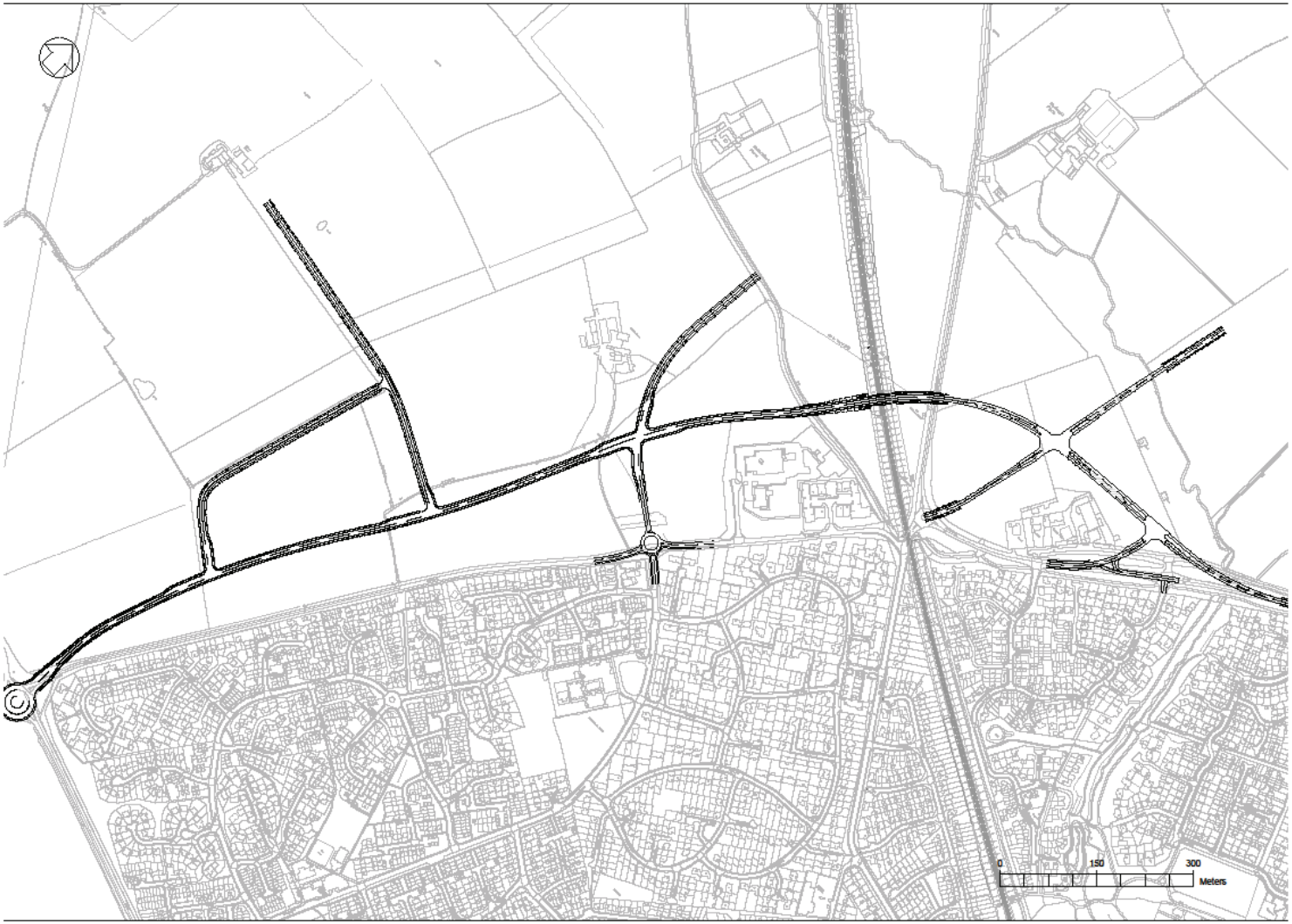
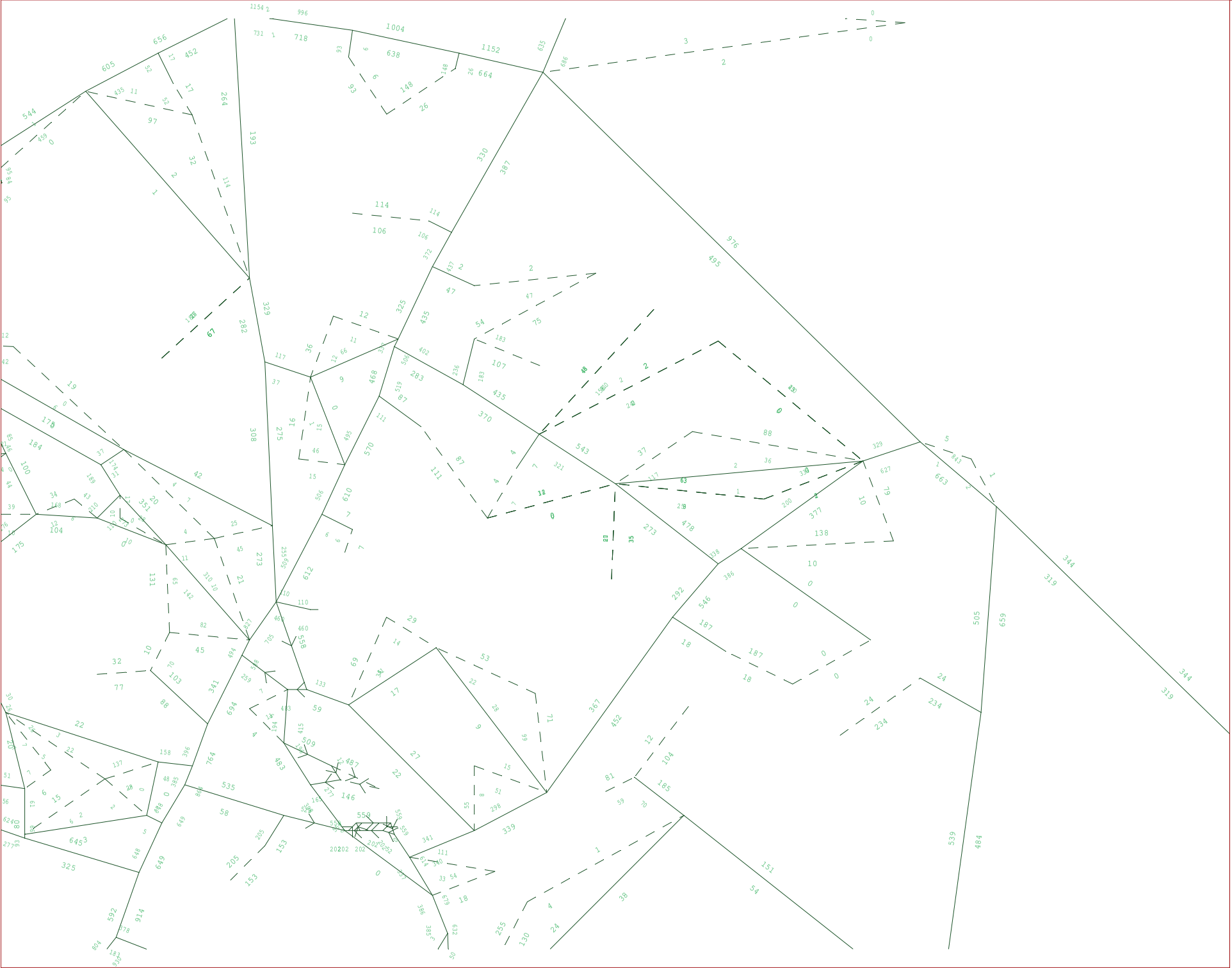

0
150
300
Meters

Appendix F – NW Bicester 85th Percentile Trip Rates Model Outputs (Supplied Electronically)

Appendix G – NW Bicester with SE Peripheral Route 85th Percentile Trip Rates Model Outputs (Supplied Electronically)

Appendix H – NW Bicester Average Trip Rates Model Outputs (Supplied Electronically)



SATURN

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DVV / ITS

ORK.UFS

2012_AM_NETW

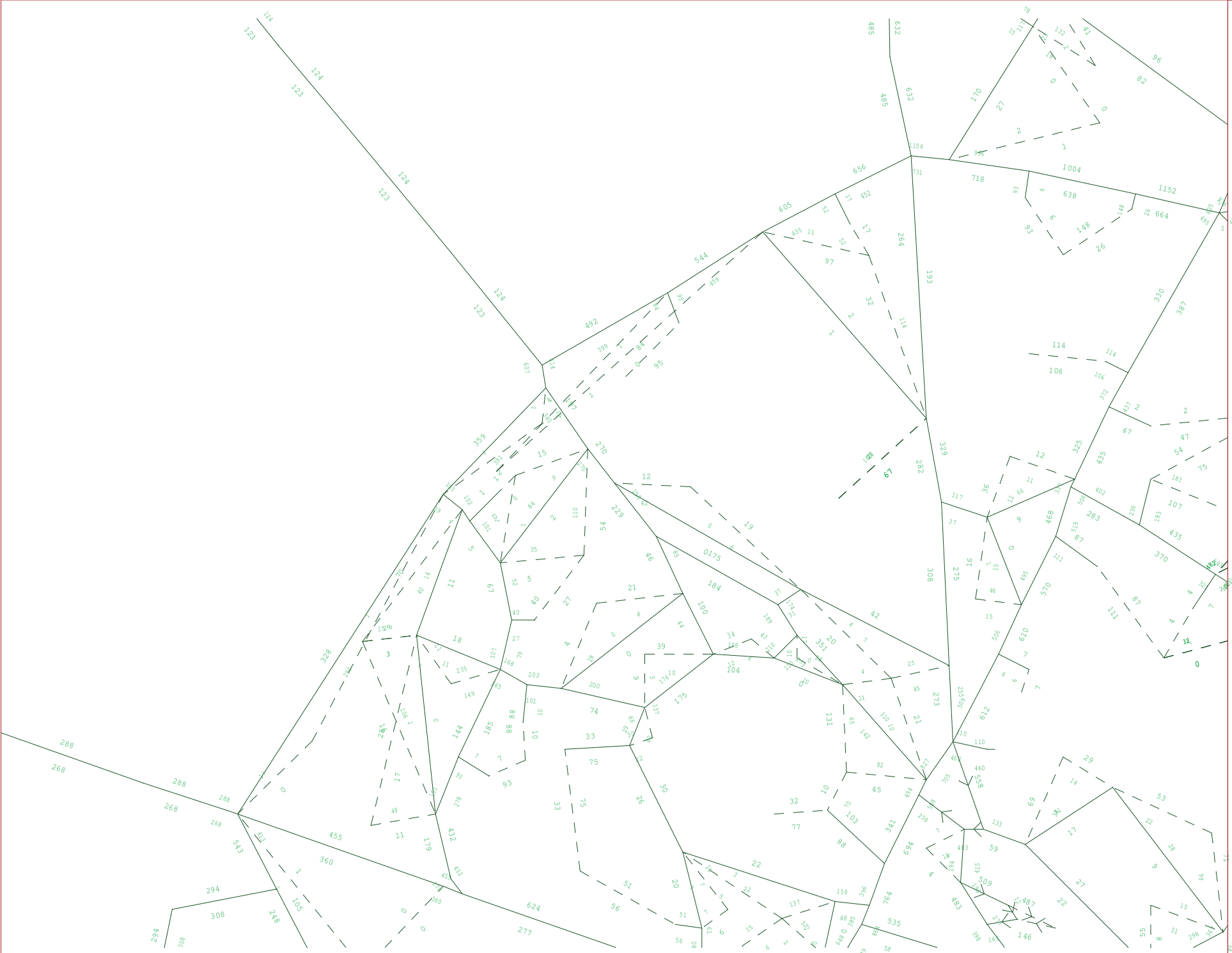
Scale 12696

Link Annot:

Demand flow

13- 2-14

WHITE YOUNG



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2012_AM_NETW

Scale 12696

Link Annot:

Demand flow

13- 2-14

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Link Annot:

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Link Annot:

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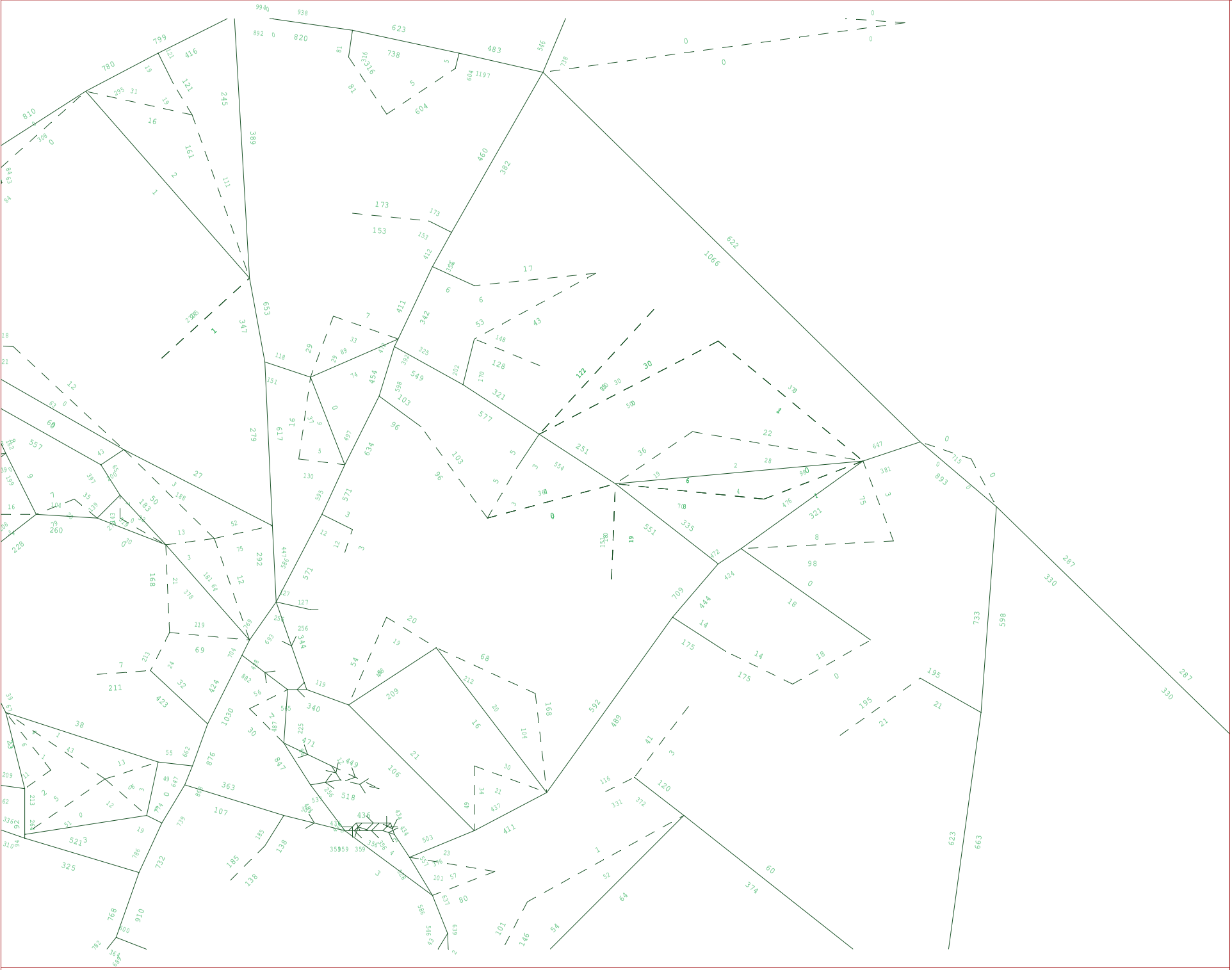

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Demand flow

13- 2-14

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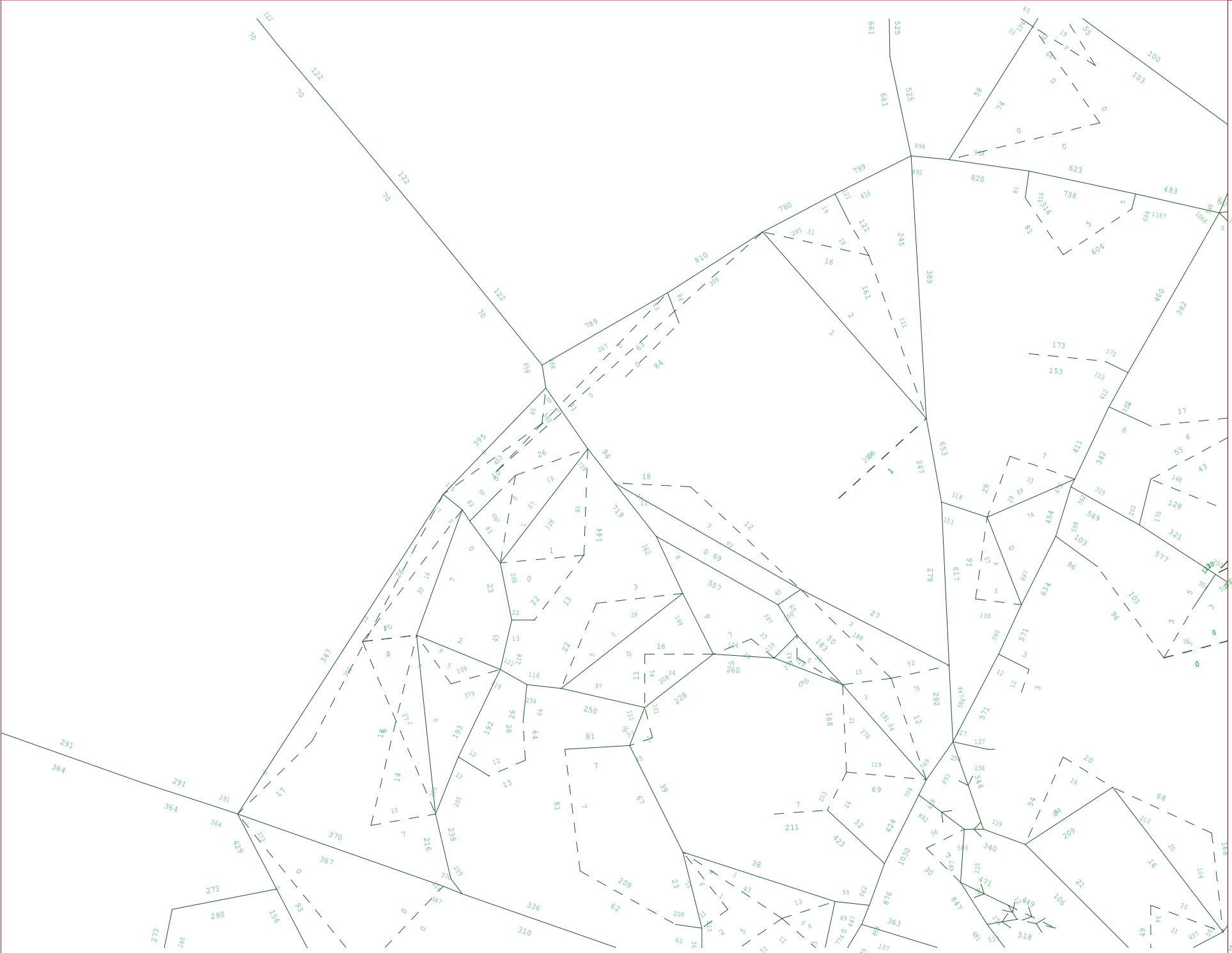

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Scale 12696

Link Annot:

Demand flow

13- 2-14

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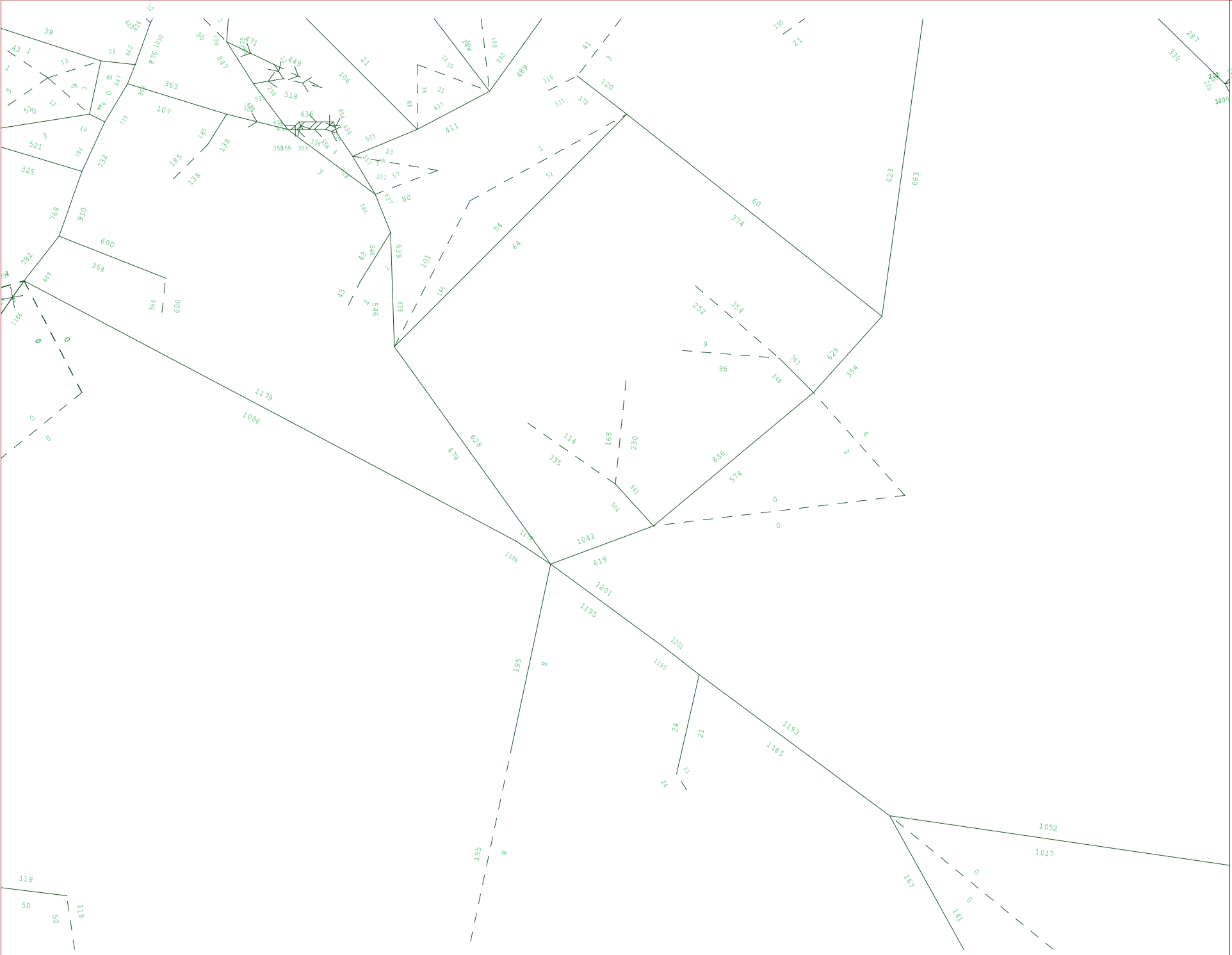

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Link Annot:

Demand flow

13- 2-14

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2012_PM_NETW

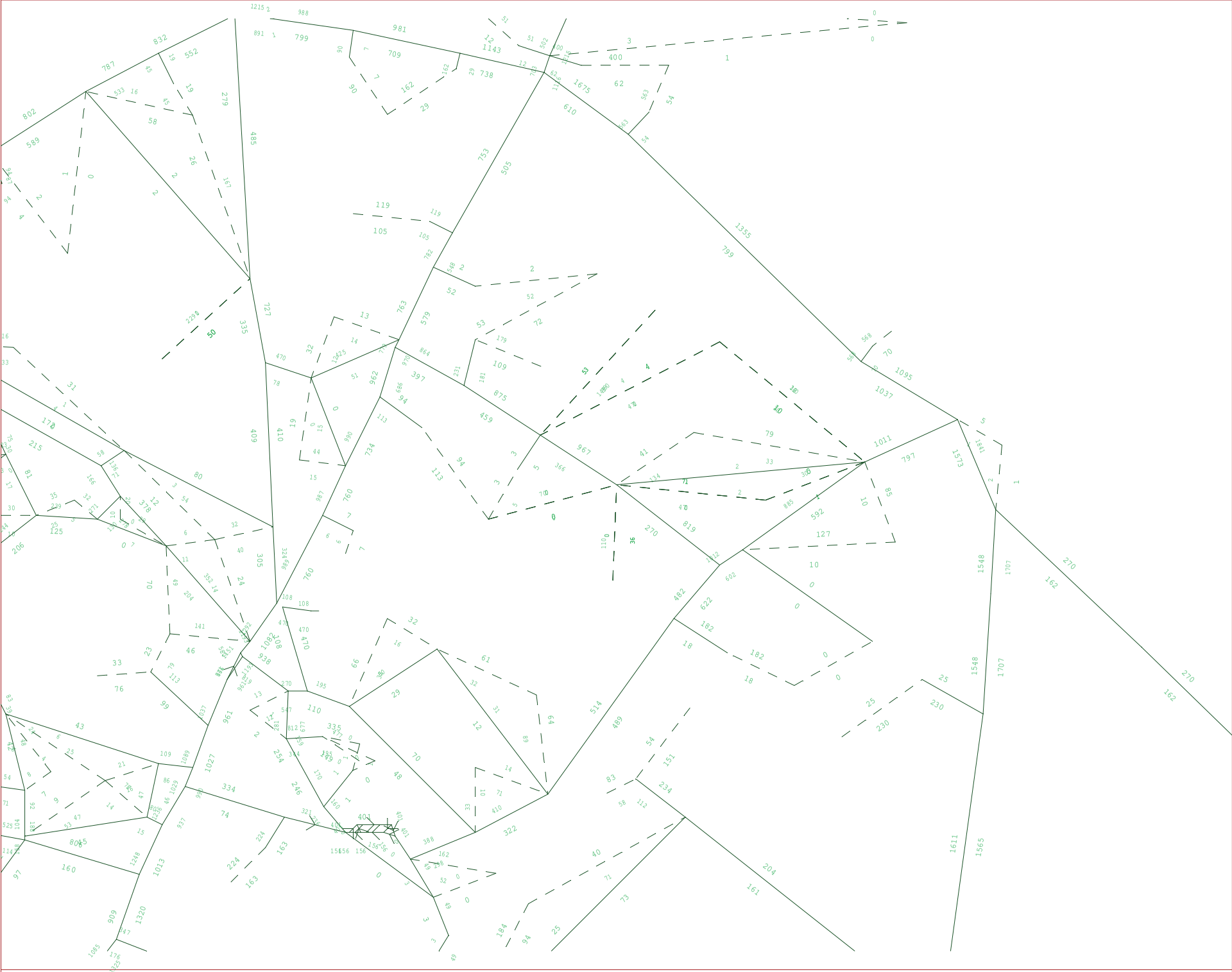
Scale 12696

Link Annot:

