4%</b>
1/1	B4030 Bicester Road Left Ahead Right	U	N/A	N/A	A		1	33	-	431	1802	511	84.4%
2/1+2/2	B430 Oxford Road Right Left Ahead	U+O	N/A	N/A	B		1	34	-	291	1884:1787	478+90	51.3 : 51.3%
3/1	B4030 Heyford Road Ahead Right Left	U	N/A	N/A	C		1	30	-	406	1819	470	86.4%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	D		1	36	-	496	1901	586	84.6%
5/1		U	N/A	N/A	-		-	-	-	419	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	592	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	370	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	243	Inf	Inf	0.0%



Full Input Data And Results

Scenario 8: '2027 Base PM' (FG8: '2027 Base PM', Plan 1: 'Network Control Plan 1')

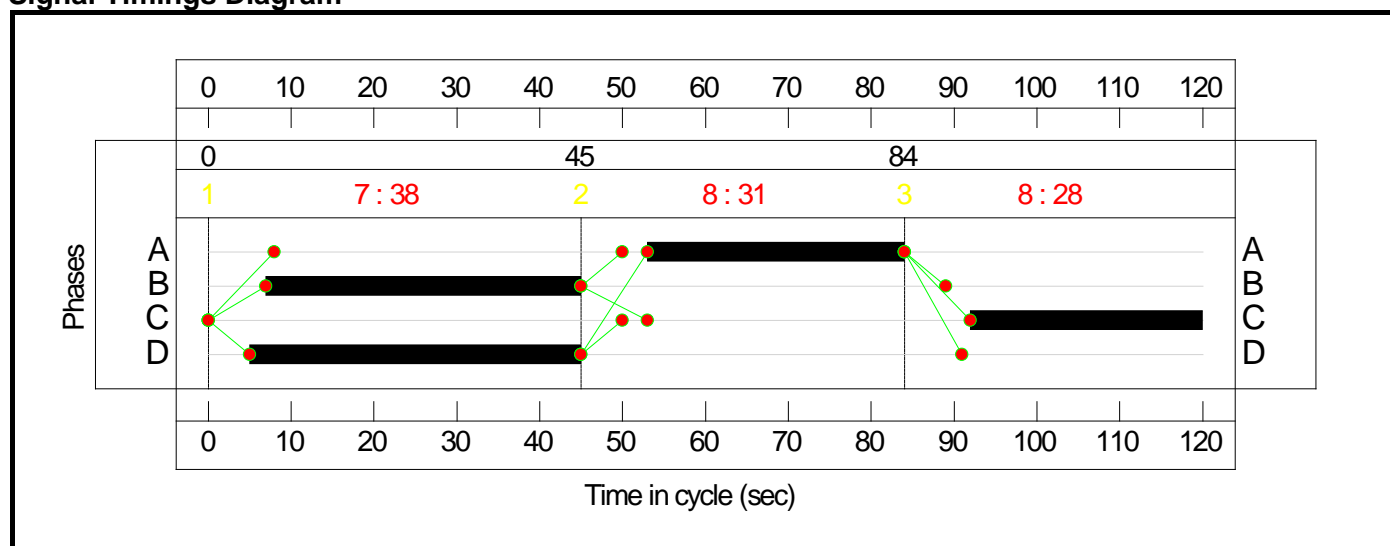
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	38	31	28
Change Point	0	45	84

Signal Timings Diagram



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network: B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>76.6%</b>
<b>B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>76.6%</b>
1/1	B4030 Bicester Road Left Ahead Right	U	N/A	N/A	A		1	31	-	370	1812	483	76.6%
2/1+2/2	B430 Oxford Road Right Left Ahead	U+O	N/A	N/A	B		1	38	-	453	1898:1787	538+114	69.6 : 69.6%
3/1	B4030 Heyford Road Ahead Right Left	U	N/A	N/A	C		1	28	-	333	1811	438	76.1%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	D		1	40	-	264	1880	642	41.1%
5/1		U	N/A	N/A	-		-	-	-	389	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	299	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	351	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	381	Inf	Inf	0.0%

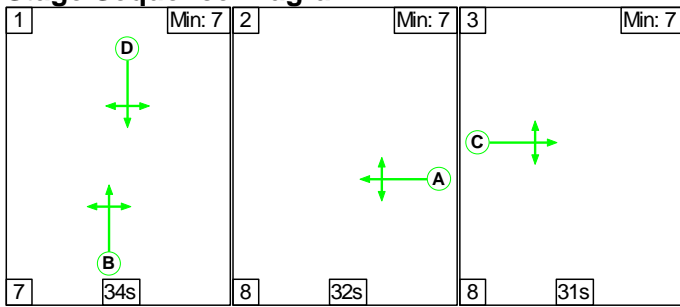
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network: B430/B4030</b>	-	-	<b>90</b>	<b>0</b>	<b>0</b>	<b>14.6</b>	<b>4.6</b>	<b>0.2</b>	<b>19.4</b>	-	-	-	-
<b>B430/B4030</b>	-	-	<b>90</b>	<b>0</b>	<b>0</b>	<b>14.6</b>	<b>4.6</b>	<b>0.2</b>	<b>19.4</b>	-	-	-	-
1/1	370	370	-	-	-	4.2	1.6	-	5.8	56.0	11.3	1.6	12.9
2/1+2/2	453	453	79	0	0	4.3	1.1	0.1	5.5	44.1	11.9	1.1	13.0
3/1	333	333	-	-	-	3.9	1.5	-	5.5	59.0	10.3	1.5	11.8
4/1	264	264	11	0	0	2.2	0.3	0.0	2.6	35.6	6.7	0.3	7.0
5/1	389	389	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	299	299	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	351	351	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	381	381	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1      PRC for Signalled Lanes (%): 17.5      Total Delay for Signalled Lanes (pcuHr): 19.37      Cycle Time (s): 120                      PRC Over All Lanes (%): 17.5      Total Delay Over All Lanes(pcuHr): 19.37</p>													

Full Input Data And Results

**Scenario 9: '2027 Base AM + 100dw'** (FG9: '2027 Base AM + 100 dwellings', Plan 1: 'Network Control Plan 1')

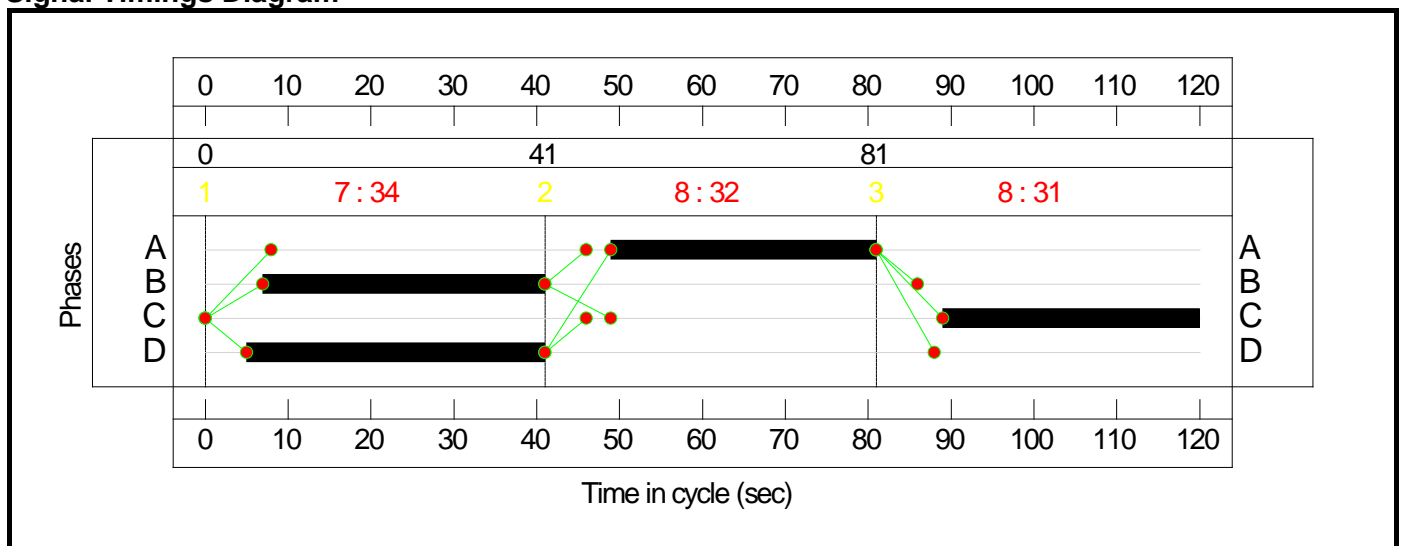
**Stage Sequence Diagram**



**Stage Timings**

Stage	1	2	3
Duration	34	32	31
Change Point	0	41	81

**Signal Timings Diagram**



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network: B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>87.4%</b>
<b>B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>87.4%</b>
1/1	B4030 Bicester Road Left Ahead Right	U	N/A	N/A	A		1	32	-	433	1802	496	87.4%
2/1+2/2	B430 Oxford Road Right Left Ahead	U+O	N/A	N/A	B		1	34	-	294	1883:1787	478+89	51.9 : 51.9%
3/1	B4030 Heyford Road Ahead Right Left	U	N/A	N/A	C		1	31	-	418	1819	485	86.2%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	D		1	36	-	496	1901	586	84.6%
5/1		U	N/A	N/A	-		-	-	-	423	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	600	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	375	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	243	Inf	Inf	0.0%

Full Input Data And Results

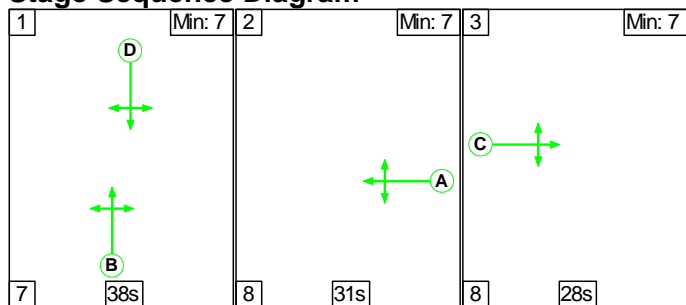
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)														
<b>Network: B430/B4030</b>	-	-	59	0	0	18.0	9.2	0.3	27.5	-	-	-	-														
<b>B430/B4030</b>	-	-	59	0	0	18.0	9.2	0.3	27.5	-	-	-	-														
1/1	433	433	-	-	-	5.0	3.1	-	8.1	67.7	13.7	3.1	16.9														
2/1+2/2	294	294	46	0	0	2.8	0.5	0.3	3.6	44.7	7.2	0.5	7.7														
3/1	418	418	-	-	-	4.9	2.9	-	7.7	66.6	13.2	2.9	16.1														
4/1	496	496	13	0	0	5.4	2.6	0.0	8.0	57.8	15.4	2.6	18.0														
5/1	423	423	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0														
6/1	600	600	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0														
7/1	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0														
8/1	243	243	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0														
<table style="width:100%; border:none;"> <tr> <td style="width:20%;">C1</td> <td style="width:20%;">PRC for Signalled Lanes (%):</td> <td style="width:10%;">3.0</td> <td style="width:20%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width:10%;">27.49</td> <td style="width:20%;">Cycle Time (s):</td> <td style="width:10%;">120</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>3.0</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>27.49</td> <td></td> <td></td> </tr> </table>														C1	PRC for Signalled Lanes (%):	3.0	Total Delay for Signalled Lanes (pcuHr):	27.49	Cycle Time (s):	120		PRC Over All Lanes (%):	3.0	Total Delay Over All Lanes(pcuHr):	27.49		
C1	PRC for Signalled Lanes (%):	3.0	Total Delay for Signalled Lanes (pcuHr):	27.49	Cycle Time (s):	120																					
	PRC Over All Lanes (%):	3.0	Total Delay Over All Lanes(pcuHr):	27.49																							



Full Input Data And Results

**Scenario 10: '2027 Base PM + 100dw'** (FG10: '2027 Base PM + 100 dwellings', Plan 1: 'Network Control Plan 1')

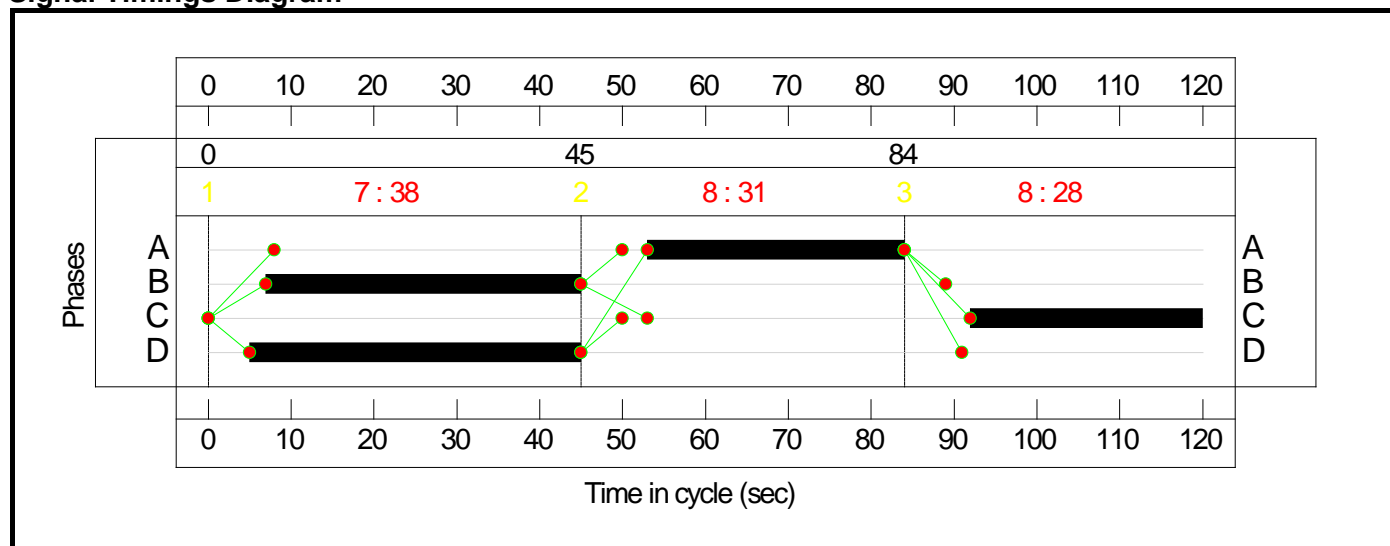
**Stage Sequence Diagram**



**Stage Timings**

Stage	1	2	3
Duration	38	31	28
Change Point	0	45	84

**Signal Timings Diagram**



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network: B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>77.0%</b>
<b>B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>77.0%</b>
1/1	B4030 Bicester Road Left Ahead Right	U	N/A	N/A	A		1	31	-	372	1812	483	77.0%
2/1+2/2	B430 Oxford Road Right Left Ahead	U+O	N/A	N/A	B		1	38	-	458	1897:1787	538+112	70.4 : 70.4%
3/1	B4030 Heyford Road Ahead Right Left	U	N/A	N/A	C		1	28	-	337	1811	438	77.0%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	D		1	40	-	264	1880	642	41.1%
5/1		U	N/A	N/A	-		-	-	-	390	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	302	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	358	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	381	Inf	Inf	0.0%

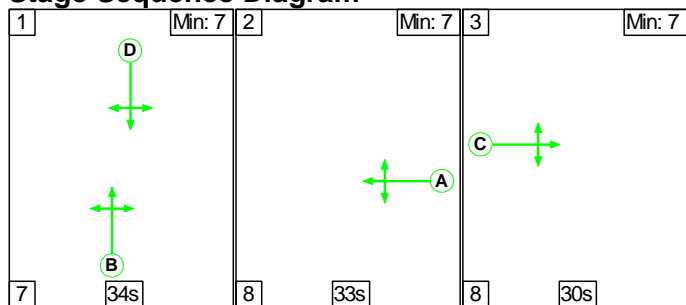
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network: B430/B4030</b>	-	-	<b>90</b>	<b>0</b>	<b>0</b>	<b>14.7</b>	<b>4.8</b>	<b>0.2</b>	<b>19.7</b>	-	-	-	-
<b>B430/B4030</b>	-	-	<b>90</b>	<b>0</b>	<b>0</b>	<b>14.7</b>	<b>4.8</b>	<b>0.2</b>	<b>19.7</b>	-	-	-	-
1/1	372	372	-	-	-	4.2	1.6	-	5.8	56.3	11.4	1.6	13.0
2/1+2/2	458	458	79	0	0	4.4	1.2	0.1	5.7	44.4	12.1	1.2	13.2
3/1	337	337	-	-	-	4.0	1.6	-	5.6	59.7	10.4	1.6	12.0
4/1	264	264	11	0	0	2.2	0.3	0.0	2.6	35.6	6.7	0.3	7.0
5/1	390	390	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	302	302	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	358	358	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	381	381	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		16.9	Total Delay for Signalled Lanes (pcuHr):		19.68	Cycle Time (s): 120				
			PRC Over All Lanes (%):		16.9	Total Delay Over All Lanes(pcuHr):		19.68					

Full Input Data And Results

Scenario 11: '2028 Base AM' (FG11: '2028 Base AM', Plan 1: 'Network Control Plan 1')

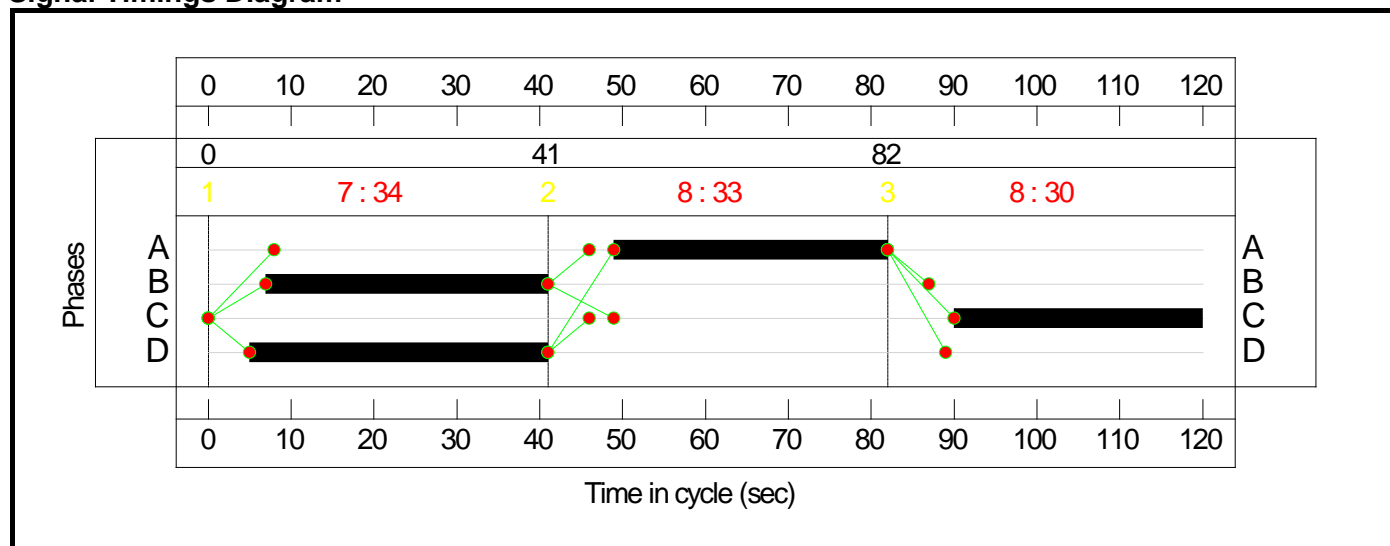
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	34	33	30
Change Point	0	41	82

Signal Timings Diagram



Full Input Data And Results

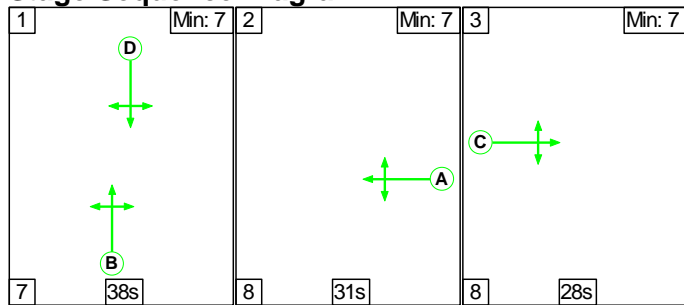
**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network: B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>87.3%</b>
<b>B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>87.3%</b>
1/1	B4030 Bicester Road Left Ahead Right	U	N/A	N/A	A		1	33	-	435	1802	511	85.2%
2/1+2/2	B430 Oxford Road Right Left Ahead	U+O	N/A	N/A	B		1	34	-	293	1884:1787	478+89	51.7 : 51.7%
3/1	B4030 Heyford Road Ahead Right Left	U	N/A	N/A	C		1	30	-	410	1819	470	87.3%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	D		1	36	-	500	1901	586	85.3%
5/1		U	N/A	N/A	-		-	-	-	423	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	597	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	374	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	244	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)														
<b>Network: B430/B4030</b>	-	-	59	0	0	18.0	9.0	0.3	27.3	-	-	-	-														
<b>B430/B4030</b>	-	-	59	0	0	18.0	9.0	0.3	27.3	-	-	-	-														
1/1	435	435	-	-	-	4.9	2.7	-	7.6	62.9	13.7	2.7	16.3														
2/1+2/2	293	293	46	0	0	2.8	0.5	0.3	3.6	44.7	7.1	0.5	7.7														
3/1	410	410	-	-	-	4.9	3.1	-	8.0	69.8	13.0	3.1	16.1														
4/1	500	500	13	0	0	5.4	2.7	0.0	8.2	58.7	15.6	2.7	18.3														
5/1	423	423	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0														
6/1	597	597	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0														
7/1	374	374	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0														
8/1	244	244	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0														
<table style="width:100%; border:none;"> <tr> <td style="width:20%;">C1</td> <td style="width:15%;">PRC for Signalled Lanes (%):</td> <td style="width:15%;">3.2</td> <td style="width:15%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width:15%;">27.34</td> <td style="width:20%;">Cycle Time (s):</td> <td style="width:20%;">120</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>3.2</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>27.34</td> <td></td> <td></td> </tr> </table>														C1	PRC for Signalled Lanes (%):	3.2	Total Delay for Signalled Lanes (pcuHr):	27.34	Cycle Time (s):	120		PRC Over All Lanes (%):	3.2	Total Delay Over All Lanes(pcuHr):	27.34		
C1	PRC for Signalled Lanes (%):	3.2	Total Delay for Signalled Lanes (pcuHr):	27.34	Cycle Time (s):	120																					
	PRC Over All Lanes (%):	3.2	Total Delay Over All Lanes(pcuHr):	27.34																							

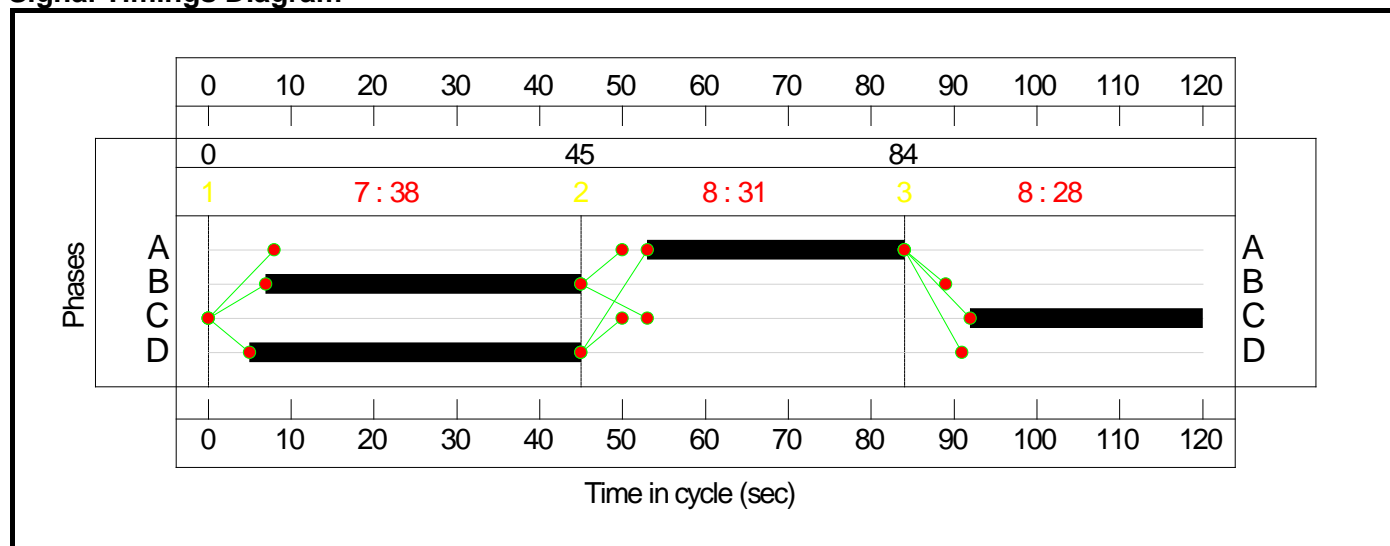
**Stage Sequence Diagram**



**Stage Timings**

Stage	1	2	3
Duration	38	31	28
Change Point	0	45	84

**Signal Timings Diagram**



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network: B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>77.0%</b>
<b>B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>77.0%</b>
1/1	B4030 Bicester Road Left Ahead Right	U	N/A	N/A	A		1	31	-	372	1812	483	77.0%
2/1+2/2	B430 Oxford Road Right Left Ahead	U+O	N/A	N/A	B		1	38	-	457	1898:1787	537+114	70.2 : 70.2%
3/1	B4030 Heyford Road Ahead Right Left	U	N/A	N/A	C		1	28	-	335	1811	438	76.5%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	D		1	40	-	268	1878	641	41.8%
5/1		U	N/A	N/A	-		-	-	-	393	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	301	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	354	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	384	Inf	Inf	0.0%



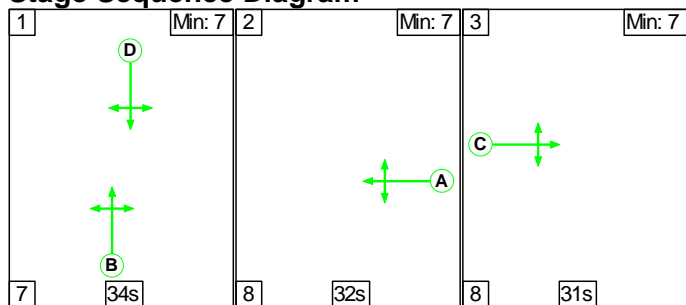
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network: B430/B4030</b>	-	-	<b>92</b>	<b>0</b>	<b>0</b>	<b>14.7</b>	<b>4.7</b>	<b>0.2</b>	<b>19.6</b>	-	-	-	-
<b>B430/B4030</b>	-	-	<b>92</b>	<b>0</b>	<b>0</b>	<b>14.7</b>	<b>4.7</b>	<b>0.2</b>	<b>19.6</b>	-	-	-	-
1/1	372	372	-	-	-	4.2	1.6	-	5.8	56.3	11.4	1.6	13.0
2/1+2/2	457	457	80	0	0	4.4	1.2	0.1	5.6	44.4	12.0	1.2	13.2
3/1	335	335	-	-	-	3.9	1.6	-	5.5	59.3	10.3	1.6	11.9
4/1	268	268	12	0	0	2.3	0.4	0.0	2.7	35.8	6.8	0.4	7.2
5/1	393	393	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	301	301	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	354	354	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	384	384	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%): 16.9		Total Delay for Signalled Lanes (pcuHr): 19.64		PRC Over All Lanes (%): 16.9		Total Delay Over All Lanes(pcuHr): 19.64		Cycle Time (s): 120		

Full Input Data And Results

**Scenario 13: '2028 Base AM + 150dw'** (FG13: '2028 Base AM + 150 dwellings', Plan 1: 'Network Control Plan 1')

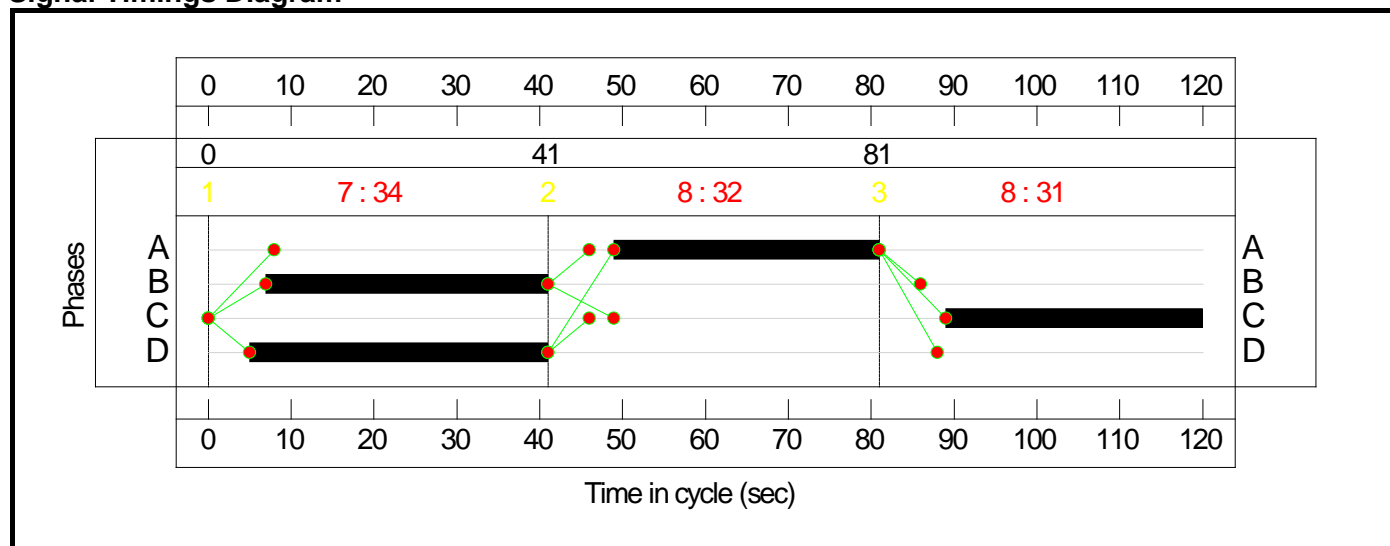
**Stage Sequence Diagram**



**Stage Timings**

Stage	1	2	3
Duration	34	32	31
Change Point	0	41	81

**Signal Timings Diagram**



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network: B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>88.0%</b>
<b>B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>88.0%</b>
1/1	B4030 Bicester Road Left Ahead Right	U	N/A	N/A	A		1	32	-	436	1802	496	88.0%
2/1+2/2	B430 Oxford Road Right Left Ahead	U+O	N/A	N/A	B		1	34	-	297	1883:1787	479+88	52.4 : 52.4%
3/1	B4030 Heyford Road Ahead Right Left	U	N/A	N/A	C		1	31	-	427	1819	485	88.0%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	D		1	36	-	500	1901	586	85.3%
5/1		U	N/A	N/A	-		-	-	-	428	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	609	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	379	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	244	Inf	Inf	0.0%

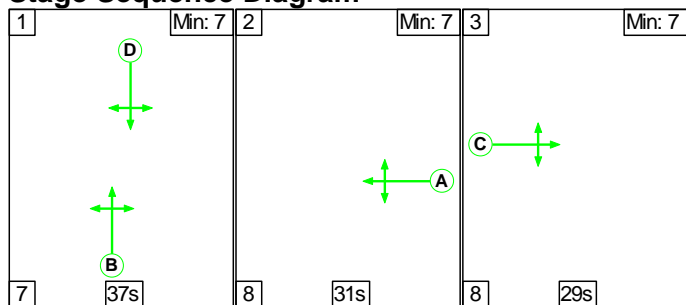
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network: B430/B4030</b>	-	-	59	0	0	18.3	9.9	0.3	28.5	-	-	-	-
<b>B430/B4030</b>	-	-	59	0	0	18.3	9.9	0.3	28.5	-	-	-	-
1/1	436	436	-	-	-	5.0	3.3	-	8.3	68.8	13.8	3.3	17.1
2/1+2/2	297	297	46	0	0	2.9	0.5	0.3	3.7	44.8	7.3	0.5	7.8
3/1	427	427	-	-	-	5.0	3.3	-	8.3	70.0	13.5	3.3	16.8
4/1	500	500	13	0	0	5.4	2.7	0.0	8.2	58.7	15.6	2.7	18.3
5/1	428	428	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	609	609	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	379	379	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	244	244	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1      PRC for Signalled Lanes (%): 2.2      Total Delay for Signalled Lanes (pcuHr): 28.49      Cycle Time (s): 120                      PRC Over All Lanes (%): 2.2      Total Delay Over All Lanes(pcuHr): 28.49</p>													

Full Input Data And Results

Scenario 14: '2028 Base PM + 150dw' (FG14: '2028 Base PM + 150 dwellings', Plan 1: 'Network Control Plan 1')

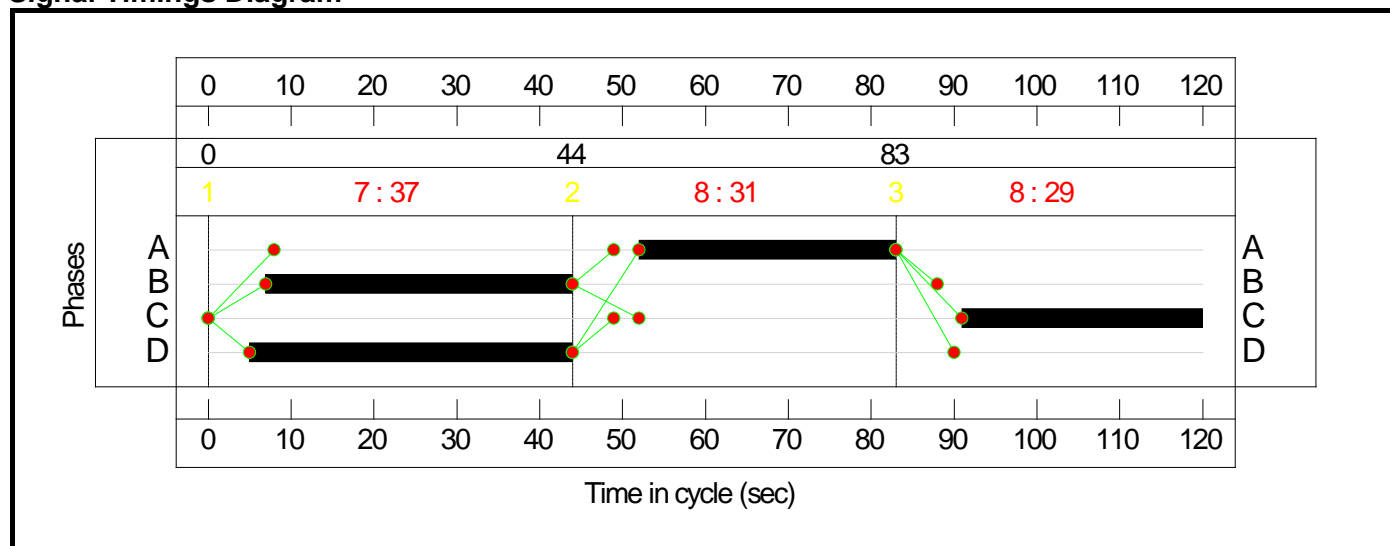
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	37	31	29
Change Point	0	44	83

Signal Timings Diagram



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network: B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>77.8%</b>
<b>B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>77.8%</b>
1/1	B4030 Bicester Road Left Ahead Right	U	N/A	N/A	A		1	31	-	376	1812	483	77.8%
2/1+2/2	B430 Oxford Road Right Left Ahead	U+O	N/A	N/A	B		1	37	-	466	1896:1787	526+109	73.4 : 73.4%
3/1	B4030 Heyford Road Ahead Right Left	U	N/A	N/A	C		1	29	-	342	1811	453	75.5%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	D		1	39	-	268	1878	625	42.9%
5/1		U	N/A	N/A	-		-	-	-	395	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	306	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	367	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	384	Inf	Inf	0.0%

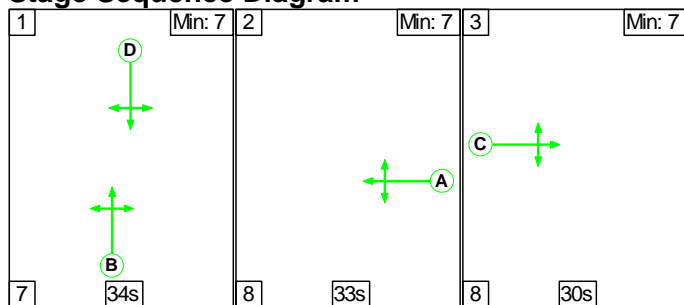
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network: B430/B4030</b>	-	-	<b>92</b>	<b>0</b>	<b>0</b>	<b>15.1</b>	<b>4.9</b>	<b>0.2</b>	<b>20.2</b>	-	-	-	-
<b>B430/B4030</b>	-	-	<b>92</b>	<b>0</b>	<b>0</b>	<b>15.1</b>	<b>4.9</b>	<b>0.2</b>	<b>20.2</b>	-	-	-	-
1/1	376	376	-	-	-	4.3	1.7	-	6.0	57.0	11.6	1.7	13.3
2/1+2/2	466	466	80	0	0	4.6	1.4	0.1	6.1	46.8	12.6	1.4	13.9
3/1	342	342	-	-	-	4.0	1.5	-	5.5	57.4	10.4	1.5	12.0
4/1	268	268	12	0	0	2.3	0.4	0.1	2.7	36.9	6.9	0.4	7.3
5/1	395	395	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	306	306	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	367	367	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	384	384	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1      PRC for Signalled Lanes (%): 15.7      Total Delay for Signalled Lanes (pcuHr): 20.21      Cycle Time (s): 120                      PRC Over All Lanes (%): 15.7      Total Delay Over All Lanes(pcuHr): 20.21</p>													

Full Input Data And Results

Scenario 15: '2031 Base AM' (FG15: '2031 Base AM', Plan 1: 'Network Control Plan 1')

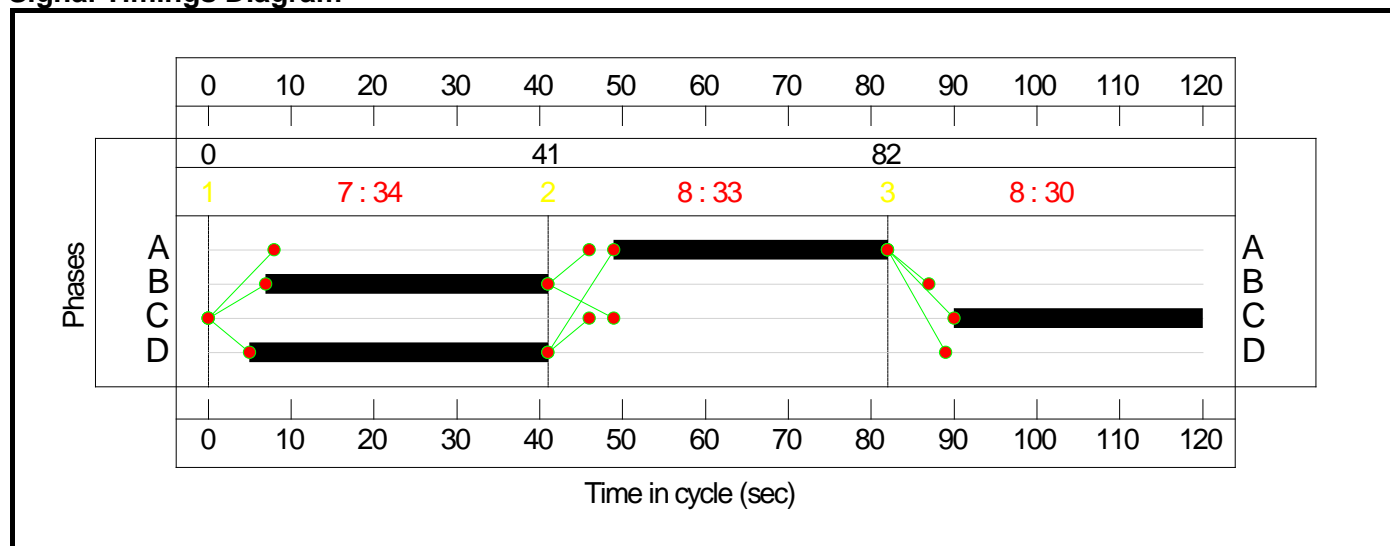
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	34	33	30
Change Point	0	41	82

Signal Timings Diagram





Full Input Data And Results

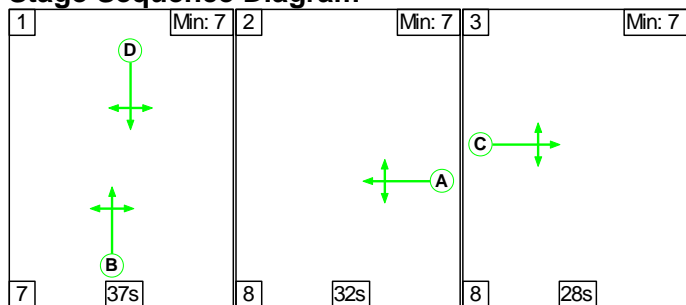
**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network: B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>89.4%</b>
<b>B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>89.4%</b>
1/1	B4030 Bicester Road Left Ahead Right	U	N/A	N/A	A		1	33	-	445	1802	511	87.2%
2/1+2/2	B430 Oxford Road Right Left Ahead	U+O	N/A	N/A	B		1	34	-	300	1884:1787	478+89	52.9 : 52.9%
3/1	B4030 Heyford Road Ahead Right Left	U	N/A	N/A	C		1	30	-	420	1818	470	89.4%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	D		1	36	-	511	1902	586	87.1%
5/1		U	N/A	N/A	-		-	-	-	432	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	611	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	382	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	251	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network: B430/B4030</b>	-	-	59	0	1	18.5	10.5	0.3	29.3	-	-	-	-
<b>B430/B4030</b>	-	-	59	0	1	18.5	10.5	0.3	29.3	-	-	-	-
1/1	445	445	-	-	-	5.1	3.1	-	8.2	66.0	14.1	3.1	17.2
2/1+2/2	300	300	46	0	1	2.9	0.6	0.3	3.8	45.1	7.3	0.6	7.9
3/1	420	420	-	-	-	5.0	3.7	-	8.7	74.5	13.4	3.7	17.1
4/1	511	511	13	0	0	5.6	3.1	0.0	8.7	61.4	16.0	3.1	19.2
5/1	432	432	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	611	611	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	382	382	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	251	251	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):	0.6	Total Delay for Signalled Lanes (pcuHr):			29.32	Cycle Time (s): 120				
			PRC Over All Lanes (%):	0.6	Total Delay Over All Lanes (pcuHr):			29.32					

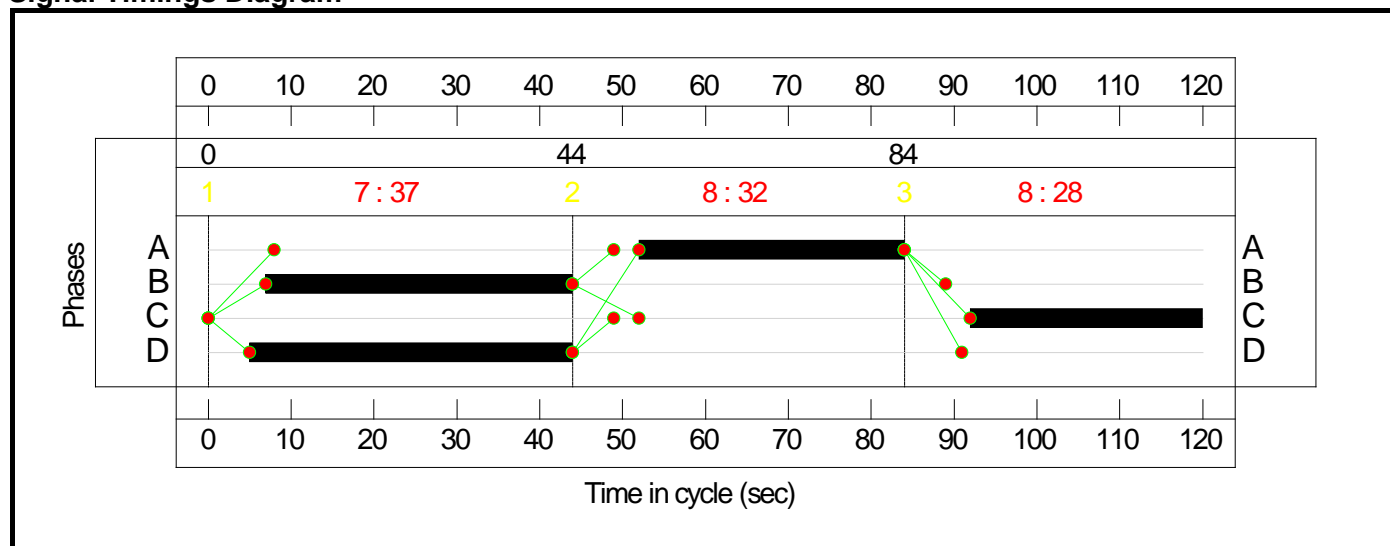
**Stage Sequence Diagram**



**Stage Timings**

Stage	1	2	3
Duration	37	32	28
Change Point	0	44	84

**Signal Timings Diagram**



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network: B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>78.4%</b>
<b>B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>78.4%</b>
1/1	B4030 Bicester Road Left Ahead Right	U	N/A	N/A	A		1	32	-	381	1812	498	76.5%
2/1+2/2	B430 Oxford Road Right Left Ahead	U+O	N/A	N/A	B		1	37	-	468	1898:1787	524+111	73.6 : 73.6%
3/1	B4030 Heyford Road Ahead Right Left	U	N/A	N/A	C		1	28	-	343	1811	438	78.4%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	D		1	39	-	274	1879	626	43.8%
5/1		U	N/A	N/A	-		-	-	-	402	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	309	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	363	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	392	Inf	Inf	0.0%

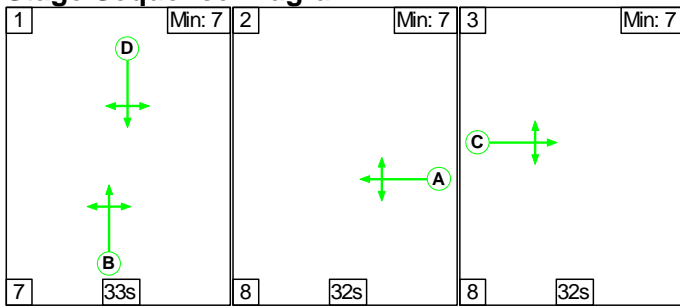
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)																
<b>Network: B430/B4030</b>	-	-	<b>94</b>	<b>0</b>	<b>0</b>	<b>15.3</b>	<b>5.1</b>	<b>0.2</b>	<b>20.5</b>	-	-	-	-																
<b>B430/B4030</b>	-	-	<b>94</b>	<b>0</b>	<b>0</b>	<b>15.3</b>	<b>5.1</b>	<b>0.2</b>	<b>20.5</b>	-	-	-	-																
1/1	381	381	-	-	-	4.2	1.6	-	5.8	54.9	11.6	1.6	13.2																
2/1+2/2	468	468	82	0	0	4.6	1.4	0.1	6.1	47.0	12.6	1.4	14.0																
3/1	343	343	-	-	-	4.1	1.7	-	5.8	60.9	10.7	1.7	12.4																
4/1	274	274	12	0	0	2.4	0.4	0.1	2.8	37.0	7.1	0.4	7.5																
5/1	402	402	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0																
6/1	309	309	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0																
7/1	363	363	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0																
8/1	392	392	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0																
<table style="width:100%; border:none;"> <tr> <td style="width:20%;"></td> <td style="width:10%;">C1</td> <td style="width:15%;">PRC for Signalled Lanes (%):</td> <td style="width:10%;">14.8</td> <td style="width:15%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width:10%;">20.53</td> <td style="width:25%;">Cycle Time (s):</td> <td style="width:15%;">120</td> </tr> <tr> <td></td> <td></td> <td>PRC Over All Lanes (%):</td> <td>14.8</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>20.53</td> <td></td> <td></td> </tr> </table>															C1	PRC for Signalled Lanes (%):	14.8	Total Delay for Signalled Lanes (pcuHr):	20.53	Cycle Time (s):	120			PRC Over All Lanes (%):	14.8	Total Delay Over All Lanes(pcuHr):	20.53		
	C1	PRC for Signalled Lanes (%):	14.8	Total Delay for Signalled Lanes (pcuHr):	20.53	Cycle Time (s):	120																						
		PRC Over All Lanes (%):	14.8	Total Delay Over All Lanes(pcuHr):	20.53																								

Full Input Data And Results

**Scenario 17: '2031 Base AM + 230dw'** (FG17: '2031 Base AM + 230 dwellings', Plan 1: 'Network Control Plan 1')

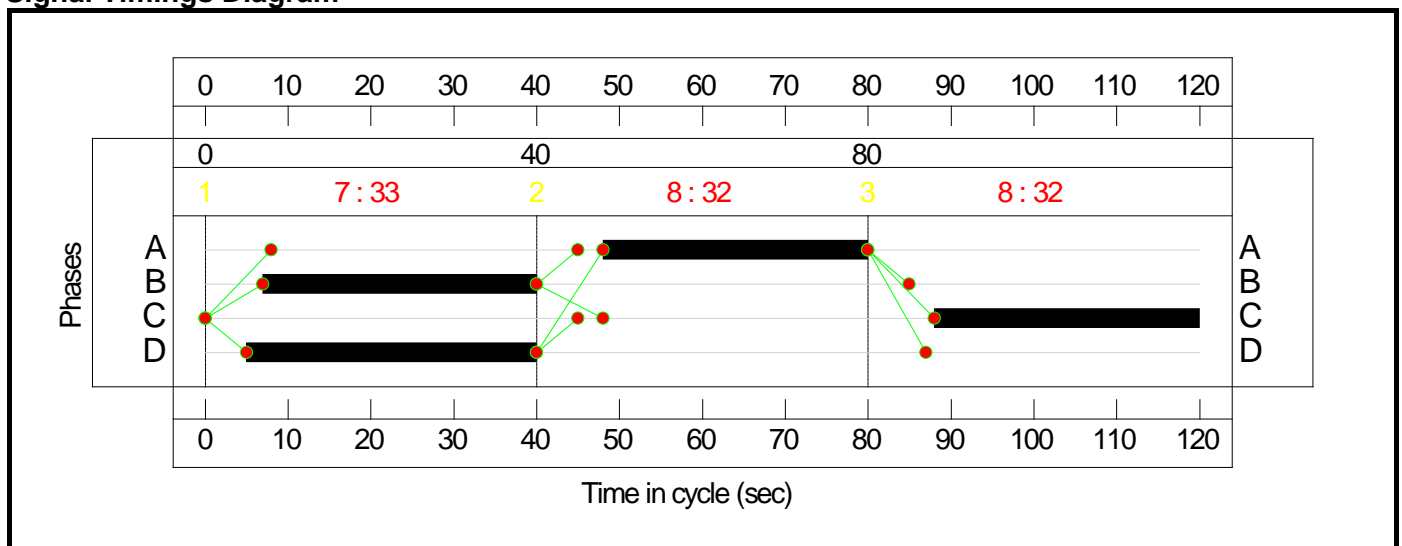
**Stage Sequence Diagram**



**Stage Timings**

Stage	1	2	3
Duration	33	32	32
Change Point	0	40	80

**Signal Timings Diagram**



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network: B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>90.4%</b>
<b>B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>90.4%</b>
1/1	B4030 Bicester Road Left Ahead Right	U	N/A	N/A	A		1	32	-	448	1802	496	90.4%
2/1+2/2	B430 Oxford Road Right Left Ahead	U+O	N/A	N/A	B		1	33	-	306	1883:1787	466+75	55.6 : 62.8%
3/1	B4030 Heyford Road Ahead Right Left	U	N/A	N/A	C		1	32	-	447	1819	500	89.4%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	D		1	35	-	511	1902	571	89.6%
5/1		U	N/A	N/A	-		-	-	-	441	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	629	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	391	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	251	Inf	Inf	0.0%

Full Input Data And Results

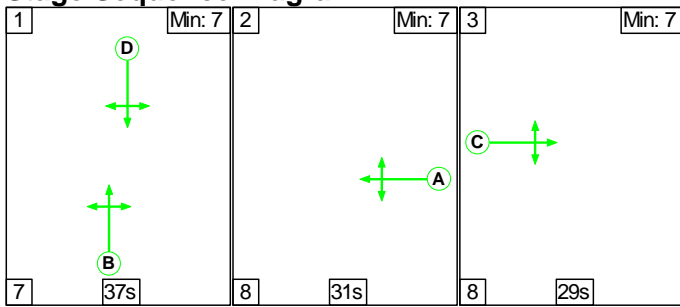
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network: B430/B4030</b>	-	-	50	0	10	19.1	12.2	0.3	31.6	-	-	-	-
<b>B430/B4030</b>	-	-	50	0	10	19.1	12.2	0.3	31.6	-	-	-	-
1/1	448	448	-	-	-	5.2	4.0	-	9.3	74.3	14.3	4.0	18.3
2/1+2/2	306	306	37	0	10	3.0	0.6	0.3	4.0	47.0	7.7	0.6	8.3
3/1	447	447	-	-	-	5.2	3.7	-	8.9	71.5	14.3	3.7	18.0
4/1	511	511	13	0	0	5.7	3.8	0.0	9.5	67.1	16.2	3.8	20.0
5/1	441	441	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	629	629	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	391	391	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	251	251	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1      PRC for Signalled Lanes (%): -0.4      Total Delay for Signalled Lanes (pcuHr): 31.65      Cycle Time (s): 120 PRC Over All Lanes (%): -0.4      Total Delay Over All Lanes(pcuHr): 31.65													



Full Input Data And Results

**Scenario 18: '2031 Base PM + 230dw'** (FG18: '2031 Base PM + 230 dwellings', Plan 1: 'Network Control Plan 1')

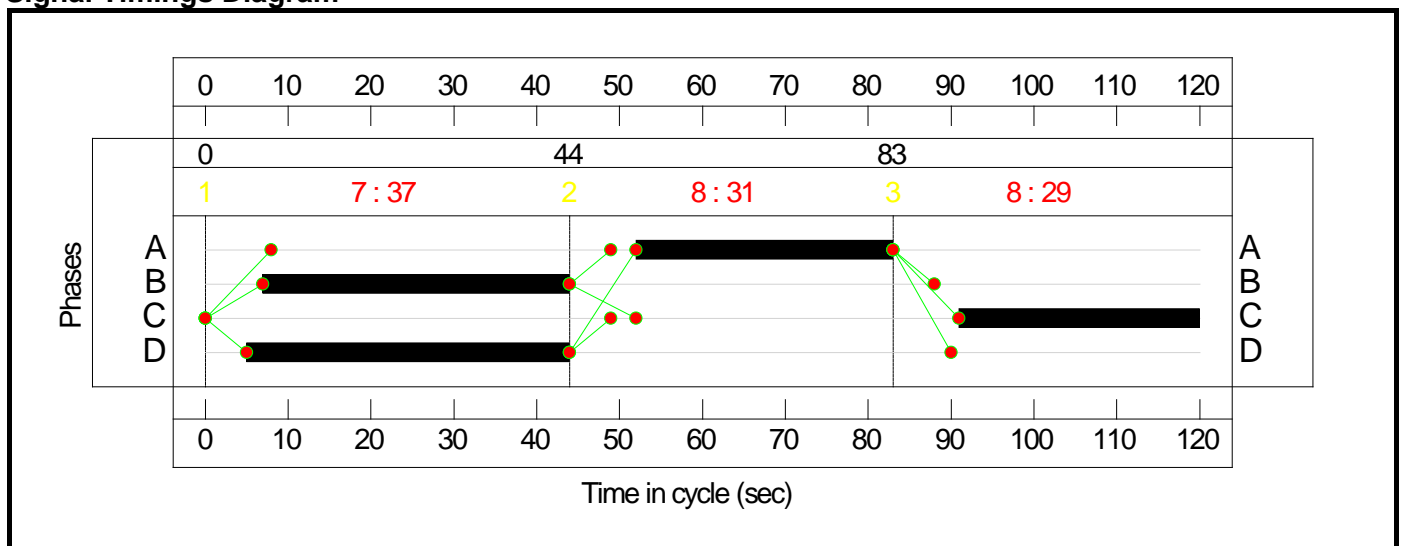
**Stage Sequence Diagram**



**Stage Timings**

Stage	1	2	3
Duration	37	31	29
Change Point	0	44	83

**Signal Timings Diagram**



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network: B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>80.1%</b>
<b>B430/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>80.1%</b>
1/1	B4030 Bicester Road Left Ahead Right	U	N/A	N/A	A		1	31	-	387	1812	483	80.1%
2/1+2/2	B430 Oxford Road Right Left Ahead	U+O	N/A	N/A	B		1	37	-	481	1896:1787	526+108	75.8 : 75.8%
3/1	B4030 Heyford Road Ahead Right Left	U	N/A	N/A	C		1	29	-	353	1812	453	77.9%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	D		1	39	-	274	1879	625	43.8%
5/1		U	N/A	N/A	-		-	-	-	405	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	316	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	382	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	392	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network: B430/B4030</b>	-	-	<b>94</b>	<b>0</b>	<b>0</b>	<b>15.7</b>	<b>5.6</b>	<b>0.2</b>	<b>21.4</b>	-	-	-	-
<b>B430/B4030</b>	-	-	<b>94</b>	<b>0</b>	<b>0</b>	<b>15.7</b>	<b>5.6</b>	<b>0.2</b>	<b>21.4</b>	-	-	-	-
1/1	387	387	-	-	-	4.4	1.9	-	6.3	59.0	11.9	1.9	13.9
2/1+2/2	481	481	82	0	0	4.8	1.5	0.1	6.4	48.2	13.1	1.5	14.7
3/1	353	353	-	-	-	4.1	1.7	-	5.8	59.3	10.9	1.7	12.6
4/1	274	274	12	0	0	2.4	0.4	0.1	2.8	37.1	7.1	0.4	7.5
5/1	405	405	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	316	316	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	382	382	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	392	392	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		12.4	Total Delay for Signalled Lanes (pcuHr):		21.43	Cycle Time (s): 120				
			PRC Over All Lanes (%):		12.4	Total Delay Over All Lanes(pcuHr):		21.43					

## **APPENDIX H19**

### **B430/A4095 MODELLING OUTPUT**

## B430/A4095 – Junction Assessment Results

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
<b>2023 Base</b>						
A4095 (W) LT	0.26	0	7	0.32	1	8
A4095 (W) RT	0.08	0	8	0.10	0	7
B430 (S) RT	0.06	0	7	0.03	0	6
A4095 (E) LT	0.17	0	9	0.09	0	8
A4095 (E) RT	0.13	0	10	0.12	0	8
B430 (N) RT	0.23	0	7	0.18	0	6
<b>2026 Base</b>						
A4095 (W) LT	0.27	0	8	0.34	1	8
A4095 (W) RT	0.08	0	8	0.10	0	7
B430 (S) RT	0.06	0	7	0.03	0	6
A4095 (E) LT	0.18	0	10	0.10	0	8
A4095 (E) RT	0.14	0	10	0.13	0	9
B430 (N) RT	0.24	0	7	0.19	0	7
<b>2026 Base + 50 dwellings</b>						
A4095 (W) LT	0.27	0	8	0.34	1	8
A4095 (W) RT	0.08	0	8	0.10	0	7
B430 (S) RT	0.06	0	7	0.03	0	6
A4095 (E) LT	0.18	0	10	0.10	0	8
A4095 (E) RT	0.14	0	10	0.13	0	9
B430 (N) RT	0.24	0	7	0.19	0	7
<b>2027 Base</b>						
A4095 (W) LT	0.28	0	8	0.34	1	8
A4095 (W) RT	0.08	0	8	0.10	0	7
B430 (S) RT	0.06	0	7	0.03	0	6
A4095 (E) LT	0.18	0	10	0.10	0	8
A4095 (E) RT	0.14	0	10	0.13	0	9
B430 (N) RT	0.24	0	7	0.19	0	7
<b>2027 Base + 100 dwellings</b>						
A4095 (W) LT	0.28	0	8	0.34	1	8
A4095 (W) RT	0.08	0	8	0.10	0	7
B430 (S) RT	0.06	0	7	0.03	0	6
A4095 (E) LT	0.18	0	10	0.10	0	8
A4095 (E) RT	0.14	0	10	0.13	0	9
B430 (N) RT	0.24	0	7	0.19	0	7
<b>2028 Base</b>						
A4095 (W) LT	0.28	0	8	0.35	1	8
A4095 (W) RT	0.08	0	8	0.10	0	7
B430 (S) RT	0.06	0	7	0.03	0	6
A4095 (E) LT	0.18	0	10	0.10	0	8
A4095 (E) RT	0.15	0	10	0.13	0	9
B430 (N) RT	0.24	0	7	0.19	0	7

2028 Base + 150 dwellings						
A4095 (W) LT	0.28	0	8	0.35	1	9
A4095 (W) RT	0.08	0	8	0.10	0	7
B430 (S) RT	0.06	0	7	0.03	0	6
A4095 (E) LT	0.19	0	10	0.10	0	8
A4095 (E) RT	0.15	0	11	0.13	0	9
B430 (N) RT	0.24	0	7	0.19	0	7
2031 Base						
A4095 (W) LT	0.29	0	8	0.36	1	9
A4095 (W) RT	0.09	0	8	0.10	0	7
B430 (S) RT	0.06	0	7	0.03	0	6
A4095 (E) LT	0.19	0	10	0.11	0	8
A4095 (E) RT	0.15	0	11	0.13	0	9
B430 (N) RT	0.25	0	7	0.20	0	7
2031 Base + 230 dwellings						
A4095 (W) LT	0.29	0	8	0.36	1	9
A4095 (W) RT	0.09	0	8	0.11	0	8
B430 (S) RT	0.06	0	7	0.03	0	6
A4095 (E) LT	0.19	0	10	0.11	0	8
A4095 (E) RT	0.15	0	11	0.14	0	9
B430 (N) RT	0.25	0	7	0.20	0	7

RFC is Ratio of Flow to Capacity, Queue is mean max in PCUs, Delay is seconds per PCU.

Junctions 10
PICADY 10 - Priority Intersection Module
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**Filename:** T19562 - B430-A4095 - Manual Scenarios.j10

**Path:** C:\Users\NeilBateman\Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\2019\T19562 Heyford Park\Junction Assessments\Picady

**Report generation date:** 19/10/2023 10:32:32

- »2023 Survey, AM
- »2023 Survey, PM
- »2026 Base, AM
- »2026 Base, PM
- »2026 Base + 50dw, AM
- »2026 Base + 50dw, PM
- »2027 Base, AM
- »2027 Base, PM
- »2027 Base + 100dw, AM
- »2027 Base + 100dw, PM
- »2028 Base, AM
- »2028 Base, PM
- »2028 Base + 150dw, AM
- »2028 Base + 150dw, PM
- »2031 Base, AM
- »2031 Base, PM
- »2031 Base + 230dw, AM
- »2031 Base + 230dw, PM

**Summary of junction performance**

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
<b>2023 Survey</b>										
Stream B-CD	D1	0.4	7.41	0.26	A	D2	0.5	8.10	0.32	A
Stream B-AD		0.1	7.99	0.08	A		0.1	7.13	0.10	A
Stream A-D		0.1	6.62	0.06	A		0.0	5.69	0.03	A
Stream D-AB		0.2	9.49	0.17	A		0.1	7.55	0.09	A
Stream D-BC		0.2	9.93	0.13	A		0.1	8.48	0.12	A
Stream C-B		0.3	6.78	0.23	A		0.2	6.49	0.18	A
<b>2026 Base</b>										
Stream B-CD	D3	0.4	7.57	0.27	A	D4	0.5	8.35	0.34	A
Stream B-AD		0.1	8.15	0.08	A		0.1	7.26	0.10	A
Stream A-D		0.1	6.72	0.06	A		0.0	5.73	0.03	A
Stream D-AB		0.2	9.73	0.18	A		0.1	7.67	0.10	A
Stream D-BC		0.2	10.18	0.14	B		0.1	8.68	0.13	A
Stream C-B		0.3	6.87	0.24	A		0.2	6.58	0.19	A
<b>2026 Base + 50dw</b>										

Stream B-CD	D5	0.4	7.58	0.27	A	D6	0.5	8.37	0.34	A
Stream B-AD		0.1	8.18	0.08	A		0.1	7.28	0.10	A
Stream A-D		0.1	6.74	0.06	A		0.0	5.74	0.03	A
Stream D-AB		0.2	9.77	0.18	A		0.1	7.68	0.10	A
Stream D-BC		0.2	10.23	0.14	B		0.1	8.70	0.13	A
Stream C-B		0.3	6.87	0.24	A		0.2	6.59	0.19	A
<b>2027 Base</b>										
Stream B-CD	D7	0.4	7.62	0.28	A	D8	0.5	8.40	0.34	A
Stream B-AD		0.1	8.19	0.08	A		0.1	7.29	0.10	A
Stream A-D		0.1	6.74	0.06	A		0.0	5.74	0.03	A
Stream D-AB		0.2	9.80	0.18	A		0.1	7.70	0.10	A
Stream D-BC		0.2	10.25	0.14	B		0.1	8.71	0.13	A
Stream C-B		0.3	6.89	0.24	A		0.2	6.60	0.19	A
<b>2027 Base + 100dw</b>										
Stream B-CD	D9	0.4	7.64	0.28	A	D10	0.5	8.45	0.34	A
Stream B-AD		0.1	8.24	0.08	A		0.1	7.34	0.10	A
Stream A-D		0.1	6.77	0.06	A		0.0	5.75	0.03	A
Stream D-AB		0.2	9.88	0.18	A		0.1	7.73	0.10	A
Stream D-BC		0.2	10.33	0.14	B		0.1	8.76	0.13	A
Stream C-B		0.3	6.90	0.24	A		0.2	6.62	0.19	A
<b>2028 Base</b>										
Stream B-CD	D11	0.4	7.65	0.28	A	D12	0.5	8.47	0.35	A
Stream B-AD		0.1	8.24	0.08	A		0.1	7.33	0.10	A
Stream A-D		0.1	6.78	0.06	A		0.0	5.75	0.03	A
Stream D-AB		0.2	9.91	0.18	A		0.1	7.73	0.10	A
Stream D-BC		0.2	10.39	0.15	B		0.1	8.76	0.13	A
Stream C-B		0.3	6.93	0.24	A		0.2	6.62	0.19	A
<b>2028 Base + 150dw</b>										
Stream B-CD	D13	0.4	7.69	0.28	A	D14	0.5	8.53	0.35	A
Stream B-AD		0.1	8.32	0.08	A		0.1	7.39	0.10	A
Stream A-D		0.1	6.83	0.06	A		0.0	5.76	0.03	A
Stream D-AB		0.2	10.02	0.19	B		0.1	7.77	0.10	A
Stream D-BC		0.2	10.51	0.15	B		0.2	8.86	0.13	A
Stream C-B		0.3	6.94	0.24	A		0.2	6.65	0.19	A
<b>2031 Base</b>										
Stream B-CD	D15	0.4	7.78	0.29	A	D16	0.6	8.65	0.36	A
Stream B-AD		0.1	8.36	0.09	A		0.1	7.43	0.10	A
Stream A-D		0.1	6.84	0.06	A		0.0	5.78	0.03	A
Stream D-AB		0.2	10.08	0.19	B		0.1	7.83	0.11	A
Stream D-BC		0.2	10.57	0.15	B		0.2	8.92	0.13	A
Stream C-B		0.3	6.98	0.25	A		0.2	6.69	0.20	A
<b>2031 Base + 230dw</b>										
Stream B-CD	D17	0.4	7.84	0.29	A	D18	0.6	8.75	0.36	A
Stream B-AD		0.1	8.48	0.09	A		0.1	7.52	0.11	A
Stream A-D		0.1	6.92	0.06	A		0.0	5.80	0.03	A
Stream D-AB		0.2	10.27	0.19	B		0.1	7.91	0.11	A
Stream D-BC		0.2	10.77	0.15	B		0.2	9.06	0.14	A
Stream C-B		0.3	7.01	0.25	A		0.2	6.74	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.