Demand flow

13- 2-14

WHITE YOUNG



SATURN

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AM_No_NWBice

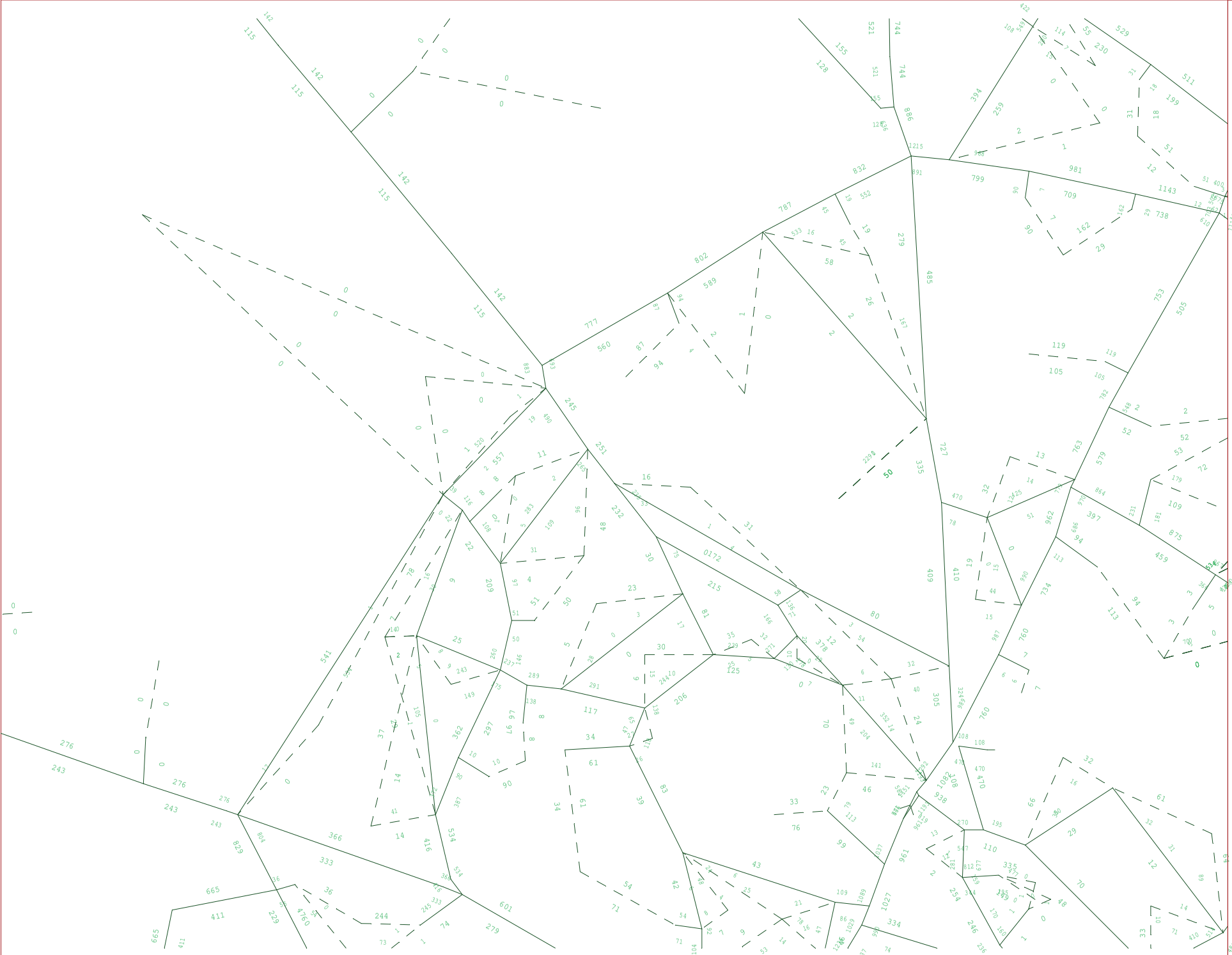
Scale 12696

Link Annot:

Demand flow

8- 5-14

WHITE YOUNG



SATURN

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ster_V3.UFS

AM_No_NWBice

Scale 12696

Link Annot:

Demand flow

8- 5-14

WHITE YOUNG

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AM_No_NWBice

Scale 12696

Link Annot:

Demand flow

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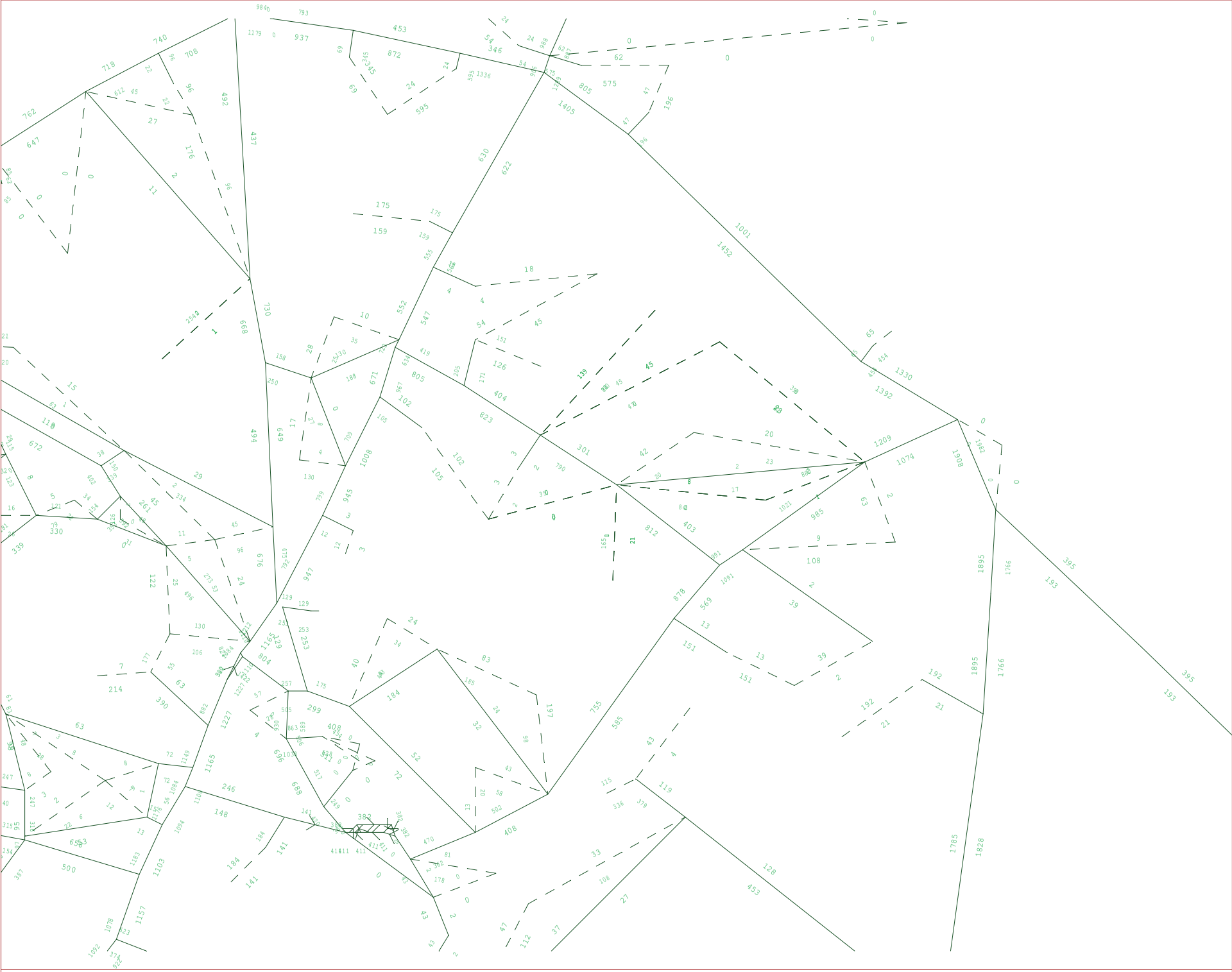
Link Annot:

Demand flow

8- 5-14

WHITE YOUNG



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Scale 12696

Link Annot:

Demand flow

8- 5-14

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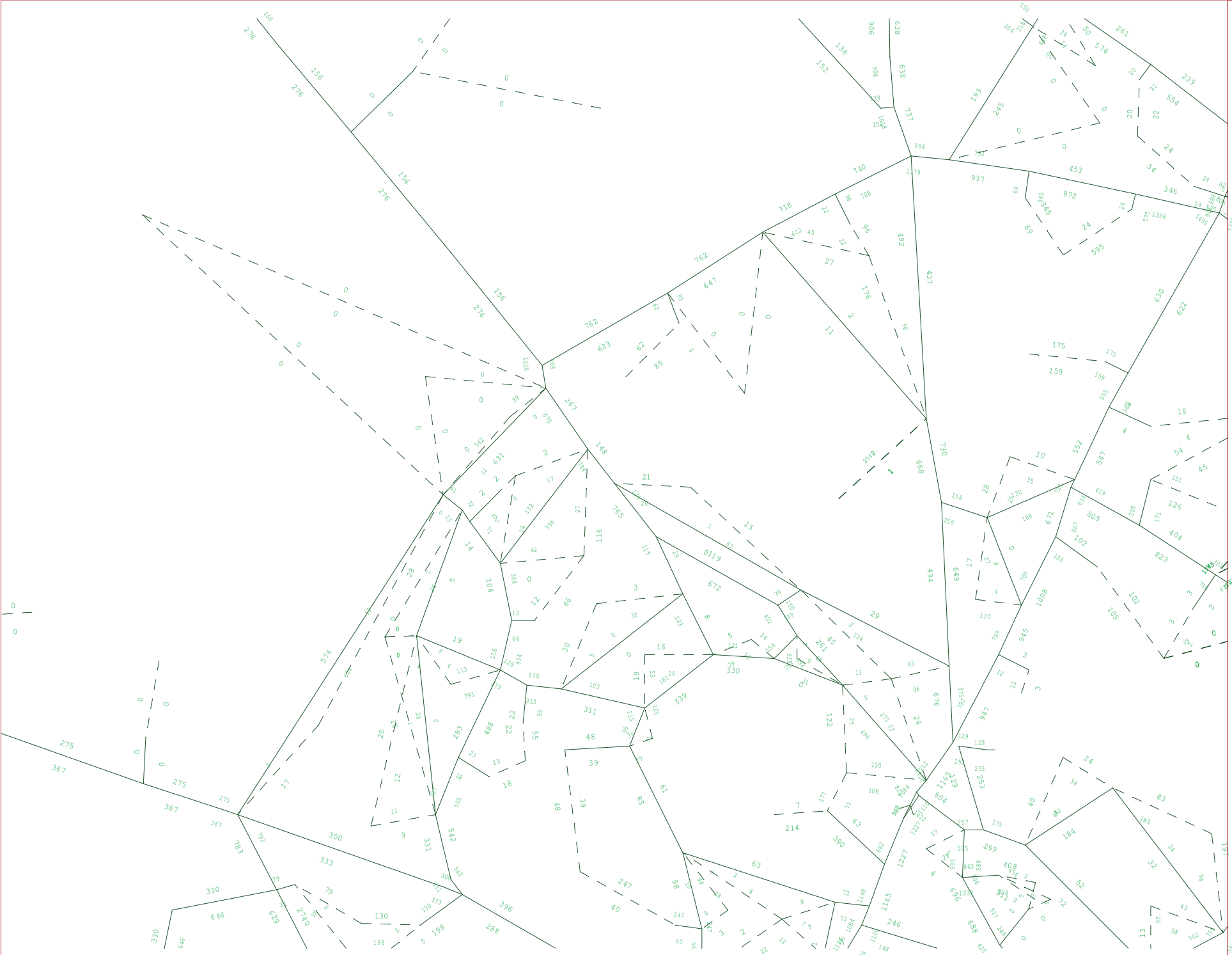

SATURN

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Scale 12696

Link Annot:

Demand flow

8- 5-14

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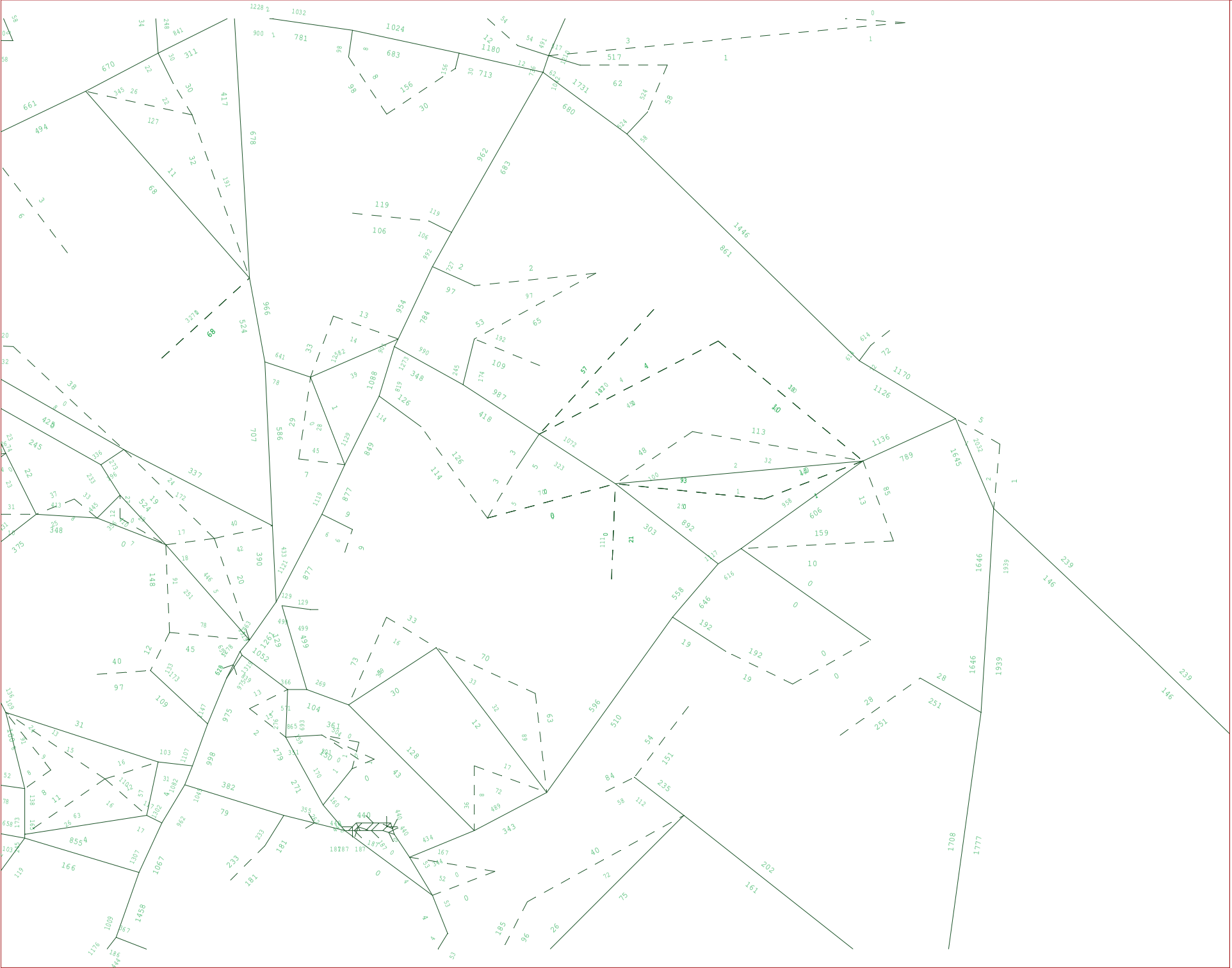
Scale 12696

Link Annot:

Demand flow

8- 5-14

WHITE YOUNG



SATURN

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AM_85THPCILE

Scale 12696

Link Annot:

Demand flow

21- 5-14

WHITE YOUNG

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_NWB_V3B.UFS
AM_85THPCILE

Scale 12696

Link Annot:

Demand flow

21- 5-14

WHITE YOUNG

SATURN

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_NWB_V3B.UFS

AM_85THPCILE

Scale 12696

Link Annot:

Demand flow

21- 5-14

WHITE YOUNG

SATURN

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_NWB_V3B.UFS
AM_85THPCILE

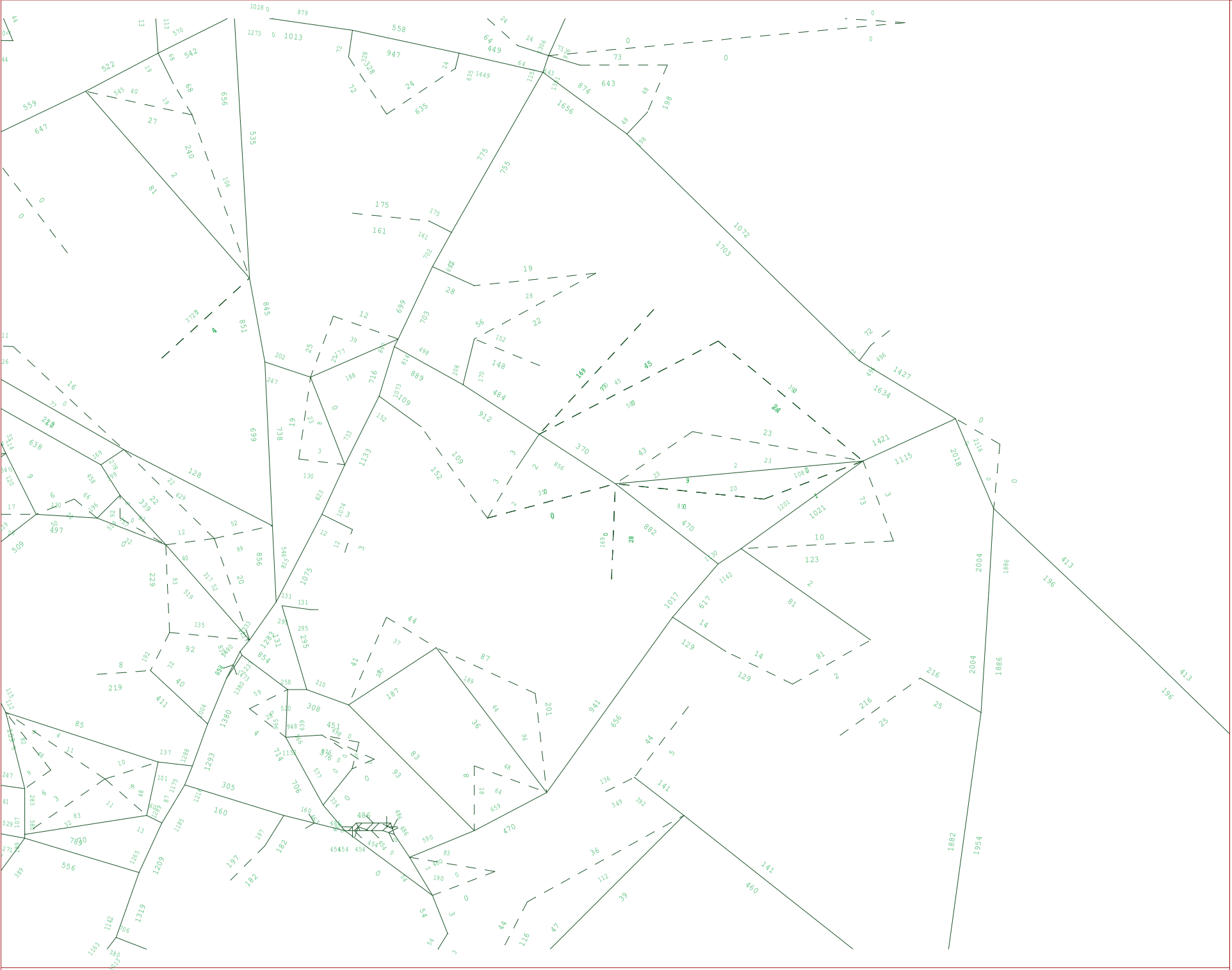
Scale 12696

Link Annot:

Demand flow

21- 5-14

WHITE YOUNG



SATURN

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_NWB_V3B.UFS

PM_85THPCILE

Scale 12696

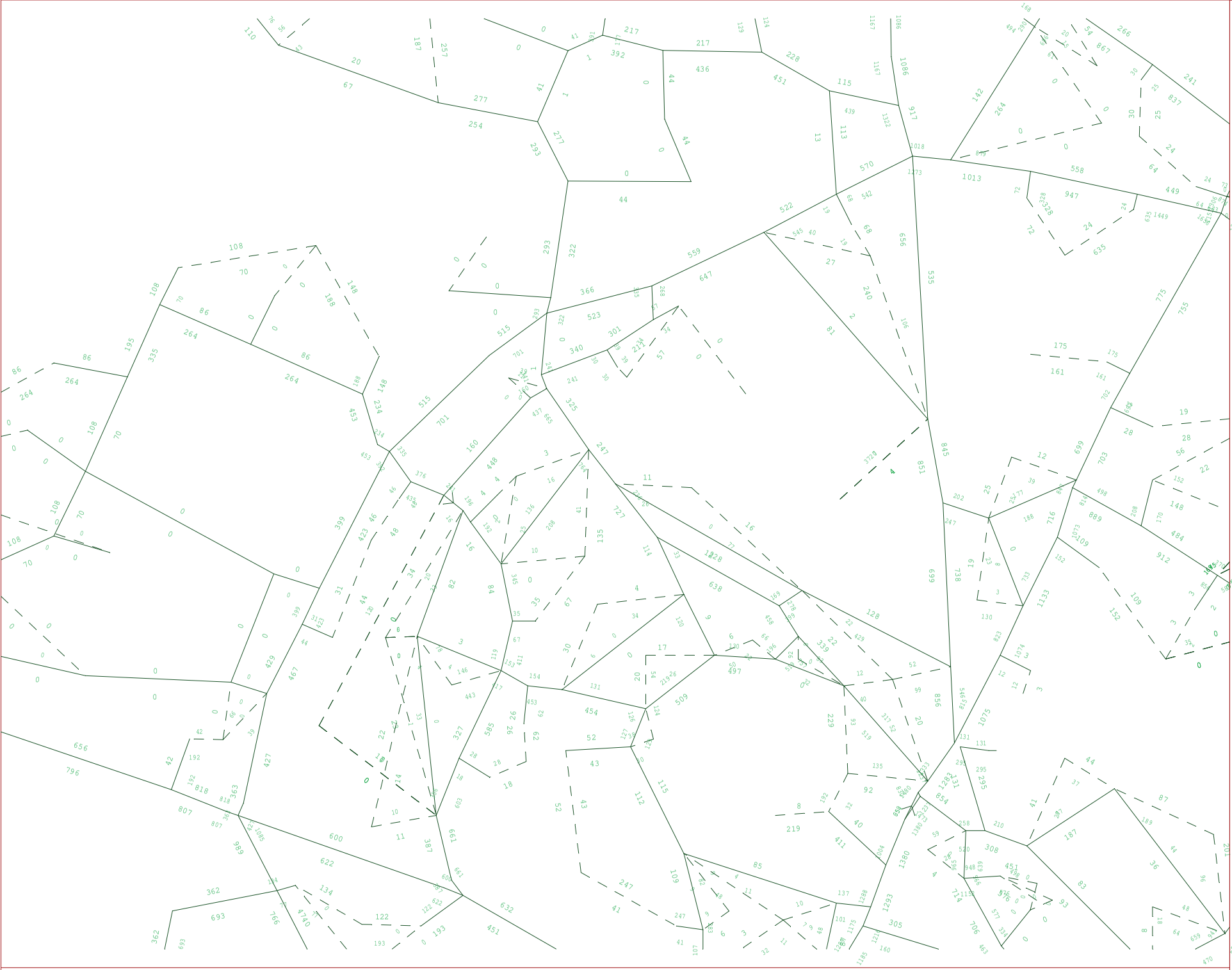
Link Annot:

Demand flow

21- 5-14

WHITE YOUNG

Bicester Network - NW Bicester Network PM Peak 21- 5-14



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_NWB_V3B.UFS

PM_85THPCILE

Scale 12696

Link Annot:

Demand flow

21- 5-14

WHITE YOUNG

Bicester Network - NW Bicester Network PM Peak 21- 5-14

SATURN

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_NWB_V3B.UFS

PM_85THPCILE

Scale 12696

Link Annot:

Demand flow

Bicester Network - NW Bicester Network PM Peak 21- 5-14

21- 5-14

WHITE YOUNG

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PM_85THPCILE

Scale 12696

Link Annot:

Demand flow

21- 5-14

WHITE YOUNG

SATURN

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STER_V3.UFS
AM_NO_NWBICE
CILE_NWB_V3B

Scale 17613

Link Annot:

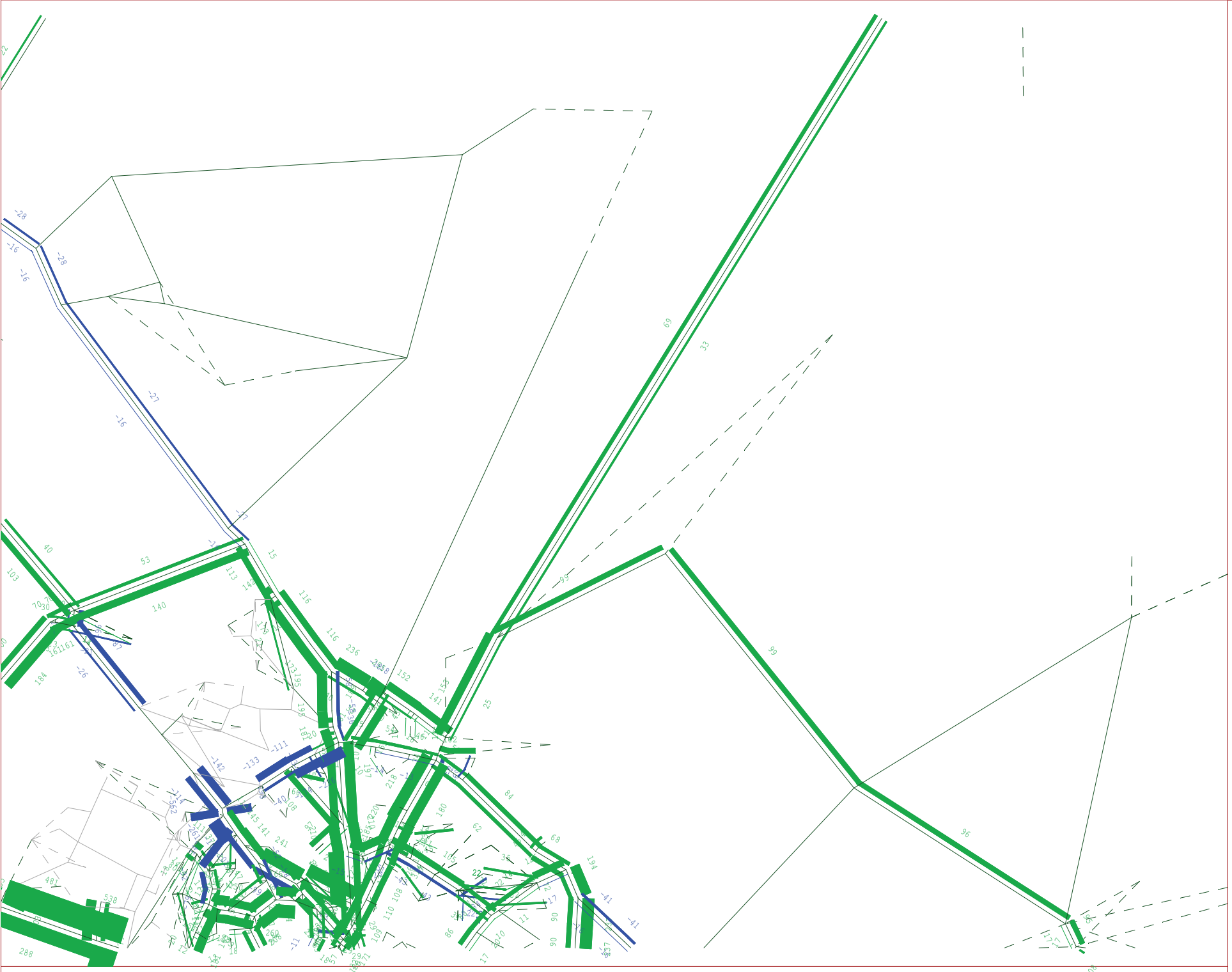
+ Demand flo
- Demand flo

Differ: 2-1

Bandwidths =
100./mm

14- 5-14

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

STER_V3.UFS
AM_NO_NWBICE
CILE_NWB_V3B

Scale 40207

Link Annot:

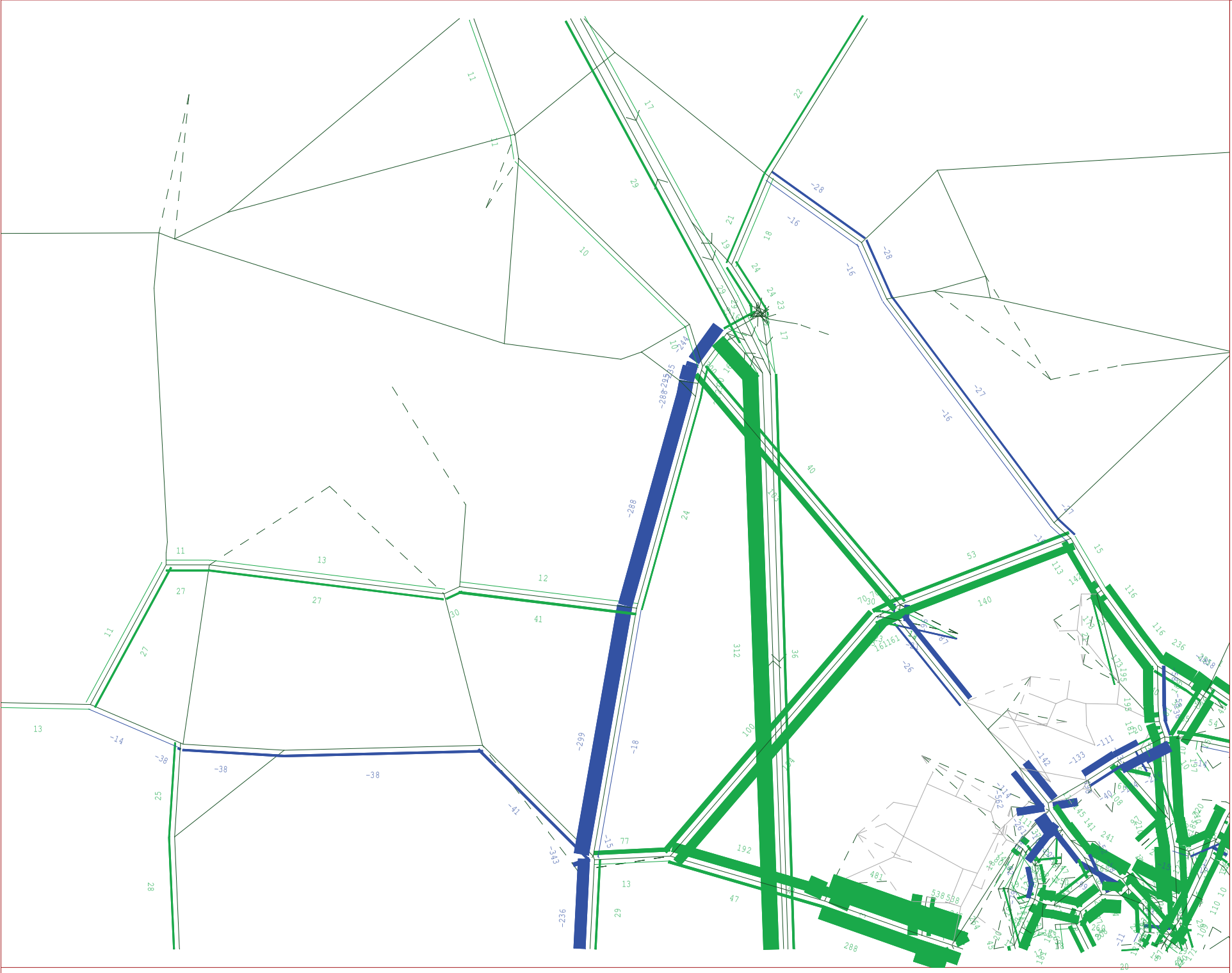
+ Demand flo
- Demand flo

Differ: 2-1

Bandwidths =
100./mm

14- 5-14

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

STER_V3.UFS
AM_NO_NWBICE
CILE_NWB_V3B

Scale 40207

Link Annot:

+ Demand flo
- Demand flo

Differ: 2-1

Bandwidths =
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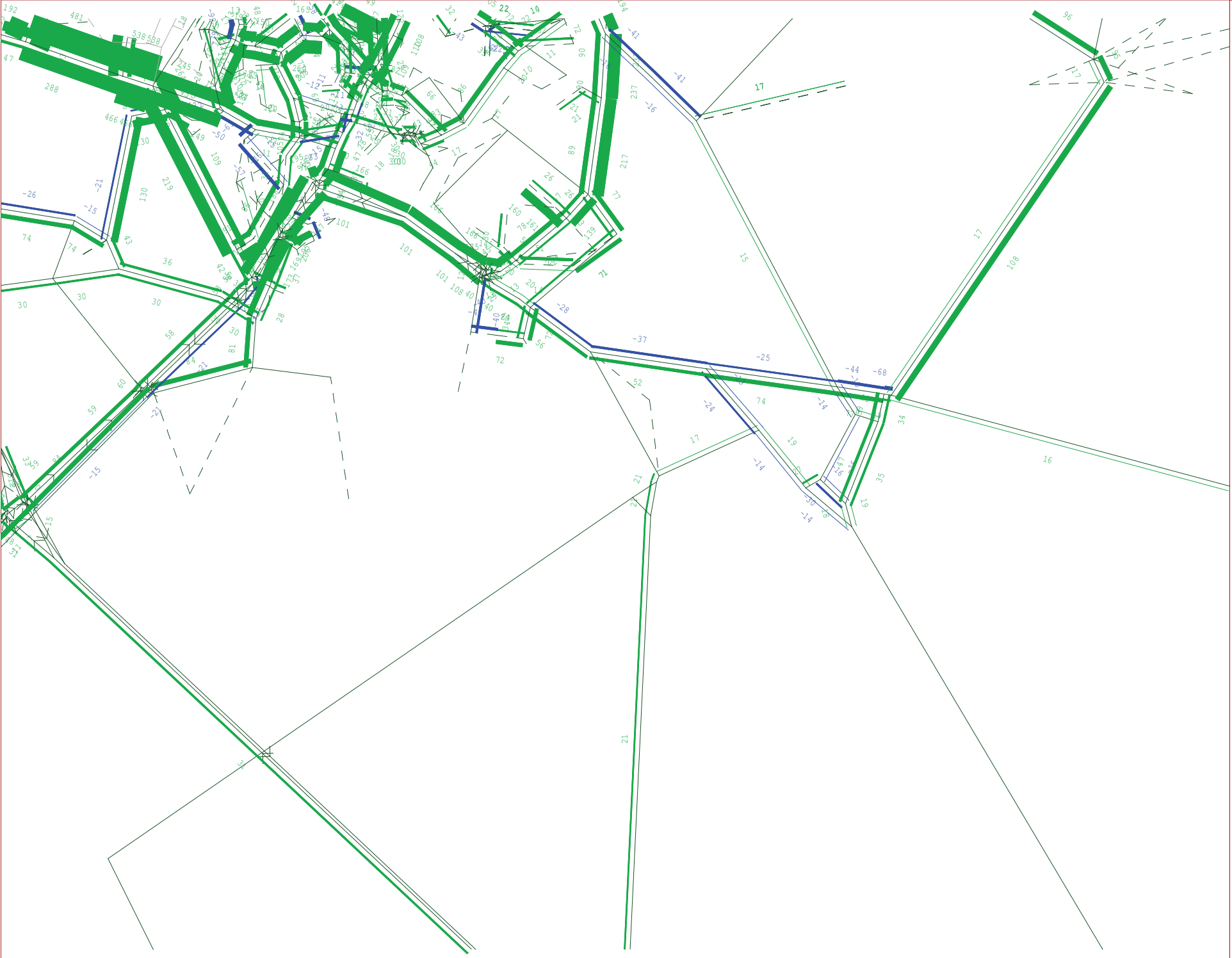
14- 5-14

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

STER_V3.UFS
AM_NO_NWBICE
CILE_NWB_V3B

Scale 40207

Link Annot:

+ Demand flo
- Demand flo

Differ: 2-1

Bandwidths =
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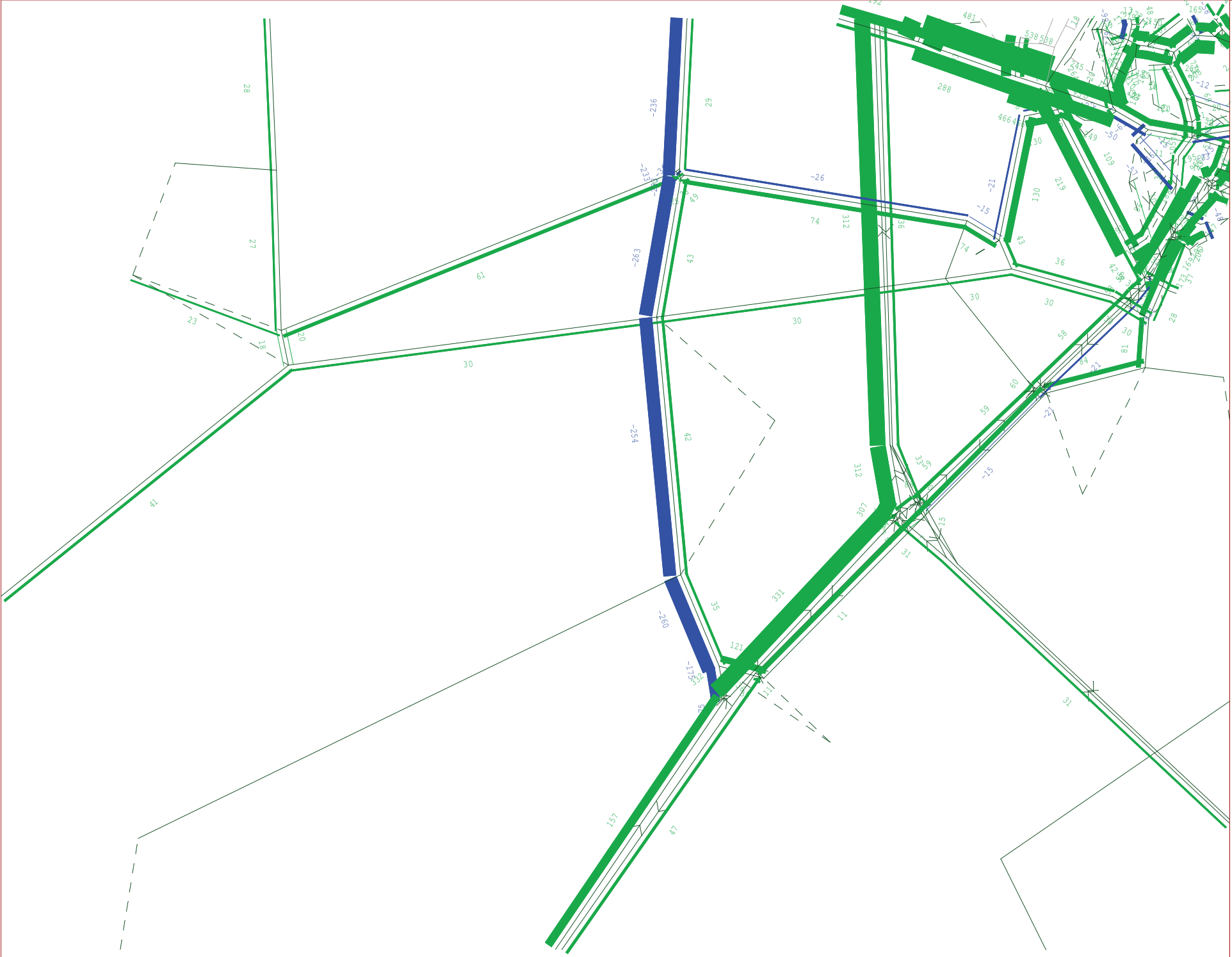
14- 5-14

WHITE YOUNG



SATURN

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DVV / ITS

STER_V3.UFS
AM_NO_NWBICE
CILE_NWB_V3B

Scale 40207

Link Annot:

+ Demand flo
- Demand flo

Differ: 2-1

Bandwidths =
100./mm

14- 5-14

WHITE YOUNG

SATURN

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STER_V3.UFS

PM_NO_NWBICE

CILE_NWB_V3B

Scale 17613

Link Annot:

+ Demand flo

- Demand flo

Differ: 2-1

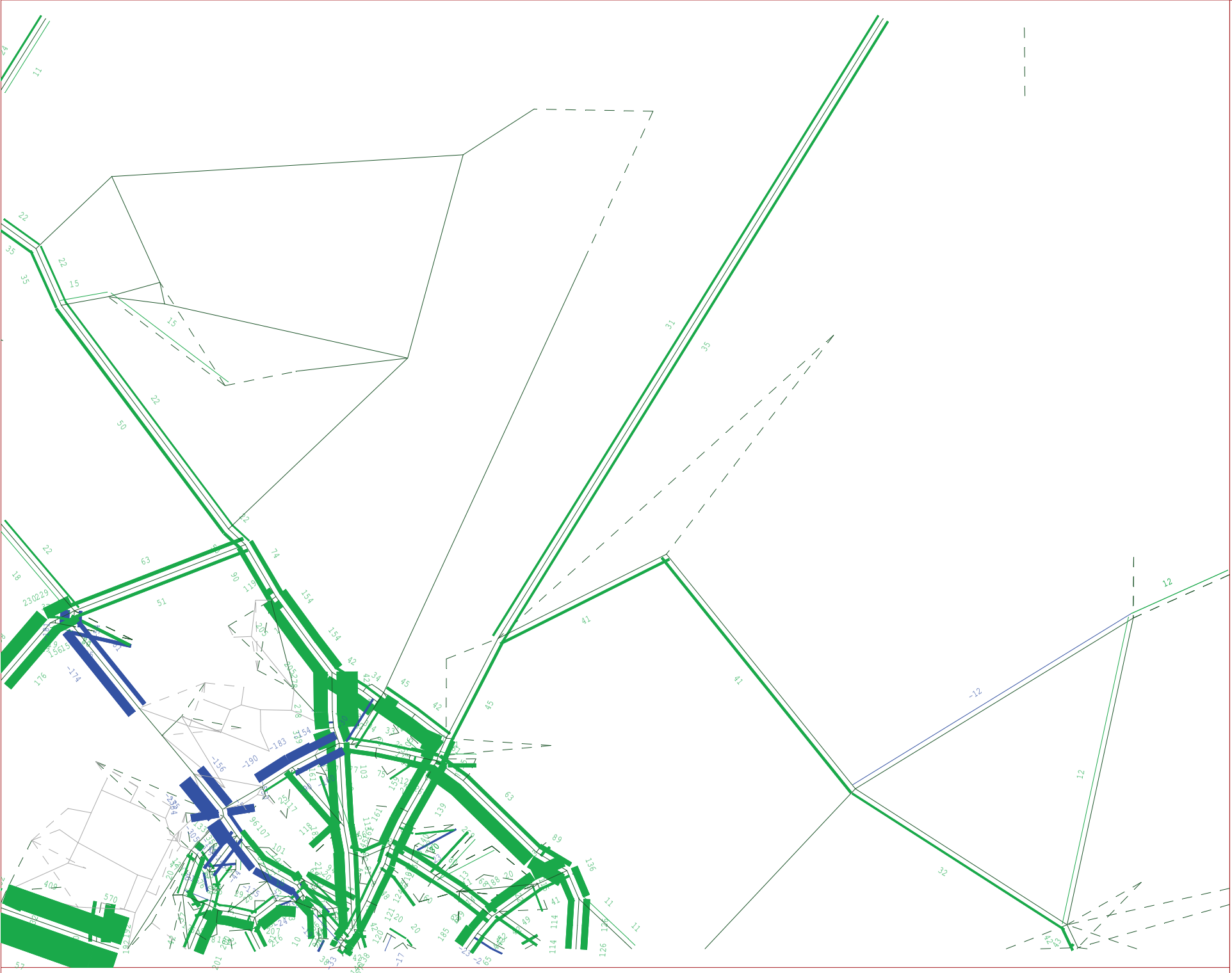
Bandwidths =

100./mm

14- 5-14

WHITE YOUNG

Bicester Network - No NW Bicester Network PM Peak V3 14- 5-14



SATURN

Atkins Ltd /
DVV / ITS

STER_V3.UFS
PM_NO_NWBICE
CILE_NWB_V3B

Scale 40207

Link Annot:

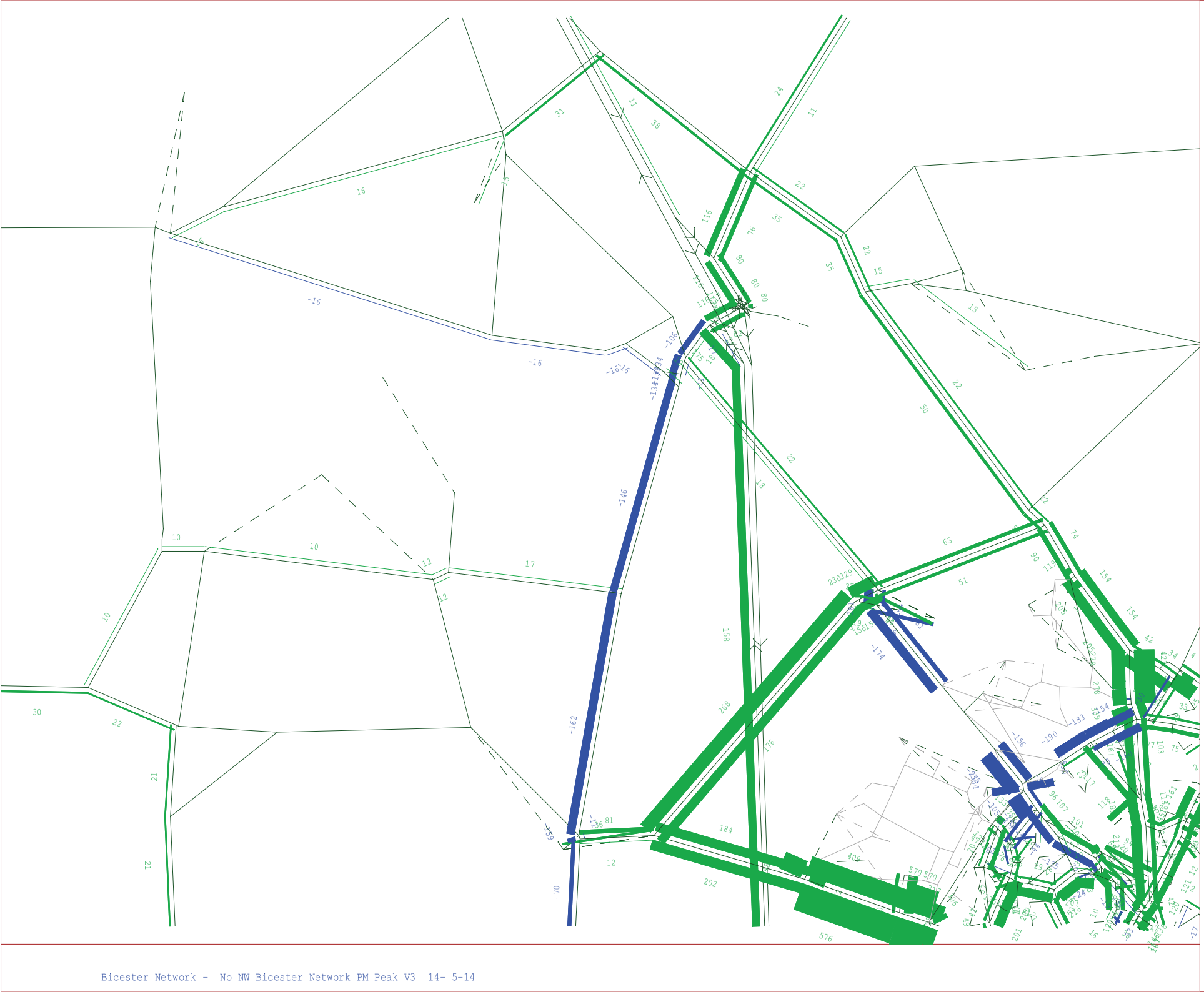
+ Demand flo
- Demand flo

Differ: 2-1

Bandwidths =
100./mm

14- 5-14

WHITE YOUNG



SATURN

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STER_V3.UFS
PM_NO_NWBICE
CILE_NWB_V3B

Scale 40207

Link Annot:

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- Demand flo

Differ: 2-1

Bandwidths =
100./mm

14- 5-14

WHITE YOUNG

SATURN

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STER_V3.UFS
PM_NO_NWBICE
CILE_NWB_V3B

Scale 40207

Link Annot:

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- Demand flo

Differ: 2-1

Bandwidths =
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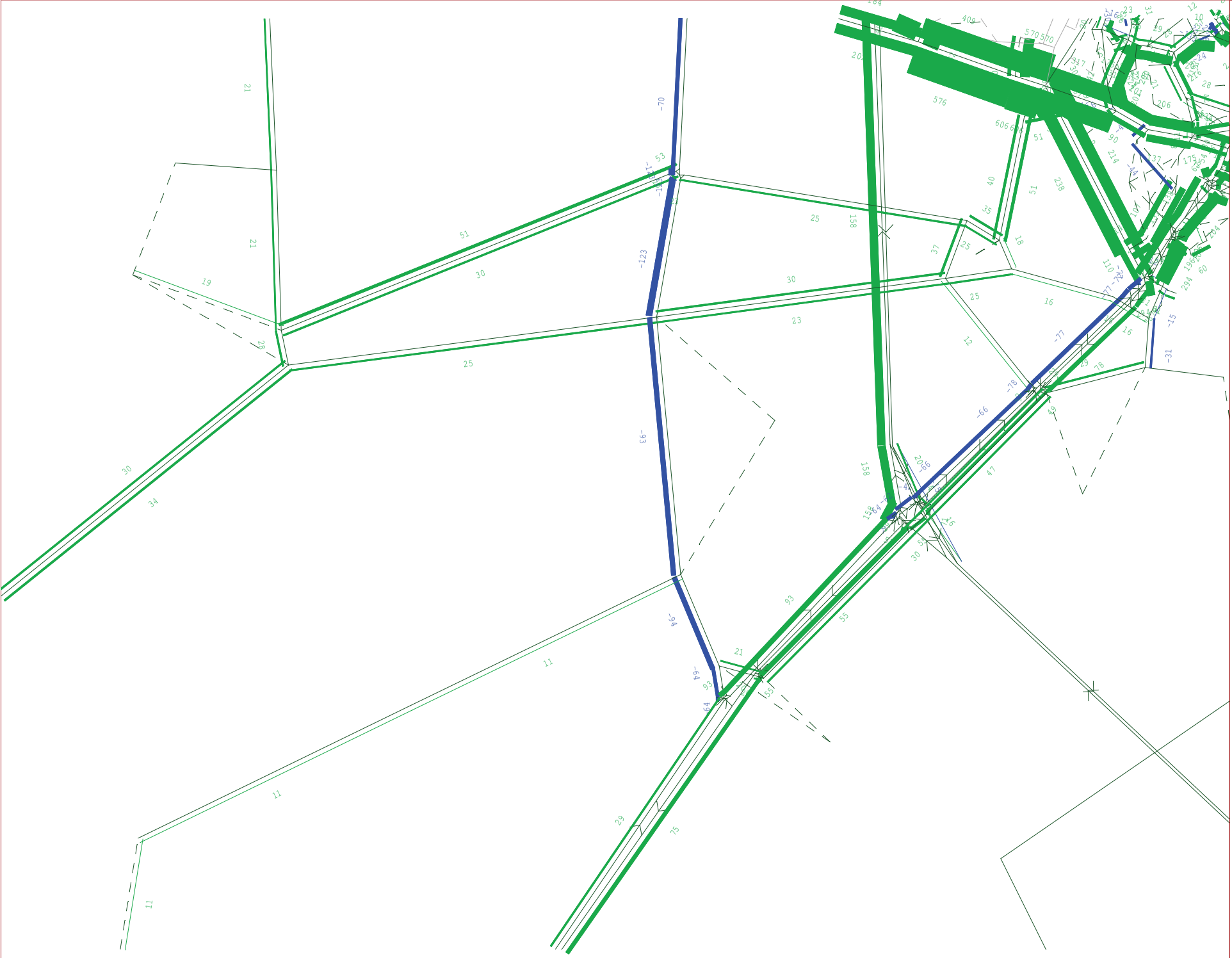
14- 5-14