## File summary

### File Description

<b>Title</b>	B430/A4095 Staggered
<b>Location</b>	Heyford Park
<b>Site number</b>	
<b>Date</b>	18/10/2023
<b>Version</b>	
<b>Status</b>	(new file)
<b>Identifier</b>	
<b>Client</b>	Richborough Estates
<b>Jobnumber</b>	T19562
<b>Enumerator</b>	James Parker
<b>Description</b>	

## Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

## Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

## 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	2023 Survey	AM	ONE HOUR	07:45	09:15	15	✓
D2	2023 Survey	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Base + 50dw	AM	ONE HOUR	07:45	09:15	15	✓
D6	2026 Base + 50dw	PM	ONE HOUR	16:45	18:15	15	✓
D7	2027 Base	AM	ONE HOUR	07:45	09:15	15	✓
D8	2027 Base	PM	ONE HOUR	16:45	18:15	15	✓
D9	2027 Base + 100dw	AM	ONE HOUR	07:45	09:15	15	✓
D10	2027 Base + 100dw	PM	ONE HOUR	16:45	18:15	15	✓
D11	2028 Base	AM	ONE HOUR	07:45	09:15	15	✓
D12	2028 Base	PM	ONE HOUR	16:45	18:15	15	✓
D13	2028 Base + 150dw	AM	ONE HOUR	07:45	09:15	15	✓
D14	2028 Base + 150dw	PM	ONE HOUR	16:45	18:15	15	✓
D15	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓
D16	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓
D17	2031 Base + 230dw	AM	ONE HOUR	07:45	09:15	15	✓
D18	2031 Base + 230dw	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

# 2023 Survey, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		3.71	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.71	A

## Arms

### Arms

Arm	Name	Description	Arm type
A	B430 (S)		Major
B	A4095 (W)		Minor
C	B430 (N)		Major
D	A4095 (E)		Minor

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	7.00		✓	3.25	250.0		-
C	7.00		✓	3.25	220.0		-

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 (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B	Two lanes	4.15	4.50	250	200
D	Two lanes	3.80	4.05	230	110

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	801	-	-	-	-	-	-	0.297	0.424	0.297	-	-	-
B-A	769	0.134	0.339	0.339	-	-	-	0.213	0.484	-	0.339	0.339	0.169
B-C	836	0.123	0.310	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	746	0.130	0.328	0.328	-	-	-	0.207	0.469	0.207	-	-	-
B-D, offside lane	769	0.134	0.339	0.339	-	-	-	0.213	0.484	0.213	-	-	-
C-B	782	0.290	0.290	0.414	-	-	-	-	-	-	-	-	-
D-A	749	-	-	-	-	-	-	0.277	-	0.110	-	-	-
D-B, nearside lane	660	0.183	0.183	0.415	-	-	-	0.291	0.291	0.115	-	-	-
D-B, offside lane	676	0.187	0.187	0.425	-	-	-	0.298	0.298	0.118	-	-	-
D-C	676	-	0.187	0.425	0.149	0.298	0.298	0.298	0.298	0.118	-	-	-

The slopes and intercepts shown above include custom intercept adjustments only.  
 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	2023 Survey	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	171	100.000
B		ONE HOUR	✓	202	100.000
C		ONE HOUR	✓	571	100.000
D		ONE HOUR	✓	128	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	3	138	30	
	B	3	0	131	68	
	C	381	150	0	40	
	D	28	90	10	0	

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To				
		A	B	C	D	
From	A	0	50	6	3	
	B	0	0	5	8	
	C	6	5	0	3	
	D	4	6	0	0	

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.26	7.41	0.4	A	152	227
B-AD	0.08	7.99	0.1	A	34	51
A-B					3	4
A-C					127	190
A-D	0.06	6.62	0.1	A	28	41
D-AB	0.17	9.49	0.2	A	68	102
D-BC	0.13	9.93	0.2	A	50	74
C-D					37	55
C-A					350	524
C-B	0.23	6.78	0.3	A	138	206

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	124	31	738	0.169	123	0.0	0.2	6.180	A
B-AD	28	7	602	0.046	28	0.0	0.1	6.724	A
A-B	2	0.56			2				
A-C	104	26			104				
A-D	23	6	659	0.034	22	0.0	0.0	5.824	A
D-AB	55	14	550	0.101	55	0.0	0.1	7.647	A
D-BC	41	10	515	0.079	41	0.0	0.1	7.950	A
C-D	30	8			30				
C-A	287	72			287				
C-B	113	28	741	0.152	112	0.0	0.2	5.998	A

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	148	37	720	0.206	148	0.2	0.3	6.642	A
B-AD	33	8	569	0.058	33	0.1	0.1	7.208	A
A-B	3	0.67			3				
A-C	124	31			124				
A-D	27	7	631	0.043	27	0.0	0.0	6.137	A
D-AB	66	17	521	0.127	66	0.1	0.2	8.324	A
D-BC	49	12	483	0.101	49	0.1	0.1	8.682	A
C-D	36	9			36				
C-A	343	86			343				
C-B	135	34	734	0.184	135	0.2	0.2	6.310	A

**08:15 - 08:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	182	45	695	0.262	182	0.3	0.4	7.391	A
B-AD	40	10	524	0.077	40	0.1	0.1	7.987	A
A-B	3	0.83			3				
A-C	152	38			152				
A-D	33	8	593	0.056	33	0.0	0.1	6.622	A
D-AB	82	20	481	0.170	82	0.2	0.2	9.474	A
D-BC	59	15	439	0.135	59	0.1	0.2	9.919	A
C-D	44	11			44				
C-A	419	105			419				
C-B	165	41	723	0.228	165	0.2	0.3	6.772	A

**08:30 - 08:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	182	45	695	0.262	182	0.4	0.4	7.409	A
B-AD	40	10	524	0.077	40	0.1	0.1	7.994	A
A-B	3	0.83			3				
A-C	152	38			152				
A-D	33	8	593	0.056	33	0.1	0.1	6.623	A
D-AB	82	20	481	0.170	82	0.2	0.2	9.489	A
D-BC	59	15	439	0.135	59	0.2	0.2	9.930	A
C-D	44	11			44				
C-A	419	105			419				
C-B	165	41	723	0.228	165	0.3	0.3	6.777	A

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	148	37	720	0.206	149	0.4	0.3	6.661	A
B-AD	33	8	569	0.058	33	0.1	0.1	7.214	A
A-B	3	0.67			3				
A-C	124	31			124				
A-D	27	7	631	0.043	27	0.1	0.0	6.143	A
D-AB	66	17	521	0.128	67	0.2	0.2	8.344	A
D-BC	49	12	483	0.101	49	0.2	0.1	8.697	A
C-D	36	9			36				
C-A	343	86			343				
C-B	135	34	734	0.184	135	0.3	0.2	6.321	A

**09:00 - 09:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	124	31	737	0.169	125	0.3	0.2	6.205	A
B-AD	28	7	601	0.046	28	0.1	0.1	6.734	A
A-B	2	0.56			2				
A-C	104	26			104				
A-D	23	6	659	0.034	23	0.0	0.0	5.830	A
D-AB	55	14	550	0.101	56	0.2	0.1	7.673	A
D-BC	41	10	514	0.079	41	0.1	0.1	7.974	A
C-D	30	8			30				
C-A	287	72			287				
C-B	113	28	741	0.152	113	0.2	0.2	6.020	A

# 2023 Survey, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		3.93	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.93	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
D2	2023 Survey	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	281	100.000
B		ONE HOUR	✓	247	100.000
C		ONE HOUR	✓	285	100.000
D		ONE HOUR	✓	99	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	7	255	19
	B	4	0	153	90
	C	159	112	0	14
	D	14	61	24	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	17	6	6
	B	0	0	3	1
	C	6	2	0	8
	D	8	0	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.32	8.10	0.5	A	182	273
B-AD	0.10	7.13	0.1	A	45	67
A-B					6	10
A-C					234	351
A-D	0.03	5.69	0.0	A	17	26
D-AB	0.09	7.55	0.1	A	42	63
D-BC	0.12	8.48	0.1	A	49	73
C-D					13	19
C-A					146	219
C-B	0.18	6.49	0.2	A	103	154

**Main Results for each time segment**
**16:45 - 17:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	149	37	720	0.207	148	0.0	0.3	6.440	A
B-AD	37	9	629	0.058	36	0.0	0.1	6.133	A
A-B	5	1			5				
A-C	192	48			192				
A-D	14	4	726	0.020	14	0.0	0.0	5.357	A
D-AB	34	9	587	0.058	34	0.0	0.1	6.658	A
D-BC	40	10	545	0.074	40	0.0	0.1	7.119	A
C-D	11	3			11				
C-A	120	30			120				
C-B	84	21	718	0.117	84	0.0	0.1	5.780	A

**17:00 - 17:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	178	45	701	0.254	178	0.3	0.3	7.050	A
B-AD	44	11	601	0.073	44	0.1	0.1	6.520	A
A-B	6	2			6				
A-C	229	57			229				
A-D	17	4	712	0.024	17	0.0	0.0	5.492	A
D-AB	41	10	567	0.073	41	0.1	0.1	7.007	A
D-BC	48	12	519	0.092	48	0.1	0.1	7.640	A
C-D	13	3			13				
C-A	143	36			143				
C-B	101	25	706	0.143	101	0.1	0.2	6.061	A

**17:15 - 17:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	218	55	674	0.324	218	0.3	0.5	8.081	A
B-AD	54	13	563	0.095	53	0.1	0.1	7.127	A
A-B	8	2			8				
A-C	281	70			281				
A-D	21	5	692	0.030	21	0.0	0.0	5.687	A
D-AB	51	13	539	0.095	51	0.1	0.1	7.549	A
D-BC	58	14	483	0.120	58	0.1	0.1	8.474	A
C-D	15	4			15				
C-A	175	44			175				
C-B	123	31	689	0.179	123	0.2	0.2	6.484	A

**17:30 - 17:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	218	55	674	0.324	218	0.5	0.5	8.101	A
B-AD	54	13	563	0.095	54	0.1	0.1	7.132	A
A-B	8	2			8				
A-C	281	70			281				
A-D	21	5	692	0.030	21	0.0	0.0	5.688	A
D-AB	51	13	538	0.095	51	0.1	0.1	7.553	A
D-BC	58	14	482	0.120	58	0.1	0.1	8.482	A
C-D	15	4			15				
C-A	175	44			175				
C-B	123	31	689	0.179	123	0.2	0.2	6.487	A

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	178	45	701	0.254	179	0.5	0.4	7.077	A
B-AD	44	11	601	0.073	44	0.1	0.1	6.525	A
A-B	6	2			6				
A-C	229	57			229				
A-D	17	4	712	0.024	17	0.0	0.0	5.496	A
D-AB	41	10	567	0.073	41	0.1	0.1	7.014	A
D-BC	48	12	519	0.092	48	0.1	0.1	7.649	A
C-D	13	3			13				
C-A	143	36			143				
C-B	101	25	706	0.143	101	0.2	0.2	6.067	A

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	149	37	720	0.207	150	0.4	0.3	6.472	A
B-AD	37	9	628	0.058	37	0.1	0.1	6.145	A
A-B	5	1			5				
A-C	192	48			192				
A-D	14	4	726	0.020	14	0.0	0.0	5.360	A
D-AB	34	9	587	0.058	34	0.1	0.1	6.671	A
D-BC	40	10	545	0.074	40	0.1	0.1	7.137	A
C-D	11	3			11				
C-A	120	30			120				
C-B	84	21	718	0.117	84	0.2	0.1	5.794	A



# 2026 Base, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		3.78	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.78	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
D3	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	177	100.000
B		ONE HOUR	✓	209	100.000
C		ONE HOUR	✓	590	100.000
D		ONE HOUR	✓	132	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	3	143	31
	B	3	0	136	70
	C	394	155	0	41
	D	29	93	10	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

### Heavy Vehicle %

		To			
		A	B	C	D
From	A	0	50	6	3
	B	0	0	5	8
	C	6	5	0	3
	D	4	6	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.27	7.57	0.4	A	157	236
B-AD	0.08	8.15	0.1	A	35	52
A-B					3	4
A-C					131	197
A-D	0.06	6.72	0.1	A	28	43
D-AB	0.18	9.73	0.2	A	70	105
D-BC	0.14	10.18	0.2	B	51	76
C-D					38	56
C-A					362	542
C-B	0.24	6.87	0.3	A	142	213

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	129	32	735	0.175	128	0.0	0.2	6.252	A
B-AD	29	7	596	0.048	28	0.0	0.1	6.800	A
A-B	2	0.56			2				
A-C	108	27			108				
A-D	23	6	654	0.036	23	0.0	0.0	5.874	A
D-AB	57	14	545	0.105	57	0.0	0.1	7.749	A
D-BC	42	10	510	0.082	42	0.0	0.1	8.054	A
C-D	31	8			31				
C-A	297	74			297				
C-B	117	29	740	0.158	116	0.0	0.2	6.049	A

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	154	38	717	0.215	154	0.2	0.3	6.744	A
B-AD	34	9	562	0.060	34	0.1	0.1	7.313	A
A-B	3	0.67			3				
A-C	129	32			129				
A-D	28	7	625	0.045	28	0.0	0.0	6.204	A
D-AB	69	17	515	0.133	69	0.1	0.2	8.475	A
D-BC	50	12	477	0.105	50	0.1	0.1	8.840	A
C-D	37	9			37				
C-A	354	89			354				
C-B	139	35	732	0.190	139	0.2	0.2	6.375	A

**08:15 - 08:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	189	47	691	0.273	188	0.3	0.4	7.556	A
B-AD	42	10	516	0.081	41	0.1	0.1	8.147	A
A-B	3	0.83			3				
A-C	157	39			157				
A-D	34	9	586	0.058	34	0.0	0.1	6.718	A
D-AB	85	21	474	0.179	84	0.2	0.2	9.717	A
D-BC	61	15	432	0.141	61	0.1	0.2	10.170	B
C-D	45	11			45				
C-A	434	108			434				
C-B	171	43	721	0.237	170	0.2	0.3	6.865	A

**08:30 - 08:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	189	47	691	0.273	189	0.4	0.4	7.570	A
B-AD	42	10	515	0.081	42	0.1	0.1	8.153	A
A-B	3	0.83			3				
A-C	157	39			157				
A-D	34	9	586	0.058	34	0.1	0.1	6.720	A
D-AB	85	21	474	0.179	85	0.2	0.2	9.735	A
D-BC	61	15	431	0.141	61	0.2	0.2	10.184	B
C-D	45	11			45				
C-A	434	108			434				
C-B	171	43	721	0.237	171	0.3	0.3	6.870	A

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	154	38	717	0.215	154	0.4	0.3	6.761	A
B-AD	34	9	562	0.061	34	0.1	0.1	7.322	A
A-B	3	0.67			3				
A-C	129	32			129				
A-D	28	7	625	0.045	28	0.1	0.0	6.210	A
D-AB	69	17	515	0.133	69	0.2	0.2	8.494	A
D-BC	50	12	477	0.105	50	0.2	0.1	8.855	A
C-D	37	9			37				
C-A	354	89			354				
C-B	139	35	732	0.190	140	0.3	0.2	6.385	A

**09:00 - 09:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	129	32	735	0.175	129	0.3	0.2	6.278	A
B-AD	29	7	596	0.048	29	0.1	0.1	6.814	A
A-B	2	0.56			2				
A-C	108	27			108				
A-D	23	6	654	0.036	23	0.0	0.0	5.881	A
D-AB	57	14	545	0.105	58	0.2	0.1	7.778	A
D-BC	42	10	509	0.082	42	0.1	0.1	8.085	A
C-D	31	8			31				
C-A	297	74			297				
C-B	117	29	740	0.158	117	0.2	0.2	6.068	A

# 2026 Base, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		4.02	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.02	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
D4	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	291	100.000
B		ONE HOUR	✓	256	100.000
C		ONE HOUR	✓	296	100.000
D		ONE HOUR	✓	103	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	7	264	20
	B	4	0	159	93
	C	165	116	0	15
	D	15	63	25	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	17	6	6
	B	0	0	3	1
	C	6	2	0	8
	D	8	0	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.34	8.35	0.5	A	189	283
B-AD	0.10	7.26	0.1	A	46	69
A-B					6	10
A-C					242	363
A-D	0.03	5.73	0.0	A	18	28
D-AB	0.10	7.67	0.1	A	44	66
D-BC	0.13	8.68	0.1	A	50	76
C-D					14	21
C-A					151	227
C-B	0.19	6.58	0.2	A	106	160

**Main Results for each time segment**
**16:45 - 17:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	155	39	717	0.216	154	0.0	0.3	6.539	A
B-AD	38	9	623	0.061	38	0.0	0.1	6.198	A
A-B	5	1			5				
A-C	199	50			199				
A-D	15	4	724	0.021	15	0.0	0.0	5.384	A
D-AB	36	9	584	0.061	36	0.0	0.1	6.714	A
D-BC	42	10	540	0.077	41	0.0	0.1	7.213	A
C-D	11	3			11				
C-A	124	31			124				
C-B	87	22	716	0.122	87	0.0	0.1	5.829	A

**17:00 - 17:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	185	46	697	0.265	185	0.3	0.4	7.198	A
B-AD	45	11	595	0.076	45	0.1	0.1	6.609	A
A-B	6	2			6				
A-C	237	59			237				
A-D	18	4	708	0.025	18	0.0	0.0	5.526	A
D-AB	43	11	563	0.077	43	0.1	0.1	7.084	A
D-BC	49	12	513	0.096	49	0.1	0.1	7.766	A
C-D	13	3			13				
C-A	148	37			148				
C-B	104	26	703	0.148	104	0.1	0.2	6.125	A

**17:15 - 17:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	227	57	669	0.339	226	0.4	0.5	8.321	A
B-AD	55	14	555	0.099	55	0.1	0.1	7.258	A
A-B	8	2			8				
A-C	291	73			291				
A-D	22	6	688	0.032	22	0.0	0.0	5.732	A
D-AB	53	13	534	0.100	53	0.1	0.1	7.663	A
D-BC	60	15	475	0.126	60	0.1	0.1	8.671	A
C-D	17	4			17				
C-A	182	45			182				
C-B	128	32	686	0.186	127	0.2	0.2	6.572	A

**17:30 - 17:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	227	57	669	0.339	227	0.5	0.5	8.346	A
B-AD	55	14	555	0.099	55	0.1	0.1	7.263	A
A-B	8	2			8				
A-C	291	73			291				
A-D	22	6	688	0.032	22	0.0	0.0	5.733	A
D-AB	53	13	534	0.100	53	0.1	0.1	7.667	A
D-BC	60	15	475	0.126	60	0.1	0.1	8.680	A
C-D	17	4			17				
C-A	182	45			182				
C-B	128	32	686	0.186	128	0.2	0.2	6.577	A

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	185	46	697	0.265	186	0.5	0.4	7.225	A
B-AD	45	11	595	0.076	45	0.1	0.1	6.617	A
A-B	6	2			6				
A-C	237	59			237				
A-D	18	4	708	0.025	18	0.0	0.0	5.530	A
D-AB	43	11	563	0.077	43	0.1	0.1	7.088	A
D-BC	49	12	512	0.096	50	0.1	0.1	7.780	A
C-D	13	3			13				
C-A	148	37			148				
C-B	104	26	703	0.148	104	0.2	0.2	6.132	A

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	155	39	717	0.216	155	0.4	0.3	6.578	A
B-AD	38	9	623	0.061	38	0.1	0.1	6.211	A
A-B	5	1			5				
A-C	199	50			199				
A-D	15	4	723	0.021	15	0.0	0.0	5.389	A
D-AB	36	9	584	0.061	36	0.1	0.1	6.725	A
D-BC	42	10	540	0.077	42	0.1	0.1	7.232	A
C-D	11	3			11				
C-A	124	31			124				
C-B	87	22	716	0.122	87	0.2	0.1	5.843	A

# 2026 Base + 50dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		3.77	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.77	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
D5	2026 Base + 50dw	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	178	100.000
B		ONE HOUR	✓	209	100.000
C		ONE HOUR	✓	594	100.000
D		ONE HOUR	✓	132	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	3	144	31
	B	3	0	136	70
	C	398	155	0	41
	D	29	93	10	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	50	6	3
	B	0	0	5	8
	C	6	5	0	3
	D	4	6	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.27	7.58	0.4	A	157	236
B-AD	0.08	8.18	0.1	A	35	52
A-B					3	4
A-C					132	198
A-D	0.06	6.74	0.1	A	28	43
D-AB	0.18	9.77	0.2	A	70	105
D-BC	0.14	10.23	0.2	B	51	76
C-D					38	56
C-A					365	548
C-B	0.24	6.87	0.3	A	142	213

**Main Results for each time segment**
**07:45 - 08:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	129	32	735	0.175	128	0.0	0.2	6.257	A
B-AD	29	7	595	0.048	28	0.0	0.1	6.811	A
A-B	2	0.56			2				
A-C	108	27			108				
A-D	23	6	653	0.036	23	0.0	0.0	5.883	A
D-AB	57	14	544	0.105	57	0.0	0.1	7.765	A
D-BC	42	10	509	0.083	42	0.0	0.1	8.077	A
C-D	31	8			31				
C-A	300	75			300				
C-B	117	29	740	0.158	116	0.0	0.2	6.051	A

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	154	38	716	0.215	154	0.2	0.3	6.751	A
B-AD	34	9	561	0.061	34	0.1	0.1	7.328	A
A-B	3	0.67			3				
A-C	129	32			129				
A-D	28	7	624	0.045	28	0.0	0.0	6.215	A
D-AB	69	17	514	0.134	69	0.1	0.2	8.497	A
D-BC	50	12	476	0.105	50	0.1	0.1	8.865	A
C-D	37	9			37				
C-A	358	89			358				
C-B	139	35	732	0.190	139	0.2	0.2	6.378	A



**08:15 - 08:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	189	47	690	0.273	188	0.3	0.4	7.568	A
B-AD	42	10	514	0.081	41	0.1	0.1	8.169	A
A-B	3	0.83			3				
A-C	159	40			159				
A-D	34	9	585	0.058	34	0.0	0.1	6.734	A
D-AB	85	21	472	0.179	84	0.2	0.2	9.755	A
D-BC	61	15	430	0.141	61	0.1	0.2	10.212	B
C-D	45	11			45				
C-A	438	110			438				
C-B	171	43	720	0.237	170	0.2	0.3	6.869	A

**08:30 - 08:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	189	47	690	0.273	189	0.4	0.4	7.581	A
B-AD	42	10	514	0.081	42	0.1	0.1	8.176	A
A-B	3	0.83			3				
A-C	159	40			159				
A-D	34	9	585	0.058	34	0.1	0.1	6.736	A
D-AB	85	21	472	0.179	85	0.2	0.2	9.772	A
D-BC	61	15	430	0.141	61	0.2	0.2	10.226	B
C-D	45	11			45				
C-A	438	110			438				
C-B	171	43	720	0.237	171	0.3	0.3	6.874	A

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	154	38	716	0.215	154	0.4	0.3	6.768	A
B-AD	34	9	561	0.061	34	0.1	0.1	7.337	A
A-B	3	0.67			3				
A-C	129	32			129				
A-D	28	7	624	0.045	28	0.1	0.0	6.219	A
D-AB	69	17	514	0.134	69	0.2	0.2	8.519	A
D-BC	50	12	475	0.105	50	0.2	0.1	8.883	A
C-D	37	9			37				
C-A	358	89			358				
C-B	139	35	732	0.190	140	0.3	0.2	6.388	A

**09:00 - 09:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	129	32	734	0.175	129	0.3	0.2	6.283	A
B-AD	29	7	595	0.048	29	0.1	0.1	6.822	A
A-B	2	0.56			2				
A-C	108	27			108				
A-D	23	6	653	0.036	23	0.0	0.0	5.890	A
D-AB	57	14	544	0.106	58	0.2	0.1	7.794	A
D-BC	42	10	508	0.083	42	0.1	0.1	8.102	A
C-D	31	8			31				
C-A	300	75			300				
C-B	117	29	740	0.158	117	0.2	0.2	6.072	A

# 2026 Base + 50dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		4.01	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.01	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
D6	2026 Base + 50dw	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	294	100.000
B		ONE HOUR	✓	256	100.000
C		ONE HOUR	✓	297	100.000
D		ONE HOUR	✓	103	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	7	267	20
	B	4	0	159	93
	C	166	116	0	15
	D	15	63	25	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	17	6	6
	B	0	0	3	1
	C	6	2	0	8
	D	8	0	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.34	8.37	0.5	A	189	283
B-AD	0.10	7.28	0.1	A	46	69
A-B					6	10
A-C					245	368
A-D	0.03	5.74	0.0	A	18	28
D-AB	0.10	7.68	0.1	A	44	66
D-BC	0.13	8.70	0.1	A	50	76
C-D					14	21
C-A					152	228
C-B	0.19	6.59	0.2	A	106	160

**Main Results for each time segment**

**16:45 - 17:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	155	39	716	0.216	154	0.0	0.3	6.548	A
B-AD	38	9	622	0.061	38	0.0	0.1	6.208	A
A-B	5	1			5				
A-C	201	50			201				
A-D	15	4	723	0.021	15	0.0	0.0	5.386	A
D-AB	36	9	584	0.061	36	0.0	0.1	6.721	A
D-BC	42	10	539	0.077	41	0.0	0.1	7.222	A
C-D	11	3			11				
C-A	125	31			125				
C-B	87	22	716	0.122	87	0.0	0.1	5.835	A

**17:00 - 17:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	185	46	696	0.266	185	0.3	0.4	7.211	A
B-AD	45	11	594	0.076	45	0.1	0.1	6.623	A
A-B	6	2			6				
A-C	240	60			240				
A-D	18	4	708	0.025	18	0.0	0.0	5.528	A
D-AB	43	11	563	0.077	43	0.1	0.1	7.093	A
D-BC	49	12	512	0.097	49	0.1	0.1	7.779	A
C-D	13	3			13				
C-A	149	37			149				
C-B	104	26	703	0.148	104	0.1	0.2	6.133	A

**17:15 - 17:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	227	57	668	0.339	226	0.4	0.5	8.343	A
B-AD	55	14	554	0.100	55	0.1	0.1	7.278	A
A-B	8	2			8				
A-C	294	73			294				
A-D	22	6	687	0.032	22	0.0	0.0	5.735	A
D-AB	53	13	533	0.100	53	0.1	0.1	7.677	A
D-BC	60	15	474	0.127	60	0.1	0.1	8.691	A
C-D	17	4			17				
C-A	183	46			183				
C-B	128	32	685	0.186	127	0.2	0.2	6.583	A

**17:30 - 17:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	227	57	668	0.339	227	0.5	0.5	8.368	A
B-AD	55	14	554	0.100	55	0.1	0.1	7.283	A
A-B	8	2			8				
A-C	294	73			294				
A-D	22	6	687	0.032	22	0.0	0.0	5.736	A
D-AB	53	13	533	0.100	53	0.1	0.1	7.681	A
D-BC	60	15	474	0.127	60	0.1	0.1	8.700	A
C-D	17	4			17				
C-A	183	46			183				
C-B	128	32	685	0.186	128	0.2	0.2	6.588	A

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	185	46	696	0.266	186	0.5	0.4	7.241	A
B-AD	45	11	593	0.076	45	0.1	0.1	6.630	A
A-B	6	2			6				
A-C	240	60			240				
A-D	18	4	708	0.025	18	0.0	0.0	5.530	A
D-AB	43	11	562	0.077	43	0.1	0.1	7.097	A
D-BC	49	12	512	0.097	50	0.1	0.1	7.794	A
C-D	13	3			13				
C-A	149	37			149				
C-B	104	26	703	0.148	104	0.2	0.2	6.142	A

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	155	39	716	0.216	155	0.4	0.3	6.585	A
B-AD	38	9	622	0.061	38	0.1	0.1	6.219	A
A-B	5	1			5				
A-C	201	50			201				
A-D	15	4	723	0.021	15	0.0	0.0	5.391	A
D-AB	36	9	583	0.062	36	0.1	0.1	6.732	A
D-BC	42	10	539	0.077	42	0.1	0.1	7.244	A
C-D	11	3			11				
C-A	125	31			125				
C-B	87	22	715	0.122	87	0.2	0.1	5.847	A

# 2027 Base, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		3.80	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.80	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
D7	2027 Base	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	178	100.000
B		ONE HOUR	✓	211	100.000
C		ONE HOUR	✓	595	100.000
D		ONE HOUR	✓	133	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	3	144	31
	B	3	0	137	71
	C	397	156	0	42
	D	29	94	10	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	50	6	3
	B	0	0	5	8
	C	6	5	0	3
	D	4	6	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.28	7.62	0.4	A	158	238
B-AD	0.08	8.19	0.1	A	35	53
A-B					3	4
A-C					132	198
A-D	0.06	6.74	0.1	A	28	43
D-AB	0.18	9.80	0.2	A	71	106
D-BC	0.14	10.25	0.2	B	51	77
C-D					39	58
C-A					364	546
C-B	0.24	6.89	0.3	A	143	215

**Main Results for each time segment**
**07:45 - 08:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	130	32	734	0.177	129	0.0	0.2	6.274	A
B-AD	29	7	595	0.049	29	0.0	0.1	6.822	A
A-B	2	0.56			2				
A-C	108	27			108				
A-D	23	6	653	0.036	23	0.0	0.0	5.886	A
D-AB	58	14	544	0.106	57	0.0	0.1	7.779	A
D-BC	42	11	509	0.083	42	0.0	0.1	8.086	A
C-D	32	8			32				
C-A	299	75			299				
C-B	117	29	740	0.159	117	0.0	0.2	6.058	A

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	155	39	716	0.217	155	0.2	0.3	6.775	A
B-AD	34	9	561	0.061	34	0.1	0.1	7.340	A
A-B	3	0.67			3				
A-C	129	32			129				
A-D	28	7	624	0.045	28	0.0	0.0	6.219	A
D-AB	69	17	514	0.135	69	0.1	0.2	8.517	A
D-BC	50	13	475	0.106	50	0.1	0.1	8.878	A
C-D	38	9			38				
C-A	357	89			357				
C-B	140	35	732	0.192	140	0.2	0.2	6.388	A

**08:15 - 08:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	190	48	689	0.276	190	0.3	0.4	7.605	A
B-AD	42	11	514	0.082	42	0.1	0.1	8.188	A
A-B	3	0.83			3				
A-C	159	40			159				
A-D	34	9	584	0.058	34	0.0	0.1	6.740	A
D-AB	85	21	472	0.181	85	0.2	0.2	9.785	A
D-BC	61	15	430	0.142	61	0.1	0.2	10.232	B
C-D	46	12			46				
C-A	437	109			437				
C-B	172	43	720	0.238	171	0.2	0.3	6.883	A

**08:30 - 08:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	190	48	689	0.276	190	0.4	0.4	7.619	A
B-AD	42	11	514	0.082	42	0.1	0.1	8.195	A
A-B	3	0.83			3				
A-C	159	40			159				
A-D	34	9	584	0.058	34	0.1	0.1	6.742	A
D-AB	85	21	472	0.181	85	0.2	0.2	9.803	A
D-BC	61	15	430	0.142	61	0.2	0.2	10.246	B
C-D	46	12			46				
C-A	437	109			437				
C-B	172	43	720	0.238	172	0.3	0.3	6.888	A

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	155	39	716	0.217	156	0.4	0.3	6.793	A
B-AD	34	9	560	0.061	35	0.1	0.1	7.347	A
A-B	3	0.67			3				
A-C	129	32			129				
A-D	28	7	624	0.045	28	0.1	0.0	6.223	A
D-AB	69	17	513	0.135	69	0.2	0.2	8.539	A
D-BC	50	13	475	0.106	51	0.2	0.1	8.896	A
C-D	38	9			38				
C-A	357	89			357				
C-B	140	35	732	0.192	141	0.3	0.3	6.397	A

**09:00 - 09:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	130	32	734	0.177	130	0.3	0.2	6.300	A
B-AD	29	7	594	0.049	29	0.1	0.1	6.832	A
A-B	2	0.56			2				
A-C	108	27			108				
A-D	23	6	653	0.036	23	0.0	0.0	5.895	A
D-AB	58	14	543	0.106	58	0.2	0.1	7.808	A
D-BC	42	11	508	0.083	42	0.1	0.1	8.112	A
C-D	32	8			32				
C-A	299	75			299				
C-B	117	29	740	0.159	118	0.3	0.2	6.080	A

# 2027 Base, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		4.05	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.05	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
D8	2027 Base	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	293	100.000
B		ONE HOUR	✓	258	100.000
C		ONE HOUR	✓	298	100.000
D		ONE HOUR	✓	104	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	7	266	20
	B	4	0	160	94
	C	166	117	0	15
	D	15	64	25	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00



**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	17	6	6
	B	0	0	3	1
	C	6	2	0	8
	D	8	0	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.34	8.40	0.5	A	190	285
B-AD	0.10	7.29	0.1	A	47	70
A-B					6	10
A-C					244	366
A-D	0.03	5.74	0.0	A	18	28
D-AB	0.10	7.70	0.1	A	45	67
D-BC	0.13	8.71	0.1	A	51	76
C-D					14	21
C-A					152	228
C-B	0.19	6.60	0.2	A	107	161

**Main Results for each time segment**
**16:45 - 17:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	156	39	716	0.218	155	0.0	0.3	6.563	A
B-AD	38	10	622	0.061	38	0.0	0.1	6.213	A
A-B	5	1			5				
A-C	200	50			200				
A-D	15	4	723	0.021	15	0.0	0.0	5.389	A
D-AB	36	9	583	0.062	36	0.0	0.1	6.732	A
D-BC	42	11	539	0.078	42	0.0	0.1	7.229	A
C-D	11	3			11				
C-A	125	31			125				
C-B	88	22	716	0.123	88	0.0	0.1	5.840	A

**17:00 - 17:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	186	47	696	0.268	186	0.3	0.4	7.233	A
B-AD	46	11	593	0.077	46	0.1	0.1	6.630	A
A-B	6	2			6				
A-C	239	60			239				
A-D	18	4	708	0.025	18	0.0	0.0	5.531	A
D-AB	44	11	562	0.078	44	0.1	0.1	7.108	A
D-BC	50	12	512	0.097	50	0.1	0.1	7.789	A
C-D	13	3			13				
C-A	149	37			149				
C-B	105	26	703	0.150	105	0.1	0.2	6.139	A

**17:15 - 17:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	228	57	668	0.342	228	0.4	0.5	8.378	A
B-AD	56	14	554	0.101	56	0.1	0.1	7.288	A
A-B	8	2			8				
A-C	293	73			293				
A-D	22	6	687	0.032	22	0.0	0.0	5.739	A
D-AB	54	14	532	0.101	54	0.1	0.1	7.698	A
D-BC	60	15	474	0.128	60	0.1	0.1	8.705	A
C-D	17	4			17				
C-A	183	46			183				
C-B	129	32	685	0.188	129	0.2	0.2	6.592	A

**17:30 - 17:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	228	57	668	0.342	228	0.5	0.5	8.403	A
B-AD	56	14	554	0.101	56	0.1	0.1	7.293	A
A-B	8	2			8				
A-C	293	73			293				
A-D	22	6	687	0.032	22	0.0	0.0	5.740	A
D-AB	54	14	532	0.101	54	0.1	0.1	7.702	A
D-BC	60	15	474	0.128	60	0.1	0.1	8.714	A
C-D	17	4			17				
C-A	183	46			183				
C-B	129	32	685	0.188	129	0.2	0.2	6.597	A

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	186	47	696	0.268	187	0.5	0.4	7.260	A
B-AD	46	11	593	0.077	46	0.1	0.1	6.635	A
A-B	6	2			6				
A-C	239	60			239				
A-D	18	4	708	0.025	18	0.0	0.0	5.533	A
D-AB	44	11	562	0.078	44	0.1	0.1	7.112	A
D-BC	50	12	512	0.097	50	0.1	0.1	7.804	A
C-D	13	3			13				
C-A	149	37			149				
C-B	105	26	703	0.150	105	0.2	0.2	6.149	A

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	156	39	716	0.218	156	0.4	0.3	6.603	A
B-AD	38	10	622	0.061	38	0.1	0.1	6.224	A
A-B	5	1			5				
A-C	200	50			200				
A-D	15	4	723	0.021	15	0.0	0.0	5.391	A
D-AB	36	9	583	0.062	36	0.1	0.1	6.746	A
D-BC	42	11	539	0.078	42	0.1	0.1	7.248	A
C-D	11	3			11				
C-A	125	31			125				
C-B	88	22	716	0.123	88	0.2	0.1	5.854	A

# 2027 Base + 100dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		3.78	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.78	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	2027 Base + 100dw	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	180	100.000
B		ONE HOUR	✓	211	100.000
C		ONE HOUR	✓	603	100.000
D		ONE HOUR	✓	133	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	3	146	31
	B	3	0	137	71
	C	405	156	0	42
	D	29	94	10	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	50	6	3
	B	0	0	5	8
	C	6	5	0	3
	D	4	6	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.28	7.64	0.4	A	158	238
B-AD	0.08	8.24	0.1	A	35	53
A-B					3	4
A-C					134	201
A-D	0.06	6.77	0.1	A	28	43
D-AB	0.18	9.88	0.2	A	71	106
D-BC	0.14	10.33	0.2	B	51	77
C-D					39	58
C-A					372	557
C-B	0.24	6.90	0.3	A	143	215

**Main Results for each time segment**
**07:45 - 08:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	130	32	733	0.177	129	0.0	0.2	6.284	A
B-AD	29	7	593	0.049	29	0.0	0.1	6.843	A
A-B	2	0.56			2				
A-C	110	27			110				
A-D	23	6	651	0.036	23	0.0	0.0	5.902	A
D-AB	58	14	542	0.107	57	0.0	0.1	7.811	A
D-BC	42	11	506	0.084	42	0.0	0.1	8.122	A
C-D	32	8			32				
C-A	305	76			305				
C-B	117	29	739	0.159	117	0.0	0.2	6.062	A

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	155	39	715	0.217	155	0.2	0.3	6.789	A
B-AD	34	9	559	0.062	34	0.1	0.1	7.370	A
A-B	3	0.67			3				
A-C	131	33			131				
A-D	28	7	622	0.045	28	0.0	0.0	6.242	A
D-AB	69	17	511	0.135	69	0.1	0.2	8.563	A
D-BC	50	13	473	0.106	50	0.1	0.1	8.930	A
C-D	38	9			38				
C-A	364	91			364				
C-B	140	35	731	0.192	140	0.2	0.2	6.393	A

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	190	48	688	0.277	190	0.3	0.4	7.629	A
B-AD	42	11	511	0.082	42	0.1	0.1	8.234	A
A-B	3	0.83			3				
A-C	161	40			161				
A-D	34	9	582	0.059	34	0.0	0.1	6.772	A
D-AB	85	21	469	0.182	85	0.2	0.2	9.861	A
D-BC	61	15	427	0.143	61	0.1	0.2	10.317	B
C-D	46	12			46				
C-A	446	111			446				
C-B	172	43	720	0.239	171	0.2	0.3	6.888	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	190	48	688	0.277	190	0.4	0.4	7.642	A
B-AD	42	11	511	0.082	42	0.1	0.1	8.240	A
A-B	3	0.83			3				
A-C	161	40			161				
A-D	34	9	581	0.059	34	0.1	0.1	6.774	A
D-AB	85	21	469	0.182	85	0.2	0.2	9.879	A
D-BC	61	15	427	0.143	61	0.2	0.2	10.331	B
C-D	46	12			46				
C-A	446	111			446				
C-B	172	43	720	0.239	172	0.3	0.3	6.896	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	155	39	715	0.217	156	0.4	0.3	6.809	A
B-AD	34	9	558	0.062	35	0.1	0.1	7.380	A
A-B	3	0.67			3				
A-C	131	33			131				
A-D	28	7	622	0.045	28	0.1	0.0	6.248	A
D-AB	69	17	511	0.135	69	0.2	0.2	8.585	A
D-BC	50	13	473	0.107	51	0.2	0.1	8.948	A
C-D	38	9			38				
C-A	364	91			364				
C-B	140	35	731	0.192	141	0.3	0.3	6.406	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	130	32	733	0.177	130	0.3	0.2	6.310	A
B-AD	29	7	593	0.049	29	0.1	0.1	6.856	A
A-B	2	0.56			2				
A-C	110	27			110				
A-D	23	6	651	0.036	23	0.0	0.0	5.909	A
D-AB	58	14	541	0.107	58	0.2	0.1	7.839	A
D-BC	42	11	506	0.084	42	0.1	0.1	8.147	A
C-D	32	8			32				
C-A	305	76			305				
C-B	117	29	739	0.159	118	0.3	0.2	6.082	A

# 2027 Base + 100dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		4.03	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.03	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	2027 Base + 100dw	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	299	100.000
B		ONE HOUR	✓	258	100.000
C		ONE HOUR	✓	301	100.000
D		ONE HOUR	✓	104	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	7	272	20
	B	4	0	160	94
	C	169	117	0	15
	D	15	64	25	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	17	6	6
	B	0	0	3	1
	C	6	2	0	8
	D	8	0	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.34	8.45	0.5	A	190	285
B-AD	0.10	7.34	0.1	A	47	70
A-B					6	10
A-C					250	374
A-D	0.03	5.75	0.0	A	18	28
D-AB	0.10	7.73	0.1	A	45	67
D-BC	0.13	8.76	0.1	A	51	76
C-D					14	21
C-A					155	233
C-B	0.19	6.62	0.2	A	107	161

**Main Results for each time segment**
**16:45 - 17:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	156	39	715	0.218	155	0.0	0.3	6.582	A
B-AD	38	10	620	0.062	38	0.0	0.1	6.235	A
A-B	5	1			5				
A-C	205	51			205				
A-D	15	4	722	0.021	15	0.0	0.0	5.394	A
D-AB	36	9	582	0.062	36	0.0	0.1	6.749	A
D-BC	42	11	538	0.078	42	0.0	0.1	7.251	A
C-D	11	3			11				
C-A	127	32			127				
C-B	88	22	714	0.123	88	0.0	0.1	5.852	A

**17:00 - 17:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	186	47	694	0.269	186	0.3	0.4	7.260	A
B-AD	46	11	591	0.077	46	0.1	0.1	6.659	A
A-B	6	2			6				
A-C	245	61			245				
A-D	18	4	707	0.025	18	0.0	0.0	5.538	A
D-AB	44	11	560	0.078	44	0.1	0.1	7.130	A
D-BC	50	12	510	0.098	50	0.1	0.1	7.820	A
C-D	13	3			13				
C-A	152	38			152				
C-B	105	26	701	0.150	105	0.1	0.2	6.155	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	228	57	665	0.343	228	0.4	0.5	8.425	A
B-AD	56	14	551	0.101	56	0.1	0.1	7.332	A
A-B	8	2			8				
A-C	299	75			299				
A-D	22	6	686	0.032	22	0.0	0.0	5.748	A
D-AB	54	14	530	0.102	54	0.1	0.1	7.730	A
D-BC	60	15	472	0.128	60	0.1	0.1	8.752	A
C-D	17	4			17				
C-A	186	47			186				
C-B	129	32	683	0.189	129	0.2	0.2	6.615	A

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	228	57	665	0.343	228	0.5	0.5	8.450	A
B-AD	56	14	551	0.101	56	0.1	0.1	7.336	A
A-B	8	2			8				
A-C	299	75			299				
A-D	22	6	686	0.032	22	0.0	0.0	5.748	A
D-AB	54	14	530	0.102	54	0.1	0.1	7.734	A
D-BC	60	15	471	0.128	60	0.1	0.1	8.762	A
C-D	17	4			17				
C-A	186	47			186				
C-B	129	32	683	0.189	129	0.2	0.2	6.620	A

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	186	47	694	0.269	187	0.5	0.4	7.291	A
B-AD	46	11	591	0.077	46	0.1	0.1	6.664	A
A-B	6	2			6				
A-C	245	61			245				
A-D	18	4	707	0.025	18	0.0	0.0	5.542	A
D-AB	44	11	560	0.078	44	0.1	0.1	7.137	A
D-BC	50	12	510	0.098	50	0.1	0.1	7.833	A
C-D	13	3			13				
C-A	152	38			152				
C-B	105	26	701	0.150	105	0.2	0.2	6.165	A

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	156	39	714	0.218	156	0.4	0.3	6.622	A
B-AD	38	10	620	0.062	38	0.1	0.1	6.248	A
A-B	5	1			5				
A-C	205	51			205				
A-D	15	4	722	0.021	15	0.0	0.0	5.398	A
D-AB	36	9	581	0.062	36	0.1	0.1	6.762	A
D-BC	42	11	537	0.078	42	0.1	0.1	7.273	A
C-D	11	3			11				
C-A	127	32			127				
C-B	88	22	714	0.123	88	0.2	0.1	5.864	A



# 2028 Base, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		3.83	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.83	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	2028 Base	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	180	100.000
B		ONE HOUR	✓	212	100.000
C		ONE HOUR	✓	601	100.000
D		ONE HOUR	✓	135	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	3	145	32
	B	3	0	138	71
	C	401	158	0	42
	D	29	95	11	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	50	6	3
	B	0	0	5	8
	C	6	5	0	3
	D	4	6	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.28	7.65	0.4	A	159	239
B-AD	0.08	8.24	0.1	A	35	53
A-B					3	4
A-C					133	200
A-D	0.06	6.78	0.1	A	29	44
D-AB	0.18	9.91	0.2	A	71	107
D-BC	0.15	10.39	0.2	B	53	79
C-D					39	58
C-A					368	552
C-B	0.24	6.93	0.3	A	145	217

**Main Results for each time segment**
**07:45 - 08:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	131	33	734	0.178	130	0.0	0.2	6.287	A
B-AD	29	7	593	0.049	29	0.0	0.1	6.845	A
A-B	2	0.56			2				
A-C	109	27			109				
A-D	24	6	651	0.037	24	0.0	0.0	5.907	A
D-AB	58	15	542	0.108	58	0.0	0.1	7.823	A
D-BC	43	11	506	0.086	43	0.0	0.1	8.142	A
C-D	32	8			32				
C-A	302	75			302				
C-B	119	30	739	0.161	118	0.0	0.2	6.078	A

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	156	39	715	0.218	156	0.2	0.3	6.794	A
B-AD	34	9	558	0.062	34	0.1	0.1	7.372	A
A-B	3	0.67			3				
A-C	130	33			130				
A-D	29	7	622	0.046	29	0.0	0.0	6.248	A
D-AB	70	17	511	0.137	70	0.1	0.2	8.580	A
D-BC	52	13	472	0.109	51	0.1	0.1	8.961	A
C-D	38	9			38				
C-A	360	90			360				
C-B	142	36	731	0.194	142	0.2	0.3	6.414	A

**08:15 - 08:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	191	48	688	0.278	191	0.3	0.4	7.637	A
B-AD	42	11	511	0.082	42	0.1	0.1	8.237	A
A-B	3	0.83			3				
A-C	160	40			160				
A-D	35	9	582	0.061	35	0.0	0.1	6.781	A
D-AB	86	21	468	0.183	86	0.2	0.2	9.890	A
D-BC	63	16	426	0.147	62	0.1	0.2	10.371	B
C-D	46	12			46				
C-A	442	110			442				
C-B	174	43	720	0.242	174	0.3	0.3	6.917	A

**08:30 - 08:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	191	48	688	0.278	191	0.4	0.4	7.650	A
B-AD	42	11	511	0.082	42	0.1	0.1	8.244	A
A-B	3	0.83			3				
A-C	160	40			160				
A-D	35	9	582	0.061	35	0.1	0.1	6.783	A
D-AB	86	21	468	0.184	86	0.2	0.2	9.909	A
D-BC	63	16	426	0.147	63	0.2	0.2	10.385	B
C-D	46	12			46				
C-A	442	110			442				
C-B	174	43	720	0.242	174	0.3	0.3	6.926	A

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	156	39	715	0.218	157	0.4	0.3	6.814	A
B-AD	34	9	558	0.062	35	0.1	0.1	7.382	A
A-B	3	0.67			3				
A-C	130	33			130				
A-D	29	7	622	0.046	29	0.1	0.1	6.252	A
D-AB	70	17	511	0.137	70	0.2	0.2	8.601	A
D-BC	52	13	472	0.109	52	0.2	0.1	8.978	A
C-D	38	9			38				
C-A	360	90			360				
C-B	142	36	731	0.194	142	0.3	0.3	6.424	A

**09:00 - 09:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	131	33	733	0.178	131	0.3	0.2	6.313	A
B-AD	29	7	593	0.049	29	0.1	0.1	6.855	A
A-B	2	0.56			2				
A-C	109	27			109				
A-D	24	6	651	0.037	24	0.1	0.0	5.917	A
D-AB	58	15	541	0.108	58	0.2	0.1	7.852	A
D-BC	43	11	506	0.086	44	0.1	0.1	8.167	A
C-D	32	8			32				
C-A	302	75			302				
C-B	119	30	739	0.161	119	0.3	0.2	6.097	A

# 2028 Base, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		4.06	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.06	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	2028 Base	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	296	100.000
B		ONE HOUR	✓	260	100.000
C		ONE HOUR	✓	301	100.000
D		ONE HOUR	✓	104	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	7	269	20
	B	4	0	161	95
	C	168	118	0	15
	D	15	64	25	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	17	6	6
	B	0	0	3	1
	C	6	2	0	8
	D	8	0	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.35	8.47	0.5	A	192	287
B-AD	0.10	7.33	0.1	A	47	70
A-B					6	10
A-C					247	370
A-D	0.03	5.75	0.0	A	18	28
D-AB	0.10	7.73	0.1	A	45	67
D-BC	0.13	8.76	0.1	A	51	76
C-D					14	21
C-A					154	231
C-B	0.19	6.62	0.2	A	108	162

**Main Results for each time segment**
**16:45 - 17:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	157	39	715	0.220	156	0.0	0.3	6.590	A
B-AD	39	10	621	0.062	38	0.0	0.1	6.233	A
A-B	5	1			5				
A-C	203	51			203				
A-D	15	4	722	0.021	15	0.0	0.0	5.394	A
D-AB	36	9	582	0.062	36	0.0	0.1	6.744	A
D-BC	42	11	538	0.078	42	0.0	0.1	7.248	A
C-D	11	3			11				
C-A	126	32			126				
C-B	89	22	715	0.124	88	0.0	0.1	5.853	A

**17:00 - 17:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	188	47	695	0.270	187	0.3	0.4	7.273	A
B-AD	46	12	592	0.078	46	0.1	0.1	6.656	A
A-B	6	2			6				
A-C	242	60			242				
A-D	18	4	707	0.025	18	0.0	0.0	5.539	A
D-AB	44	11	561	0.078	44	0.1	0.1	7.124	A
D-BC	50	12	510	0.098	50	0.1	0.1	7.816	A
C-D	13	3			13				
C-A	151	38			151				
C-B	106	27	702	0.151	106	0.1	0.2	6.156	A

**17:15 - 17:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	230	58	666	0.345	229	0.4	0.5	8.443	A
B-AD	56	14	552	0.102	56	0.1	0.1	7.327	A
A-B	8	2			8				
A-C	296	74			296				
A-D	22	6	686	0.032	22	0.0	0.0	5.749	A
D-AB	54	14	531	0.102	54	0.1	0.1	7.721	A
D-BC	60	15	472	0.128	60	0.1	0.1	8.747	A
C-D	17	4			17				
C-A	185	46			185				
C-B	130	32	684	0.190	130	0.2	0.2	6.617	A

**17:30 - 17:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	230	58	666	0.345	230	0.5	0.5	8.470	A
B-AD	56	14	552	0.102	56	0.1	0.1	7.332	A
A-B	8	2			8				
A-C	296	74			296				
A-D	22	6	686	0.032	22	0.0	0.0	5.750	A
D-AB	54	14	531	0.102	54	0.1	0.1	7.725	A
D-BC	60	15	472	0.128	60	0.1	0.1	8.756	A
C-D	17	4			17				
C-A	185	46			185				
C-B	130	32	684	0.190	130	0.2	0.2	6.622	A

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	188	47	694	0.270	188	0.5	0.4	7.304	A
B-AD	46	12	592	0.078	46	0.1	0.1	6.664	A
A-B	6	2			6				
A-C	242	60			242				
A-D	18	4	707	0.025	18	0.0	0.0	5.540	A
D-AB	44	11	561	0.078	44	0.1	0.1	7.131	A
D-BC	50	12	510	0.098	50	0.1	0.1	7.831	A
C-D	13	3			13				
C-A	151	38			151				
C-B	106	27	702	0.151	106	0.2	0.2	6.166	A

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	157	39	715	0.220	158	0.4	0.3	6.628	A
B-AD	39	10	621	0.062	39	0.1	0.1	6.244	A
A-B	5	1			5				
A-C	203	51			203				
A-D	15	4	722	0.021	15	0.0	0.0	5.399	A
D-AB	36	9	582	0.062	36	0.1	0.1	6.757	A
D-BC	42	11	537	0.078	42	0.1	0.1	7.267	A
C-D	11	3			11				
C-A	126	32			126				
C-B	89	22	715	0.124	89	0.2	0.1	5.868	A

# 2028 Base + 150dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		3.81	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.81	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
D13	2028 Base + 150dw	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	184	100.000
B		ONE HOUR	✓	212	100.000
C		ONE HOUR	✓	612	100.000
D		ONE HOUR	✓	135	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	3	149	32
	B	3	0	138	71
	C	411	158	0	43
	D	29	95	11	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	50	6	3
	B	0	0	5	8
	C	6	5	0	3
	D	4	6	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.28	7.69	0.4	A	159	239
B-AD	0.08	8.32	0.1	A	35	53
A-B					3	4
A-C					137	205
A-D	0.06	6.83	0.1	A	29	44
D-AB	0.19	10.02	0.2	B	71	107
D-BC	0.15	10.51	0.2	B	53	79
C-D					39	59
C-A					377	566
C-B	0.24	6.94	0.3	A	145	217

**Main Results for each time segment**
**07:45 - 08:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	131	33	732	0.179	130	0.0	0.2	6.304	A
B-AD	29	7	590	0.049	29	0.0	0.1	6.879	A
A-B	2	0.56			2				
A-C	112	28			112				
A-D	24	6	649	0.037	24	0.0	0.0	5.930	A
D-AB	58	15	539	0.108	58	0.0	0.1	7.868	A
D-BC	43	11	503	0.086	43	0.0	0.1	8.193	A
C-D	32	8			32				
C-A	309	77			309				
C-B	119	30	738	0.161	118	0.0	0.2	6.087	A

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	156	39	713	0.219	156	0.2	0.3	6.818	A
B-AD	34	9	555	0.062	34	0.1	0.1	7.419	A
A-B	3	0.67			3				
A-C	134	33			134				
A-D	29	7	619	0.046	29	0.0	0.0	6.279	A
D-AB	70	17	508	0.137	70	0.1	0.2	8.645	A
D-BC	52	13	469	0.110	51	0.1	0.1	9.034	A
C-D	39	10			39				
C-A	369	92			369				
C-B	142	36	730	0.195	142	0.2	0.3	6.426	A



**08:15 - 08:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	191	48	686	0.279	191	0.3	0.4	7.675	A
B-AD	42	11	507	0.083	42	0.1	0.1	8.309	A
A-B	3	0.83			3				
A-C	164	41			164				
A-D	35	9	578	0.061	35	0.0	0.1	6.826	A
D-AB	86	21	464	0.185	86	0.2	0.2	9.997	A
D-BC	63	16	422	0.149	62	0.1	0.2	10.490	B
C-D	47	12			47				
C-A	453	113			453				
C-B	174	43	718	0.242	174	0.3	0.3	6.934	A

**08:30 - 08:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	191	48	686	0.279	191	0.4	0.4	7.691	A
B-AD	42	11	507	0.083	42	0.1	0.1	8.316	A
A-B	3	0.83			3				
A-C	164	41			164				
A-D	35	9	578	0.061	35	0.1	0.1	6.828	A
D-AB	86	21	464	0.185	86	0.2	0.2	10.016	B
D-BC	63	16	422	0.149	63	0.2	0.2	10.508	B
C-D	47	12			47				
C-A	453	113			453				
C-B	174	43	718	0.242	174	0.3	0.3	6.942	A

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	156	39	713	0.219	157	0.4	0.3	6.836	A
B-AD	34	9	555	0.062	35	0.1	0.1	7.427	A
A-B	3	0.67			3				
A-C	134	33			134				
A-D	29	7	619	0.046	29	0.1	0.1	6.285	A
D-AB	70	17	507	0.138	70	0.2	0.2	8.666	A
D-BC	52	13	469	0.110	52	0.2	0.1	9.053	A
C-D	39	10			39				
C-A	369	92			369				
C-B	142	36	730	0.195	142	0.3	0.3	6.438	A

**09:00 - 09:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	131	33	732	0.179	131	0.3	0.2	6.332	A
B-AD	29	7	590	0.049	29	0.1	0.1	6.892	A
A-B	2	0.56			2				
A-C	112	28			112				
A-D	24	6	649	0.037	24	0.1	0.0	5.940	A
D-AB	58	15	538	0.108	58	0.2	0.1	7.898	A
D-BC	43	11	503	0.086	44	0.1	0.1	8.220	A
C-D	32	8			32				
C-A	309	77			309				
C-B	119	30	738	0.161	119	0.3	0.2	6.108	A

# 2028 Base + 150dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		4.04	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.04	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
D14	2028 Base + 150dw	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	303	100.000
B		ONE HOUR	✓	260	100.000
C		ONE HOUR	✓	305	100.000
D		ONE HOUR	✓	105	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	7	276	20
	B	4	0	161	95
	C	172	118	0	15
	D	15	64	26	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	17	6	6
	B	0	0	3	1
	C	6	2	0	8
	D	8	0	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.35	8.53	0.5	A	192	287
B-AD	0.10	7.39	0.1	A	47	70
A-B					6	10
A-C					253	380
A-D	0.03	5.76	0.0	A	18	28
D-AB	0.10	7.77	0.1	A	45	67
D-BC	0.13	8.86	0.2	A	52	77
C-D					14	21
C-A					158	237
C-B	0.19	6.65	0.2	A	108	162

**Main Results for each time segment**
**16:45 - 17:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	157	39	713	0.220	156	0.0	0.3	6.613	A
B-AD	39	10	618	0.062	38	0.0	0.1	6.259	A
A-B	5	1			5				
A-C	208	52			208				
A-D	15	4	721	0.021	15	0.0	0.0	5.401	A
D-AB	36	9	580	0.063	36	0.0	0.1	6.768	A
D-BC	43	11	536	0.080	42	0.0	0.1	7.295	A
C-D	11	3			11				
C-A	129	32			129				
C-B	89	22	714	0.124	88	0.0	0.1	5.867	A

**17:00 - 17:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	188	47	692	0.271	187	0.3	0.4	7.306	A
B-AD	46	12	589	0.078	46	0.1	0.1	6.692	A
A-B	6	2			6				
A-C	248	62			248				
A-D	18	4	706	0.025	18	0.0	0.0	5.547	A
D-AB	44	11	558	0.078	44	0.1	0.1	7.156	A
D-BC	51	13	507	0.100	51	0.1	0.1	7.881	A
C-D	13	3			13				
C-A	155	39			155				
C-B	106	27	700	0.151	106	0.1	0.2	6.175	A

**17:15 - 17:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	230	58	663	0.347	229	0.4	0.5	8.499	A
B-AD	56	14	548	0.103	56	0.1	0.1	7.380	A
A-B	8	2			8				
A-C	304	76			304				
A-D	22	6	684	0.032	22	0.0	0.0	5.760	A
D-AB	54	14	528	0.103	54	0.1	0.1	7.770	A
D-BC	61	15	468	0.131	61	0.1	0.1	8.843	A
C-D	17	4			17				
C-A	189	47			189				
C-B	130	32	682	0.190	130	0.2	0.2	6.643	A

**17:30 - 17:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	230	58	663	0.347	230	0.5	0.5	8.526	A
B-AD	56	14	548	0.103	56	0.1	0.1	7.385	A
A-B	8	2			8				
A-C	304	76			304				
A-D	22	6	684	0.032	22	0.0	0.0	5.761	A
D-AB	54	14	528	0.103	54	0.1	0.1	7.774	A
D-BC	61	15	468	0.131	61	0.1	0.2	8.857	A
C-D	17	4			17				
C-A	189	47			189				
C-B	130	32	682	0.190	130	0.2	0.2	6.649	A

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	188	47	692	0.271	188	0.5	0.4	7.337	A
B-AD	46	12	589	0.078	46	0.1	0.1	6.700	A
A-B	6	2			6				
A-C	248	62			248				
A-D	18	4	706	0.025	18	0.0	0.0	5.551	A
D-AB	44	11	558	0.078	44	0.1	0.1	7.163	A
D-BC	51	13	507	0.100	51	0.2	0.1	7.896	A
C-D	13	3			13				
C-A	155	39			155				
C-B	106	27	700	0.151	106	0.2	0.2	6.185	A

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	157	39	713	0.220	158	0.4	0.3	6.653	A
B-AD	39	10	618	0.062	39	0.1	0.1	6.270	A
A-B	5	1			5				
A-C	208	52			208				
A-D	15	4	721	0.021	15	0.0	0.0	5.406	A
D-AB	36	9	580	0.063	36	0.1	0.1	6.779	A
D-BC	43	11	535	0.080	43	0.1	0.1	7.314	A
C-D	11	3			11				
C-A	129	32			129				
C-B	89	22	714	0.125	89	0.2	0.1	5.882	A

# 2031 Base, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		3.88	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.88	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
D15	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	184	100.000
B		ONE HOUR	✓	217	100.000
C		ONE HOUR	✓	614	100.000
D		ONE HOUR	✓	138	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	3	149	32
	B	3	0	141	73
	C	410	161	0	43
	D	30	97	11	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	50	6	3
	B	0	0	5	8
	C	6	5	0	3
	D	4	6	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.29	7.78	0.4	A	163	245
B-AD	0.09	8.36	0.1	A	36	54
A-B					3	4
A-C					137	205
A-D	0.06	6.84	0.1	A	29	44
D-AB	0.19	10.08	0.2	B	73	110
D-BC	0.15	10.57	0.2	B	53	80
C-D					39	59
C-A					376	564
C-B	0.25	6.98	0.3	A	148	222

**Main Results for each time segment**

**07:45 - 08:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	134	33	731	0.183	133	0.0	0.2	6.344	A
B-AD	30	7	589	0.050	29	0.0	0.1	6.895	A
A-B	2	0.56			2				
A-C	112	28			112				
A-D	24	6	648	0.037	24	0.0	0.0	5.937	A
D-AB	60	15	539	0.111	59	0.0	0.1	7.893	A
D-BC	44	11	503	0.088	44	0.0	0.1	8.218	A
C-D	32	8			32				
C-A	309	77			309				
C-B	121	30	738	0.164	120	0.0	0.2	6.109	A

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	160	40	712	0.224	159	0.2	0.3	6.875	A
B-AD	35	9	554	0.064	35	0.1	0.1	7.449	A
A-B	3	0.67			3				
A-C	134	33			134				
A-D	29	7	618	0.047	29	0.0	0.0	6.289	A
D-AB	72	18	508	0.141	71	0.1	0.2	8.686	A
D-BC	52	13	468	0.112	52	0.1	0.1	9.069	A
C-D	39	10			39				
C-A	369	92			369				
C-B	145	36	730	0.198	145	0.2	0.3	6.455	A

**08:15 - 08:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	196	49	684	0.286	195	0.3	0.4	7.766	A
B-AD	43	11	505	0.085	43	0.1	0.1	8.355	A
A-B	3	0.83			3				
A-C	164	41			164				
A-D	35	9	577	0.061	35	0.0	0.1	6.840	A
D-AB	88	22	464	0.190	88	0.2	0.2	10.055	B
D-BC	64	16	421	0.151	64	0.1	0.2	10.549	B
C-D	47	12			47				
C-A	451	113			451				
C-B	177	44	718	0.247	177	0.3	0.3	6.976	A

**08:30 - 08:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	196	49	684	0.286	196	0.4	0.4	7.781	A
B-AD	43	11	505	0.086	43	0.1	0.1	8.362	A
A-B	3	0.83			3				
A-C	164	41			164				
A-D	35	9	577	0.061	35	0.1	0.1	6.842	A
D-AB	88	22	464	0.190	88	0.2	0.2	10.083	B
D-BC	64	16	421	0.151	64	0.2	0.2	10.566	B
C-D	47	12			47				
C-A	451	113			451				
C-B	177	44	718	0.247	177	0.3	0.3	6.984	A

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	160	40	712	0.224	160	0.4	0.3	6.897	A
B-AD	35	9	554	0.064	35	0.1	0.1	7.457	A
A-B	3	0.67			3				
A-C	134	33			134				
A-D	29	7	618	0.047	29	0.1	0.1	6.292	A
D-AB	72	18	507	0.141	72	0.2	0.2	8.707	A
D-BC	52	13	468	0.112	53	0.2	0.1	9.090	A
C-D	39	10			39				
C-A	369	92			369				
C-B	145	36	730	0.198	145	0.3	0.3	6.465	A

**09:00 - 09:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	134	33	731	0.183	134	0.3	0.2	6.371	A
B-AD	30	7	589	0.050	30	0.1	0.1	6.914	A
A-B	2	0.56			2				
A-C	112	28			112				
A-D	24	6	648	0.037	24	0.1	0.0	5.947	A
D-AB	60	15	538	0.111	60	0.2	0.1	7.923	A
D-BC	44	11	502	0.088	44	0.1	0.1	8.244	A
C-D	32	8			32				
C-A	309	77			309				
C-B	121	30	738	0.164	121	0.3	0.2	6.131	A

# 2031 Base, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		4.13	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.13	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
D16	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	304	100.000
B		ONE HOUR	✓	266	100.000
C		ONE HOUR	✓	308	100.000
D		ONE HOUR	✓	107	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	8	275	21
	B	4	0	165	97
	C	172	121	0	15
	D	15	66	26	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00



**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	17	6	6
	B	0	0	3	1
	C	6	2	0	8
	D	8	0	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.36	8.65	0.6	A	196	294
B-AD	0.10	7.43	0.1	A	48	72
A-B					7	11
A-C					252	379
A-D	0.03	5.78	0.0	A	19	29
D-AB	0.11	7.83	0.1	A	46	69
D-BC	0.13	8.92	0.2	A	52	79
C-D					14	21
C-A					158	237
C-B	0.20	6.69	0.2	A	111	167

**Main Results for each time segment**
**16:45 - 17:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	161	40	713	0.226	160	0.0	0.3	6.663	A
B-AD	39	10	617	0.064	39	0.0	0.1	6.280	A
A-B	6	2			6				
A-C	207	52			207				
A-D	16	4	720	0.022	16	0.0	0.0	5.414	A
D-AB	37	9	578	0.064	37	0.0	0.1	6.798	A
D-BC	43	11	534	0.081	43	0.0	0.1	7.323	A
C-D	11	3			11				
C-A	129	32			129				
C-B	91	23	713	0.128	91	0.0	0.1	5.892	A

**17:00 - 17:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	192	48	692	0.278	192	0.3	0.4	7.380	A
B-AD	47	12	587	0.080	47	0.1	0.1	6.721	A
A-B	7	2			7				
A-C	247	62			247				
A-D	19	5	705	0.027	19	0.0	0.0	5.564	A
D-AB	45	11	556	0.080	45	0.1	0.1	7.197	A
D-BC	52	13	506	0.102	51	0.1	0.1	7.920	A
C-D	13	3			13				
C-A	155	39			155				
C-B	109	27	700	0.155	109	0.1	0.2	6.207	A

**17:15 - 17:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	236	59	662	0.356	235	0.4	0.6	8.622	A
B-AD	57	14	546	0.105	57	0.1	0.1	7.424	A
A-B	9	2			9				
A-C	303	76			303				
A-D	23	6	683	0.034	23	0.0	0.0	5.782	A
D-AB	55	14	525	0.105	55	0.1	0.1	7.829	A
D-BC	62	16	466	0.134	62	0.1	0.2	8.907	A
C-D	17	4			17				
C-A	189	47			189				
C-B	133	33	682	0.195	133	0.2	0.2	6.689	A

**17:30 - 17:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	236	59	662	0.356	236	0.6	0.6	8.651	A
B-AD	57	14	546	0.105	57	0.1	0.1	7.429	A
A-B	9	2			9				
A-C	303	76			303				
A-D	23	6	683	0.034	23	0.0	0.0	5.783	A
D-AB	55	14	525	0.105	55	0.1	0.1	7.833	A
D-BC	62	16	466	0.134	62	0.2	0.2	8.919	A
C-D	17	4			17				
C-A	189	47			189				
C-B	133	33	682	0.195	133	0.2	0.2	6.694	A

**17:45 - 18:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	192	48	692	0.278	193	0.6	0.4	7.413	A
B-AD	47	12	587	0.080	47	0.1	0.1	6.726	A
A-B	7	2			7				
A-C	247	62			247				
A-D	19	5	704	0.027	19	0.0	0.0	5.566	A
D-AB	45	11	556	0.080	45	0.1	0.1	7.204	A
D-BC	52	13	506	0.102	52	0.2	0.1	7.935	A
C-D	13	3			13				
C-A	155	39			155				
C-B	109	27	700	0.155	109	0.2	0.2	6.215	A

**18:00 - 18:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	161	40	712	0.226	161	0.4	0.3	6.704	A
B-AD	39	10	617	0.064	39	0.1	0.1	6.294	A
A-B	6	2			6				
A-C	207	52			207				
A-D	16	4	720	0.022	16	0.0	0.0	5.419	A
D-AB	37	9	578	0.064	37	0.1	0.1	6.810	A
D-BC	43	11	534	0.081	44	0.1	0.1	7.343	A
C-D	11	3			11				
C-A	129	32			129				
C-B	91	23	713	0.128	91	0.2	0.2	5.906	A

# 2031 Base + 230dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		3.84	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.84	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
D17	2031 Base + 230dw	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	189	100.000
B		ONE HOUR	✓	217	100.000
C		ONE HOUR	✓	633	100.000
D		ONE HOUR	✓	138	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	3	154	32
	B	3	0	141	73
	C	427	161	0	45
	D	30	97	11	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	50	6	3
	B	0	0	5	8
	C	6	5	0	2
	D	4	6	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.29	7.84	0.4	A	163	245
B-AD	0.09	8.48	0.1	A	36	54
A-B					3	4
A-C					141	212
A-D	0.06	6.92	0.1	A	29	44
D-AB	0.19	10.27	0.2	B	73	110
D-BC	0.15	10.77	0.2	B	53	80
C-D					41	62
C-A					392	588
C-B	0.25	7.01	0.3	A	148	222

**Main Results for each time segment**
**07:45 - 08:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	134	33	729	0.183	133	0.0	0.2	6.358	A
B-AD	30	7	585	0.051	29	0.0	0.1	6.950	A
A-B	2	0.56			2				
A-C	116	29			116				
A-D	24	6	644	0.037	24	0.0	0.0	5.978	A
D-AB	60	15	534	0.112	59	0.0	0.1	7.966	A
D-BC	44	11	498	0.089	44	0.0	0.1	8.301	A
C-D	34	8			34				
C-A	321	80			321				
C-B	121	30	737	0.164	120	0.0	0.2	6.120	A

**08:00 - 08:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	160	40	709	0.225	159	0.2	0.3	6.911	A
B-AD	35	9	549	0.064	35	0.1	0.1	7.524	A
A-B	3	0.67			3				
A-C	138	35			138				
A-D	29	7	613	0.047	29	0.0	0.1	6.343	A
D-AB	72	18	502	0.143	71	0.1	0.2	8.787	A
D-BC	52	13	463	0.113	52	0.1	0.1	9.192	A
C-D	40	10			40				
C-A	384	96			384				
C-B	145	36	729	0.199	145	0.2	0.3	6.470	A

**08:15 - 08:30**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	196	49	681	0.288	195	0.3	0.4	7.824	A
B-AD	43	11	499	0.087	43	0.1	0.1	8.470	A
A-B	3	0.83			3				
A-C	170	42			170				
A-D	35	9	571	0.062	35	0.1	0.1	6.919	A
D-AB	88	22	457	0.193	88	0.2	0.2	10.245	B
D-BC	64	16	414	0.154	63	0.1	0.2	10.756	B
C-D	50	12			50				
C-A	470	118			470				
C-B	177	44	717	0.247	177	0.3	0.3	6.997	A

**08:30 - 08:45**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	196	49	680	0.288	196	0.4	0.4	7.842	A
B-AD	43	11	499	0.087	43	0.1	0.1	8.477	A
A-B	3	0.83			3				
A-C	170	42			170				
A-D	35	9	571	0.062	35	0.1	0.1	6.921	A
D-AB	88	22	457	0.193	88	0.2	0.2	10.267	B
D-BC	64	16	414	0.154	64	0.2	0.2	10.773	B
C-D	50	12			50				
C-A	470	118			470				
C-B	177	44	717	0.247	177	0.3	0.3	7.005	A

**08:45 - 09:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	160	40	709	0.225	160	0.4	0.3	6.930	A
B-AD	35	9	549	0.064	35	0.1	0.1	7.535	A
A-B	3	0.67			3				
A-C	138	35			138				
A-D	29	7	613	0.047	29	0.1	0.1	6.350	A
D-AB	72	18	502	0.143	72	0.2	0.2	8.815	A
D-BC	52	13	462	0.113	53	0.2	0.1	9.213	A
C-D	40	10			40				
C-A	384	96			384				
C-B	145	36	729	0.199	145	0.3	0.3	6.480	A

**09:00 - 09:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	134	33	729	0.184	134	0.3	0.2	6.396	A
B-AD	30	7	585	0.051	30	0.1	0.1	6.965	A
A-B	2	0.56			2				
A-C	116	29			116				
A-D	24	6	644	0.037	24	0.1	0.0	5.988	A
D-AB	60	15	534	0.112	60	0.2	0.1	7.998	A
D-BC	44	11	497	0.089	44	0.1	0.1	8.329	A
C-D	34	8			34				
C-A	321	80			321				
C-B	121	30	737	0.164	121	0.3	0.2	6.142	A

# 2031 Base + 230dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		4.10	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.10	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
D18	2031 Base + 230dw	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	316	100.000
B		ONE HOUR	✓	266	100.000
C		ONE HOUR	✓	315	100.000
D		ONE HOUR	✓	108	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	8	287	21
	B	4	0	165	97
	C	178	121	0	16
	D	15	66	27	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	17	6	6
	B	0	0	3	1
	C	6	2	0	7
	D	8	0	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.36	8.75	0.6	A	196	294
B-AD	0.11	7.52	0.1	A	48	72
A-B					7	11
A-C					263	395
A-D	0.03	5.80	0.0	A	19	29
D-AB	0.11	7.91	0.1	A	46	69
D-BC	0.14	9.06	0.2	A	53	80
C-D					15	22
C-A					163	245
C-B	0.20	6.74	0.2	A	111	167

**Main Results for each time segment**
**16:45 - 17:00**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	161	40	709	0.227	160	0.0	0.3	6.703	A
B-AD	39	10	613	0.064	39	0.0	0.1	6.326	A
A-B	6	2			6				
A-C	216	54			216				
A-D	16	4	719	0.022	16	0.0	0.0	5.426	A
D-AB	37	9	575	0.065	37	0.0	0.1	6.837	A
D-BC	44	11	531	0.083	44	0.0	0.1	7.389	A
C-D	12	3			12				
C-A	134	34			134				
C-B	91	23	711	0.128	90	0.0	0.1	5.916	A

**17:00 - 17:15**

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	192	48	688	0.279	192	0.3	0.4	7.431	A
B-AD	47	12	582	0.081	47	0.1	0.1	6.783	A
A-B	7	2			7				
A-C	258	65			258				
A-D	19	5	703	0.027	19	0.0	0.0	5.579	A
D-AB	45	11	553	0.081	45	0.1	0.1	7.249	A
D-BC	52	13	501	0.104	52	0.1	0.1	8.014	A
C-D	14	4			14				
C-A	160	40			160				
C-B	109	27	697	0.156	109	0.1	0.2	6.240	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	236	59	657	0.358	235	0.4	0.6	8.724	A
B-AD	57	14	540	0.106	57	0.1	0.1	7.518	A
A-B	9	2			9				
A-C	316	79			316				
A-D	23	6	681	0.034	23	0.0	0.0	5.802	A
D-AB	55	14	521	0.106	55	0.1	0.1	7.908	A
D-BC	63	16	461	0.138	63	0.1	0.2	9.052	A
C-D	18	4			18				
C-A	196	49			196				
C-B	133	33	678	0.197	133	0.2	0.2	6.736	A

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	236	59	657	0.358	236	0.6	0.6	8.753	A
B-AD	57	14	540	0.106	57	0.1	0.1	7.523	A
A-B	9	2			9				
A-C	316	79			316				
A-D	23	6	681	0.034	23	0.0	0.0	5.803	A
D-AB	55	14	521	0.107	55	0.1	0.1	7.912	A
D-BC	63	16	461	0.138	63	0.2	0.2	9.065	A
C-D	18	4			18				
C-A	196	49			196				
C-B	133	33	678	0.197	133	0.2	0.2	6.741	A

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	192	48	688	0.280	193	0.6	0.4	7.473	A
B-AD	47	12	582	0.081	47	0.1	0.1	6.789	A
A-B	7	2			7				
A-C	258	65			258				
A-D	19	5	703	0.027	19	0.0	0.0	5.581	A
D-AB	45	11	552	0.081	45	0.1	0.1	7.254	A
D-BC	52	13	501	0.105	53	0.2	0.1	8.030	A
C-D	14	4			14				
C-A	160	40			160				
C-B	109	27	697	0.156	109	0.2	0.2	6.250	A

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	161	40	709	0.227	161	0.4	0.3	6.742	A
B-AD	39	10	613	0.064	39	0.1	0.1	6.337	A
A-B	6	2			6				
A-C	216	54			216				
A-D	16	4	719	0.022	16	0.0	0.0	5.429	A
D-AB	37	9	575	0.065	37	0.1	0.1	6.848	A
D-BC	44	11	530	0.083	44	0.1	0.1	7.413	A
C-D	12	3			12				
C-A	134	34			134				
C-B	91	23	711	0.128	91	0.2	0.2	5.929	A



## APPENDIX H20

### A4260/B4030 (HOPCROFTS HOLT) MODELLING OUTPUT

## A4260-B4030 Hopcrofts Holt Signals – Junction Assessment Results

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	Sat (%)	Queue	Delay (s)	Sat (%)	Queue	Delay (s)
<b>2023 Base</b>						
B4030 (E)	76.3	5	55	62.9	3	54
A4260 (S)	34.5	3	13	71.6	8	17
B4030 (W)	71.3	6	58	68.0	6	54
A4260 (N)	78.5	8	20	34.6	3	11
Cycle Time (s)	90			90		
PRC (%)	14.7			25.7		
Delay (PCUhr)	12.70			10.06		
<b>2026 Base</b>						
B4030 (E)	78.9	5	57	65.2	4	55
A4260 (S)	39.6	3	13	74.2	9	18
B4030 (W)	73.5	6	60	70.3	6	55
A4260 (N)	81.2	9	22	35.8	3	11
Cycle Time (s)	90			90		
PRC (%)	10.9			21.3		
Delay (PCUhr)	13.70			10.74		
<b>2026 Base + 50 dwellings</b>						
B4030 (E)	80.9	6	59	65.8	4	55
A4260 (S)	39.6	3	14	74.3	9	18
B4030 (W)	73.5	6	60	70.3	6	55
A4260 (N)	81.3	9	22	36.1	3	11
Cycle Time (s)	90			90		
PRC (%)	10.7			21.1		
Delay (PCUhr)	14.04			10.82		
<b>2027 Base</b>						
B4030 (E)	79.9	6	58	65.8	4	55
A4260 (S)	39.8	3	14	74.8	9	18
B4030 (W)	74.2	6	60	71.3	6	56
A4260 (N)	81.9	9	22	36.1	3	11
Cycle Time (s)	90			90		
PRC (%)	9.9			20.4		
Delay (PCUhr)	14.06			10.95		
<b>2027 Base + 100 dwellings</b>						
B4030 (E)	79.6	6	56	67.6	4	56
A4260 (S)	41.0	3	14	75.0	9	18
B4030 (W)	74.2	6	60	71.7	6	56
A4260 (N)	84.2	10	24	36.7	3	11
Cycle Time (s)	90			90		
PRC (%)	6.8			20.0		
Delay (PCUhr)	14.64			11.18		

2028 Base						
B4030 (E)	80.3	6	58	66.4	4	56
A4260 (S)	40.2	3	14	75.5	9	18
B4030 (W)	75.3	7	61	71.7	6	56
A4260 (N)	82.5	10	22	36.5	3	11
Cycle Time (s)	90			90		
PRC (%)	9.1			19.2		
Delay (PCUhr)	14.35			11.13		
2028 Base + 150 dwellings						
B4030 (E)	82.0	6	59	68.2	4	56
A4260 (S)	41.4	3	14	75.9	9	19
B4030 (W)	75.6	7	62	72.0	6	56
A4260 (N)	84.9	10	25	37.2	3	11
Cycle Time (s)	90			90		
PRC (%)	6.0			18.6		
Delay (PCUhr)	15.36			11.39		
2031 Base						
B4030 (E)	82.4	6	61	67.6	4	56
A4260 (S)	41.2	3	14	77.3	9	19
B4030 (W)	76.3	7	63	73.3	7	58
A4260 (N)	84.5	10	24	37.3	3	11
Cycle Time (s)	90			90		
PRC (%)	6.5			16.5		
Delay (PCUhr)	15.29			11.64		
2031 Base + 230 dwellings						
B4030 (E)	82.6	7	58	71.1	4	58
A4260 (S)	42.5	3	14	77.8	10	19
B4030 (W)	82.6	7	74	74.0	7	58
A4260 (N)	87.3	12	28	38.5	3	11
Cycle Time (s)	90			90		
PRC (%)	3.1			15.7		
Delay (PCUhr)	17.04			12.15		

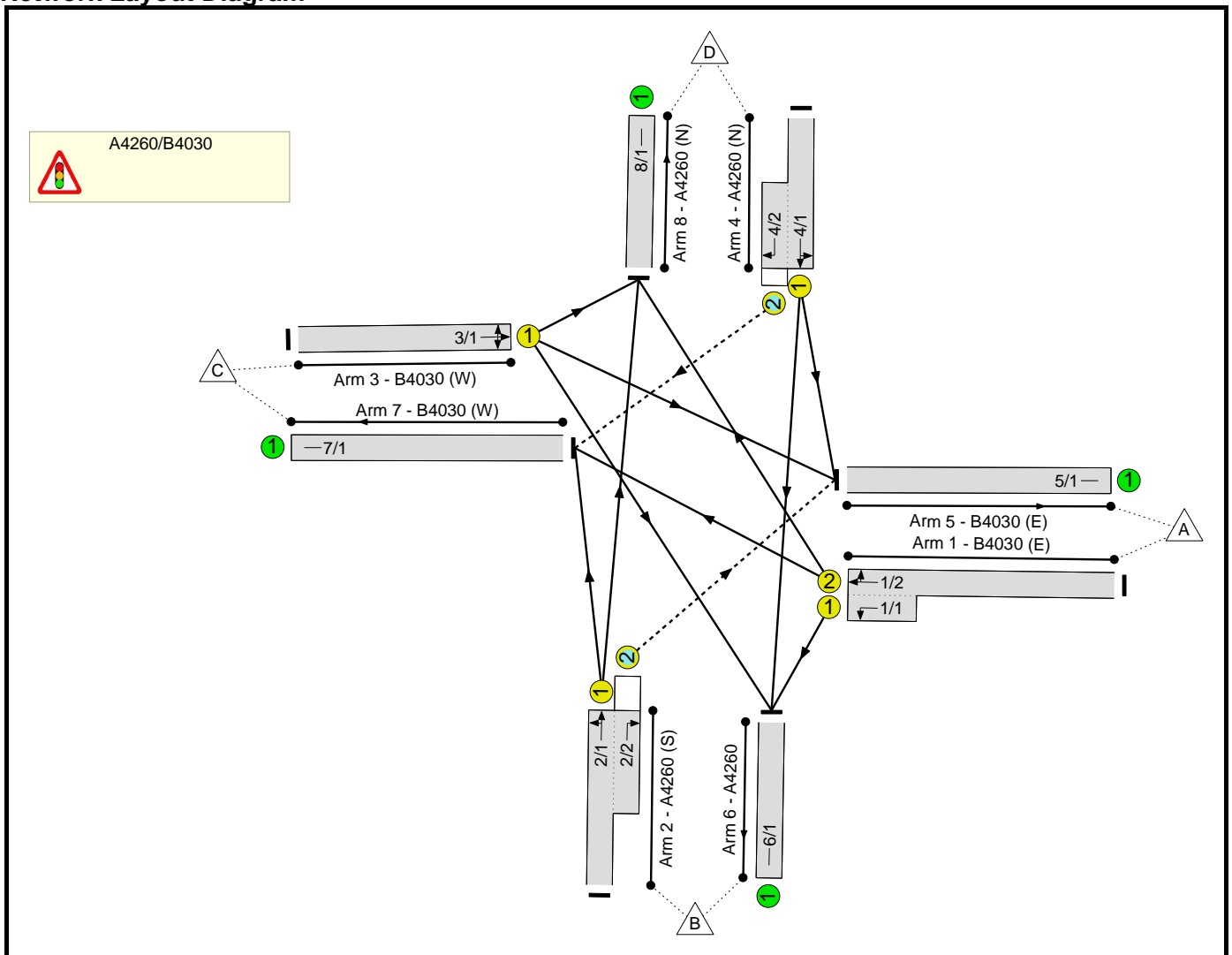
Sat % is saturation, Queue is mean max in PCUs, Delay is seconds per PCU.