WHITE YOUNG



SATURN

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STER_V3.UFS
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Scale 40207

Link Annot:

+ Demand flo
- Demand flo

Differ: 2-1

Bandwidths =
100./mm

14- 5-14

WHITE YOUNG

ARCADY 6		
GUI Version: 6.2 AG Analysis Program: Release 7.0 (FEBRUARY 2010) (c) Copyright TRL Limited, 2004 Adapted from ARCADY/3 which is Crown Copyright by permission of the controller of HMSO		
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TRL Limited Crowthorne House Nine Mile Ride Wokingham, Berks. RG40 3GA, UK		Tel: +44 (0)1344 770758 Fax:+44 (0)1344 770864 Email: software@ trl.co.uk Web:www.trlsoftware.co.uk
The user of this computer program for the solution of an engineering problem is in no way relieved of their responsibility for the correctness of the solution		

Run Information

Run with file:- **k:\UA005241 - Bicester Traffic Modelling\D-Calcs\Traffic Modelling\J23\Revised Howes Lane Middleton Stoney Road Roundabout with Development 2031 ARCADY model results (J23).vai**
At: **16:41:49 on Wednesday, July 30, 2014**
Mode: **Drive On The Left**
Units: **Metric**

Arm Labelling

Arm	Full Arm Names
Arm A	B4030 (Northwest)
Arm B	Howes Lane
Arm C	Middleton Stoney Rd
Arm D	B4030 Vendee Drive left turn
Arm E	B4030 Vendee Drive ahead right

Flow Scaling Factor

Arm	Flow Scaling Factor (%)
Arm A	100
Arm B	100
Arm C	100
Arm D	100
Arm E	100

File Properties

Run Title	Howes Lane/ Middleton Stoney Road J23
Location	Bicester
Date	10/12/2013
Client	
Enumerator	dca76340 [HCL57004]
Job Number	
Status	Preliminary
Description	

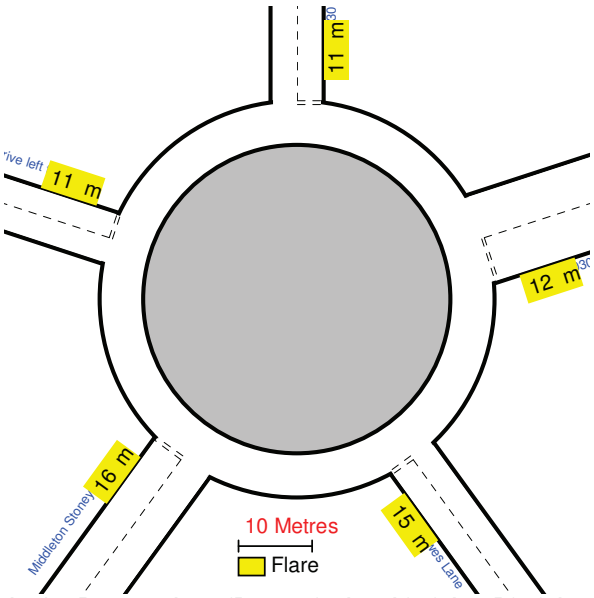
Errors and Warnings

[No errors or warnings]

Geometric Data

Data Item	Arm A	Arm B	Arm C	Arm D	Arm E
Approach Road Half-Width (m)	3.25	3.65	3.65	3.65	3.65
Entry Width (m)	6.30	3.65	4.65	3.65	3.65
Flare Length (m)	12.00	15.00	16.00	11.00	11.00
Entry Radius (m)	25.00	17.00	28.00	16.00	16.00
Inscribed Circle Diameter (m)	54.00	54.00	54.00	54.00	54.00
Entry Angle (degrees)	45.00	45.00	37.00	42.00	42.00
Slope	0.528	0.451	0.521	0.455	0.455
Intercept (PCU/Min)	23.854	17.314	22.407	17.440	17.440

Junction Diagram: (View Extent = 80m)



Angles Between Arms (Degrees): Arm A(72) Arm B(72) Arm C(72) Arm D(72) Arm E(72)

Demand Data

Demand Profiles are Synthesised using **DIRECT** Data
Period of interest (for Queue and Delay calculations): **08:00 to 09:00**
Length of Time Period: **60 min**
Length of Time Segment: **15 min**

Direct Data for Demand Set: 2031 With Dev.

Time Period	Arm	Demand Data (Veh/Min)
Segment : 1 - 08:00 to 08:15	A	13.54
	B	5.64
	C	9.09
	D	5.84
	E	10.86
Segment : 2 - 08:15 to 08:30	A	13.54
	B	5.64
	C	9.09
	D	5.84
	E	10.86
Segment : 3 - 08:30 to 08:45	A	13.54
	B	5.64
	C	9.09
	D	5.84
	E	10.86
Segment : 4 - 08:45 to 09:00	A	13.54
	B	5.64
	C	9.09
	D	5.84
	E	10.86

Turning Proportions for Demand Set: 2031 With Dev.

Turning proportions vary over entry and calculated from turning count data (shaded)

Time Period	From/To	Arm A	Arm B	Arm C	Arm D	Arm E
08:00 to 09:00	Arm A	0.000	0.008	0.429	0.563	0.000
		0.0	6.9	348.5	457.2	0.0
	Arm B	0.032	0.000	0.010	0.958	0.000
		10.9	0.0	3.4	324.2	0.0
	Arm C	0.465	0.064	0.000	0.472	0.000
		253.7	34.7	0.0	257.4	0.0
	Arm D	0.000	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	0.0	350.9
	Arm E	0.000	0.617	0.383	0.000	0.000
		0.0	402.2	249.4	0.0	0.0

Heavy Vehicle Percentages for Demand Set: 2031 With Dev.

Vary over entry

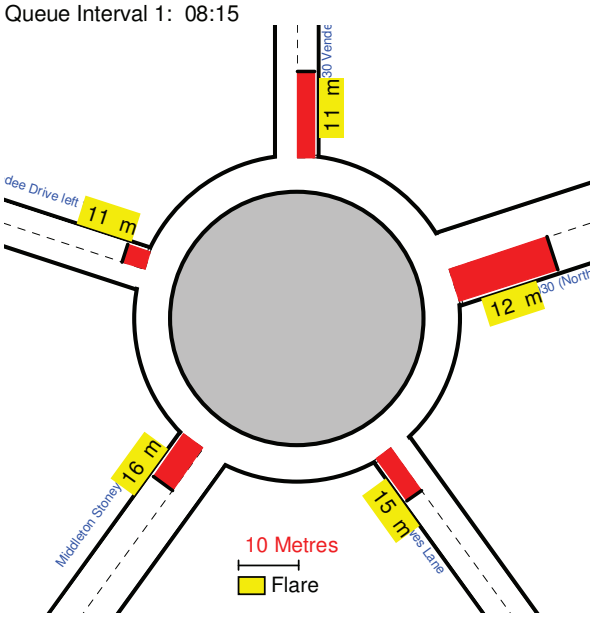
Time Period	From/To	Arm A	Arm B	Arm C	Arm D	Arm E
08:00 to 09:00	Arm A	0.0	0.0	0.0	0.0	0.0
	Arm B	0.0	0.0	0.0	0.0	0.0
	Arm C	0.0	0.0	0.0	0.0	0.0
	Arm D	0.0	0.0	0.0	0.0	0.0
	Arm E	0.0	0.0	0.0	0.0	0.0

Queue Diagrams: (View Extent = 80m)

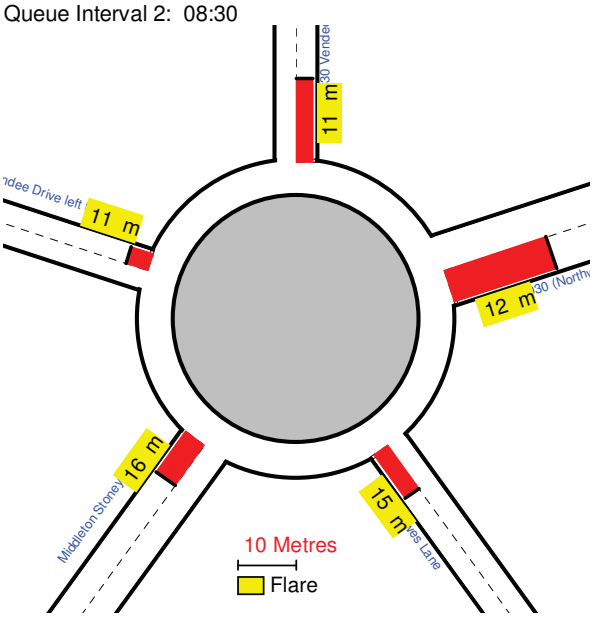
Queue Length	Colour
Mean Queue	
5 th % ile	
90 th % ile	
95 th % ile	

Start Time: 08:00---> End Time: 09:00

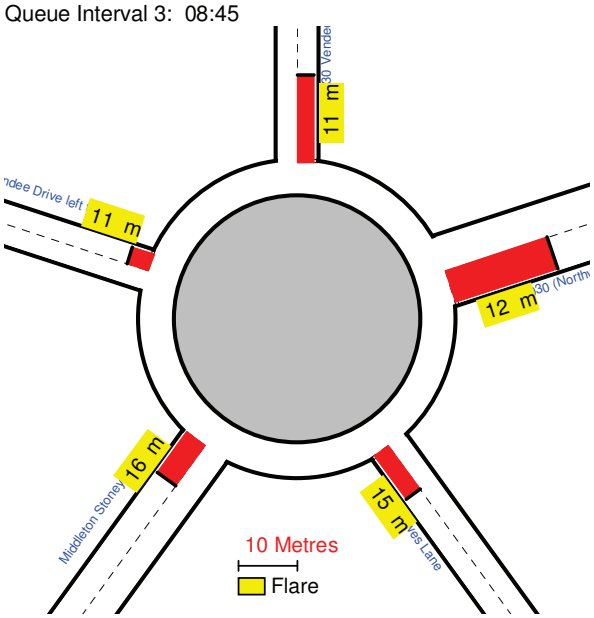
Queue Interval 1: 08:15



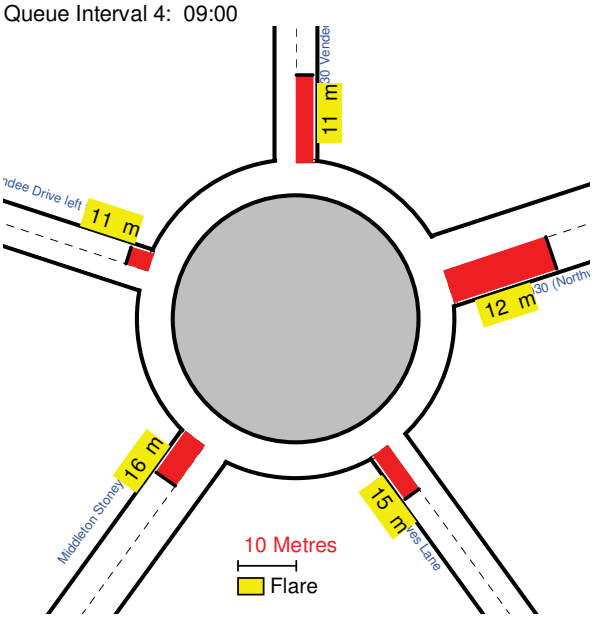
Queue Interval 2: 08:30



Queue Interval 3: 08:45

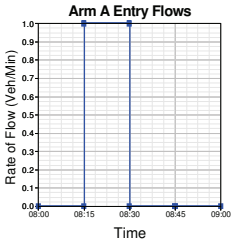


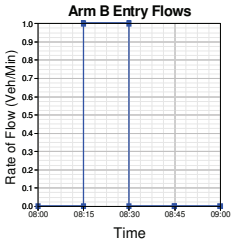
Queue Interval 4: 09:00

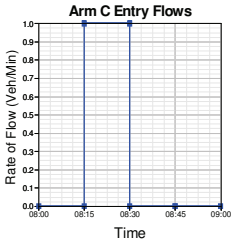


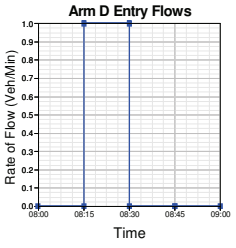
Demand Data Graphs

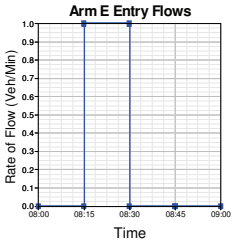
Direct Entry/Exit Flows for Demand Set: 2031 With Dev.





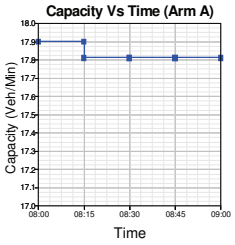


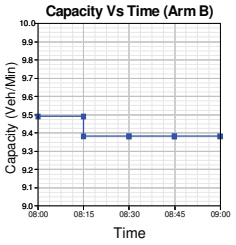


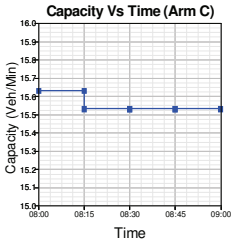


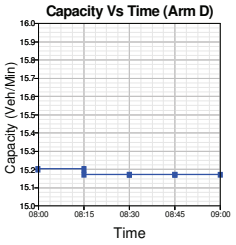
Capacity (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

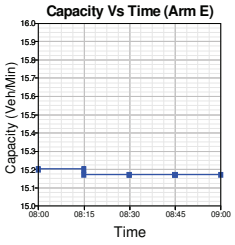
(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)





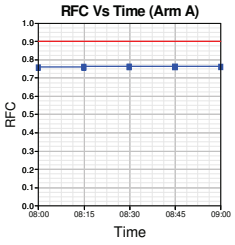


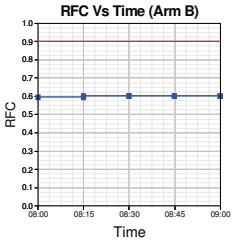


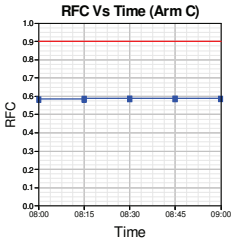


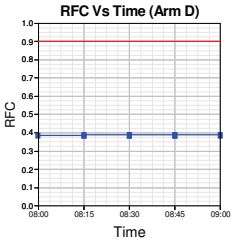
RFC (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

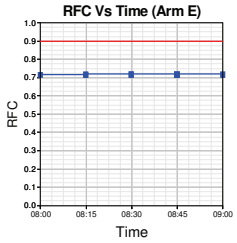
(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)





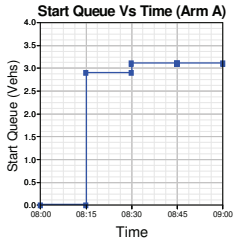


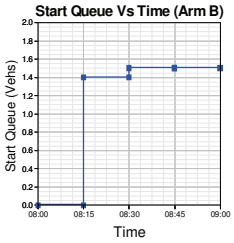


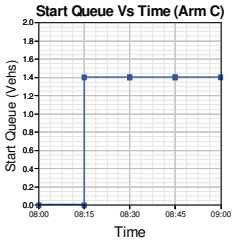


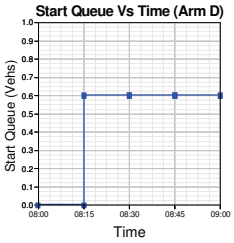
Start Queue (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

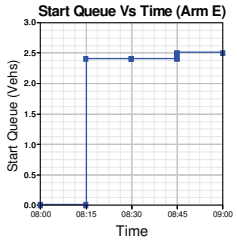
(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)





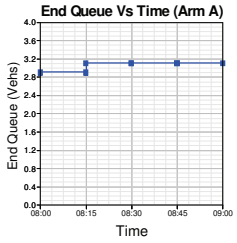


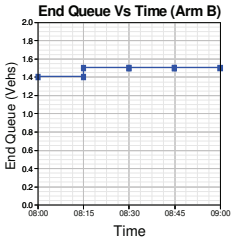


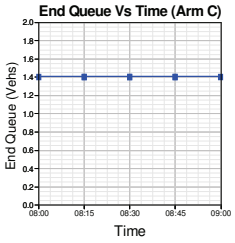


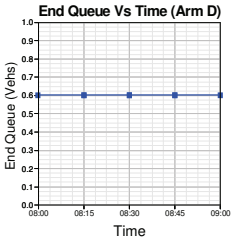
End Queue (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

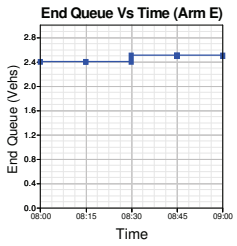
(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)









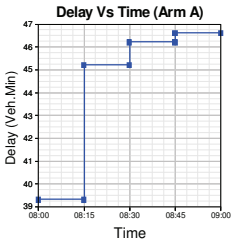


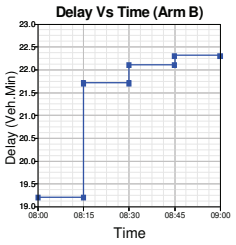
Geometric Delay Graph

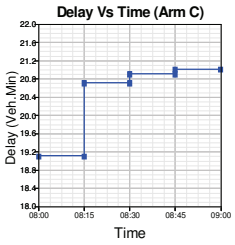
No Data. Please select 'Geometric Delay' in 'Principal Options' and try again.

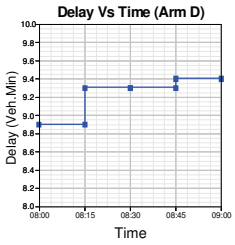
Delay (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

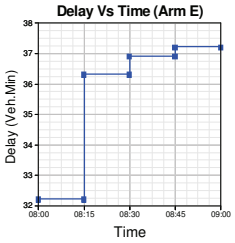
(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)











Queues and Delay:

Segment	Arm	Demand (Veh / Min)	Capacity (Veh / Min)	Demand / Capacity (RFC)	Ped Flow (Ped / Min)	Start Queue (Veh)	End Queue (Veh)	Delay (Veh.Min / Time Segment)	Geometric Delay (Veh.Min / Time Segment)	Arrival Delay (Min / Veh)
Segment : 1 - 08:00 to 08:15	A	13.54	17.90	0.757	-	0.0	2.9	39.3	-	0.212
	B	5.64	9.49	0.594	-	0.0	1.4	19.2	-	0.248
	C	9.09	15.63	0.581	-	0.0	1.4	19.1	-	0.149
	D	5.84	15.20	0.384	-	0.0	0.6	8.9	-	0.106
	E	10.86	15.20	0.715	-	0.0	2.4	32.2	-	0.216
Segment : 2 - 08:15 to 08:30	A	13.54	17.81	0.760	-	2.9	3.1	45.2	-	0.232
	B	5.64	9.38	0.601	-	1.4	1.5	21.7	-	0.266
	C	9.09	15.53	0.585	-	1.4	1.4	20.7	-	0.155
	D	5.84	15.17	0.385	-	0.6	0.6	9.3	-	0.107
	E	10.86	15.17	0.716	-	2.4	2.4	36.3	-	0.231
Segment : 3 - 08:30 to 08:45	A	13.54	17.81	0.760	-	3.1	3.1	46.2	-	0.234
	B	5.64	9.38	0.601	-	1.5	1.5	22.1	-	0.267
	C	9.09	15.53	0.585	-	1.4	1.4	20.9	-	0.155
	D	5.84	15.17	0.385	-	0.6	0.6	9.3	-	0.107
	E	10.86	15.17	0.716	-	2.4	2.5	36.9	-	0.231
Segment : 4 - 08:45 to 09:00	A	13.54	17.81	0.760	-	3.1	3.1	46.6	-	0.234
	B	5.64	9.38	0.601	-	1.5	1.5	22.3	-	0.267
	C	9.09	15.53	0.585	-	1.4	1.4	21.0	-	0.155
	D	5.84	15.17	0.385	-	0.6	0.6	9.4	-	0.107
	E	10.86	15.17	0.716	-	2.5	2.5	37.2	-	0.232

Queuing Delay Information Over Whole Period

Arm	Total Demand		Queueing Delay		Inclusive Queueing Delay	
	(Veh)	(Veh/Hr)	(Min)	(Min/Veh)	(Min)	(Min/Veh)
A	812.4	812.4	177.3	0.22	177.6	0.22
B	338.4	338.4	85.3	0.25	85.4	0.25
C	545.4	545.4	81.7	0.15	81.8	0.15
D	350.4	350.4	36.9	0.11	36.9	0.11
E	651.6	651.6	142.6	0.22	142.8	0.22
ALL	2698.2	2698.2	523.9	0.19	524.5	0.19

Delay is that occuring only within the time period.
Inclusive delay includes delay suffered by vehicles that are still queueing after the end of the time period.
These will only be significantly different if there is a large queue remaining at the end of the time period.

Accident Data

No Data, please select the 'Accident Analysis' option in 'Principal Options' and try again.

Accident Results

No Data, please select the 'Accident Analysis' option in 'Principal Options' and try again.

ARCADY 6		
GUI Version: 6.2 AG Analysis Program: Release 7.0 (FEBRUARY 2010) (c) Copyright TRL Limited, 2004 Adapted from ARCADY/3 which is Crown Copyright by permission of the controller of HMSO		
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The user of this computer program for the solution of an engineering problem is in no way relieved of their responsibility for the correctness of the solution		

Run Information

Run with file:- **k:\UA005241 - Bicester Traffic Modelling\D-Calcs\Traffic Modelling\J23\Revised Howes Lane Middleton Stoney Road Roundabout with Development 2031 ARCADY model results (J23) PM.vai**
At: **16:43:11 on Wednesday, July 30, 2014**
Mode: **Drive On The Left**
Units: **Metric**

Arm Labelling

Arm	Full Arm Names
Arm A	B4030 (Northwest)
Arm B	Howes Lane
Arm C	Middleton Stoney Rd
Arm D	B4030 Vendee Drive left turn
Arm E	B4030 Vendee Drive ahead right

Flow Scaling Factor

Arm	Flow Scaling Factor (%)
Arm A	100
Arm B	100
Arm C	100
Arm D	100
Arm E	100

File Properties

Run Title	Howes Lane_Middleton Stoney Road J23
Location	Bicester
Date	10/12/2013
Client	
Enumerator	dca76340 [HCL57004]
Job Number	
Status	Preliminary
Description	

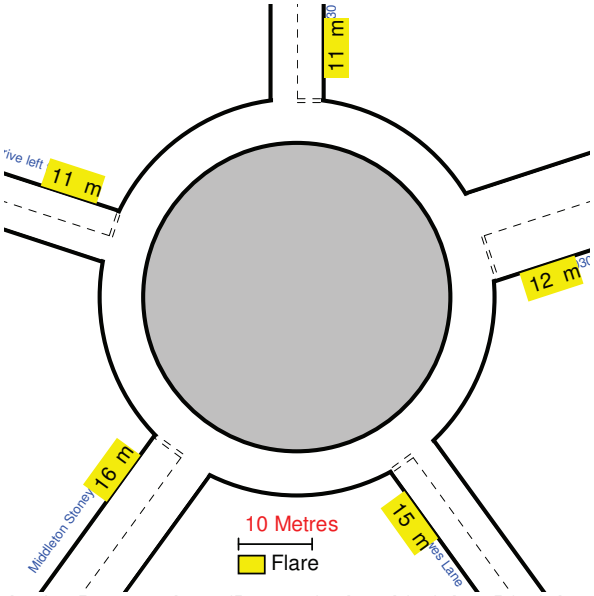
Errors and Warnings

[No errors or warnings]

Geometric Data

Data Item	Arm A	Arm B	Arm C	Arm D	Arm E
Approach Road Half-Width (m)	3.25	3.65	3.65	3.65	3.65
Entry Width (m)	6.30	3.65	4.65	3.65	3.65
Flare Length (m)	12.00	15.00	16.00	11.00	11.00
Entry Radius (m)	25.00	17.00	28.00	16.00	16.00
Inscribed Circle Diameter (m)	54.00	54.00	54.00	54.00	54.00
Entry Angle (degrees)	45.00	45.00	37.00	42.00	42.00
Slope	0.528	0.451	0.521	0.455	0.455
Intercept (PCU/Min)	23.854	17.314	22.407	17.440	17.440

Junction Diagram: (View Extent = 80m)



Angles Between Arms (Degrees): Arm A(72) Arm B(72) Arm C(72) Arm D(72) Arm E(72)

Demand Data

Demand Profiles are Synthesised using **DIRECT** Data
Period of interest (for Queue and Delay calculations): **17:00 to 18:00**
Length of Time Period: **60 min**
Length of Time Segment: **15 min**

Direct Data for Demand Set: 2031 With Dev.

Time Period	Arm	Demand Data (Veh/Min)
Segment : 1 - 17:00 to 17:15	A	13.62
	B	7.12
	C	10.37
	D	8.13
	E	8.33
Segment : 2 - 17:15 to 17:30	A	13.62
	B	7.12
	C	10.37
	D	8.13
	E	8.33
Segment : 3 - 17:30 to 17:45	A	13.62
	B	7.12
	C	10.37
	D	8.13
	E	8.33
Segment : 4 - 17:45 to 18:00	A	13.62
	B	7.12
	C	10.37
	D	8.13
	E	8.33

Turning Proportions for Demand Set: 2031 With Dev.

Turning proportions vary over entry and calculated from turning count data (shaded)

Time Period	From/To	Arm A	Arm B	Arm C	Arm D	Arm E
17:00 to 18:00	Arm A	0.000	0.028	0.482	0.490	0.000
		0.0	23.0	394.0	400.0	0.0
	Arm B	0.047	0.000	0.019	0.934	0.000
		20.0	0.0	8.0	398.0	0.0
	Arm C	0.481	0.059	0.000	0.460	0.000
		299.0	37.0	0.0	286.0	0.0
	Arm D	0.000	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	0.0	488.0
	Arm E	0.000	0.606	0.394	0.000	0.000
		0.0	303.0	197.0	0.0	0.0

Heavy Vehicle Percentages for Demand Set: 2031 With Dev.

Vary over entry

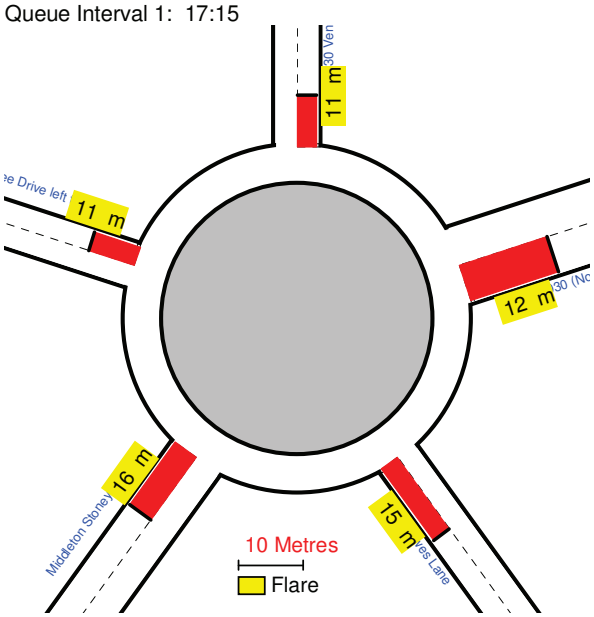
Time Period	From/To	Arm A	Arm B	Arm C	Arm D	Arm E
17:00 to 18:00	Arm A	0.0	0.0	0.0	0.0	0.0
	Arm B	0.0	0.0	0.0	0.0	0.0
	Arm C	0.0	0.0	0.0	0.0	0.0
	Arm D	0.0	0.0	0.0	0.0	0.0
	Arm E	0.0	0.0	0.0	0.0	0.0

Queue Diagrams: (View Extent = 80m)

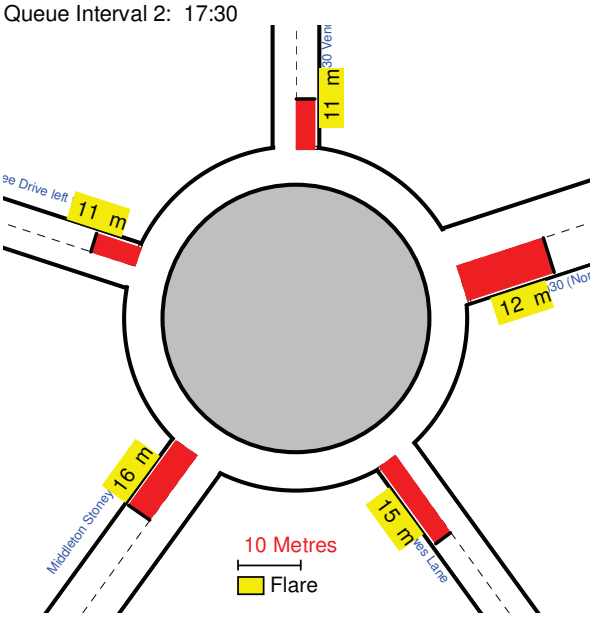
Queue Length	Colour
Mean Queue	
5 th % ile	
90 th % ile	
95 th % ile	

Start Time: 17:00---> End Time: 18:00

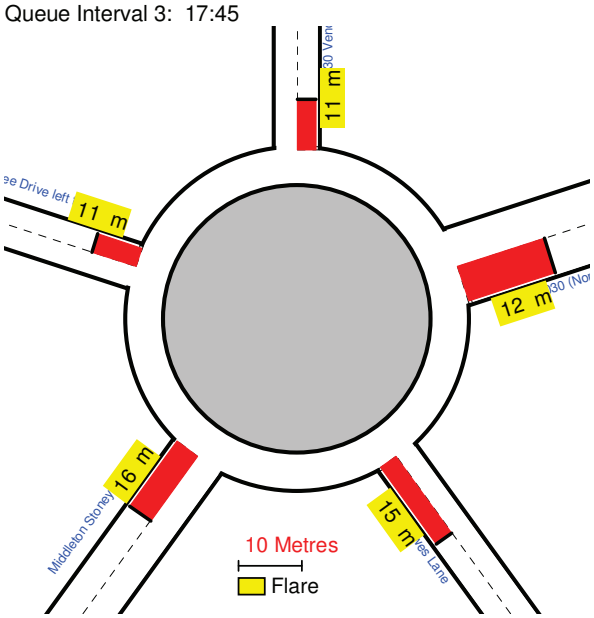
Queue Interval 1: 17:15



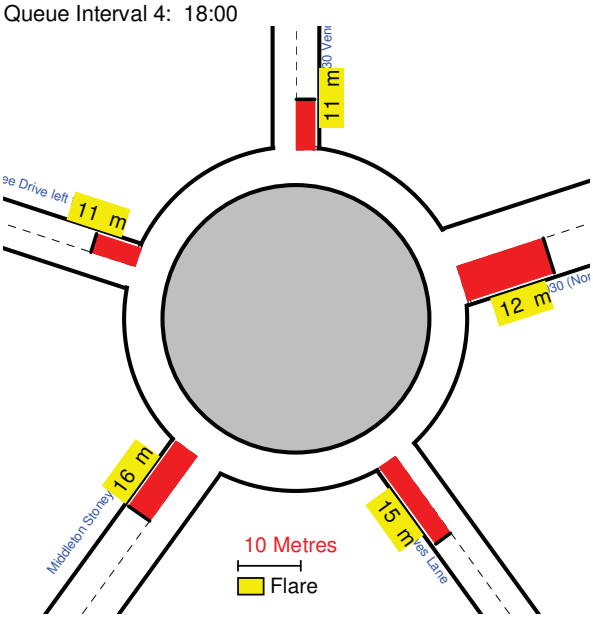
Queue Interval 2: 17:30



Queue Interval 3: 17:45

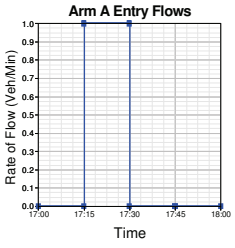


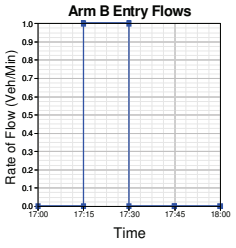
Queue Interval 4: 18:00

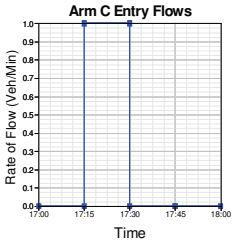


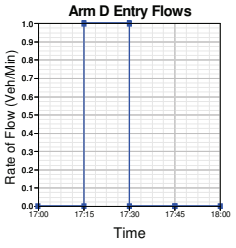
Demand Data Graphs

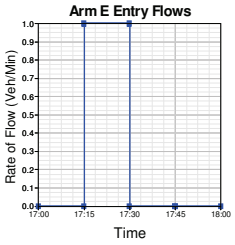
Direct Entry/Exit Flows for Demand Set: 2031 With Dev.





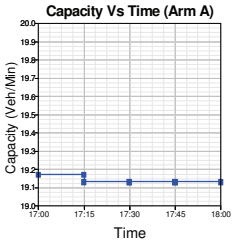


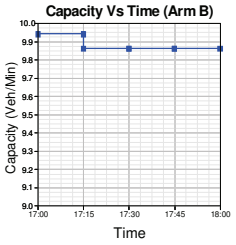


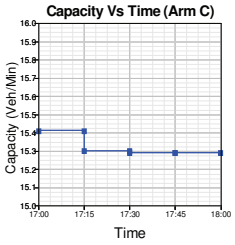


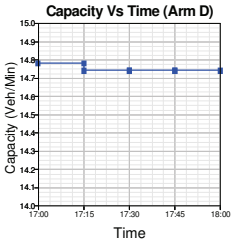
Capacity (against Time) Graphs, for each 15min Interval (17:00 - 18:00)

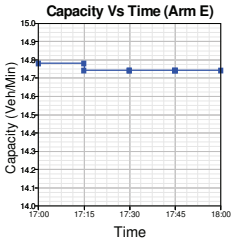
(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)





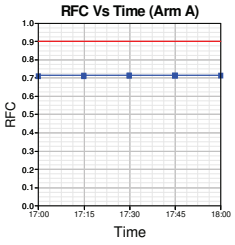


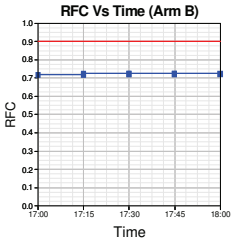


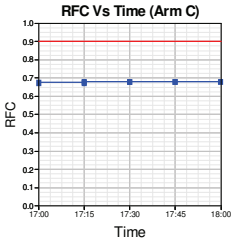


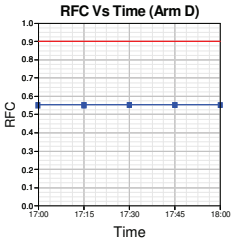
RFC (against Time) Graphs, for each 15min Interval (17:00 - 18:00)

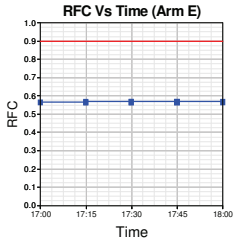
(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)





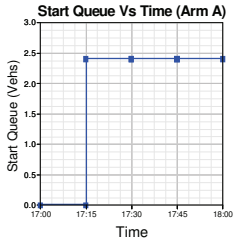


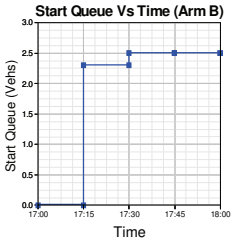


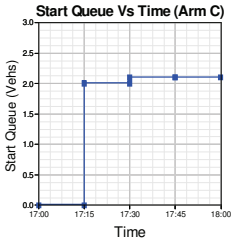


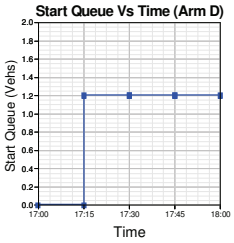
Start Queue (against Time) Graphs, for each 15min Interval (17:00 - 18:00)

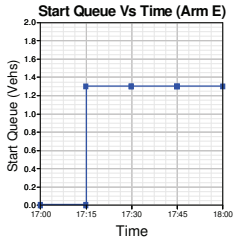
(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)





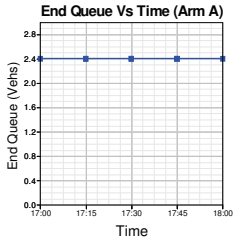


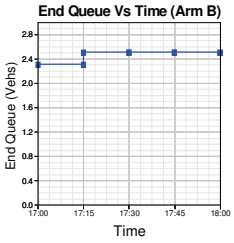


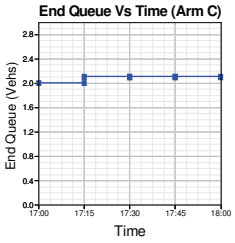


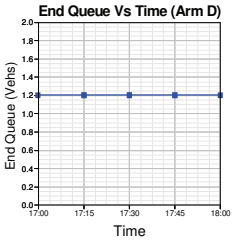
End Queue (against Time) Graphs, for each 15min Interval (17:00 - 18:00)

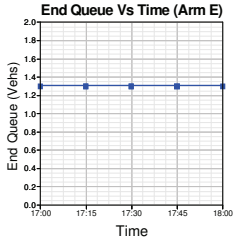
(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)









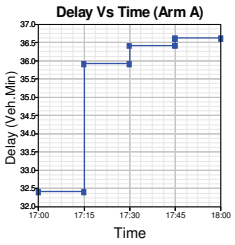


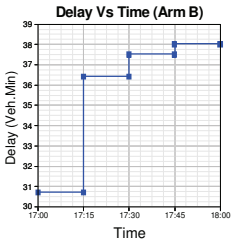
Geometric Delay Graph

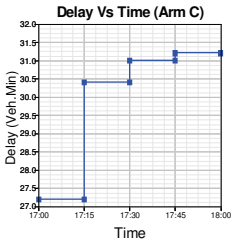
No Data. Please select 'Geometric Delay' in 'Principal Options' and try again.

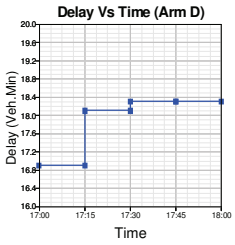
Delay (against Time) Graphs, for each 15min Interval (17:00 - 18:00)

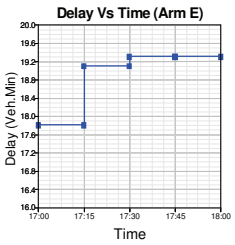
(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)











Queues and Delay:

Segment	Arm	Demand (Veh / Min)	Capacity (Veh / Min)	Demand / Capacity (RFC)	Ped Flow (Ped / Min)	Start Queue (Veh)	End Queue (Veh)	Delay (Veh.Min / Time Segment)	Geometric Delay (Veh.Min / Time Segment)	Arrival Delay (Min / Veh)
Segment : 1 - 17:00 to 17:15	A	13.62	19.17	0.710	-	0.0	2.4	32.4	-	0.171
	B	7.12	9.94	0.716	-	0.0	2.3	30.7	-	0.321
	C	10.37	15.41	0.673	-	0.0	2.0	27.2	-	0.189
	D	8.13	14.78	0.550	-	0.0	1.2	16.9	-	0.147
	E	8.33	14.78	0.564	-	0.0	1.3	17.8	-	0.151
Segment : 2 - 17:15 to 17:30	A	13.62	19.13	0.712	-	2.4	2.4	35.9	-	0.181
	B	7.12	9.86	0.722	-	2.3	2.5	36.4	-	0.360
	C	10.37	15.30	0.678	-	2.0	2.1	30.4	-	0.202
	D	8.13	14.74	0.551	-	1.2	1.2	18.1	-	0.151
	E	8.33	14.74	0.565	-	1.3	1.3	19.1	-	0.156
Segment : 3 - 17:30 to 17:45	A	13.62	19.13	0.712	-	2.4	2.4	36.4	-	0.181
	B	7.12	9.86	0.722	-	2.5	2.5	37.5	-	0.363
	C	10.37	15.29	0.678	-	2.1	2.1	31.0	-	0.203
	D	8.13	14.74	0.551	-	1.2	1.2	18.3	-	0.151
	E	8.33	14.74	0.565	-	1.3	1.3	19.3	-	0.156
Segment : 4 - 17:45 to 18:00	A	13.62	19.13	0.712	-	2.4	2.4	36.6	-	0.181
	B	7.12	9.86	0.722	-	2.5	2.5	38.0	-	0.363
	C	10.37	15.29	0.678	-	2.1	2.1	31.2	-	0.203
	D	8.13	14.74	0.552	-	1.2	1.2	18.3	-	0.151
	E	8.33	14.74	0.565	-	1.3	1.3	19.3	-	0.156

Queuing Delay Information Over Whole Period

Arm	Total Demand		Queueing Delay		Inclusive Queueing Delay	
	(Veh)	(Veh/Hr)	(Min)	(Min/Veh)	(Min)	(Min/Veh)
A	817.2	817.2	141.4	0.17	141.5	0.17
B	427.2	427.2	142.6	0.33	143.0	0.33
C	622.2	622.2	119.8	0.19	119.9	0.19
D	487.8	487.8	71.6	0.15	71.6	0.15
E	499.8	499.8	75.5	0.15	75.6	0.15
ALL	2854.2	2854.2	550.9	0.19	551.6	0.19

Delay is that occuring only within the time period.
Inclusive delay includes delay suffered by vehicles that are still queueing after the end of the time period.
These will only be significantly different if there is a large queue remaining at the end of the time period.

Accident Data

No Data, please select the 'Accident Analysis' option in 'Principal Options' and try again.

Accident Results

No Data, please select the 'Accident Analysis' option in 'Principal Options' and try again.

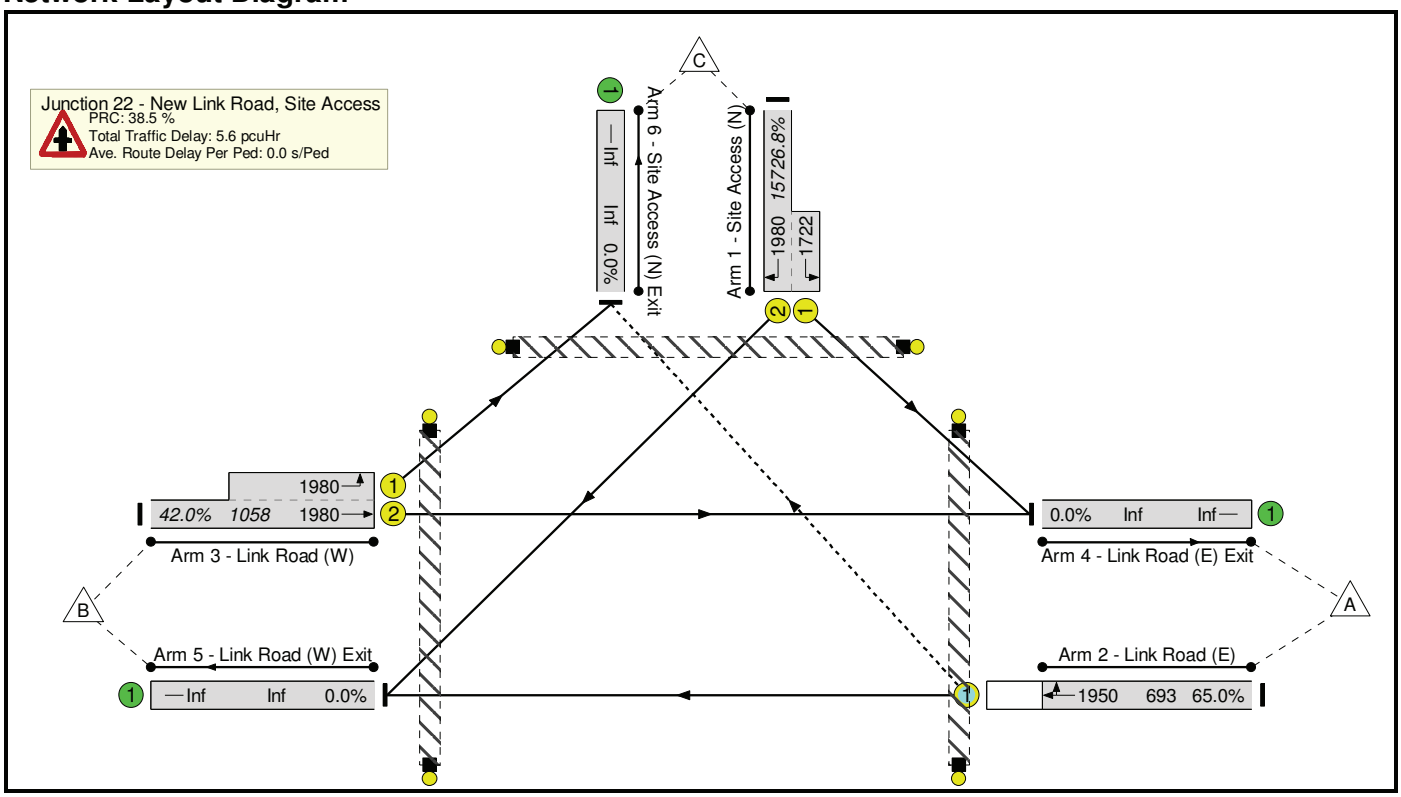
Basic Results Summary

User and Project Details

Project:	**Bicester Modelling**
Title:	**Proposed Site Access (Junction 22) with Development 2031 LinSig model**
Location:	
File name:	**Proposed Site Access (Junction 22) with Development 2031 LinSig model**
Author:	HA
Company:	Hyder Consulting
Address:	
Notes:	

Scenario 1: 'AM Peak' (FG1: 'AM Peak, 2031 with Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J22	-	-	-		-	-	-	-	-	-	**65.0%**	**107**	**0**	**4**	**5.6**	-	-
Junction 22 - New Link Road, Site Access	-	-	-		-	-	-	-	-	-	**65.0%**	**107**	**0**	**4**	**5.6**	-	-
1/2+1/1	Site Access (N) Left Right	U	C		1	7	-	42	1980:1722	157	26.8%	-	-	-	0.6	52.9	1.1
2/1	Link Road (E) Ahead Right	O	A		1	46	-	450	1950	693	65.0%	107	0	4	3.1	25.2	9.5
3/2+3/1	Link Road (W) Ahead Left	U	B		1	46	-	444	1980:1980	1058	42.0%	-	-	-	1.9	15.2	6.8
Ped Link: P1	Unnamed Ped Link	-	D		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	E		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	F		1	6	-	0	-	0	0.0%	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): 38.5
PRC Over All Lanes (%): 38.5

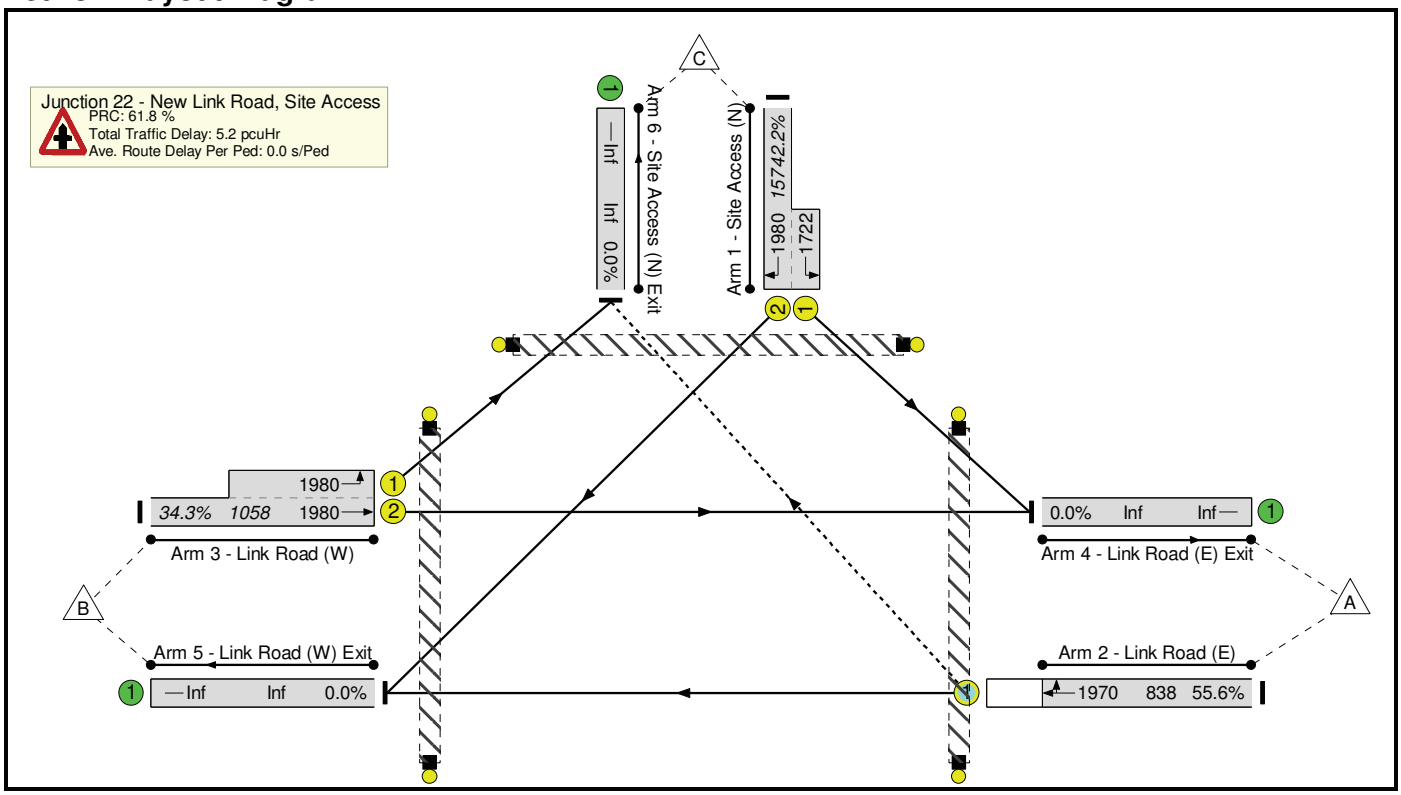
Total Delay for Signalled Lanes (pcuHr): 5.64
Total Delay Over All Lanes(pcuHr): 5.64

Cycle Time (s): 88

Basic Results Summary

Scenario 2: 'PM Peak' (FG2: 'PM Peak, 2031 with Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J22	-	-	-		-	-	-	-	-	-	**55.6%**	**38**	**0**	**1**	**5.2**	-	-
Junction 22 - New Link Road, Site Access	-	-	-		-	-	-	-	-	-	**55.6%**	**38**	**0**	**1**	**5.2**	-	-
1/2+1/1	Site Access (N) Left Right	U	C		1	7	-	66	1980:1722	157	42.2%	-	-	-	1.1	57.6	1.9
2/1	Link Road (E) Ahead Right	O	A		1	46	-	466	1970	838	55.6%	38	0	1	2.7	20.7	9.2
3/2+3/1	Link Road (W) Ahead Left	U	B		1	46	-	363	1980:1980	1058	34.3%	-	-	-	1.4	14.3	5.3
Ped Link: P1	Unnamed Ped Link	-	D		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	E		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	F		1	6	-	0	-	0	0.0%	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 61.8 Total Delay for Signalled Lanes (pcuHr): 5.17

PRC Over All Lanes (%): 61.8 Total Delay Over All Lanes(pcuHr): 5.17 Cycle Time (s): 88