Full Input Data And Results  
Full Input Data And Results

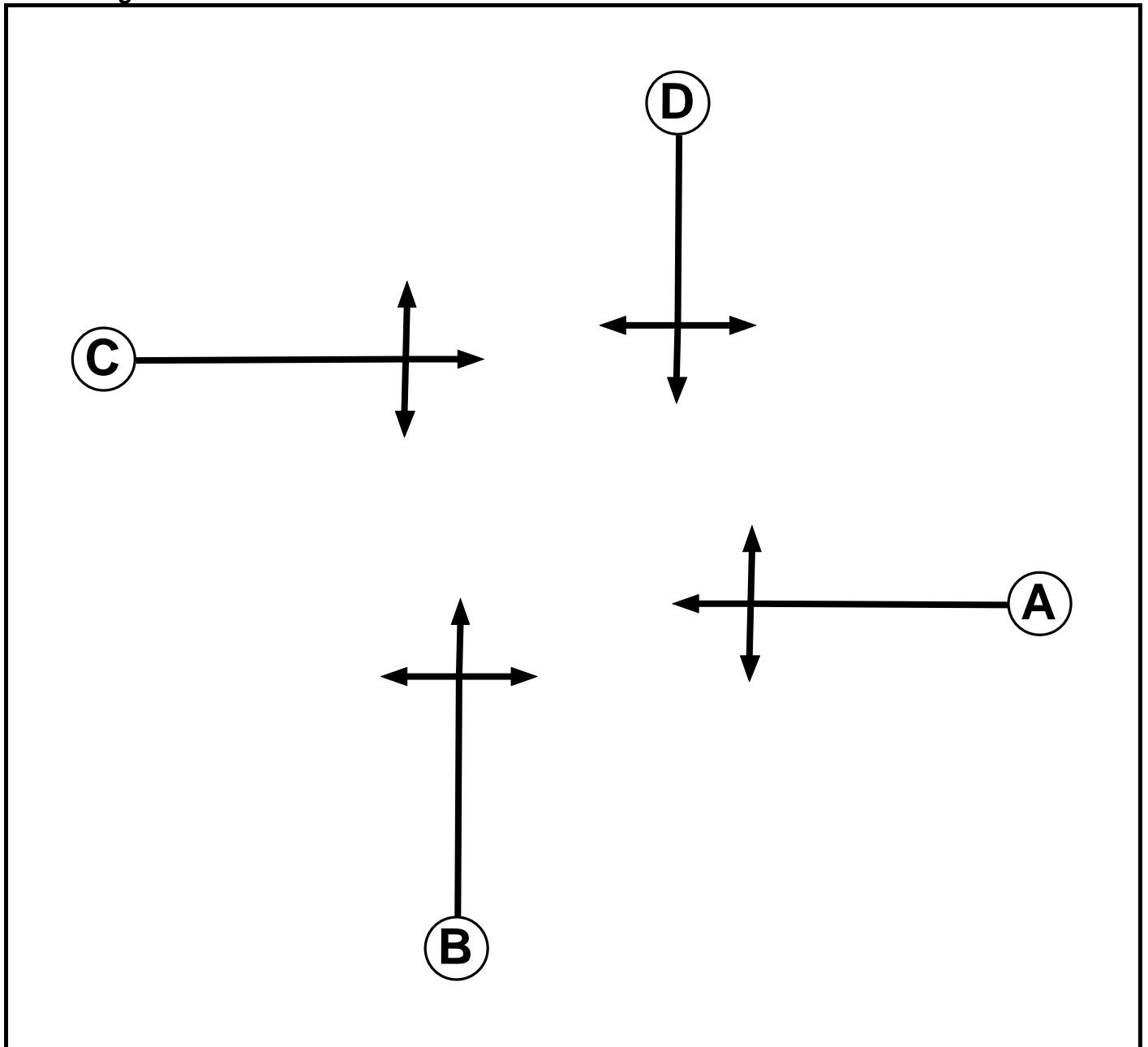
User and Project Details

Project:	
Title:	
Location:	Hopcrofts Holt Existing
Additional detail:	
File name:	T19562 - A4260-B4030.lsg3x
Author:	James Parker
Company:	Hub Transport Planning Ltd
Address:	

Network Layout Diagram



Phase Diagram



Full Input Data And Results

**Phase Input Data**

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7

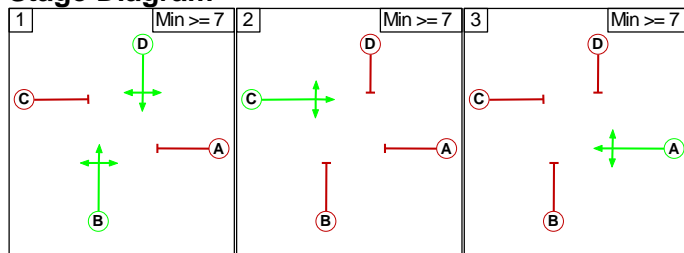
**Phase Intergreens Matrix**

	Starting Phase			
	A	B	C	D
Terminating Phase	A	5	10	5
	B	5	8	-
	C	10	8	5
	D	9	-	5

**Phases in Stage**

Stage No.	Phases in Stage
1	B D
2	C
3	A

**Stage Diagram**



**Phase Delays**

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

**Prohibited Stage Change**

	To Stage		
	1	2	3
From Stage	1	8	9
	2	8	10
	3	5	10

Full Input Data And Results

**Give-Way Lane Input Data**

Junction: A4260/B4030											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/2 (A4260 (S))	5/1 (Right)	1439	0	4/1	1.09	All	2.00	-	0.50	2	2.00
4/2 (A4260 (N))	7/1 (Right)	1439	0	2/1	1.09	All	1.00	-	0.50	1	1.00

Full Input Data And Results

**Lane Input Data**

Junction: A4260/B4030												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (B4030 (E))	U	A	2	3	4.0	Geom	-	3.00	0.00	Y	Arm 6 Left	10.00
1/2 (B4030 (E))	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 7 Ahead	15.00
											Arm 8 Right	15.00
2/1 (A4260 (S))	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 7 Left	18.00
											Arm 8 Ahead	Inf
2/2 (A4260 (S))	O	B	2	3	6.0	Geom	-	3.00	0.00	Y	Arm 5 Right	10.00
3/1 (B4030 (W))	U	C	2	3	60.0	Geom	-	3.45	0.00	Y	Arm 5 Ahead	17.00
											Arm 6 Right	17.00
											Arm 8 Left	13.00
											Arm 5 Left	15.00
4/1 (A4260 (N))	U	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 6 Ahead	Inf
4/2 (A4260 (N))	O	D	2	3	5.0	Geom	-	3.00	0.00	Y	Arm 7 Right	14.00
5/1 (B4030 (E))	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A4260)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (B4030 (W))	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (A4260 (N))	U		2	3	60.0	Inf	-	-	-	-	-	-

**Traffic Flow Groups**

Flow Group	Start Time	End Time	Duration	Formula
1: '2023 Surveys AM'	08:00	09:00	01:00	
2: '2023 Surveys PM'	17:00	18:00	01:00	
3: '2026 Base AM'	08:00	09:00	01:00	
4: '2026 Base PM'	17:00	18:00	01:00	
5: '2026 Base +50dw AM'	08:00	09:00	01:00	
6: '2026 Base +50dw PM'	17:00	18:00	01:00	
7: '2027 Base AM'	08:00	09:00	01:00	
8: '2027 Base PM'	17:00	18:00	01:00	



Full Input Data And Results

9: '2027 Base +100dw AM'	08:00	09:00	01:00	
10: '2027 Base +100dw PM'	17:00	18:00	01:00	
11: '2028 Base AM'	08:00	09:00	01:00	
12: '2028 Base PM'	17:00	18:00	01:00	
13: '2028 Base +150dw AM'	08:00	09:00	01:00	
14: '2028 Base +150dw PM'	17:00	18:00	01:00	
15: '2031 Base AM'	08:00	09:00	01:00	
16: '2031 Base PM'	17:00	18:00	01:00	
17: '2031 Base +230dw AM'	08:00	09:00	01:00	
18: '2031 Base +230dw PM'	17:00	18:00	01:00	

Scenario 1: '2023 Surveys AM' (FG1: '2023 Surveys AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
A	0	151	87	64	302	
B	28	0	31	262	321	
C	97	71	0	31	199	
D	68	550	49	0	667	
Tot.	193	772	167	357	1489	

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 1: 2023 Surveys AM
<b>Junction: A4260/B4030</b>	
1/1 (short)	151
1/2 (with short)	302(In) 151(Out)
2/1 (with short)	321(In) 293(Out)
2/2 (short)	28
3/1	199
4/1 (with short)	667(In) 618(Out)
4/2 (short)	49
5/1	193
6/1	772
7/1	167
8/1	357

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	57.6 %	1741	1741
				Arm 8 Right	15.00	42.4 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	10.6 %	1898	1898
				Arm 8 Ahead	Inf	89.4 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	48.7 %	1794	1794
				Arm 6 Right	17.00	35.7 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 8 Left	13.00	15.6 %	1894	1894
				Arm 5 Left	15.00	11.0 %		
				Arm 6 Ahead	Inf	89.0 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)				Infinite Saturation Flow			Inf	Inf
6/1 (A4260 Lane 1)				Infinite Saturation Flow			Inf	Inf
7/1 (B4030 (W) Lane 1)				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 2: '2023 Surveys PM'** (FG2: '2023 Surveys PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	92	29	78	199
	B	70	0	50	533	653
	C	126	37	0	40	203
	D	55	227	41	0	323
	Tot.	251	356	120	651	1378

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 2: 2023 Surveys PM
<b>Junction: A4260/B4030</b>	
1/1 (short)	92
1/2 (with short)	199(In) 107(Out)
2/1 (with short)	653(In) 583(Out)
2/2 (short)	70
3/1	203
4/1 (with short)	323(In) 282(Out)
4/2 (short)	41
5/1	251
6/1	356
7/1	120
8/1	651

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	27.1 %	1741	1741
				Arm 8 Right	15.00	72.9 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	8.6 %	1901	1901
				Arm 8 Ahead	Inf	91.4 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	62.1 %	1792	1792
				Arm 6 Right	17.00	18.2 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 8 Left	13.00	19.7 %	1878	1878
				Arm 5 Left	15.00	19.5 %		
				Arm 6 Ahead	Inf	80.5 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)				Infinite Saturation Flow			Inf	Inf
6/1 (A4260 Lane 1)				Infinite Saturation Flow			Inf	Inf
7/1 (B4030 (W) Lane 1)				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 3: '2026 Base AM'** (FG3: '2026 Base AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	156	90	66	312
	B	29	0	32	271	332
	C	100	73	0	32	205
	D	70	569	51	0	690
	Tot.	199	798	173	369	1539

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 3: 2026 Base AM
<b>Junction: A4260/B4030</b>	
1/1 (short)	156
1/2 (with short)	312(In) 156(Out)
2/1 (with short)	332(In) 303(Out)
2/2 (short)	29
3/1	205
4/1 (with short)	690(In) 639(Out)
4/2 (short)	51
5/1	199
6/1	798
7/1	173
8/1	369

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	57.7 %	1741	1741
				Arm 8 Right	15.00	42.3 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	10.6 %	1898	1898
				Arm 8 Ahead	Inf	89.4 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	48.8 %	1794	1794
				Arm 6 Right	17.00	35.6 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 8 Left	13.00	15.6 %	1894	1894
				Arm 5 Left	15.00	11.0 %		
				Arm 6 Ahead	Inf	89.0 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)				Infinite Saturation Flow			Inf	Inf
6/1 (A4260 Lane 1)				Infinite Saturation Flow			Inf	Inf
7/1 (B4030 (W) Lane 1)				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 4: '2026 Base PM'** (FG4: '2026 Base PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	95	30	81	206
	B	73	0	52	552	677
	C	131	38	0	41	210
	D	57	235	42	0	334
	Tot.	261	368	124	674	1427

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 4: 2026 Base PM
<b>Junction: A4260/B4030</b>	
1/1 (short)	95
1/2 (with short)	206(In) 111(Out)
2/1 (with short)	677(In) 604(Out)
2/2 (short)	73
3/1	210
4/1 (with short)	334(In) 292(Out)
4/2 (short)	42
5/1	261
6/1	368
7/1	124
8/1	674

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	27.0 %	1741	1741
				Arm 8 Right	15.00	73.0 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	8.6 %	1901	1901
				Arm 8 Ahead	Inf	91.4 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	62.4 %	1792	1792
				Arm 6 Right	17.00	18.1 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 8 Left	13.00	19.5 %	1878	1878
				Arm 5 Left	15.00	19.5 %		
				Arm 6 Ahead	Inf	80.5 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)				Infinite Saturation Flow			Inf	Inf
6/1 (A4260 Lane 1)				Infinite Saturation Flow			Inf	Inf
7/1 (B4030 (W) Lane 1)				Infinite Saturation Flow			Inf	Inf



Full Input Data And Results

8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 5: '2026 Base +50dw AM'** (FG5: '2026 Base +50dw AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	160	91	69	320
	B	30	0	32	271	333
	C	100	73	0	32	205
	D	71	569	51	0	691
	Tot.	201	802	174	372	1549

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 5: 2026 Base +50dw AM
<b>Junction: A4260/B4030</b>	
1/1 (short)	160
1/2 (with short)	320(In) 160(Out)
2/1 (with short)	333(In) 303(Out)
2/2 (short)	30
3/1	205
4/1 (with short)	691(In) 640(Out)
4/2 (short)	51
5/1	201
6/1	802
7/1	174
8/1	372

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	56.9 %	1741	1741
				Arm 8 Right	15.00	43.1 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	10.6 %	1898	1898
				Arm 8 Ahead	Inf	89.4 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	48.8 %	1794	1794
				Arm 6 Right	17.00	35.6 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 8 Left	13.00	15.6 %	1894	1894
				Arm 5 Left	15.00	11.1 %		
				Arm 6 Ahead	Inf	88.9 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)				Infinite Saturation Flow			Inf	Inf
6/1 (A4260 Lane 1)				Infinite Saturation Flow			Inf	Inf
7/1 (B4030 (W) Lane 1)				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 6: '2026 Base + 50dw PM'** (FG6: '2026 Base +50dw PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	97	30	82	209
	B	75	0	52	552	679
	C	131	38	0	41	210
	D	59	235	42	0	336
	Tot.	265	370	124	675	1434

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 6: 2026 Base + 50dw PM
<b>Junction: A4260/B4030</b>	
1/1 (short)	97
1/2 (with short)	209(In) 112(Out)
2/1 (with short)	679(In) 604(Out)
2/2 (short)	75
3/1	210
4/1 (with short)	336(In) 294(Out)
4/2 (short)	42
5/1	265
6/1	370
7/1	124
8/1	675

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	26.8 %	1741	1741
				Arm 8 Right	15.00	73.2 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	8.6 %	1901	1901
				Arm 8 Ahead	Inf	91.4 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	62.4 %	1792	1792
				Arm 6 Right	17.00	18.1 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 8 Left	13.00	19.5 %	1877	1877
				Arm 5 Left	15.00	20.1 %		
				Arm 6 Ahead	Inf	79.9 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)				Infinite Saturation Flow			Inf	Inf
6/1 (A4260 Lane 1)				Infinite Saturation Flow			Inf	Inf
7/1 (B4030 (W) Lane 1)				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 7: '2027 Base AM'** (FG7: '2027 Base AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	158	91	67	316
	B	29	0	32	273	334
	C	101	74	0	32	207
	D	71	574	51	0	696
	Tot.	201	806	174	372	1553

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 7: 2027 Base AM
<b>Junction: A4260/B4030</b>	
1/1 (short)	158
1/2 (with short)	316(In) 158(Out)
2/1 (with short)	334(In) 305(Out)
2/2 (short)	29
3/1	207
4/1 (with short)	696(In) 645(Out)
4/2 (short)	51
5/1	201
6/1	806
7/1	174
8/1	372

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	57.6 %	1741	1741
				Arm 8 Right	15.00	42.4 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	10.5 %	1898	1898
				Arm 8 Ahead	Inf	89.5 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	48.8 %	1794	1794
				Arm 6 Right	17.00	35.7 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 8 Left	13.00	15.5 %	1894	1894
				Arm 5 Left	15.00	11.0 %		
				Arm 6 Ahead	Inf	89.0 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)				Infinite Saturation Flow			Inf	Inf
6/1 (A4260 Lane 1)				Infinite Saturation Flow			Inf	Inf
7/1 (B4030 (W) Lane 1)				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 8: '2027 Base PM'** (FG8: '2027 Base PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination					Tot.
		A	B	C	D	Tot.	
Origin	A	0	96	30	82	208	
	B	73	0	52	557	682	
	C	132	39	0	42	213	
	D	57	237	43	0	337	
	Tot.	262	372	125	681	1440	

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 8: 2027 Base PM
<b>Junction: A4260/B4030</b>	
1/1 (short)	96
1/2 (with short)	208(In) 112(Out)
2/1 (with short)	682(In) 609(Out)
2/2 (short)	73
3/1	213
4/1 (with short)	337(In) 294(Out)
4/2 (short)	43
5/1	262
6/1	372
7/1	125
8/1	681

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	26.8 %	1741	1741
				Arm 8 Right	15.00	73.2 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	8.5 %	1901	1901
				Arm 8 Ahead	Inf	91.5 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	62.0 %	1792	1792
				Arm 6 Right	17.00	18.3 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 8 Left	13.00	19.7 %	1879	1879
				Arm 5 Left	15.00	19.4 %		
				Arm 6 Ahead	Inf	80.6 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)				Infinite Saturation Flow			Inf	Inf
6/1 (A4260 Lane 1)				Infinite Saturation Flow			Inf	Inf
7/1 (B4030 (W) Lane 1)				Infinite Saturation Flow			Inf	Inf



Full Input Data And Results

8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 9: '2027 Base +100dw AM'** (FG9: '2027 Base +100dw AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	165	92	73	330
	B	32	0	32	273	337
	C	101	74	0	32	207
	D	73	574	51	0	698
	Tot.	206	813	175	378	1572

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 9: 2027 Base +100dw AM
<b>Junction: A4260/B4030</b>	
1/1 (short)	165
1/2 (with short)	330(In) 165(Out)
2/1 (with short)	337(In) 305(Out)
2/2 (short)	32
3/1	207
4/1 (with short)	698(In) 647(Out)
4/2 (short)	51
5/1	206
6/1	813
7/1	175
8/1	378

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	55.8 %	1741	1741
				Arm 8 Right	15.00	44.2 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	10.5 %	1898	1898
				Arm 8 Ahead	Inf	89.5 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	48.8 %	1794	1794
				Arm 6 Right	17.00	35.7 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 8 Left	13.00	15.5 %	1894	1894
				Arm 5 Left	15.00	11.3 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 6 Ahead	Inf	88.7 %		
5/1 (B4030 (E) Lane 1)				Arm 7 Right	14.00	100.0 %	1730	1730
6/1 (A4260 Lane 1)				Infinite Saturation Flow			Inf	Inf
7/1 (B4030 (W) Lane 1)				Infinite Saturation Flow			Inf	Inf
				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 10: '2027 Base + 100dw PM'** (FG10: '2027 Base +100dw PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination					Tot.
		A	B	C	D	Tot.	
Origin	A	0	99	31	84	214	
	B	78	0	52	557	687	
	C	133	39	0	42	214	
	D	62	237	43	0	342	
	Tot.	273	375	126	683	1457	

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 10: 2027 Base + 100dw PM
<b>Junction: A4260/B4030</b>	
1/1 (short)	99
1/2 (with short)	214(In) 115(Out)
2/1 (with short)	687(In) 609(Out)
2/2 (short)	78
3/1	214
4/1 (with short)	342(In) 299(Out)
4/2 (short)	43
5/1	273
6/1	375
7/1	126
8/1	683

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	27.0 %	1741	1741
				Arm 8 Right	15.00	73.0 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	8.5 %	1901	1901
				Arm 8 Ahead	Inf	91.5 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	62.1 %	1792	1792
				Arm 6 Right	17.00	18.2 %		
				Arm 8 Left	13.00	19.6 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 5 Left	15.00	20.7 %	1876	1876
				Arm 6 Ahead	Inf	79.3 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A4260 Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (B4030 (W) Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 11: '2028 Base AM'** (FG11: '2028 Base AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	159	91	67	317
	B	29	0	33	275	337
	C	102	75	0	33	210
	D	71	578	52	0	701
	Tot.	202	812	176	375	1565

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 11: 2028 Base AM
<b>Junction: A4260/B4030</b>	
1/1 (short)	159
1/2 (with short)	317(In) 158(Out)
2/1 (with short)	337(In) 308(Out)
2/2 (short)	29
3/1	210
4/1 (with short)	701(In) 649(Out)
4/2 (short)	52
5/1	202
6/1	812
7/1	176
8/1	375

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	57.6 %	1741	1741
				Arm 8 Right	15.00	42.4 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	10.7 %	1898	1898
				Arm 8 Ahead	Inf	89.3 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	48.6 %	1794	1794
				Arm 6 Right	17.00	35.7 %		
				Arm 8 Left	13.00	15.7 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 5 Left	15.00	10.9 %	1894	1894
				Arm 6 Ahead	Inf	89.1 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A4260 Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (B4030 (W) Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 12: '2028 Base PM'** (FG12: '2028 Base PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	97	31	82	210
	B	74	0	53	562	689
	C	133	39	0	42	214
	D	58	239	43	0	340
	Tot.	265	375	127	686	1453

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 12: 2028 Base PM
<b>Junction: A4260/B4030</b>	
1/1 (short)	97
1/2 (with short)	210(In) 113(Out)
2/1 (with short)	689(In) 615(Out)
2/2 (short)	74
3/1	214
4/1 (with short)	340(In) 297(Out)
4/2 (short)	43
5/1	265
6/1	375
7/1	127
8/1	686

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	27.4 %	1741	1741
				Arm 8 Right	15.00	72.6 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	8.6 %	1901	1901
				Arm 8 Ahead	Inf	91.4 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	62.1 %	1792	1792
				Arm 6 Right	17.00	18.2 %		
				Arm 8 Left	13.00	19.6 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 5 Left	15.00	19.5 %	1878	1878
				Arm 6 Ahead	Inf	80.5 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A4260 Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (B4030 (W) Lane 1)	Infinite Saturation Flow						Inf	Inf



Full Input Data And Results

8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 13: '2028 Base +150dw AM'** (FG13: '2028 Base +150dw AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	170	94	76	340
	B	33	0	33	275	341
	C	103	75	0	33	211
	D	74	578	52	0	704
	Tot.	210	823	179	384	1596

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 13: 2028 Base +150dw AM
<b>Junction: A4260/B4030</b>	
1/1 (short)	170
1/2 (with short)	340(In) 170(Out)
2/1 (with short)	341(In) 308(Out)
2/2 (short)	33
3/1	211
4/1 (with short)	704(In) 652(Out)
4/2 (short)	52
5/1	210
6/1	823
7/1	179
8/1	384

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	55.3 %	1741	1741
				Arm 8 Right	15.00	44.7 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	10.7 %	1898	1898
				Arm 8 Ahead	Inf	89.3 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	48.8 %	1794	1794
				Arm 6 Right	17.00	35.5 %		
				Arm 8 Left	13.00	15.6 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 5 Left	15.00	11.3 %	1894	1894
				Arm 6 Ahead	Inf	88.7 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A4260 Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (B4030 (W) Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 14: '2028 Base + 150dw PM'** (FG14: '2028 Base +150dw PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	101	31	85	217
	B	81	0	53	562	696
	C	134	39	0	42	215
	D	64	239	43	0	346
	Tot.	279	379	127	689	1474

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 14: 2028 Base + 150dw PM
<b>Junction: A4260/B4030</b>	
1/1 (short)	101
1/2 (with short)	217(In) 116(Out)
2/1 (with short)	696(In) 615(Out)
2/2 (short)	81
3/1	215
4/1 (with short)	346(In) 303(Out)
4/2 (short)	43
5/1	279
6/1	379
7/1	127
8/1	689

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	26.7 %	1741	1741
				Arm 8 Right	15.00	73.3 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	8.6 %	1901	1901
				Arm 8 Ahead	Inf	91.4 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	62.3 %	1792	1792
				Arm 6 Right	17.00	18.1 %		
				Arm 8 Left	13.00	19.5 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 5 Left	15.00	21.1 %	1875	1875
				Arm 6 Ahead	Inf	78.9 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A4260 Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (B4030 (W) Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 15: '2031 Base AM'** (FG15: '2031 Base AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	163	94	69	326
	B	30	0	33	282	345
	C	104	76	0	33	213
	D	73	592	53	0	718
	Tot.	207	831	180	384	1602

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 15: 2031 Base AM
<b>Junction: A4260/B4030</b>	
1/1 (short)	163
1/2 (with short)	326(In) 163(Out)
2/1 (with short)	345(In) 315(Out)
2/2 (short)	30
3/1	213
4/1 (with short)	718(In) 665(Out)
4/2 (short)	53
5/1	207
6/1	831
7/1	180
8/1	384

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	57.7 %	1741	1741
				Arm 8 Right	15.00	42.3 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	10.5 %	1898	1898
				Arm 8 Ahead	Inf	89.5 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	48.8 %	1794	1794
				Arm 6 Right	17.00	35.7 %		
				Arm 8 Left	13.00	15.5 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 5 Left	15.00	11.0 %	1894	1894
				Arm 6 Ahead	Inf	89.0 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A4260 Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (B4030 (W) Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 16: '2031 Base PM'** (FG16: '2031 Base PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	99	31	84	214
	B	76	0	54	575	705
	C	136	40	0	43	219
	D	59	245	44	0	348
	Tot.	271	384	129	702	1486

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 16: 2031 Base PM
<b>Junction: A4260/B4030</b>	
1/1 (short)	99
1/2 (with short)	214(In) 115(Out)
2/1 (with short)	705(In) 629(Out)
2/2 (short)	76
3/1	219
4/1 (with short)	348(In) 304(Out)
4/2 (short)	44
5/1	271
6/1	384
7/1	129
8/1	702

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	27.0 %	1741	1741
				Arm 8 Right	15.00	73.0 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	8.6 %	1901	1901
				Arm 8 Ahead	Inf	91.4 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	62.1 %	1792	1792
				Arm 6 Right	17.00	18.3 %		
				Arm 8 Left	13.00	19.6 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 5 Left	15.00	19.4 %	1879	1879
				Arm 6 Ahead	Inf	80.6 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A4260 Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (B4030 (W) Lane 1)	Infinite Saturation Flow						Inf	Inf



Full Input Data And Results

8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 17: '2031 Base +230dw AM'** (FG17: '2031 Base +230dw AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	179	97	83	359
	B	36	0	33	282	351
	C	105	76	0	33	214
	D	78	592	53	0	723
	Tot.	219	847	183	398	1647

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 17: 2031 Base +230dw AM
<b>Junction: A4260/B4030</b>	
1/1 (short)	179
1/2 (with short)	359(In) 180(Out)
2/1 (with short)	351(In) 315(Out)
2/2 (short)	36
3/1	214
4/1 (with short)	723(In) 670(Out)
4/2 (short)	53
5/1	219
6/1	847
7/1	183
8/1	398

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	53.9 %	1741	1741
				Arm 8 Right	15.00	46.1 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	10.5 %	1898	1898
				Arm 8 Ahead	Inf	89.5 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	49.1 %	1794	1794
				Arm 6 Right	17.00	35.5 %		
				Arm 8 Left	13.00	15.4 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 5 Left	15.00	11.6 %	1893	1893
				Arm 6 Ahead	Inf	88.4 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A4260 Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (B4030 (W) Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 18: '2031 Base + 230dw PM'** (FG18: '2031 Base +230dw PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	105	32	89	226
	B	87	0	54	575	716
	C	138	40	0	43	221
	D	69	245	44	0	358
	Tot.	294	390	130	707	1521

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 18: 2031 Base + 230dw PM
<b>Junction: A4260/B4030</b>	
1/1 (short)	105
1/2 (with short)	226(In) 121(Out)
2/1 (with short)	716(In) 629(Out)
2/2 (short)	87
3/1	221
4/1 (with short)	358(In) 314(Out)
4/2 (short)	44
5/1	294
6/1	390
7/1	130
8/1	707

**Lane Saturation Flows**

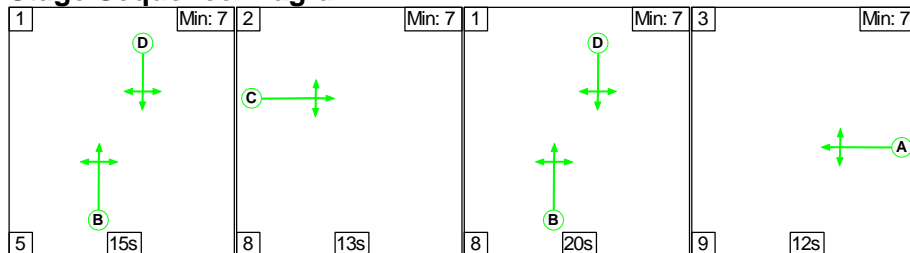
<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.00	0.00	Y	Arm 6 Left	10.00	100.0 %	1665	1665
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	26.4 %	1741	1741
				Arm 8 Right	15.00	73.6 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	8.6 %	1901	1901
				Arm 8 Ahead	Inf	91.4 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	62.4 %	1792	1792
				Arm 6 Right	17.00	18.1 %		
				Arm 8 Left	13.00	19.5 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 5 Left	15.00	22.0 %	1874	1874
				Arm 6 Ahead	Inf	78.0 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (A4260 Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (B4030 (W) Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf
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Scenario 1: '2023 Surveys AM' (FG1: '2023 Surveys AM', Plan 1: 'Network Control Plan 1')

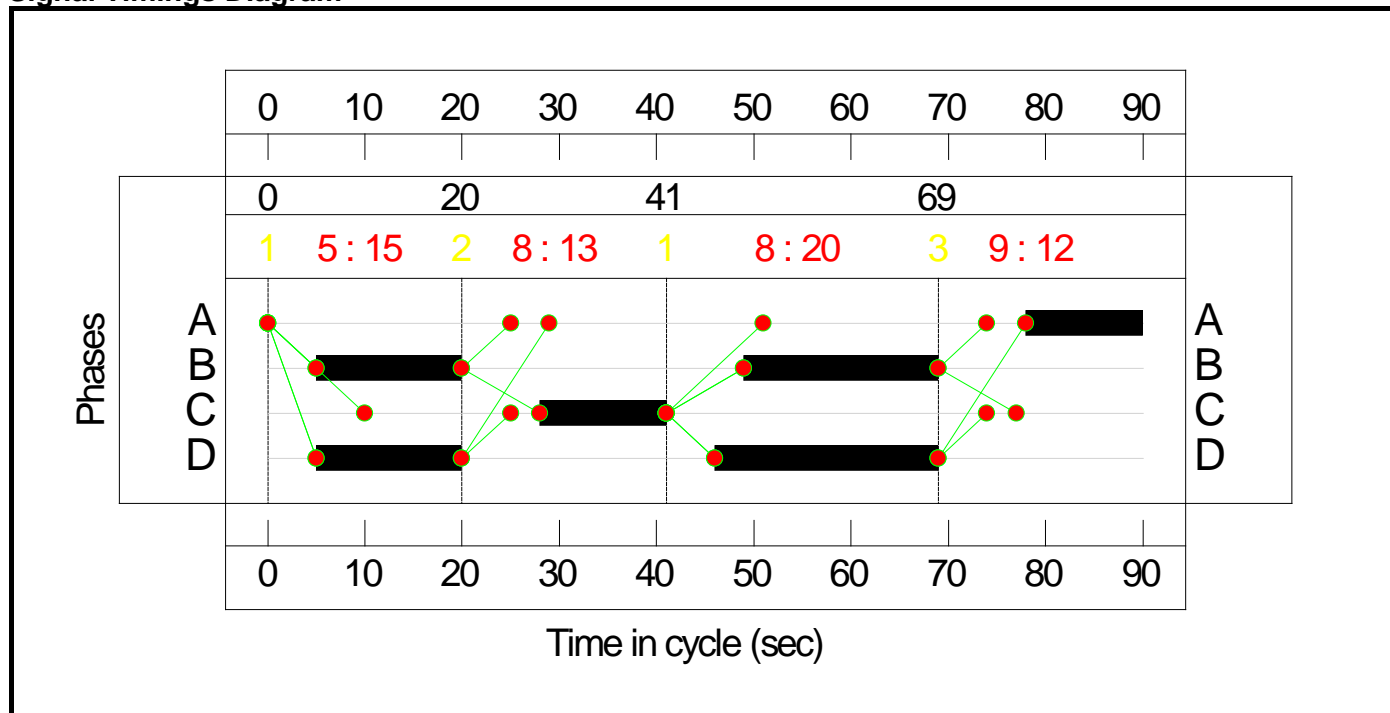
Stage Sequence Diagram



Stage Timings

Stage	1	2	1	3
Duration	15	13	20	12
Change Point	0	20	41	69

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>78.5%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>78.5%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	12	-	302	1741:1665	198+198	76.3 : 76.3%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		2	35	-	321	1898:1665	765+73	38.3 : 38.3%
3/1	B4030 (W) Ahead Right Left	U	N/A	N/A	C		1	13	-	199	1794	279	71.3%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		2	38	-	667	1894:1730	787+62	78.5 : 78.5%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	193	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	772	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	167	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	357	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>62</b>	<b>15</b>	<b>0</b>	<b>7.7</b>	<b>4.9</b>	<b>0.1</b>	<b>12.7</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>62</b>	<b>15</b>	<b>0</b>	<b>7.7</b>	<b>4.9</b>	<b>0.1</b>	<b>12.7</b>	-	-	-	-
1/2+1/1	302	302	-	-	-	3.0	1.6	-	4.6	54.8	3.5	1.6	5.1
2/1+2/2	321	321	28	0	0	0.8	0.3	0.1	1.2	13.3	2.7	0.3	3.0
3/1	199	199	-	-	-	2.0	1.2	-	3.2	57.9	4.7	1.2	5.9
4/1+4/2	667	667	34	15	0	1.9	1.8	0.0	3.7	20.1	6.6	1.8	8.4
5/1	193	193	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	772	772	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	167	167	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	357	357	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

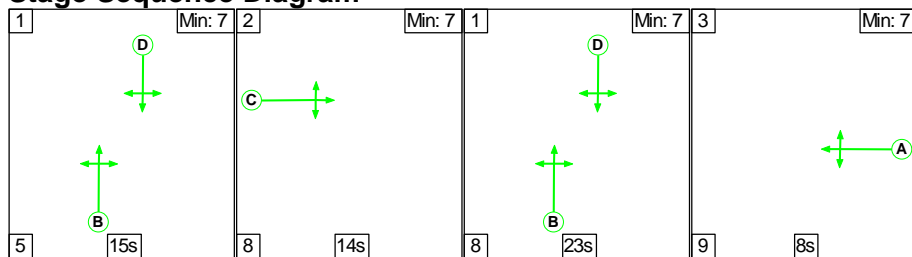
## Full Input Data And Results

C1	PRC for Signalled Lanes (%):	14.7	Total Delay for Signalled Lanes (pcuHr):	12.70	Cycle Time (s):	90
	PRC Over All Lanes (%):	14.7	Total Delay Over All Lanes(pcuHr):	12.70		

Full Input Data And Results

Scenario 2: '2023 Surveys PM' (FG2: '2023 Surveys PM', Plan 1: 'Network Control Plan 1')

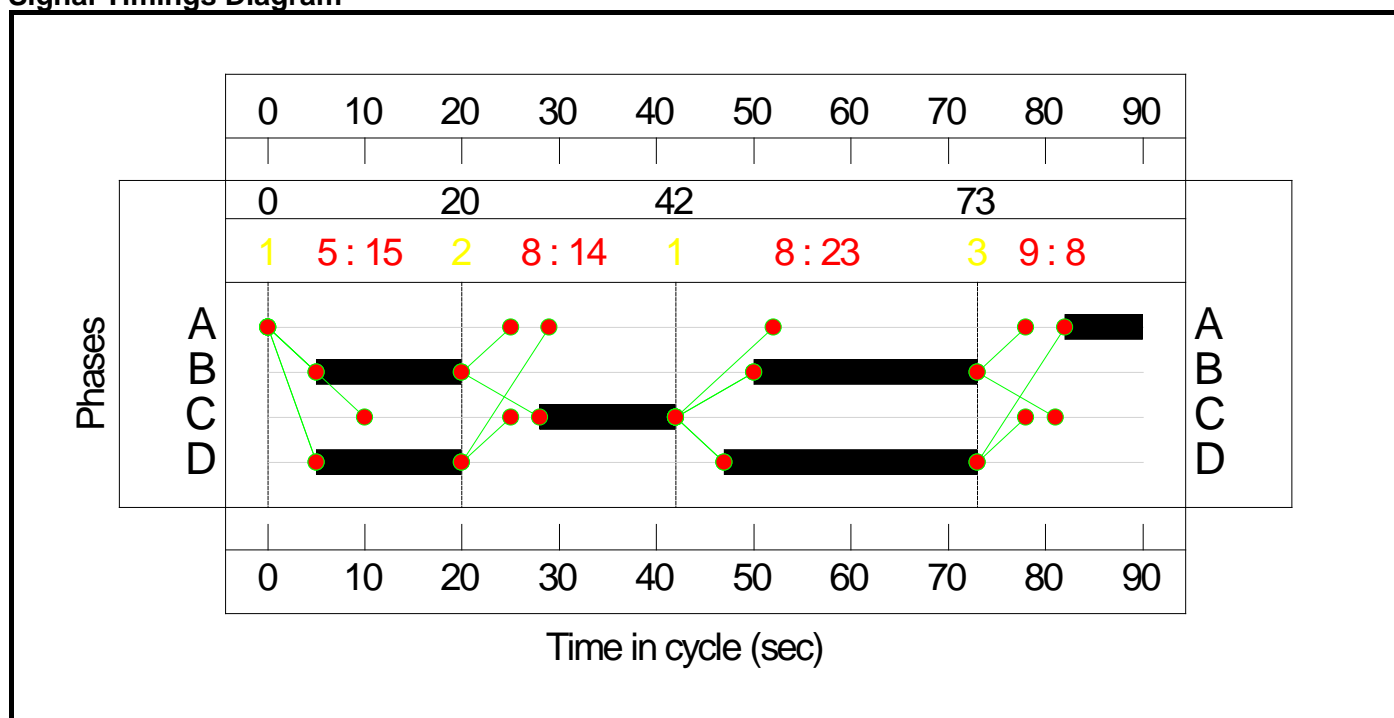
Stage Sequence Diagram



Stage Timings

Stage	1	2	1	3
Duration	15	14	23	8
Change Point	0	20	42	73

Signal Timings Diagram





Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>71.6%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>71.6%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	8	-	199	1741:1665	170+146	62.9 : 62.9%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		2	38	-	653	1901:1665	814+98	71.6 : 71.6%
3/1	B4030 (W) Ahead Right Left	U	N/A	N/A	C		1	14	-	203	1792	299	68.0%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		2	41	-	323	1878:1730	815+118	34.6 : 34.6%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	251	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	356	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	120	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	651	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>98</b>	<b>13</b>	<b>0</b>	<b>6.6</b>	<b>3.4</b>	<b>0.1</b>	<b>10.1</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>98</b>	<b>13</b>	<b>0</b>	<b>6.6</b>	<b>3.4</b>	<b>0.1</b>	<b>10.1</b>	-	-	-	-
1/2+1/1	199	199	-	-	-	2.1	0.8	-	3.0	53.8	2.6	0.8	3.4
2/1+2/2	653	653	70	0	0	1.8	1.2	0.0	3.1	17.1	6.7	1.2	8.0
3/1	203	203	-	-	-	2.0	1.0	-	3.0	53.7	4.7	1.0	5.8
4/1+4/2	323	323	28	13	0	0.6	0.3	0.1	1.0	10.7	2.4	0.3	2.6
5/1	251	251	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	356	356	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	120	120	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	651	651	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

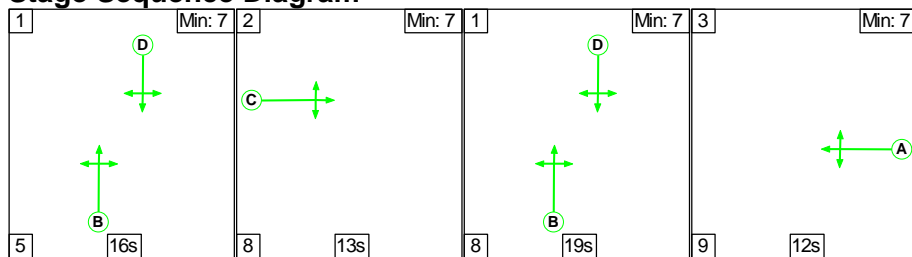
## Full Input Data And Results

C1	PRC for Signalled Lanes (%):	25.7	Total Delay for Signalled Lanes (pcuHr):	10.06	Cycle Time (s):	90
	PRC Over All Lanes (%):	25.7	Total Delay Over All Lanes(pcuHr):	10.06		

Full Input Data And Results

Scenario 3: '2026 Base AM' (FG3: '2026 Base AM', Plan 1: 'Network Control Plan 1')

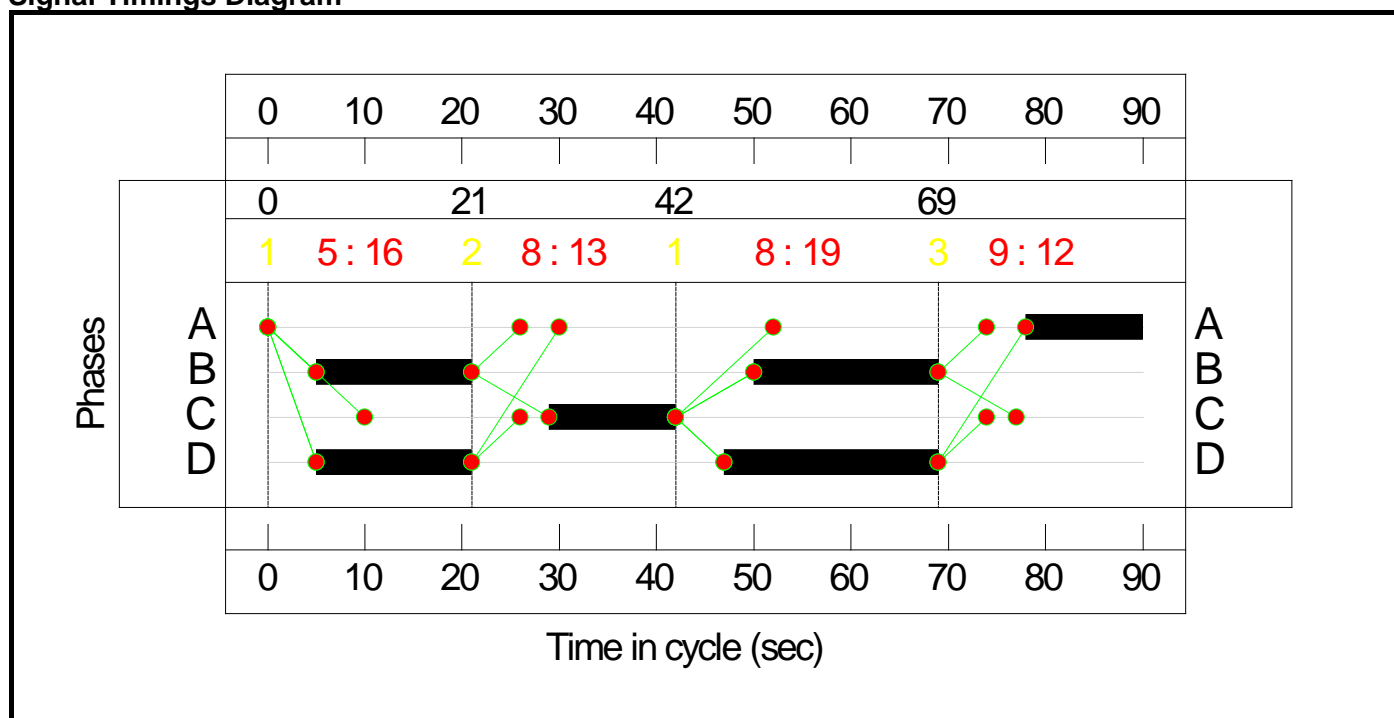
Stage Sequence Diagram



Stage Timings

Stage	1	2	1	3
Duration	16	13	19	12
Change Point	0	21	42	69

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>81.2%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>81.2%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	12	-	312	1741:1665	198+198	78.9 : 78.9%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		2	35	-	332	1898:1665	765+73	39.6 : 39.6%
3/1	B4030 (W) Ahead Right Left	U	N/A	N/A	C		1	13	-	205	1794	279	73.5%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		2	38	-	690	1894:1730	787+63	81.2 : 81.2%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	199	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	798	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	173	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	369	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>65</b>	<b>15</b>	<b>0</b>	<b>8.1</b>	<b>5.6</b>	<b>0.1</b>	<b>13.7</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>65</b>	<b>15</b>	<b>0</b>	<b>8.1</b>	<b>5.6</b>	<b>0.1</b>	<b>13.7</b>	-	-	-	-
1/2+1/1	312	312	-	-	-	3.1	1.8	-	4.9	56.9	3.6	1.8	5.4
2/1+2/2	332	332	29	0	0	0.9	0.3	0.1	1.2	13.4	2.8	0.3	3.1
3/1	205	205	-	-	-	2.1	1.3	-	3.4	59.7	4.8	1.3	6.2
4/1+4/2	690	690	36	15	0	2.0	2.1	0.0	4.1	21.6	6.9	2.1	9.0
5/1	199	199	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	798	798	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	173	173	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	369	369	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

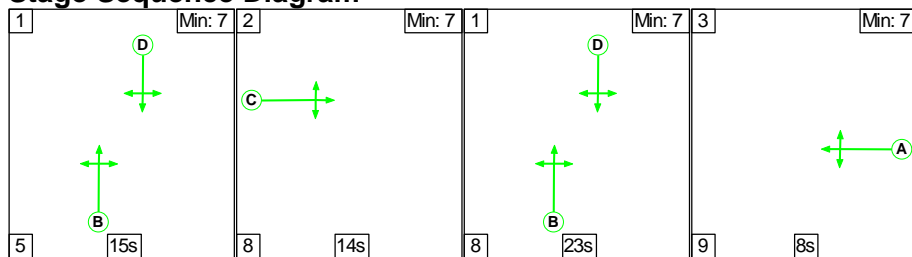
## Full Input Data And Results

C1	PRC for Signalled Lanes (%):	10.9	Total Delay for Signalled Lanes (pcuHr):	13.70	Cycle Time (s):	90
	PRC Over All Lanes (%):	10.9	Total Delay Over All Lanes(pcuHr):	13.70		

Full Input Data And Results

Scenario 4: '2026 Base PM' (FG4: '2026 Base PM', Plan 1: 'Network Control Plan 1')

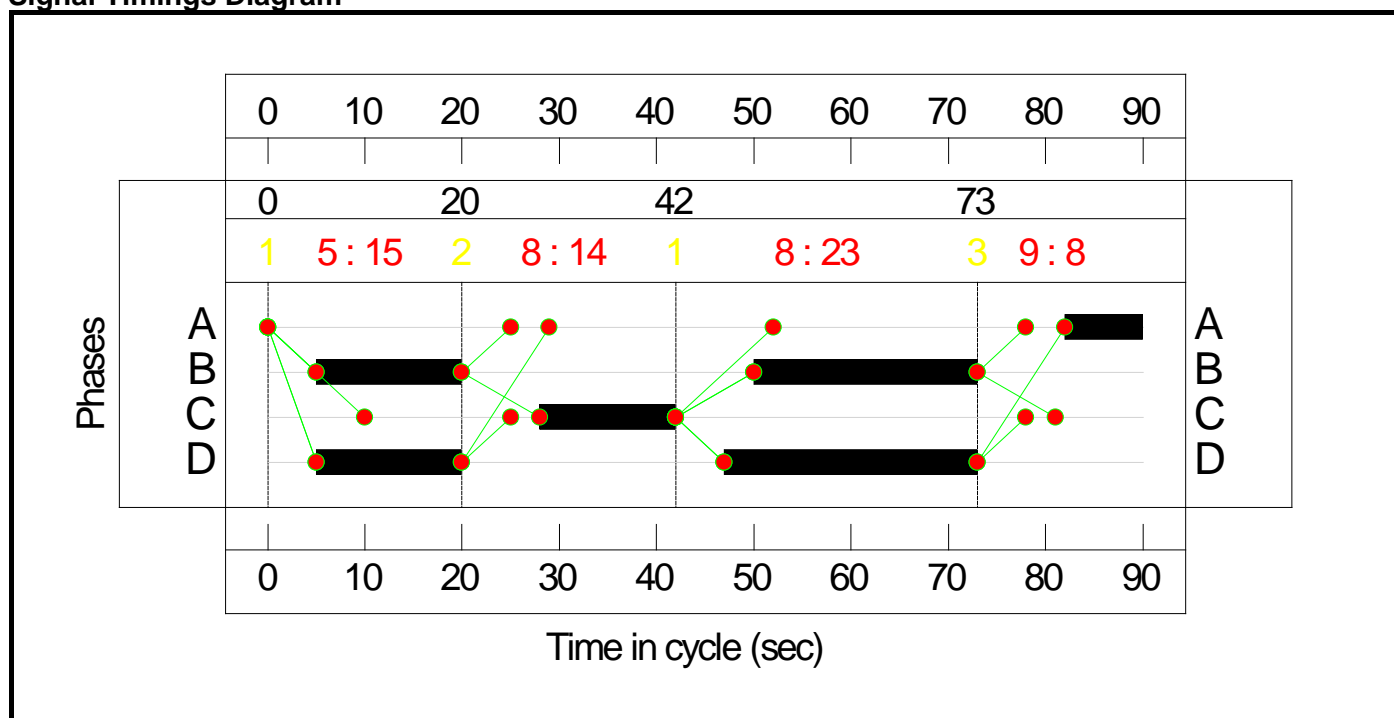
Stage Sequence Diagram



Stage Timings

Stage	1	2	1	3
Duration	15	14	23	8
Change Point	0	20	42	73

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>74.2%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>74.2%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	8	-	206	1741:1665	170+146	65.2 : 65.2%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		2	38	-	677	1901:1665	814+98	74.2 : 74.2%
3/1	B4030 (W) Ahead Right Left	U	N/A	N/A	C		1	14	-	210	1792	299	70.3%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		2	41	-	334	1878:1730	815+117	35.8 : 35.8%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	261	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	368	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	124	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	674	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>102</b>	<b>13</b>	<b>0</b>	<b>6.9</b>	<b>3.8</b>	<b>0.1</b>	<b>10.7</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>102</b>	<b>13</b>	<b>0</b>	<b>6.9</b>	<b>3.8</b>	<b>0.1</b>	<b>10.7</b>	-	-	-	-
1/2+1/1	206	206	-	-	-	2.2	0.9	-	3.1	54.9	2.7	0.9	3.6
2/1+2/2	677	677	73	0	0	1.9	1.4	0.0	3.4	17.9	7.3	1.4	8.7
3/1	210	210	-	-	-	2.1	1.2	-	3.2	55.2	4.9	1.2	6.1
4/1+4/2	334	334	29	13	0	0.7	0.3	0.1	1.0	10.9	2.4	0.3	2.7
5/1	261	261	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	368	368	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	124	124	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	674	674	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

## Full Input Data And Results

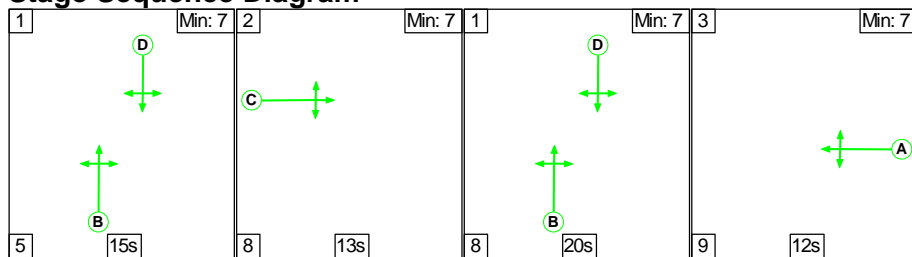
C1	PRC for Signalled Lanes (%):	21.3	Total Delay for Signalled Lanes (pcuHr):	10.74	Cycle Time (s):	90
	PRC Over All Lanes (%):	21.3	Total Delay Over All Lanes(pcuHr):	10.74		



Full Input Data And Results

Scenario 5: '2026 Base +50dw AM' (FG5: '2026 Base +50dw AM', Plan 1: 'Network Control Plan 1')

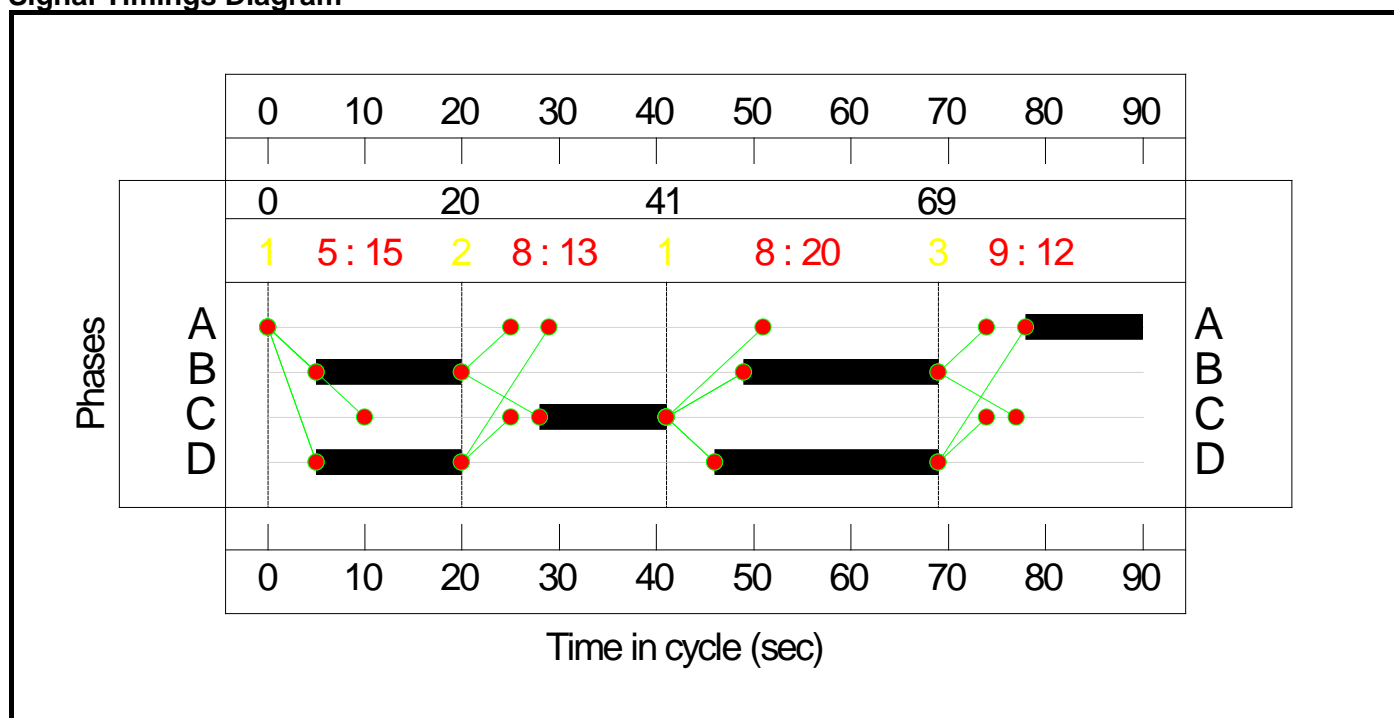
Stage Sequence Diagram



Stage Timings

Stage	1	2	1	3
Duration	15	13	20	12
Change Point	0	20	41	69

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>81.3%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>81.3%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	12	-	320	1741:1665	198+198	80.9 : 80.9%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		2	35	-	333	1898:1665	764+76	39.6 : 39.6%
3/1	B4030 (W) Ahead Right Left	U	N/A	N/A	C		1	13	-	205	1794	279	73.5%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		2	38	-	691	1894:1730	787+63	81.3 : 81.3%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	201	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	802	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	174	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	372	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>66</b>	<b>15</b>	<b>0</b>	<b>8.2</b>	<b>5.8</b>	<b>0.1</b>	<b>14.0</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>66</b>	<b>15</b>	<b>0</b>	<b>8.2</b>	<b>5.8</b>	<b>0.1</b>	<b>14.0</b>	-	-	-	-
1/2+1/1	320	320	-	-	-	3.2	2.0	-	5.2	59.0	3.8	2.0	5.8
2/1+2/2	333	333	30	0	0	0.9	0.3	0.1	1.2	13.5	2.8	0.3	3.1
3/1	205	205	-	-	-	2.1	1.3	-	3.4	59.7	4.8	1.3	6.2
4/1+4/2	691	691	36	15	0	2.0	2.1	0.0	4.2	21.6	6.9	2.1	9.0
5/1	201	201	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	802	802	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	174	174	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

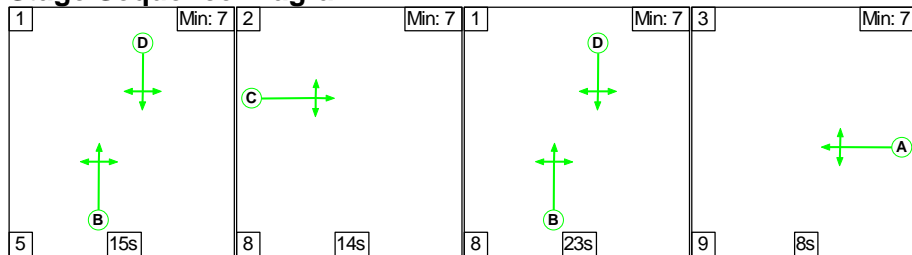
## Full Input Data And Results

C1	PRC for Signalled Lanes (%):	10.7	Total Delay for Signalled Lanes (pcuHr):	14.04	Cycle Time (s):	90
	PRC Over All Lanes (%):	10.7	Total Delay Over All Lanes(pcuHr):	14.04		

Full Input Data And Results

Scenario 6: '2026 Base + 50dw PM' (FG6: '2026 Base +50dw PM', Plan 1: 'Network Control Plan 1')

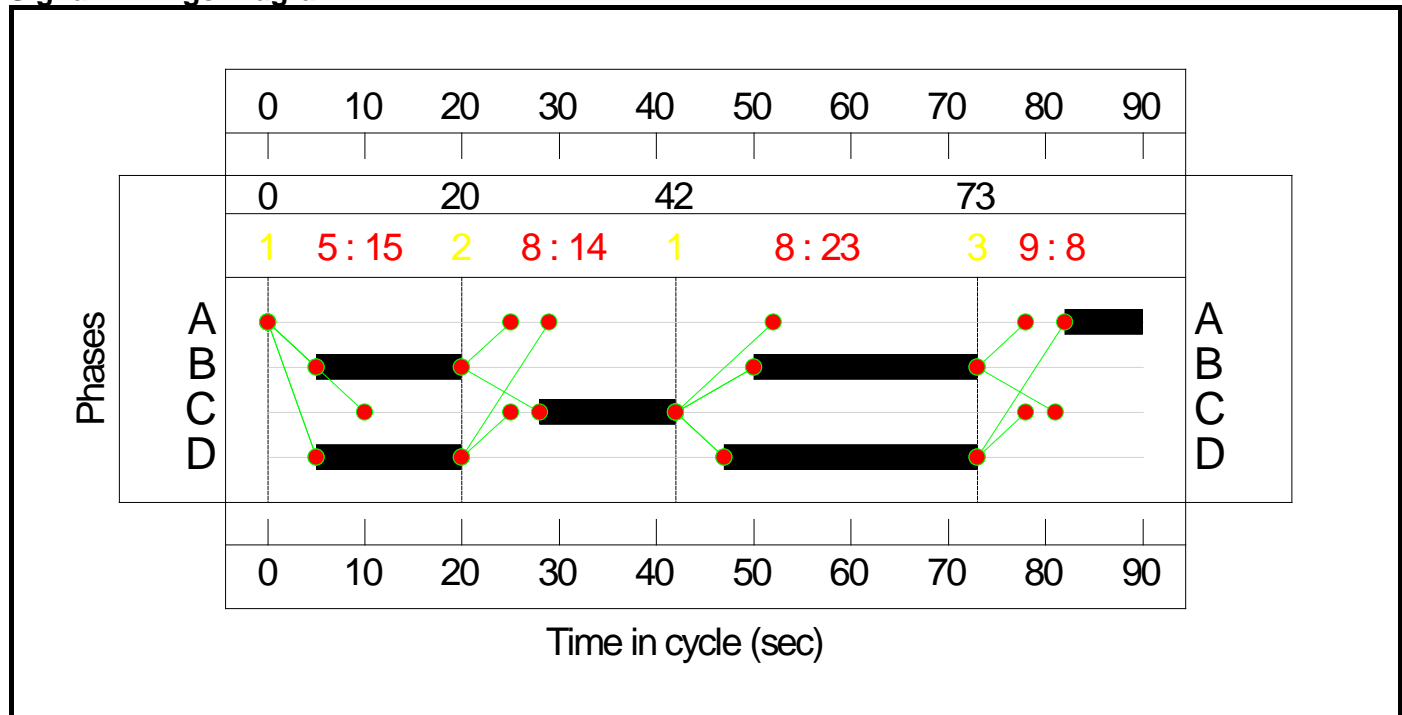
Stage Sequence Diagram



Stage Timings

Stage	1	2	1	3
Duration	15	14	23	8
Change Point	0	20	42	73

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>74.3%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>74.3%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	8	-	209	1741:1665	170+147	65.8 : 65.8%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		2	38	-	679	1901:1665	813+101	74.3 : 74.3%
3/1	B4030 (W) Ahead Right Left	U	N/A	N/A	C		1	14	-	210	1792	299	70.3%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		2	41	-	336	1877:1730	815+116	36.1 : 36.1%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	265	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	370	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	124	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	675	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>104</b>	<b>13</b>	<b>0</b>	<b>6.9</b>	<b>3.8</b>	<b>0.1</b>	<b>10.8</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>104</b>	<b>13</b>	<b>0</b>	<b>6.9</b>	<b>3.8</b>	<b>0.1</b>	<b>10.8</b>	-	-	-	-
1/2+1/1	209	209	-	-	-	2.3	0.9	-	3.2	55.2	2.7	0.9	3.6
2/1+2/2	679	679	75	0	0	1.9	1.4	0.0	3.4	17.9	7.3	1.4	8.7
3/1	210	210	-	-	-	2.1	1.2	-	3.2	55.2	4.9	1.2	6.1
4/1+4/2	336	336	29	13	0	0.7	0.3	0.1	1.0	10.9	2.5	0.3	2.7
5/1	265	265	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	370	370	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	124	124	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	675	675	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

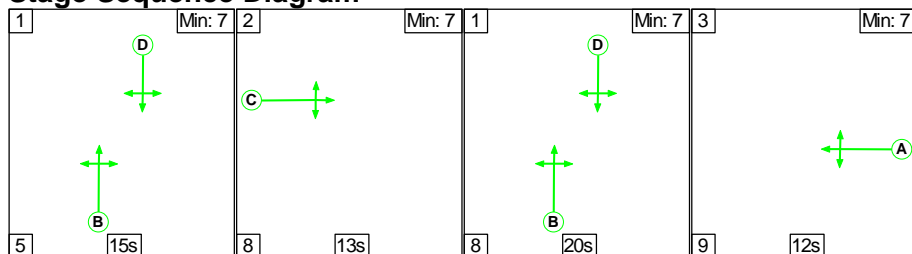
## Full Input Data And Results

C1	PRC for Signalled Lanes (%):	21.1	Total Delay for Signalled Lanes (pcuHr):	10.82	Cycle Time (s):	90
	PRC Over All Lanes (%):	21.1	Total Delay Over All Lanes(pcuHr):	10.82		

Full Input Data And Results

Scenario 7: '2027 Base AM' (FG7: '2027 Base AM', Plan 1: 'Network Control Plan 1')

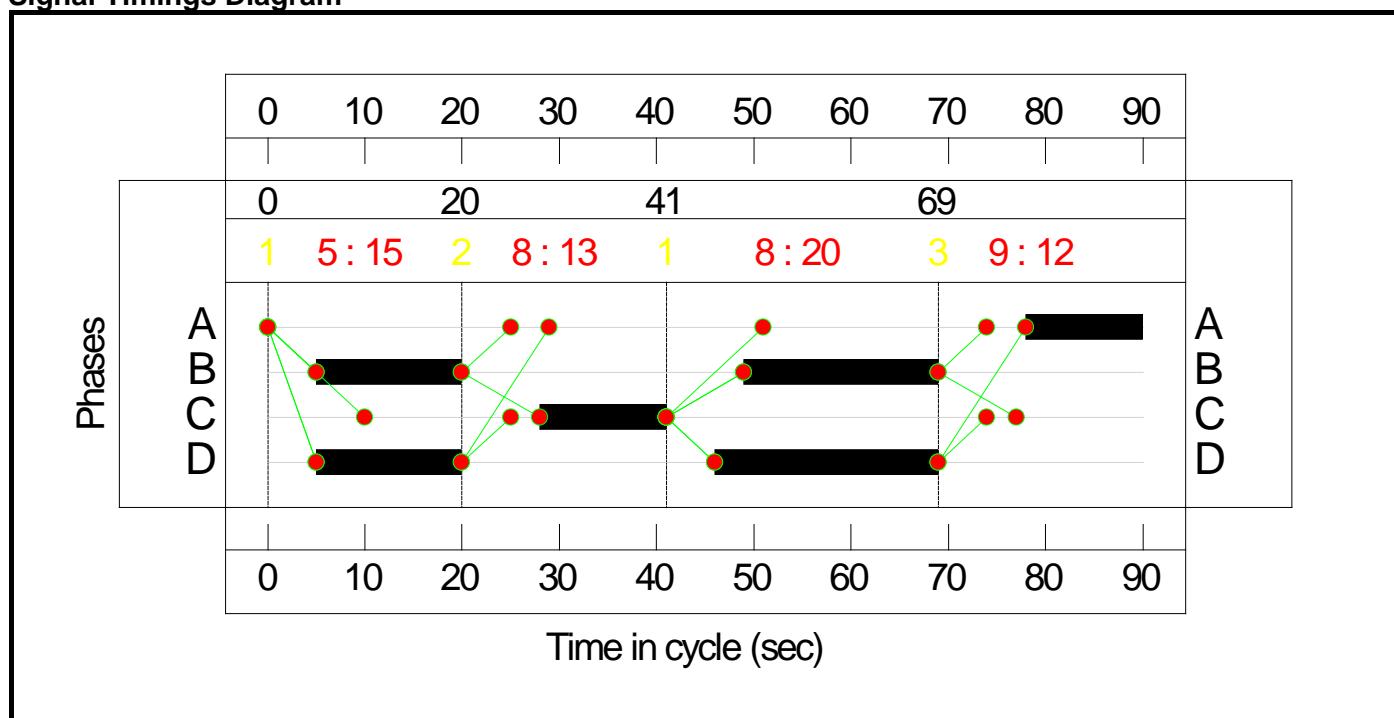
Stage Sequence Diagram



Stage Timings

Stage	1	2	1	3
Duration	15	13	20	12
Change Point	0	20	41	69

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>81.9%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>81.9%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	12	-	316	1741:1665	198+198	79.9 : 79.9%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		2	35	-	334	1898:1665	765+73	39.8 : 39.8%
3/1	B4030 (W) Ahead Right Left	U	N/A	N/A	C		1	13	-	207	1794	279	74.2%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		2	38	-	696	1894:1730	787+62	81.9 : 81.9%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	201	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	806	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	174	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	372	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>65</b>	<b>15</b>	<b>0</b>	<b>8.2</b>	<b>5.8</b>	<b>0.1</b>	<b>14.1</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>65</b>	<b>15</b>	<b>0</b>	<b>8.2</b>	<b>5.8</b>	<b>0.1</b>	<b>14.1</b>	-	-	-	-
1/2+1/1	316	316	-	-	-	3.2	1.9	-	5.1	57.9	3.7	1.9	5.6
2/1+2/2	334	334	29	0	0	0.9	0.3	0.1	1.3	13.5	2.8	0.3	3.1
3/1	207	207	-	-	-	2.1	1.4	-	3.5	60.3	4.9	1.4	6.3
4/1+4/2	696	696	36	15	0	2.0	2.2	0.0	4.3	22.0	7.1	2.2	9.3
5/1	201	201	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	806	806	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	174	174	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0



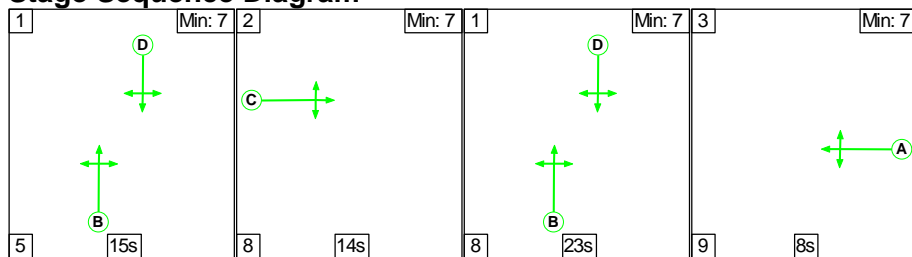
## Full Input Data And Results

C1	PRC for Signalled Lanes (%):	9.9	Total Delay for Signalled Lanes (pcuHr):	14.06	Cycle Time (s):	90
	PRC Over All Lanes (%):	9.9	Total Delay Over All Lanes(pcuHr):	14.06		

Full Input Data And Results

Scenario 8: '2027 Base PM' (FG8: '2027 Base PM', Plan 1: 'Network Control Plan 1')

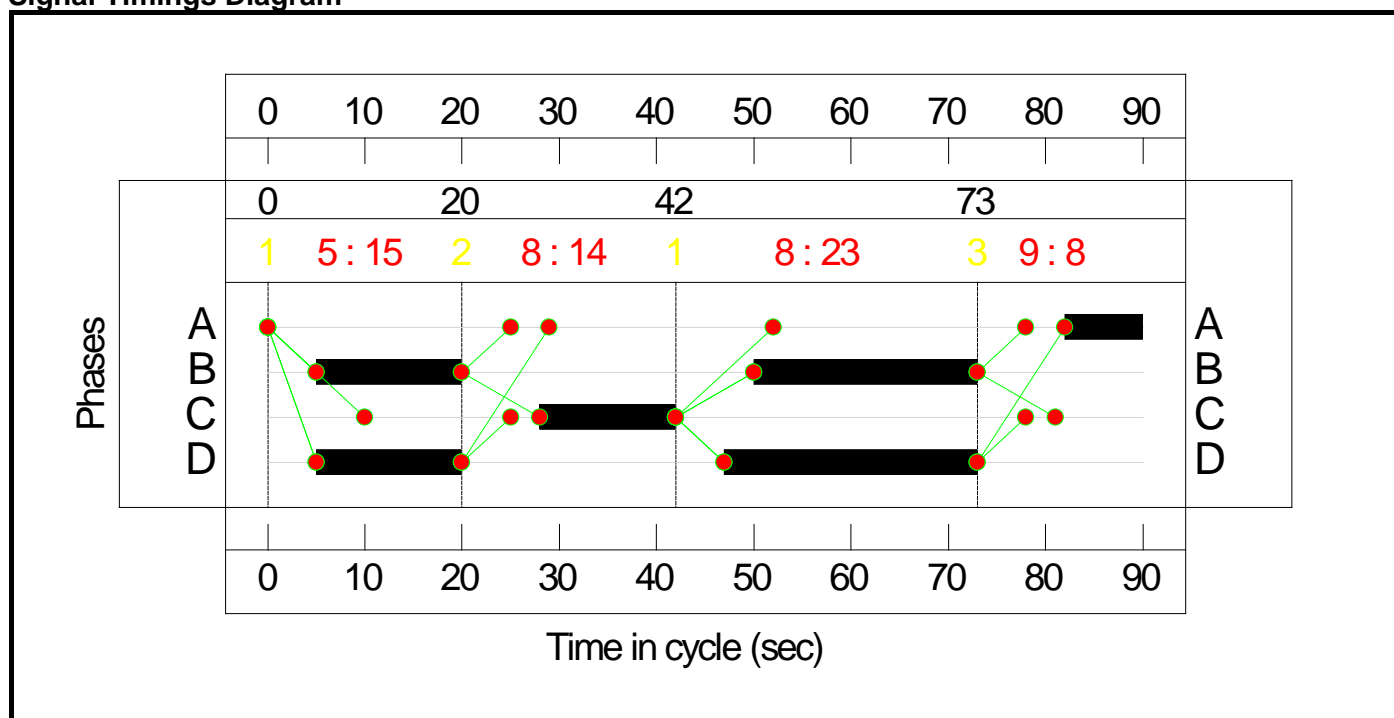
Stage Sequence Diagram



Stage Timings

Stage	1	2	1	3
Duration	15	14	23	8
Change Point	0	20	42	73

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>74.8%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>74.8%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	8	-	208	1741:1665	170+146	65.8 : 65.8%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		2	38	-	682	1901:1665	814+98	74.8 : 74.8%
3/1	B4030 (W) Ahead Right Left	U	N/A	N/A	C		1	14	-	213	1792	299	71.3%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		2	41	-	337	1879:1730	814+119	36.1 : 36.1%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	262	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	372	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	125	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	681	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>103</b>	<b>13</b>	<b>0</b>	<b>7.0</b>	<b>3.9</b>	<b>0.1</b>	<b>11.0</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>103</b>	<b>13</b>	<b>0</b>	<b>7.0</b>	<b>3.9</b>	<b>0.1</b>	<b>11.0</b>	-	-	-	-
1/2+1/1	208	208	-	-	-	2.2	0.9	-	3.2	55.2	2.7	0.9	3.6
2/1+2/2	682	682	73	0	0	1.9	1.5	0.0	3.4	18.1	7.3	1.5	8.8
3/1	213	213	-	-	-	2.1	1.2	-	3.3	55.9	5.0	1.2	6.2
4/1+4/2	337	337	30	13	0	0.7	0.3	0.1	1.0	10.9	2.4	0.3	2.7
5/1	262	262	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	125	125	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	681	681	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

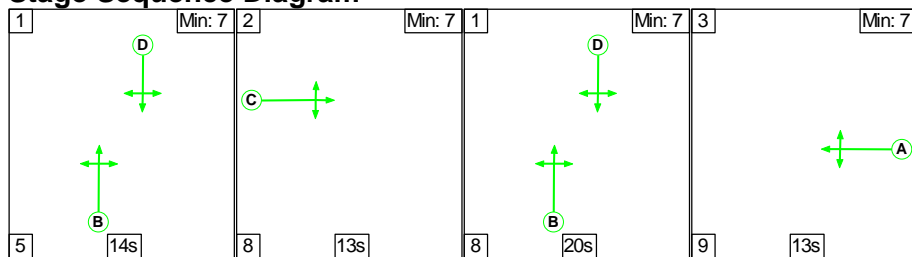
## Full Input Data And Results

C1	PRC for Signalled Lanes (%):	20.4	Total Delay for Signalled Lanes (pcuHr):	10.95	Cycle Time (s):	90
	PRC Over All Lanes (%):	20.4	Total Delay Over All Lanes(pcuHr):	10.95		

Full Input Data And Results

Scenario 9: '2027 Base +100dw AM' (FG9: '2027 Base +100dw AM', Plan 1: 'Network Control Plan 1')

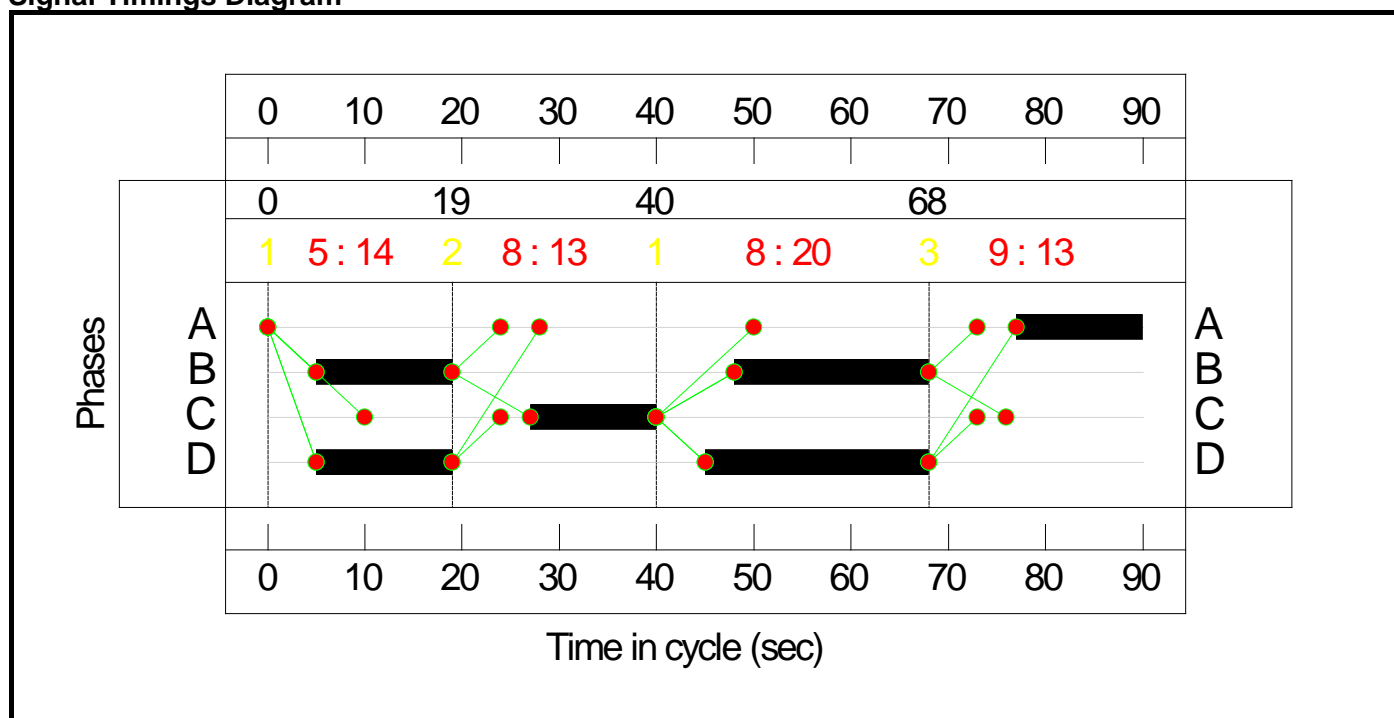
Stage Sequence Diagram



Stage Timings

Stage	1	2	1	3
Duration	14	13	20	13
Change Point	0	19	40	68

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>84.2%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>84.2%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	13	-	330	1741:1665	207+207	79.6 : 79.6%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		2	34	-	337	1898:1665	744+78	41.0 : 41.0%
3/1	B4030 (W) Ahead Right Left	U	N/A	N/A	C		1	13	-	207	1794	279	74.2%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		2	37	-	698	1894:1730	768+61	84.2 : 84.2%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	206	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	813	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	175	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	378	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>58</b>	<b>15</b>	<b>10</b>	<b>8.4</b>	<b>6.2</b>	<b>0.1</b>	<b>14.6</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>58</b>	<b>15</b>	<b>10</b>	<b>8.4</b>	<b>6.2</b>	<b>0.1</b>	<b>14.6</b>	-	-	-	-
1/2+1/1	330	330	-	-	-	3.3	1.9	-	5.1	55.9	3.8	1.9	5.7
2/1+2/2	337	337	22	0	10	0.9	0.3	0.1	1.3	14.1	2.8	0.3	3.1
3/1	207	207	-	-	-	2.1	1.4	-	3.5	60.3	4.9	1.4	6.3
4/1+4/2	698	698	36	15	0	2.1	2.6	0.0	4.7	24.4	7.4	2.6	9.9
5/1	206	206	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	813	813	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	175	175	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	378	378	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

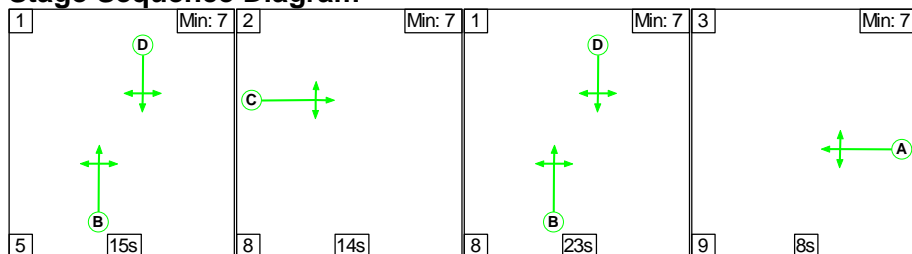
## Full Input Data And Results

C1	PRC for Signalled Lanes (%):	6.8	Total Delay for Signalled Lanes (pcuHr):	14.64	Cycle Time (s):	90
	PRC Over All Lanes (%):	6.8	Total Delay Over All Lanes(pcuHr):	14.64		

Full Input Data And Results

Scenario 10: '2027 Base + 100dw PM' (FG10: '2027 Base +100dw PM', Plan 1: 'Network Control Plan 1')

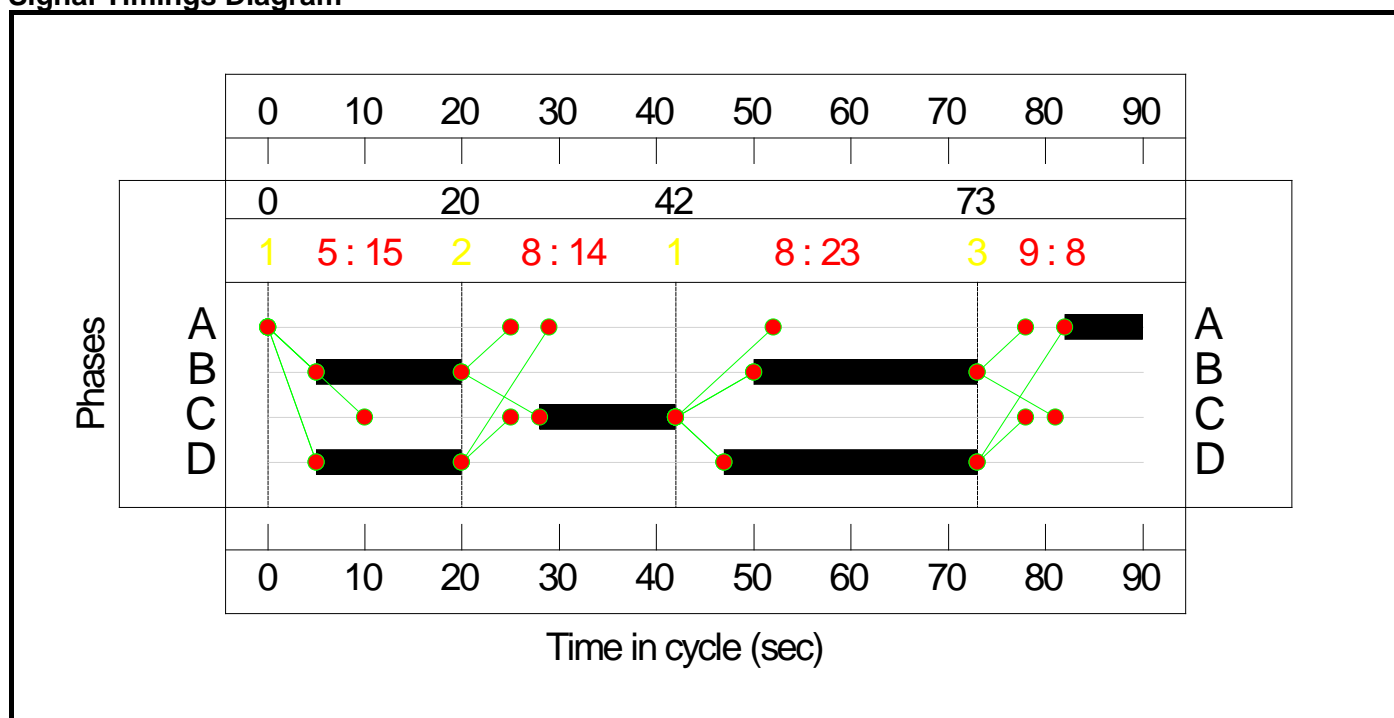
Stage Sequence Diagram



Stage Timings

Stage	1	2	1	3
Duration	15	14	23	8
Change Point	0	20	42	73

Signal Timings Diagram





Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>75.0%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>75.0%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	8	-	214	1741:1665	170+147	67.6 : 67.6%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		2	38	-	687	1901:1665	812+104	75.0 : 75.0%
3/1	B4030 (W) Ahead Right Left	U	N/A	N/A	C		1	14	-	214	1792	299	71.7%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		2	41	-	342	1876:1730	815+117	36.7 : 36.7%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	273	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	375	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	126	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	683	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>108</b>	<b>13</b>	<b>0</b>	<b>7.1</b>	<b>4.0</b>	<b>0.1</b>	<b>11.2</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>108</b>	<b>13</b>	<b>0</b>	<b>7.1</b>	<b>4.0</b>	<b>0.1</b>	<b>11.2</b>	-	-	-	-
1/2+1/1	214	214	-	-	-	2.3	1.0	-	3.3	56.1	2.7	1.0	3.8
2/1+2/2	687	687	78	0	0	1.9	1.5	0.0	3.5	18.2	7.3	1.5	8.8
3/1	214	214	-	-	-	2.1	1.2	-	3.3	56.2	5.1	1.2	6.3
4/1+4/2	342	342	30	13	0	0.7	0.3	0.1	1.0	10.9	2.5	0.3	2.8
5/1	273	273	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	126	126	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	683	683	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

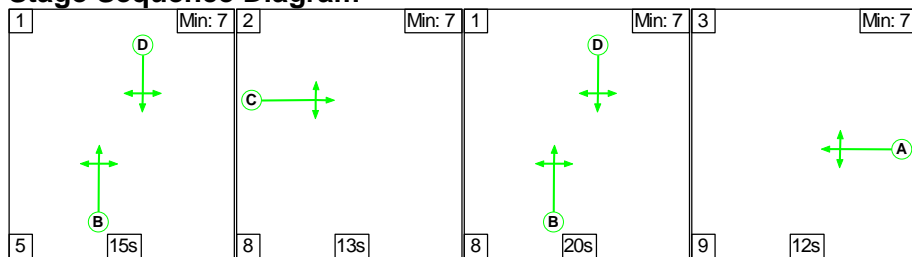
## Full Input Data And Results

C1	PRC for Signalled Lanes (%):	20.0	Total Delay for Signalled Lanes (pcuHr):	11.18	Cycle Time (s):	90
	PRC Over All Lanes (%):	20.0	Total Delay Over All Lanes(pcuHr):	11.18		

Full Input Data And Results

Scenario 11: '2028 Base AM' (FG11: '2028 Base AM', Plan 1: 'Network Control Plan 1')

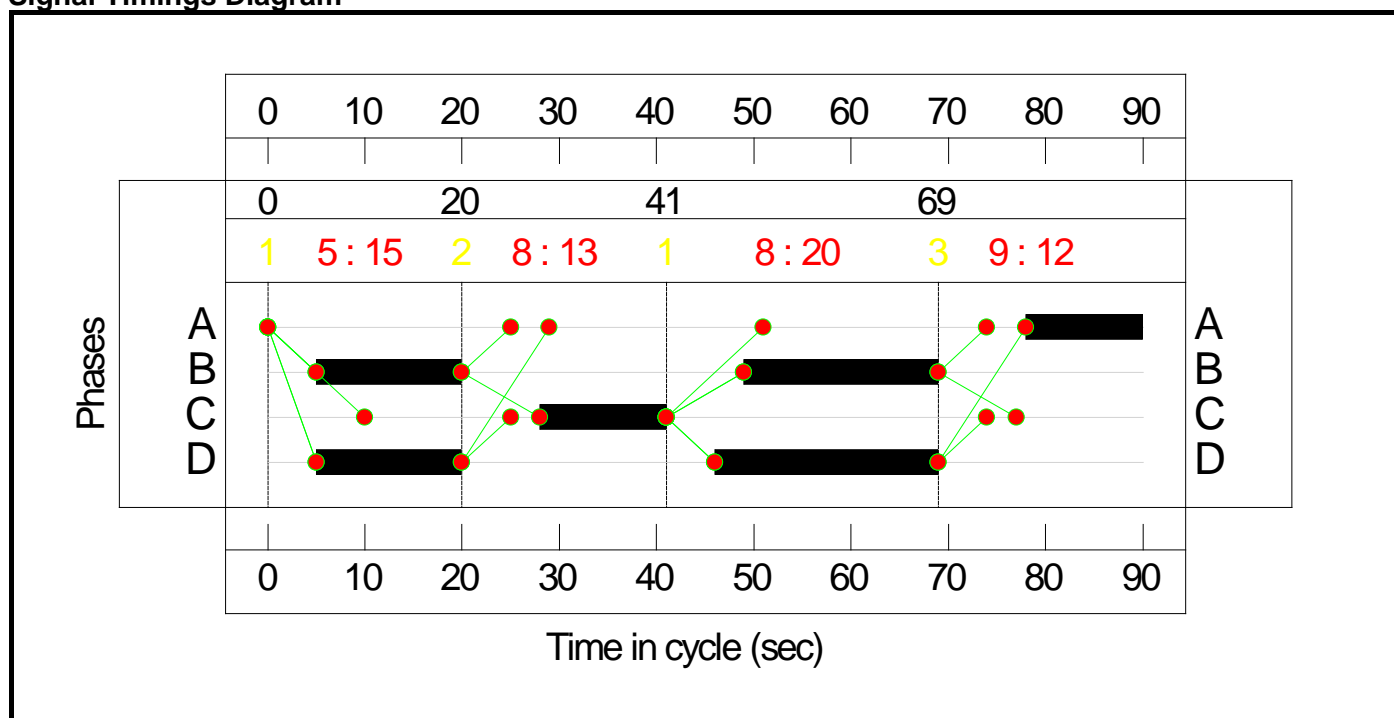
Stage Sequence Diagram



Stage Timings

Stage	1	2	1	3
Duration	15	13	20	12
Change Point	0	20	41	69

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>82.5%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>82.5%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	12	-	317	1741:1665	197+198	80.3 : 80.3%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		2	35	-	337	1898:1665	766+72	40.2 : 40.2%
3/1	B4030 (W) Ahead Right Left	U	N/A	N/A	C		1	13	-	210	1794	279	75.3%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		2	38	-	701	1894:1730	787+63	82.5 : 82.5%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	202	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	812	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	176	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	375	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>65</b>	<b>16</b>	<b>0</b>	<b>8.2</b>	<b>6.0</b>	<b>0.1</b>	<b>14.4</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>65</b>	<b>16</b>	<b>0</b>	<b>8.2</b>	<b>6.0</b>	<b>0.1</b>	<b>14.4</b>	-	-	-	-
1/2+1/1	317	317	-	-	-	3.2	1.9	-	5.1	58.4	3.8	1.9	5.7
2/1+2/2	337	337	29	0	0	0.9	0.3	0.1	1.3	13.5	2.8	0.3	3.2
3/1	210	210	-	-	-	2.1	1.5	-	3.6	61.4	5.0	1.5	6.5
4/1+4/2	701	701	36	16	0	2.1	2.3	0.0	4.4	22.4	7.2	2.3	9.5
5/1	202	202	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	812	812	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	176	176	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

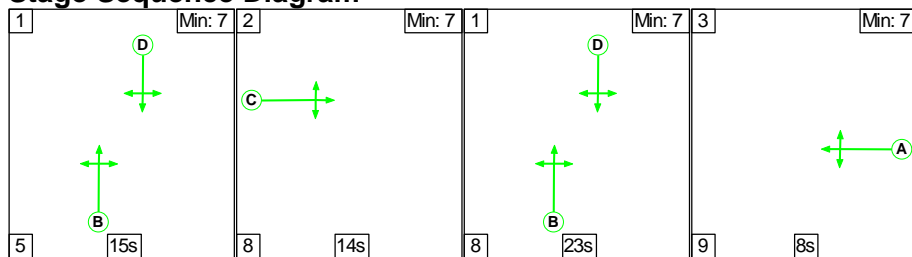
## Full Input Data And Results

C1	PRC for Signalled Lanes (%):	9.1	Total Delay for Signalled Lanes (pcuHr):	14.35	Cycle Time (s):	90
	PRC Over All Lanes (%):	9.1	Total Delay Over All Lanes(pcuHr):	14.35		

Full Input Data And Results

Scenario 12: '2028 Base PM' (FG12: '2028 Base PM', Plan 1: 'Network Control Plan 1')

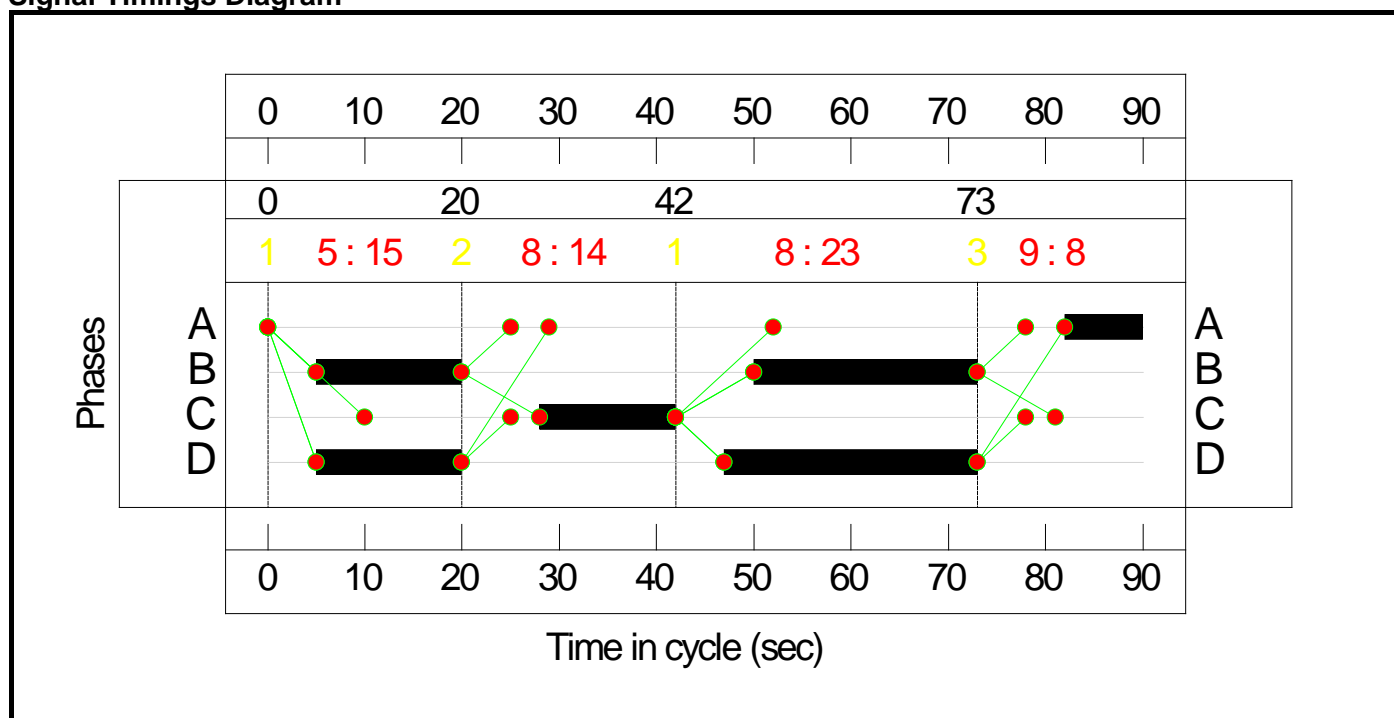
Stage Sequence Diagram



Stage Timings

Stage	1	2	1	3
Duration	15	14	23	8
Change Point	0	20	42	73

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>75.5%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>75.5%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	8	-	210	1741:1665	170+146	66.4 : 66.4%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		2	38	-	689	1901:1665	814+98	75.5 : 75.5%
3/1	B4030 (W) Ahead Right Left	U	N/A	N/A	C		1	14	-	214	1792	299	71.7%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		2	41	-	340	1878:1730	815+118	36.5 : 36.5%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	265	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	375	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	127	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	686	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>104</b>	<b>13</b>	<b>0</b>	<b>7.0</b>	<b>4.0</b>	<b>0.1</b>	<b>11.1</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>104</b>	<b>13</b>	<b>0</b>	<b>7.0</b>	<b>4.0</b>	<b>0.1</b>	<b>11.1</b>	-	-	-	-
1/2+1/1	210	210	-	-	-	2.3	1.0	-	3.2	55.5	2.7	1.0	3.7
2/1+2/2	689	689	74	0	0	2.0	1.5	0.0	3.5	18.4	7.3	1.5	8.9
3/1	214	214	-	-	-	2.1	1.2	-	3.3	56.2	5.1	1.2	6.3
4/1+4/2	340	340	30	13	0	0.7	0.3	0.1	1.0	10.9	2.5	0.3	2.8
5/1	265	265	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	127	127	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	686	686	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

## Full Input Data And Results

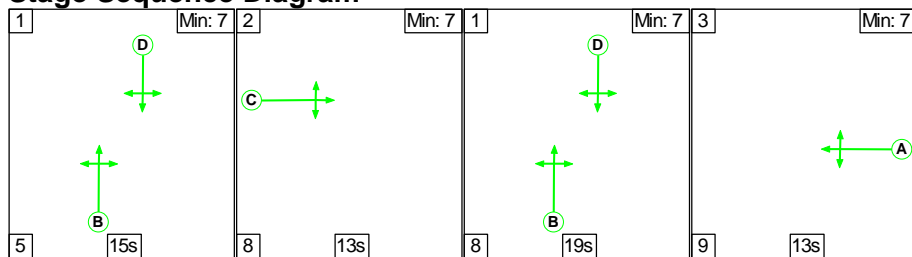
C1	PRC for Signalled Lanes (%):	19.2	Total Delay for Signalled Lanes (pcuHr):	11.13	Cycle Time (s):	90
	PRC Over All Lanes (%):	19.2	Total Delay Over All Lanes(pcuHr):	11.13		



Full Input Data And Results

Scenario 13: '2028 Base +150dw AM' (FG13: '2028 Base +150dw AM', Plan 1: 'Network Control Plan 1')

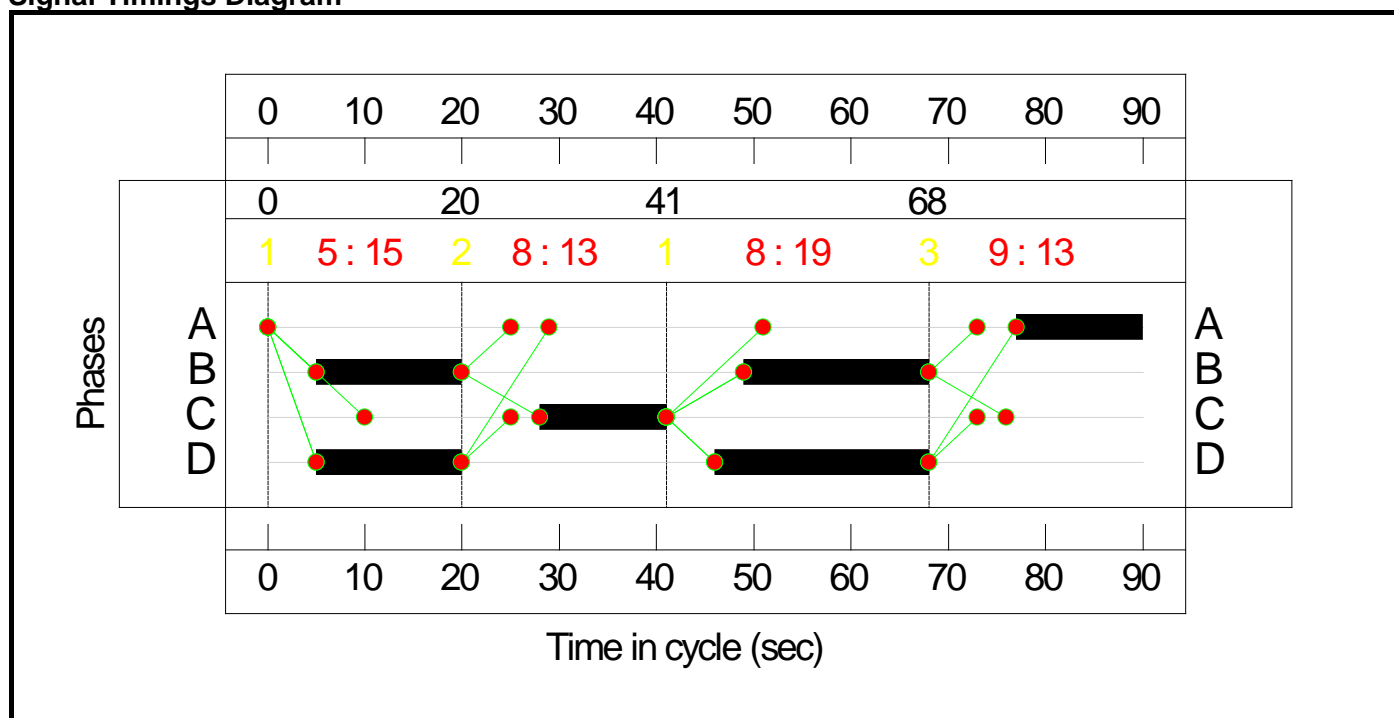
Stage Sequence Diagram



Stage Timings

Stage	1	2	1	3
Duration	15	13	19	13
Change Point	0	20	41	68

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>84.9%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>84.9%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	13	-	340	1741:1665	207+207	82.0 : 82.0%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		2	34	-	341	1898:1665	743+80	41.4 : 41.4%
3/1	B4030 (W) Ahead Right Left	U	N/A	N/A	C		1	13	-	211	1794	279	75.6%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		2	37	-	704	1894:1730	768+61	84.9 : 84.9%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	210	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	823	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	179	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	384	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>66</b>	<b>16</b>	<b>3</b>	<b>8.6</b>	<b>6.7</b>	<b>0.1</b>	<b>15.4</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>66</b>	<b>16</b>	<b>3</b>	<b>8.6</b>	<b>6.7</b>	<b>0.1</b>	<b>15.4</b>	-	-	-	-
1/2+1/1	340	340	-	-	-	3.4	2.2	-	5.5	58.5	4.1	2.2	6.2
2/1+2/2	341	341	30	0	3	0.9	0.4	0.1	1.3	14.1	2.8	0.4	3.2
3/1	211	211	-	-	-	2.1	1.5	-	3.6	61.7	5.0	1.5	6.5
4/1+4/2	704	704	36	16	0	2.2	2.7	0.0	4.9	25.0	7.6	2.7	10.3
5/1	210	210	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	823	823	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	179	179	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	384	384	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

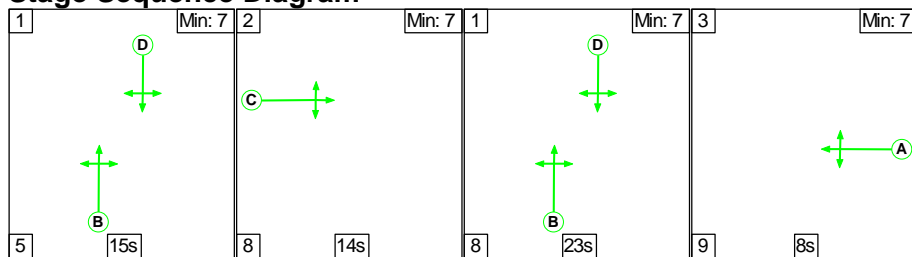
## Full Input Data And Results

C1	PRC for Signalled Lanes (%):	6.0	Total Delay for Signalled Lanes (pcuHr):	15.36	Cycle Time (s):	90
	PRC Over All Lanes (%):	6.0	Total Delay Over All Lanes(pcuHr):	15.36		

Full Input Data And Results

Scenario 14: '2028 Base + 150dw PM' (FG14: '2028 Base +150dw PM', Plan 1: 'Network Control Plan 1')

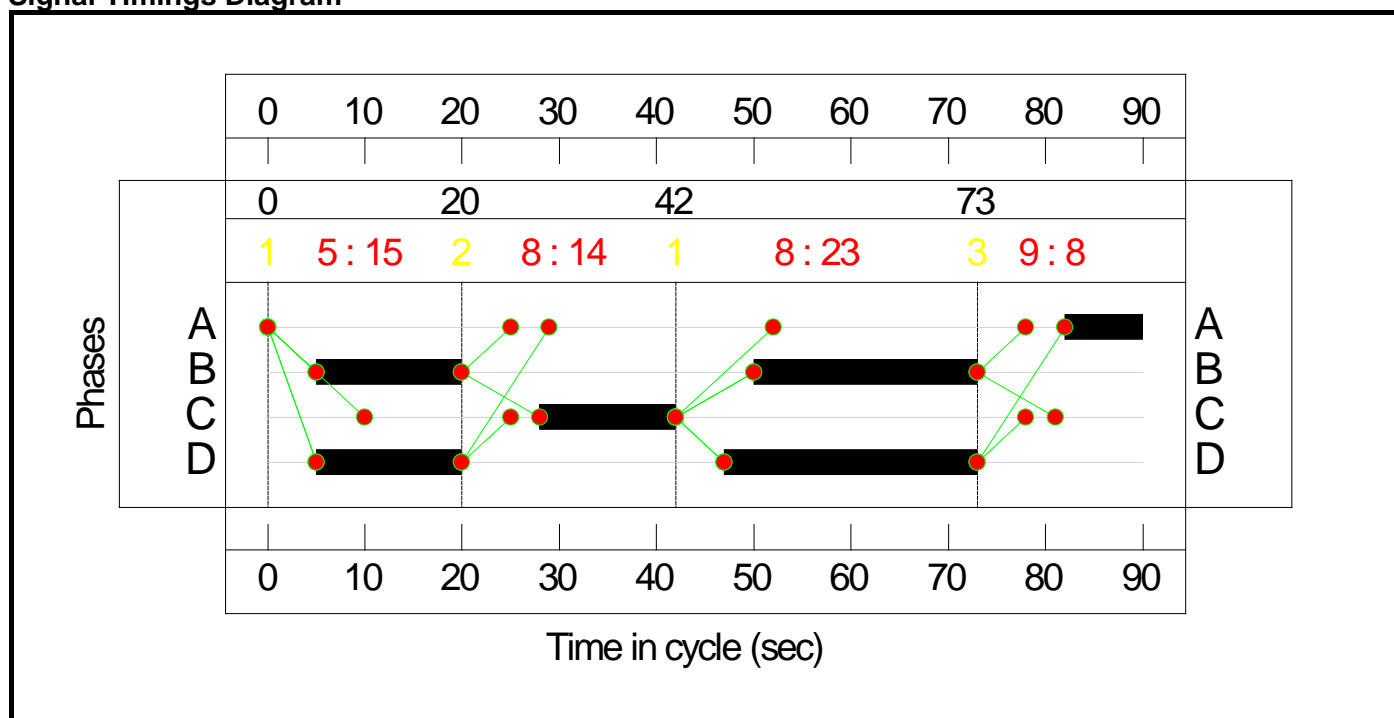
Stage Sequence Diagram



Stage Timings

Stage	1	2	1	3
Duration	15	14	23	8
Change Point	0	20	42	73

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	N/A	-	-		-	-	-	-	-	-	75.9%
<b>A4260/B4030</b>	-	-	N/A	-	-		-	-	-	-	-	-	75.9%
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	8	-	217	1741:1665	170+148	68.2 : 68.2%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		2	38	-	696	1901:1665	811+107	75.9 : 75.9%
3/1	B4030 (W) Ahead Right Left	U	N/A	N/A	C		1	14	-	215	1792	299	72.0%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		2	41	-	346	1875:1730	815+116	37.2 : 37.2%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	279	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	379	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	127	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	689	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	111	13	0	7.1	4.1	0.1	11.4	-	-	-	-
<b>A4260/B4030</b>	-	-	111	13	0	7.1	4.1	0.1	11.4	-	-	-	-
1/2+1/1	217	217	-	-	-	2.3	1.0	-	3.4	56.4	2.8	1.0	3.8
2/1+2/2	696	696	81	0	0	2.0	1.6	0.0	3.6	18.5	7.4	1.6	8.9
3/1	215	215	-	-	-	2.1	1.2	-	3.4	56.4	5.1	1.2	6.3
4/1+4/2	346	346	30	13	0	0.7	0.3	0.1	1.1	11.0	2.6	0.3	2.9
5/1	279	279	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	379	379	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	127	127	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	689	689	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

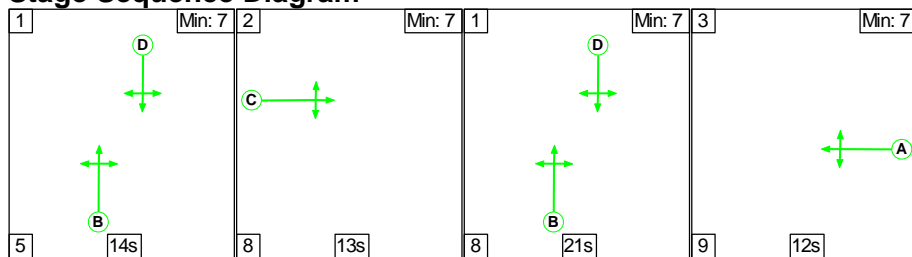
## Full Input Data And Results

C1	PRC for Signalled Lanes (%):	18.6	Total Delay for Signalled Lanes (pcuHr):	11.39	Cycle Time (s):	90
	PRC Over All Lanes (%):	18.6	Total Delay Over All Lanes(pcuHr):	11.39		

Full Input Data And Results

Scenario 15: '2031 Base AM' (FG15: '2031 Base AM', Plan 1: 'Network Control Plan 1')

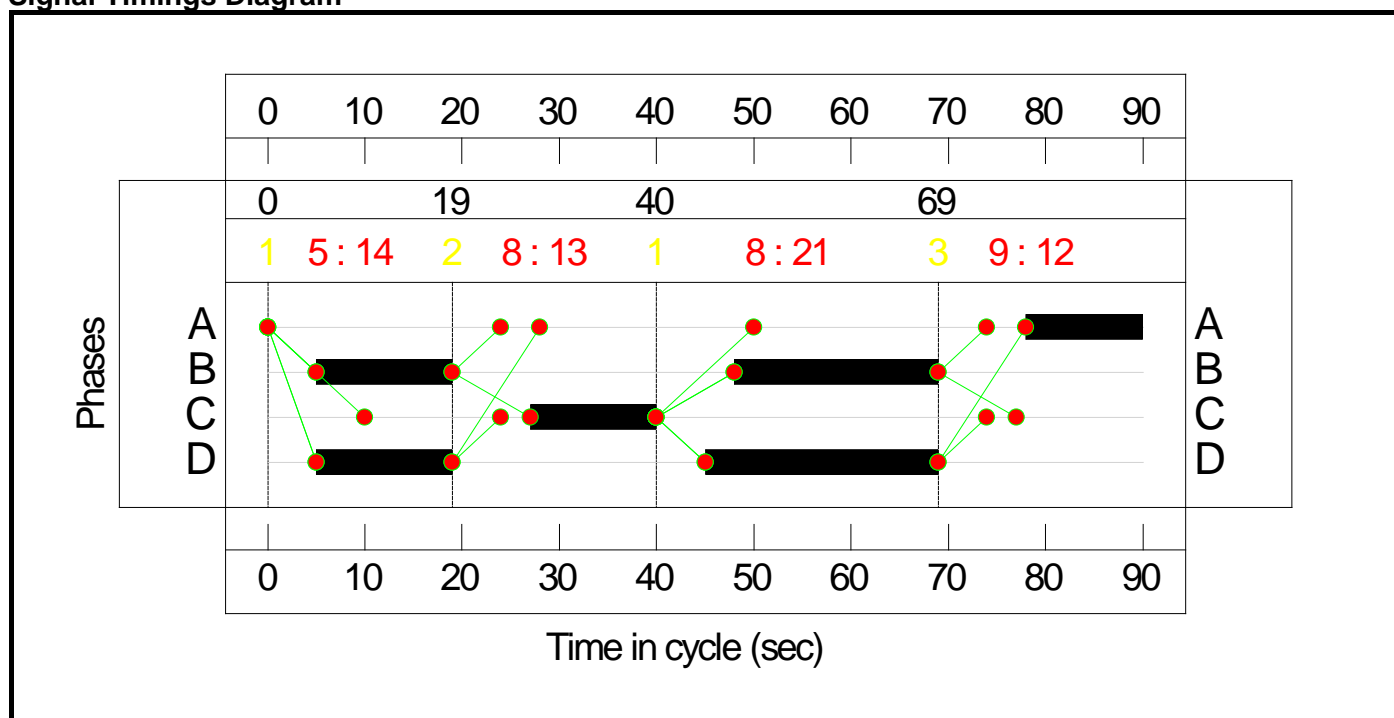
Stage Sequence Diagram



Stage Timings

Stage	1	2	1	3
Duration	14	13	21	12
Change Point	0	19	40	69

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>84.5%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>84.5%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	12	-	326	1741:1665	198+198	82.4 : 82.4%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		2	35	-	345	1898:1665	765+73	41.2 : 41.2%
3/1	B4030 (W) Ahead Right Left	U	N/A	N/A	C		1	13	-	213	1794	279	76.3%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		2	38	-	718	1894:1730	787+63	84.5 : 84.5%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	207	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	831	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	180	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	384	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>58</b>	<b>16</b>	<b>9</b>	<b>8.5</b>	<b>6.7</b>	<b>0.1</b>	<b>15.3</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>58</b>	<b>16</b>	<b>9</b>	<b>8.5</b>	<b>6.7</b>	<b>0.1</b>	<b>15.3</b>	-	-	-	-
1/2+1/1	326	326	-	-	-	3.3	2.2	-	5.5	60.7	3.8	2.2	6.0
2/1+2/2	345	345	21	0	9	0.9	0.3	0.1	1.3	13.7	2.9	0.3	3.2
3/1	213	213	-	-	-	2.2	1.5	-	3.7	62.5	5.1	1.5	6.6
4/1+4/2	718	718	37	16	0	2.1	2.6	0.0	4.8	24.0	7.4	2.6	10.0
5/1	207	207	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	831	831	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	180	180	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	384	384	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0



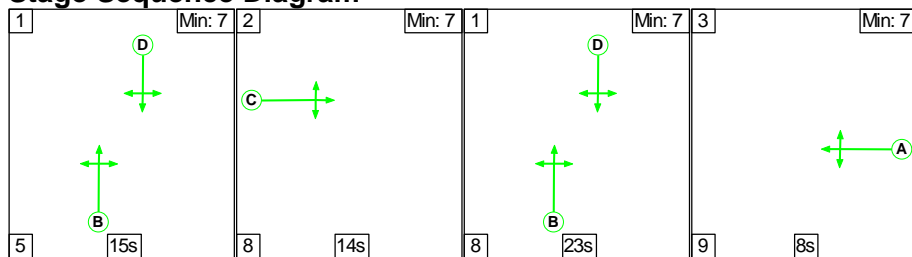
## Full Input Data And Results

C1	PRC for Signalled Lanes (%):	6.5	Total Delay for Signalled Lanes (pcuHr):	15.29	Cycle Time (s):	90
	PRC Over All Lanes (%):	6.5	Total Delay Over All Lanes(pcuHr):	15.29		

Full Input Data And Results

Scenario 16: '2031 Base PM' (FG16: '2031 Base PM', Plan 1: 'Network Control Plan 1')

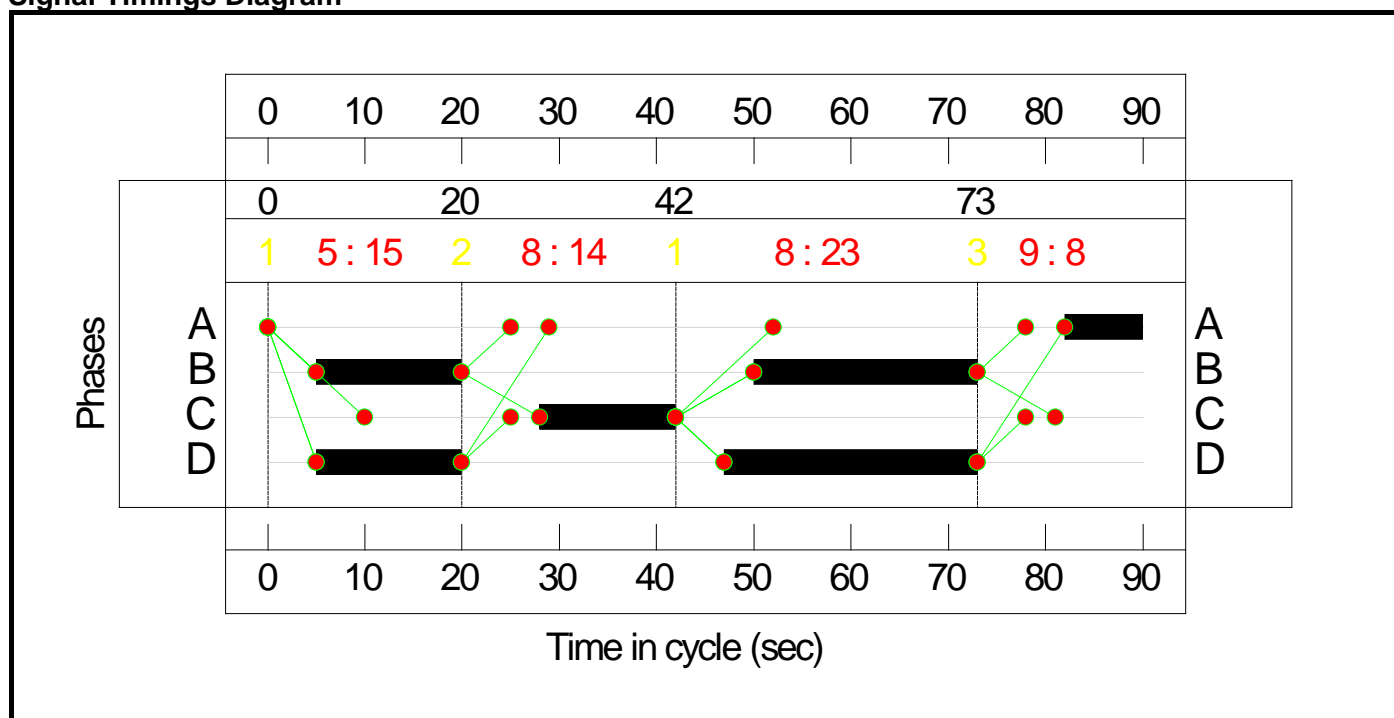
Stage Sequence Diagram



Stage Timings

Stage	1	2	1	3
Duration	15	14	23	8
Change Point	0	20	42	73

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>77.3%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>77.3%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	8	-	214	1741:1665	170+147	67.6 : 67.6%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		2	38	-	705	1901:1665	814+98	77.3 : 77.3%
3/1	B4030 (W) Ahead Right Left	U	N/A	N/A	C		1	14	-	219	1792	299	73.3%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		2	41	-	348	1879:1730	815+118	37.3 : 37.3%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	271	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	384	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	129	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	702	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>106</b>	<b>14</b>	<b>0</b>	<b>7.2</b>	<b>4.3</b>	<b>0.1</b>	<b>11.6</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>106</b>	<b>14</b>	<b>0</b>	<b>7.2</b>	<b>4.3</b>	<b>0.1</b>	<b>11.6</b>	-	-	-	-
1/2+1/1	214	214	-	-	-	2.3	1.0	-	3.3	56.1	2.7	1.0	3.8
2/1+2/2	705	705	76	0	0	2.0	1.7	0.0	3.7	19.1	7.8	1.7	9.4
3/1	219	219	-	-	-	2.2	1.3	-	3.5	57.5	5.2	1.3	6.5
4/1+4/2	348	348	30	14	0	0.7	0.3	0.1	1.1	11.0	2.6	0.3	2.9
5/1	271	271	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	384	384	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	129	129	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	702	702	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

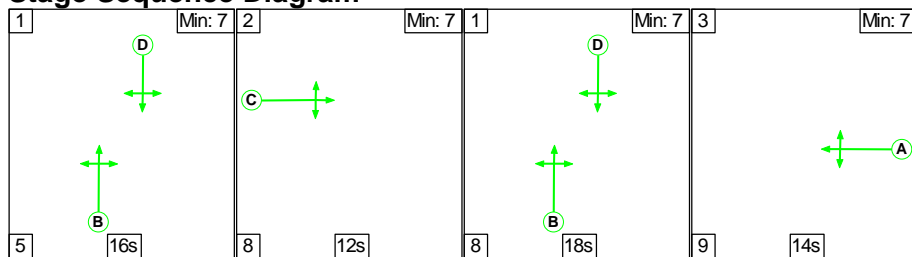
## Full Input Data And Results

C1	PRC for Signalled Lanes (%):	16.5	Total Delay for Signalled Lanes (pcuHr):	11.64	Cycle Time (s):	90
	PRC Over All Lanes (%):	16.5	Total Delay Over All Lanes(pcuHr):	11.64		

Full Input Data And Results

Scenario 17: '2031 Base +230dw AM' (FG17: '2031 Base +230dw AM', Plan 1: 'Network Control Plan 1')

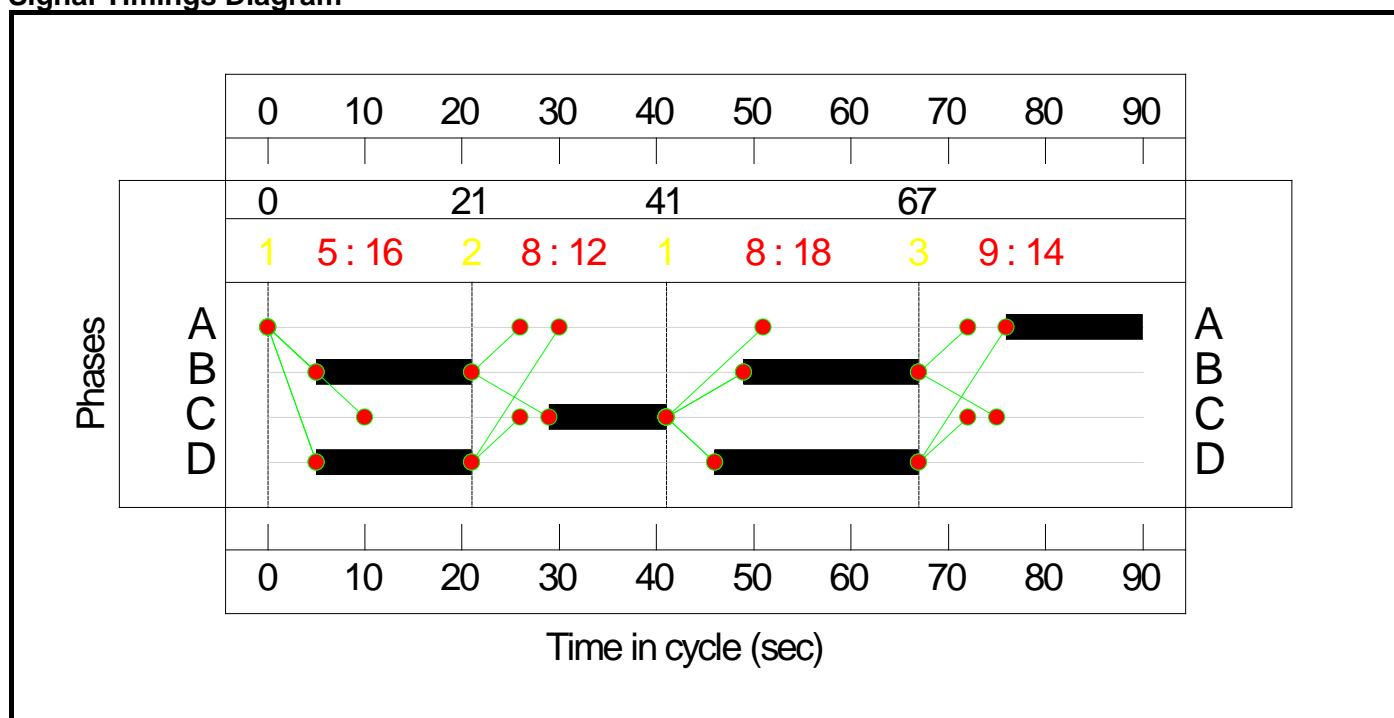
Stage Sequence Diagram



Stage Timings

Stage	1	2	1	3
Duration	16	12	18	14
Change Point	0	21	41	67

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>87.3%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>87.3%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	14	-	359	1741:1665	218+217	82.6 : 82.6%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		2	34	-	351	1898:1665	741+85	42.5 : 42.5%
3/1	B4030 (W) Ahead Right Left	U	N/A	N/A	C		1	12	-	214	1794	259	82.6%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		2	37	-	723	1893:1730	768+61	87.3 : 87.3%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	219	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	847	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	183	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	398	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>64</b>	<b>15</b>	<b>10</b>	<b>8.9</b>	<b>8.0</b>	<b>0.1</b>	<b>17.0</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>64</b>	<b>15</b>	<b>10</b>	<b>8.9</b>	<b>8.0</b>	<b>0.1</b>	<b>17.0</b>	-	-	-	-
1/2+1/1	359	359	-	-	-	3.5	2.2	-	5.7	57.5	4.4	2.2	6.7
2/1+2/2	351	351	26	0	10	0.9	0.4	0.1	1.4	14.3	2.8	0.4	3.2
3/1	214	214	-	-	-	2.2	2.2	-	4.4	73.8	5.2	2.2	7.3
4/1+4/2	723	723	38	15	0	2.3	3.2	0.0	5.5	27.5	8.2	3.2	11.5
5/1	219	219	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	847	847	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	183	183	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	398	398	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

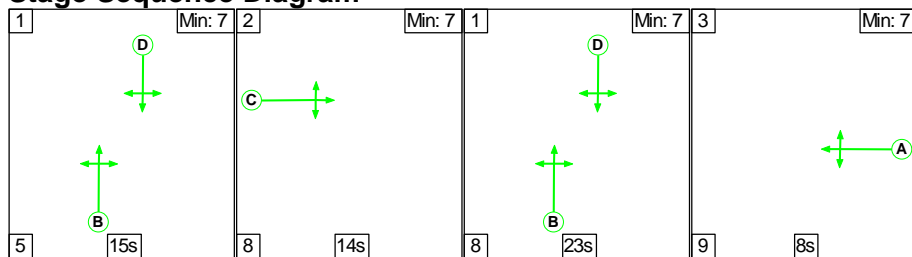
## Full Input Data And Results

C1	PRC for Signalled Lanes (%):	3.1	Total Delay for Signalled Lanes (pcuHr):	17.04	Cycle Time (s):	90
	PRC Over All Lanes (%):	3.1	Total Delay Over All Lanes(pcuHr):	17.04		

Full Input Data And Results

Scenario 18: '2031 Base + 230dw PM' (FG18: '2031 Base +230dw PM', Plan 1: 'Network Control Plan 1')

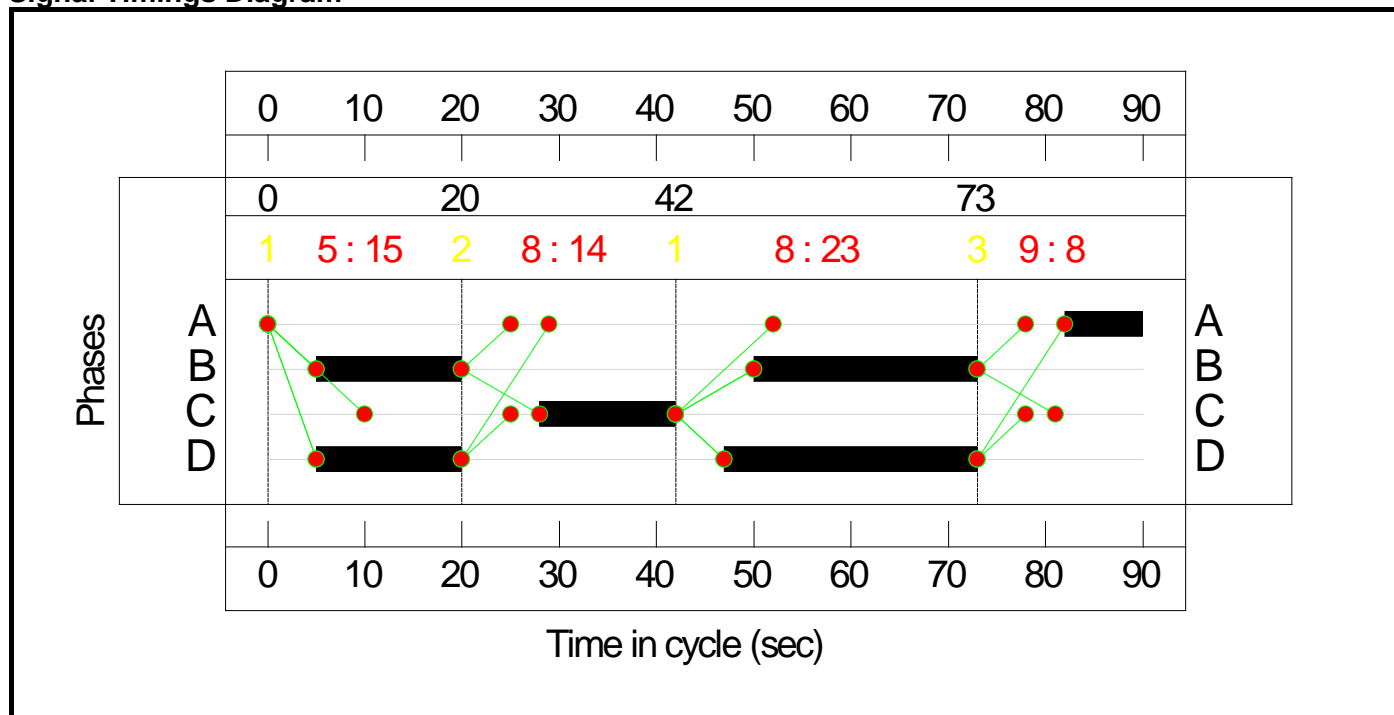
Stage Sequence Diagram



Stage Timings

Stage	1	2	1	3
Duration	15	14	23	8
Change Point	0	20	42	73

Signal Timings Diagram





Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	N/A	-	-		-	-	-	-	-	-	77.8%
<b>A4260/B4030</b>	-	-	N/A	-	-		-	-	-	-	-	-	77.8%
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	8	-	226	1741:1665	170+148	71.1 : 71.1%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		2	38	-	716	1901:1665	808+112	77.8 : 77.8%
3/1	B4030 (W) Ahead Right Left	U	N/A	N/A	C		1	14	-	221	1792	299	74.0%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		2	41	-	358	1874:1730	816+114	38.5 : 38.5%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	294	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	390	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	130	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	707	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	117	14	0	7.4	4.6	0.1	12.2	-	-	-	-
<b>A4260/B4030</b>	-	-	117	14	0	7.4	4.6	0.1	12.2	-	-	-	-
1/2+1/1	226	226	-	-	-	2.5	1.2	-	3.7	58.2	2.9	1.2	4.1
2/1+2/2	716	716	87	0	0	2.1	1.7	0.1	3.8	19.3	7.8	1.7	9.5
3/1	221	221	-	-	-	2.2	1.4	-	3.6	58.0	5.2	1.4	6.6
4/1+4/2	358	358	30	14	0	0.7	0.3	0.1	1.1	11.1	2.7	0.3	3.0
5/1	294	294	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	390	390	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	130	130	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	707	707	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

## Full Input Data And Results

C1	PRC for Signalled Lanes (%):	15.7	Total Delay for Signalled Lanes (pcuHr):	12.15	Cycle Time (s):	90
	PRC Over All Lanes (%):	15.7	Total Delay Over All Lanes(pcuHr):	12.15		

## APPENDIX H21

### A4260/SOMERTON ROAD/N ASTON ROAD MODELLING OUTPUT

## A4260/Somerton Road/N Aston Road – Junction Assessment Results

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
<b>2023 Base</b>						
N Aston Rd LT	0.06	0	8	0.08	0	9
N Aston Rd RT	0.09	0	11	0.06	0	12
A4260 (S) RT	0.07	0	8	0.05	0	6
Somerton Road LT	0.12	0	10	0.10	0	9
Somerton Road RT	0.18	0	18	0.16	0	14
A4260 (N) RT	0.08	0	6	0.09	0	7
<b>2026 Base</b>						
N Aston Rd LT	0.06	0	8	0.09	0	9
N Aston Rd RT	0.10	0	12	0.07	0	13
A4260 (S) RT	0.07	0	8	0.05	0	6
Somerton Road LT	0.13	0	11	0.11	0	9
Somerton Road RT	0.19	0	19	0.17	0	14
A4260 (N) RT	0.08	0	6	0.10	0	7
<b>2026 Base + 50 dwellings</b>						
N Aston Rd LT	0.06	0	8	0.09	0	9
N Aston Rd RT	0.10	0	12	0.07	0	13
A4260 (S) RT	0.07	0	8	0.05	0	6
Somerton Road LT	0.13	0	11	0.11	0	9
Somerton Road RT	0.19	0	19	0.17	0	14
A4260 (N) RT	0.08	0	6	0.10	0	7
<b>2027 Base</b>						
N Aston Rd LT	0.06	0	8	0.09	0	9
N Aston Rd RT	0.10	0	12	0.07	0	13
A4260 (S) RT	0.07	0	8	0.05	0	6
Somerton Road LT	0.13	0	11	0.11	0	9
Somerton Road RT	0.20	0	19	0.18	0	14
A4260 (N) RT	0.08	0	6	0.10	0	7
<b>2027 Base + 100 dwellings</b>						
N Aston Rd LT	0.06	0	8	0.09	0	9
N Aston Rd RT	0.10	0	12	0.07	0	13
A4260 (S) RT	0.07	0	8	0.05	0	6
Somerton Road LT	0.13	0	11	0.11	0	9
Somerton Road RT	0.20	0	19	0.18	0	14
A4260 (N) RT	0.08	0	6	0.10	0	7
<b>2028 Base</b>						
N Aston Rd LT	0.06	0	8	0.09	0	9
N Aston Rd RT	0.10	0	12	0.07	0	13
A4260 (S) RT	0.07	0	8	0.05	0	6
Somerton Road LT	0.13	0	11	0.11	0	9
Somerton Road RT	0.20	0	19	0.18	0	14
A4260 (N) RT	0.08	0	6	0.10	0	7

2028 Base + 150 dwellings						
N Aston Rd LT	0.07	0	8	0.09	0	9
N Aston Rd RT	0.10	0	12	0.07	0	13
A4260 (S) RT	0.07	0	8	0.05	0	6
Somerton Road LT	0.13	0	11	0.11	0	9
Somerton Road RT	0.20	0	19	0.18	0	15
A4260 (N) RT	0.08	0	6	0.10	0	7
2031 Base						
N Aston Rd LT	0.07	0	8	0.09	0	9
N Aston Rd RT	0.11	0	12	0.07	0	13
A4260 (S) RT	0.08	0	8	0.05	0	6
Somerton Road LT	0.14	0	11	0.11	0	9
Somerton Road RT	0.21	0	20	0.19	0	15
A4260 (N) RT	0.08	0	6	0.10	0	7
2031 Base + 230 dwellings						
N Aston Rd LT	0.07	0	8	0.10	0	10
N Aston Rd RT	0.11	0	13	0.07	0	13
A4260 (S) RT	0.08	0	8	0.05	0	7
Somerton Road LT	0.14	0	11	0.11	0	9
Somerton Road RT	0.21	0	20	0.19	0	15
A4260 (N) RT	0.08	0	7	0.10	0	7

RFC is Ratio of Flow to Capacity, Queue is mean max in PCUs, Delay is seconds per PCU.

Junctions 10
PICADY 10 - Priority Intersection Module
Version: 10.1.0.1820 © Copyright TRL Software Limited, 2023
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**Filename:** T19562 - A4260-Somerton Rd-N Aston Rd - Crossroads v3 12102023.j10

**Path:** C:\Users\NeilBateman\Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\2019\T19562 Heyford Park\Junction Assessments\Picady

**Report generation date:** 19/10/2023 10:22:15

- »2023 Surveys, AM
- »2023 Surveys, PM
- »2026 Base, AM
- »2026 Base, PM
- »2026 Base + 50dw, AM
- »2026 Base + 50dw, PM
- »2027 Base, AM
- »2027 Base, PM
- »2027 Base + 100dw, AM
- »2027 Base + 100dw, PM
- »2028 Base, AM
- »2028 Base, PM
- »2028 Base + 150dw, AM
- »2028 Base + 150dw, PM
- »2031 Base, AM
- »2031 Base, PM
- »2031 Base + 230dw, AM
- »2031 Base + 230dw, PM

**Summary of junction performance**

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
<b>2023 Surveys</b>										
Stream B-CD	D1	0.1	7.87	0.06	A	D2	0.1	8.92	0.08	A
Stream B-AD		0.1	11.49	0.09	B		0.1	12.08	0.06	B
Stream A-BCD		0.1	8.00	0.07	A		0.1	6.35	0.05	A
Stream D-AB		0.2	10.30	0.12	B		0.1	8.78	0.10	A
Stream D-BC		0.3	17.65	0.18	C		0.2	13.71	0.16	B
Stream C-ABD		0.1	6.32	0.08	A		0.1	6.95	0.09	A
<b>2026 Base</b>										
Stream B-CD	D3	0.1	8.02	0.06	A	D4	0.1	9.16	0.09	A
Stream B-AD		0.1	11.86	0.10	B		0.1	12.52	0.07	B
Stream A-BCD		0.1	8.14	0.07	A		0.1	6.40	0.05	A
Stream D-AB		0.2	10.67	0.13	B		0.1	9.03	0.11	A
Stream D-BC		0.3	18.47	0.19	C		0.2	14.22	0.17	B
Stream C-ABD		0.1	6.38	0.08	A		0.1	7.08	0.10	A
<b>2026 Base + 50dw</b>										

Stream B-CD	D5	0.1	7.98	0.06	A	D6	0.1	9.19	0.09	A
Stream B-AD		0.1	11.90	0.10	B		0.1	12.56	0.07	B
Stream A-BCD		0.1	8.15	0.07	A		0.1	6.41	0.05	A
Stream D-AB		0.2	10.69	0.13	B		0.1	9.03	0.11	A
Stream D-BC		0.3	18.51	0.19	C		0.2	14.26	0.17	B
Stream C-ABD		0.1	6.39	0.08	A		0.1	7.09	0.10	A
<b>2027 Base</b>										
Stream B-CD	D7	0.1	8.05	0.06	A	D8	0.1	9.22	0.09	A
Stream B-AD		0.1	11.96	0.10	B		0.1	12.63	0.07	B
Stream A-BCD		0.1	8.17	0.07	A		0.1	6.42	0.05	A
Stream D-AB		0.2	10.76	0.13	B		0.1	9.09	0.11	A
Stream D-BC		0.3	18.67	0.20	C		0.2	14.35	0.18	B
Stream C-ABD		0.1	6.40	0.08	A		0.1	7.11	0.10	A
<b>2027 Base + 100dw</b>										
Stream B-CD	D9	0.1	8.13	0.06	A	D10	0.1	9.24	0.09	A
Stream B-AD		0.1	12.05	0.10	B		0.1	12.67	0.07	B
Stream A-BCD		0.1	8.18	0.07	A		0.1	6.43	0.05	A
Stream D-AB		0.2	10.81	0.13	B		0.1	9.15	0.11	A
Stream D-BC		0.3	18.85	0.20	C		0.2	14.40	0.18	B
Stream C-ABD		0.1	6.42	0.08	A		0.1	7.11	0.10	A
<b>2028 Base</b>										
Stream B-CD	D11	0.1	8.09	0.06	A	D12	0.1	9.29	0.09	A
Stream B-AD		0.1	12.05	0.10	B		0.1	12.74	0.07	B
Stream A-BCD		0.1	8.21	0.07	A		0.1	6.43	0.05	A
Stream D-AB		0.2	10.85	0.13	B		0.1	9.16	0.11	A
Stream D-BC		0.3	18.88	0.20	C		0.2	14.48	0.18	B
Stream C-ABD		0.1	6.41	0.08	A		0.1	7.14	0.10	A
<b>2028 Base + 150dw</b>										
Stream B-CD	D13	0.1	8.17	0.07	A	D14	0.1	9.32	0.09	A
Stream B-AD		0.1	12.17	0.10	B		0.1	12.82	0.07	B
Stream A-BCD		0.1	8.22	0.07	A		0.1	6.45	0.05	A
Stream D-AB		0.2	10.88	0.13	B		0.1	9.24	0.11	A
Stream D-BC		0.3	19.07	0.20	C		0.2	14.62	0.18	B
Stream C-ABD		0.1	6.44	0.08	A		0.1	7.16	0.10	A
<b>2031 Base</b>										
Stream B-CD	D15	0.1	8.20	0.07	A	D16	0.1	9.48	0.09	A
Stream B-AD		0.1	12.35	0.11	B		0.1	13.09	0.07	B
Stream A-BCD		0.1	8.31	0.08	A		0.1	6.47	0.05	A
Stream D-AB		0.2	11.15	0.14	B		0.1	9.36	0.11	A
Stream D-BC		0.3	19.56	0.21	C		0.2	14.88	0.19	B
Stream C-ABD		0.1	6.46	0.08	A		0.1	7.24	0.10	A
<b>2031 Base + 230dw</b>										
Stream B-CD	D17	0.1	8.27	0.07	A	D18	0.1	9.57	0.10	A
Stream B-AD		0.1	12.56	0.11	B		0.1	13.27	0.07	B
Stream A-BCD		0.1	8.34	0.08	A		0.1	6.50	0.05	A
Stream D-AB		0.2	11.26	0.14	B		0.1	9.47	0.11	A
Stream D-BC		0.3	19.92	0.21	C		0.2	15.13	0.19	C
Stream C-ABD		0.1	6.50	0.08	A		0.1	7.27	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.