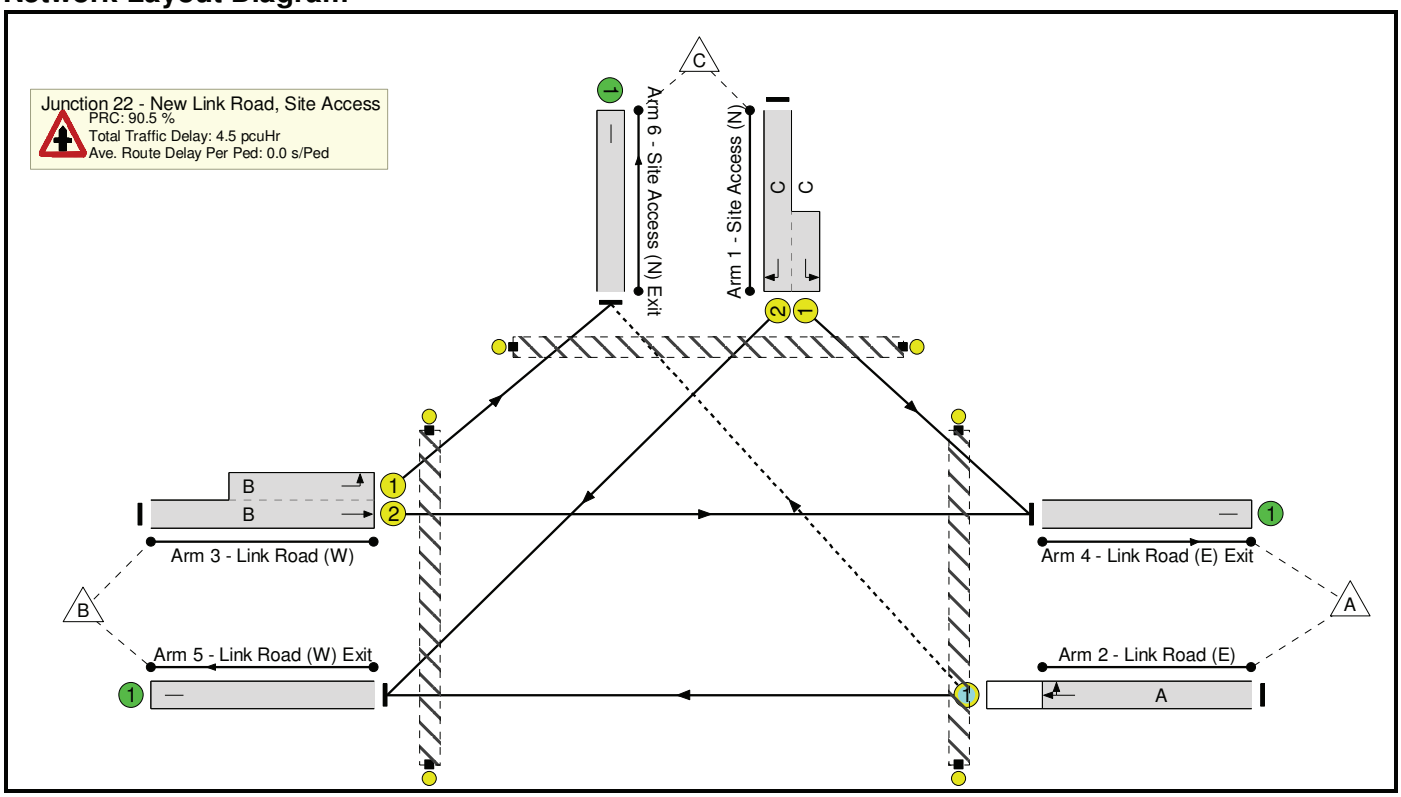
Basic Results Summary

User and Project Details

Project:	**Bicester Modelling**
Title:	**Proposed Site Access (Junction 30) with Development 2031 LinSig model**
Location:	
File name:	**Proposed Site Access (Junction 30) with Development 2031 LinSig model**
Author:	HA
Company:	Hyder Consulting
Address:	
Notes:	

Scenario 1: 'AM Peak' (FG1: 'AM Peak, 2031 with Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

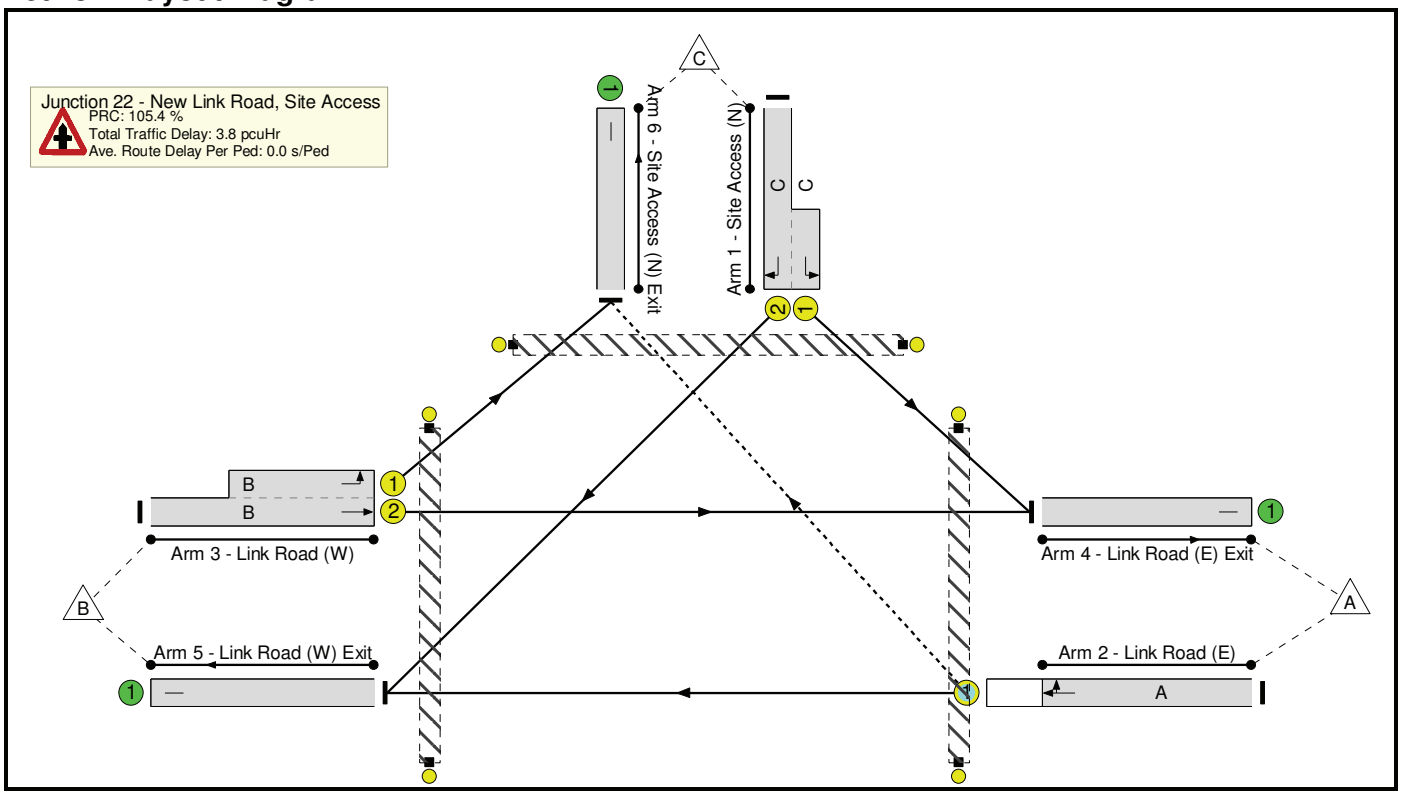
Item	Lane Description	Lane Type	Deg Sat (%)	Mean Max Queue (pcu)
Network: J22	**-**	**-**	**47.2%**	**-**
Junction 22 - New Link Road, Site Access	**-**	**-**	**47.2%**	**-**
1/2+1/1	Site Access (N) Left Right	U	16.8%	0.7
2/1	Link Road (E) Ahead Right	O	43.8%	6.5
3/2+3/1	Link Road (W) Ahead Left	U	47.2%	7.2
Ped Link: P1	Unnamed Ped Link	-	0.0%	-
Ped Link: P2	Unnamed Ped Link	-	0.0%	-
Ped Link: P3	Unnamed Ped Link	-	0.0%	-

C1	PRC for Signalled Lanes (%):	90.5	Total Delay for Signalled Lanes (pcuHr):	4.50		
	PRC Over All Lanes (%):	90.5	Total Delay Over All Lanes(pcuHr):	4.50	Cycle Time (s):	80

Basic Results Summary

Scenario 2: 'PM Peak' (FG2: 'PM Peak, 2031 with Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Deg Sat (%)	Mean Max Queue (pcu)
Network: J22	**-**	**-**	**43.8%**	**-**
Junction 22 - New Link Road, Site Access	**-**	**-**	**43.8%**	**-**
1/2+1/1	Site Access (N) Left Right	U	0.0%	0.0
2/1	Link Road (E) Ahead Right	O	43.8%	6.5
3/2+3/1	Link Road (W) Ahead Left	U	41.3%	6.0
Ped Link: P1	Unnamed Ped Link	-	0.0%	-
Ped Link: P2	Unnamed Ped Link	-	0.0%	-
Ped Link: P3	Unnamed Ped Link	-	0.0%	-

C1	PRC for Signalled Lanes (%):	105.4	Total Delay for Signalled Lanes (pcuHr):	3.77		
	PRC Over All Lanes (%):	105.4	Total Delay Over All Lanes(pcuHr):	3.77	Cycle Time (s):	80

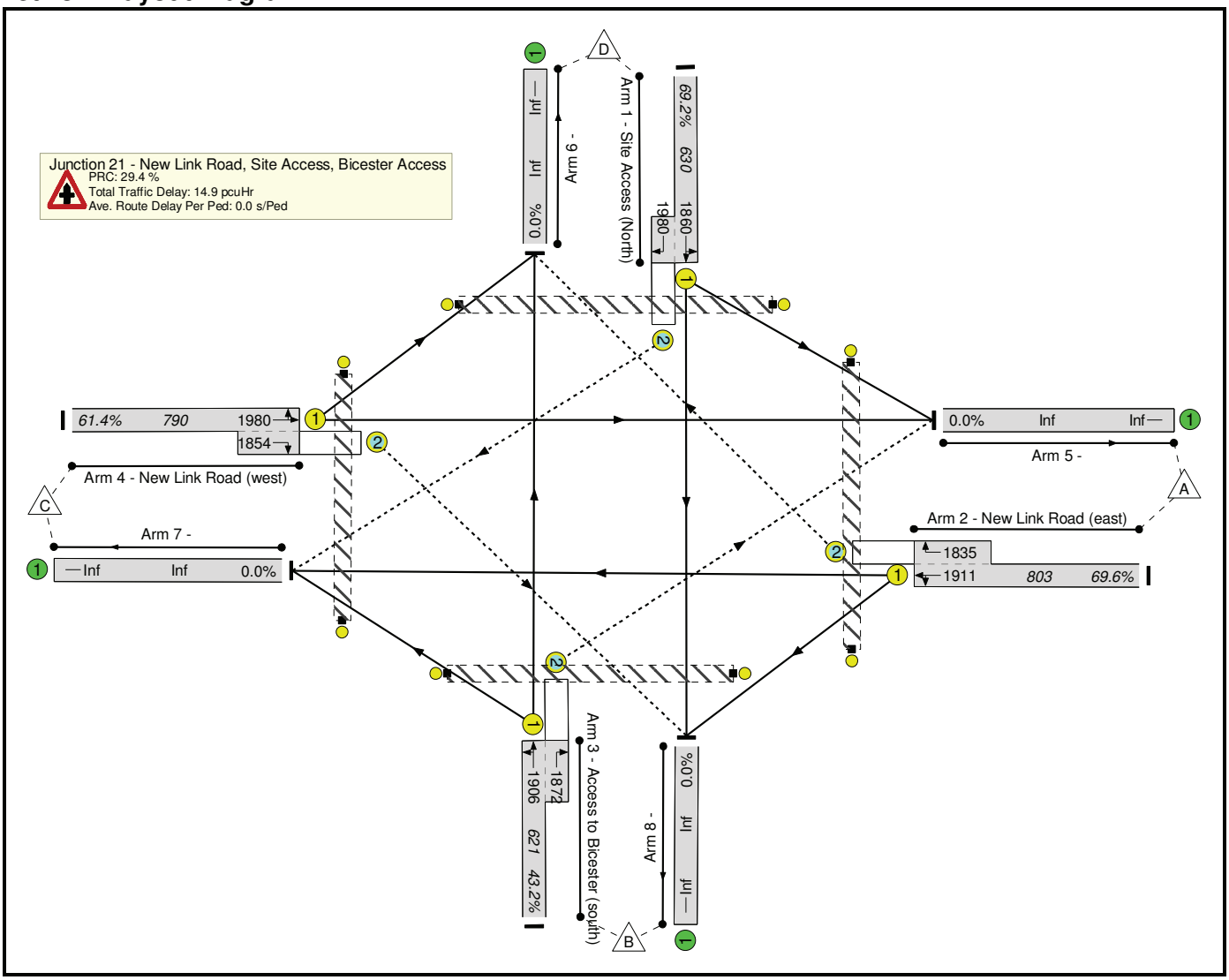
Basic Results Summary

User and Project Details

Project:	**Bicester**
Title:	**Proposed Site Access (Junction 21) with Development 2031 LinSig model**
Location:	
File name:	**Proposed Site Access (Junction 21) with Development 2031 LinSig model**
Author:	HA
Company:	
Address:	
Notes:	

Scenario 1: '2031 AM Peak' (FG1: 'AM Peak, 2031 with Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**69.6%**	**139**	**0**	**1**	**14.9**	-	-
Junction 21 - New Link Road, Site Access, Bicester Access	-	-	-		-	-	-	-	-	-	**69.6%**	**139**	**0**	**1**	**14.9**	-	-
1/1+1/2	Site Access (North) Left Right Ahead	U+O	F	E	2	58	-	436	1860:1980	630	69.2%	0	0	0	4.2	35.0	11.9
2/1+2/2	New Link Road (east) Right Ahead Left	U+O	A	C	2	67	-	559	1911:1835	803	69.6%	109	0	0	4.8	30.9	11.4
3/1+3/2	Access to Bicester (south) Right Ahead Left	U+O	G	H	2	56	-	268	1906:1872	621	43.2%	3	0	1	2.2	29.0	6.3
4/1+4/2	New Link Road (west) Ahead Left Right	U+O	B	D	2	67	-	485	1980:1854	790	61.4%	27	0	0	3.7	27.6	10.1
Ped Link: P1	Unnamed Ped Link	-	I		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	K		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	J		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P4	Unnamed Ped Link	-	L		1	7	-	0	-	0	0.0%	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): 29.4
PRC Over All Lanes (%): 29.4

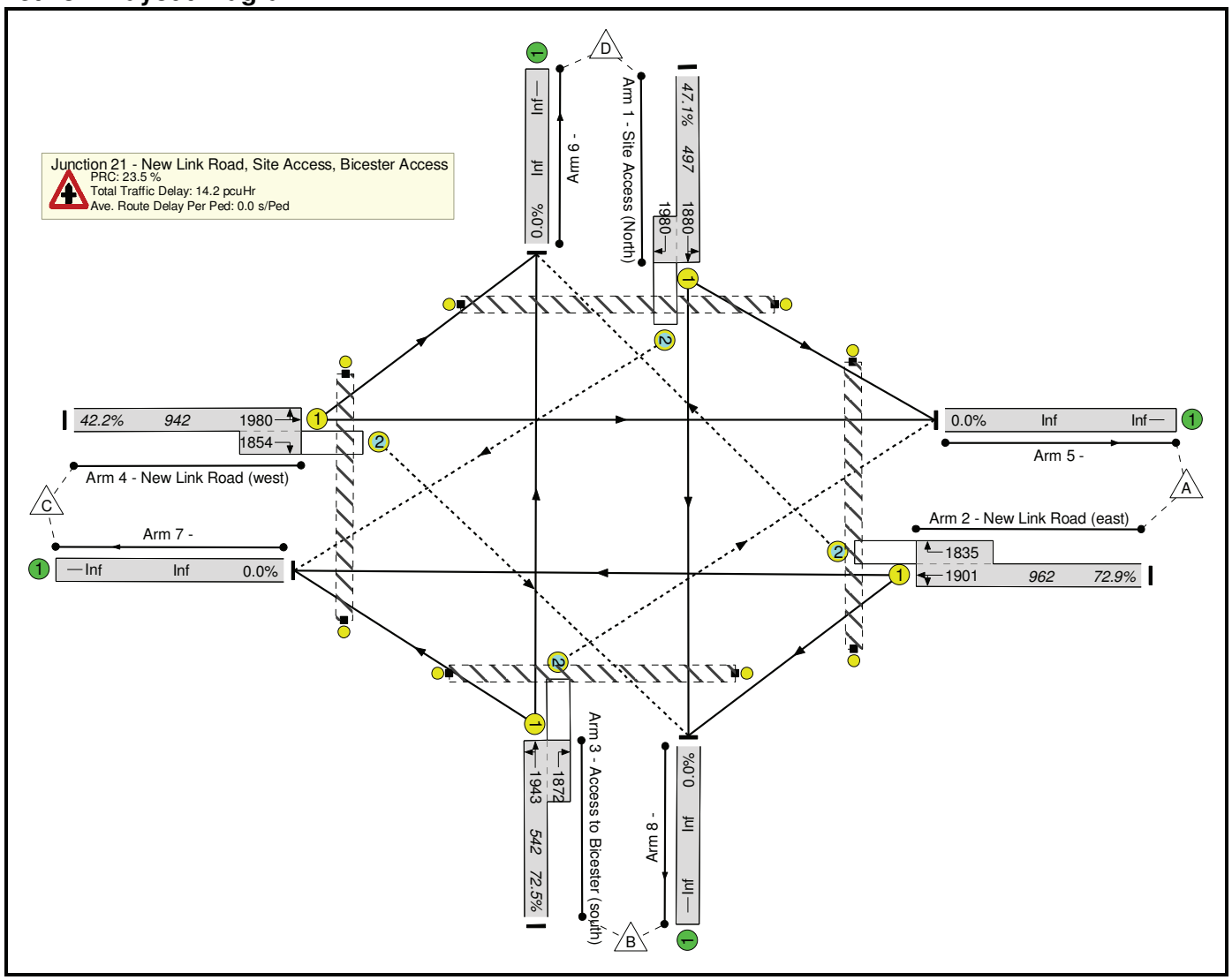
Total Delay for Signalled Lanes (pcuHr): 14.92
Total Delay Over All Lanes(pcuHr): 14.92

Cycle Time (s): 176

Basic Results Summary

Scenario 2: '2031 PM Peak' (FG2: 'PM Peak, 2031 with Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**72.9%**	**299**	**0**	**0**	**14.2**	-	-
Junction 21 - New Link Road, Site Access, Bicester Access	-	-	-		-	-	-	-	-	-	**72.9%**	**299**	**0**	**0**	**14.2**	-	-
1/1+1/2	Site Access (North) Left Right Ahead	U+O	F	E	2	45	-	234	1880:1980	497	47.1%	0	0	0	2.2	34.1	5.6
2/1+2/2	New Link Road (east) Right Ahead Left	U+O	A	C	2	80	-	701	1901:1835	962	72.9%	183	0	0	5.1	26.2	14.0
3/1+3/2	Access to Bicester (south) Right Ahead Left	U+O	G	H	2	43	-	393	1943:1872	542	72.5%	75	0	0	4.6	42.4	9.6
4/1+4/2	New Link Road (west) Ahead Left Right	U+O	B	D	2	80	-	398	1980:1854	942	42.2%	41	0	0	2.2	20.2	6.8
Ped Link: P1	Unnamed Ped Link	-	I		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	K		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	J		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P4	Unnamed Ped Link	-	L		1	7	-	0	-	0	0.0%	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): 23.5
PRC Over All Lanes (%): 23.5

Total Delay for Signalled Lanes (pcuHr): 14.18
Total Delay Over All Lanes(pcuHr): 14.18

Cycle Time (s): 176

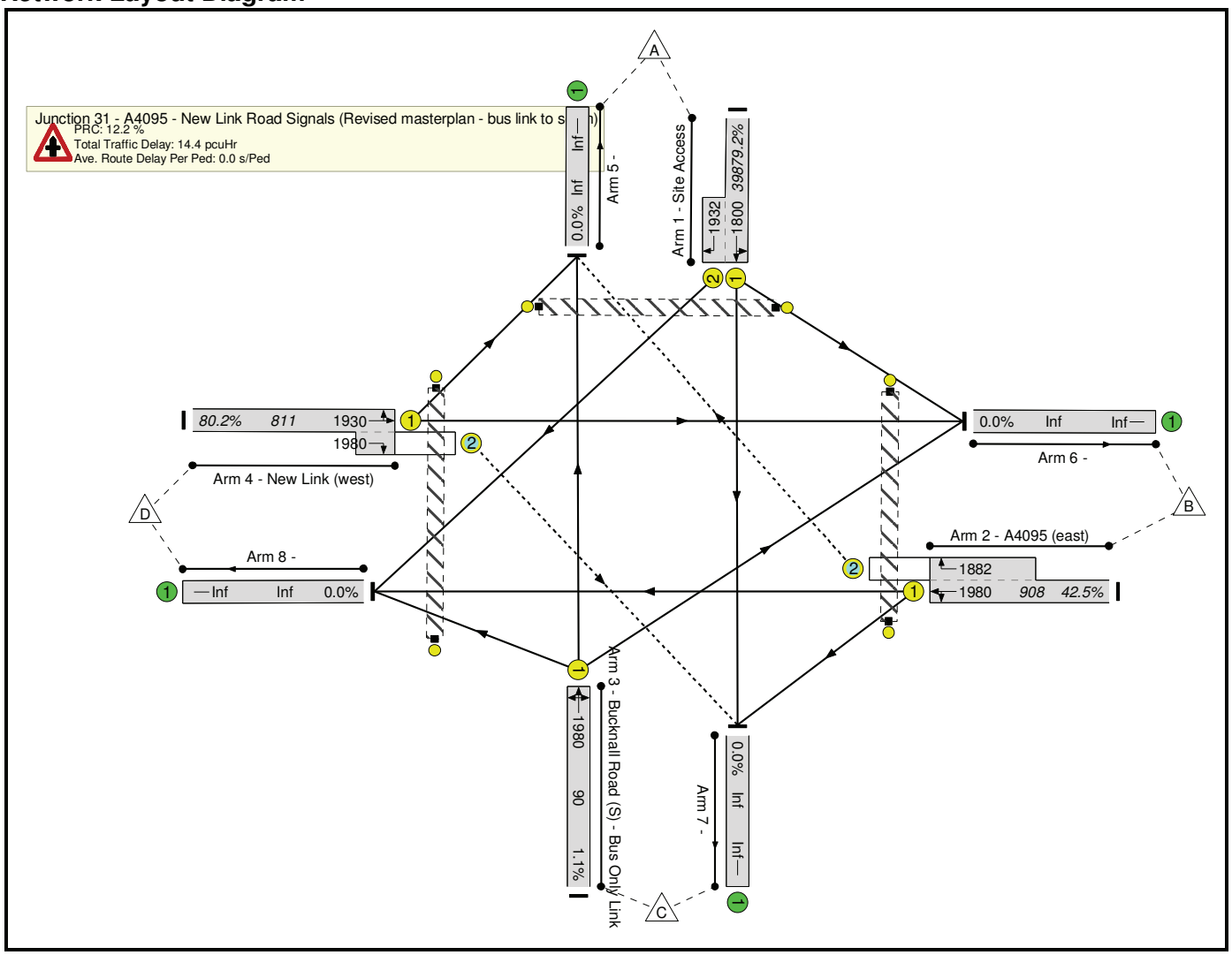
Basic Results Summary

User and Project Details

Project:	**Bicester Modelling**
Title:	**Proposed Site Access/ Busway (Junction 31) with Development 2031 LinSig model**
Location:	Bicester
File name:	**Proposed Site Access/ Busway (Junction 31) with Development 2031 LinSig model**
Author:	HA
Company:	Hyder Consulting
Address:	
Notes:	

Scenario 1: '2031 AM Peak' (FG1: 'AM Peak 2031 with Development', Plan 2: 'Network Control Plan 2')

Network Layout Diagram



Basic Results Summary

Network Results

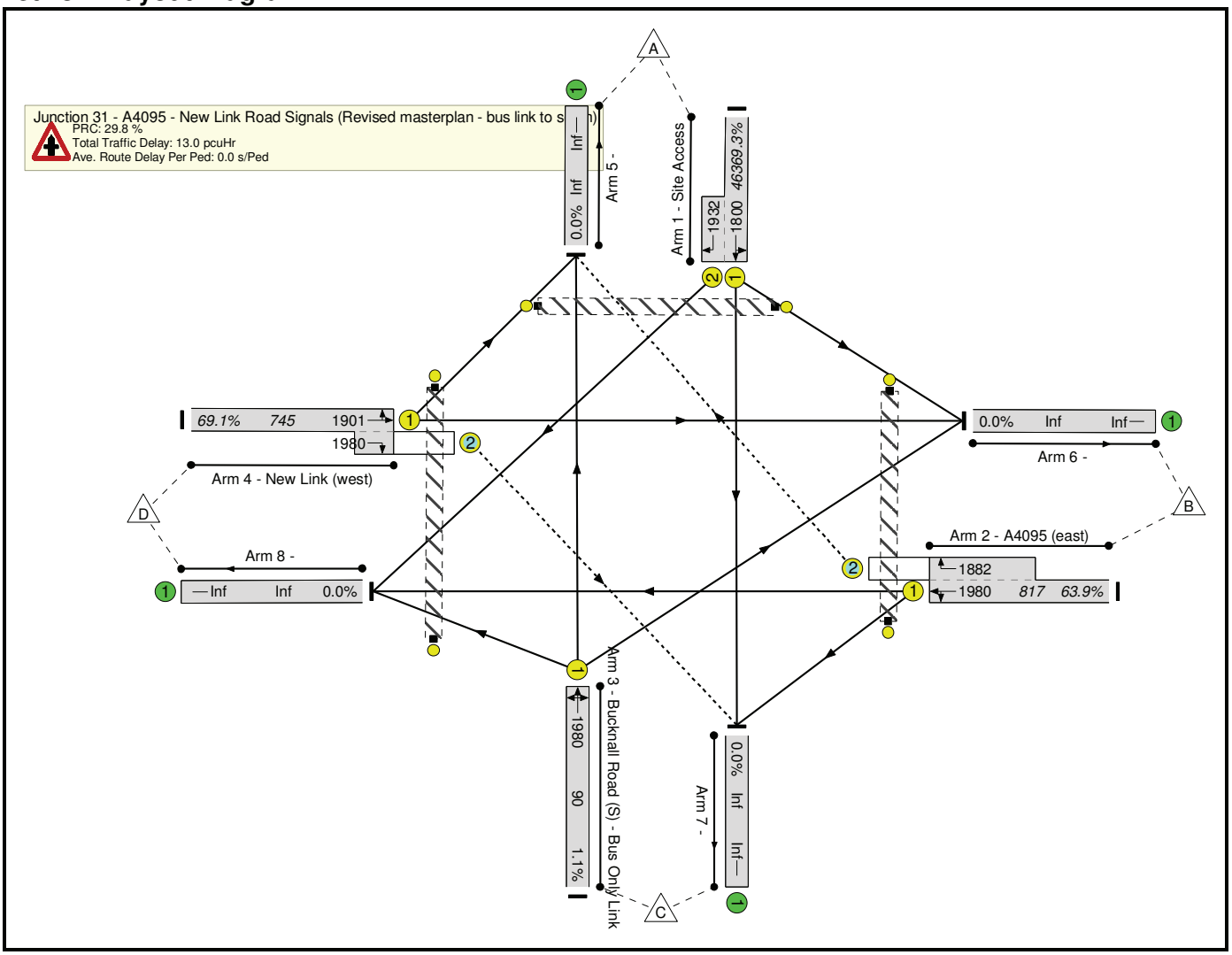
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J31	-	-	-		-	-	-	-	-	-	**80.2%**	**28**	**23**	**41**	**14.4**	-	-
Junction 31 - A4095 - New Link Road Signals (Revised masterplan - bus link to south)	-	-	-		-	-	-	-	-	-	**80.2%**	**28**	**23**	**41**	**14.4**	-	-
1/1+1/2	Site Access Left Ahead Right	U	A		2	30	-	315	1800:1932	398	79.2%	-	-	-	5.0	57.3	10.3
2/1+2/2	A4095 (east) Right Left Ahead	U+O	B	E	2	72	-	386	1980:1882	908	42.5%	28	23	41	2.8	26.4	6.8
3/1	Bucknall Road (S) - Bus Only Link Ahead Right Left	U	C		1	7	-	1	1980	90	1.1%	-	-	-	0.0	100.9	0.1
4/1+4/2	New Link (west) Left Ahead Right	U+O	D	F	2	72	-	651	1930:1980	811	80.2%	0	0	0	6.5	36.1	20.4
Ped Link: P1	Unnamed Ped Link	-	G		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	I		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	H		1	6	-	0	-	0	0.0%	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 12.2 Total Delay for Signalled Lanes (pcuHr): 14.40
PRC Over All Lanes (%): 12.2 Total Delay Over All Lanes(pcuHr): 14.40 Cycle Time (s): 176