## File summary

### File Description

<b>Title</b>	A4260/Somerton Road/N Aston Road
<b>Location</b>	Heyford Park
<b>Site number</b>	
<b>Date</b>	19/10/2023
<b>Version</b>	
<b>Status</b>	(new file)
<b>Identifier</b>	
<b>Client</b>	Richborough Estates
<b>Jobnumber</b>	T19562
<b>Enumerator</b>	HUBTRANSPORTPLANNING\NeilBateman
<b>Description</b>	

### Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

### Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

### 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	2023 Surveys	AM	ONE HOUR	07:45	09:15	15	✓
D2	2023 Surveys	PM	ONE HOUR	16:45	18:15	15	✓
D3	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓
D4	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓
D5	2026 Base + 50dw	AM	ONE HOUR	07:45	09:15	15	✓
D6	2026 Base + 50dw	PM	ONE HOUR	16:45	18:15	15	✓
D7	2027 Base	AM	ONE HOUR	07:45	09:15	15	✓
D8	2027 Base	PM	ONE HOUR	16:45	18:15	15	✓
D9	2027 Base + 100dw	AM	ONE HOUR	07:45	09:15	15	✓
D10	2027 Base + 100dw	PM	ONE HOUR	16:45	18:15	15	✓
D11	2028 Base	AM	ONE HOUR	07:45	09:15	15	✓
D12	2028 Base	PM	ONE HOUR	16:45	18:15	15	✓
D13	2028 Base + 150dw	AM	ONE HOUR	07:45	09:15	15	✓
D14	2028 Base + 150dw	PM	ONE HOUR	16:45	18:15	15	✓
D15	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓
D16	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓
D17	2031 Base + 230dw	AM	ONE HOUR	07:45	09:15	15	✓
D18	2031 Base + 230dw	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



# 2023 Surveys, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A4260-Somerton Rd-N Aston Rd	Crossroads	Two-way	Two-way	Two-way	Two-way		2.14	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.14	A

## Arms

### Arms

Arm	Name	Description	Arm type
A	A4260 (S)		Major
B	N Aston Road		Minor
C	A4260 (N)		Major
D	Somerton Road		Minor

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	6.50		✓	3.00	175.0	✓	10.00
C	6.50		✓	3.00	250.0	✓	14.00

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	One lane plus flare	10.00	4.50	3.00	2.50	2.50		0.50	130	116
D	One lane plus flare	10.00	4.00	2.75	2.75	2.75		0.50	30	41

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	734	-	-	-	-	-	-	0.278	0.397	0.278	-	-	-
B-A	616	0.110	0.277	0.277	-	-	-	0.175	0.396	-	0.277	0.277	0.139
B-C	741	0.111	0.281	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	616	0.110	0.277	0.277	-	-	-	0.175	0.396	0.175	-	-	-
B-D, offside lane	616	0.110	0.277	0.277	-	-	-	0.175	0.396	0.175	-	-	-
C-B	781	0.296	0.296	0.423	-	-	-	-	-	-	-	-	-
D-A	780	-	-	-	-	-	-	0.296	-	0.117	-	-	-
D-B, nearside lane	609	0.173	0.173	0.392	-	-	-	0.274	0.274	0.109	-	-	-
D-B, offside lane	530	0.150	0.150	0.341	-	-	-	0.239	0.239	0.095	-	-	-
D-C	530	-	0.150	0.341	0.119	0.239	0.239	0.239	0.239	0.095	-	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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	2023 Surveys	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	358	100.000
B		ONE HOUR	✓	59	100.000
C		ONE HOUR	✓	643	100.000
D		ONE HOUR	✓	97	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	0	7	318	33
	B	24	0	21	14
	C	573	45	0	25
	D	34	28	35	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	17	8	10
	B	0	0	5	17
	C	8	7	0	9
	D	13	12	17	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.06	7.87	0.1	A	26	39
B-AD	0.09	11.49	0.1	B	28	42
A-BCD	0.07	8.00	0.1	A	30	45
A-B					6	10
A-C					292	438
D-AB	0.12	10.30	0.2	B	45	68
D-BC	0.18	17.65	0.3	C	44	65
C-ABD	0.08	6.32	0.1	A	41	62
C-D					23	34
C-A					526	789

# 2023 Surveys, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A4260-Somerton Rd-N Aston Rd	Crossroads	Two-way	Two-way	Two-way	Two-way		1.82	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.82	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
D2	2023 Surveys	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	634	100.000
B		ONE HOUR	✓	53	100.000
C		ONE HOUR	✓	356	100.000
D		ONE HOUR	✓	90	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	11	597	26
	B	8	0	23	22
	C	285	48	0	23
	D	22	36	32	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	10	5	4
	B	0	0	0	10
	C	4	0	0	5
	D	0	6	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.08	8.92	0.1	A	31	47
B-AD	0.06	12.08	0.1	B	17	26
A-BCD	0.05	6.35	0.1	A	24	36
A-B					10	15
A-C					548	822
D-AB	0.10	8.78	0.1	A	38	57
D-BC	0.16	13.71	0.2	B	44	67
C-ABD	0.09	6.95	0.1	A	44	66
C-D					21	32
C-A					262	392

# 2026 Base, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A4260-Somerton Rd-N Aston Rd	Crossroads	Two-way	Two-way	Two-way	Two-way		2.21	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.21	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
D3	2026 Base	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	370	100.000
B		ONE HOUR	✓	61	100.000
C		ONE HOUR	✓	666	100.000
D		ONE HOUR	✓	100	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	7	329	34
	B	25	0	22	14
	C	593	47	0	26
	D	35	29	36	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	17	8	10
	B	0	0	5	17
	C	8	7	0	9
	D	13	12	17	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.06	8.02	0.1	A	27	41
B-AD	0.10	11.86	0.1	B	29	44
A-BCD	0.07	8.14	0.1	A	31	47
A-B					6	10
A-C					302	453
D-AB	0.13	10.67	0.2	B	47	71
D-BC	0.19	18.47	0.3	C	45	68
C-ABD	0.08	6.38	0.1	A	43	64
C-D					24	36
C-A					544	816

# 2026 Base, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A4260-Somerton Rd-N Aston Rd	Crossroads	Two-way	Two-way	Two-way	Two-way		1.87	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.87	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
D4	2026 Base	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	657	100.000
B		ONE HOUR	✓	55	100.000
C		ONE HOUR	✓	369	100.000
D		ONE HOUR	✓	93	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	11	619	27	
	B	8	0	24	23	
	C	295	50	0	24	
	D	23	37	33	0	

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00



**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	10	5	4
	B	0	0	0	10
	C	4	0	0	5
	D	0	6	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.09	9.16	0.1	A	33	49
B-AD	0.07	12.52	0.1	B	18	27
A-BCD	0.05	6.40	0.1	A	25	37
A-B					10	15
A-C					568	852
D-AB	0.11	9.03	0.1	A	40	59
D-BC	0.17	14.22	0.2	B	46	69
C-ABD	0.10	7.08	0.1	A	46	68
C-D					22	33
C-A					271	407

# 2026 Base + 50dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A4260-Somerton Rd-N Aston Rd	Crossroads	Two-way	Two-way	Two-way	Two-way		2.20	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.20	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
D5	2026 Base + 50dw	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	373	100.000
B		ONE HOUR	✓	61	100.000
C		ONE HOUR	✓	667	100.000
D		ONE HOUR	✓	100	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	7	332	34
	B	25	0	22	14
	C	594	47	0	26
	D	35	29	36	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	17	8	10
	B	0	0	5	17
	C	8	7	0	9
	D	13	12	17	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.06	7.98	0.1	A	27	41
B-AD	0.10	11.90	0.1	B	29	43
A-BCD	0.07	8.15	0.1	A	31	47
A-B					6	10
A-C					305	457
D-AB	0.13	10.69	0.2	B	47	70
D-BC	0.19	18.51	0.3	C	45	67
C-ABD	0.08	6.39	0.1	A	43	65
C-D					24	36
C-A					545	818

# 2026 Base + 50dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A4260-Somerton Rd-N Aston Rd	Crossroads	Two-way	Two-way	Two-way	Two-way		1.87	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.87	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
D6	2026 Base + 50dw	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	658	100.000
B		ONE HOUR	✓	55	100.000
C		ONE HOUR	✓	372	100.000
D		ONE HOUR	✓	93	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	11	620	27	
	B	8	0	24	23	
	C	298	50	0	24	
	D	23	37	33	0	

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	10	5	4
	B	0	0	0	10
	C	4	0	0	5
	D	0	6	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.09	9.19	0.1	A	33	49
B-AD	0.07	12.56	0.1	B	18	26
A-BCD	0.05	6.41	0.1	A	25	37
A-B					10	15
A-C					569	853
D-AB	0.11	9.03	0.1	A	40	60
D-BC	0.17	14.26	0.2	B	46	69
C-ABD	0.10	7.09	0.1	A	46	69
C-D					22	33
C-A					273	410

# 2027 Base, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A4260-Somerton Rd-N Aston Rd	Crossroads	Two-way	Two-way	Two-way	Two-way		2.22	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.22	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
D7	2027 Base	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	373	100.000
B		ONE HOUR	✓	62	100.000
C		ONE HOUR	✓	671	100.000
D		ONE HOUR	✓	101	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	7	332	34
	B	25	0	22	15
	C	598	47	0	26
	D	35	29	37	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	17	8	10
	B	0	0	5	17
	C	8	7	0	9
	D	13	12	17	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.06	8.05	0.1	A	27	41
B-AD	0.10	11.96	0.1	B	29	44
A-BCD	0.07	8.17	0.1	A	32	47
A-B					6	10
A-C					304	457
D-AB	0.13	10.76	0.2	B	47	71
D-BC	0.20	18.67	0.3	C	45	68
C-ABD	0.08	6.40	0.1	A	43	65
C-D					24	36
C-A					549	823

# 2027 Base, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A4260-Somerton Rd-N Aston Rd	Crossroads	Two-way	Two-way	Two-way	Two-way		1.88	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.88	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
D8	2027 Base	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	662	100.000
B		ONE HOUR	✓	55	100.000
C		ONE HOUR	✓	372	100.000
D		ONE HOUR	✓	94	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	11	624	27
	B	8	0	24	23
	C	298	50	0	24
	D	23	38	33	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00



**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	10	5	4
	B	0	0	0	10
	C	4	0	0	5
	D	0	6	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.09	9.22	0.1	A	33	49
B-AD	0.07	12.63	0.1	B	18	27
A-BCD	0.05	6.42	0.1	A	25	37
A-B					10	15
A-C					573	859
D-AB	0.11	9.09	0.1	A	40	60
D-BC	0.18	14.35	0.2	B	46	69
C-ABD	0.10	7.11	0.1	A	46	69
C-D					22	33
C-A					273	410

# 2027 Base + 100dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A4260-Somerton Rd-N Aston Rd	Crossroads	Two-way	Two-way	Two-way	Two-way		2.22	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.22	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	2027 Base + 100dw	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	379	100.000
B		ONE HOUR	✓	62	100.000
C		ONE HOUR	✓	673	100.000
D		ONE HOUR	✓	101	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	7	338	34
	B	25	0	22	15
	C	600	47	0	26
	D	35	29	37	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	17	8	10
	B	0	0	5	17
	C	8	7	0	9
	D	13	12	17	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.06	8.13	0.1	A	28	41
B-AD	0.10	12.05	0.1	B	29	44
A-BCD	0.07	8.18	0.1	A	31	47
A-B					6	10
A-C					310	465
D-AB	0.13	10.81	0.2	B	47	70
D-BC	0.20	18.85	0.3	C	46	69
C-ABD	0.08	6.42	0.1	A	43	65
C-D					24	36
C-A					551	826

# 2027 Base + 100dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A4260-Somerton Rd-N Aston Rd	Crossroads	Two-way	Two-way	Two-way	Two-way		1.87	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.87	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	2027 Base + 100dw	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	664	100.000
B		ONE HOUR	✓	55	100.000
C		ONE HOUR	✓	376	100.000
D		ONE HOUR	✓	94	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	11	626	27	
	B	8	0	24	23	
	C	302	50	0	24	
	D	23	38	33	0	

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	10	5	4
	B	0	0	0	10
	C	4	0	0	5
	D	0	6	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.09	9.24	0.1	A	33	49
B-AD	0.07	12.67	0.1	B	18	26
A-BCD	0.05	6.43	0.1	A	25	37
A-B					10	15
A-C					574	862
D-AB	0.11	9.15	0.1	A	40	60
D-BC	0.18	14.40	0.2	B	46	69
C-ABD	0.10	7.11	0.1	A	46	69
C-D					22	33
C-A					277	416

# 2028 Base, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A4260-Somerton Rd-N Aston Rd	Crossroads	Two-way	Two-way	Two-way	Two-way		2.24	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.24	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	2028 Base	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	376	100.000
B		ONE HOUR	✓	62	100.000
C		ONE HOUR	✓	676	100.000
D		ONE HOUR	✓	102	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	7	334	35
	B	25	0	22	15
	C	602	47	0	26
	D	36	29	37	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	17	8	10
	B	0	0	5	17
	C	8	7	0	9
	D	13	12	17	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.06	8.09	0.1	A	27	41
B-AD	0.10	12.05	0.1	B	29	44
A-BCD	0.07	8.21	0.1	A	32	48
A-B					6	10
A-C					307	460
D-AB	0.13	10.85	0.2	B	48	72
D-BC	0.20	18.88	0.3	C	46	69
C-ABD	0.08	6.41	0.1	A	43	65
C-D					24	36
C-A					553	829

# 2028 Base, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A4260-Somerton Rd-N Aston Rd	Crossroads	Two-way	Two-way	Two-way	Two-way		1.90	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.90	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	2028 Base	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	668	100.000
B		ONE HOUR	✓	56	100.000
C		ONE HOUR	✓	375	100.000
D		ONE HOUR	✓	95	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	12	629	27	
	B	8	0	24	23	
	C	300	51	0	24	
	D	23	38	34	0	

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00



**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	10	5	4
	B	0	0	0	10
	C	4	0	0	5
	D	0	6	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.09	9.29	0.1	A	33	50
B-AD	0.07	12.74	0.1	B	18	27
A-BCD	0.05	6.43	0.1	A	25	38
A-B					11	17
A-C					577	866
D-AB	0.11	9.16	0.1	A	40	61
D-BC	0.18	14.48	0.2	B	47	70
C-ABD	0.10	7.14	0.1	A	46	70
C-D					22	33
C-A					276	413

# 2028 Base + 150dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A4260-Somerton Rd-N Aston Rd	Crossroads	Two-way	Two-way	Two-way	Two-way		2.24	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.24	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
D13	2028 Base + 150dw	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	385	100.000
B		ONE HOUR	✓	62	100.000
C		ONE HOUR	✓	678	100.000
D		ONE HOUR	✓	102	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	7	343	35
	B	25	0	22	15
	C	605	47	0	26
	D	36	29	37	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	17	8	10
	B	0	0	5	17
	C	8	7	0	9
	D	13	12	17	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.07	8.17	0.1	A	28	41
B-AD	0.10	12.17	0.1	B	29	44
A-BCD	0.07	8.22	0.1	A	32	48
A-B					6	10
A-C					315	472
D-AB	0.13	10.88	0.2	B	48	72
D-BC	0.20	19.07	0.3	C	46	69
C-ABD	0.08	6.44	0.1	A	43	65
C-D					24	36
C-A					555	833

# 2028 Base + 150dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A4260-Somerton Rd-N Aston Rd	Crossroads	Two-way	Two-way	Two-way	Two-way		1.89	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.89	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
D14	2028 Base + 150dw	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	671	100.000
B		ONE HOUR	✓	55	100.000
C		ONE HOUR	✓	382	100.000
D		ONE HOUR	✓	95	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	12	632	27	
	B	8	0	24	23	
	C	307	51	0	24	
	D	23	38	34	0	

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	10	5	4
	B	0	0	0	10
	C	4	0	0	5
	D	0	6	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.09	9.32	0.1	A	33	49
B-AD	0.07	12.82	0.1	B	18	26
A-BCD	0.05	6.45	0.1	A	25	37
A-B					11	17
A-C					580	870
D-AB	0.11	9.24	0.1	A	40	60
D-BC	0.18	14.62	0.2	B	47	70
C-ABD	0.10	7.16	0.1	A	47	70
C-D					22	33
C-A					282	423

# 2031 Base, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A4260-Somerton Rd-N Aston Rd	Crossroads	Two-way	Two-way	Two-way	Two-way		2.29	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.29	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
D15	2031 Base	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	386	100.000
B		ONE HOUR	✓	64	100.000
C		ONE HOUR	✓	692	100.000
D		ONE HOUR	✓	104	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	8	342	36
	B	26	0	23	15
	C	617	48	0	27
	D	37	30	38	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	17	8	10
	B	0	0	5	17
	C	8	7	0	9
	D	13	12	17	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.07	8.20	0.1	A	28	42
B-AD	0.11	12.35	0.1	B	30	45
A-BCD	0.08	8.31	0.1	A	33	49
A-B					7	11
A-C					314	471
D-AB	0.14	11.15	0.2	B	49	74
D-BC	0.21	19.56	0.3	C	47	70
C-ABD	0.08	6.46	0.1	A	44	67
C-D					25	37
C-A					566	849

# 2031 Base, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A4260-Somerton Rd-N Aston Rd	Crossroads	Two-way	Two-way	Two-way	Two-way		1.94	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.94	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
D16	2031 Base	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	685	100.000
B		ONE HOUR	✓	57	100.000
C		ONE HOUR	✓	384	100.000
D		ONE HOUR	✓	97	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	12	645	28	
	B	9	0	25	24	
	C	308	52	0	25	
	D	24	39	35	0	

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00



**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	10	5	4
	B	0	0	0	10
	C	4	0	0	5
	D	0	6	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.09	9.48	0.1	A	34	51
B-AD	0.07	13.09	0.1	B	19	28
A-BCD	0.05	6.47	0.1	A	26	39
A-B					11	17
A-C					591	887
D-AB	0.11	9.36	0.1	A	41	62
D-BC	0.19	14.88	0.2	B	48	72
C-ABD	0.10	7.24	0.1	A	48	71
C-D					23	34
C-A					282	424

# 2031 Base + 230dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A4260-Somerton Rd-N Aston Rd	Crossroads	Two-way	Two-way	Two-way	Two-way		2.30	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.30	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
D17	2031 Base + 230dw	AM	ONE HOUR	07:45	09:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	400	100.000
B		ONE HOUR	✓	64	100.000
C		ONE HOUR	✓	696	100.000
D		ONE HOUR	✓	105	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	8	356	36
	B	26	0	23	15
	C	621	48	0	27
	D	37	30	38	0

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	17	8	10
	B	0	0	5	17
	C	8	7	0	9
	D	13	12	17	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.07	8.27	0.1	A	28	43
B-AD	0.11	12.56	0.1	B	30	45
A-BCD	0.08	8.34	0.1	A	33	50
A-B					7	11
A-C					327	490
D-AB	0.14	11.26	0.2	B	49	74
D-BC	0.21	19.92	0.3	C	47	70
C-ABD	0.08	6.50	0.1	A	44	66
C-D					25	37
C-A					570	855

# 2031 Base + 230dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A4260-Somerton Rd-N Aston Rd	Crossroads	Two-way	Two-way	Two-way	Two-way		1.95	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.95	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
D18	2031 Base + 230dw	PM	ONE HOUR	16:45	18:15	15	✓

### Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	690	100.000
B		ONE HOUR	✓	58	100.000
C		ONE HOUR	✓	394	100.000
D		ONE HOUR	✓	98	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To				
		A	B	C	D	
From	A	0	12	650	28	
	B	9	0	25	24	
	C	317	52	0	25	
	D	24	39	35	0	

## Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

**Heavy Vehicle %**

		To			
		A	B	C	D
From	A	0	10	5	4
	B	0	0	0	10
	C	4	0	0	5
	D	0	6	0	0

## Results

**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.10	9.57	0.1	A	34	51
B-AD	0.07	13.27	0.1	B	19	28
A-BCD	0.05	6.50	0.1	A	26	39
A-B					11	17
A-C					596	895
D-AB	0.11	9.47	0.1	A	42	63
D-BC	0.19	15.13	0.2	C	48	72
C-ABD	0.10	7.27	0.1	A	48	72
C-D					23	34
C-A					291	436

## APPENDIX H22

### A43/M40 SLIP ROAD MODELLING OUTPUT

## A43/M40 Slip Road Roundabout – Junction Assessment Results

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
<b>2023 Base</b>						
A43 (N)	0.96	17	32	0.76	3	7
A43 (S)	0.02	0	0	0.02	0	0
M40 Off Slip	0.82	5	17	1.09	51	167
<b>2026 Base</b>						
A43 (N)	1.01	40	66	0.79	4	8
A43 (S)	0.02	0	0	0.02	0	0
M40 Off Slip	0.89	8	28	1.24	107	337
<b>2026 Base + 50 dwellings</b>						
A43 (N)	1.01	40	67	0.79	4	8
A43 (S)	0.02	0	0	0.02	0	0
M40 Off Slip	0.89	9	29	1.24	109	341
<b>2027 Base</b>						
A43 (N)	1.02	45	73	0.80	4	8
A43 (S)	0.02	0	0	0.02	0	0
M40 Off Slip	0.91	10	32	1.26	115	363
<b>2027 Base + 100 dwellings</b>						
A43 (N)	1.02	47	75	0.80	4	8
A43 (S)	0.02	0	0	0.02	0	0
M40 Off Slip	0.91	10	32	1.27	119	374
<b>2028 Base</b>						
A43 (N)	1.03	51	80	0.80	4	8
A43 (S)	0.02	0	0	0.02	0	0
M40 Off Slip	0.91	10	33	1.29	125	393
<b>2028 Base + 150 dwellings</b>						
A43 (N)	1.03	53	83	0.81	4	9
A43 (S)	0.02	0	0	0.02	0	0
M40 Off Slip	0.92	11	36	1.31	131	413
<b>2031 Base</b>						
A43 (N)	1.05	70	105	0.82	4	9
A43 (S)	0.02	0	0	0.02	0	0
M40 Off Slip	0.94	14	45	1.36	151	481
<b>2031 Base + 230 dwellings</b>						
A43 (N)	1.06	74	110	0.82	5	9
A43 (S)	0.02	0	0	0.02	0	0
M40 Off Slip	0.96	16	52	1.39	160	509

RFC is Ratio of Flow to Capacity, Queue is mean max in PCUs, Delay is seconds per PCU.

# Junctions 10

## ARCADY 10 - Roundabout Module

Version: 10.1.0.1820

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**Path:** C:\Users\NeilBateman\Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\2019\T19562 Heyford Park\Junction Assessments\Arcady

**Report generation date:** 13/10/2023 12:58:29

- 
- »2023, AM
  - »2023, PM
  - »2026, AM
  - »2026, PM
  - »2026 + 50dw, AM
  - »2026 + 50dw, PM
  - »2027, AM
  - »2027, PM
  - »2027 + 100dw, AM
  - »2027 + 100dw, PM
  - »2028, AM
  - »2028, PM
  - »2028 + 150dw, AM
  - »2028 + 150dw, PM
  - »2031, AM
  - »2031, PM
  - »2031 + 230dw, AM
  - »2031 + 230dw, PM



### Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
<b>2023</b>										
Arm 1	D1	16.5	31.90	0.96	D	D2	3.2	7.11	0.76	A
Arm 2		0.0	0.04	0.02	A		0.0	0.04	0.02	A
Arm 3		5.0	17.33	0.82	C		51.0	167.02	1.09	F
<b>2026</b>										
Arm 1	D3	39.9	66.39	1.01	F	D4	3.9	8.14	0.79	A
Arm 2		0.0	0.04	0.02	A		0.0	0.04	0.02	A
Arm 3		8.4	28.05	0.89	D		107.4	337.11	1.24	F
<b>2026 + 50dw</b>										
Arm 1	D5	40.4	67.07	1.01	F	D6	3.9	8.20	0.79	A
Arm 2		0.0	0.04	0.02	A		0.0	0.04	0.02	A
Arm 3		8.6	28.66	0.89	D		108.8	341.23	1.24	F
<b>2027</b>										
Arm 1	D7	44.8	72.83	1.02	F	D8	4.0	8.31	0.80	A
Arm 2		0.0	0.04	0.02	A		0.0	0.04	0.02	A
Arm 3		9.1	30.52	0.90	D		115.3	362.70	1.26	F
<b>2027 + 100dw</b>										
Arm 1	D9	46.5	75.02	1.02	F	D10	4.0	8.44	0.80	A
Arm 2		0.0	0.04	0.02	A		0.0	0.04	0.02	A
Arm 3		9.6	32.17	0.91	D		119.0	373.75	1.27	F
<b>2028</b>										
Arm 1	D11	50.5	80.15	1.03	F	D12	4.1	8.48	0.80	A
Arm 2		0.0	0.04	0.02	A		0.0	0.04	0.02	A
Arm 3		10.0	33.36	0.91	D		124.8	393.11	1.29	F
<b>2028 + 150dw</b>										
Arm 1	D13	52.8	83.20	1.03	F	D14	4.2	8.68	0.81	A
Arm 2		0.0	0.04	0.02	A		0.0	0.04	0.02	A
Arm 3		10.9	36.15	0.92	E		131.2	413.27	1.31	F
<b>2031</b>										
Arm 1	D15	70.1	105.07	1.05	F	D16	4.4	9.08	0.82	A
Arm 2		0.0	0.04	0.02	A		0.0	0.04	0.02	A
Arm 3		14.0	45.39	0.94	E		151.1	480.68	1.36	F
<b>2031 + 230dw</b>										
Arm 1	D17	73.7	109.64	1.06	F	D18	4.7	9.44	0.82	A
Arm 2		0.0	0.04	0.02	A		0.0	0.04	0.02	A
Arm 3		16.2	51.78	0.96	F		160.1	508.89	1.39	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.

## File summary

### File Description

Title	
Location	
Site number	
Date	09/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\NeilBateman
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	PCU	PCU	perHour	s	-Min	perMin

## Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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	2023	AM	ONE HOUR	08:00	09:30	15
D2	2023	PM	ONE HOUR	17:00	18:30	15
D3	2026	AM	ONE HOUR	08:00	09:30	15
D4	2026	PM	ONE HOUR	17:00	18:30	15
D5	2026 + 50dw	AM	ONE HOUR	08:00	09:30	15
D6	2026 + 50dw	PM	ONE HOUR	17:00	18:30	15
D7	2027	AM	ONE HOUR	08:00	09:30	15
D8	2027	PM	ONE HOUR	17:00	18:30	15
D9	2027 + 100dw	AM	ONE HOUR	08:00	09:30	15
D10	2027 + 100dw	PM	ONE HOUR	17:00	18:30	15
D11	2028	AM	ONE HOUR	08:00	09:30	15
D12	2028	PM	ONE HOUR	17:00	18:30	15
D13	2028 + 150dw	AM	ONE HOUR	08:00	09:30	15
D14	2028 + 150dw	PM	ONE HOUR	17:00	18:30	15
D15	2031	AM	ONE HOUR	08:00	09:30	15
D16	2031	PM	ONE HOUR	17:00	18:30	15
D17	2031 + 230dw	AM	ONE HOUR	08:00	09:30	15
D18	2031 + 230dw	PM	ONE HOUR	17:00	18:30	15

## Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

# 2023, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	17.77	C

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	17.77	C

## Arms

### Arms

Arm	Name	Description	No give-way line
1	A43 (N)		
2	A43 (S)		✓
3	M40 off slip		

### 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)	Entry only	Exit only
1	7.56	8.66	20.0	14.8	70.2	38.4		
2	3.00	3.00	0.0	3.0	13.0	0.0		
3	3.75	9.38	40.0	20.8	70.0	41.3	✓	

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.612	2455
2	0.000	99999
3	0.579	2226

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	2023	AM	ONE HOUR	08:00	09:30	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1796	100.000
2		✓	1407	100.000
3		✓	986	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		1	2	3
From	1	0	1796	0
	2	1407	0	0
	3	412	574	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		1	2	3
From	1	0	6	0
	2	6	0	0
	3	16	20	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.96	31.90	16.5	D
2	0.02	0.04	0.0	A
3	0.82	17.33	5.0	C

### Main Results for each time segment

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1352	430	2192	0.617	1345	1.7	4.473	A
2	1059	0	99999	0.011	1059	0.0	0.038	A
3	742	1059	1612	0.460	738	1.0	4.851	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1615	514	2140	0.754	1609	3.2	7.098	A
2	1265	0	99999	0.013	1265	0.0	0.038	A
3	886	1265	1493	0.594	884	1.7	6.956	A

**08:30 - 08:45**

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1977	625	2073	0.954	1935	13.7	22.861	C
2	1549	0	99999	0.015	1549	0.0	0.038	A
3	1086	1549	1328	0.817	1073	4.8	15.962	C

**08:45 - 09:00**

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1977	631	2069	0.956	1966	16.5	31.903	D
2	1549	0	99999	0.015	1549	0.0	0.038	A
3	1086	1549	1328	0.817	1085	5.0	17.327	C

**09:00 - 09:15**

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1615	524	2135	0.756	1667	3.4	9.032	A
2	1265	0	99999	0.013	1265	0.0	0.039	A
3	886	1265	1493	0.594	899	1.8	7.327	A

**09:15 - 09:30**

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1352	434	2190	0.618	1359	1.7	4.630	A
2	1059	0	99999	0.011	1059	0.0	0.039	A
3	742	1059	1612	0.460	745	1.0	4.931	A

# 2023, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	36.19	E

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	36.19	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)
D2	2023	PM	ONE HOUR	17:00	18:30	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1504	100.000
2		✓	2058	100.000
3		✓	903	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		1	2	3
From	1	0	1504	0
	2	2058	0	0
	3	450	453	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		1	2	3
From	1	0	3	0
	2	5	0	0
	3	13	10	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.76	7.11	3.2	A
2	0.02	0.04	0.0	A
3	1.09	167.02	51.0	F

### Main Results for each time segment

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1132	339	2248	0.504	1128	1.0	3.299	A
2	1549	0	99999	0.015	1549	0.0	0.038	A
3	680	1549	1328	0.512	675	1.2	6.104	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1352	404	2208	0.612	1350	1.6	4.311	A
2	1850	0	99999	0.019	1850	0.0	0.038	A
3	812	1850	1154	0.703	806	2.5	11.363	B

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1656	445	2183	0.759	1650	3.1	6.875	A
2	2266	0	99999	0.023	2266	0.0	0.038	A
3	994	2266	913	1.089	887	29.4	79.324	F

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1656	455	2176	0.761	1656	3.2	7.108	A
2	2266	0	99999	0.023	2266	0.0	0.038	A
3	994	2266	913	1.089	908	51.0	167.020	F

#### 18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1352	504	2147	0.630	1358	1.8	4.733	A
2	1850	0	99999	0.019	1850	0.0	0.038	A
3	812	1850	1154	0.703	1004	2.9	56.819	F

#### 18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1132	344	2244	0.505	1135	1.1	3.350	A
2	1549	0	99999	0.015	1549	0.0	0.039	A
3	680	1549	1328	0.512	687	1.2	6.318	A

# 2026, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	35.08	E

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	35.08	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	2026	AM	ONE HOUR	08:00	09:30	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1887	100.000
2		✓	1478	100.000
3		✓	1036	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		1	2	3
From	1	0	1887	0
	2	1478	0	0
	3	433	603	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		1	2	3
From	1	0	6	0
	2	6	0	0
	3	16	20	0



## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.01	66.39	39.9	F
2	0.02	0.04	0.0	A
3	0.89	28.05	8.4	D

### Main Results for each time segment

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1421	451	2179	0.652	1413	2.0	4.933	A
2	1113	0	99999	0.011	1113	0.0	0.038	A
3	780	1113	1581	0.493	775	1.1	5.256	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1696	540	2125	0.798	1688	4.0	8.582	A
2	1329	0	99999	0.013	1329	0.0	0.038	A
3	931	1329	1456	0.640	928	2.1	8.005	A

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2078	651	2057	1.010	1989	26.2	36.396	E
2	1627	0	99999	0.016	1627	0.0	0.038	A
3	1141	1627	1283	0.889	1118	7.6	23.286	C

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2078	662	2050	1.014	2023	39.9	66.391	F
2	1627	0	99999	0.016	1627	0.0	0.038	A
3	1141	1627	1283	0.889	1138	8.4	28.052	D

#### 09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1696	557	2115	0.802	1837	4.6	20.435	C
2	1329	0	99999	0.013	1329	0.0	0.039	A
3	931	1329	1456	0.640	956	2.2	8.927	A

#### 09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1421	456	2176	0.653	1431	2.0	5.192	A
2	1113	0	99999	0.011	1113	0.0	0.039	A
3	780	1113	1581	0.493	784	1.2	5.369	A

# 2026, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	71.00	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	71.00	F

## 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	2026	PM	ONE HOUR	17:00	18:30	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1582	100.000
2		✓	2165	100.000
3		✓	951	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		1	2	3
From	1	0	1582	0
	2	2165	0	0
	3	474	477	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		1	2	3
From	1	0	3	0
	2	5	0	0
	3	13	10	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.79	8.14	3.9	A
2	0.02	0.04	0.0	A
3	1.24	337.11	107.4	F

### Main Results for each time segment

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1191	356	2237	0.532	1186	1.2	3.513	A
2	1630	0	99999	0.016	1630	0.0	0.038	A
3	716	1630	1282	0.559	710	1.4	6.961	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1422	424	2195	0.648	1419	1.9	4.760	A
2	1946	0	99999	0.019	1946	0.0	0.038	A
3	855	1946	1098	0.778	846	3.6	15.385	C

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1742	419	2199	0.792	1734	3.8	7.853	A
2	2384	0	99999	0.024	2384	0.0	0.038	A
3	1047	2384	845	1.239	835	56.6	142.931	F

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1742	423	2196	0.793	1741	3.9	8.140	A
2	2384	0	99999	0.024	2384	0.0	0.038	A
3	1047	2384	845	1.239	844	107.4	337.106	F

#### 18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1422	545	2121	0.670	1429	2.1	5.407	A
2	1946	0	99999	0.019	1946	0.0	0.039	A
3	855	1946	1098	0.778	1087	49.4	259.427	F

#### 18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1191	455	2177	0.547	1195	1.3	3.788	A
2	1630	0	99999	0.016	1630	0.0	0.038	A
3	716	1630	1281	0.559	908	1.4	18.681	C

# 2026 + 50dw, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	35.49	E

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	35.49	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	2026 + 50dw	AM	ONE HOUR	08:00	09:30	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1888	100.000
2		✓	1482	100.000
3		✓	1037	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		1	2	3
From	1	0	1888	0
	2	1482	0	0
	3	433	604	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		1	2	3
From	1	0	6	0
	2	6	0	0
	3	16	20	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.01	67.07	40.4	F
2	0.02	0.04	0.0	A
3	0.89	28.66	8.6	D

### Main Results for each time segment

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1421	452	2178	0.652	1414	2.0	4.939	A
2	1116	0	99999	0.011	1116	0.0	0.038	A
3	781	1116	1579	0.494	776	1.1	5.273	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1697	541	2124	0.799	1689	4.0	8.607	A
2	1332	0	99999	0.013	1332	0.0	0.038	A
3	932	1332	1454	0.641	929	2.1	8.049	A

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2079	652	2056	1.011	1989	26.4	36.630	E
2	1632	0	99999	0.016	1632	0.0	0.038	A
3	1142	1632	1280	0.892	1119	7.8	23.654	C

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2079	663	2049	1.014	2023	40.4	67.066	F
2	1632	0	99999	0.016	1632	0.0	0.038	A
3	1142	1632	1280	0.892	1139	8.6	28.662	D

#### 09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1697	558	2114	0.803	1840	4.6	20.861	C
2	1332	0	99999	0.013	1332	0.0	0.039	A
3	932	1332	1454	0.641	958	2.2	9.005	A

#### 09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1421	457	2175	0.653	1432	2.0	5.202	A
2	1116	0	99999	0.011	1116	0.0	0.038	A
3	781	1116	1579	0.494	785	1.2	5.387	A

# 2026 + 50dw, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	71.91	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	71.91	F

## 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	2026 + 50dw	PM	ONE HOUR	17:00	18:30	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1585	100.000
2		✓	2166	100.000
3		✓	953	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		1	2	3
From	1	0	1585	0
	2	2166	0	0
	3	474	479	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		1	2	3
From	1	0	3	0
	2	5	0	0
	3	13	10	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.79	8.20	3.9	A
2	0.02	0.04	0.0	A
3	1.24	341.23	108.8	F

### Main Results for each time segment

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1193	358	2236	0.534	1189	1.2	3.523	A
2	1631	0	99999	0.016	1631	0.0	0.038	A
3	717	1631	1281	0.560	712	1.4	6.985	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1425	426	2194	0.649	1422	1.9	4.784	A
2	1947	0	99999	0.019	1947	0.0	0.038	A
3	857	1947	1098	0.780	848	3.7	15.510	C

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1745	420	2198	0.794	1737	3.8	7.918	A
2	2385	0	99999	0.024	2385	0.0	0.038	A
3	1049	2385	844	1.243	835	57.3	144.547	F

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1745	424	2196	0.795	1745	3.9	8.204	A
2	2385	0	99999	0.024	2385	0.0	0.038	A
3	1049	2385	844	1.243	843	108.8	341.225	F

#### 18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1425	546	2121	0.672	1432	2.1	5.434	A
2	1947	0	99999	0.019	1947	0.0	0.038	A
3	857	1947	1098	0.780	1087	51.3	264.756	F

#### 18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1193	461	2173	0.549	1197	1.3	3.810	A
2	1631	0	99999	0.016	1631	0.0	0.038	A
3	717	1631	1281	0.560	917	1.5	19.969	C

# 2027, AM

### Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	38.42	E

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	38.42	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)
D7	2027	AM	ONE HOUR	08:00	09:30	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1899	100.000
2		✓	1488	100.000
3		✓	1043	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		1	2	3
From	1	0	1899	0
	2	1488	0	0
	3	436	607	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		1	2	3
From	1	0	6	0
	2	6	0	0
	3	16	20	0



## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.02	72.83	44.8	F
2	0.02	0.04	0.0	A
3	0.90	30.52	9.1	D

### Main Results for each time segment

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1430	454	2177	0.657	1422	2.0	5.001	A
2	1120	0	99999	0.011	1120	0.0	0.038	A
3	785	1120	1577	0.498	781	1.2	5.318	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1707	543	2123	0.804	1699	4.2	8.822	A
2	1338	0	99999	0.013	1338	0.0	0.038	A
3	938	1338	1451	0.646	934	2.1	8.178	A

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2091	654	2055	1.018	1994	28.5	38.651	E
2	1638	0	99999	0.016	1638	0.0	0.038	A
3	1148	1638	1277	0.900	1124	8.2	24.740	C

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2091	666	2047	1.021	2026	44.8	72.831	F
2	1638	0	99999	0.016	1638	0.0	0.038	A
3	1148	1638	1277	0.900	1145	9.1	30.520	D

#### 09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1707	562	2111	0.809	1867	4.8	24.812	C
2	1338	0	99999	0.013	1338	0.0	0.039	A
3	938	1338	1451	0.646	965	2.2	9.249	A

#### 09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1430	459	2174	0.658	1441	2.1	5.281	A
2	1120	0	99999	0.011	1120	0.0	0.038	A
3	785	1120	1577	0.498	789	1.2	5.435	A

# 2027, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	76.20	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	76.20	F

## 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)
D8	2027	PM	ONE HOUR	17:00	18:30	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1593	100.000
2		✓	2180	100.000
3		✓	957	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		1	2	3
From	1	0	1593	0
	2	2180	0	0
	3	477	480	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		1	2	3
From	1	0	3	0
	2	5	0	0
	3	13	10	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.80	8.31	4.0	A
2	0.02	0.04	0.0	A
3	1.26	362.70	115.3	F

### Main Results for each time segment

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1199	359	2236	0.536	1195	1.2	3.545	A
2	1641	0	99999	0.016	1641	0.0	0.038	A
3	720	1641	1275	0.565	715	1.4	7.094	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1432	427	2194	0.653	1429	1.9	4.829	A
2	1960	0	99999	0.020	1960	0.0	0.038	A
3	860	1960	1090	0.789	851	3.8	16.125	C

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1754	415	2201	0.797	1746	3.9	8.006	A
2	2400	0	99999	0.024	2400	0.0	0.038	A
3	1054	2400	835	1.261	827	60.6	153.156	F

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1754	419	2199	0.798	1754	4.0	8.307	A
2	2400	0	99999	0.024	2400	0.0	0.038	A
3	1054	2400	835	1.262	835	115.3	362.702	F

#### 18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1432	542	2124	0.674	1439	2.2	5.475	A
2	1960	0	99999	0.020	1960	0.0	0.039	A
3	860	1960	1090	0.789	1080	60.4	290.982	F

#### 18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1199	480	2162	0.555	1203	1.3	3.882	A
2	1641	0	99999	0.016	1641	0.0	0.039	A
3	720	1641	1275	0.565	956	1.5	28.244	D

# 2027 + 100dw, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	39.69	E

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	39.69	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)
D9	2027 + 100dw	AM	ONE HOUR	08:00	09:30	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1902	100.000
2		✓	1496	100.000
3		✓	1046	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		1	2	3
From	1	0	1902	0
	2	1496	0	0
	3	436	610	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		1	2	3
From	1	0	6	0
	2	6	0	0
	3	16	20	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.02	75.02	46.5	F
2	0.02	0.04	0.0	A
3	0.91	32.17	9.6	D

### Main Results for each time segment

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1432	457	2176	0.658	1424	2.0	5.023	A
2	1126	0	99999	0.011	1126	0.0	0.038	A
3	787	1126	1573	0.501	783	1.2	5.357	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1710	546	2121	0.806	1701	4.2	8.905	A
2	1345	0	99999	0.013	1345	0.0	0.038	A
3	940	1345	1447	0.650	936	2.1	8.284	A

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2094	657	2053	1.020	1994	29.2	39.404	E
2	1647	0	99999	0.016	1647	0.0	0.038	A
3	1152	1647	1272	0.906	1126	8.6	25.679	D

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2094	669	2046	1.024	2025	46.5	75.023	F
2	1647	0	99999	0.016	1647	0.0	0.038	A
3	1152	1647	1272	0.906	1148	9.6	32.173	D

#### 09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1710	566	2109	0.811	1876	4.9	26.588	D
2	1345	0	99999	0.013	1345	0.0	0.038	A
3	940	1345	1447	0.650	970	2.3	9.461	A

#### 09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1432	462	2173	0.659	1443	2.1	5.310	A
2	1126	0	99999	0.011	1126	0.0	0.038	A
3	787	1126	1573	0.501	792	1.2	5.477	A

# 2027 + 100dw, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	78.65	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	78.65	F

## 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)
D10	2027 + 100dw	PM	ONE HOUR	17:00	18:30	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1599	100.000
2		✓	2183	100.000
3		✓	962	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		1	2	3
From	1	0	1599	0
	2	2183	0	0
	3	477	485	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		1	2	3
From	1	0	3	0
	2	5	0	0
	3	13	10	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.80	8.44	4.0	A
2	0.02	0.04	0.0	A
3	1.27	373.75	119.0	F

### Main Results for each time segment

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1204	362	2234	0.539	1199	1.2	3.569	A
2	1643	0	99999	0.016	1643	0.0	0.038	A
3	724	1643	1274	0.569	718	1.4	7.156	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1437	431	2191	0.656	1435	1.9	4.879	A
2	1962	0	99999	0.020	1962	0.0	0.038	A
3	865	1962	1089	0.794	855	4.0	16.483	C

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1761	416	2201	0.800	1752	3.9	8.130	A
2	2404	0	99999	0.024	2404	0.0	0.038	A
3	1059	2404	833	1.271	825	62.4	157.585	F

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1761	420	2198	0.801	1760	4.0	8.444	A
2	2404	0	99999	0.024	2404	0.0	0.038	A
3	1059	2404	833	1.271	833	119.0	373.749	F

#### 18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1437	544	2122	0.677	1445	2.2	5.533	A
2	1962	0	99999	0.020	1962	0.0	0.038	A
3	865	1962	1089	0.794	1079	65.6	305.136	F

#### 18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1204	494	2153	0.559	1207	1.3	3.936	A
2	1643	0	99999	0.016	1643	0.0	0.039	A
3	724	1643	1274	0.569	980	1.5	34.928	D

# 2028, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	42.23	E

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	42.23	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)
D11	2028	AM	ONE HOUR	08:00	09:30	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1912	100.000
2		✓	1498	100.000
3		✓	1050	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		1	2	3
From	1	0	1912	0
	2	1498	0	0
	3	439	611	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		1	2	3
From	1	0	6	0
	2	6	0	0
	3	16	20	0



## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.03	80.15	50.5	F
2	0.02	0.04	0.0	A
3	0.91	33.36	10.0	D

### Main Results for each time segment

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1439	457	2175	0.662	1431	2.0	5.075	A
2	1128	0	99999	0.011	1128	0.0	0.038	A
3	790	1128	1572	0.503	786	1.2	5.381	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1719	547	2120	0.811	1710	4.3	9.094	A
2	1347	0	99999	0.013	1347	0.0	0.038	A
3	944	1347	1446	0.653	940	2.2	8.357	A

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2105	657	2053	1.025	1998	31.1	41.178	E
2	1649	0	99999	0.016	1649	0.0	0.038	A
3	1156	1649	1270	0.910	1129	8.9	26.335	D

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2105	670	2045	1.029	2028	50.5	80.146	F
2	1649	0	99999	0.016	1649	0.0	0.038	A
3	1156	1649	1270	0.910	1152	10.0	33.364	D

#### 09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1719	567	2108	0.815	1900	5.1	31.121	D
2	1347	0	99999	0.013	1347	0.0	0.039	A
3	944	1347	1446	0.653	975	2.3	9.618	A

#### 09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1439	463	2172	0.663	1451	2.1	5.382	A
2	1128	0	99999	0.011	1128	0.0	0.038	A
3	790	1128	1572	0.503	795	1.2	5.505	A

# 2028, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	82.48	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	82.48	F

## 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)
D12	2028	PM	ONE HOUR	17:00	18:30	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1604	100.000
2		✓	2196	100.000
3		✓	965	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		1	2	3
From	1	0	1604	0
	2	2196	0	0
	3	481	484	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		1	2	3
From	1	0	3	0
	2	5	0	0
	3	13	10	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.80	8.48	4.1	A
2	0.02	0.04	0.0	A
3	1.29	393.11	124.8	F

### Main Results for each time segment

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1208	361	2234	0.541	1203	1.2	3.580	A
2	1653	0	99999	0.017	1653	0.0	0.038	A
3	727	1653	1268	0.573	721	1.5	7.256	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1442	430	2192	0.658	1439	1.9	4.903	A
2	1974	0	99999	0.020	1974	0.0	0.038	A
3	868	1974	1082	0.802	857	4.1	17.078	C

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1766	410	2204	0.801	1758	4.0	8.163	A
2	2418	0	99999	0.024	2418	0.0	0.038	A
3	1062	2418	825	1.288	818	65.3	165.533	F

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1766	414	2202	0.802	1766	4.1	8.476	A
2	2418	0	99999	0.024	2418	0.0	0.038	A
3	1062	2418	825	1.288	825	124.8	393.108	F

#### 18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1442	538	2126	0.678	1449	2.2	5.539	A
2	1974	0	99999	0.020	1974	0.0	0.038	A
3	868	1974	1082	0.802	1072	73.6	328.478	F

#### 18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1208	509	2144	0.563	1211	1.3	3.990	A
2	1653	0	99999	0.017	1653	0.0	0.038	A
3	727	1653	1268	0.573	1015	1.6	48.941	E

# 2028 + 150dw, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	44.10	E

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	44.10	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)
D13	2028 + 150dw	AM	ONE HOUR	08:00	09:30	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1916	100.000
2		✓	1510	100.000
3		✓	1054	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		1	2	3
From	1	0	1916	0
	2	1510	0	0
	3	439	615	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		1	2	3
From	1	0	6	0
	2	6	0	0
	3	16	20	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.03	83.20	52.8	F
2	0.02	0.04	0.0	A
3	0.92	36.15	10.9	E

### Main Results for each time segment

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1442	460	2174	0.664	1434	2.1	5.107	A
2	1137	0	99999	0.011	1137	0.0	0.038	A
3	794	1137	1567	0.506	789	1.2	5.439	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1722	550	2118	0.813	1713	4.4	9.213	A
2	1357	0	99999	0.014	1357	0.0	0.038	A
3	948	1357	1439	0.658	943	2.2	8.518	A

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2110	660	2051	1.028	1998	32.2	42.202	E
2	1663	0	99999	0.017	1663	0.0	0.038	A
3	1160	1663	1263	0.919	1131	9.5	27.833	D

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2110	674	2043	1.033	2027	52.8	83.199	F
2	1663	0	99999	0.017	1663	0.0	0.038	A
3	1160	1663	1263	0.919	1155	10.9	36.154	E

#### 09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1722	573	2105	0.818	1913	5.3	34.288	D
2	1357	0	99999	0.014	1357	0.0	0.038	A
3	948	1357	1439	0.658	982	2.3	9.973	A

#### 09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1442	466	2170	0.665	1455	2.1	5.425	A
2	1137	0	99999	0.011	1137	0.0	0.039	A
3	794	1137	1567	0.506	798	1.2	5.567	A

# 2028 + 150dw, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	86.82	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	86.82	F

## 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)
D14	2028 + 150dw	PM	ONE HOUR	17:00	18:30	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1613	100.000
2		✓	2204	100.000
3		✓	972	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		1	2	3
From	1	0	1613	0
	2	2204	0	0
	3	481	491	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		1	2	3
From	1	0	3	0
	2	5	0	0
	3	13	10	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.81	8.68	4.2	A
2	0.02	0.04	0.0	A
3	1.31	413.27	131.2	F

### Main Results for each time segment

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1214	367	2231	0.544	1209	1.2	3.612	A
2	1659	0	99999	0.017	1659	0.0	0.038	A
3	732	1659	1265	0.579	726	1.5	7.369	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1450	436	2189	0.663	1447	2.0	4.979	A
2	1981	0	99999	0.020	1981	0.0	0.038	A
3	874	1981	1078	0.811	863	4.3	17.775	C

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1776	411	2204	0.806	1768	4.1	8.342	A
2	2427	0	99999	0.024	2427	0.0	0.038	A
3	1070	2427	820	1.305	813	68.6	173.863	F

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1776	414	2202	0.807	1776	4.2	8.675	A
2	2427	0	99999	0.024	2427	0.0	0.038	A
3	1070	2427	820	1.305	820	131.2	413.274	F

#### 18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1450	540	2125	0.682	1458	2.3	5.624	A
2	1981	0	99999	0.020	1981	0.0	0.039	A
3	874	1981	1078	0.811	1069	82.5	353.642	F

#### 18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1214	533	2129	0.570	1218	1.4	4.086	A
2	1659	0	99999	0.017	1659	0.0	0.039	A
3	732	1659	1264	0.579	1055	1.6	69.068	F

# 2031, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	55.75	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	55.75	F

## 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)
D15	2031	AM	ONE HOUR	08:00	09:30	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1952	100.000
2		✓	1529	100.000
3		✓	1072	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		1	2	3
From	1	0	1952	0
	2	1529	0	0
	3	448	624	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		1	2	3
From	1	0	6	0
	2	6	0	0
	3	16	20	0



## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.05	105.07	70.1	F
2	0.02	0.04	0.0	A
3	0.94	45.39	14.0	E

### Main Results for each time segment

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1470	467	2169	0.677	1461	2.2	5.321	A
2	1151	0	99999	0.012	1151	0.0	0.038	A
3	807	1151	1559	0.518	802	1.3	5.590	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1755	558	2113	0.830	1744	4.9	10.046	B
2	1375	0	99999	0.014	1375	0.0	0.038	A
3	964	1375	1429	0.674	959	2.4	8.970	A

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2149	665	2048	1.050	2008	40.1	49.626	E
2	1683	0	99999	0.017	1683	0.0	0.038	A
3	1180	1683	1250	0.944	1143	11.6	32.353	D

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2149	682	2038	1.055	2029	70.1	105.072	F
2	1683	0	99999	0.017	1683	0.0	0.038	A
3	1180	1683	1250	0.944	1171	14.0	45.388	E

#### 09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1755	588	2096	0.837	2009	6.6	62.262	F
2	1375	0	99999	0.014	1375	0.0	0.038	A
3	964	1375	1429	0.674	1009	2.5	11.202	B

#### 09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1470	473	2166	0.679	1487	2.3	5.760	A
2	1151	0	99999	0.012	1151	0.0	0.038	A
3	807	1151	1559	0.518	812	1.3	5.740	A

# 2031, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	100.36	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	100.36	F

## 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)
D16	2031	PM	ONE HOUR	17:00	18:30	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1639	100.000
2		✓	2243	100.000
3		✓	985	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		1	2	3
From	1	0	1639	0
	2	2243	0	0
	3	491	494	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		1	2	3
From	1	0	3	0
	2	5	0	0
	3	13	10	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.82	9.08	4.4	A
2	0.02	0.04	0.0	A
3	1.36	480.68	151.1	F

### Main Results for each time segment

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1234	369	2230	0.553	1229	1.3	3.688	A
2	1689	0	99999	0.017	1689	0.0	0.038	A
3	742	1689	1248	0.594	735	1.6	7.740	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1473	437	2188	0.674	1470	2.1	5.144	A
2	2016	0	99999	0.020	2016	0.0	0.038	A
3	885	2016	1058	0.837	872	5.0	20.266	C

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1805	396	2213	0.816	1796	4.3	8.706	A
2	2470	0	99999	0.025	2470	0.0	0.038	A
3	1085	2470	795	1.364	790	78.6	202.838	F

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1805	399	2211	0.816	1804	4.4	9.080	A
2	2470	0	99999	0.025	2470	0.0	0.038	A
3	1085	2470	795	1.364	795	151.1	480.679	F

#### 18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1473	527	2133	0.691	1482	2.3	5.766	A
2	2016	0	99999	0.020	2016	0.0	0.038	A
3	885	2016	1058	0.837	1050	110.0	434.284	F

#### 18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1234	589	2095	0.589	1237	1.5	4.341	A
2	1689	0	99999	0.017	1689	0.0	0.038	A
3	742	1689	1247	0.594	1174	1.8	147.845	F

# 2031 + 230dw, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	59.02	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	59.02	F

## 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)
D17	2031 + 230dw	AM	ONE HOUR	08:00	09:30	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1958	100.000
2		✓	1548	100.000
3		✓	1077	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		1	2	3
From	1	0	1958	0
	2	1548	0	0
	3	448	629	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		1	2	3
From	1	0	6	0
	2	6	0	0
	3	16	20	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.06	109.64	73.7	F
2	0.02	0.04	0.0	A
3	0.96	51.78	16.2	F

### Main Results for each time segment

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1474	471	2167	0.680	1465	2.2	5.371	A
2	1165	0	99999	0.012	1165	0.0	0.038	A
3	811	1165	1551	0.523	806	1.3	5.679	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1760	563	2111	0.834	1749	5.0	10.247	B
2	1392	0	99999	0.014	1392	0.0	0.038	A
3	968	1392	1420	0.682	963	2.5	9.241	A

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2156	668	2046	1.053	2009	41.7	51.138	F
2	1704	0	99999	0.017	1704	0.0	0.038	A
3	1186	1704	1238	0.958	1144	13.0	35.311	E

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2156	685	2036	1.059	2028	73.7	109.636	F
2	1704	0	99999	0.017	1704	0.0	0.038	A
3	1186	1704	1238	0.958	1173	16.2	51.780	F

#### 09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1760	597	2090	0.842	2026	7.2	69.620	F
2	1392	0	99999	0.014	1392	0.0	0.039	A
3	968	1392	1420	0.682	1022	2.6	12.140	B

#### 09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1474	477	2163	0.681	1494	2.3	5.859	A
2	1165	0	99999	0.012	1165	0.0	0.039	A
3	811	1165	1551	0.523	816	1.3	5.840	A

# 2031 + 230dw, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 3 - 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	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	106.77	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	106.77	F

## 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)
D18	2031 + 230dw	PM	ONE HOUR	17:00	18:30	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1652	100.000
2		✓	2250	100.000
3		✓	997	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To		
		1	2	3
From	1	0	1652	0
	2	2250	0	0
	3	491	506	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		1	2	3
From	1	0	3	0
	2	5	0	0
	3	13	10	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.82	9.44	4.7	A
2	0.02	0.04	0.0	A
3	1.39	508.89	160.1	F

### Main Results for each time segment

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1244	378	2224	0.559	1239	1.3	3.742	A
2	1694	0	99999	0.017	1694	0.0	0.038	A
3	751	1694	1244	0.603	744	1.7	7.916	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1485	447	2181	0.681	1482	2.2	5.272	A
2	2023	0	99999	0.020	2023	0.0	0.038	A
3	896	2023	1054	0.850	881	5.4	21.568	C

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1819	399	2211	0.823	1809	4.5	9.025	A
2	2477	0	99999	0.025	2477	0.0	0.038	A
3	1098	2477	791	1.388	786	83.3	215.289	F

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1819	401	2210	0.823	1818	4.7	9.443	A
2	2477	0	99999	0.025	2477	0.0	0.038	A
3	1098	2477	791	1.388	790	160.1	508.890	F

#### 18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1485	531	2130	0.697	1494	2.4	5.911	A
2	2023	0	99999	0.020	2023	0.0	0.038	A
3	896	2023	1054	0.850	1047	122.5	469.378	F

#### 18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1244	624	2073	0.600	1247	1.6	4.509	A
2	1694	0	99999	0.017	1694	0.0	0.038	A
3	751	1694	1244	0.603	1230	2.6	186.928	F

## APPENDIX H23

### A43/B4100 (BAYNARDS GREEN) MODELLING OUTPUT



## A43/B4100 Baynards Green Roundabout – Junction Assessment Results

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
<b>2023 Base</b>						
A43 (N)	1.36	431	746	0.94	12	26
B4100 (E)	0.72	3	14	1.00	22	79
A43 (S)	0.97	20	38	1.36	453	736
B4100 (W)	0.36	1	9	0.31	1	9
<b>2026 Base</b>						
A43 (N)	1.44	570	990	0.99	26	48
B4100 (E)	0.75	3	16	1.08	48	152
A43 (S)	1.03	50	80	1.42	603	994
B4100 (W)	0.40	1	10	0.33	1	9
<b>2026 Base + 50 dwellings</b>						
A43 (N)	1.44	570	991	0.99	26	50
B4100 (E)	0.75	16	3	1.08	49	153
A43 (S)	1.03	52	82	1.43	604	995
B4100 (W)	0.40	1	10	0.33	1	9
<b>2027 Base</b>						
A43 (N)	1.45	588	1023	0.99	29	53
B4100 (E)	0.75	3	16	1.10	53	166
A43 (S)	1.04	56	88	1.44	625	1028
B4100 (W)	0.40	1	10	0.33	1	9
<b>2027 Base + 100 dwellings</b>						
A43 (N)	1.45	591	1029	1.00	30	55
B4100 (E)	0.75	3	16	1.10	54	168
A43 (S)	1.04	60	92	1.44	627	1032
B4100 (W)	0.40	1	10	0.33	1	9
<b>2028 Base</b>						
A43 (N)	1.46	608	1064	1.00	32	59
B4100 (E)	0.76	3	16	1.11	57	177
A43 (S)	1.04	63	97	1.44	644	1072
B4100 (W)	0.40	1	10	0.33	1	9
<b>2028 Base + 150 dwellings</b>						
A43 (N)	1.46	612	1072	1.01	35	62
B4100 (E)	0.76	3	16	1.11	59	181
A43 (S)	1.05	68	103	1.45	647	1082
B4100 (W)	0.40	1	10	0.33	1	9
<b>2031 Base</b>						
A43 (N)	1.49	670	1189	1.02	47	78
B4100 (E)	0.77	4	17	1.14	71	215
A43 (S)	1.07	85	125	1.47	702	1220
B4100 (W)	0.41	1	10	0.34	1	9

2031 Base + 230 dwellings						
A43 (N)	1.50	674	1205	1.03	52	85
B4100 (E)	0.77	4	17	1.14	72	222
A43 (S)	1.08	95	137	1.48	708	1237
B4100 (W)	0.41	1	10	0.34	1	9

RFC is Ratio of Flow to Capacity, Queue is mean max in PCUs, Delay is seconds per PCU.

# Junctions 10

## ARCADY 10 - Roundabout Module

Version: 10.1.0.1820

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**Filename:** T19562 - A43\_B4100 v2.j10**Path:** C:\Users\NeilBateman\Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\2019\T19562 Heyford Park\Junction Assessments\Arcady**Report generation date:** 19/10/2023 11:05:10

- 
- »2023, AM
  - »2023, PM
  - »2026, AM
  - »2026, PM
  - »2026 +50dw, AM
  - »2026 +50dw, PM
  - »2027, AM
  - »2027, PM
  - »2027 +100dw, AM
  - »2027 +100dw, PM
  - »2028, AM
  - »2028, PM
  - »2028 +150dw, AM
  - »2028 +150dw, PM
  - »2031, AM
  - »2031, PM
  - »2031 +230dw, AM
  - »2031 +230dw, PM

### Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
<b>2023</b>										
Arm 1	D1	430.9	746.31	1.36	F	D2	12.4	25.59	0.94	D
Arm 2		2.6	13.91	0.72	B		21.7	78.85	1.00	F
Arm 3		20.0	37.87	0.97	E		453.0	735.50	1.36	F
Arm 4		0.6	8.81	0.36	A		0.5	8.70	0.31	A
<b>2026</b>										
Arm 1	D3	569.1	989.53	1.44	F	D4	25.6	48.41	0.99	E
Arm 2		3.1	15.56	0.75	C		48.2	151.90	1.08	F
Arm 3		50.2	80.08	1.03	F		603.1	993.91	1.42	F
Arm 4		0.7	9.73	0.40	A		0.5	8.90	0.33	A
<b>2026 +50dw</b>										
Arm 1	D5	570.1	991.31	1.44	F	D6	26.3	49.47	0.99	E
Arm 2		3.1	15.57	0.75	C		48.6	153.26	1.08	F
Arm 3		51.8	82.11	1.03	F		604.1	995.38	1.43	F
Arm 4		0.7	9.75	0.40	A		0.5	8.90	0.33	A
<b>2027</b>										
Arm 1	D7	587.7	1022.65	1.45	F	D8	28.9	53.48	0.99	F
Arm 2		3.1	15.81	0.75	C		53.2	165.58	1.10	F
Arm 3		56.3	87.97	1.04	F		624.8	1027.73	1.44	F
Arm 4		0.7	9.81	0.40	A		0.5	8.91	0.33	A
<b>2027 +100dw</b>										
Arm 1	D9	590.8	1028.65	1.45	F	D10	30.2	55.37	1.00	F
Arm 2		3.1	15.85	0.75	C		53.9	167.84	1.10	F
Arm 3		59.7	92.27	1.04	F		627.1	1032.46	1.44	F
Arm 4		0.7	9.83	0.40	A		0.5	8.92	0.33	A
<b>2028</b>										
Arm 1	D11	608.0	1063.56	1.46	F	D12	32.4	58.63	1.00	F
Arm 2		3.2	16.16	0.76	C		57.3	177.07	1.11	F
Arm 3		63.0	96.50	1.04	F		644.1	1072.33	1.44	F
Arm 4		0.7	9.89	0.40	A		0.5	8.96	0.33	A
<b>2028 +150dw</b>										
Arm 1	D13	612.1	1071.65	1.46	F	D14	35.1	62.43	1.01	F
Arm 2		3.2	16.22	0.76	C		58.5	181.00	1.11	F
Arm 3		68.4	103.29	1.05	F		646.9	1081.51	1.45	F
Arm 4		0.7	9.92	0.40	A		0.5	8.96	0.33	A
<b>2031</b>										
Arm 1	D15	669.8	1189.43	1.49	F	D16	46.6	78.17	1.02	F
Arm 2		3.5	17.19	0.77	C		70.5	214.68	1.14	F
Arm 3		85.4	125.11	1.07	F		702.1	1220.09	1.47	F
Arm 4		0.7	10.09	0.41	B		0.5	9.06	0.34	A
<b>2031 +230dw</b>										
Arm 1	D17	674.2	1204.54	1.50	F	D18	13.2	26.50	0.93	D
Arm 2		3.5	17.30	0.77	C		32.3	122.63	0.99	F
Arm 3		94.8	137.12	1.08	F		1056.3	1714.78	1.35	F
Arm 4		0.7	10.11	0.41	B		0.5	8.67	0.31	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.

## File summary

### File Description

<b>Title</b>	A43-B4100
<b>Location</b>	Heyford Park
<b>Site number</b>	
<b>Date</b>	09/10/2023
<b>Version</b>	
<b>Status</b>	(new file)
<b>Identifier</b>	
<b>Client</b>	Richborough
<b>Jobnumber</b>	T19562
<b>Enumerator</b>	AzureAD\NeilBateman
<b>Description</b>	

## Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

## Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2023	AM	ONE HOUR	07:45	09:15		15
D2	2023	PM	ONE HOUR	16:45	18:15		15
D3	2026	AM	ONE HOUR	07:45	09:15		15
D4	2026	PM	ONE HOUR	16:45	18:15		15
D5	2026 +50dw	AM	ONE HOUR	07:45	09:15		15
D6	2026 +50dw	PM	ONE HOUR	16:45	18:15		15
D7	2027	AM	ONE HOUR	07:45	09:15		15
D8	2027	PM	ONE HOUR	16:45	18:15		15
D9	2027 +100dw	AM	ONE HOUR	07:45	09:15		15
D10	2027 +100dw	PM	ONE HOUR	16:45	18:15		15
D11	2028	AM	ONE HOUR	07:45	09:15		15
D12	2028	PM	ONE HOUR	16:45	18:15		15
D13	2028 +150dw	AM	ONE HOUR	07:45	09:15		15
D14	2028 +150dw	PM	ONE HOUR	16:45	18:15		15
D15	2031	AM	ONE HOUR	07:45	09:15		15
D16	2031	PM	ONE HOUR	16:45	18:15		15
D17	2031 +230dw	AM	ONE HOUR	07:45	09:15		15
D18	2031 +230dw	PM	DIRECT	16:45	18:15	90	15

## Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

# 2023, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	366.04	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	366.04	F

## Arms

### Arms

Arm	Name	Description	No give-way line
1	A43 (N)		
2	B4100 (E)		
3	A43 (S)		
4	B4100 (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)	Entry only	Exit only
1	7.50	7.85	10.8	16.7	74.0	34.2		
2	3.60	6.53	22.0	19.2	74.0	34.9		
3	7.60	8.50	13.0	31.0	74.0	38.4		
4	4.10	7.00	20.0	20.2	74.0	30.6		

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.577	2311
2	0.482	1681
3	0.608	2496
4	0.511	1840

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	2023	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	2359	100.000
2		✓	627	100.000
3		✓	1818	100.000
4		✓	223	100.000

## Origin-Destination Data

### Demand (PCU/hr)

From	To			
	1	2	3	4
1	0	524	1739	96
2	268	0	54	305
3	1366	446	0	6
4	29	191	3	0

## Vehicle Mix

### Heavy Vehicle %

From	To			
	1	2	3	4
1	0	6	6	6
2	6	0	6	6
3	6	6	0	6
4	6	6	6	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.36	746.31	430.9	F
2	0.72	13.91	2.6	B
3	0.97	37.87	20.0	E
4	0.36	8.81	0.6	A

### Main Results for each time segment

#### 07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1776	479	2034	0.873	1750	6.5	12.470	B
2	472	1363	1023	0.461	468	0.9	6.838	A
3	1369	499	2192	0.624	1362	1.7	4.557	A
4	168	1557	1044	0.161	167	0.2	4.346	A

**08:00 - 08:15**

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2121	573	1980	1.071	1952	48.6	60.378	F
2	564	1521	947	0.595	561	1.5	9.830	A
3	1634	592	2136	0.765	1628	3.3	7.420	A
4	200	1862	889	0.226	200	0.3	5.537	A

**08:15 - 08:30**

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2597	691	1912	1.359	1911	220.2	258.605	F
2	690	1490	962	0.718	686	2.6	13.622	B
3	2002	705	2067	0.968	1951	16.1	25.684	D
4	246	2238	697	0.352	244	0.6	8.412	A

**08:30 - 08:45**

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2597	701	1906	1.362	1906	392.9	575.230	F
2	690	1486	964	0.716	690	2.6	13.914	B
3	2002	708	2065	0.969	1986	20.0	37.872	E
4	246	2274	678	0.362	245	0.6	8.809	A

**08:45 - 09:00**

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2121	592	1969	1.077	1969	430.9	746.312	F
2	564	1534	941	0.599	568	1.6	10.335	B
3	1634	599	2132	0.767	1700	3.6	10.129	B
4	200	1937	851	0.236	202	0.3	5.890	A

**09:00 - 09:15**

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1776	484	2031	0.874	2026	368.3	710.149	F
2	472	1579	919	0.514	474	1.1	8.608	A
3	1369	516	2183	0.627	1376	1.8	4.774	A
4	168	1574	1036	0.162	168	0.2	4.400	A



# 2023, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	372.54	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	372.54	F

## 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	2023	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1683	100.000
2		✓	897	100.000
3		✓	2509	100.000
4		✓	174	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	375	1253	55
	2	342	0	250	305
	3	2005	490	0	14
	4	17	156	1	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	3	3	3
	2	5	0	5	5
	3	5	5	0	5
	4	3	3	3	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.94	25.59	12.4	D
2	1.00	78.85	21.7	F
3	1.36	735.50	453.0	F
4	0.31	8.70	0.5	A

### Main Results for each time segment

#### 16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1267	481	2033	0.623	1260	1.7	4.759	A
2	675	980	1208	0.559	670	1.3	6.964	A
3	1889	525	2177	0.868	1864	6.2	11.300	B
4	131	2109	763	0.172	130	0.2	5.854	A

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1513	548	1995	0.759	1507	3.1	7.518	A
2	806	1172	1115	0.723	801	2.6	11.840	B
3	2256	627	2115	1.067	2085	48.9	56.737	F
4	156	2379	625	0.250	156	0.3	7.895	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1853	572	1981	0.936	1822	11.0	20.233	C
2	988	1417	997	0.990	939	14.7	46.018	E
3	2762	737	2048	1.349	2047	227.7	248.518	F
4	192	2394	617	0.310	191	0.5	8.690	A

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1853	571	1981	0.935	1847	12.4	25.591	D
2	988	1437	988	1.000	960	21.7	78.851	F
3	2762	753	2038	1.355	2038	408.8	561.211	F
4	192	2393	618	0.310	192	0.5	8.698	A

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1513	547	1995	0.758	1549	3.4	8.949	A
2	806	1205	1100	0.733	881	3.1	22.666	C
3	2256	686	2079	1.085	2079	453.0	735.499	F
4	156	2403	613	0.255	157	0.4	8.142	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1267	542	1998	0.634	1273	1.8	5.156	A
2	675	990	1203	0.561	682	1.4	7.348	A
3	1889	534	2172	0.870	2167	383.6	695.239	F
4	131	2415	607	0.216	131	0.3	7.804	A

# 2026, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	495.76	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	495.76	F

## 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	2026	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	2479	100.000
2		✓	658	100.000
3		✓	1911	100.000
4		✓	234	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	551	1827	101
	2	281	0	57	320
	3	1435	469	0	7
	4	30	201	3	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	6	6	6
	2	6	0	6	6
	3	6	6	0	6
	4	6	6	6	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.44	989.53	569.1	F
2	0.75	15.56	3.1	C
3	1.03	80.08	50.2	F
4	0.40	9.73	0.7	A

### Main Results for each time segment

#### 07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1866	504	2020	0.924	1826	10.0	17.172	C
2	495	1423	994	0.498	491	1.0	7.523	A
3	1439	523	2178	0.661	1431	2.0	5.052	A
4	176	1635	1005	0.175	175	0.2	4.596	A

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2229	602	1963	1.135	1952	79.3	91.140	F
2	592	1520	947	0.624	589	1.7	10.566	B
3	1718	617	2121	0.810	1709	4.3	9.070	A
4	210	1954	842	0.250	210	0.4	6.032	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2729	713	1899	1.437	1899	286.9	351.886	F
2	724	1480	967	0.749	719	3.0	15.111	C
3	2104	734	2049	1.027	1995	31.5	41.568	E
4	258	2295	668	0.386	256	0.7	9.251	A

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2729	723	1894	1.441	1894	495.8	739.760	F
2	724	1476	969	0.748	724	3.1	15.556	C
3	2104	739	2047	1.028	2029	50.2	80.085	F
4	258	2331	649	0.397	258	0.7	9.733	A

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2229	650	1935	1.151	1935	569.1	989.531	F
2	592	1508	953	0.621	597	1.8	10.847	B
3	1718	624	2117	0.812	1899	5.0	29.689	D
4	210	2147	744	0.283	211	0.4	7.186	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1866	510	2016	0.926	2013	532.6	985.386	F
2	495	1568	925	0.536	498	1.2	8.983	A
3	1439	536	2170	0.663	1450	2.1	5.384	A
4	176	1657	993	0.177	177	0.2	4.679	A

# 2026, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	515.45	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	515.45	F

## 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	2026	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1771	100.000
2		✓	943	100.000
3		✓	2639	100.000
4		✓	183	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	395	1318	58
	2	360	0	262	321
	3	2110	515	0	14
	4	18	164	1	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	3	3	3
	2	5	0	5	5
	3	5	5	0	5
	4	3	3	3	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.99	48.41	25.6	E
2	1.08	151.90	48.2	F
3	1.42	993.91	603.1	F
4	0.33	8.90	0.5	A

### Main Results for each time segment

#### 16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1333	504	2020	0.660	1325	2.0	5.279	A
2	710	1031	1184	0.600	704	1.5	7.783	A
3	1987	552	2161	0.920	1948	9.6	15.698	C
4	138	2207	713	0.193	137	0.2	6.425	A

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1592	554	1991	0.800	1584	3.9	8.949	A
2	848	1232	1086	0.780	840	3.5	14.885	B
3	2372	659	2096	1.132	2083	81.9	87.376	F
4	165	2393	618	0.266	164	0.4	8.163	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1950	580	1976	0.987	1888	19.3	30.634	D
2	1038	1468	972	1.068	945	26.8	71.744	F
3	2906	744	2044	1.422	2043	297.5	338.618	F
4	201	2393	618	0.326	201	0.5	8.887	A

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1950	580	1976	0.987	1925	25.6	48.411	E
2	1038	1496	959	1.083	953	48.2	151.900	F
3	2906	751	2039	1.425	2039	514.1	723.019	F
4	201	2392	618	0.326	201	0.5	8.898	A

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1592	542	1998	0.797	1677	4.3	14.438	B
2	848	1304	1052	0.806	1017	6.0	97.869	F
3	2372	789	2016	1.177	2016	603.1	993.907	F
4	165	2394	617	0.266	165	0.4	8.203	A



18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1333	543	1997	0.668	1342	2.1	5.733	A
2	710	1043	1177	0.603	727	1.6	8.707	A
3	1987	569	2150	0.924	2146	563.3	978.339	F
4	138	2412	608	0.227	138	0.3	7.898	A

# 2026 +50dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	497.11	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	497.11	F

## 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	2026 +50dw	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	2480	100.000
2		✓	658	100.000
3		✓	1915	100.000
4		✓	234	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	551	1828	101
	2	281	0	57	320
	3	1439	469	0	7
	4	30	201	3	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	6	6	6
	2	6	0	6	6
	3	6	6	0	6
	4	6	6	6	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.44	991.31	570.1	F
2	0.75	15.57	3.1	C
3	1.03	82.11	51.8	F
4	0.40	9.75	0.7	A

### Main Results for each time segment

#### 07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1867	504	2020	0.924	1827	10.0	17.215	C
2	495	1423	994	0.498	491	1.0	7.527	A
3	1442	523	2178	0.662	1434	2.0	5.073	A
4	176	1638	1003	0.176	175	0.2	4.604	A

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2229	602	1963	1.136	1952	79.5	91.382	F
2	592	1521	947	0.625	589	1.7	10.569	B
3	1722	617	2121	0.812	1712	4.3	9.141	A
4	210	1958	840	0.250	210	0.4	6.049	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2731	713	1900	1.437	1899	287.3	352.433	F
2	724	1481	966	0.750	719	3.0	15.123	C
3	2108	734	2049	1.029	1997	32.2	42.273	E
4	258	2297	667	0.386	256	0.7	9.269	A

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2731	722	1894	1.442	1894	496.4	740.739	F
2	724	1477	968	0.748	724	3.1	15.572	C
3	2108	739	2047	1.030	2030	51.8	82.112	F
4	258	2332	649	0.397	258	0.7	9.747	A

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2229	652	1935	1.152	1935	570.1	991.306	F
2	592	1507	953	0.620	597	1.8	10.842	B
3	1722	624	2117	0.813	1908	5.0	31.540	D
4	210	2156	739	0.285	211	0.4	7.253	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1867	510	2016	0.926	2013	533.8	987.375	F
2	495	1568	924	0.536	498	1.2	8.983	A
3	1442	536	2170	0.664	1453	2.1	5.411	A
4	176	1661	992	0.178	177	0.2	4.689	A

# 2026 +50dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	516.56	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	516.56	F

## 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	2026 +50dw	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1774	100.000
2		✓	943	100.000
3		✓	2640	100.000
4		✓	183	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	395	1321	58
	2	360	0	262	321
	3	2111	515	0	14
	4	18	164	1	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	3	3	3
	2	5	0	5	5
	3	5	5	0	5
	4	3	3	3	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.99	49.47	26.3	E
2	1.08	153.26	48.6	F
3	1.43	995.38	604.1	F
4	0.33	8.90	0.5	A

### Main Results for each time segment

#### 16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1336	504	2020	0.661	1328	2.0	5.297	A
2	710	1033	1182	0.600	704	1.5	7.800	A
3	1988	552	2161	0.920	1949	9.7	15.734	C
4	138	2207	713	0.193	137	0.2	6.429	A

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1595	554	1991	0.801	1587	4.0	9.003	A
2	848	1234	1085	0.781	840	3.5	14.953	B
3	2373	658	2096	1.133	2083	82.1	87.594	F
4	165	2393	618	0.266	164	0.4	8.164	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1953	580	1976	0.988	1890	19.7	31.055	D
2	1038	1471	971	1.069	944	27.1	72.218	F
3	2907	744	2044	1.422	2044	297.9	339.125	F
4	201	2393	618	0.326	201	0.5	8.888	A

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1953	580	1976	0.988	1927	26.3	49.467	E
2	1038	1499	958	1.084	952	48.6	153.260	F
3	2907	750	2040	1.425	2040	514.6	723.891	F
4	201	2392	618	0.326	201	0.5	8.899	A

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1595	542	1998	0.798	1683	4.3	14.805	B
2	848	1309	1049	0.808	1018	6.2	100.226	F
3	2373	790	2016	1.177	2016	604.1	995.384	F
4	165	2393	618	0.266	165	0.4	8.202	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1336	543	1997	0.669	1344	2.1	5.754	A
2	710	1046	1176	0.604	728	1.6	8.761	A
3	1988	570	2150	0.925	2146	564.5	980.279	F
4	138	2412	608	0.227	138	0.3	7.898	A

# 2027, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	514.21	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	514.21	F

## 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)
D7	2027	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	2495	100.000
2		✓	662	100.000
3		✓	1924	100.000
4		✓	235	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	555	1839	101
	2	283	0	57	322
	3	1445	472	0	7
	4	30	202	3	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	6	6	6
	2	6	0	6	6
	3	6	6	0	6
	4	6	6	6	0



## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.45	1022.65	587.7	F
2	0.75	15.81	3.1	C
3	1.04	87.97	56.3	F
4	0.40	9.81	0.7	A

### Main Results for each time segment

#### 07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1878	507	2018	0.931	1836	10.7	17.992	C
2	498	1430	991	0.503	494	1.1	7.618	A
3	1448	526	2176	0.666	1440	2.1	5.128	A
4	177	1646	999	0.177	176	0.2	4.631	A

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2243	606	1961	1.144	1951	83.7	95.777	F
2	595	1520	948	0.628	592	1.7	10.656	B
3	1730	620	2119	0.816	1720	4.5	9.350	A
4	211	1967	835	0.253	211	0.4	6.105	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2747	715	1898	1.447	1898	296.0	364.814	F
2	729	1479	967	0.754	724	3.0	15.329	C
3	2118	738	2047	1.035	1999	34.4	44.304	E
4	259	2301	665	0.389	258	0.7	9.341	A

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2747	724	1893	1.451	1893	509.5	762.087	F
2	729	1475	969	0.752	729	3.1	15.809	C
3	2118	742	2045	1.036	2031	56.3	87.973	F
4	259	2335	648	0.400	259	0.7	9.806	A

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2243	660	1930	1.162	1930	587.7	1020.817	F
2	595	1503	955	0.623	600	1.8	10.900	B
3	1730	627	2115	0.818	1934	5.3	37.411	E
4	211	2183	725	0.292	212	0.4	7.463	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1878	513	2014	0.932	2011	554.6	1022.647	F
2	498	1566	925	0.539	501	1.3	9.030	A
3	1448	539	2168	0.668	1461	2.2	5.484	A
4	177	1670	987	0.179	178	0.2	4.720	A

# 2027, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	535.54	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	535.54	F

## 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)
D8	2027	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1784	100.000
2		✓	951	100.000
3		✓	2659	100.000
4		✓	184	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	398	1328	58
	2	363	0	264	324
	3	2125	519	0	15
	4	18	165	1	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	3	3	3
	2	5	0	5	5
	3	5	5	0	5
	4	3	3	3	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.99	53.48	28.9	F
2	1.10	165.58	53.2	F
3	1.44	1027.73	624.8	F
4	0.33	8.91	0.5	A

### Main Results for each time segment

#### 16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1343	507	2018	0.665	1335	2.0	5.366	A
2	716	1038	1180	0.607	710	1.6	7.934	A
3	2002	556	2158	0.928	1960	10.4	16.622	C
4	139	2220	706	0.196	138	0.2	6.512	A

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1604	555	1990	0.806	1596	4.1	9.203	A
2	855	1241	1082	0.790	847	3.7	15.518	C
3	2390	663	2093	1.142	2082	87.5	92.826	F
4	165	2393	618	0.268	165	0.4	8.183	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1964	581	1975	0.994	1896	21.1	32.629	D
2	1047	1474	970	1.080	945	29.2	76.524	F
3	2928	744	2043	1.433	2043	308.6	353.283	F
4	203	2392	618	0.328	202	0.5	8.903	A

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1964	581	1975	0.994	1933	28.9	53.476	F
2	1047	1503	956	1.095	951	53.2	165.583	F
3	2928	750	2040	1.435	2040	530.5	747.849	F
4	203	2392	619	0.328	203	0.5	8.914	A

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1604	543	1998	0.803	1702	4.5	16.355	C
2	855	1323	1043	0.820	1022	11.3	119.742	F
3	2390	794	2013	1.187	2013	624.8	1027.730	F
4	165	2392	618	0.268	166	0.4	8.206	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1343	542	1998	0.672	1352	2.2	5.821	A
2	716	1051	1174	0.610	755	1.7	9.842	A
3	2002	589	2138	0.936	2134	591.7	1026.054	F
4	139	2410	609	0.227	139	0.3	7.893	A

# 2027 +100dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	518.23	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	518.23	F

## 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)
D9	2027 +100dw	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	2498	100.000
2		✓	662	100.000
3		✓	1932	100.000
4		✓	235	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	555	1842	101
	2	283	0	57	322
	3	1453	472	0	7
	4	30	202	3	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	6	6	6
	2	6	0	6	6
	3	6	6	0	6
	4	6	6	6	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.45	1028.65	590.8	F
2	0.75	15.85	3.1	C
3	1.04	92.27	59.7	F
4	0.40	9.83	0.7	A

### Main Results for each time segment

#### 07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1881	507	2018	0.932	1838	10.8	18.132	C
2	498	1432	990	0.503	494	1.1	7.630	A
3	1455	526	2176	0.668	1446	2.1	5.168	A
4	177	1652	996	0.178	176	0.2	4.648	A

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2246	606	1961	1.145	1951	84.4	96.528	F
2	595	1520	947	0.628	592	1.7	10.666	B
3	1737	620	2119	0.820	1727	4.6	9.504	A
4	211	1974	832	0.254	211	0.4	6.139	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2750	714	1899	1.448	1899	297.4	366.629	F
2	729	1480	967	0.754	724	3.0	15.360	C
3	2127	738	2047	1.039	2001	36.0	45.782	E
4	259	2304	663	0.390	258	0.7	9.372	A

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2750	722	1894	1.452	1894	511.4	765.281	F
2	729	1476	968	0.753	729	3.1	15.847	C
3	2127	742	2045	1.040	2032	59.7	92.267	F
4	259	2336	647	0.400	259	0.7	9.828	A

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2246	663	1928	1.165	1928	590.8	1026.028	F
2	595	1503	956	0.623	600	1.8	10.891	B
3	1737	627	2115	0.821	1954	5.5	42.234	E
4	211	2204	715	0.296	212	0.5	7.611	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1881	514	2014	0.934	2011	558.2	1028.654	F
2	498	1566	925	0.539	501	1.3	9.034	A
3	1455	539	2168	0.671	1468	2.2	5.541	A
4	177	1676	984	0.180	178	0.2	4.740	A



# 2027 +100dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	538.62	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	538.62	F

## 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)
D10	2027 +100dw	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1789	100.000
2		✓	951	100.000
3		✓	2662	100.000
4		✓	184	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	398	1333	58
	2	363	0	264	324
	3	2128	519	0	15
	4	18	165	1	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	3	3	3
	2	5	0	5	5
	3	5	5	0	5
	4	3	3	3	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.00	55.37	30.2	F
2	1.10	167.84	53.9	F
3	1.44	1032.46	627.1	F
4	0.33	8.92	0.5	A

### Main Results for each time segment

#### 16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1347	507	2018	0.667	1339	2.0	5.393	A
2	716	1042	1178	0.608	710	1.6	7.963	A
3	2004	556	2158	0.929	1962	10.5	16.743	C
4	139	2222	705	0.196	138	0.2	6.522	A

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1608	555	1991	0.808	1600	4.1	9.294	A
2	855	1245	1080	0.791	847	3.7	15.635	C
3	2393	663	2093	1.144	2082	88.2	93.513	F
4	165	2394	617	0.268	165	0.4	8.185	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1970	581	1976	0.997	1899	21.8	33.363	D
2	1047	1478	968	1.082	944	29.5	77.323	F
3	2931	743	2044	1.434	2044	310.0	355.031	F
4	203	2392	618	0.328	202	0.5	8.904	A

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1970	581	1976	0.997	1936	30.2	55.372	F
2	1047	1506	954	1.097	950	53.9	167.842	F
3	2931	749	2041	1.436	2041	532.6	750.496	F
4	203	2392	618	0.328	203	0.5	8.916	A

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1608	542	1998	0.805	1711	4.5	17.192	C
2	855	1331	1038	0.823	1019	13.0	123.983	F
3	2393	791	2015	1.188	2015	627.1	1030.945	F
4	165	2392	618	0.268	166	0.4	8.209	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1347	541	1999	0.674	1356	2.2	5.854	A
2	716	1055	1172	0.611	761	1.7	10.219	B
3	2004	594	2135	0.939	2131	595.3	1032.464	F
4	139	2410	609	0.227	139	0.3	7.889	A

# 2028, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	536.47	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	536.47	F

## 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)
D11	2028	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	2512	100.000
2		✓	667	100.000
3		✓	1937	100.000
4		✓	237	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	558	1852	102
	2	285	0	58	324
	3	1455	475	0	7
	4	30	204	3	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	6	6	6
	2	6	0	6	6
	3	6	6	0	6
	4	6	6	6	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.46	1063.56	608.0	F
2	0.76	16.16	3.2	C
3	1.04	96.50	63.0	F
4	0.40	9.89	0.7	A

### Main Results for each time segment

#### 07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1891	511	2016	0.938	1845	11.5	18.950	C
2	502	1438	987	0.509	498	1.1	7.726	A
3	1458	529	2174	0.671	1450	2.1	5.209	A
4	178	1657	993	0.180	178	0.2	4.672	A

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2258	610	1959	1.153	1950	88.6	101.011	F
2	600	1519	948	0.633	597	1.8	10.784	B
3	1741	624	2117	0.823	1731	4.6	9.657	A
4	213	1980	829	0.257	213	0.4	6.188	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2766	718	1897	1.458	1896	306.0	379.167	F
2	734	1478	968	0.759	729	3.1	15.633	C
3	2133	743	2044	1.043	2001	37.5	47.241	E
4	261	2305	662	0.394	260	0.7	9.445	A

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2766	726	1892	1.462	1892	524.4	786.770	F
2	734	1475	969	0.758	734	3.2	16.159	C
3	2133	747	2042	1.045	2031	63.0	96.505	F
4	261	2337	646	0.404	261	0.7	9.894	A

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2258	670	1924	1.174	1924	608.0	1055.220	F
2	600	1499	957	0.626	605	1.8	10.993	B
3	1741	631	2113	0.824	1971	5.6	47.282	E
4	213	2222	705	0.302	214	0.5	7.788	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1891	518	2012	0.940	2009	578.7	1063.561	F
2	502	1565	926	0.542	504	1.3	9.100	A
3	1458	542	2166	0.673	1472	2.2	5.598	A
4	178	1682	981	0.182	179	0.2	4.768	A

# 2028, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	560.46	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	560.46	F

## 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)
D12	2028	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1796	100.000
2		✓	957	100.000
3		✓	2678	100.000
4		✓	186	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	400	1337	59
	2	365	0	266	326
	3	2140	523	0	15
	4	19	166	1	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	3	3	3
	2	5	0	5	5
	3	5	5	0	5
	4	3	3	3	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.00	58.63	32.4	F
2	1.11	177.07	57.3	F
3	1.44	1072.33	644.1	F
4	0.33	8.96	0.5	A

### Main Results for each time segment

#### 16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1352	510	2017	0.671	1344	2.1	5.449	A
2	720	1045	1176	0.612	714	1.6	8.066	A
3	2016	560	2156	0.935	1971	11.2	17.559	C
4	140	2233	700	0.200	139	0.3	6.601	A

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1615	556	1990	0.811	1606	4.2	9.451	A
2	860	1249	1078	0.798	852	3.8	16.090	C
3	2407	668	2090	1.152	2081	92.9	98.097	F
4	167	2394	617	0.271	167	0.4	8.220	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1977	582	1975	1.001	1903	22.9	34.601	D
2	1054	1480	967	1.090	944	31.1	80.571	F
3	2949	744	2043	1.443	2043	319.2	367.279	F
4	205	2392	618	0.331	204	0.5	8.945	A

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1977	582	1975	1.001	1939	32.4	58.629	F
2	1054	1508	953	1.106	949	57.3	177.070	F
3	2949	749	2041	1.445	2041	546.2	770.613	F
4	205	2391	619	0.331	205	0.5	8.957	A

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1615	544	1997	0.809	1726	4.7	18.770	C
2	860	1342	1033	0.833	1015	18.7	139.391	F
3	2407	789	2016	1.194	2016	644.1	1057.116	F
4	167	2392	618	0.270	168	0.4	8.237	A



18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1352	540	1999	0.676	1362	2.2	5.907	A
2	720	1059	1170	0.616	788	1.7	11.760	B
3	2016	614	2123	0.950	2119	618.3	1072.331	F
4	140	2408	610	0.230	140	0.3	7.900	A

# 2028 +150dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	542.14	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	542.14	F

## 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)
D13	2028 +150dw	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	2516	100.000
2		✓	667	100.000
3		✓	1949	100.000
4		✓	237	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	558	1856	102
	2	285	0	58	324
	3	1467	475	0	7
	4	30	204	3	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	6	6	6
	2	6	0	6	6
	3	6	6	0	6
	4	6	6	6	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.46	1071.65	612.1	F
2	0.76	16.22	3.2	C
3	1.05	103.29	68.4	F
4	0.40	9.92	0.7	A

### Main Results for each time segment

#### 07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1894	511	2016	0.940	1848	11.6	19.150	C
2	502	1440	986	0.509	498	1.1	7.751	A
3	1467	529	2174	0.675	1459	2.2	5.271	A
4	178	1666	989	0.180	177	0.2	4.698	A

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2262	610	1959	1.155	1950	89.6	102.047	F
2	600	1520	947	0.633	597	1.8	10.797	B
3	1752	624	2117	0.828	1742	4.8	9.904	A
4	213	1990	823	0.259	213	0.4	6.242	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2770	715	1898	1.460	1898	307.8	381.535	F
2	734	1480	967	0.760	729	3.1	15.680	C
3	2146	742	2045	1.050	2005	40.1	49.566	E
4	261	2309	661	0.395	260	0.7	9.458	A

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2770	723	1893	1.463	1893	527.0	790.967	F
2	734	1477	968	0.758	734	3.2	16.219	C
3	2146	747	2042	1.051	2033	68.4	103.294	F
4	261	2339	645	0.404	261	0.7	9.915	A

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2262	675	1921	1.177	1921	612.1	1062.277	F
2	600	1498	958	0.626	605	1.8	10.978	B
3	1752	630	2113	0.829	2002	6.0	56.058	F
4	213	2253	689	0.309	214	0.5	8.046	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1894	518	2012	0.942	2008	583.5	1071.650	F
2	502	1565	926	0.542	504	1.3	9.106	A
3	1467	542	2167	0.677	1482	2.3	5.696	A
4	178	1692	975	0.183	179	0.2	4.800	A

# 2028 +150dw, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	566.28	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	566.28	F

## 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)
D14	2028 +150dw	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1805	100.000
2		✓	957	100.000
3		✓	2682	100.000
4		✓	186	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	400	1346	59
	2	365	0	266	326
	3	2144	523	0	15
	4	19	166	1	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	3	3	3
	2	5	0	5	5
	3	5	5	0	5
	4	3	3	3	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.01	62.43	35.1	F
2	1.11	181.00	58.5	F
3	1.45	1081.51	646.9	F
4	0.33	8.96	0.5	A

### Main Results for each time segment

#### 16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1359	510	2017	0.674	1351	2.1	5.500	A
2	720	1052	1173	0.614	714	1.6	8.120	A
3	2019	560	2156	0.937	1974	11.4	17.735	C
4	140	2235	698	0.200	139	0.3	6.615	A

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1623	556	1990	0.815	1614	4.3	9.627	A
2	860	1257	1074	0.801	851	3.9	16.328	C
3	2411	667	2090	1.154	2081	93.9	99.040	F
4	167	2394	617	0.271	167	0.4	8.222	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1987	582	1975	1.006	1908	24.3	36.024	E
2	1054	1486	964	1.093	942	31.7	81.986	F
3	2953	743	2044	1.444	2044	321.1	369.536	F
4	205	2392	618	0.331	204	0.5	8.947	A

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1987	582	1975	1.006	1944	35.1	62.428	F
2	1054	1514	950	1.109	946	58.5	180.998	F
3	2953	747	2042	1.446	2042	548.9	773.765	F
4	205	2391	619	0.331	205	0.5	8.960	A

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1623	544	1997	0.813	1744	4.8	20.894	C
2	860	1358	1025	0.839	1007	21.8	147.419	F
3	2411	784	2019	1.194	2019	646.9	1060.816	F
4	167	2392	618	0.270	168	0.4	8.237	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1359	538	2000	0.679	1369	2.2	5.971	A
2	720	1067	1166	0.618	801	1.7	12.763	B
3	2019	623	2117	0.954	2114	623.2	1081.507	F
4	140	2407	610	0.229	140	0.3	7.895	A

# 2031, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	606.00	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	606.00	F

## 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)
D15	2031	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	2564	100.000
2		✓	681	100.000
3		✓	1977	100.000
4		✓	242	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	570	1890	104
	2	291	0	59	331
	3	1485	485	0	7
	4	31	208	3	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	6	6	6
	2	6	0	6	6
	3	6	6	0	6
	4	6	6	6	0



## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.49	1189.43	669.8	F
2	0.77	17.19	3.5	C
3	1.07	125.11	85.4	F
4	0.41	10.09	0.7	B

### Main Results for each time segment

#### 07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1930	521	2010	0.960	1873	14.4	22.315	C
2	513	1459	977	0.525	508	1.1	8.060	A
3	1488	540	2168	0.687	1479	2.3	5.474	A
4	182	1691	976	0.187	181	0.2	4.794	A

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2305	622	1952	1.181	1946	104.3	118.102	F
2	612	1516	950	0.645	609	1.9	11.122	B
3	1777	635	2110	0.842	1765	5.3	10.723	B
4	218	2019	809	0.269	217	0.4	6.443	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2823	723	1893	1.491	1893	336.7	423.697	F
2	750	1476	969	0.774	744	3.4	16.504	C
3	2177	756	2036	1.069	2005	48.1	57.041	F
4	266	2316	657	0.406	265	0.7	9.706	A

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2823	730	1890	1.494	1890	570.1	862.430	F
2	750	1473	970	0.773	749	3.5	17.188	C
3	2177	761	2033	1.071	2028	85.4	125.108	F
4	266	2341	644	0.413	266	0.7	10.089	B

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2305	701	1906	1.209	1906	669.8	1160.219	F
2	612	1485	964	0.635	618	1.9	11.227	B
3	1777	642	2106	0.844	2081	9.4	86.996	F
4	218	2338	646	0.337	218	0.5	8.944	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1930	532	2004	0.963	2001	652.2	1189.427	F
2	513	1558	929	0.552	515	1.3	9.268	A
3	1488	551	2161	0.689	1516	2.4	6.168	A
4	182	1731	956	0.191	183	0.3	4.947	A

# 2031, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	643.44	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	643.44	F

## 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)
D16	2031	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1835	100.000
2		✓	978	100.000
3		✓	2735	100.000
4		✓	190	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	409	1366	60
	2	373	0	272	333
	3	2186	534	0	15
	4	19	170	1	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	3	3	3
	2	5	0	5	5
	3	5	5	0	5
	4	3	3	3	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.02	78.17	46.6	F
2	1.14	214.68	70.5	F
3	1.47	1220.09	702.1	F
4	0.34	9.06	0.5	A

### Main Results for each time segment

#### 16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1381	519	2011	0.687	1373	2.2	5.728	A
2	736	1067	1166	0.632	729	1.8	8.529	A
3	2059	571	2149	0.958	2002	14.3	20.891	C
4	143	2269	681	0.210	142	0.3	6.863	A

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1650	559	1988	0.830	1640	4.7	10.343	B
2	879	1275	1066	0.825	868	4.4	18.247	C
3	2459	681	2082	1.181	2076	110.0	115.370	F
4	171	2396	616	0.277	170	0.4	8.305	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2020	587	1972	1.024	1920	29.8	41.749	E
2	1077	1493	960	1.121	944	37.7	94.097	F
3	3011	744	2044	1.474	2043	352.0	410.807	F
4	209	2392	618	0.338	209	0.5	9.042	A

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2020	587	1972	1.025	1953	46.6	78.168	F
2	1077	1519	948	1.136	945	70.5	214.682	F
3	3011	746	2042	1.475	2042	594.2	839.666	F
4	209	2392	618	0.338	209	0.5	9.058	A

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1650	550	1993	0.828	1814	5.5	33.413	D
2	879	1411	1000	0.879	986	43.9	209.035	F
3	2459	771	2027	1.213	2027	702.1	1148.181	F
4	171	2392	618	0.276	171	0.4	8.306	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1381	533	2003	0.690	1394	2.3	6.207	A
2	736	1084	1158	0.636	904	1.9	28.199	D
3	2059	698	2071	0.994	2068	699.8	1220.092	F
4	143	2402	613	0.233	143	0.3	7.898	A

# 2031 +230dw, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	616.43	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	616.43	F

## 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)
D17	2031 +230dw	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	2570	100.000
2		✓	681	100.000
3		✓	1996	100.000
4		✓	242	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	570	1896	104
	2	291	0	59	331
	3	1504	485	0	7
	4	31	208	3	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	6	6	6
	2	6	0	6	6
	3	6	6	0	6
	4	6	6	6	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.50	1204.54	674.2	F
2	0.77	17.30	3.5	C
3	1.08	137.12	94.8	F
4	0.41	10.11	0.7	B

### Main Results for each time segment

#### 07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1935	521	2010	0.963	1876	14.8	22.686	C
2	513	1462	975	0.526	508	1.2	8.087	A
3	1503	540	2168	0.693	1493	2.3	5.585	A
4	182	1705	969	0.188	181	0.2	4.838	A

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2310	622	1952	1.184	1946	105.9	119.848	F
2	612	1517	949	0.645	609	1.9	11.142	B
3	1794	635	2110	0.851	1781	5.6	11.203	B
4	218	2036	800	0.272	217	0.4	6.535	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2830	719	1896	1.493	1895	339.5	427.288	F
2	750	1478	968	0.775	744	3.4	16.588	C
3	2198	756	2036	1.079	2009	52.7	61.171	F
4	266	2320	655	0.407	265	0.7	9.756	A

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2830	725	1892	1.495	1892	573.8	867.374	F
2	750	1476	969	0.774	749	3.5	17.297	C
3	2198	761	2033	1.081	2029	94.8	137.117	F
4	266	2342	644	0.414	266	0.7	10.107	B

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2310	696	1909	1.210	1909	674.2	1167.339	F
2	612	1488	963	0.636	619	1.9	11.279	B
3	1794	642	2106	0.852	2082	22.9	105.192	F
4	218	2339	645	0.337	218	0.5	8.955	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1935	545	1996	0.969	1993	659.6	1204.540	F
2	513	1553	931	0.550	515	1.3	9.217	A
3	1503	551	2161	0.695	1584	2.5	7.584	A
4	182	1799	921	0.198	183	0.3	5.179	A



# 2031 +230dw, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Profile Type	D18 - 2031 +230dw, PM	The DIRECT profile type is intended to be used for demand that varies over time. You are using it with the 'Use O-D data' option, but your O-D data does not vary over time. Are you sure this is correct?

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	846.21	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	846.21	F

## 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)
D18	2031 +230dw	PM	DIRECT	16:45	18:15	90	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Scaling Factor (%)
1		✓	100.000
2		✓	100.000
3		✓	100.000
4		✓	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	409	1379	60
	2	373	0	272	333
	3	2193	534	0	15
	4	19	170	1	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	3	3	3
	2	5	0	5	5
	3	5	5	0	5
	4	3	3	3	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.93	26.50	13.2	D
2	0.99	122.63	32.3	F
3	1.35	1714.78	1056.3	F
4	0.31	8.67	0.5	A

### Main Results for each time segment

#### 16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1848	567	1984	0.932	1806	10.5	17.958	C
2	978	1407	1002	0.976	926	12.9	37.894	E
3	2742	727	2054	1.335	2041	175.1	158.147	F
4	190	2384	623	0.305	188	0.4	8.503	A

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1848	568	1983	0.932	1843	11.8	24.573	C
2	978	1436	988	0.990	954	18.9	70.615	F
3	2742	749	2041	1.344	2041	350.4	467.388	F
4	190	2393	618	0.308	190	0.5	8.671	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1848	568	1983	0.932	1846	12.4	25.600	D
2	978	1438	987	0.991	961	23.2	88.214	F
3	2742	753	2038	1.346	2038	526.5	777.737	F
4	190	2393	618	0.308	190	0.5	8.669	A

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1848	568	1983	0.932	1847	12.8	26.062	D
2	978	1439	987	0.991	964	26.7	101.693	F
3	2742	756	2036	1.346	2036	702.9	1089.261	F
4	190	2393	618	0.308	190	0.5	8.667	A

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1848	567	1983	0.932	1847	13.0	26.328	D
2	978	1439	986	0.992	966	29.7	112.912	F
3	2742	757	2035	1.347	2035	879.5	1401.949	F
4	190	2393	618	0.308	190	0.5	8.666	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1848	567	1983	0.932	1847	13.2	26.501	D
2	978	1440	986	0.992	968	32.3	122.632	F
3	2742	758	2035	1.348	2035	1056.3	1714.776	F
4	190	2393	618	0.308	190	0.5	8.665	A

## **APPENDIX H24**

# **ADDITIONAL CUMULATIVE ASSESSMENTS MODELLING OUTPUT**

## B430/Ardley Road Signals Mitigation – Junction Assessment Results

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	Sat (%)	Queue	Delay (s)	Sat (%)	Queue	Delay (s)
<b>2031 Reference Case</b>						
B430 (N)	96.1	48	44	53.7	13	17
Ardley Road (E)	94.8	8	177	86.8	9	102
B430 (S)	54.6	13	12	89.3	36	29
Ardley Road (W)	94.8	14	125	83.9	9	93
Cycle Time (s)	120			120		
PRC (%)	-6.8			0.8		
Delay (PCUhr)	36.43			25.63		
<b>2031 Reference Case + Development</b>						
B430 (N)	97.2	52	49	55.4	13	17
Ardley Road (E)	94.8	8	177	86.8	9	102
B430 (S)	57.8	14	12	89.4	36	29
Ardley Road (W)	94.8	14	125	89.5	10	112
Cycle Time (s)	120			120		
PRC (%)	-8.0			0.5		
Delay (PCUhr)	39.04			26.81		

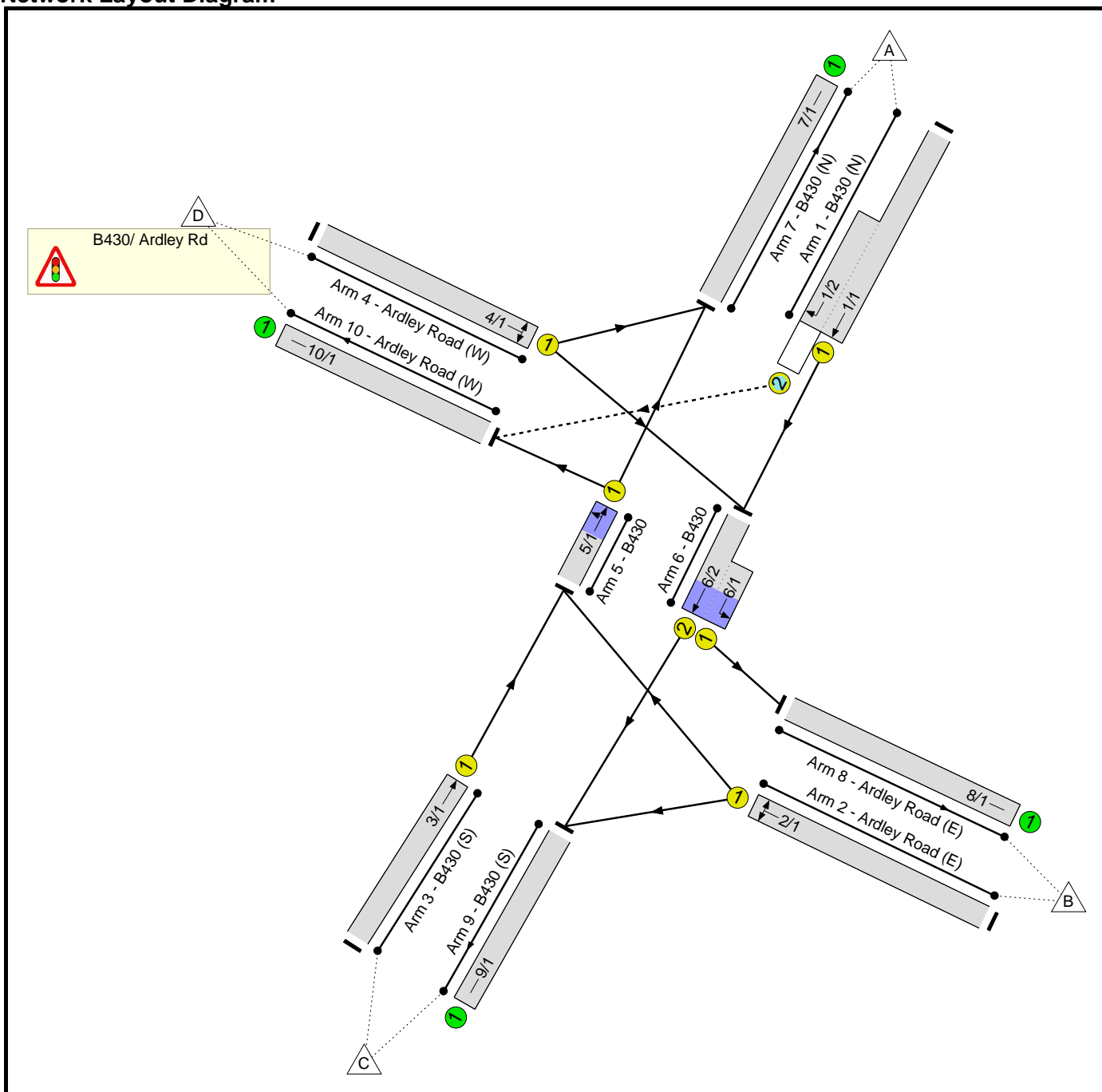
Sat % is saturation, Queue is mean max in PCUs, Delay is seconds per PCU.

Full Input Data And Results  
**Full Input Data And Results**

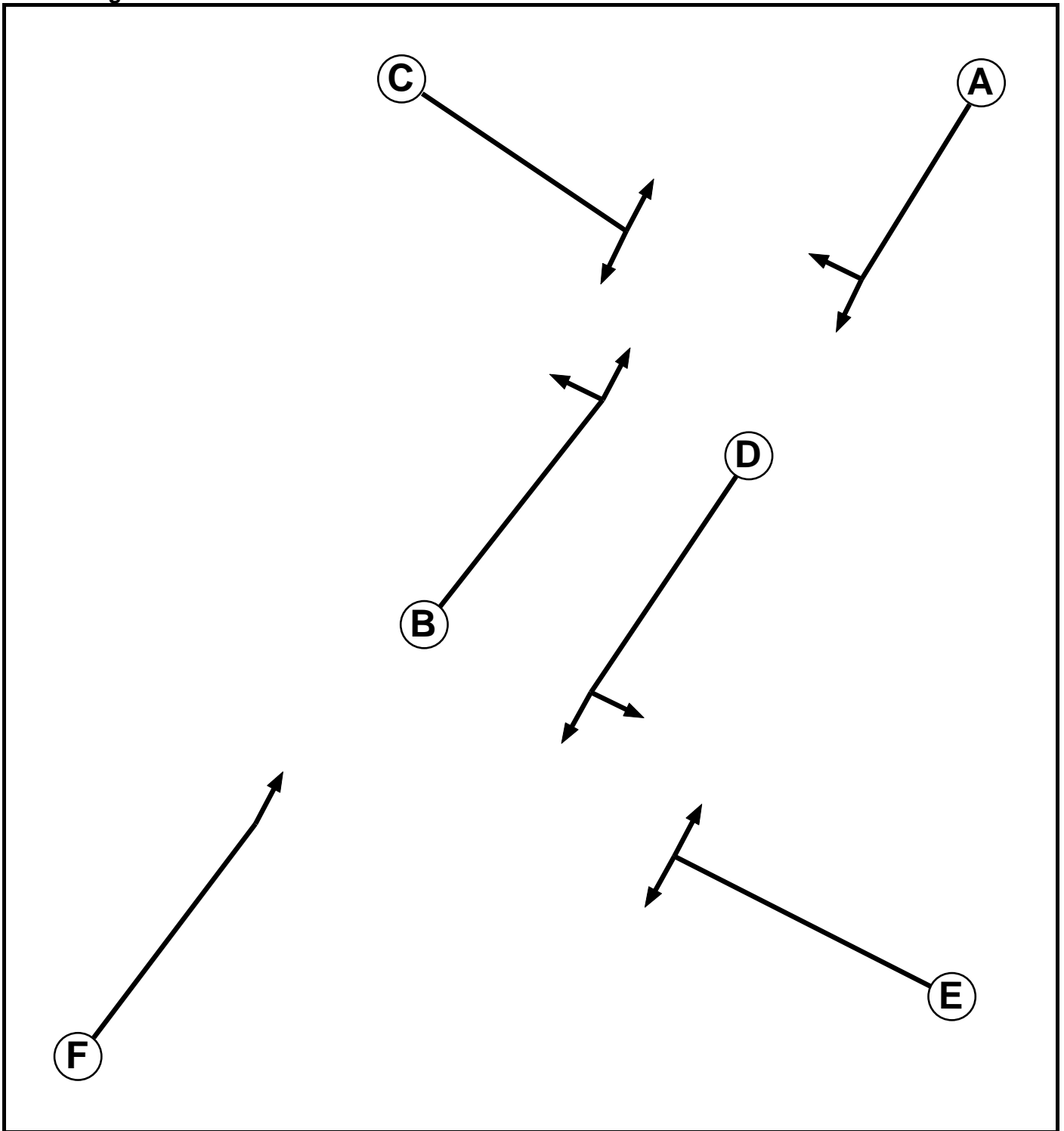
**User and Project Details**

<b>Project:</b>	
<b>Title:</b>	<b>B430/Ardley Road Mitigation</b>
<b>Location:</b>	
<b>Additional detail:</b>	
<b>File name:</b>	T19562 - B430-Ardley Rd Approved Mitigation Scheme.lsg3x
<b>Author:</b>	James Parker
<b>Company:</b>	Hub Transport Planning Ltd
<b>Address:</b>	

**Network Layout Diagram**



Phase Diagram



Full Input Data And Results

**Phase Input Data**

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7

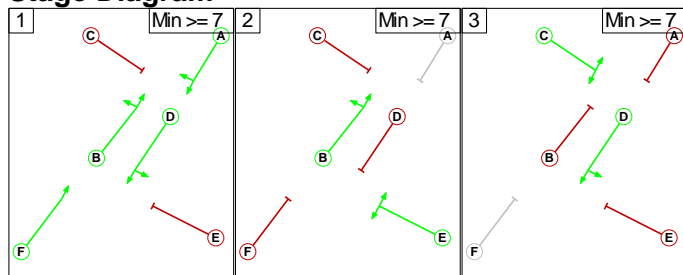
**Phase Intergreens Matrix**

		Starting Phase					
		A	B	C	D	E	F
Terminating Phase	A	-	-	5	-	-	-
	B	-	-	5	-	-	-
	C	5	5	-	-	-	-
	D	-	-	-	-	5	-
	E	-	-	-	5	-	5
	F	-	-	-	-	5	-

**Phases in Stage**

Stage No.	Phases in Stage
1	A B D F
2	B E
3	C D

**Stage Diagram**



**Phase Delays**

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					



Full Input Data And Results

**Prohibited Stage Change**

		To Stage		
		1	2	3
From Stage	1	5	5	5
	2	5	5	5
	3	5	5	5

Full Input Data And Results

**Give-Way Lane Input Data**

Junction: B430/ Ardley Rd											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/2 (B430 (N))	10/1 (Right)	1439	0	5/1	1.09	All	3.00	-	0.50	3	3.00

Full Input Data And Results

**Lane Input Data**

Junction: B430/ Ardley Rd												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (B430 (N))	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Ahead	Inf
1/2 (B430 (N))	O	A	2	3	7.8	Geom	-	3.50	0.00	N	Arm 10 Right	15.00
2/1 (Ardley Road (E))	U	E	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Right Arm 9 Left	12.00 12.00
3/1 (B430 (S))	U	F	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Ahead	Inf
4/1 (Ardley Road (W))	U	C	2	3	60.0	Geom	-	3.56	0.00	Y	Arm 6 Right	15.00
											Arm 7 Left	12.00
5/1 (B430)	U	B	2	3	4.0	Geom	-	4.50	0.00	Y	Arm 7 Ahead Arm 10 Left	Inf 14.00
6/1 (B430)	U	D	2	3	4.0	Geom	-	3.50	0.00	Y	Arm 8 Left	12.00
6/2 (B430)	U	D	2	3	5.0	Geom	-	3.50	0.00	N	Arm 9 Ahead	Inf
7/1 (B430 (N))	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (Ardley Road (E))	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1 (B430 (S))	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1 (Ardley Road (W))	U		2	3	60.0	Inf	-	-	-	-	-	-

**Traffic Flow Groups**

Flow Group	Start Time	End Time	Duration	Formula
1: '2031 DS Modelled AM'	08:00	09:00	01:00	
2: '2031 DS Modelled PM'	17:00	18:00	01:00	
3: '2031 DS Modelled + 230 Dw AM'	08:00	09:00	01:00	
4: '2031 DS Modelled + 230 Dw PM'	17:00	18:00	01:00	

Scenario 1: '2031 DS Modelled AM' (FG1: '2031 DS Modelled AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

Desired Flow :

	Destination
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### Full Input Data And Results

	A	B	C	D	Tot.	
Origin	A	0	289	979	17	1285
	B	94	0	10	17	121
	C	701	0	0	50	751
	D	39	189	26	0	254
	Tot.	834	478	1015	84	2411

Full Input Data And Results

**Traffic Lane Flows**

Scenario 1: 2031 DS Modelled AM	
<b>Junction: B430/ Ardley Rd</b>	
1/1 (with short)	1285(In) 1268(Out)
1/2 (short)	17
2/1	121
3/1	751
4/1	254
5/1	862
6/1 (short)	478
6/2 (with short)	1483(In) 1005(Out)
7/1	834
8/1	478
9/1	1015
10/1	84

**Lane Saturation Flows**

Junction: B430/ Ardley Rd								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B430 (N))	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
1/2 (B430 (N))	3.50	0.00	N	Arm 10 Right	15.00	100.0 %	1914	1914
2/1 (Ardley Road (E))	3.00	0.00	Y	Arm 5 Right Arm 9 Left	12.00 12.00	91.7 % 8.3 %	1702	1702
3/1 (B430 (S))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
4/1 (Ardley Road (W))	3.56	0.00	Y	Arm 6 Right Arm 7 Left	15.00 12.00	84.6 % 15.4 %	1786	1786
5/1 (B430)	4.50	0.00	Y	Arm 7 Ahead Arm 10 Left	Inf 14.00	92.2 % 7.8 %	2048	2048
6/1 (B430)	3.50	0.00	Y	Arm 8 Left	12.00	100.0 %	1747	1747
6/2 (B430)	3.50	0.00	N	Arm 9 Ahead	Inf	100.0 %	2105	2105
7/1 (B430 (N) Lane 1)				Infinite Saturation Flow			Inf	Inf
8/1 (Ardley Road (E) Lane 1)				Infinite Saturation Flow			Inf	Inf
9/1 (B430 (S) Lane 1)				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

10/1 (Ardley Road (W) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 2: '2031 DS Modelled PM'** (FG2: '2031 DS Modelled PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	191	459	27	677
	B	89	0	88	20	197
	C	1042	0	0	113	1155
	D	23	50	127	0	200
	Tot.	1154	241	674	160	2229

Full Input Data And Results

**Traffic Lane Flows**

Scenario 2: 2031 DS Modelled PM	
<b>Junction: B430/ Ardley Rd</b>	
1/1 (with short)	677(In) 650(Out)
1/2 (short)	27
2/1	197
3/1	1155
4/1	200
5/1	1264
6/1 (short)	241
6/2 (with short)	827(In) 586(Out)
7/1	1154
8/1	241
9/1	674
10/1	160

**Lane Saturation Flows**

Junction: B430/ Ardley Rd								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B430 (N))	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
1/2 (B430 (N))	3.50	0.00	N	Arm 10 Right	15.00	100.0 %	1914	1914
2/1 (Ardley Road (E))	3.00	0.00	Y	Arm 5 Right	12.00	55.3 %	1702	1702
				Arm 9 Left	12.00	44.7 %		
3/1 (B430 (S))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
4/1 (Ardley Road (W))	3.56	0.00	Y	Arm 6 Right	15.00	88.5 %	1787	1787
				Arm 7 Left	12.00	11.5 %		
5/1 (B430)	4.50	0.00	Y	Arm 7 Ahead	Inf	89.5 %	2042	2042
				Arm 10 Left	14.00	10.5 %		
6/1 (B430)	3.50	0.00	Y	Arm 8 Left	12.00	100.0 %	1747	1747
6/2 (B430)	3.50	0.00	N	Arm 9 Ahead	Inf	100.0 %	2105	2105
7/1 (B430 (N) Lane 1)				Infinite Saturation Flow			Inf	Inf
8/1 (Ardley Road (E) Lane 1)				Infinite Saturation Flow			Inf	Inf
9/1 (B430 (S) Lane 1)				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

10/1 (Ardley Road (W) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 3: '2031 DS Modelled + 230 Dw AM'** (FG3: '2031 DS Modelled + 230 Dw AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	290	993	17	1300
	B	94	0	10	17	121
	C	745	0	0	50	795
	D	39	189	26	0	254
	Tot.	878	479	1029	84	2470



Full Input Data And Results

**Traffic Lane Flows**

Scenario 3: 2031 DS Modelled + 230 Dw AM	
<b>Junction: B430/ Ardley Rd</b>	
1/1 (with short)	1300(In) 1283(Out)
1/2 (short)	17
2/1	121
3/1	795
4/1	254
5/1	906
6/1 (short)	479
6/2 (with short)	1498(In) 1019(Out)
7/1	878
8/1	479
9/1	1029
10/1	84

**Lane Saturation Flows**

Junction: B430/ Ardley Rd								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B430 (N))	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
1/2 (B430 (N))	3.50	0.00	N	Arm 10 Right	15.00	100.0 %	1914	1914
2/1 (Ardley Road (E))	3.00	0.00	Y	Arm 5 Right Arm 9 Left	12.00 12.00	91.7 % 8.3 %	1702	1702
3/1 (B430 (S))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
4/1 (Ardley Road (W))	3.56	0.00	Y	Arm 6 Right Arm 7 Left	15.00 12.00	84.6 % 15.4 %	1786	1786
5/1 (B430)	4.50	0.00	Y	Arm 7 Ahead Arm 10 Left	Inf 14.00	92.6 % 7.4 %	2049	2049
6/1 (B430)	3.50	0.00	Y	Arm 8 Left	12.00	100.0 %	1747	1747
6/2 (B430)	3.50	0.00	N	Arm 9 Ahead	Inf	100.0 %	2105	2105
7/1 (B430 (N) Lane 1)	Infinite Saturation Flow						Inf	Inf
8/1 (Ardley Road (E) Lane 1)	Infinite Saturation Flow						Inf	Inf
9/1 (B430 (S) Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

10/1 (Ardley Road (W) Lane 1)	Infinite Saturation Flow	Inf	Inf
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**Scenario 4: '2031 DS Modelled + 230 Dw PM'** (FG4: '2031 DS Modelled + 230 Dw PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	191	490	27	708
	B	89	0	88	20	197
	C	1058	0	0	113	1171
	D	23	50	127	0	200
	Tot.	1170	241	705	160	2276

Full Input Data And Results

**Traffic Lane Flows**

Scenario 4: 2031 DS Modelled + 230 Dw PM	
<b>Junction: B430/ Ardley Rd</b>	
1/1 (with short)	708(In) 681(Out)
1/2 (short)	27
2/1	197
3/1	1171
4/1	200
5/1	1280
6/1 (short)	241
6/2 (with short)	858(In) 617(Out)
7/1	1170
8/1	241
9/1	705
10/1	160

**Lane Saturation Flows**

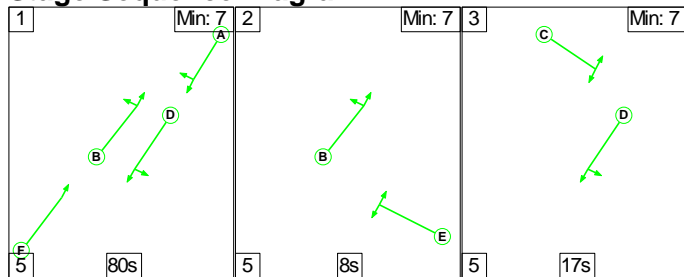
Junction: B430/ Ardley Rd								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B430 (N))	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
1/2 (B430 (N))	3.50	0.00	N	Arm 10 Right	15.00	100.0 %	1914	1914
2/1 (Ardley Road (E))	3.00	0.00	Y	Arm 5 Right Arm 9 Left	12.00 12.00	55.3 % 44.7 %	1702	1702
3/1 (B430 (S))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
4/1 (Ardley Road (W))	3.56	0.00	Y	Arm 6 Right Arm 7 Left	15.00 12.00	88.5 % 11.5 %	1787	1787
5/1 (B430)	4.50	0.00	Y	Arm 7 Ahead Arm 10 Left	Inf 14.00	89.6 % 10.4 %	2042	2042
6/1 (B430)	3.50	0.00	Y	Arm 8 Left	12.00	100.0 %	1747	1747
6/2 (B430)	3.50	0.00	N	Arm 9 Ahead	Inf	100.0 %	2105	2105
7/1 (B430 (N) Lane 1)				Infinite Saturation Flow			Inf	Inf
8/1 (Ardley Road (E) Lane 1)				Infinite Saturation Flow			Inf	Inf
9/1 (B430 (S) Lane 1)				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

10/1 (Ardley Road (W) Lane 1)	Infinite Saturation Flow	Inf	Inf
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Scenario 1: '2031 DS Modelled AM' (FG1: '2031 DS Modelled AM', Plan 1: 'Network Control Plan 1')

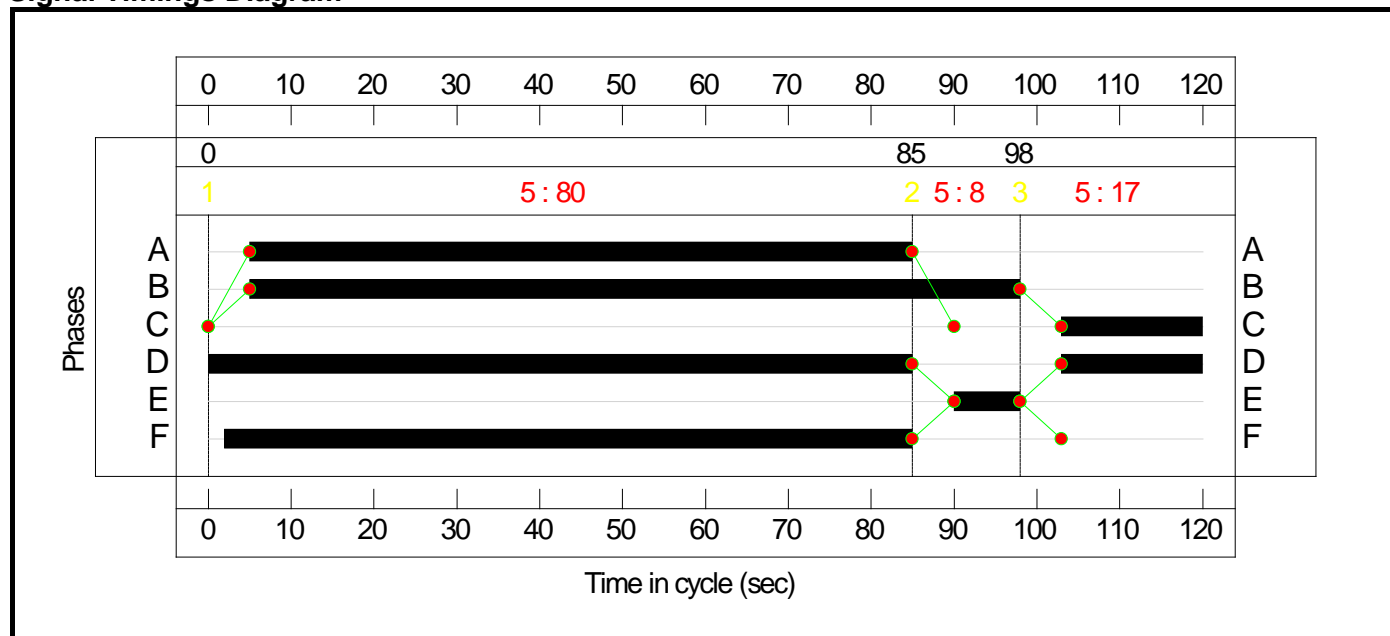
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	80	8	17
Change Point	0	85	98

Signal Timings Diagram



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	96.1%
B430/ Ardley Rd	-	-	N/A	-	-		-	-	-	-	-	-	96.1%
1/1+1/2	B430 (N) Ahead Right	U+O	N/A	N/A	A		1	80	-	1285	1965:1914	1319+18	96.1 : 96.1%
2/1	Ardley Road (E) Right Left	U	N/A	N/A	E		1	8	-	121	1702	128	94.8%
3/1	B430 (S) Ahead	U	N/A	N/A	F		1	83	-	751	1965	1375	54.6%
4/1	Ardley Road (W) Right Left	U	N/A	N/A	C		1	17	-	254	1786	268	94.8%
5/1	B430 Ahead Left	U	N/A	N/A	B		1	93	-	862	2048	1604	53.7%
6/2+6/1	B430 Left Ahead	U	N/A	N/A	D		1	102	-	1483	2105:1747	1191+566	84.4 : 84.4%
7/1	B430 (N)	U	N/A	N/A	-		-	-	-	834	Inf	Inf	0.0%
8/1	Ardley Road (E)	U	N/A	N/A	-		-	-	-	478	Inf	Inf	0.0%
9/1	B430 (S)	U	N/A	N/A	-		-	-	-	1015	Inf	Inf	0.0%
10/1	Ardley Road (W)	U	N/A	N/A	-		-	-	-	84	Inf	Inf	0.0%

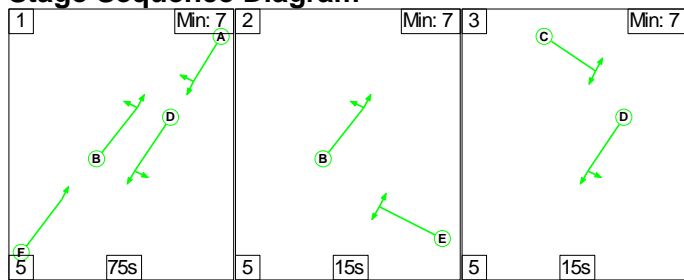
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	17	0	0	14.1	22.3	0.0	36.4	-	-	-	-
<b>B430/ Ardley Rd</b>	-	-	17	0	0	14.1	22.3	0.0	36.4	-	-	-	-
1/1+1/2	1285	1285	17	0	0	6.4	9.1	0.0	15.5	43.5	39.2	9.1	48.3
2/1	121	121	-	-	-	1.9	4.1	-	5.9	176.8	4.0	4.1	8.1
3/1	751	751	-	-	-	1.8	0.6	-	2.4	11.6	12.1	0.6	12.7
4/1	254	254	-	-	-	3.6	5.2	-	8.8	124.5	8.3	5.2	13.5
5/1	862	862	-	-	-	0.4	0.6	-	0.9	3.9	1.3	0.6	1.9
6/2+6/1	1483	1483	-	-	-	0.2	2.7	-	2.8	6.8	0.8	2.7	3.5
7/1	834	834	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	478	478	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	1015	1015	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	84	84	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		-6.8	Total Delay for Signalled Lanes (pcuHr):		36.43	Cycle Time (s): 120				
			PRC Over All Lanes (%):		-6.8	Total Delay Over All Lanes(pcuHr):		36.43					

Full Input Data And Results

Scenario 2: '2031 DS Modelled PM' (FG2: '2031 DS Modelled PM', Plan 1: 'Network Control Plan 1')

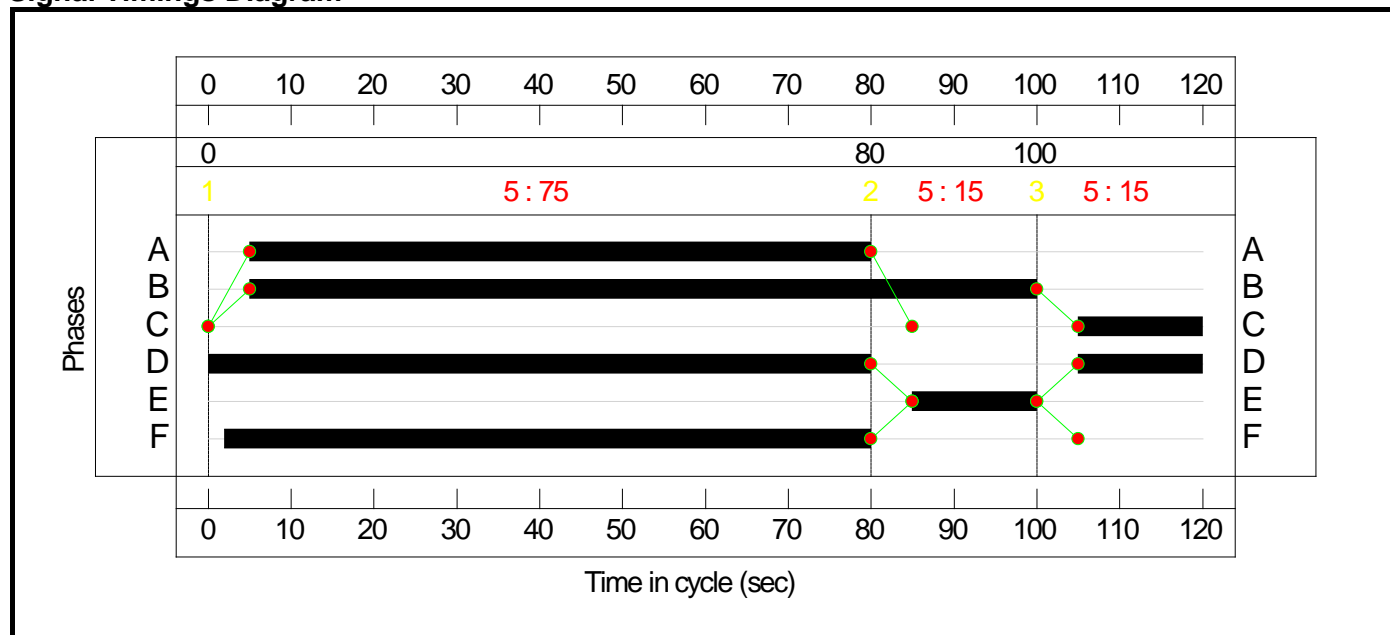
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	75	15	15
Change Point	0	80	100

Signal Timings Diagram



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	89.3%
B430/ Ardley Rd	-	-	N/A	-	-		-	-	-	-	-	-	89.3%
1/1+1/2	B430 (N) Ahead Right	U+O	N/A	N/A	A		1	75	-	677	1965:1914	1211+50	53.7 : 53.7%
2/1	Ardley Road (E) Right Left	U	N/A	N/A	E		1	15	-	197	1702	227	86.8%
3/1	B430 (S) Ahead	U	N/A	N/A	F		1	78	-	1155	1965	1294	89.3%
4/1	Ardley Road (W) Right Left	U	N/A	N/A	C		1	15	-	200	1787	238	83.9%
5/1	B430 Ahead Left	U	N/A	N/A	B		1	95	-	1264	2042	1634	77.4%
6/2+6/1	B430 Left Ahead	U	N/A	N/A	D		1	95	-	827	2105:1747	1164+479	50.3 : 50.3%
7/1	B430 (N)	U	N/A	N/A	-		-	-	-	1154	Inf	Inf	0.0%
8/1	Ardley Road (E)	U	N/A	N/A	-		-	-	-	241	Inf	Inf	0.0%
9/1	B430 (S)	U	N/A	N/A	-		-	-	-	674	Inf	Inf	0.0%
10/1	Ardley Road (W)	U	N/A	N/A	-		-	-	-	160	Inf	Inf	0.0%



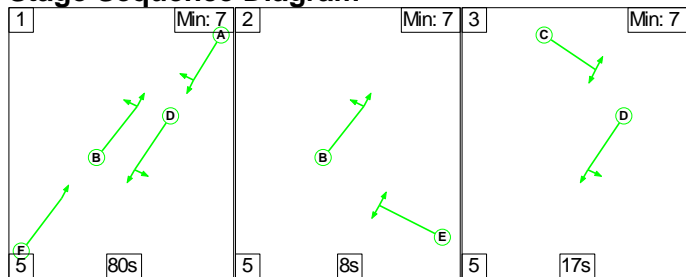
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	27	0	0	13.5	11.8	0.3	25.6	-	-	-	-
<b>B430/ Ardley Rd</b>	-	-	27	0	0	13.5	11.8	0.3	25.6	-	-	-	-
1/1+1/2	677	677	27	0	0	2.2	0.6	0.3	3.1	16.7	11.9	0.6	12.5
2/1	197	197	-	-	-	2.8	2.8	-	5.6	101.7	6.4	2.8	9.2
3/1	1155	1155	-	-	-	5.5	3.9	-	9.4	29.3	31.8	3.9	35.7
4/1	200	200	-	-	-	2.8	2.3	-	5.1	92.7	6.5	2.3	8.8
5/1	1264	1264	-	-	-	0.1	1.7	-	1.8	5.0	0.5	1.7	2.2
6/2+6/1	827	827	-	-	-	0.1	0.5	-	0.6	2.7	0.4	0.5	0.9
7/1	1154	1154	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	241	241	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	674	674	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	160	160	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%): 0.8			Total Delay for Signalled Lanes (pcuHr): 25.63			Cycle Time (s): 120				
			PRC Over All Lanes (%): 0.8			Total Delay Over All Lanes(pcuHr): 25.63							

Full Input Data And Results

**Scenario 3: '2031 DS Modelled + 230 Dw AM'** (FG3: '2031 DS Modelled + 230 Dw AM', Plan 1: 'Network Control Plan 1')

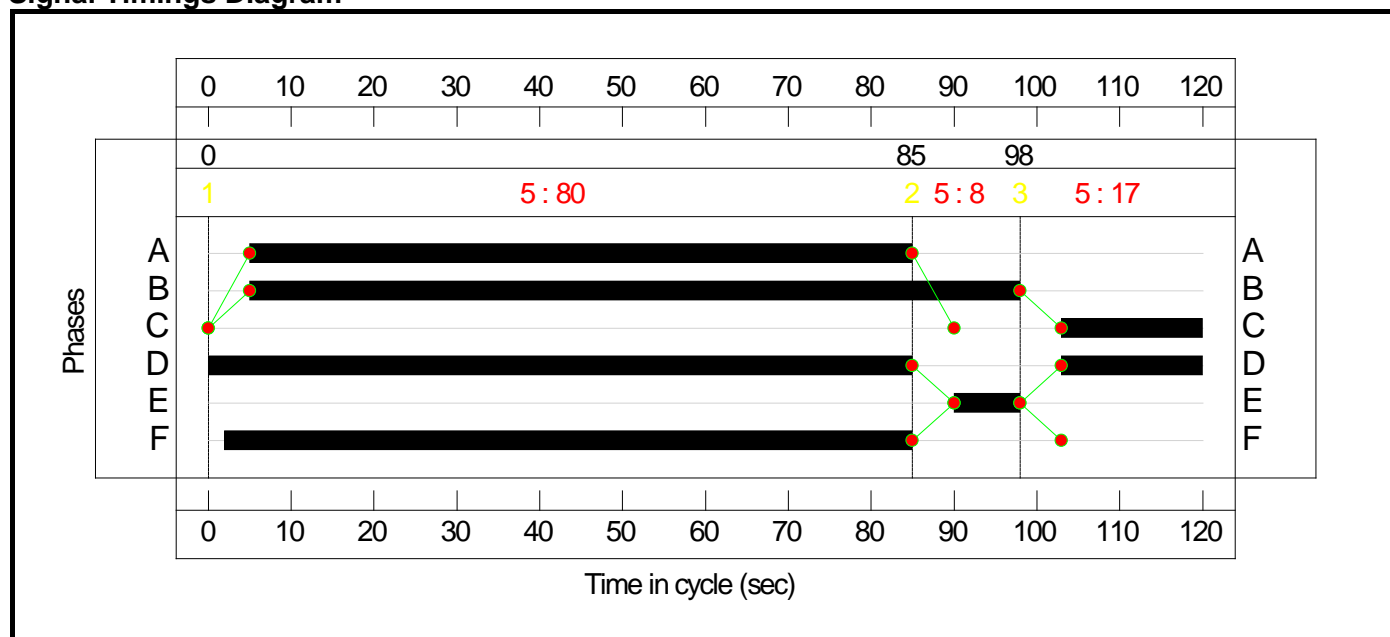
**Stage Sequence Diagram**



**Stage Timings**

Stage	1	2	3
Duration	80	8	17
Change Point	0	85	98

**Signal Timings Diagram**



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	97.2%
B430/ Ardley Rd	-	-	N/A	-	-		-	-	-	-	-	-	97.2%
1/1+1/2	B430 (N) Ahead Right	U+O	N/A	N/A	A		1	80	-	1300	1965:1914	1320+17	97.2 : 97.2%
2/1	Ardley Road (E) Right Left	U	N/A	N/A	E		1	8	-	121	1702	128	94.8%
3/1	B430 (S) Ahead	U	N/A	N/A	F		1	83	-	795	1965	1375	57.8%
4/1	Ardley Road (W) Right Left	U	N/A	N/A	C		1	17	-	254	1786	268	94.8%
5/1	B430 Ahead Left	U	N/A	N/A	B		1	93	-	906	2049	1605	56.4%
6/2+6/1	B430 Left Ahead	U	N/A	N/A	D		1	102	-	1498	2105:1747	1195+562	85.3 : 85.3%
7/1	B430 (N)	U	N/A	N/A	-		-	-	-	878	Inf	Inf	0.0%
8/1	Ardley Road (E)	U	N/A	N/A	-		-	-	-	479	Inf	Inf	0.0%
9/1	B430 (S)	U	N/A	N/A	-		-	-	-	1029	Inf	Inf	0.0%
10/1	Ardley Road (W)	U	N/A	N/A	-		-	-	-	84	Inf	Inf	0.0%

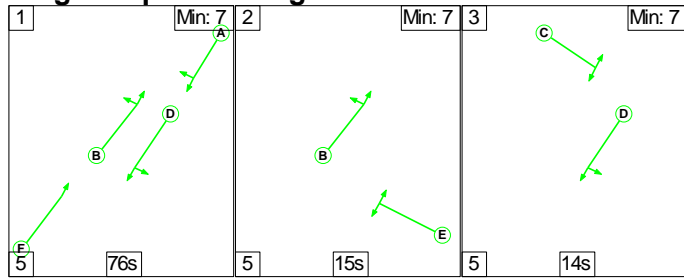
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	17	0	0	14.6	24.5	0.0	39.0	-	-	-	-
<b>B430/ Ardley Rd</b>	-	-	17	0	0	14.6	24.5	0.0	39.0	-	-	-	-
1/1+1/2	1300	1300	17	0	0	6.6	11.0	0.0	17.6	48.8	40.7	11.0	51.7
2/1	121	121	-	-	-	1.9	4.1	-	5.9	176.8	4.0	4.1	8.1
3/1	795	795	-	-	-	2.0	0.7	-	2.7	12.2	13.2	0.7	13.9
4/1	254	254	-	-	-	3.6	5.2	-	8.8	124.5	8.3	5.2	13.5
5/1	906	906	-	-	-	0.4	0.6	-	1.0	4.1	1.3	0.6	1.9
6/2+6/1	1498	1498	-	-	-	0.2	2.8	-	3.0	7.2	0.8	2.8	3.7
7/1	878	878	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	479	479	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	1029	1029	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	84	84	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		-8.0	Total Delay for Signalled Lanes (pcuHr):		39.04	Cycle Time (s): 120				
			PRC Over All Lanes (%):		-8.0	Total Delay Over All Lanes(pcuHr):		39.04					

Full Input Data And Results

**Scenario 4: '2031 DS Modelled + 230 Dw PM'** (FG4: '2031 DS Modelled + 230 Dw PM', Plan 1: 'Network Control Plan 1')

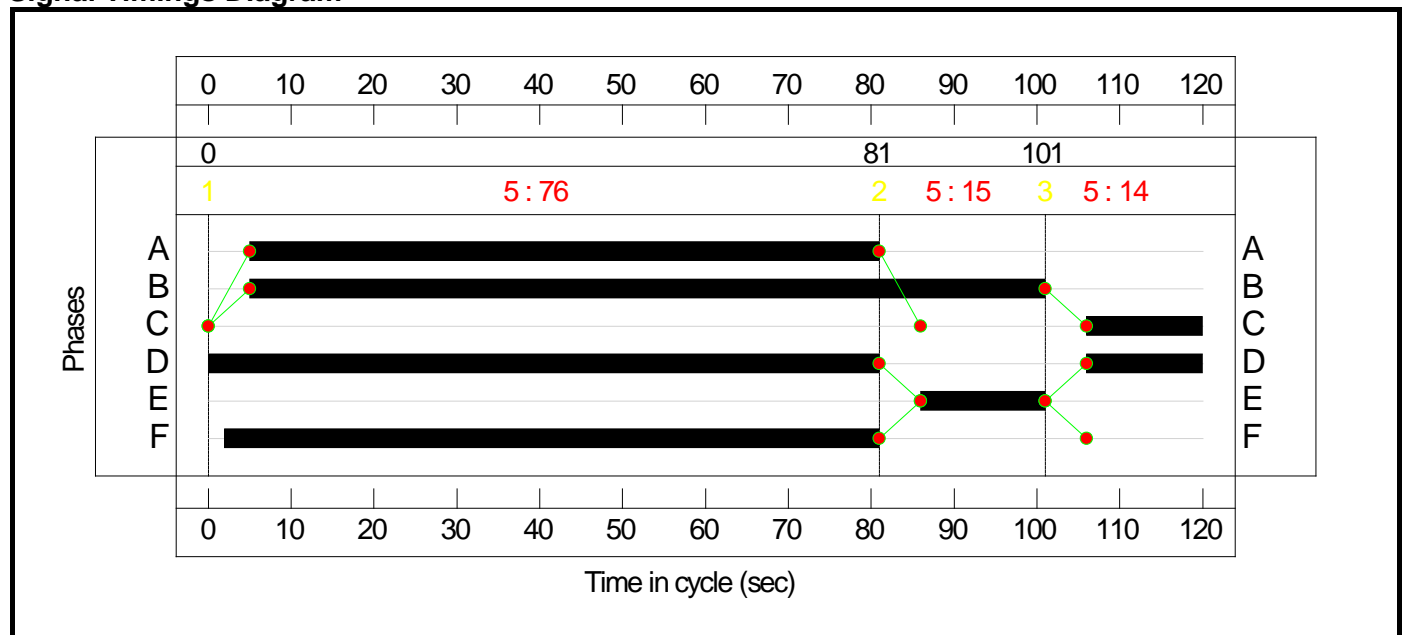
**Stage Sequence Diagram**



**Stage Timings**

Stage	1	2	3
Duration	76	15	14
Change Point	0	81	101

**Signal Timings Diagram**



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>89.5%</b>
<b>B430/ Ardley Rd</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>89.5%</b>
1/1+1/2	B430 (N) Ahead Right	U+O	N/A	N/A	A		1	76	-	708	1965:1914	1229+49	55.4 : 55.4%
2/1	Ardley Road (E) Right Left	U	N/A	N/A	E		1	15	-	197	1702	227	86.8%
3/1	B430 (S) Ahead	U	N/A	N/A	F		1	79	-	1171	1965	1310	89.4%
4/1	Ardley Road (W) Right Left	U	N/A	N/A	C		1	14	-	200	1787	223	89.5%
5/1	B430 Ahead Left	U	N/A	N/A	B		1	96	-	1280	2042	1651	77.5%
6/2+6/1	B430 Left Ahead	U	N/A	N/A	D		1	95	-	858	2105:1747	1182+462	52.2 : 52.2%
7/1	B430 (N)	U	N/A	N/A	-		-	-	-	1170	Inf	Inf	0.0%
8/1	Ardley Road (E)	U	N/A	N/A	-		-	-	-	241	Inf	Inf	0.0%
9/1	B430 (S)	U	N/A	N/A	-		-	-	-	705	Inf	Inf	0.0%
10/1	Ardley Road (W)	U	N/A	N/A	-		-	-	-	160	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	27	0	0	13.5	13.0	0.3	26.8	-	-	-	-
<b>B430/ Ardley Rd</b>	-	-	27	0	0	13.5	13.0	0.3	26.8	-	-	-	-
1/1+1/2	708	708	27	0	0	2.3	0.6	0.3	3.2	16.5	12.5	0.6	13.1
2/1	197	197	-	-	-	2.8	2.8	-	5.6	101.7	6.4	2.8	9.2
3/1	1171	1171	-	-	-	5.4	4.0	-	9.4	28.7	31.9	4.0	35.9
4/1	200	200	-	-	-	2.9	3.3	-	6.2	111.7	6.6	3.3	9.9
5/1	1280	1280	-	-	-	0.1	1.7	-	1.8	5.0	0.5	1.7	2.2
6/2+6/1	858	858	-	-	-	0.1	0.5	-	0.7	2.8	0.4	0.5	1.0
7/1	1170	1170	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	241	241	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	705	705	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	160	160	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		0.5	Total Delay for Signalled Lanes (pcuHr):		26.81	Cycle Time (s): 120				
			PRC Over All Lanes (%):		0.5	Total Delay Over All Lanes(pcuHr):		26.81					

## Hopcrofts Holt Mitigation Scheme – Junction Assessment Results

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	Sat (%)	Queue	Delay (s)	Sat (%)	Queue	Delay (s)
<b>2031 Reference Case</b>						
B4030 (E)	127.1	27	529	89.6	11	106
A4260 (S)	56.7	7	14	93.1	39	40
B4030 (W) LT	12.9	1	65	18.2	1	69
B4030 (W) A & RT	121.3	26	450	86.6	6	133
A4260 (N)	104.4	87	127	44.4	9	16
Cycle Time (s)	120			120		
PRC (%)	-41.3			-3.5		
Delay (PCUhr)	97.68			25.84		
<b>2031 Reference Case + Development</b>						
B4030 (E)	126.1	31	506	92.0	12	114
A4260 (S)	65.0	7	15	94.1	40	42
B4030 (W) LT	12.9	1	65	18.2	1	69
B4030 (W) A & RT	121.9	26	458	88.1	7	138
A4260 (N)	106.0	97	153	46.0	10	16
Cycle Time (s)	120			120		
PRC (%)	-40.1			-4.5		
Delay (PCUhr)	111.95			28.02		

Sat % is saturation, Queue is mean max in PCUs, Delay is seconds per PCU.