Basic Results Summary

Scenario 2: '2031 PM Peak' (FG2: 'PM Peak 2031 with Development', Plan 2: 'Network Control Plan 2')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J31	-	-	-		-	-	-	-	-	-	**69.3%**	**26**	**21**	**32**	**13.0**	-	-
Junction 31 - A4095 - New Link Road Signals (Revised masterplan - bus link to south)	-	-	-		-	-	-	-	-	-	**69.3%**	**26**	**21**	**32**	**13.0**	-	-
1/1+1/2	Site Access Left Ahead Right	U	A		2	35	-	321	1800:1932	463	69.3%	-	-	-	4.0	45.2	8.7
2/1+2/2	A4095 (east) Right Left Ahead	U+O	B	E	2	67	-	522	1980:1882	817	63.9%	26	21	32	4.4	30.1	12.8
3/1	Bucknall Road (S) - Bus Only Link Ahead Right Left	U	C		1	7	-	1	1980	90	1.1%	-	-	-	0.0	100.9	0.1
4/1+4/2	New Link (west) Left Ahead Right	U+O	D	F	2	67	-	515	1901:1980	745	69.1%	0	0	0	4.6	31.9	14.6
Ped Link: P1	Unnamed Ped Link	-	G		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	I		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	H		1	6	-	0	-	0	0.0%	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 29.8 Total Delay for Signalled Lanes (pcuHr): 12.99

PRC Over All Lanes (%): 29.8 Total Delay Over All Lanes(pcuHr): 12.99 Cycle Time (s): 176

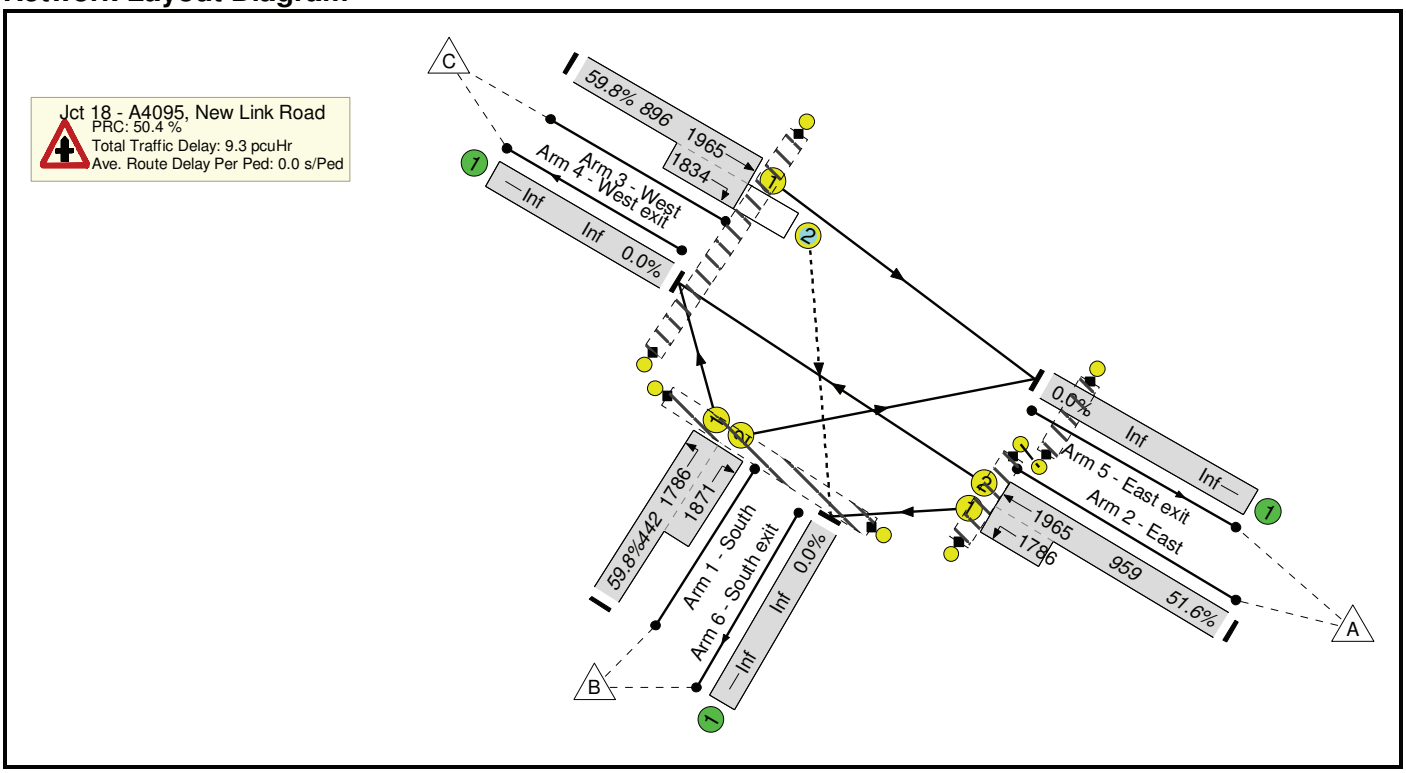
Basic Results Summary

User and Project Details

Project:	**Bicester Modelling**
Title:	**Proposed New Link/ Lord's Lane (Junction 18) with Development 2031 LinSig model**
Location:	
File name:	**Proposed New Link/ Lord's Lane (Junction 18) with Development 2031 LinSig model**
Author:	HA
Company:	Hyder consulting
Address:	
Notes:	

Scenario 1: '2031 AM Peak' (FG1: 'AM Peak, 2031 with Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J18	-	-	-		-	-	-	-	-	-	**59.8%**	**51**	**0**	**1**	**9.3**	-	-
Jct 18 - A4095, New Link Road	-	-	-		-	-	-	-	-	-	**59.8%**	**51**	**0**	**1**	**9.3**	-	-
1/1+1/2	South Left Right	U	B		1	15	-	264	1786:1871	442	59.8%	-	-	-	3.1	42.1	4.6
2/2+2/1	East Ahead Left	U	A		1	38	-	495	1965:1786	959	51.6%	-	-	-	2.7	19.8	6.2
3/1+3/2	West Ahead Right	U+O	C	G	1	38	-	536	1965:1834	896	59.8%	51	0	1	3.5	23.4	10.0
Ped Link: P1	South cross	-	D		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	East cross	-	E		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	East cross 2	-	H		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P4	West cross	-	F		1	6	-	0	-	0	0.0%	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): 50.4
PRC Over All Lanes (%): 50.4

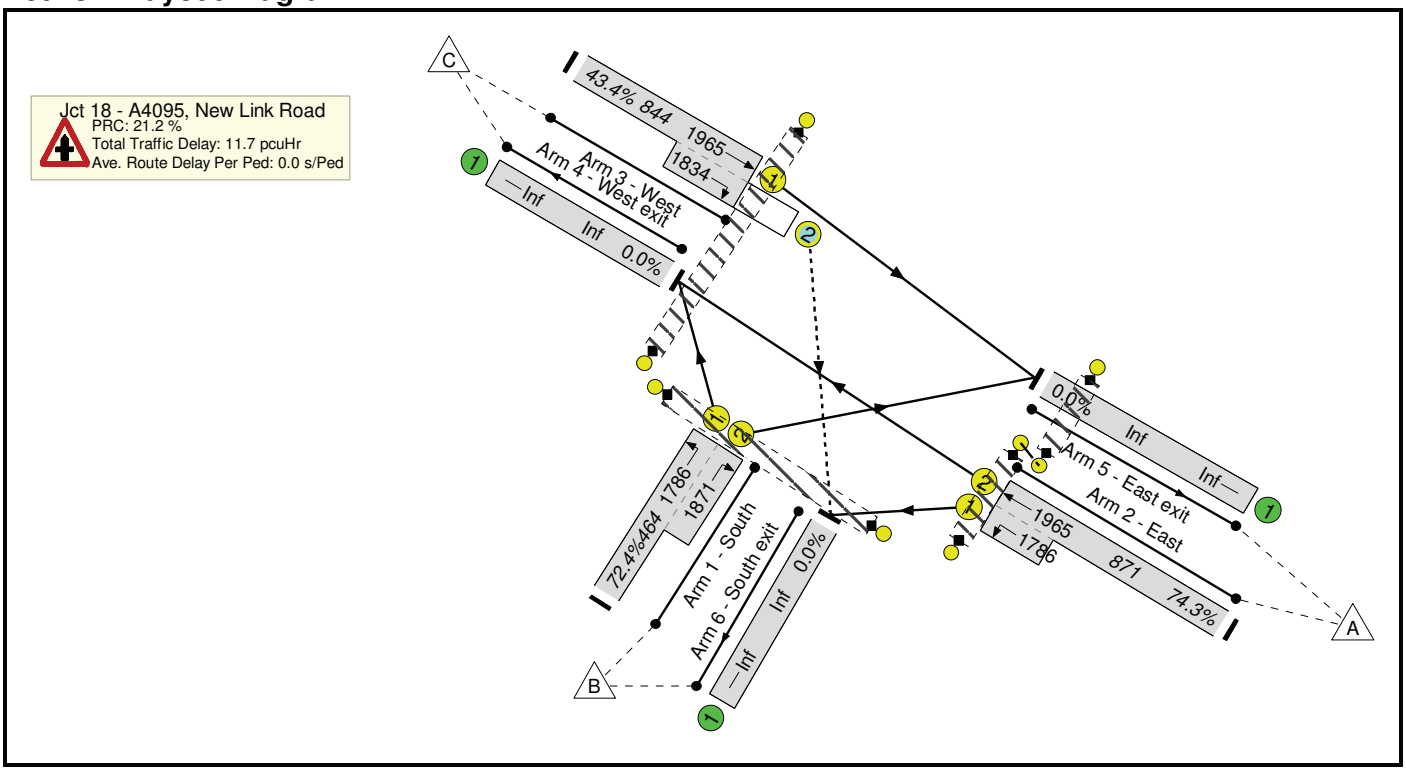
Total Delay for Signalled Lanes (pcuHr): 9.30
Total Delay Over All Lanes(pcuHr): 9.30

Cycle Time (s): 88

Basic Results Summary

Scenario 2: '2031 PM Peak' (FG2: 'PM Peak, 2031 with Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J18	-	-	-		-	-	-	-	-	-	**74.3%**	**63**	**0**	**1**	**11.7**	-	-
Jct 18 - A4095, New Link Road	-	-	-		-	-	-	-	-	-	**74.3%**	**63**	**0**	**1**	**11.7**	-	-
1/1+1/2	South Left Right	U	B		1	18	-	336	1786:1871	464	72.4%	-	-	-	4.2	44.5	7.2
2/2+2/1	East Ahead Left	U	A		1	35	-	647	1965:1786	871	74.3%	-	-	-	5.1	28.4	12.8
3/1+3/2	West Ahead Right	U+O	C	G	1	35	-	366	1965:1834	844	43.4%	63	0	1	2.5	24.4	5.7
Ped Link: P1	South cross	-	D		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	East cross	-	E		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	East cross 2	-	H		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P4	West cross	-	F		1	6	-	0	-	0	0.0%	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): 21.2
PRC Over All Lanes (%): 21.2

Total Delay for Signalled Lanes (pcuHr): 11.74
Total Delay Over All Lanes(pcuHr): 11.74

Cycle Time (s): 88

PICADY
GUI Version: 5.1 AE Analysis Program Release: 5.0 (MAY 2010) © Copyright TRL Limited, 2010 Adapted from PICADY/3 which is Crown Copyright by permission of the controller of HMSO
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Run Analysis

Parameter	Values
File Run	K:\..\UPDATED\Southern Access v1.vpi
Date Run	30 July 2014
Time Run	16:11:50
Driving Side	Drive On The Left

Arm Names and Flow Scaling Factors

Arm	Arm Name	Flow Scaling Factor (%)
Arm A	B4100 South	100
Arm B	Southern Access	100
Arm C	B4100 North	100

Stream Labelling Convention

Stream A-B contains traffic going from A to B etc.

Run Information

Parameter	Values
Run Title	Exemplar Site Southern Access with Development 2031 PICADY model results (J15)
Location	Bicester
Date	04 June 2014
Enumerator	pjs84174
Job Number	-
Status	-
Client	-
Description	-

Errors and Warnings

Parameter	Values
Warning	No Errors Or Warnings

Geometric Data

Geometric Parameters

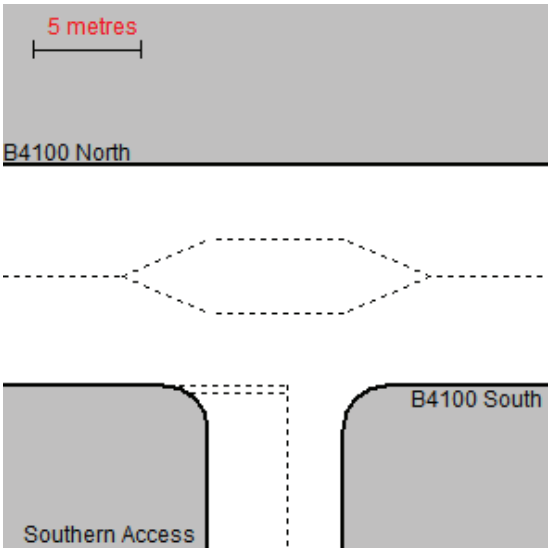
Parameter	Minor Arm B
Major Road Carriageway Width (m)	6.50
Major Road Kerbed Central Reserve Width (m)	0.00
Major Road Right Turning Lane Width (m)	3.50
Minor Road First Lane Width (m)	3.65
Minor Road Visibility To Right (m)	100
Minor Road Visibility To Left (m)	200
Major Road Right Turn Visibility (m)	215
Major Road Right Turn Blocks Traffic	No

Slope and Intercept Values

Stream	Intercept for Stream	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	634.185	0.113	0.286	0.180	0.408
B-C	731.590	0.110	0.277	-	-
C-B	797.295	0.302	0.302	-	-

Note: Streams may be combined in which case capacity will be adjusted
These values do not allow for any site-specific corrections

Junction Diagram



Demand Data

Modelling Periods

Parameter	Period	Duration (min)	Segment Length (min)
First Modelling Period	08:00-09:00	60	15
Second Modelling Period	17:00-18:00	60	15

Direct Entry Flows

Demand Set: AM 2031 With Dev
Modelling Period: 08:00-09:00

Segment: 08:00-08:15

Arm	Flow (veh/interval)
Arm A	199.39
Arm B	60.75
Arm C	172.25

Segment: 08:15-08:30

Arm	Flow (veh/interval)
Arm A	199.39
Arm B	60.75
Arm C	172.25

Segment: 08:30-08:45

Arm	Flow (veh/interval)
Arm A	199.39
Arm B	60.75
Arm C	172.25

Segment: 08:45-09:00

Arm	Flow (veh/interval)
Arm A	199.39
Arm B	60.75
Arm C	172.25

Demand Set: PM 2031 With Dev
Modelling Period: 17:00-18:00

Segment: 17:00-17:15

Arm	Flow (veh/interval)
Arm A	330.50
Arm B	28.75
Arm C	271.50

Segment: 17:15-17:30

Arm	Flow (veh/interval)
Arm A	330.50
Arm B	28.75
Arm C	271.50

Segment: 17:30-17:45

Arm	Flow (veh/interval)
Arm A	330.50
Arm B	28.75
Arm C	271.50

Segment: 17:45-18:00

Arm	Flow (veh/interval)
Arm A	330.50
Arm B	28.75
Arm C	271.50

Turning Counts

Demand Set: AM 2031 With Dev
Modelling Period: 08:00-09:00

From/To	Arm A	Arm B	Arm C
Arm A	-	151	646
Arm B	175	-	68
Arm C	680	9	-

Demand Set: PM 2031 With Dev
Modelling Period: 17:00-18:00

From/To	Arm A	Arm B	Arm C
Arm A	-	185	1137
Arm B	85	-	30
Arm C	832	254	-

Turning proportions are calculated from turning count data

Turning Proportions

Demand Set: AM 2031 With Dev
Modelling Period: 08:00-09:00

From/To	Arm A	Arm B	Arm C
Arm A	0.000	0.189	0.811
Arm B	0.720	0.000	0.280
Arm C	0.987	0.013	0.000

Demand Set: PM 2031 With Dev
Modelling Period: 17:00-18:00

From/To	Arm A	Arm B	Arm C
Arm A	0.000	0.140	0.860
Arm B	0.739	0.000	0.261
Arm C	0.766	0.234	0.000

Heavy Vehicles Percentages

Demand Set: AM 2031 With Dev
Modelling Period: 08:00-09:00

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

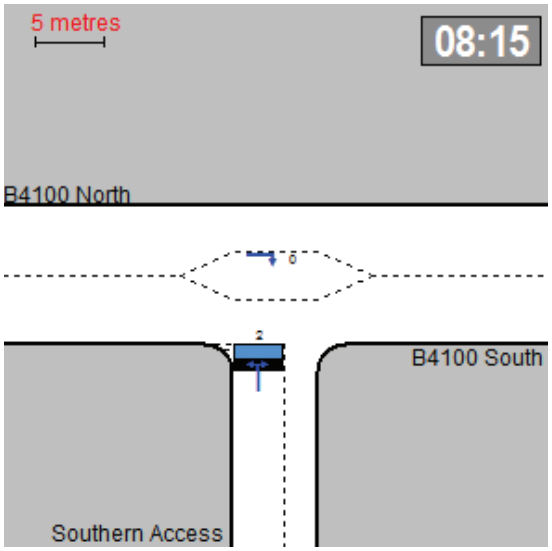
Demand Set: PM 2031 With Dev
Modelling Period: 17:00-18:00