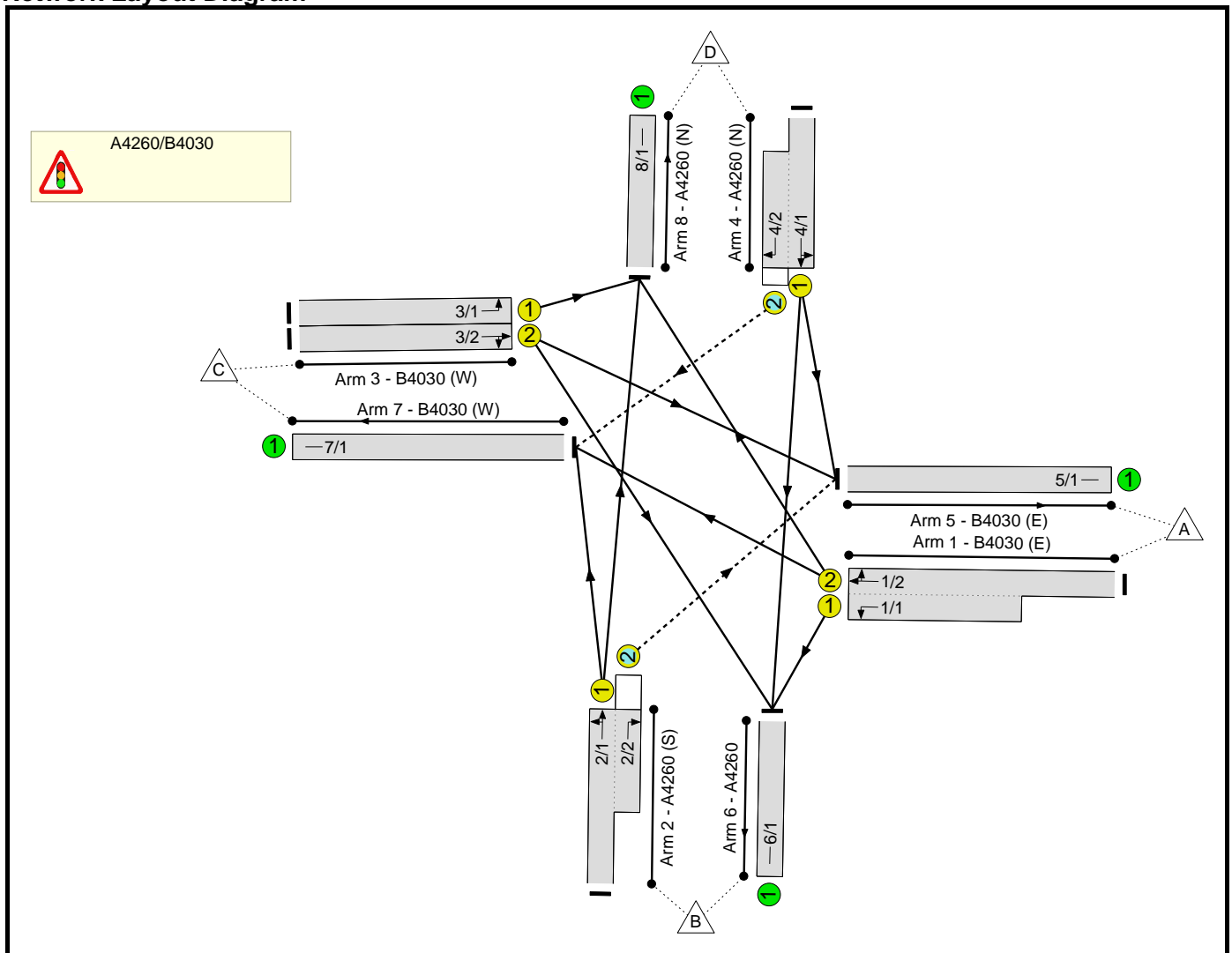


Full Input Data And Results  
**Full Input Data And Results**

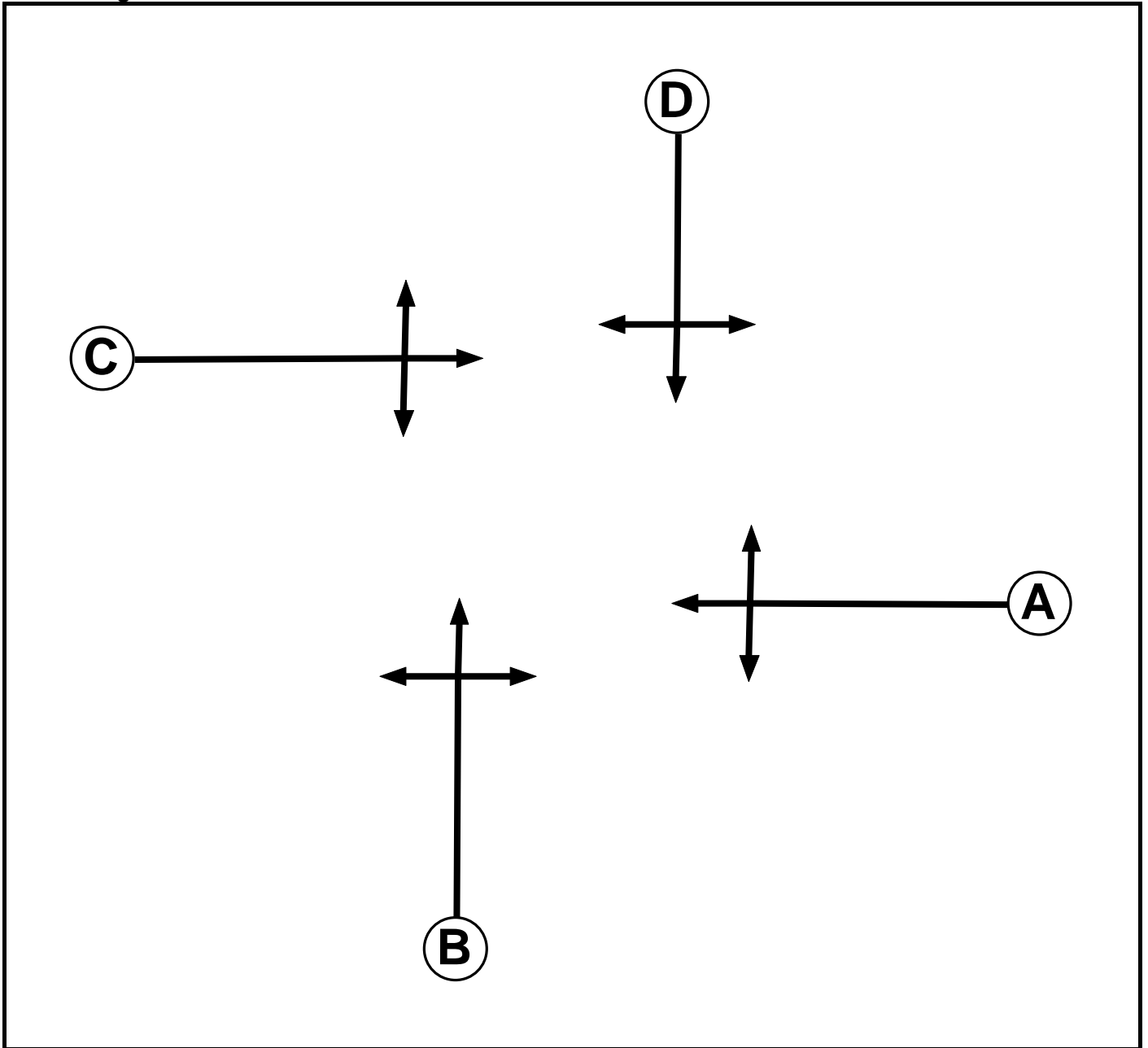
**User and Project Details**

<b>Project:</b>	
<b>Title:</b>	
<b>Location:</b>	Hopcrofts Holt Mitigation Scheme
<b>Additional detail:</b>	
<b>File name:</b>	T19562 - A4260-B4030 with improvements.lsg3x
<b>Author:</b>	James Parker
<b>Company:</b>	Hub Transport Planning Ltd
<b>Address:</b>	

**Network Layout Diagram**



Phase Diagram



Full Input Data And Results

**Phase Input Data**

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7

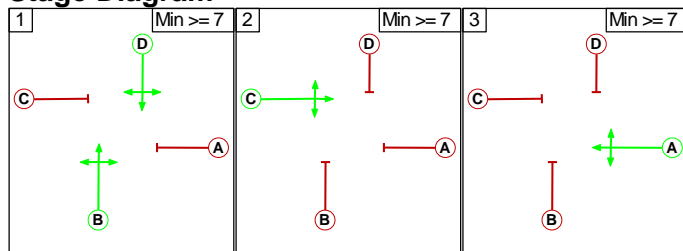
**Phase Intergreens Matrix**

	Starting Phase			
	A	B	C	D
Terminating Phase	A	5	10	5
	B	5	8	-
	C	10	8	5
	D	9	-	5

**Phases in Stage**

Stage No.	Phases in Stage
1	B D
2	C
3	A

**Stage Diagram**



**Phase Delays**

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

**Prohibited Stage Change**

	To Stage		
	1	2	3
From Stage	1	8	9
	2	8	10
	3	5	10

Full Input Data And Results

**Give-Way Lane Input Data**

Junction: A4260/B4030											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/2 (A4260 (S))	5/1 (Right)	1439	0	4/1	1.09	All	2.00	-	0.50	2	2.00
4/2 (A4260 (N))	7/1 (Right)	1439	0	2/1	1.09	All	1.00	-	0.50	1	1.00

Full Input Data And Results

**Lane Input Data**

Junction: A4260/B4030												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (B4030 (E))	U	A	2	3	10.1	Geom	-	3.25	0.00	Y	Arm 6 Left	10.00
1/2 (B4030 (E))	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 7 Ahead	15.00
											Arm 8 Right	15.00
2/1 (A4260 (S))	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 7 Left Arm 8 Ahead	18.00 Inf
2/2 (A4260 (S))	O	B	2	3	6.0	Geom	-	3.00	0.00	Y	Arm 5 Right	10.00
3/1 (B4030 (W))	U	C	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 8 Left	13.00
3/2 (B4030 (W))	U	C	2	3	60.0	Geom	-	3.45	0.00	Y	Arm 5 Ahead	17.00
											Arm 6 Right	17.00
4/1 (A4260 (N))	U	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Left Arm 6 Ahead	15.00 Inf
4/2 (A4260 (N))	O	D	2	3	6.8	Geom	-	3.00	0.00	Y	Arm 7 Right	14.00
5/1 (B4030 (E))	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A4260)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (B4030 (W))	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (A4260 (N))	U		2	3	60.0	Inf	-	-	-	-	-	-

**Traffic Flow Groups**

Flow Group	Start Time	End Time	Duration	Formula
1: '2031 Ref AM'	08:00	09:00	01:00	
2: '2031 Ref PM'	17:00	18:00	01:00	
3: '2031 Ref +230dw AM'	08:00	09:00	01:00	
4: '2031 Ref +230dw PM'	17:00	18:00	01:00	

Full Input Data And Results

**Scenario 1: '2031 Ref AM'** (FG1: '2031 Ref AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination				
		A	B	C	D	Tot.
Origin	A	0	0	119	47	166
	B	34	0	1	447	482
	C	144	38	0	19	201
	D	16	1320	31	0	1367
	Tot.	194	1358	151	513	2216

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 1: 2031 Ref AM
<b>Junction: A4260/B4030</b>	
1/1 (short)	0
1/2 (with short)	166(In) 166(Out)
2/1 (with short)	482(In) 448(Out)
2/2 (short)	34
3/1	19
3/2	182
4/1 (with short)	1367(In) 1336(Out)
4/2 (short)	31
5/1	194
6/1	1358
7/1	151
8/1	513

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.25	0.00	Y	Arm 6 Left	10.00	0.0 %	1940	1940
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	71.7 %	1741	1741
				Arm 8 Right	15.00	28.3 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	0.2 %	1915	1915
				Arm 8 Ahead	Inf	99.8 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.50	0.00	Y	Arm 8 Left	13.00	100.0 %	1762	1762
3/2 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	79.1 %	1801	1801
				Arm 6 Right	17.00	20.9 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 5 Left	15.00	1.2 %	1913	1913
				Arm 6 Ahead	Inf	98.8 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)				Infinite Saturation Flow			Inf	Inf
6/1 (A4260 Lane 1)				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

7/1 (B4030 (W) Lane 1)	Infinite Saturation Flow	Inf	Inf
8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf

**Scenario 2: '2031 Ref PM'** (FG2: '2031 Ref PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	0	128	93	221
	B	41	0	3	1061	1105
	C	95	22	0	24	141
	D	42	471	16	0	529
	Tot.	178	493	147	1178	1996



Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 2: 2031 Ref PM
<b>Junction: A4260/B4030</b>	
1/1 (short)	0
1/2 (with short)	221(In) 221(Out)
2/1 (with short)	1105(In) 1064(Out)
2/2 (short)	41
3/1	24
3/2	117
4/1 (with short)	529(In) 513(Out)
4/2 (short)	16
5/1	178
6/1	493
7/1	147
8/1	1178

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.25	0.00	Y	Arm 6 Left	10.00	0.0 %	1940	1940
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	57.9 %	1741	1741
				Arm 8 Right	15.00	42.1 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	0.3 %	1915	1915
				Arm 8 Ahead	Inf	99.7 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.50	0.00	Y	Arm 8 Left	13.00	100.0 %	1762	1762
3/2 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	81.2 %	1801	1801
				Arm 6 Right	17.00	18.8 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 5 Left	15.00	8.2 %	1899	1899
				Arm 6 Ahead	Inf	91.8 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)				Infinite Saturation Flow			Inf	Inf
6/1 (A4260 Lane 1)				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

7/1 (B4030 (W) Lane 1)	Infinite Saturation Flow	Inf	Inf
8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf

**Scenario 3: '2031 Ref +230dw AM'** (FG3: '2031 Ref +230dw AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	17	122	61	200
	B	39	0	1	447	487
	C	145	38	0	19	202
	D	20	1320	31	0	1371
	Tot.	204	1375	154	527	2260

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 3: 2031 Ref +230dw AM
<b>Junction: A4260/B4030</b>	
1/1 (short)	17
1/2 (with short)	200(In) 183(Out)
2/1 (with short)	487(In) 448(Out)
2/2 (short)	39
3/1	19
3/2	183
4/1 (with short)	1371(In) 1340(Out)
4/2 (short)	31
5/1	204
6/1	1375
7/1	154
8/1	527

**Lane Saturation Flows**

<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.25	0.00	Y	Arm 6 Left	10.00	100.0 %	1687	1687
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	66.7 %	1741	1741
				Arm 8 Right	15.00	33.3 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	0.2 %	1915	1915
				Arm 8 Ahead	Inf	99.8 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.50	0.00	Y	Arm 8 Left	13.00	100.0 %	1762	1762
3/2 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	79.2 %	1801	1801
				Arm 6 Right	17.00	20.8 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 5 Left	15.00	1.5 %	1912	1912
				Arm 6 Ahead	Inf	98.5 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)				Infinite Saturation Flow			Inf	Inf
6/1 (A4260 Lane 1)				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

7/1 (B4030 (W) Lane 1)	Infinite Saturation Flow	Inf	Inf
8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf

**Scenario 4: '2031 Ref + 230dw PM'** (FG4: '2031 Ref +230dw PM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	6	129	98	233
	B	53	0	3	1061	1117
	C	97	22	0	24	143
	D	44	488	16	0	548
	Tot.	194	516	148	1183	2041

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 4: 2031 Ref + 230dw PM
<b>Junction: A4260/B4030</b>	
1/1 (short)	6
1/2 (with short)	233(In) 227(Out)
2/1 (with short)	1117(In) 1064(Out)
2/2 (short)	53
3/1	24
3/2	119
4/1 (with short)	548(In) 532(Out)
4/2 (short)	16
5/1	194
6/1	516
7/1	148
8/1	1183

**Lane Saturation Flows**

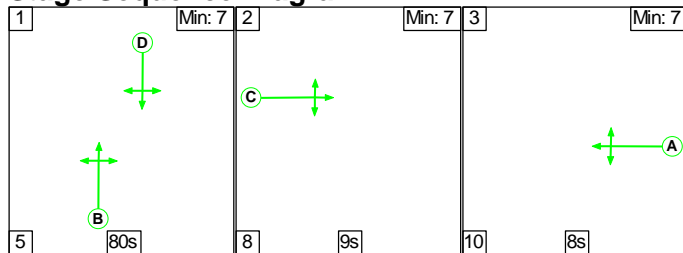
<b>Junction: A4260/B4030</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4030 (E))	3.25	0.00	Y	Arm 6 Left	10.00	100.0 %	1687	1687
1/2 (B4030 (E))	3.00	0.00	Y	Arm 7 Ahead	15.00	56.8 %	1741	1741
				Arm 8 Right	15.00	43.2 %		
2/1 (A4260 (S))	3.00	0.00	Y	Arm 7 Left	18.00	0.3 %	1915	1915
				Arm 8 Ahead	Inf	99.7 %		
2/2 (A4260 (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
3/1 (B4030 (W))	3.50	0.00	Y	Arm 8 Left	13.00	100.0 %	1762	1762
3/2 (B4030 (W))	3.45	0.00	Y	Arm 5 Ahead	17.00	81.5 %	1801	1801
				Arm 6 Right	17.00	18.5 %		
4/1 (A4260 (N))	3.00	0.00	Y	Arm 5 Left	15.00	8.3 %	1899	1899
				Arm 6 Ahead	Inf	91.7 %		
4/2 (A4260 (N))	3.00	0.00	Y	Arm 7 Right	14.00	100.0 %	1730	1730
5/1 (B4030 (E) Lane 1)				Infinite Saturation Flow			Inf	Inf
6/1 (A4260 Lane 1)				Infinite Saturation Flow			Inf	Inf

### Full Input Data And Results

7/1 (B4030 (W) Lane 1)	Infinite Saturation Flow	Inf	Inf
8/1 (A4260 (N) Lane 1)	Infinite Saturation Flow	Inf	Inf

### Scenario 1: '2031 Ref AM' (FG1: '2031 Ref AM', Plan 1: 'Network Control Plan 1')

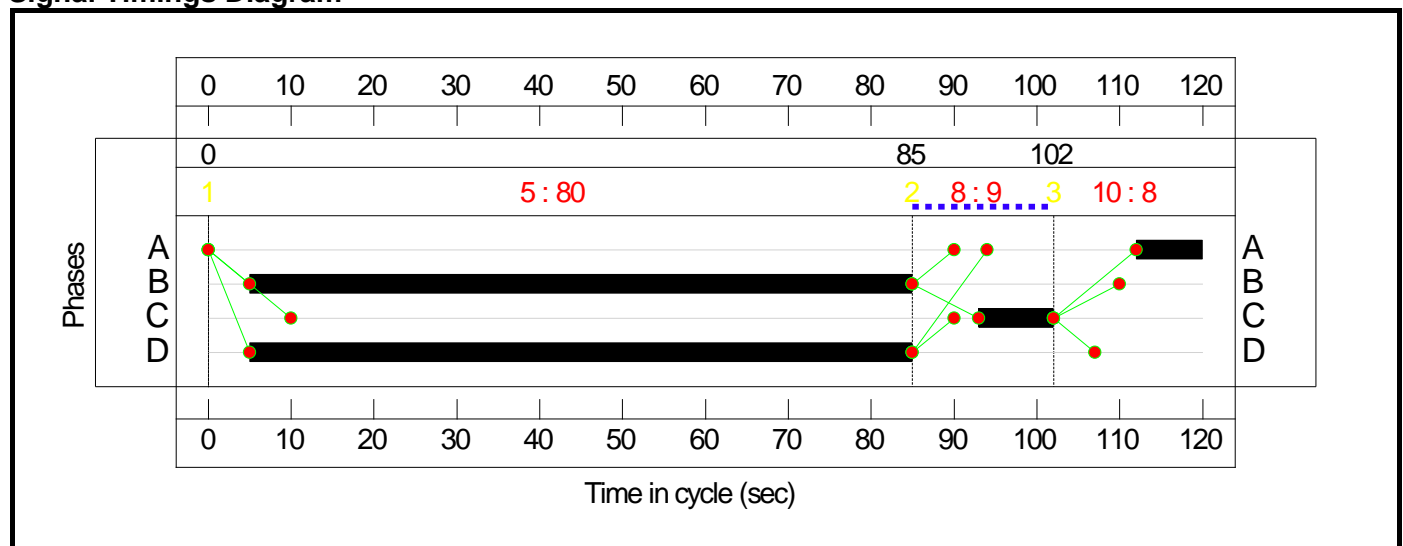
#### Stage Sequence Diagram



#### Stage Timings

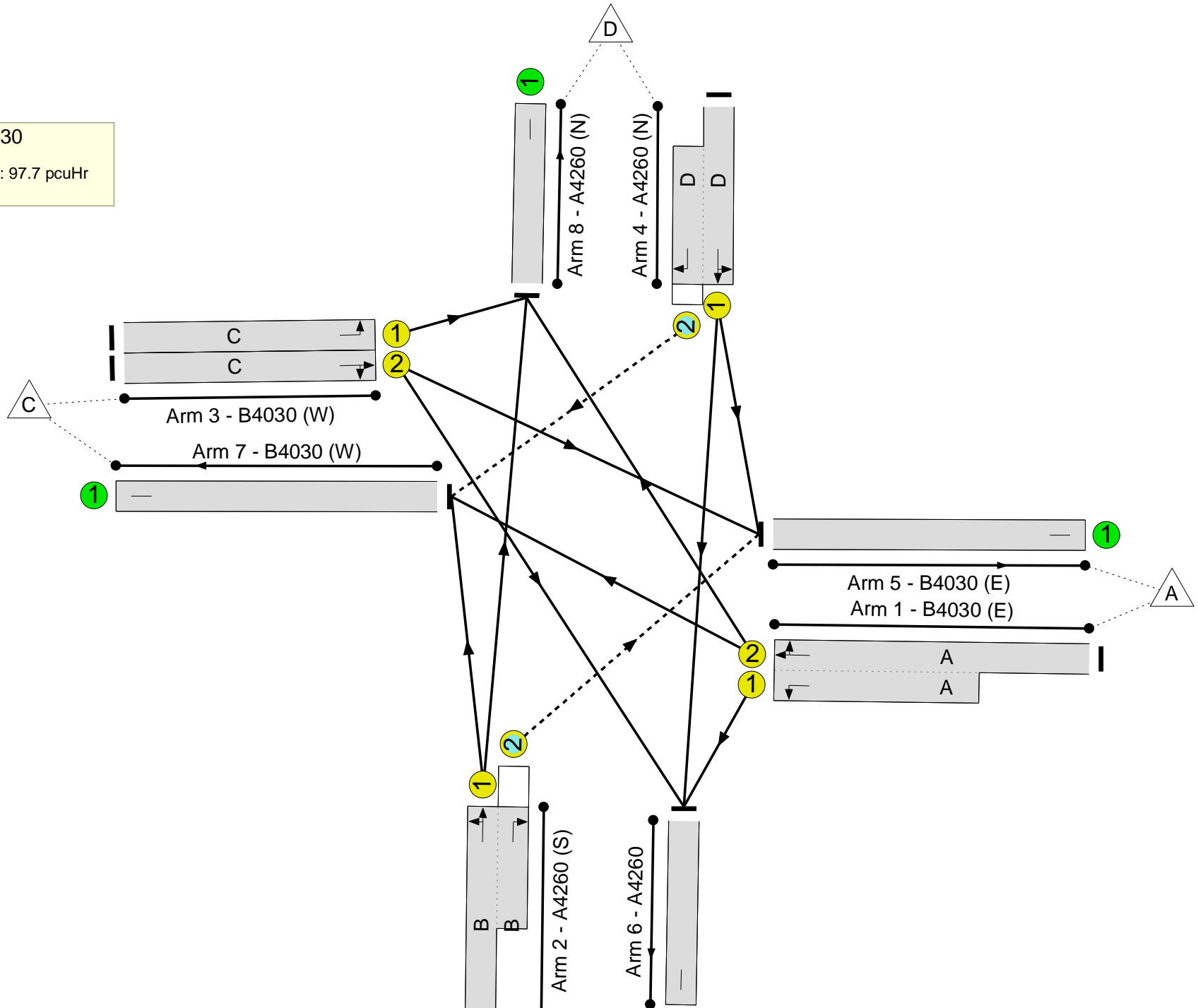
Stage	1	2	3
Duration	80	9	8
Change Point	0	85	102

#### Signal Timings Diagram



Full Input Data And Results

A4260/B4030  
PRC: -41.3 %  
Total Traffic Delay: 97.7 pcuHr



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>127.1%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>127.1%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	8	-	166	1741:1940	131+0	127.1 : 0.0%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		1	80	-	482	1915:1665	1207+60	37.1 : 56.7%
3/1	B4030 (W) Left	U	N/A	N/A	C		1	9	-	19	1762	147	12.9%
3/2	B4030 (W) Ahead Right	U	N/A	N/A	C		1	9	-	182	1801	150	121.3%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		1	80	-	1367	1913:1730	1280+30	104.4 : 104.4%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	194	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	1358	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	151	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	513	Inf	Inf	0.0%



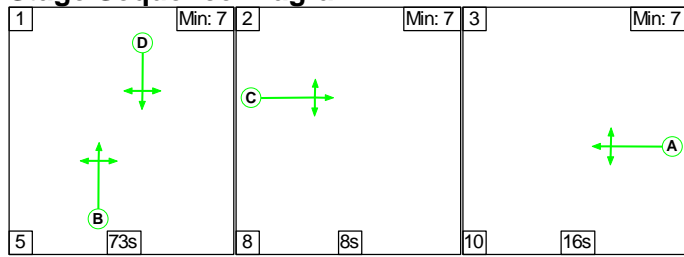
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>30</b>	<b>0</b>	<b>34</b>	<b>20.7</b>	<b>76.5</b>	<b>0.5</b>	<b>97.7</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>30</b>	<b>0</b>	<b>34</b>	<b>20.7</b>	<b>76.5</b>	<b>0.5</b>	<b>97.7</b>	-	-	-	-
1/2+1/1	166	131	-	-	-	4.6	19.8	-	24.4	528.7	7.4	19.8	27.2
2/1+2/2	482	482	0	0	34	1.1	0.3	0.5	1.9	14.3	6.3	0.3	6.6
3/1	19	19	-	-	-	0.3	0.1	-	0.3	65.1	0.6	0.1	0.7
3/2	182	150	-	-	-	4.3	18.4	-	22.8	450.2	7.4	18.4	25.9
4/1+4/2	1367	1309	30	0	0	10.4	37.9	0.0	48.3	127.2	49.2	37.9	87.1
5/1	168	168	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1296	1296	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	124	124	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	503	503	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%): -41.3		Total Delay for Signalled Lanes (pcuHr): 97.68		PRC Over All Lanes (%): -41.3		Total Delay Over All Lanes(pcuHr): 97.68		Cycle Time (s): 120		

Full Input Data And Results

Scenario 2: '2031 Ref PM' (FG2: '2031 Ref PM', Plan 1: 'Network Control Plan 1')

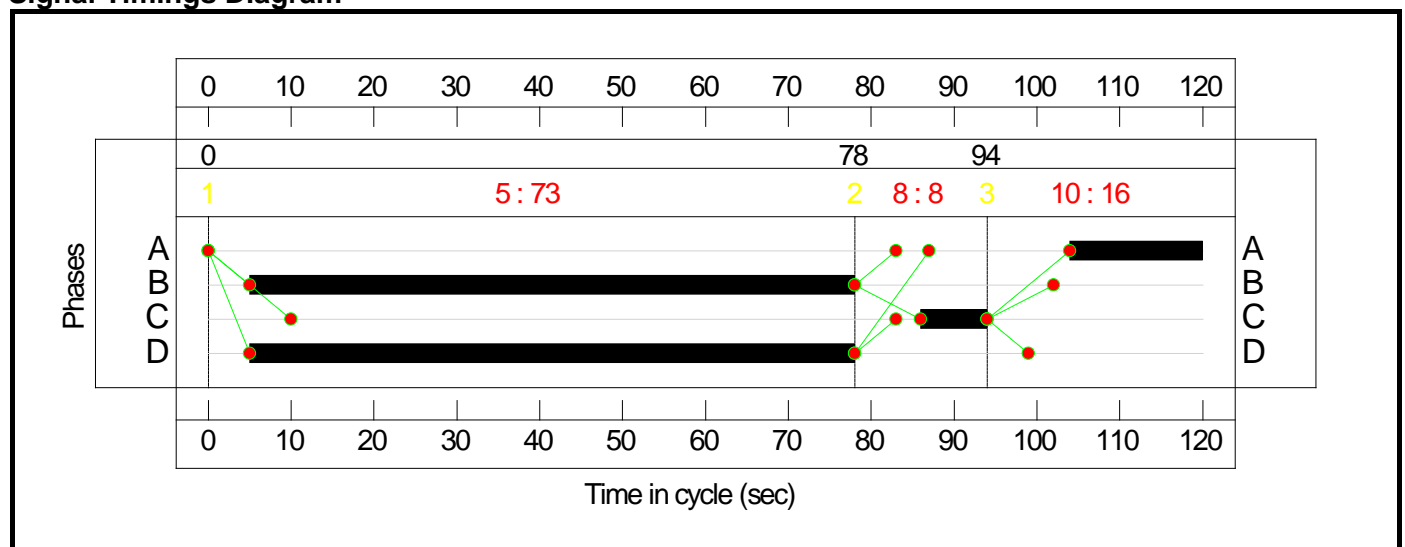
Stage Sequence Diagram



Stage Timings

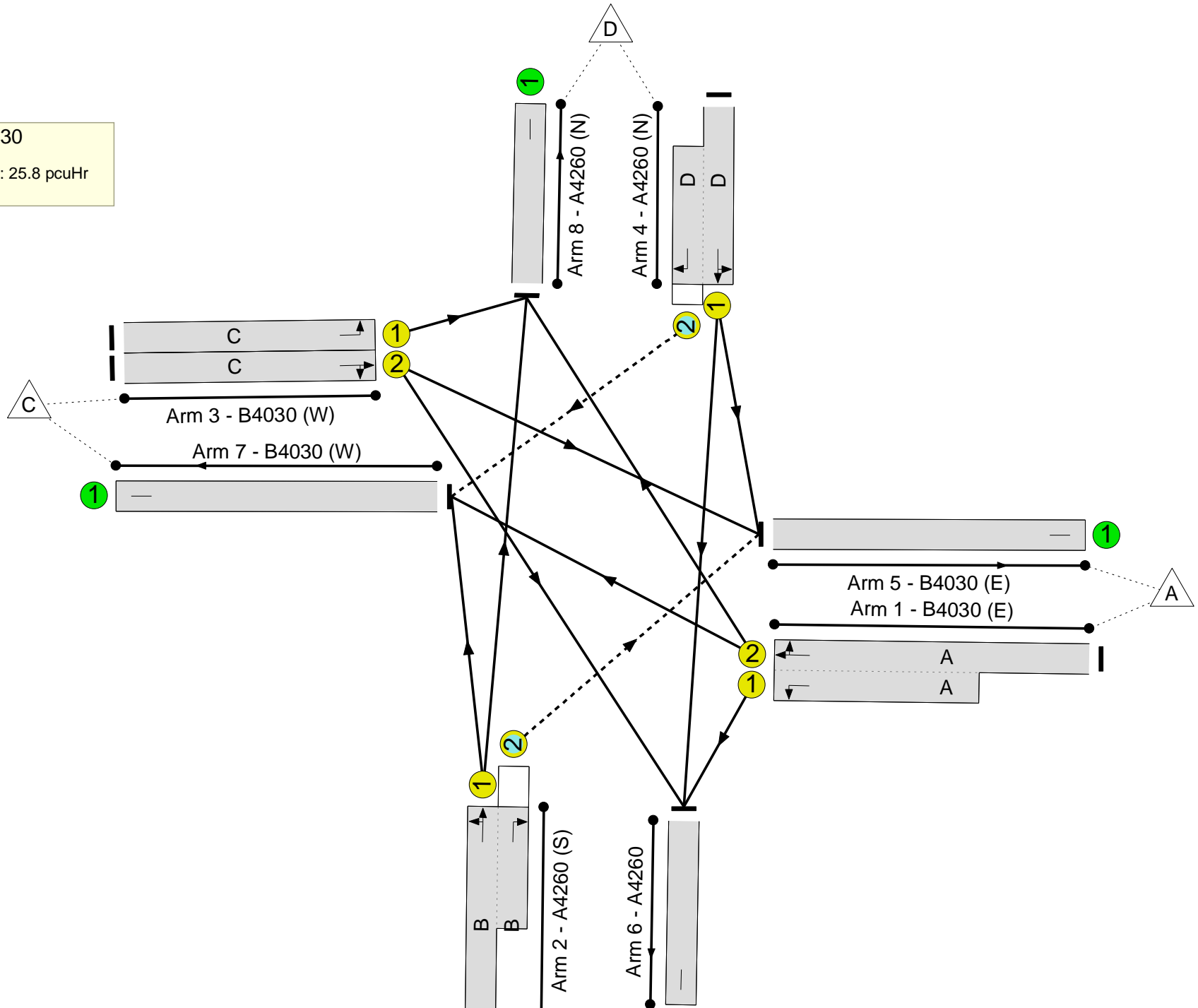

Stage	1	2	3
Duration	73	8	16
Change Point	0	78	94

Signal Timings Diagram



Full Input Data And Results

A4260/B4030  
PRC: -3.5 %  
Total Traffic Delay: 25.8 pcuHr



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>93.1%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>93.1%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	16	-	221	1741:1940	247+0	89.6 : 0.0%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		1	73	-	1105	1915:1665	1143+44	93.1 : 93.1%
3/1	B4030 (W) Left	U	N/A	N/A	C		1	8	-	24	1762	132	18.2%
3/2	B4030 (W) Ahead Right	U	N/A	N/A	C		1	8	-	117	1801	135	86.6%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		1	73	-	529	1899:1730	1156+36	44.4 : 44.4%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	178	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	493	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	147	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	1178	Inf	Inf	0.0%

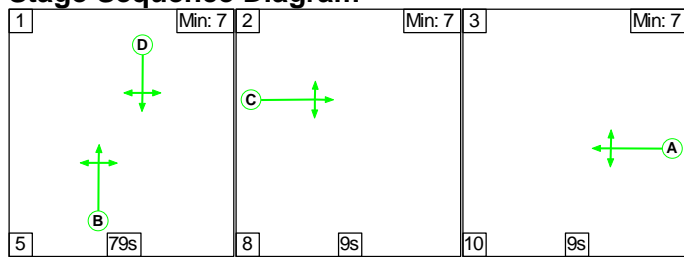
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>57</b>	<b>0</b>	<b>0</b>	<b>13.3</b>	<b>12.3</b>	<b>0.2</b>	<b>25.8</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>57</b>	<b>0</b>	<b>0</b>	<b>13.3</b>	<b>12.3</b>	<b>0.2</b>	<b>25.8</b>	-	-	-	-
1/2+1/1	221	221	-	-	-	3.1	3.4	-	6.5	106.1	7.2	3.4	10.6
2/1+2/2	1105	1105	41	0	0	6.3	5.9	0.0	12.2	39.8	32.6	5.9	38.5
3/1	24	24	-	-	-	0.3	0.1	-	0.5	68.7	0.7	0.1	0.9
3/2	117	117	-	-	-	1.8	2.5	-	4.3	132.7	3.8	2.5	6.4
4/1+4/2	529	529	16	0	0	1.8	0.4	0.2	2.4	16.0	9.0	0.4	9.4
5/1	178	178	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	493	493	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	147	147	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	1178	1178	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1      PRC for Signalled Lanes (%): -3.5      Total Delay for Signalled Lanes (pcuHr): 25.84      Cycle Time (s): 120  PRC Over All Lanes (%): -3.5      Total Delay Over All Lanes(pcuHr): 25.84</p>													

Full Input Data And Results

Scenario 3: '2031 Ref +230dw AM' (FG3: '2031 Ref +230dw AM', Plan 1: 'Network Control Plan 1')

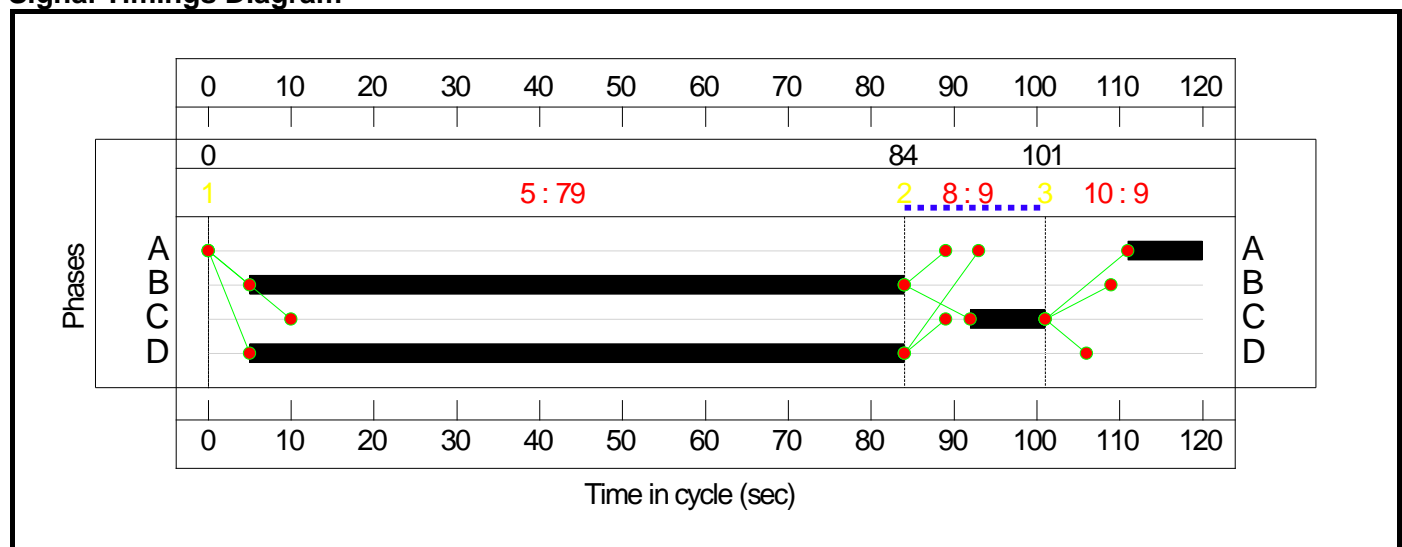
Stage Sequence Diagram



Stage Timings


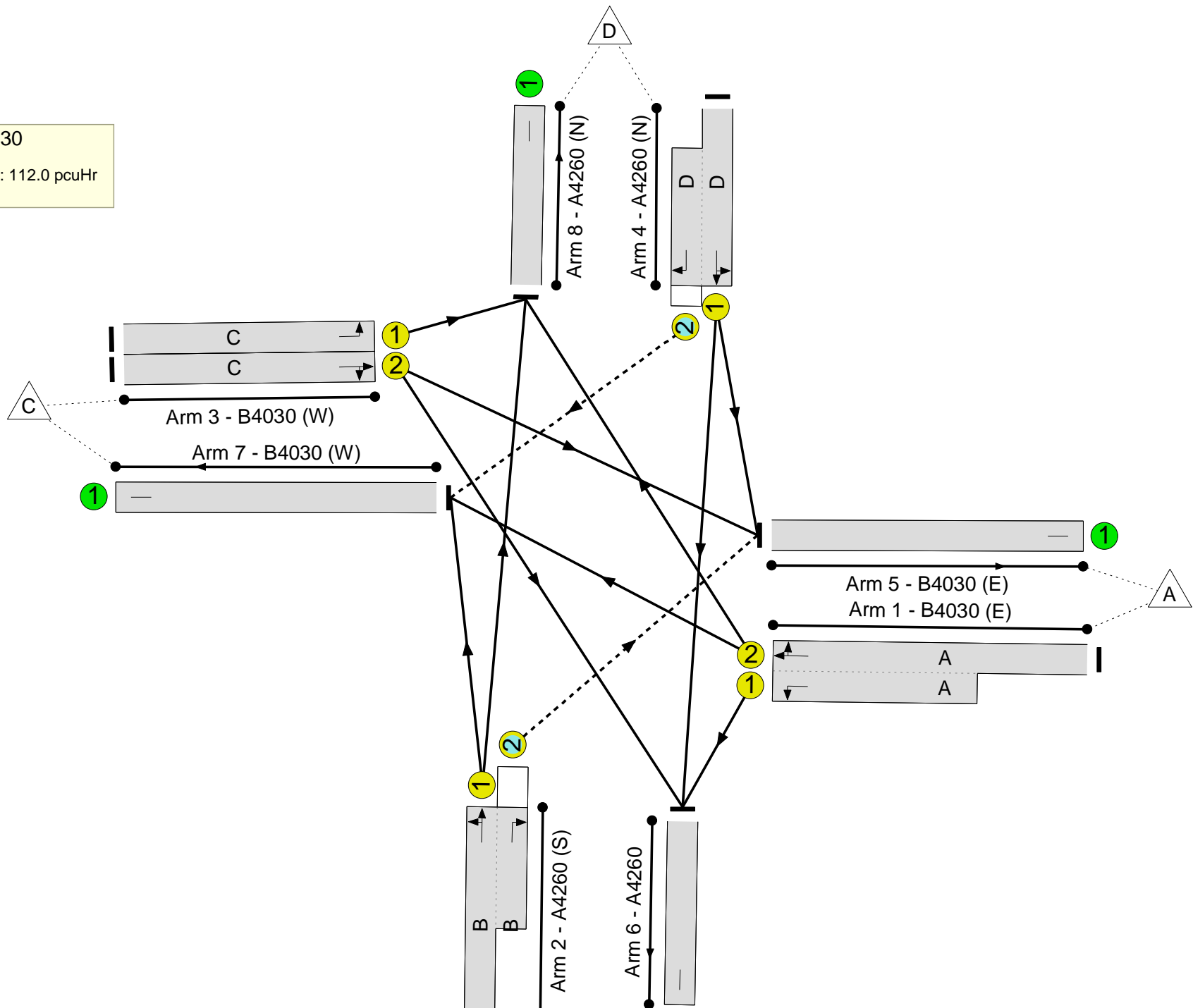
Stage	1	2	3
Duration	79	9	9
Change Point	0	84	101

Signal Timings Diagram



Full Input Data And Results

**A4260/B4030**  
 PRC: -40.1 %  
 Total Traffic Delay: 112.0 pcuHr

Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>126.1%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>126.1%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	9	-	200	1741:1687	145+13	126.1 : 126.1%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		1	79	-	487	1915:1665	1181+60	37.9 : 65.0%
3/1	B4030 (W) Left	U	N/A	N/A	C		1	9	-	19	1762	147	12.9%
3/2	B4030 (W) Ahead Right	U	N/A	N/A	C		1	9	-	183	1801	150	121.9%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		1	79	-	1371	1912:1730	1264+29	106.0 : 106.0%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	204	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	1375	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	154	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	527	Inf	Inf	0.0%



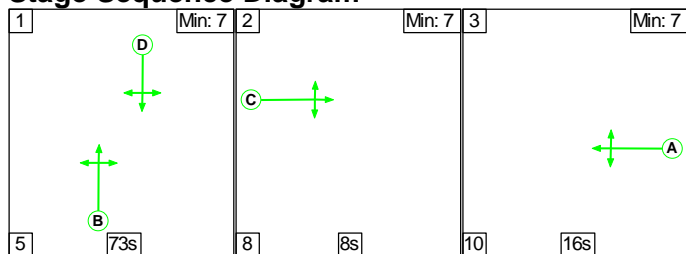
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>29</b>	<b>0</b>	<b>39</b>	<b>22.7</b>	<b>88.6</b>	<b>0.6</b>	<b>112.0</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>29</b>	<b>0</b>	<b>39</b>	<b>22.7</b>	<b>88.6</b>	<b>0.6</b>	<b>112.0</b>	-	-	-	-
1/2+1/1	200	162	-	-	-	5.2	22.9	-	28.1	505.6	8.1	22.9	31.0
2/1+2/2	487	487	0	0	39	1.2	0.3	0.6	2.1	15.3	6.5	0.3	6.8
3/1	19	19	-	-	-	0.3	0.1	-	0.3	65.1	0.6	0.1	0.7
3/2	183	150	-	-	-	4.4	18.9	-	23.3	457.5	7.5	18.9	26.4
4/1+4/2	1371	1293	29	0	0	11.7	46.4	0.0	58.2	152.8	50.1	46.4	96.5
5/1	177	177	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1293	1293	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	127	127	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	514	514	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):	-40.1	Total Delay for Signalled Lanes (pcuHr):			111.95	Cycle Time (s): 120				
			PRC Over All Lanes (%):	-40.1	Total Delay Over All Lanes(pcuHr):			111.95					

Full Input Data And Results

Scenario 4: '2031 Ref + 230dw PM' (FG4: '2031 Ref +230dw PM', Plan 1: 'Network Control Plan 1')

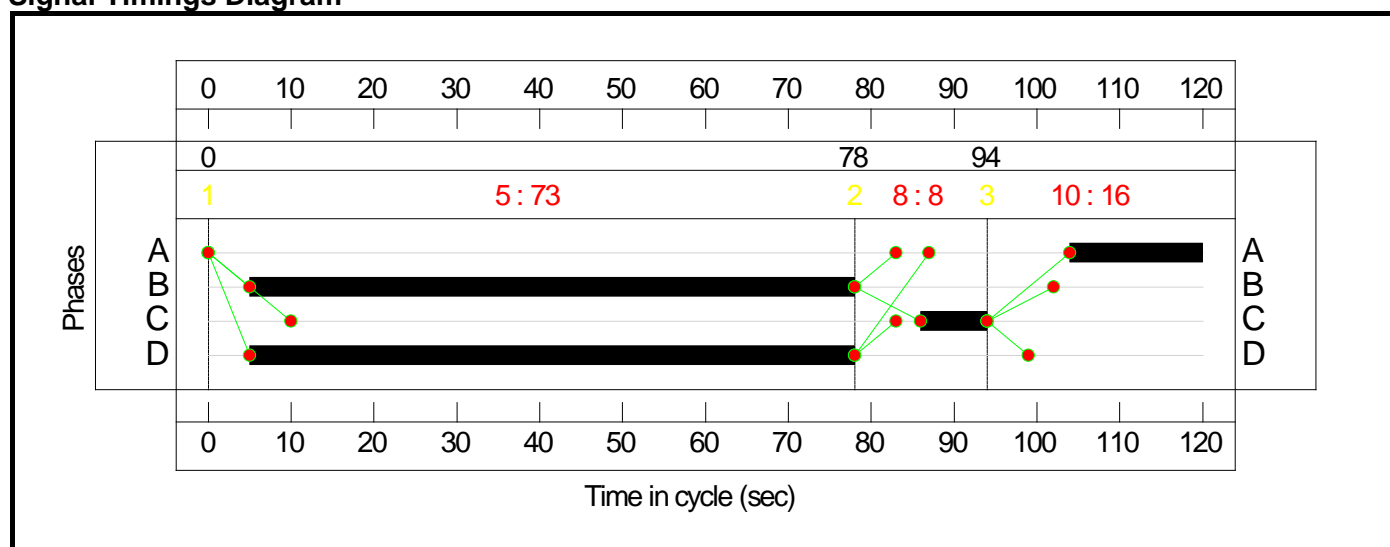
Stage Sequence Diagram




Stage Timings

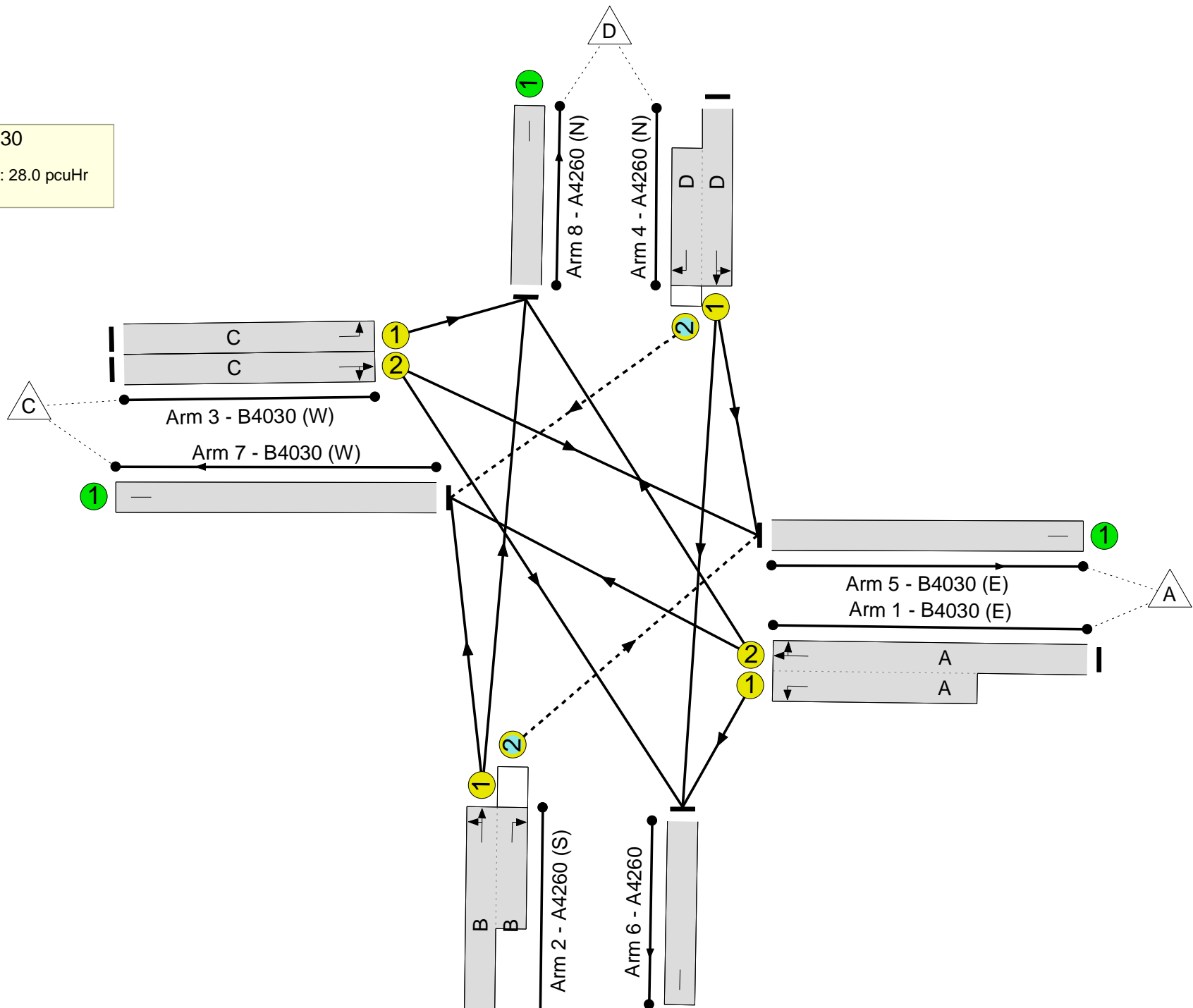
Stage	1	2	3
Duration	73	8	16
Change Point	0	78	94

Signal Timings Diagram



Full Input Data And Results


**A4260/B4030**  
 PRC: -4.5 %  
 Total Traffic Delay: 28.0 pcuHr



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>94.1%</b>
<b>A4260/B4030</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>94.1%</b>
1/2+1/1	B4030 (E) Left Ahead Right	U	N/A	N/A	A		1	16	-	233	1741:1687	247+7	92.0 : 92.0%
2/1+2/2	A4260 (S) Right Left Ahead	U+O	N/A	N/A	B		1	73	-	1117	1915:1665	1131+56	94.1 : 94.1%
3/1	B4030 (W) Left	U	N/A	N/A	C		1	8	-	24	1762	132	18.2%
3/2	B4030 (W) Ahead Right	U	N/A	N/A	C		1	8	-	119	1801	135	88.1%
4/1+4/2	A4260 (N) Left Ahead Right	U+O	N/A	N/A	D		1	73	-	548	1899:1730	1157+35	46.0 : 46.0%
5/1	B4030 (E)	U	N/A	N/A	-		-	-	-	194	Inf	Inf	0.0%
6/1	A4260	U	N/A	N/A	-		-	-	-	516	Inf	Inf	0.0%
7/1	B4030 (W)	U	N/A	N/A	-		-	-	-	148	Inf	Inf	0.0%
8/1	A4260 (N)	U	N/A	N/A	-		-	-	-	1183	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	<b>69</b>	<b>0</b>	<b>0</b>	<b>13.7</b>	<b>14.1</b>	<b>0.3</b>	<b>28.0</b>	-	-	-	-
<b>A4260/B4030</b>	-	-	<b>69</b>	<b>0</b>	<b>0</b>	<b>13.7</b>	<b>14.1</b>	<b>0.3</b>	<b>28.0</b>	-	-	-	-
1/2+1/1	233	233	-	-	-	3.3	4.1	-	7.4	114.1	7.4	4.1	11.5
2/1+2/2	1117	1117	53	0	0	6.4	6.7	0.1	13.1	42.3	33.5	6.7	40.2
3/1	24	24	-	-	-	0.3	0.1	-	0.5	68.7	0.7	0.1	0.9
3/2	119	119	-	-	-	1.8	2.8	-	4.6	138.4	3.9	2.8	6.7
4/1+4/2	548	548	16	0	0	1.9	0.4	0.2	2.5	16.3	9.3	0.4	9.7
5/1	194	194	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	516	516	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	148	148	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	1183	1183	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		-4.5	Total Delay for Signalled Lanes (pcuHr):		28.02	Cycle Time (s): 120				
			PRC Over All Lanes (%):		-4.5	Total Delay Over All Lanes(pcuHr):		28.02					

## A43/M40 Slip Road Mitigation Scheme – Junction Assessment Results

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	Sat (%)	Queue	Delay (s)	Sat (%)	Queue	Delay (s)
<b>2031 Reference Case</b>						
A43 (N) Lane 1	83.4	13	17	64.6	9	10
A43 (N) Lane 2	83.8	14	17	65.0	9	10
M40 Slip L & R	82.1	7	28	86.1	9	37
M40 Slip Right	64.7	5	28	61.5	5	32
A43 (S) Lane 1	63.6	8	10	85.8	18	17
A43 (S) Lane 2	62.6	7	11	85.1	17	17
Cycle Time (s)	50			60		
PRC (%)	7.4			4.5		
Delay (PCUhr)	26.61			29.85		
<b>2031 Reference Case + Development</b>						
A43 (N) Lane 1	83.4	13	17	64.8	9	10
A43 (N) Lane 2	83.7	14	17	65.3	9	10
M40 Slip L & R	82.3	7	29	86.2	9	37
M40 Slip Right	64.3	5	28	61.7	5	32
A43 (S) Lane 1	64.0	8	11	85.9	18	18
A43 (S) Lane 2	63.1	8	11	85.3	17	18
Cycle Time (s)	50			60		
PRC (%)	7.5			4.4		
Delay (PCUhr)	26.73			30.05		

Sat % is saturation, Queue is mean max in PCUs, Delay is seconds per PCU.

Full Input Data And Results  
**Full Input Data And Results**

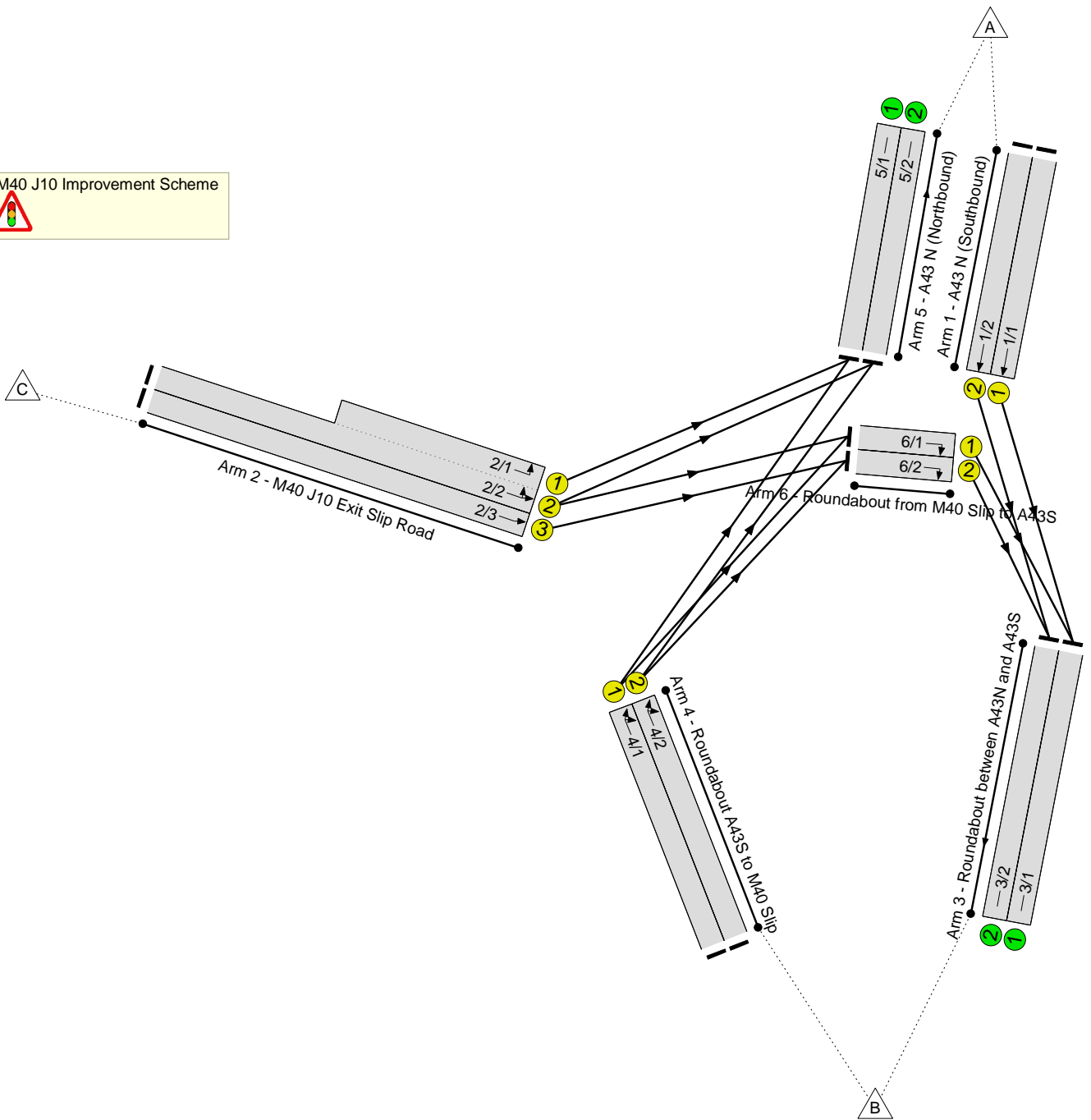
**User and Project Details**

<b>Project:</b>	
<b>Title:</b>	<b>A43/M40 Slip Mitigation Scheme</b>
<b>Location:</b>	
<b>Additional detail:</b>	
<b>File name:</b>	T19562 - A43-M40 slip scheme.lsg3x
<b>Author:</b>	James Parker
<b>Company:</b>	Hub Transport Planning Ltd
<b>Address:</b>	

**Network Layout Diagram**

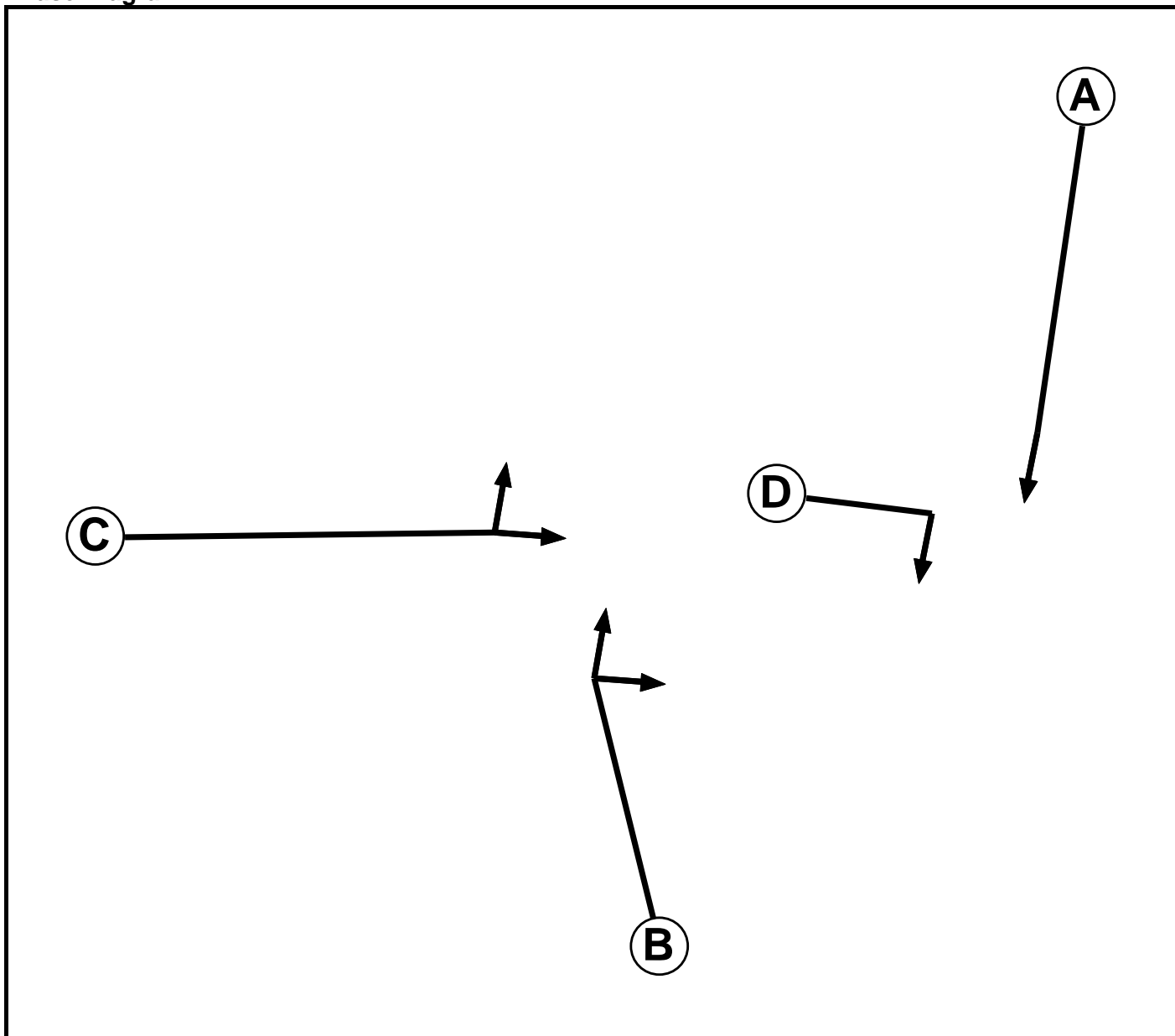
# Full Input Data And Results

M40 J10 Improvement Scheme





Phase Diagram



## Full Input Data And Results

### Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7

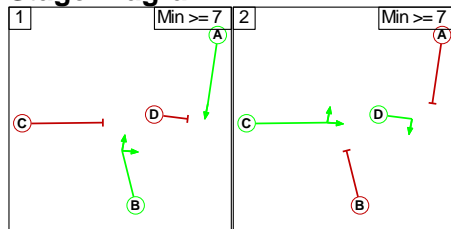
### Phase Intergreens Matrix

		Starting Phase				
		A	B	C	D	
Terminating Phase	A					5
	B				5	
	C		5			
	D	5				

### Phases in Stage

Stage No.	Phases in Stage
1	A B
2	C D

### Stage Diagram



### Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

### Prohibited Stage Change

		To Stage	
		1	2
From Stage	1		5
	2	5	

Full Input Data And Results

**Give-Way Lane Input Data**

**Junction: M40 J10 Improvement Scheme**

There are no Opposed Lanes in this Junction

Full Input Data And Results

**Lane Input Data**

Junction: M40 J10 Improvement Scheme												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A43 N Southbound))	U	A	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 3 Ahead	32.00
1/2 (A43 N Southbound))	U	A	2	3	60.0	Geom	-	4.50	0.00	Y	Arm 3 Ahead	30.00
2/1 (M40 J10 Exit Slip Road)	U	C	2	3	13.2	Geom	-	3.75	0.00	Y	Arm 5 Left	33.00
2/2 (M40 J10 Exit Slip Road)	U	C	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 5 Left	37.00
											Arm 6 Ahead	Inf
2/3 (M40 J10 Exit Slip Road)	U	C	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 6 Ahead	Inf
3/1 (Roundabout between A43N and A43S)	U		2	3	60.0	Inf	-	-	-	-	-	-
3/2 (Roundabout between A43N and A43S)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1 (Roundabout A43S to M40 Slip)	U	B	2	3	60.0	Geom	-	4.50	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	Inf
4/2 (Roundabout A43S to M40 Slip)	U	B	2	3	60.0	Geom	-	4.50	0.00	Y	Arm 5 Ahead	32.00
											Arm 6 Right	29.00
5/1 (A43 N Northbound )	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2 (A43 N Northbound )	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Roundabout from M40 Slip to A43S)	U	D	2	3	60.0	Geom	-	4.75	0.00	Y	Arm 3 Right	24.00
6/2 (Roundabout from M40 Slip to A43S)	U	D	2	3	60.0	Geom	-	4.75	0.00	Y	Arm 3 Right	24.00

**Traffic Flow Groups**

Flow Group	Start Time	End Time	Duration	Formula
1: '2031 Ref AM'	08:00	09:00	01:00	

Full Input Data And Results

2: '2031 Ref PM'	17:00	18:00	01:00	
3: '2031 With Development AM'	08:00	09:00	01:00	
4: '2031 With Development PM'	17:00	18:00	01:00	

**Scenario 1: '2031 Ref AM'** (FG1: '2031 Ref AM', Plan 1: 'Network Control Plan 1')

**Traffic Flows, Desired**

**Desired Flow :**

		Destination			
		A	B	C	Tot.
Origin	A	0	1952	0	1952
	B	1529	0	0	1529
	C	448	624	0	1072
	Tot.	1977	2576	0	4553

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 1: 2031 Ref AM
<b>Junction: M40 J10 Improvement Scheme</b>	
1/1	963
1/2	989
2/1 (short)	374
2/2 (with short)	763(In) 389(Out)
2/3	309
3/1	1278
3/2	1298
4/1	788
4/2	741
5/1	1162
5/2	815
6/1	315
6/2	309

**Lane Saturation Flows**

<b>Junction: M40 J10 Improvement Scheme</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A43 N (Southbound))	4.00	0.00	Y	Arm 3 Ahead	32.00	100.0 %	1925	1925
1/2 (A43 N (Southbound))	4.50	0.00	Y	Arm 3 Ahead	30.00	100.0 %	1967	1967
2/1 (M40 J10 Exit Slip Road)	3.75	0.00	Y	Arm 5 Left	33.00	100.0 %	1903	1903
2/2 (M40 J10 Exit Slip Road)	3.75	0.00	Y	Arm 5 Left	37.00	19.0 %	1975	1975
				Arm 6 Ahead	Inf	81.0 %		
2/3 (M40 J10 Exit Slip Road)	3.75	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1990	1990
3/1 (Roundabout between A43N and A43S Lane 1)	Infinite Saturation Flow						Inf	Inf
3/2 (Roundabout between A43N and A43S Lane 2)	Infinite Saturation Flow						Inf	Inf
4/1 (Roundabout A43S to M40 Slip)	4.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2065	2065
				Arm 6 Right	Inf	0.0 %		
4/2 (Roundabout A43S to M40 Slip)	4.50	0.00	Y	Arm 5 Ahead	32.00	100.0 %	1973	1973
				Arm 6 Right	29.00	0.0 %		

Full Input Data And Results

5/1 (A43 N (Northbound) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A43 N (Northbound) Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Roundabout from M40 Slip to A43S)	4.75	0.00	Y	Arm 3 Right	24.00	100.0 %	1967	1967
6/2 (Roundabout from M40 Slip to A43S)	4.75	0.00	Y	Arm 3 Right	24.00	100.0 %	1967	1967

Scenario 2: '2031 Ref PM' (FG2: '2031 Ref PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	1639	0	1639
	B	2243	0	0	2243
	C	491	494	0	985
	Tot.	2734	2133	0	4867

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 2: 2031 Ref PM
<b>Junction: M40 J10 Improvement Scheme</b>	
1/1	808
1/2	831
2/1 (short)	355
2/2 (with short)	720(In) 365(Out)
2/3	265
3/1	1037
3/2	1096
4/1	1151
4/2	1092
5/1	1506
5/2	1228
6/1	229
6/2	265

**Lane Saturation Flows**

<b>Junction: M40 J10 Improvement Scheme</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A43 N (Southbound))	4.00	0.00	Y	Arm 3 Ahead	32.00	100.0 %	1925	1925
1/2 (A43 N (Southbound))	4.50	0.00	Y	Arm 3 Ahead	30.00	100.0 %	1967	1967
2/1 (M40 J10 Exit Slip Road)	3.75	0.00	Y	Arm 5 Left	33.00	100.0 %	1903	1903
2/2 (M40 J10 Exit Slip Road)	3.75	0.00	Y	Arm 5 Left	37.00	37.3 %	1960	1960
				Arm 6 Ahead	Inf	62.7 %		
2/3 (M40 J10 Exit Slip Road)	3.75	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1990	1990
3/1 (Roundabout between A43N and A43S Lane 1)	Infinite Saturation Flow						Inf	Inf
3/2 (Roundabout between A43N and A43S Lane 2)	Infinite Saturation Flow						Inf	Inf
4/1 (Roundabout A43S to M40 Slip)	4.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2065	2065
				Arm 6 Right	Inf	0.0 %		
4/2 (Roundabout A43S to M40 Slip)	4.50	0.00	Y	Arm 5 Ahead	32.00	100.0 %	1973	1973
				Arm 6 Right	29.00	0.0 %		



Full Input Data And Results

5/1 (A43 N (Northbound) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A43 N (Northbound) Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Roundabout from M40 Slip to A43S)	4.75	0.00	Y	Arm 3 Right	24.00	100.0 %	1967	1967
6/2 (Roundabout from M40 Slip to A43S)	4.75	0.00	Y	Arm 3 Right	24.00	100.0 %	1967	1967

Scenario 3: '2031 With Development AM' (FG3: '2031 With Development AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	1951	0	1951
	B	1540	0	0	1540
	C	446	627	0	1073
	Tot.	1986	2578	0	4564

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 3: 2031 With Development AM
<b>Junction: M40 J10 Improvement Scheme</b>	
1/1	963
1/2	988
2/1 (short)	376
2/2 (with short)	766(In) 390(Out)
2/3	307
3/1	1283
3/2	1295
4/1	793
4/2	747
5/1	1169
5/2	817
6/1	320
6/2	307

**Lane Saturation Flows**

<b>Junction: M40 J10 Improvement Scheme</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A43 N (Southbound))	4.00	0.00	Y	Arm 3 Ahead	32.00	100.0 %	1925	1925
1/2 (A43 N (Southbound))	4.50	0.00	Y	Arm 3 Ahead	30.00	100.0 %	1967	1967
2/1 (M40 J10 Exit Slip Road)	3.75	0.00	Y	Arm 5 Left	33.00	100.0 %	1903	1903
2/2 (M40 J10 Exit Slip Road)	3.75	0.00	Y	Arm 5 Left Arm 6 Ahead	37.00 Inf	17.9 % 82.1 %	1976	1976
2/3 (M40 J10 Exit Slip Road)	3.75	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1990	1990
3/1 (Roundabout between A43N and A43S Lane 1)	Infinite Saturation Flow						Inf	Inf
3/2 (Roundabout between A43N and A43S Lane 2)	Infinite Saturation Flow						Inf	Inf
4/1 (Roundabout A43S to M40 Slip)	4.50	0.00	Y	Arm 5 Ahead Arm 6 Right	Inf Inf	100.0 % 0.0 %	2065	2065
4/2 (Roundabout A43S to M40 Slip)	4.50	0.00	Y	Arm 5 Ahead Arm 6 Right	32.00 29.00	100.0 % 0.0 %	1973	1973

Full Input Data And Results

5/1 (A43 N (Northbound) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A43 N (Northbound) Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Roundabout from M40 Slip to A43S)	4.75	0.00	Y	Arm 3 Right	24.00	100.0 %	1967	1967
6/2 (Roundabout from M40 Slip to A43S)	4.75	0.00	Y	Arm 3 Right	24.00	100.0 %	1967	1967

Scenario 4: '2031 With Development PM' (FG4: '2031 With Development PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
	A	B	C	Tot.	
Origin	A	0	1646	0	1646
	B	2247	0	0	2247
	C	492	495	0	987
	Tot.	2739	2141	0	4880

Full Input Data And Results

**Traffic Lane Flows**

Lane	Scenario 4: 2031 With Development PM
<b>Junction: M40 J10 Improvement Scheme</b>	
1/1	811
1/2	835
2/1 (short)	355
2/2 (with short)	721(In) 366(Out)
2/3	266
3/1	1040
3/2	1101
4/1	1153
4/2	1094
5/1	1508
5/2	1231
6/1	229
6/2	266

**Lane Saturation Flows**

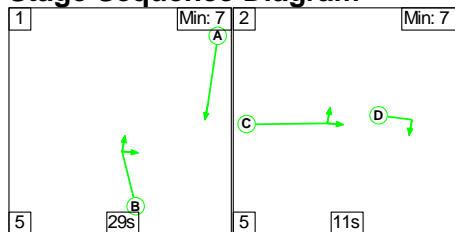
<b>Junction: M40 J10 Improvement Scheme</b>								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A43 N (Southbound))	4.00	0.00	Y	Arm 3 Ahead	32.00	100.0 %	1925	1925
1/2 (A43 N (Southbound))	4.50	0.00	Y	Arm 3 Ahead	30.00	100.0 %	1967	1967
2/1 (M40 J10 Exit Slip Road)	3.75	0.00	Y	Arm 5 Left	33.00	100.0 %	1903	1903
2/2 (M40 J10 Exit Slip Road)	3.75	0.00	Y	Arm 5 Left Arm 6 Ahead	37.00 Inf	37.4 % 62.6 %	1960	1960
2/3 (M40 J10 Exit Slip Road)	3.75	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1990	1990
3/1 (Roundabout between A43N and A43S Lane 1)	Infinite Saturation Flow						Inf	Inf
3/2 (Roundabout between A43N and A43S Lane 2)	Infinite Saturation Flow						Inf	Inf
4/1 (Roundabout A43S to M40 Slip)	4.50	0.00	Y	Arm 5 Ahead Arm 6 Right	Inf Inf	100.0 % 0.0 %	2065	2065
4/2 (Roundabout A43S to M40 Slip)	4.50	0.00	Y	Arm 5 Ahead Arm 6 Right	32.00 29.00	100.0 % 0.0 %	1973	1973

Full Input Data And Results

5/1 (A43 N (Northbound) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A43 N (Northbound) Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Roundabout from M40 Slip to A43S)	4.75	0.00	Y	Arm 3 Right	24.00	100.0 %	1967	1967
6/2 (Roundabout from M40 Slip to A43S)	4.75	0.00	Y	Arm 3 Right	24.00	100.0 %	1967	1967

Scenario 1: '2031 Ref AM' (FG1: '2031 Ref AM', Plan 1: 'Network Control Plan 1')

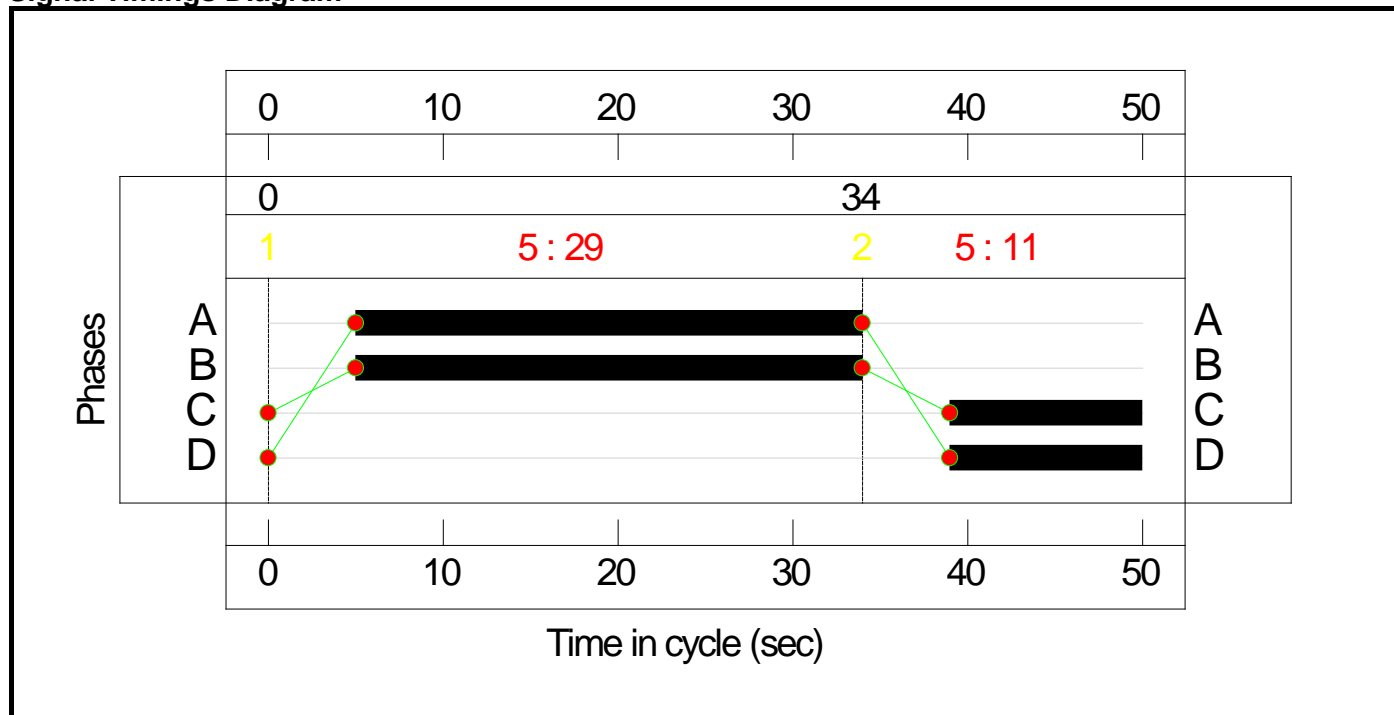
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	29	11
Change Point	0	34

Signal Timings Diagram



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>83.8%</b>
<b>M40 J10 Improvement Scheme</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>83.8%</b>
1/1	A43 N (Southbound) Ahead	U	N/A	N/A	A		1	29	-	963	1925	1155	83.4%
1/2	A43 N (Southbound) Ahead	U	N/A	N/A	A		1	29	-	989	1967	1180	83.8%
2/2+2/1	M40 J10 Exit Slip Road Left Ahead	U	N/A	N/A	C		1	11	-	763	1975:1903	474+457	82.1 : 81.9%
2/3	M40 J10 Exit Slip Road Ahead	U	N/A	N/A	C		1	11	-	309	1990	478	64.7%
3/1	Roundabout between A43N and A43S	U	N/A	N/A	-		-	-	-	1278	Inf	Inf	0.0%
3/2	Roundabout between A43N and A43S	U	N/A	N/A	-		-	-	-	1298	Inf	Inf	0.0%
4/1	Roundabout A43S to M40 Slip Ahead Right	U	N/A	N/A	B		1	29	-	788	2065	1239	63.6%
4/2	Roundabout A43S to M40 Slip Ahead Right	U	N/A	N/A	B		1	29	-	741	1973	1184	62.6%
5/1	A43 N (Northbound)	U	N/A	N/A	-		-	-	-	1162	Inf	Inf	0.0%
5/2	A43 N (Northbound)	U	N/A	N/A	-		-	-	-	815	Inf	Inf	0.0%
6/1	Roundabout from M40 Slip to A43S Right	U	N/A	N/A	D		1	11	-	315	1967	472	66.7%
6/2	Roundabout from M40 Slip to A43S Right	U	N/A	N/A	D		1	11	-	309	1967	472	65.5%

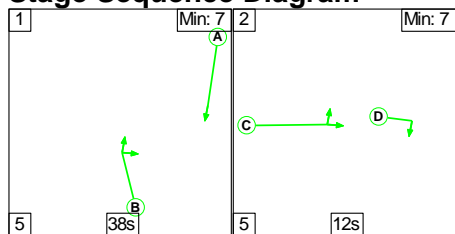
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	0	0	0	14.9	11.7	0.0	26.6	-	-	-	-
<b>M40 J10 Improvement Scheme</b>	-	-	0	0	0	14.9	11.7	0.0	26.6	-	-	-	-
1/1	963	963	-	-	-	2.1	2.4	-	4.6	17.1	10.7	2.4	13.1
1/2	989	989	-	-	-	2.2	2.5	-	4.7	17.2	11.0	2.5	13.5
2/2+2/1	763	763	-	-	-	3.8	2.2	-	6.0	28.4	5.1	2.2	7.3
2/3	309	309	-	-	-	1.5	0.9	-	2.4	27.7	3.8	0.9	4.7
3/1	1278	1278	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	1298	1298	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	788	788	-	-	-	1.4	0.9	-	2.3	10.4	7.0	0.9	7.9
4/2	741	741	-	-	-	1.3	0.8	-	2.2	10.5	6.6	0.8	7.4
5/1	1162	1162	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	815	815	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	315	315	-	-	-	1.2	1.0	-	2.2	25.6	4.2	1.0	5.2
6/2	309	309	-	-	-	1.3	0.9	-	2.2	25.7	4.1	0.9	5.1
C1			PRC for Signalled Lanes (%):		7.4	Total Delay for Signalled Lanes (pcuHr):		26.61	Cycle Time (s):		50		
			PRC Over All Lanes (%):		7.4	Total Delay Over All Lanes(pcuHr):		26.61					

Full Input Data And Results

Scenario 2: '2031 Ref PM' (FG2: '2031 Ref PM', Plan 1: 'Network Control Plan 1')

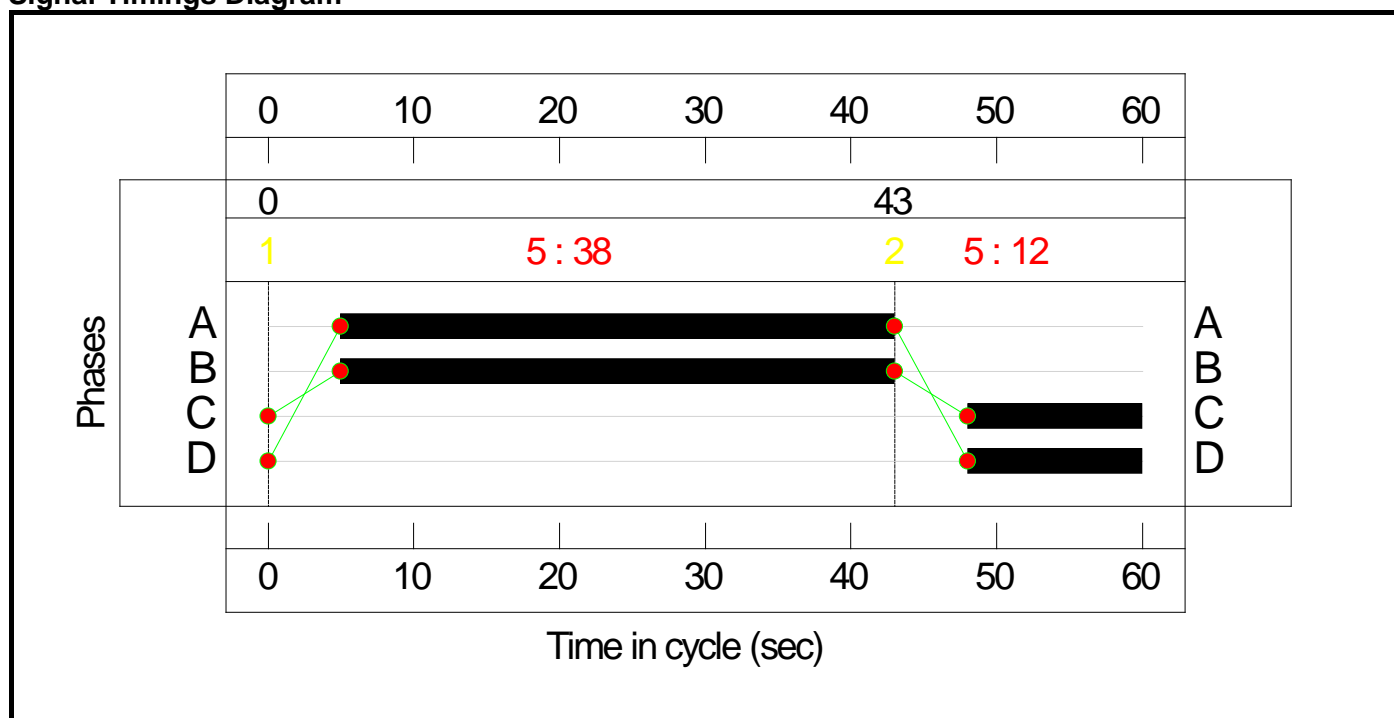
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	38	12
Change Point	0	43

Signal Timings Diagram





Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	86.1%
M40 J10 Improvement Scheme	-	-	N/A	-	-		-	-	-	-	-	-	86.1%
1/1	A43 N (Southbound) Ahead	U	N/A	N/A	A		1	38	-	808	1925	1251	64.6%
1/2	A43 N (Southbound) Ahead	U	N/A	N/A	A		1	38	-	831	1967	1279	65.0%
2/2+2/1	M40 J10 Exit Slip Road Left Ahead	U	N/A	N/A	C		1	12	-	720	1960:1903	425+412	85.9 : 86.1%
2/3	M40 J10 Exit Slip Road Ahead	U	N/A	N/A	C		1	12	-	265	1990	431	61.5%
3/1	Roundabout between A43N and A43S	U	N/A	N/A	-		-	-	-	1037	Inf	Inf	0.0%
3/2	Roundabout between A43N and A43S	U	N/A	N/A	-		-	-	-	1096	Inf	Inf	0.0%
4/1	Roundabout A43S to M40 Slip Ahead Right	U	N/A	N/A	B		1	38	-	1151	2065	1342	85.8%
4/2	Roundabout A43S to M40 Slip Ahead Right	U	N/A	N/A	B		1	38	-	1092	1973	1282	85.1%
5/1	A43 N (Northbound)	U	N/A	N/A	-		-	-	-	1506	Inf	Inf	0.0%
5/2	A43 N (Northbound)	U	N/A	N/A	-		-	-	-	1228	Inf	Inf	0.0%
6/1	Roundabout from M40 Slip to A43S Right	U	N/A	N/A	D		1	12	-	229	1967	426	53.7%
6/2	Roundabout from M40 Slip to A43S Right	U	N/A	N/A	D		1	12	-	265	1967	426	62.2%

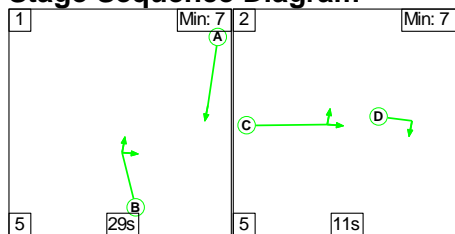
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	0	0	0	17.2	12.6	0.0	29.9	-	-	-	-
<b>M40 J10 Improvement Scheme</b>	-	-	0	0	0	17.2	12.6	0.0	29.9	-	-	-	-
1/1	808	808	-	-	-	1.4	0.9	-	2.3	10.4	8.1	0.9	9.0
1/2	831	831	-	-	-	1.5	0.9	-	2.4	10.4	8.3	0.9	9.2
2/2+2/1	720	720	-	-	-	4.5	2.9	-	7.5	37.3	5.8	2.9	8.7
2/3	265	265	-	-	-	1.6	0.8	-	2.4	32.0	4.0	0.8	4.8
3/1	1037	1037	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	1096	1096	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1151	1151	-	-	-	2.7	2.9	-	5.6	17.4	15.0	2.9	17.9
4/2	1092	1092	-	-	-	2.5	2.8	-	5.3	17.4	14.3	2.8	17.0
5/1	1506	1506	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1228	1228	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	229	229	-	-	-	1.4	0.6	-	1.9	30.5	3.7	0.6	4.3
6/2	265	265	-	-	-	1.7	0.8	-	2.5	34.2	4.4	0.8	5.2
C1			PRC for Signalled Lanes (%):		4.5	Total Delay for Signalled Lanes (pcuHr):		29.85	Cycle Time (s):		60		
			PRC Over All Lanes (%):		4.5	Total Delay Over All Lanes(pcuHr):		29.85					

Full Input Data And Results

Scenario 3: '2031 With Development AM' (FG3: '2031 With Development AM', Plan 1: 'Network Control Plan 1')

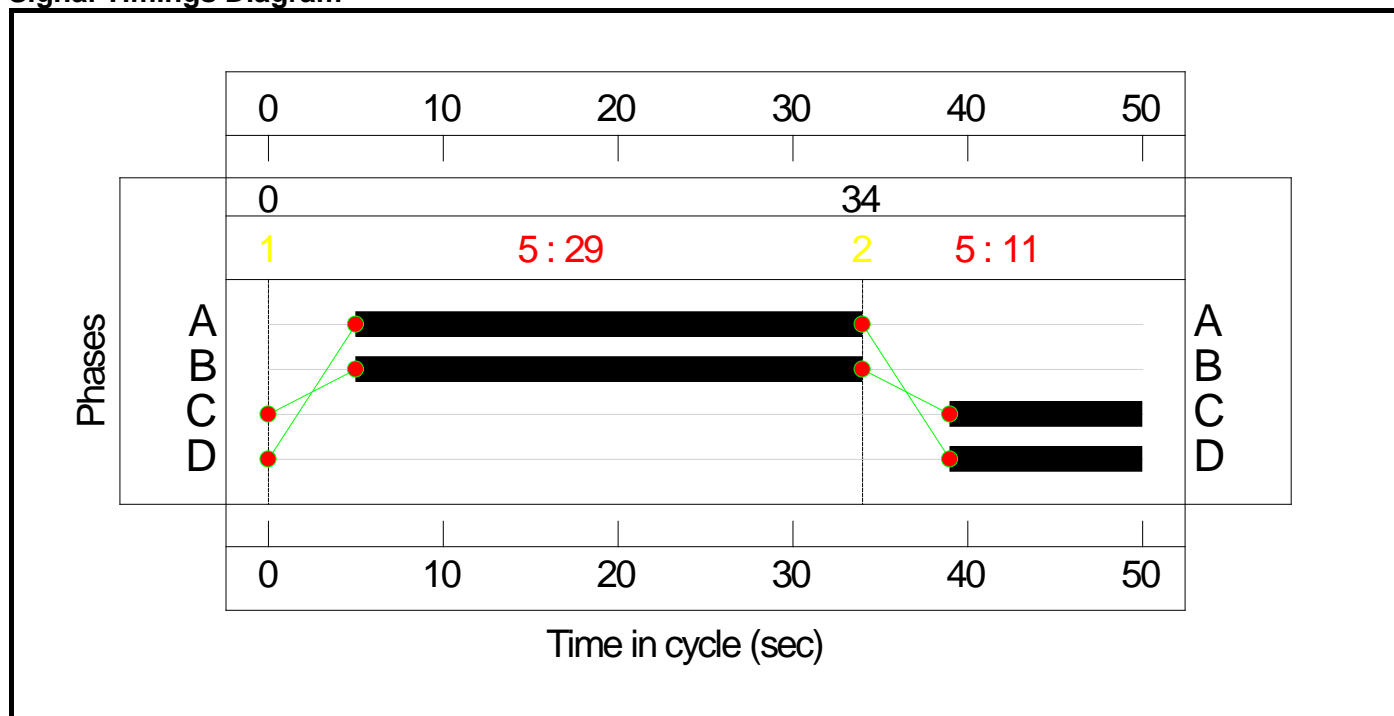
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	29	11
Change Point	0	34

Signal Timings Diagram



Full Input Data And Results

**Network Results**

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
<b>Network</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>83.7%</b>
<b>M40 J10 Improvement Scheme</b>	-	-	<b>N/A</b>	-	-		-	-	-	-	-	-	<b>83.7%</b>
1/1	A43 N (Southbound) Ahead	U	N/A	N/A	A		1	29	-	963	1925	1155	83.4%
1/2	A43 N (Southbound) Ahead	U	N/A	N/A	A		1	29	-	988	1967	1180	83.7%
2/2+2/1	M40 J10 Exit Slip Road Left Ahead	U	N/A	N/A	C		1	11	-	766	1976:1903	474+457	82.2 : 82.3%
2/3	M40 J10 Exit Slip Road Ahead	U	N/A	N/A	C		1	11	-	307	1990	478	64.3%
3/1	Roundabout between A43N and A43S	U	N/A	N/A	-		-	-	-	1283	Inf	Inf	0.0%
3/2	Roundabout between A43N and A43S	U	N/A	N/A	-		-	-	-	1295	Inf	Inf	0.0%
4/1	Roundabout A43S to M40 Slip Ahead Right	U	N/A	N/A	B		1	29	-	793	2065	1239	64.0%
4/2	Roundabout A43S to M40 Slip Ahead Right	U	N/A	N/A	B		1	29	-	747	1973	1184	63.1%
5/1	A43 N (Northbound)	U	N/A	N/A	-		-	-	-	1169	Inf	Inf	0.0%
5/2	A43 N (Northbound)	U	N/A	N/A	-		-	-	-	817	Inf	Inf	0.0%
6/1	Roundabout from M40 Slip to A43S Right	U	N/A	N/A	D		1	11	-	320	1967	472	67.8%
6/2	Roundabout from M40 Slip to A43S Right	U	N/A	N/A	D		1	11	-	307	1967	472	65.0%

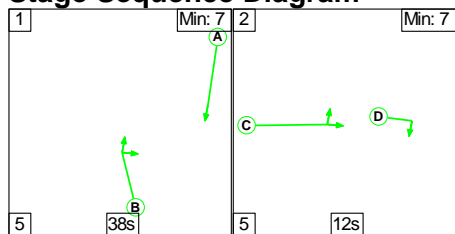
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
<b>Network</b>	-	-	0	0	0	14.9	11.8	0.0	26.7	-	-	-	-
<b>M40 J10 Improvement Scheme</b>	-	-	0	0	0	14.9	11.8	0.0	26.7	-	-	-	-
1/1	963	963	-	-	-	2.1	2.4	-	4.6	17.1	10.7	2.4	13.1
1/2	988	988	-	-	-	2.2	2.5	-	4.7	17.2	11.0	2.5	13.5
2/2+2/1	766	766	-	-	-	3.8	2.3	-	6.1	28.6	5.1	2.3	7.4
2/3	307	307	-	-	-	1.5	0.9	-	2.3	27.5	3.8	0.9	4.6
3/1	1283	1283	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	1295	1295	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	793	793	-	-	-	1.4	0.9	-	2.3	10.5	7.0	0.9	7.9
4/2	747	747	-	-	-	1.3	0.9	-	2.2	10.5	6.6	0.9	7.5
5/1	1169	1169	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	817	817	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	320	320	-	-	-	1.3	1.0	-	2.3	26.0	4.3	1.0	5.3
6/2	307	307	-	-	-	1.3	0.9	-	2.2	25.6	4.1	0.9	5.0
C1			PRC for Signalled Lanes (%):		7.5	Total Delay for Signalled Lanes (pcuHr):		26.73	Cycle Time (s):		50		
			PRC Over All Lanes (%):		7.5	Total Delay Over All Lanes(pcuHr):		26.73					

Full Input Data And Results

Scenario 4: '2031 With Development PM' (FG4: '2031 With Development PM', Plan 1: 'Network Control Plan 1')

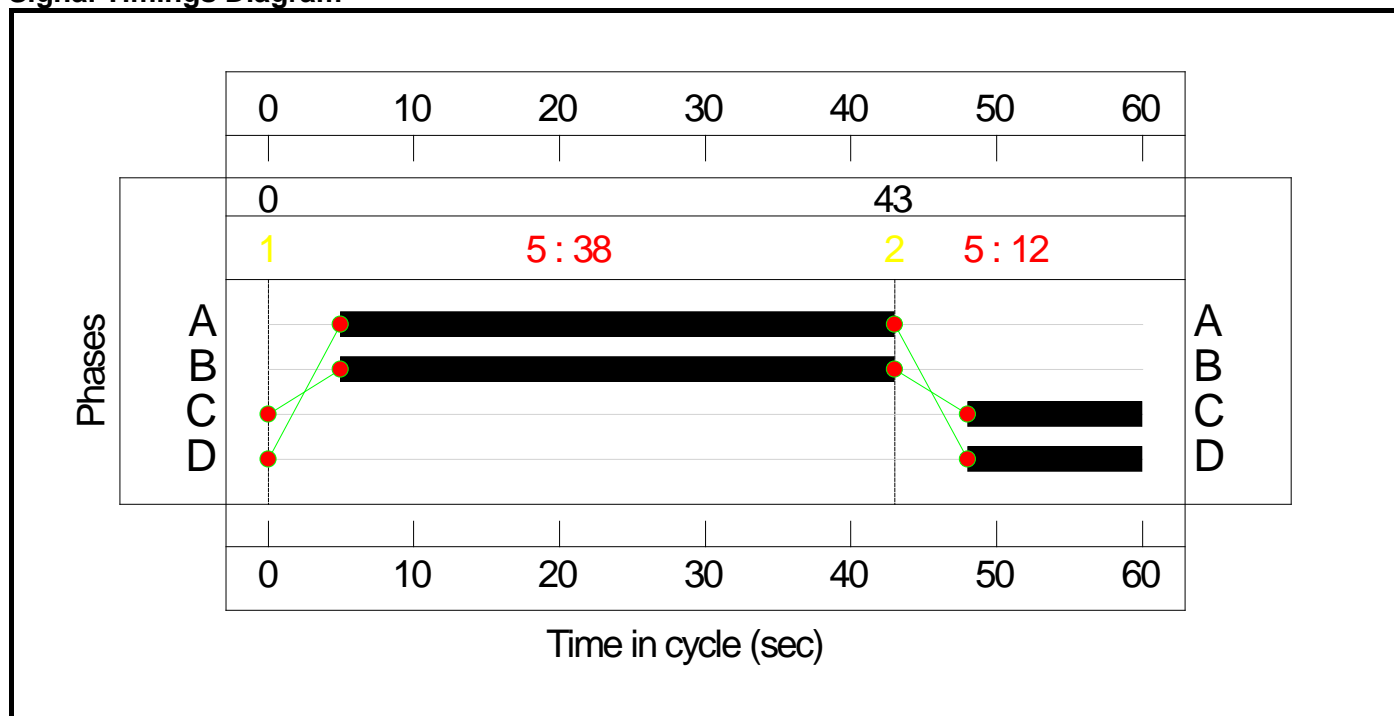
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	38	12
Change Point	0	43

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	86.2%
M40 J10 Improvement Scheme	-	-	N/A	-	-		-	-	-	-	-	-	86.2%
1/1	A43 N (Southbound) Ahead	U	N/A	N/A	A		1	38	-	811	1925	1251	64.8%
1/2	A43 N (Southbound) Ahead	U	N/A	N/A	A		1	38	-	835	1967	1279	65.3%
2/2+2/1	M40 J10 Exit Slip Road Left Ahead	U	N/A	N/A	C		1	12	-	721	1960:1903	425+412	86.2 : 86.1%
2/3	M40 J10 Exit Slip Road Ahead	U	N/A	N/A	C		1	12	-	266	1990	431	61.7%
3/1	Roundabout between A43N and A43S	U	N/A	N/A	-		-	-	-	1040	Inf	Inf	0.0%
3/2	Roundabout between A43N and A43S	U	N/A	N/A	-		-	-	-	1101	Inf	Inf	0.0%
4/1	Roundabout A43S to M40 Slip Ahead Right	U	N/A	N/A	B		1	38	-	1153	2065	1342	85.9%
4/2	Roundabout A43S to M40 Slip Ahead Right	U	N/A	N/A	B		1	38	-	1094	1973	1282	85.3%
5/1	A43 N (Northbound)	U	N/A	N/A	-		-	-	-	1508	Inf	Inf	0.0%
5/2	A43 N (Northbound)	U	N/A	N/A	-		-	-	-	1231	Inf	Inf	0.0%
6/1	Roundabout from M40 Slip to A43S Right	U	N/A	N/A	D		1	12	-	229	1967	426	53.7%
6/2	Roundabout from M40 Slip to A43S Right	U	N/A	N/A	D		1	12	-	266	1967	426	62.4%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
<b>Network</b>	-	-	<b>0</b>	<b>0</b>	<b>0</b>	<b>17.3</b>	<b>12.8</b>	<b>0.0</b>	<b>30.0</b>	-	-	-	-	
<b>M40 J10 Improvement Scheme</b>	-	-	<b>0</b>	<b>0</b>	<b>0</b>	<b>17.3</b>	<b>12.8</b>	<b>0.0</b>	<b>30.0</b>	-	-	-	-	
1/1	811	811	-	-	-	1.4	0.9	-	2.3	10.4	8.1	0.9	9.0	
1/2	835	835	-	-	-	1.5	0.9	-	2.4	10.4	8.3	0.9	9.3	
2/2+2/1	721	721	-	-	-	4.5	3.0	-	7.5	37.4	5.8	3.0	8.8	
2/3	266	266	-	-	-	1.6	0.8	-	2.4	32.1	4.0	0.8	4.8	
3/1	1040	1040	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/2	1101	1101	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/1	1153	1153	-	-	-	2.7	3.0	-	5.6	17.5	15.1	3.0	18.0	
4/2	1094	1094	-	-	-	2.5	2.8	-	5.3	17.5	14.3	2.8	17.1	
5/1	1508	1508	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	1231	1231	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	229	229	-	-	-	1.4	0.6	-	1.9	30.5	3.7	0.6	4.3	
6/2	266	266	-	-	-	1.7	0.8	-	2.5	34.3	4.4	0.8	5.2	
C1			PRC for Signalled Lanes (%):		4.4	Total Delay for Signalled Lanes (pcuHr):		30.05	Cycle Time (s):		60	PRC Over All Lanes (%):		4.4
						Total Delay Over All Lanes(pcuHr):		30.05						



## A43/B4100 Baynards Green Cumulative – Junction Assessment Results

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
<b>2031 Reference Case</b>						
A43 (N)	1.49	670	1190	1.02	47	78
B4100 (E)	0.77	4	17	1.14	71	215
A43 (S)	1.07	85	125	1.47	702	1220
B4100 (W)	0.41	1	10	0.34	1	9
<b>2031 Reference Case + Development</b>						
A43 (N)	1.49	670	1195	1.03	49	81
B4100 (E)	0.78	4	18	1.14	72	218
A43 (S)	1.08	92	133	1.48	706	1231
B4100 (W)	0.42	1	10	0.34	1	9

RFC is Ratio of Flow to Capacity, Queue is mean max in PCUs, Delay is seconds per PCU.

Junctions 10
ARCADY 10 - Roundabout Module
Version: 10.1.0.1820 © Copyright TRL Software Limited, 2023
For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com
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**Filename:** T19562 - A43\_B4100 Modelled flow.j10

**Path:** C:\Users\NeilBateman\Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\2019\T19562 Heyford Park\Junction Assessments\Arcady

**Report generation date:** 19/10/2023 11:00:53

- »2031 modelled, AM
- »2031 modelled, PM
- »2031 +230dw modelled, AM
- »2031 +230dw modelled, PM

**Summary of junction performance**

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2031 modelled										
Arm 1	D15	669.8	1189.43	1.49	F	D16	46.6	78.17	1.02	F
Arm 2		3.5	17.19	0.77	C		70.5	214.68	1.14	F
Arm 3		85.4	125.11	1.07	F		702.1	1220.09	1.47	F
Arm 4		0.7	10.09	0.41	B		0.5	9.06	0.34	A
2031 +230dw modelled										
Arm 1	D17	669.8	1195.06	1.49	F	D18	49.0	81.40	1.03	F
Arm 2		3.6	17.59	0.78	C		71.7	218.42	1.14	F
Arm 3		91.8	133.46	1.08	F		705.7	1231.36	1.48	F
Arm 4		0.8	10.17	0.42	B		0.5	9.05	0.34	A

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

**File summary**

**File Description**

<b>Title</b>	A43-B4100
<b>Location</b>	Heyford Park
<b>Site number</b>	
<b>Date</b>	09/10/2023
<b>Version</b>	
<b>Status</b>	(new file)
<b>Identifier</b>	
<b>Client</b>	Richborough
<b>Jobnumber</b>	T19562
<b>Enumerator</b>	AzureAD\NeilBateman
<b>Description</b>	

### Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

### Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D15	2031 modelled	AM	ONE HOUR	07:45	09:15	15
D16	2031 modelled	PM	ONE HOUR	16:45	18:15	15
D17	2031 +230dw modelled	AM	ONE HOUR	07:45	09:15	15
D18	2031 +230dw modelled	PM	ONE HOUR	16:45	18:15	15

### Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

# 2031 modelled, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	606.00	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	606.00	F

## Arms

### Arms

Arm	Name	Description	No give-way line
1	A43 (N)		
2	B4100 (E)		
3	A43 (S)		
4	B4100 (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)	Entry only	Exit only
1	7.50	7.85	10.8	16.7	74.0	34.2		
2	3.60	6.53	22.0	19.2	74.0	34.9		
3	7.60	8.50	13.0	31.0	74.0	38.4		
4	4.10	7.00	20.0	20.2	74.0	30.6		

## Slope / Intercept / Capacity

### Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.577	2311
2	0.482	1681
3	0.608	2496
4	0.511	1840

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)
D15	2031 modelled	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	2564	100.000
2		✓	681	100.000
3		✓	1977	100.000
4		✓	242	100.000

## Origin-Destination Data

### Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	570	1890	104
	2	291	0	59	331
	3	1485	485	0	7
	4	31	208	3	0

## Vehicle Mix

### Heavy Vehicle %

	To				
	1	2	3	4	
From	1	0	6	6	6
	2	6	0	6	6
	3	6	6	0	6
	4	6	6	6	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.49	1189.43	669.8	F
2	0.77	17.19	3.5	C
3	1.07	125.11	85.4	F
4	0.41	10.09	0.7	B

### Main Results for each time segment

#### 07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1930	521	2010	0.960	1873	14.4	22.315	C
2	513	1459	977	0.525	508	1.1	8.060	A
3	1488	540	2168	0.687	1479	2.3	5.474	A
4	182	1691	976	0.187	181	0.2	4.794	A

**08:00 - 08:15**

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2305	622	1952	1.181	1946	104.3	118.102	F
2	612	1516	950	0.645	609	1.9	11.122	B
3	1777	635	2110	0.842	1765	5.3	10.723	B
4	218	2019	809	0.269	217	0.4	6.443	A

**08:15 - 08:30**

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2823	723	1893	1.491	1893	336.7	423.697	F
2	750	1476	969	0.774	744	3.4	16.504	C
3	2177	756	2036	1.069	2005	48.1	57.041	F
4	266	2316	657	0.406	265	0.7	9.706	A

**08:30 - 08:45**

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2823	730	1890	1.494	1890	570.1	862.430	F
2	750	1473	970	0.773	749	3.5	17.188	C
3	2177	761	2033	1.071	2028	85.4	125.108	F
4	266	2341	644	0.413	266	0.7	10.089	B

**08:45 - 09:00**

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2305	701	1906	1.209	1906	669.8	1160.219	F
2	612	1485	964	0.635	618	1.9	11.227	B
3	1777	642	2106	0.844	2081	9.4	86.996	F
4	218	2338	646	0.337	218	0.5	8.944	A

**09:00 - 09:15**

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1930	532	2004	0.963	2001	652.2	1189.427	F
2	513	1558	929	0.552	515	1.3	9.268	A
3	1488	551	2161	0.689	1516	2.4	6.168	A
4	182	1731	956	0.191	183	0.3	4.947	A

# 2031 modelled, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	643.44	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	643.44	F

## 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)
D16	2031 modelled	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1835	100.000
2		✓	978	100.000
3		✓	2735	100.000
4		✓	190	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	409	1366	60
	2	373	0	272	333
	3	2186	534	0	15
	4	19	170	1	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	3	3	3
	2	5	0	5	5
	3	5	5	0	5
	4	3	3	3	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.02	78.17	46.6	F
2	1.14	214.68	70.5	F
3	1.47	1220.09	702.1	F
4	0.34	9.06	0.5	A

### Main Results for each time segment

#### 16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1381	519	2011	0.687	1373	2.2	5.728	A
2	736	1067	1166	0.632	729	1.8	8.529	A
3	2059	571	2149	0.958	2002	14.3	20.891	C
4	143	2269	681	0.210	142	0.3	6.863	A

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1650	559	1988	0.830	1640	4.7	10.343	B
2	879	1275	1066	0.825	868	4.4	18.247	C
3	2459	681	2082	1.181	2076	110.0	115.370	F
4	171	2396	616	0.277	170	0.4	8.305	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2020	587	1972	1.024	1920	29.8	41.749	E
2	1077	1493	960	1.121	944	37.7	94.097	F
3	3011	744	2044	1.474	2043	352.0	410.807	F
4	209	2392	618	0.338	209	0.5	9.042	A

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2020	587	1972	1.025	1953	46.6	78.168	F
2	1077	1519	948	1.136	945	70.5	214.682	F
3	3011	746	2042	1.475	2042	594.2	839.666	F
4	209	2392	618	0.338	209	0.5	9.058	A

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1650	550	1993	0.828	1814	5.5	33.413	D
2	879	1411	1000	0.879	986	43.9	209.035	F
3	2459	771	2027	1.213	2027	702.1	1148.181	F
4	171	2392	618	0.276	171	0.4	8.306	A



18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1381	533	2003	0.690	1394	2.3	6.207	A
2	736	1084	1158	0.636	904	1.9	28.199	D
3	2059	698	2071	0.994	2068	699.8	1220.092	F
4	143	2402	613	0.233	143	0.3	7.898	A

# 2031 +230dw modelled, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	609.76	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	609.76	F

## 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)
D17	2031 +230dw modelled	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	2563	100.000
2		✓	686	100.000
3		✓	1987	100.000
4		✓	246	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	570	1889	104
	2	291	0	59	336
	3	1495	485	0	7
	4	31	212	3	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	6	6	6
	2	6	0	6	6
	3	6	6	0	6
	4	6	6	6	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.49	1195.06	669.8	F
2	0.78	17.59	3.6	C
3	1.08	133.46	91.8	F
4	0.42	10.17	0.8	B

### Main Results for each time segment

#### 07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1930	524	2008	0.961	1872	14.5	22.400	C
2	516	1458	978	0.528	512	1.2	8.115	A
3	1496	544	2165	0.691	1487	2.3	5.549	A
4	185	1698	972	0.190	184	0.2	4.835	A

#### 08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2304	626	1950	1.182	1944	104.6	118.558	F
2	617	1514	950	0.649	614	1.9	11.238	B
3	1786	640	2107	0.848	1774	5.5	11.050	B
4	221	2028	804	0.275	221	0.4	6.530	A

#### 08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2822	725	1892	1.491	1892	337.0	424.496	F
2	755	1475	969	0.779	749	3.5	16.837	C
3	2188	761	2033	1.076	2005	51.2	59.911	F
4	271	2316	657	0.412	270	0.7	9.808	A

#### 08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2822	731	1889	1.494	1889	570.3	863.178	F
2	755	1472	971	0.778	755	3.6	17.587	C
3	2188	767	2030	1.078	2025	91.8	133.465	F
4	271	2338	646	0.419	271	0.8	10.174	B

#### 08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2304	701	1906	1.209	1906	669.8	1161.467	F
2	617	1485	964	0.639	623	1.9	11.388	B
3	1786	647	2103	0.850	2079	18.7	99.494	F
4	221	2336	647	0.342	222	0.6	8.995	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1930	544	1997	0.966	1994	653.8	1195.057	F
2	516	1553	932	0.554	519	1.3	9.296	A
3	1496	555	2159	0.693	1561	2.4	7.088	A
4	185	1776	933	0.199	186	0.3	5.120	A

# 2031 +230dw modelled, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	650.22	F

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	650.22	F

## 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)
D18	2031 +230dw modelled	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1841	100.000
2		✓	979	100.000
3		✓	2739	100.000
4		✓	190	100.000

## Origin-Destination Data

### Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	409	1372	60
	2	373	0	272	334
	3	2189	535	0	15
	4	19	170	1	0

## Vehicle Mix

### Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	3	3	3
	2	5	0	5	5
	3	5	5	0	5
	4	3	3	3	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.03	81.40	49.0	F
2	1.14	218.42	71.7	F
3	1.48	1231.36	705.7	F
4	0.34	9.05	0.5	A

### Main Results for each time segment

#### 16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1386	519	2011	0.689	1377	2.2	5.770	A
2	737	1072	1164	0.633	730	1.8	8.583	A
3	2062	572	2148	0.960	2004	14.6	21.150	C
4	143	2271	680	0.210	142	0.3	6.876	A

#### 17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1655	559	1988	0.832	1645	4.8	10.491	B
2	880	1280	1063	0.828	869	4.5	18.514	C
3	2462	681	2082	1.183	2076	111.2	116.630	F
4	171	2396	616	0.277	170	0.4	8.302	A

#### 17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2027	587	1972	1.028	1922	31.0	42.900	E
2	1078	1496	959	1.124	943	38.3	95.485	F
3	3016	743	2044	1.475	2044	354.2	413.745	F
4	209	2392	618	0.338	209	0.5	9.038	A

#### 17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	2027	587	1972	1.028	1955	49.0	81.398	F
2	1078	1522	947	1.139	944	71.7	218.424	F
3	3016	746	2043	1.476	2043	597.4	843.958	F
4	209	2391	619	0.338	209	0.5	9.054	A

#### 17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1655	551	1993	0.830	1828	5.6	36.778	E
2	880	1423	994	0.885	980	46.8	217.086	F
3	2462	767	2029	1.213	2029	705.7	1153.790	F
4	171	2392	618	0.276	171	0.4	8.302	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1386	532	2004	0.692	1399	2.4	6.259	A
2	737	1089	1155	0.638	916	1.9	32.054	D
3	2062	707	2066	0.998	2062	705.6	1231.361	F
4	143	2400	614	0.233	143	0.3	7.882	A

## APPENDIX H25

### STAGE 1 ROAD SAFETY AUDIT AND DESIGNER'S RESPONSE



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**LAND NORTH OF CAMP ROAD,  
HEYFORD PARK, OXFORDSHIRE**

**PROPOSED HIGHWAY WORKS**

---

**STAGE 1**

**ROAD SAFETY AUDIT REPORT**

---

**REQUESTED BY:**

**HUB TRANSPORT PLANNING**

---

**OCTOBER 2023**

---



**RKS**  
Associates

Project: Land North of Camp Road, Heyford Park, Oxfordshire  
Proposed Highway Works

Client: Hub Transport Planning

Document: Stage 1 Road Safety Audit

RKS Associates Ref: VRP1649 - RSA 1

Issue date: 9<sup>th</sup> October 2023

Status: Final

Authorised by: VP/MF

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**RKS**  
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Bushey  
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WD23 3AQ



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## CONTENTS

1	Introduction .....	1
2	Items Raised At Stage 1 Road Safety Audit.....	3
3	Audit Team Statement.....	5

## Appendices

Appendix A: Location of Problems Identified During Stage 1 Road Safety Audit

Appendix B: Designers Response



## 1 INTRODUCTION

1.1 This report results from a Stage 1 Road Safety Audit carried out on a proposed residential development located on land to the north of Camp Road, Heyford Park in Oxfordshire. The development proposals seek to provide up to 230 dwellings with the creation of a new vehicular access from Camp Road.

1.2 The highway works include a new vehicular access located on the northern side of Camp Road to serve the proposed development. The proposed access is 5.5m wide with 6m junction radii and takes the form of a simple priority junction facilitating all movements into and out of the development. The highway works also include the following:

- A 2m wide footway along the northern side of Camp Road connecting the development to the proposed eastbound bus stop associated with the adjacent Pye Homes development;
- A 3m wide shared footway/cycleway along the northern side of Camp Road (separated from Camp Road by an existing/proposed hedgerow) connecting the development Chilgrove Drive where a new traffic signal controlled junction is proposed;
- Traffic calming measure on Camp Road to the west of the development access comprising of a road narrowing and zebra crossing that forms part of a wider scheme requested by Oxfordshire County Council (OCC) as part of the Dorchester Living Heyford Park; and
- A new footway along the southern side of Camp Road from the zebra crossing continuing eastwards to Chilgrove Drive where a new traffic signal controlled junction is proposed.

1.3 Camp Road in the vicinity of the proposed development access is a single two-way carriageway aligned in an east to west direction. Camp Road is subject to a 30mph speed limit, it is lit and there are grass verges along either side of the carriageway.

1.4 Hub Transport Planning has supplied the following information upon which this Stage 1 RSA for the updated highway works is based:

- Transport Assessment prepared by Hub Transport Planning Reference: T19562 (December 2021)
- Hub Transport Planning Drawing Number: T19562-001 – Site Access Junction with Visibility Splays and crossings; and
- Hub Transport Planning Drawing Number: T19562-002 – Site Access Junction Swept Path Analysis 01.

1.5 The main parties to this Road Safety Audit include the following:

Road Safety Audit Team Leader	Vimal Patel BEng (Hons), GMICE, FIHE, HE Cert Comp, Reg RSA (IHE)
Road Safety Audit Team Member	Mike Fuller BSc (Hons) IEng, MCIHT, MSORSA, HE Cert Comp
Local Highway Authority	Oxfordshire County Council
Design Organisation	Hub Transport Planning



- 1.6 The Audit was undertaken following examination of the submitted documents, and reference to a site visit undertaken on Thursday 5<sup>th</sup> October 2023 between the hours of 11am and midday. The weather during the site inspection was sunny, and the road surface was dry. Traffic flows were low to moderate and no cycle or pedestrian flows were observed along Camp Road during the site inspection.

#### **Terms of Reference**

- 1.7 The Audit Team is independent of the project design team and has no other involvement with the project. This Stage 1 RSA has been undertaken in accordance with the relevant sections of GG-119, part of the Design Manual for Roads and Bridges (DMRB).
- 1.8 The Safety Audit Team have been informed by the design engineers that the extent of the Audit is limited to the proposed development access and pedestrian link and does not include the proposed traffic signal controlled junction at Chilgrove Drive, which is understood to be implemented at a later date.
- 1.9 The Safety Audit Team has examined only matters relating to road safety implications of the scheme and has not verified compliance of the design to any other criteria. The Audit Team has not been made aware of any Departures from Standard or any previous road safety audit undertaken on the proposed scheme.
- 1.10 All of the problems identified in this report are considered by the Audit Team to require action in order to improve the safety of the scheme and to minimise accident occurrence for all users. The location of the problems identified in this Safety Audit is shown in **Appendix A** where the reference numbers relate to the problems identified in this report.
- 1.11 The recommendations in this report are aimed at addressing the identified road safety problems; however, there may be other alternative acceptable ways to overcome a specific problem, when other practical issues are considered. The recommendations contained herein do not absolve the Designer of his/her responsibilities. The Auditors would be pleased to discuss the acceptability of alternative solutions to problems identified during the Audit and would encourage the Designer to consult them on this matter.
- 1.12 The LHA response to the RSA should be formally recorded and reported to the Designer and the RSA Team so that a record of the Audit process is contained in the As Built design pack to be provided and retained by the Local Highway Authority on completion.

#### **Traffic Data**

- 1.13 The Transport Assessment provided by the design engineers contains provides details of the traffic generation associated with the proposed development. The traffic generation assessment indicates that the proposed development is likely to generate 150 and 121 two-way trips during the AM and PM peak periods respectively.

#### **Collision Data**

- 1.14 Personal Injury Collision (PIC) obtained from Oxfordshire County Council for the five-year period up to August 2021 indicates a total of 20 collisions recorded on the wider highway network. A closer examination of the collision data and data obtained from publicly available Crashmap website indicates that no collisions have occurred on Camp Road in the immediate vicinity of the proposed highway works.



## 2 ITEMS RAISED AT STAGE 1 ROAD SAFETY AUDIT

### 2.1 Problem:

Summary: Potential collisions due to standing water or service covers

Location: Throughout

No details have been provided in respect of surface water drainage or other services and it is therefore not possible to ascertain whether or not there will be any safety implications. Poor drainage may result in the collection of surface water that could increase the risk of loss of control collisions.

#### Recommendation:

Ensure that adequate surface water drainage is provided and if necessary provide additional drainage.

### 2.2 Problem:

Summary: Potential risk of vehicle collisions associated with obstruction to visibility

Location: Development Access

Visibility splays to and from the proposed development access have been provided, however it is noted that the vegetation behind the visibility splay to the west of the proposed development access may restrict visibility for vehicles exiting the development. Poor visibility may increase the risk of vehicular collisions between traffic turning out of the development and vehicles travelling along Camp Road.

#### Recommendation:

Ensure that vegetation located behind the visibility splays is cut back and regularly maintained alternatively it should be replaced with a low-level variety.

### 2.3 Problem:

Summary: Potential risk of collisions associated with poor visibility

Location: Proposed development access

The vehicle swept path analysis indicate that large vehicles will utilise the full width of the proposed development access to complete the entry/exit turning manoeuvre. There is concern that vegetation adjacent to the development access may restrict forward visibility for large vehicles, this may increase the risk of turning collisions.

#### Recommendation:

Ensure that appropriate visibility splays to and from the proposed development access is clear of obstructions such as hedgerows.

### 2.4 Problem:

Summary: Potential risk of pedestrians struck by turning traffic

Location: Proposed pedestrian crossing across development access

The proposed uncontrolled pedestrian crossing facility across the development access is set back from Camp Road junction. Consequently, motorists turning left into the development may not appreciate pedestrians using the crossing. This may increase the risk of pedestrians struck by turning traffic.

#### Recommendation:

Provide appropriate visibility splays to and from the proposed uncontrolled crossing for pedestrian and vehicles clear of obstructions such as hedgerows.



**2.5**

**Problem:**

Summary: Potential risk of pedestrians stepping out onto the carriageway

Location: *Proposed footway northern side Camp Road west of development access*

Observations during the site inspection noted a large Advance Direction Sign located within the verge along the northern side of Camp Road to the west of the development access. The retention of the sign in its current location may cause a hazard for pedestrians walking along the proposed footway, this may encourage them to step out onto the carriageway where the risk of being struck by passing traffic will be greater.

**Recommendation:**

Ensure that the existing ADS is relocated such that it does not cause hazard for pedestrians walking along the proposed footway.



### **3 AUDIT TEAM STATEMENT**

- 3.1** We certify that this audit has been carried out in accordance with GG-119 of Design Manual for Roads & Bridges Volume 5 Section 2 - Road Safety Audits. Its sole purpose being to identify features of the scheme that could be removed or modified to improve safety. No member of the Audit Team has been involved in the scheme design.

#### **Audit Team Leader**

Vimal Patel  
BEng (Hons), GMICE, FIHE, RegRSA (IHE), HE Cert Comp

Signed:



Date: 9<sup>th</sup> October 2023

#### **Audit Team Member**

Mike Fuller  
BSc (Hons) IEng, MCIHT, MSoRSA, HE Cert Comp

Signed:

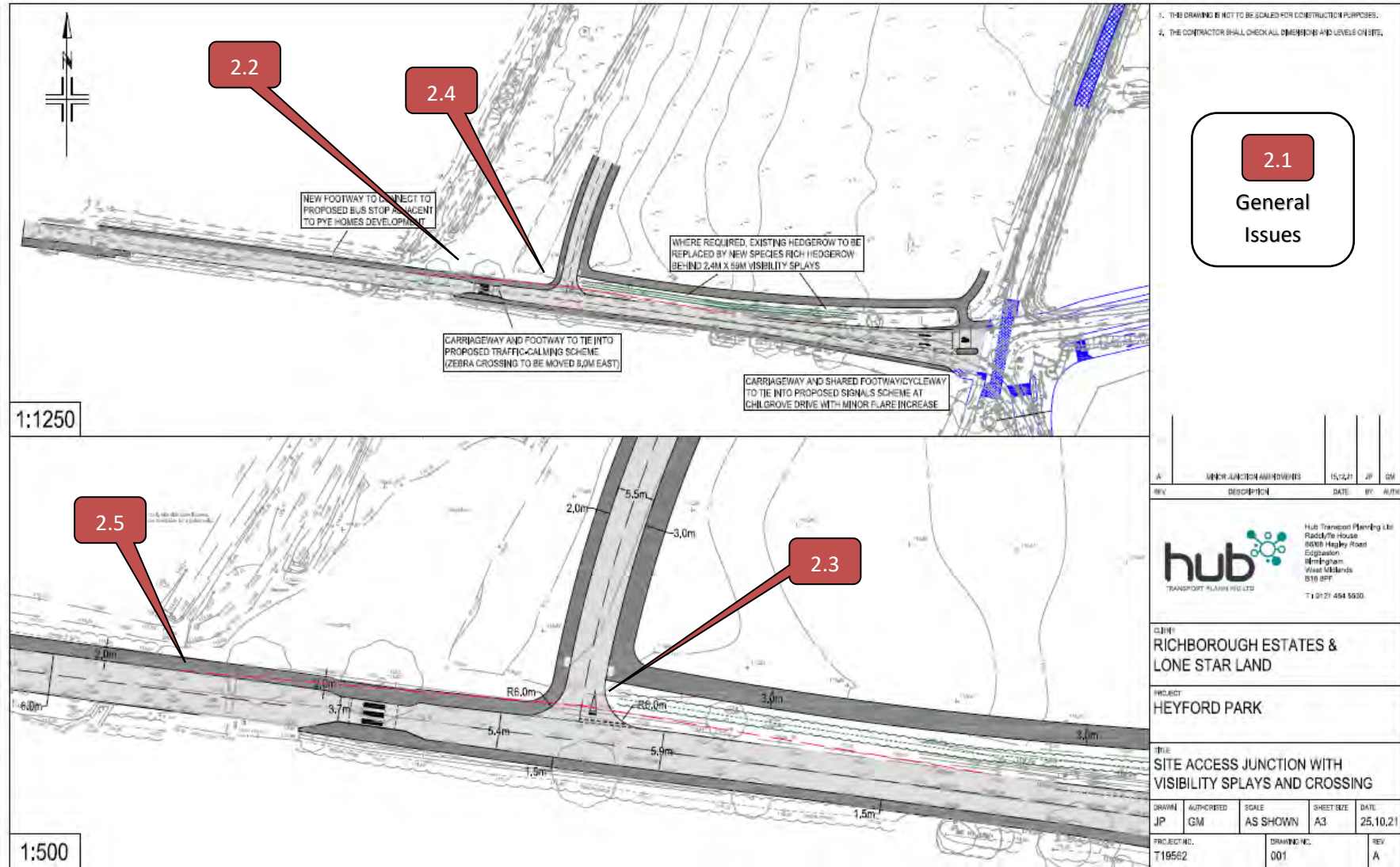


Date: 9<sup>th</sup> October 2023





# Appendix A





## Appendix B



Item No.	Audit Team Recommendation(s)	Designer's Response
2.1	Ensure that adequate surface water drainage is provided and if necessary provide additional drainage.	Recommendation Accepted.  Drainage details will be set out and agreed with the highway authority at detailed design stage.
2.2	Ensure that vegetation located behind the visibility splays is cut back and regularly maintained alternatively it should be replaced with a low-level variety.	Recommendation Accepted.  The vegetation along Camp Road will be trimmed to sit behind the visibility splays; it will be the responsibility of the highway authority to maintain the growth within the adopted highway boundary.
2.3	Ensure that appropriate visibility splays to and from the proposed development access is clear of obstructions such as hedgerows.	Recommendation Accepted.  17m forward visibility splays have been shown on our updated drawing T19562.001 rev B, which equate to a vehicle speed of 15mph.
2.4	Provide appropriate visibility splays to and from the proposed uncontrolled crossing for pedestrian and vehicles clear of obstructions such as hedgerows.	Recommendation Accepted.  17m forward visibility splays have been shown on our updated drawing T19562.001 rev B, which equate to a vehicle speed of 15mph.
2.5	Ensure that the existing ADS is relocated such that it does not cause hazard for pedestrians walking along the proposed footway	Recommendation Accepted.  The ADS has been relocated 5m to the west of the current location where the build-out provides additional width, as shown on our updated drawing T19562.001 rev B.

**Designer's Statement:**

I certify that I have considered the items that have arisen in the Stage 1 Road Safety Audit Report and my response to its recommendations are set out above.

Designer

Date: 19.10.23

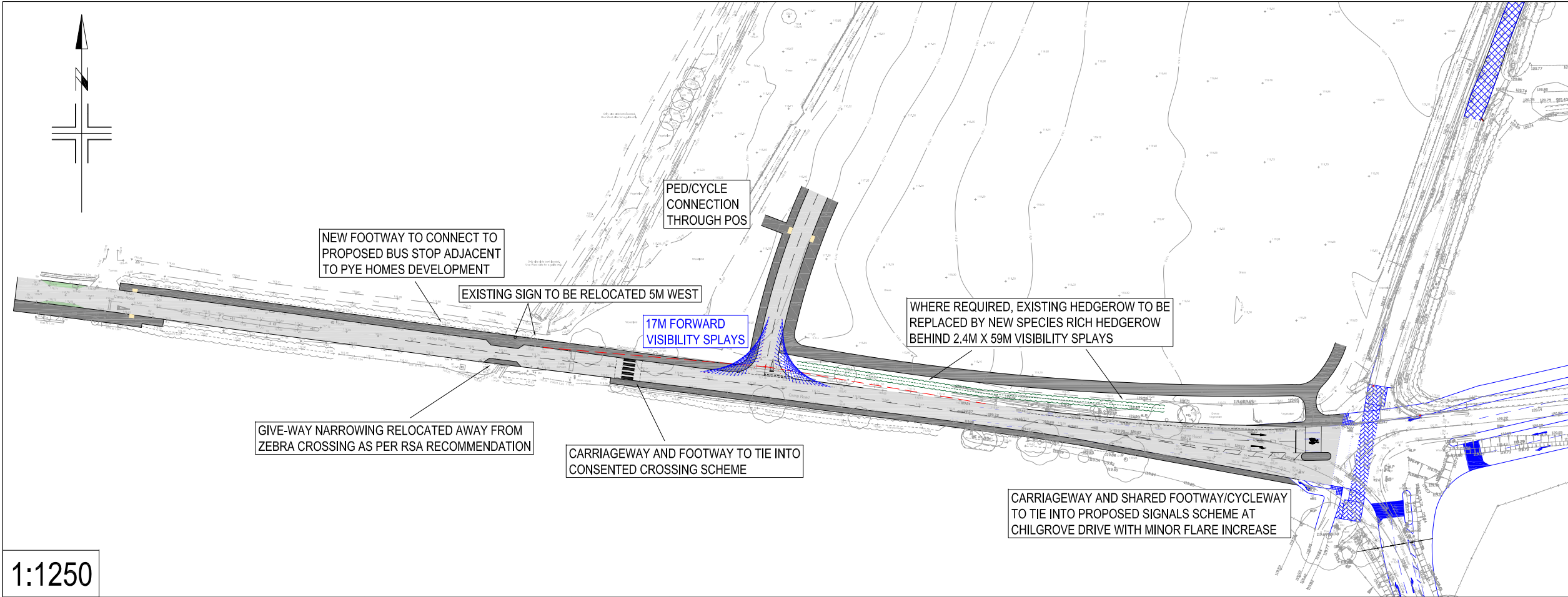
**Project Sponsor/ Client Organisation Statement:**



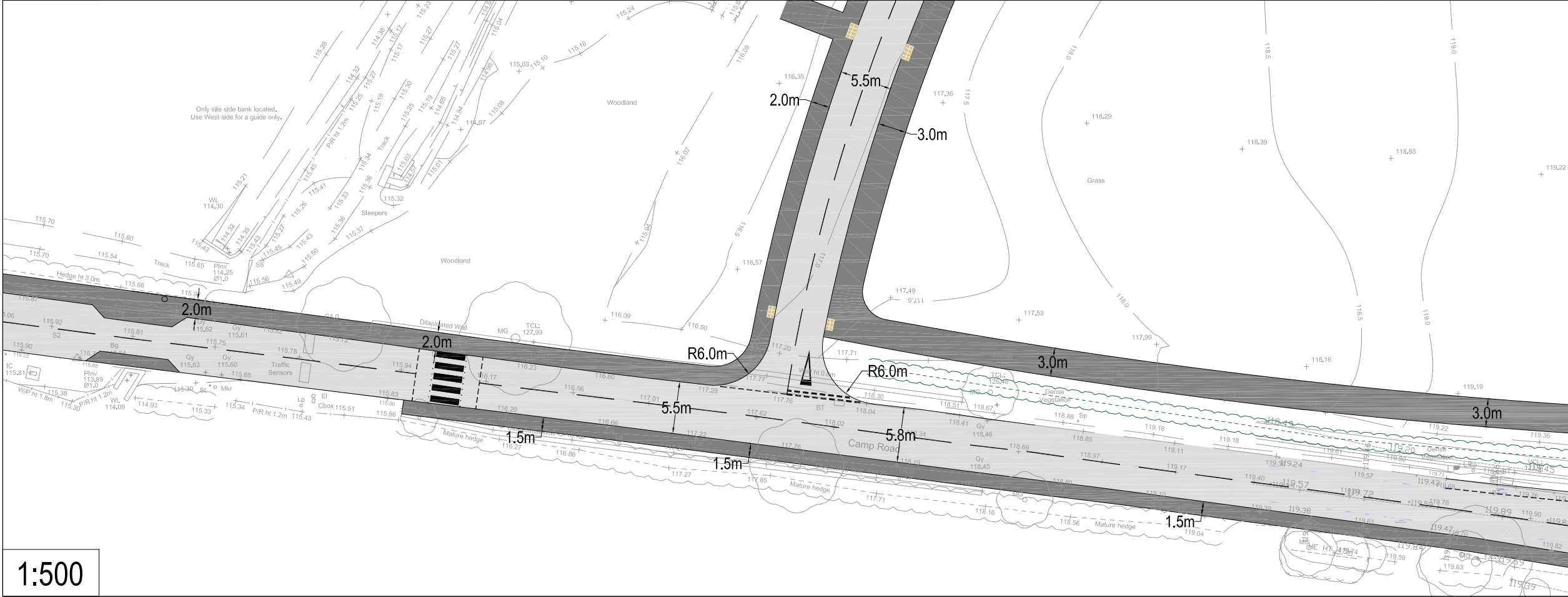
I accept/do not accept the Designer's Response (please delete as appropriate)

.....

Date:



1:1250



1:500

1. THIS DRAWING IS NOT TO BE SCALED FOR CONSTRUCTION PURPOSES.
2. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND LEVELS ON SITE.

B	DRAWING UPDATED FOLLOWING STAGE 1 RSA RECOMMENDATIONS & OCC REQUEST	27.10.23	JP	GM
A	MINOR JUNCTION AMENDMENTS	15.12.21	JP	GM

REV	DESCRIPTION	DATE	BY	AUTH
-----	-------------	------	----	------

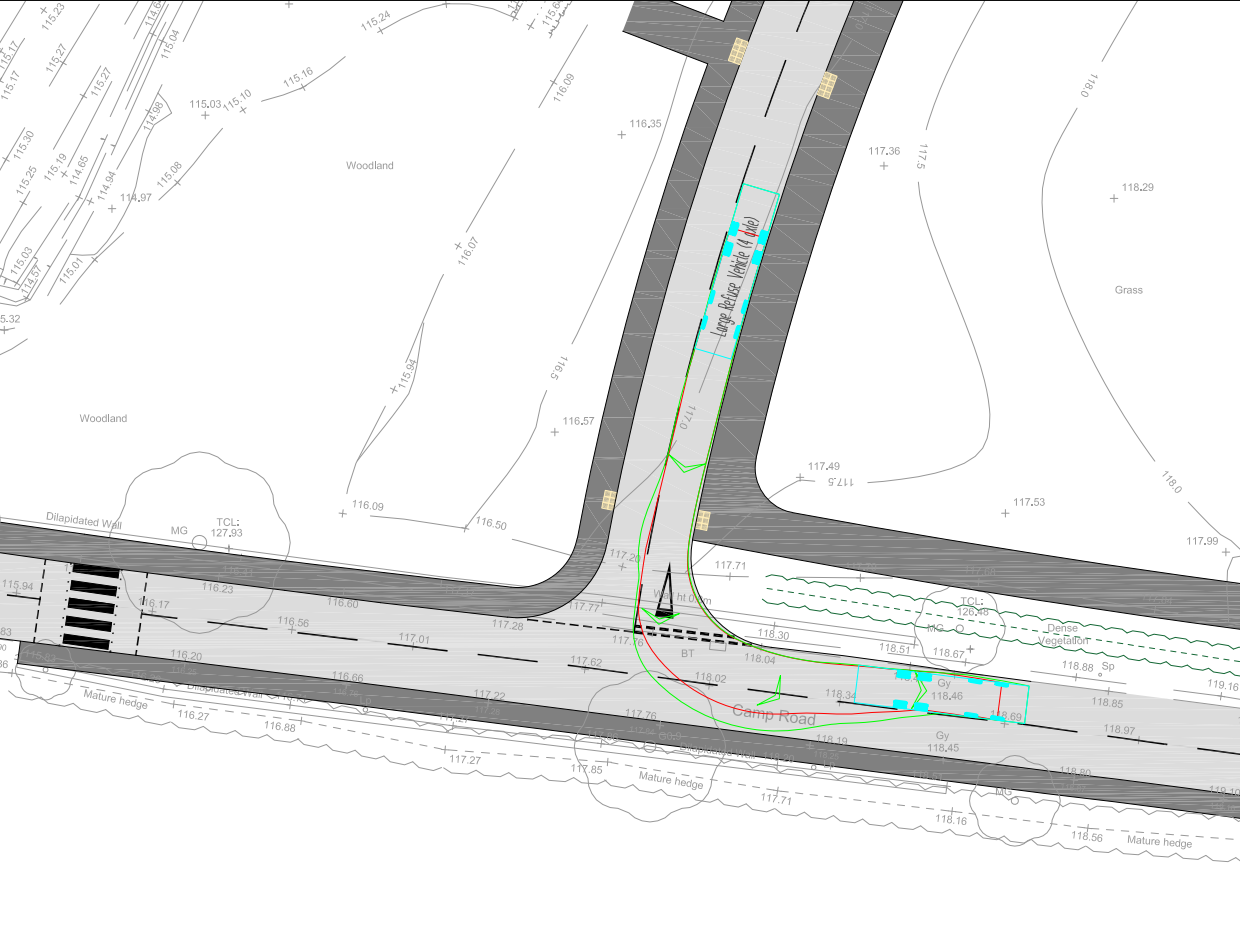
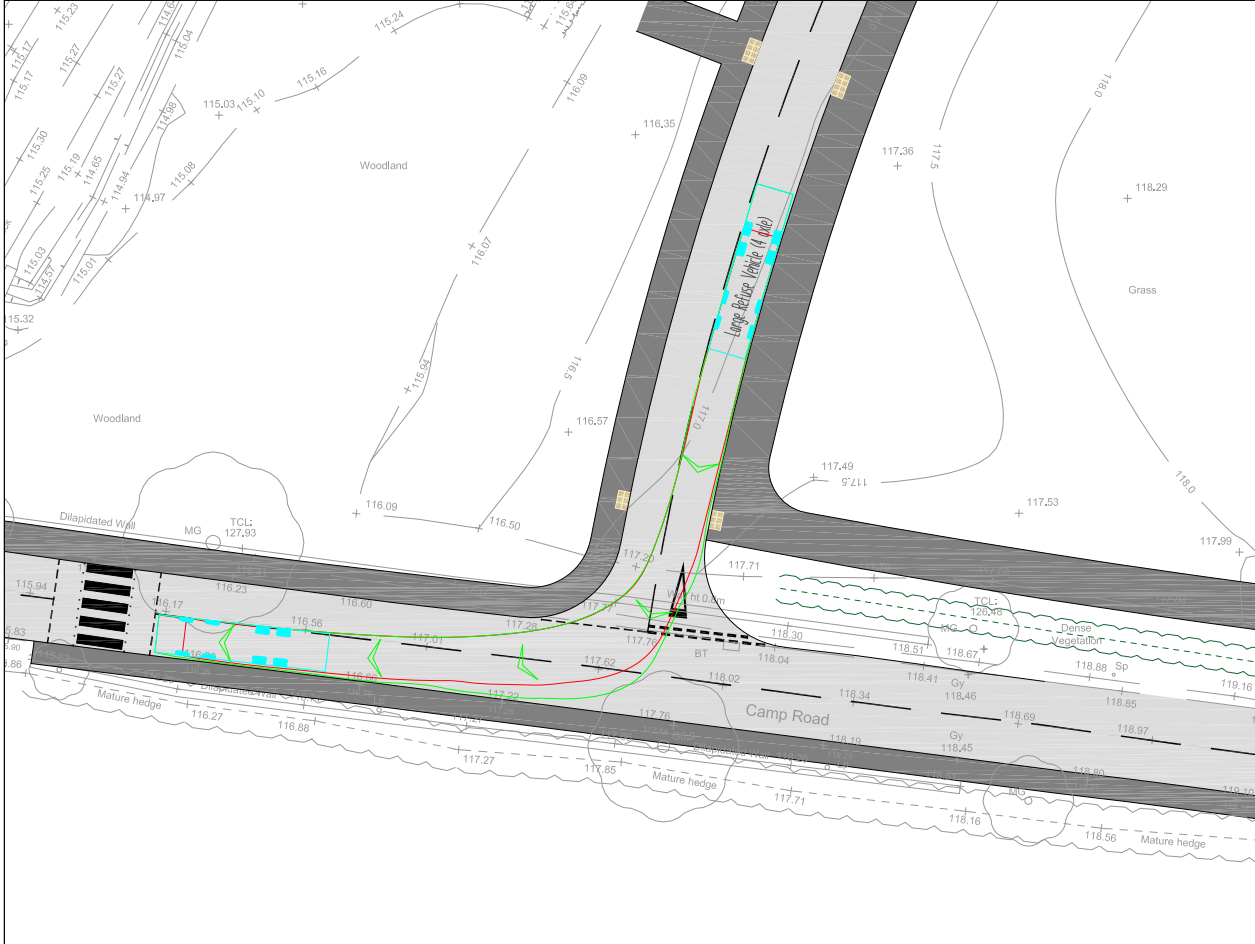
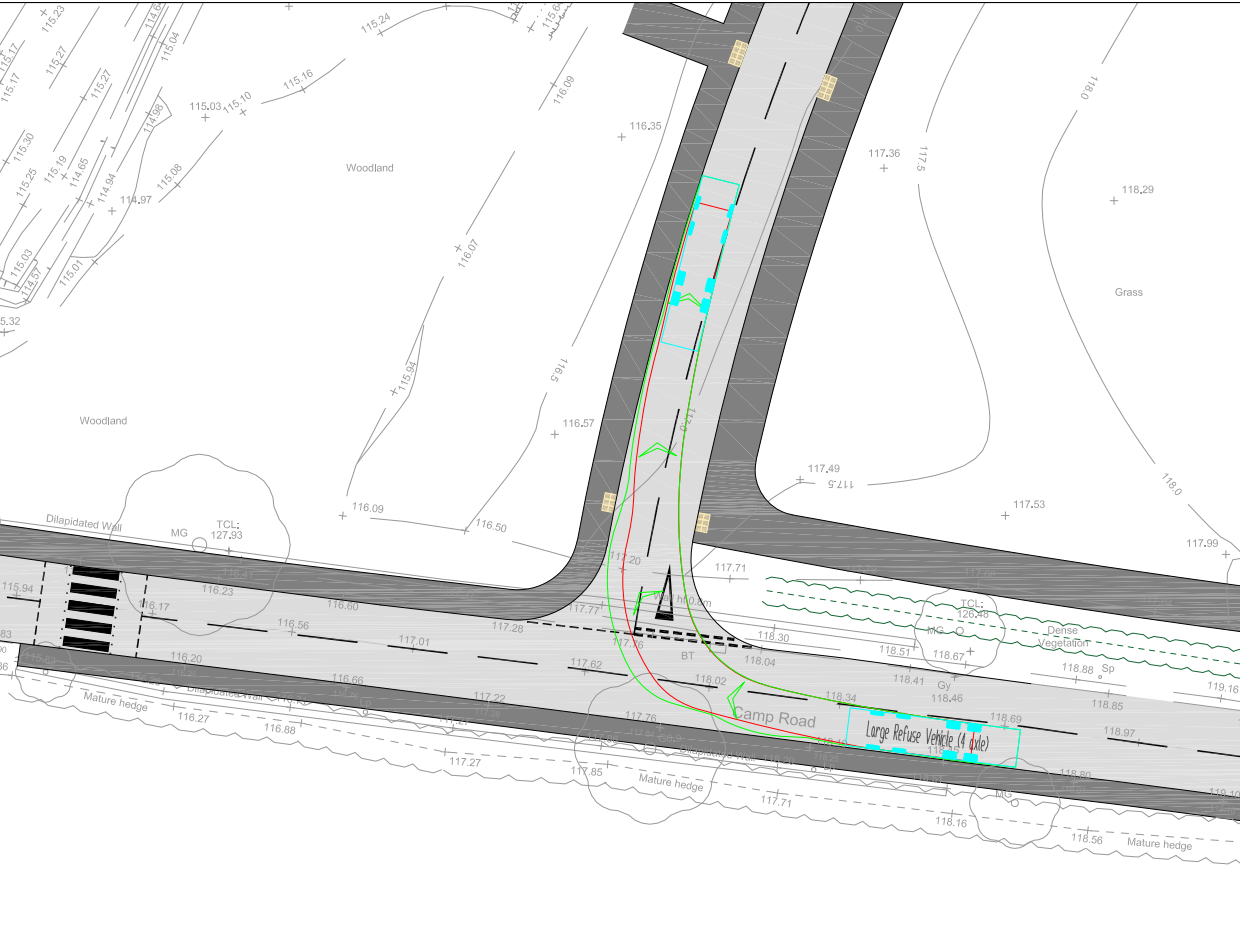
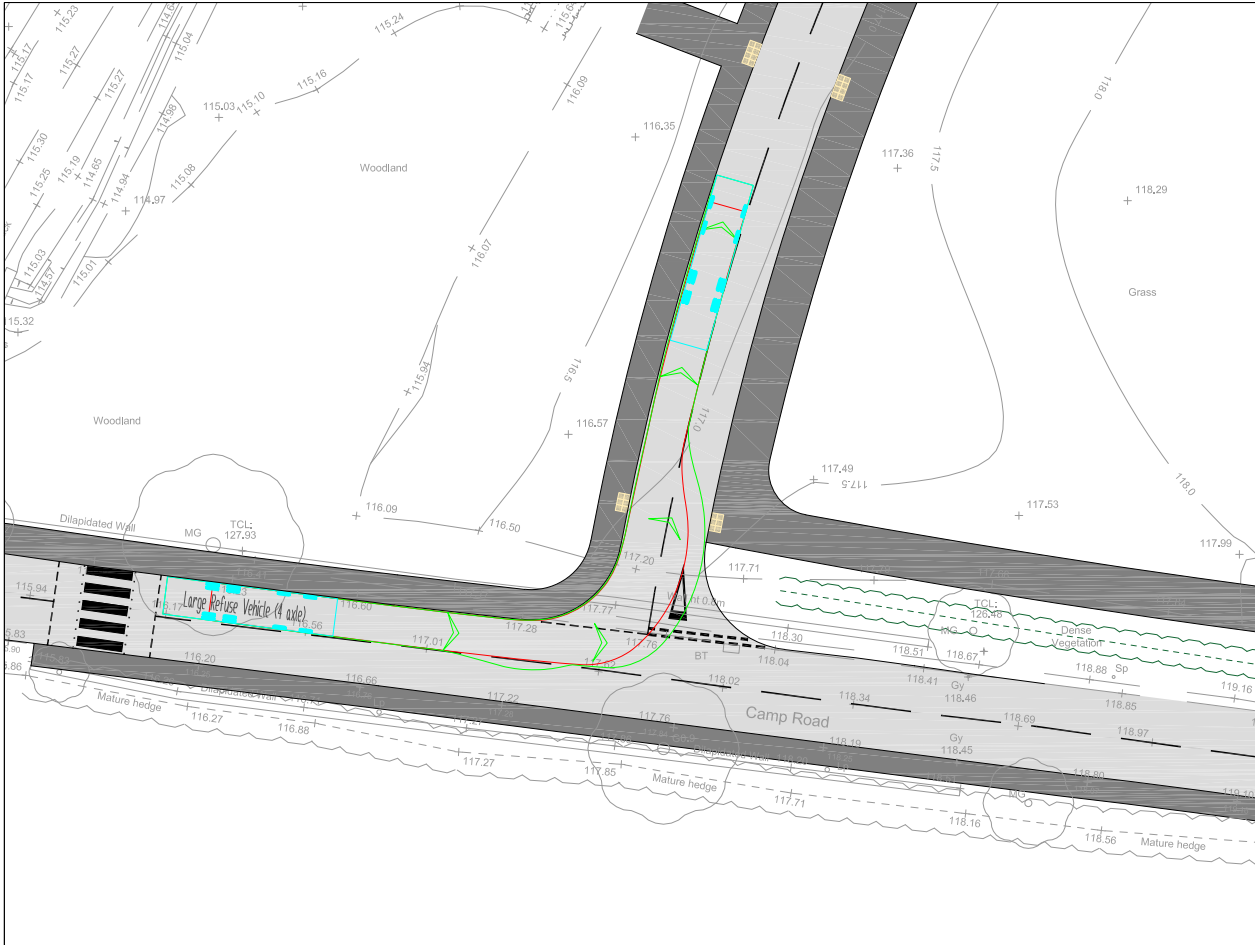
Hub Transport Planning Ltd  
 Floor 1B  
 4 Temple Row  
 Birmingham  
 B2 5HG  
 T : 0121 454 5530

CLIENT  
**RICHBOROUGH ESTATES & LONE STAR LAND**

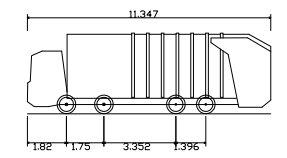
PROJECT  
**HEYFORD PARK**

TITLE  
**SITE ACCESS JUNCTION WITH VISIBILITY SPLAYS AND CROSSING**

DRAWN	AUTHORISED	SCALE	SHEET SIZE	DATE
JP	GM	AS SHOWN	A3	25.10.21
PROJECT NO. T19562		DRAWING NO. 001	REV B	



1. THIS DRAWING IS NOT TO BE SCALED FOR CONSTRUCTION PURPOSES.
2. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND LEVELS ON SITE.



Large Refuse Vehicle (4 axle)  
 Overall Length 11.347m  
 Overall Width 2.500m  
 Overall Body Height 3.751m  
 Min Body Ground Clearance 0.304m  
 Track Width 2.500m  
 Lock to lock time 6.00s  
 Wall to wall Turning Radius 11.330m

A DRAWING UPDATED FOLLOWING STAGE 1 RSA RECOMMENDATIONS & OCC REQUEST 22.10.23 JP GM

REV	DESCRIPTION	DATE	BY	AUTH
-----	-------------	------	----	------

Hub Transport Planning Ltd  
 Floor 1B  
 4 Temple Row  
 Birmingham  
 B2 5HG  
 T : 0121 454 5530

CLIENT  
**RICHBOROUGH ESTATES & LONE STAR LAND**

PROJECT  
**HEYFORD PARK**

TITLE  
**SITE ACCESS JUNCTION  
 SWEEP PATH ANALYSIS 01**

DRAWN	AUTHORISED	SCALE	SHEET SIZE	DATE
JP	GM	1:500	A3	25.10.21

PROJECT NO.	DRAWING NO.	REV
T19562	002	A

## **APPENDIX H26**

### **RKS ASSOCIATES LETTER AND HUB RESPONSE**





**RKS**  
Associates

RKS Associates Limited  
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**Our Ref: VRP1649-01-L1**

**E-mail: [vpatel@rks.org.uk](mailto:vpatel@rks.org.uk)**

10<sup>th</sup> October 2023

Hub Transport Planning Ltd  
Floor 1B  
4 Temple Row  
Birmingham  
B2 5HG

Dear James,

**Re: Land North of Camp Road, Heyford Park, Oxfordshire**

Further to the Stage 1 Road Safety Audit conducted for the highway works associated with the land north of Camp Road, Heyford Park in Oxfordshire. Please note that the extent of the Stage 1 RSA covered the site access and footways along the northern and southern side of Camp Road.

We note that the traffic calming feature on Camp Road involving the combined carriageway narrowing and zebra crossing has been requested by Oxfordshire County Council and subsequently approved as part of application 18/00825/HYBRID for a much larger development scheme.

Notwithstanding the above, we have identified the following road safety concerns relating to the proposed traffic calming feature which should be addressed accordingly:

**Problem:**

There is concern that the absence of priority one way operation through the proposed traffic calming feature (road narrowing) may increase the risk of collisions associated with motorists failing to give way to on-coming traffic. The road safety is further compromised by the zebra crossing which introduces further confusion for road users as to who has priority.

**Recommendation:**

It is recommended that an alternative form of traffic calming is provided with a clear separation between the proposed zebra crossing and traffic calming feature.

**Problem:**

Observations during the site inspection noted the proposed zebra crossing it to be located adjacent to a mature tree on the northern side of Camp Road. The retention of the mature tree will overshadow crossing particularly during the hours of darkness. This may result in motorists having poor forward visibility to pedestrians using the crossing and may increase the risk of pedestrian/vehicle collisions at the crossing.

**Recommendation:**

Remove the mature tree if possible, alternatively relocate the pedestrian crossing to a location where it is not overshadowed by vegetation.

We trust the above is set out clearly, however feel free to contact me to discuss further.

Yours sincerely

Vimal Patel, BEng (Hons), GMICE, FIHE, HE Cert Comp, Reg RSA (IHE)



**RKS**  
Associates

**Our Ref: JP/T19562-RKS01.let**  
**Your Ref:**



19<sup>th</sup> October 2023

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FAO Vimal Patel Esq

Dear Vimal

**RE: Land North of Camp Road, Heyford Park, Oxfordshire**

Many thanks for your letter dated 10<sup>th</sup> October 2023 regarding the consented traffic calming feature on Camp Road.

In respect of the road safety concerns you have identified, I can respond as follows:

**Problem:**

There is concern that the absence of priority one way operation through the proposed traffic calming feature (road narrowing) may increase the risk of collisions associated with motorists failing to give way to on-coming traffic. The road safety is further compromised by the zebra crossing which introduces further confusion for road users as to who has priority.

**Recommendation:**

It is recommended that an alternative form of traffic calming is provided with a clear separation between the proposed zebra crossing and traffic calming feature.

**Response:**

We have updated our drawing, T19562.001 rev B, to provide the carriageway narrowing at a 30m offset to the zebra crossing, in order to deliver the clear separation requested.

**Problem:**

Observations during the site inspection noted the proposed zebra crossing it to be located adjacent to a mature tree on the northern side of Camp Road. The retention of the mature tree will overshadow crossing particularly during the hours of darkness. This may result in motorists having poor forward visibility to pedestrians using the crossing and may increase the risk of pedestrian/vehicle collisions at the crossing.

**Recommendation:**

Remove the mature tree if possible, alternatively relocate the pedestrian crossing to a location where it is not overshadowed by vegetation.

**Response:**

As shown on our updated drawing, T19562.001 rev B, the previous proposal to move the zebra crossing slightly to the east has now been updated to show the crossing in the originally approved location, to the west of the mature tree referred to.

I trust that the above addresses your concerns sufficiently, but if you require any further clarification please let me know.

Yours sincerely

A handwritten signature in black ink, appearing to read 'J. Parker', is centered below the text 'Yours sincerely'.

James Parker  
**Director**  
Hub Transport Planning Ltd

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Encs.