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

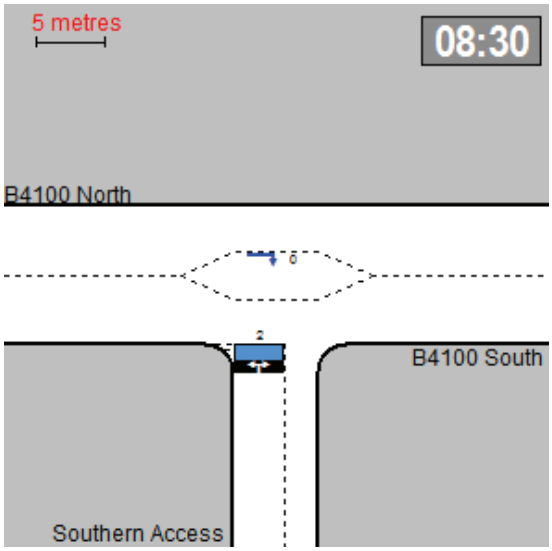
Queue Diagrams

Demand Set: AM 2031 With Dev
Modelling Period: 08:00-09:00
View Extent: 40m

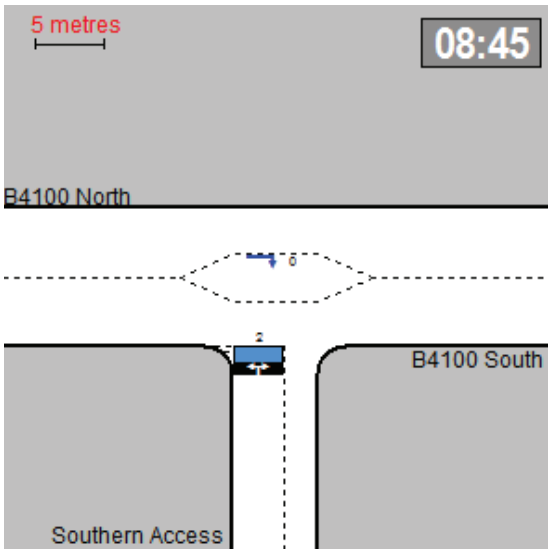
Queue Interval 1: 08:00-08:15



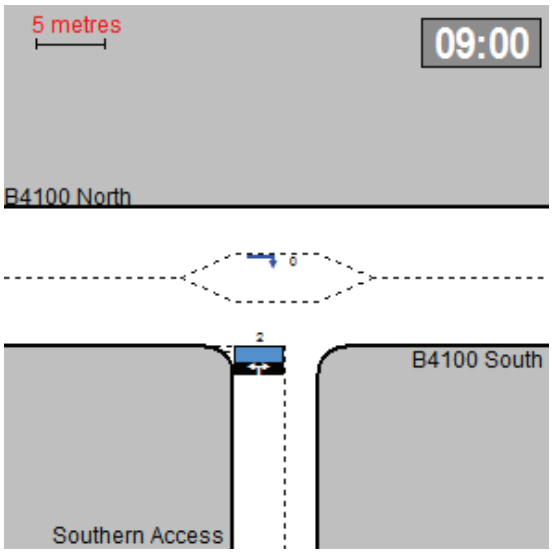
Queue Interval 2: 08:15-08:30



Queue Interval 3: 08:30-08:45

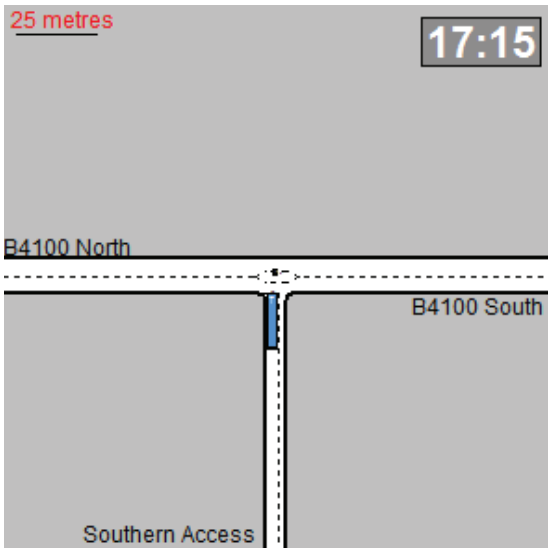


Queue Interval 4: 08:45-09:00

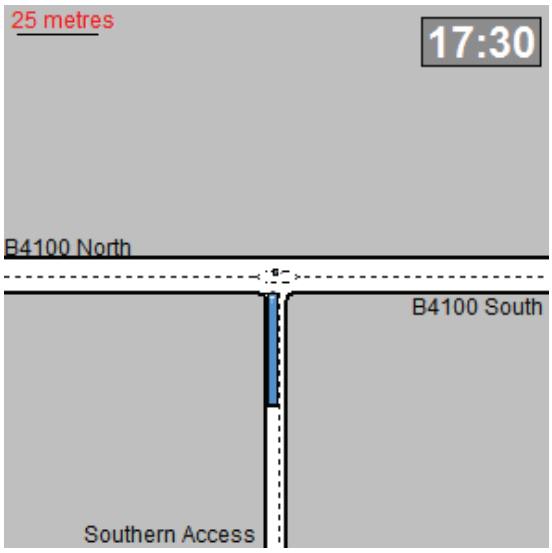


Demand Set: PM 2031 With Dev
Modelling Period: 17:00-18:00
View Extent: 169m

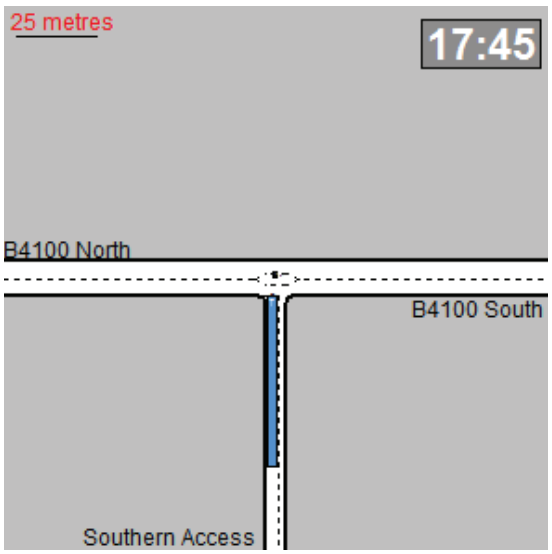
Queue Interval 1: 17:00-17:15



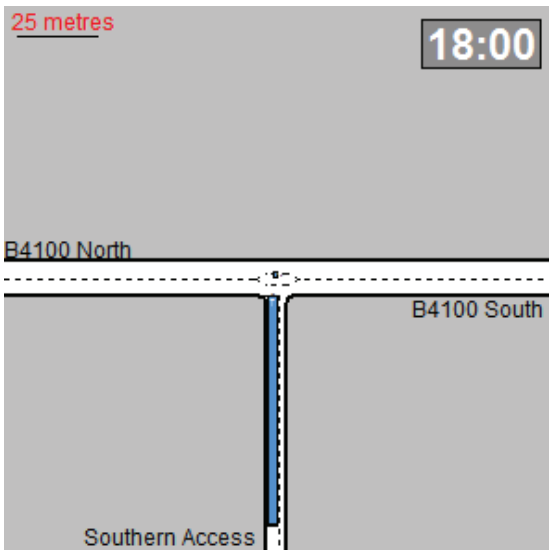
Queue Interval 2: 17:15-17:30



Queue Interval 3: 17:30-17:45

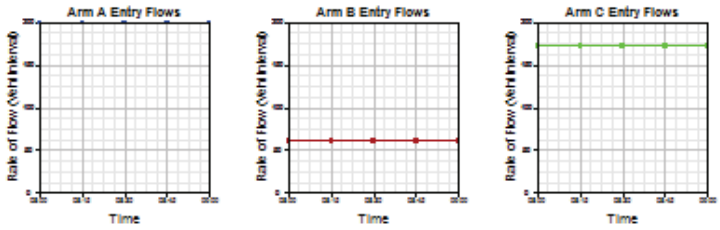


Queue Interval 4: 17:45-18:00

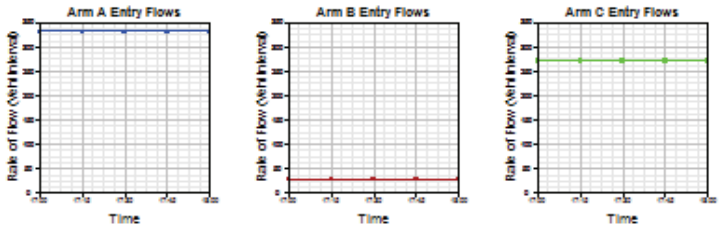


Demand Data Graph

Demand Set: AM 2031 With Dev
Modelling Period: 08:00-09:00

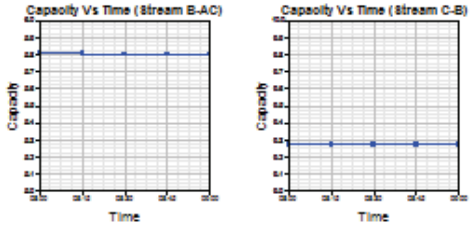


Demand Set: PM 2031 With Dev
Modelling Period: 17:00-18:00

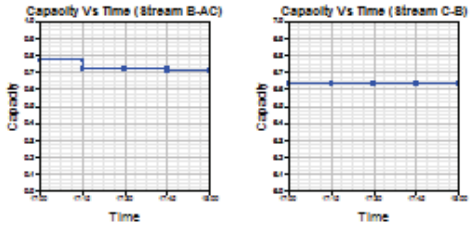


Capacity Graph

Demand Set: AM 2031 With Dev
Modelling Period: 08:00-09:00

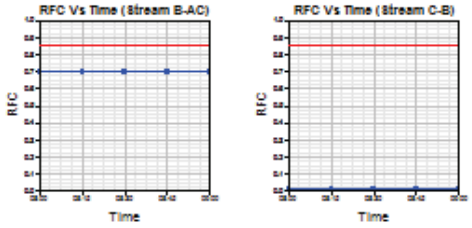


Demand Set: PM 2031 With Dev
Modelling Period: 17:00-18:00

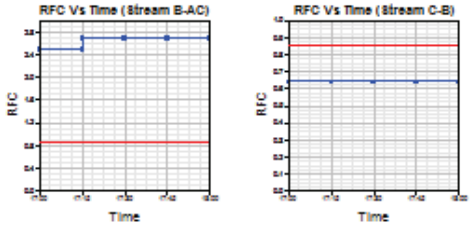


RFC Graph

Demand Set: AM 2031 With Dev
Modelling Period: 08:00-09:00

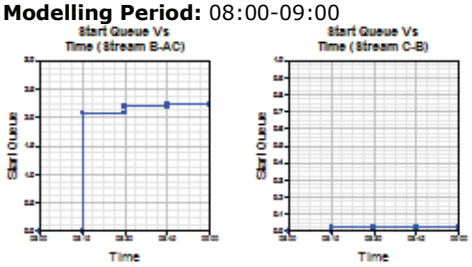


Demand Set: PM 2031 With Dev
Modelling Period: 17:00-18:00

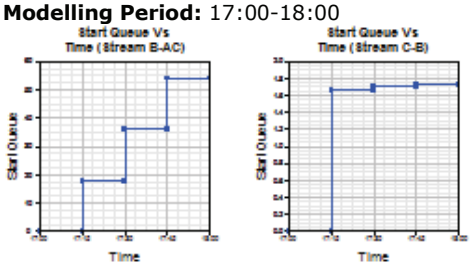


Start Queue Graph

Demand Set: AM 2031 With Dev
Modelling Period: 08:00-09:00

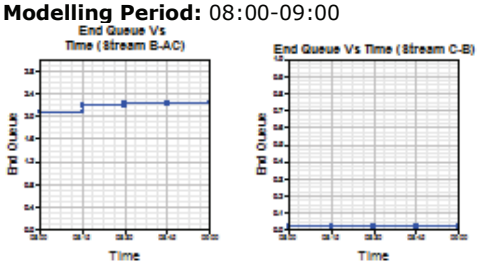


Demand Set: PM 2031 With Dev
Modelling Period: 17:00-18:00

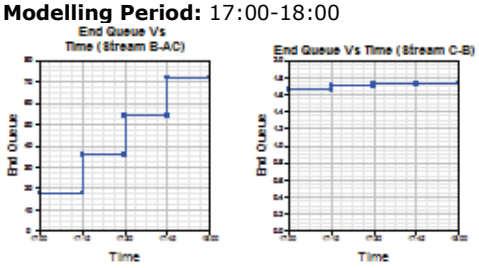


End Queue Graph

Demand Set: AM 2031 With Dev
Modelling Period: 08:00-09:00

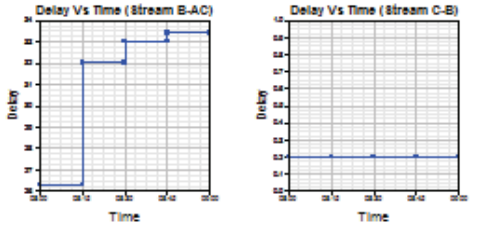


Demand Set: PM 2031 With Dev
Modelling Period: 17:00-18:00

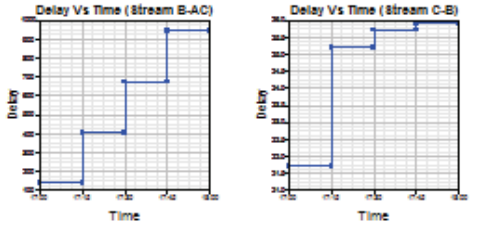


Delay Graph

Demand Set: AM 2031 With Dev
Modelling Period: 08:00-09:00



Demand Set: PM 2031 With Dev
Modelling Period: 17:00-18:00



Queues & Delays

Demand Set: AM 2031 With Dev
Modelling Period: 08:00-09:00

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	4.05	5.81	0.698	-	0.00	2.07	-	26.3	0.50
	C-A	11.33	-	-	-	-	-	-	-	-
	C-B	0.15	9.27	0.016	-	0.00	0.02	-	0.2	0.11
	A-B	2.52	-	-	-	-	-	-	-	-
	A-C	10.77	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	4.05	5.80	0.698	-	2.07	2.18	-	32.0	0.56
	C-A	11.33	-	-	-	-	-	-	-	-
	C-B	0.15	9.27	0.016	-	0.02	0.02	-	0.2	0.11
	A-B	2.52	-	-	-	-	-	-	-	-
	A-C	10.77	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	4.05	5.80	0.698	-	2.18	2.22	-	33.0	0.57
	C-A	11.33	-	-	-	-	-	-	-	-
	C-B	0.15	9.27	0.016	-	0.02	0.02	-	0.2	0.11
	A-B	2.52	-	-	-	-	-	-	-	-
	A-C	10.77	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	4.05	5.80	0.698	-	2.22	2.24	-	33.4	0.57
	C-A	11.33	-	-	-	-	-	-	-	-
	C-B	0.15	9.27	0.016	-	0.02	0.02	-	0.2	0.11
	A-B	2.52	-	-	-	-	-	-	-	-
	A-C	10.77	-	-	-	-	-	-	-	-

Demand Set: PM 2031 With Dev
Modelling Period: 17:00-18:00

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	1.92	0.77	**2.476**	-	0.00	17.76	-	136.5	13.64
	C-A	13.87	-	-	-	-	-	-	-	-
	C-B	4.23	6.63	0.639	-	0.00	1.65	-	21.7	0.38
	A-B	3.08	-	-	-	-	-	-	-	-
	A-C	18.95	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	1.92	0.72	**2.673**	-	17.76	35.77	-	401.5	38.87
	C-A	13.87	-	-	-	-	-	-	-	-
	C-B	4.23	6.63	0.639	-	1.65	1.70	-	25.2	0.42
	A-B	3.08	-	-	-	-	-	-	-	-
	A-C	18.95	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	1.92	0.72	**2.680**	-	35.77	53.81	-	671.9	64.52
	C-A	13.87	-	-	-	-	-	-	-	-
	C-B	4.23	6.63	0.639	-	1.70	1.72	-	25.7	0.42
	A-B	3.08	-	-	-	-	-	-	-	-
	A-C	18.95	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	1.92	0.71	**2.683**	-	53.81	71.84	-	942.4	89.94
	C-A	13.87	-	-	-	-	-	-	-	-
	C-B	4.23	6.63	0.639	-	1.72	1.73	-	25.9	0.42
	A-B	3.08	-	-	-	-	-	-	-	-
	A-C	18.95	-	-	-	-	-	-	-	-

Entry capacities marked with an '(X)' are dominated by a pedestrian crossing in that time segment.
In time segments marked with a '(B)', traffic leaving the junction may block back from a crossing so impairing normal operation of the junction.
Delays marked with '##' could not be calculated.

Overall Queues & Delays

Queueing Delay Information Over Whole Period

Demand Set: AM 2031 With Dev
Modelling Period: 08:00-09:00

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	243.0	243.0	124.7	0.5	125.1	0.5
C-A	680.0	680.0	-	-	-	-
C-B	9.0	9.0	1.0	0.1	1.0	0.1
A-B	151.1	151.1	-	-	-	-
A-C	646.5	646.5	-	-	-	-
All	**1729.6**	**1729.6**	**125.7**	**0.1**	**126.1**	**0.1**

Demand Set: PM 2031 With Dev
Modelling Period: 17:00-18:00

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	115.0	115.0	2152.2	18.7	5764.9	50.1
C-A	832.0	832.0	-	-	-	-
C-B	254.0	254.0	98.5	0.4	98.7	0.4
A-B	185.0	185.0	-	-	-	-
A-C	1137.0	1137.0	-	-	-	-
All	**2523.0**	**2523.0**	**2250.8**	**0.9**	**5863.6**	**2.3**

Delay is that occurring only within the time period.
Inclusive delay includes delay suffered by vehicles which are still queuing after the end of the time period.
These will only be significantly different if there is a large queue remaining at the end of the time period.

PICADY 5 Run Successful

PICADY
GUI Version: 5.1 AE Analysis Program Release: 5.0 (MAY 2010) © Copyright TRL Limited, 2010 Adapted from PICADY/3 which is Crown Copyright by permission of the controller of HMSO
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The user of this computer program for the solution of an engineering problem is in no way relieved of their responsibility for the correctness of the solution

Run Analysis

Parameter	Values
File Run	K:\..\J32\Exemplar Site Northern Access with Development 2031 PICADY model results (J32) .vpi
Date Run	30 July 2014
Time Run	14:12:17
Driving Side	Drive On The Left

Arm Names and Flow Scaling Factors

Arm	Arm Name	Flow Scaling Factor (%)
Arm A	B4100 South	100
Arm B	Northern Access	100
Arm C	B4100 North	100

Stream Labelling Convention

Stream A-B contains traffic going from A to B etc.

Run Information

Parameter	Values
Run Title	Exemplar Site Northern Access (J32)
Location	Bicester
Date	10 September 2010
Enumerator	mba24773 [HCL56181]
Job Number	-
Status	-
Client	-
Description	-

Errors and Warnings

Parameter	Values
Warning	No Errors Or Warnings

Geometric Data

Geometric Parameters

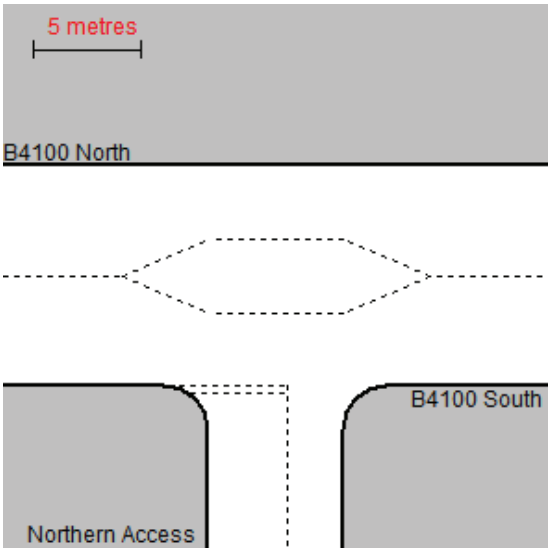
Parameter	Minor Arm B
Major Road Carriageway Width (m)	6.50
Major Road Kerbed Central Reserve Width (m)	0.00
Major Road Right Turning Lane Width (m)	3.50
Minor Road First Lane Width (m)	3.65
Minor Road Visibility To Right (m)	100
Minor Road Visibility To Left (m)	200
Major Road Right Turn Visibility (m)	215
Major Road Right Turn Blocks Traffic	No

Slope and Intercept Values

Stream	Intercept for Stream	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	634.185	0.113	0.286	0.180	0.408
B-C	731.590	0.110	0.277	-	-
C-B	797.295	0.302	0.302	-	-

Note: Streams may be combined in which case capacity will be adjusted
These values do not allow for any site-specific corrections

Junction Diagram



Demand Data

Modelling Periods

Parameter	Period	Duration (min)	Segment Length (min)
First Modelling Period	08:00-09:00	60	15
Second Modelling Period	17:00-18:00	60	15

Direct Entry Flows

Demand Set: AM 2031 With Dev
Modelling Period: 08:00-09:00

Segment: 08:00-08:15

Arm	Flow (veh/interval)
Arm A	194.00
Arm B	38.50
Arm C	289.25

Segment: 08:15-08:30

Arm	Flow (veh/interval)
Arm A	194.00
Arm B	38.50
Arm C	289.25

Segment: 08:30-08:45

Arm	Flow (veh/interval)
Arm A	194.00
Arm B	38.50
Arm C	289.25

Segment: 08:45-09:00

Arm	Flow (veh/interval)
Arm A	194.00
Arm B	38.50
Arm C	289.25

Demand Set: PM 2031 With Dev
Modelling Period: 17:00-18:00

Segment: 17:00-17:15

Arm	Flow (veh/interval)
Arm A	324.00
Arm B	36.50
Arm C	194.00

Segment: 17:15-17:30

Arm	Flow (veh/interval)
Arm A	324.00
Arm B	36.50
Arm C	194.00

Segment: 17:30-17:45

Arm	Flow (veh/interval)
Arm A	324.00
Arm B	36.50
Arm C	194.00

Segment: 17:45-18:00

Arm	Flow (veh/interval)
Arm A	324.00
Arm B	36.50
Arm C	194.00

Turning Counts

Demand Set: AM 2031 With Dev
Modelling Period: 08:00-09:00

From/To	Arm A	Arm B	Arm C
Arm A	-	99	677
Arm B	108	-	46
Arm C	1149	9	-

Demand Set: PM 2031 With Dev
Modelling Period: 17:00-18:00

From/To	Arm A	Arm B	Arm C
Arm A	-	133	1163
Arm B	109	-	37
Arm C	749	27	-

Turning proportions are calculated from turning count data

Turning Proportions

Demand Set: AM 2031 With Dev
Modelling Period: 08:00-09:00

From/To	Arm A	Arm B	Arm C
Arm A	0.000	0.128	0.872
Arm B	0.701	0.000	0.299
Arm C	0.992	0.008	0.000

Demand Set: PM 2031 With Dev
Modelling Period: 17:00-18:00

From/To	Arm A	Arm B	Arm C
Arm A	0.000	0.103	0.897
Arm B	0.747	0.000	0.253
Arm C	0.965	0.035	0.000

Heavy Vehicles Percentages

Demand Set: AM 2031 With Dev
Modelling Period: 08:00-09:00

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

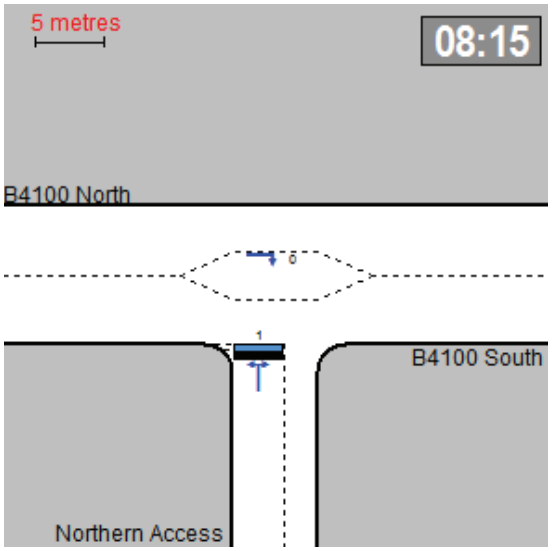
Demand Set: PM 2031 With Dev
Modelling Period: 17:00-18:00

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

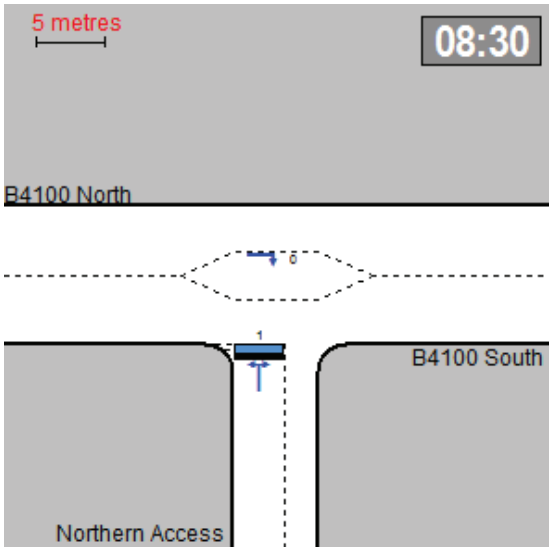
Queue Diagrams

Demand Set: Sum of Demand Sets for Modelling Period: 08:00 - 09:00
Modelling Period: 08:00-09:00
View Extent: 40m

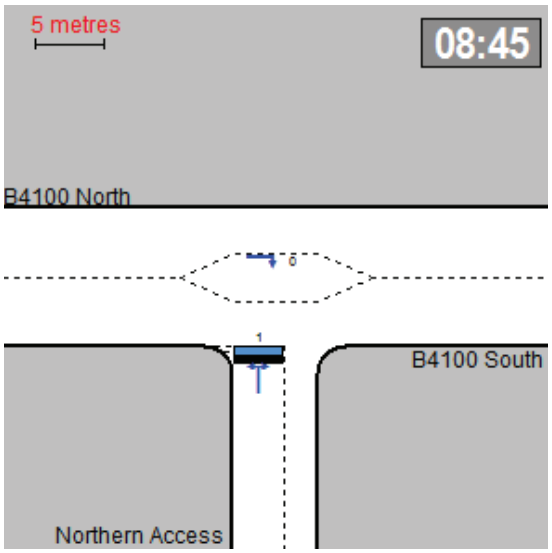
Queue Interval 1: 08:00-08:15



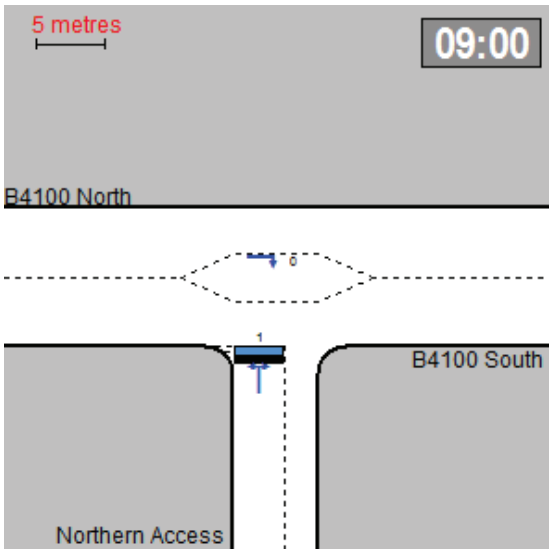
Queue Interval 2: 08:15-08:30



Queue Interval 3: 08:30-08:45

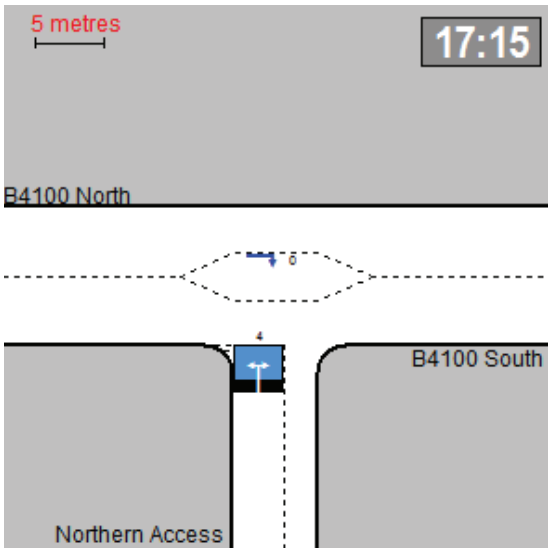


Queue Interval 4: 08:45-09:00

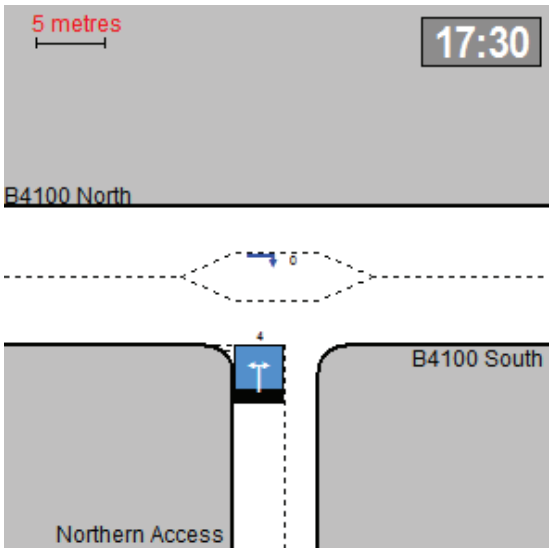


Demand Set: Sum of Demand Sets for Modelling Period: 17:00 - 18:00
Modelling Period: 17:00-18:00
View Extent: 40m

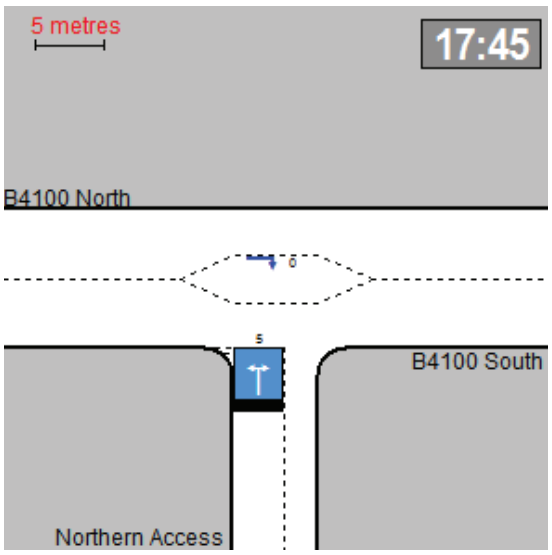
Queue Interval 1: 17:00-17:15



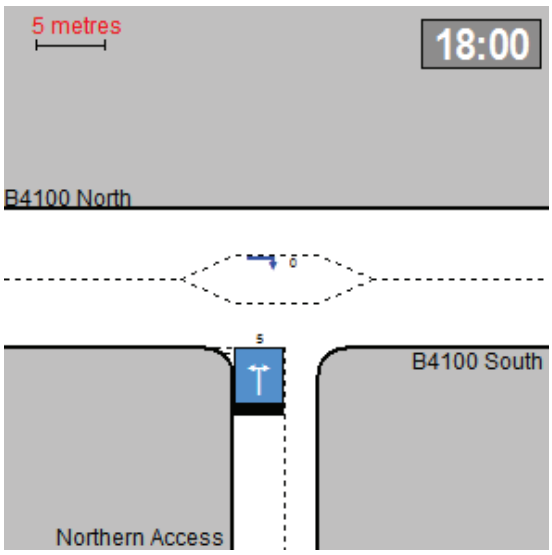
Queue Interval 2: 17:15-17:30



Queue Interval 3: 17:30-17:45

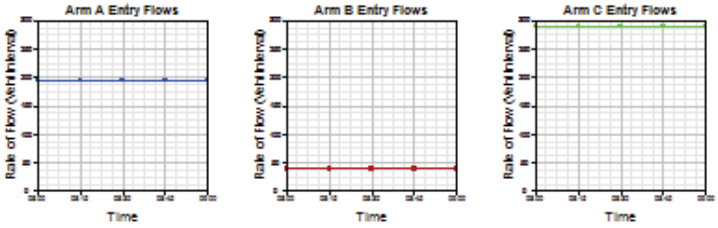


Queue Interval 4: 17:45-18:00

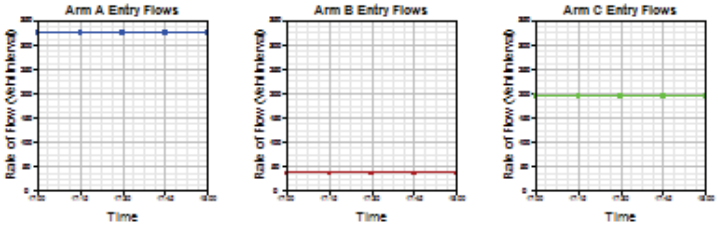


Demand Data Graph

Demand Set: AM 2031 With Dev
Modelling Period: 08:00-09:00

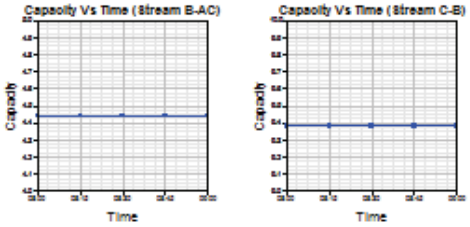


Demand Set: PM 2031 With Dev
Modelling Period: 17:00-18:00

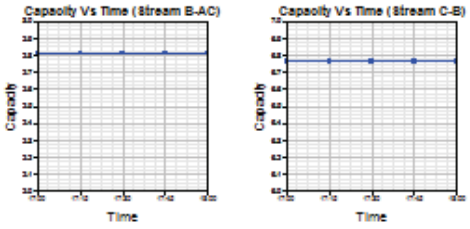


Capacity Graph

Demand Set: Sum of Demand Sets for Modelling Period: 08:00 - 09:00
Modelling Period: 08:00-09:00

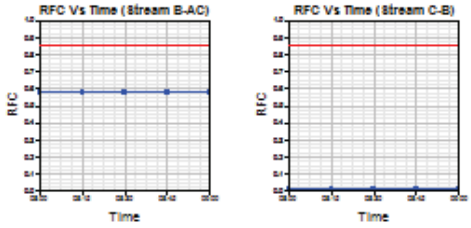


Demand Set: Sum of Demand Sets for Modelling Period: 17:00 - 18:00
Modelling Period: 17:00-18:00

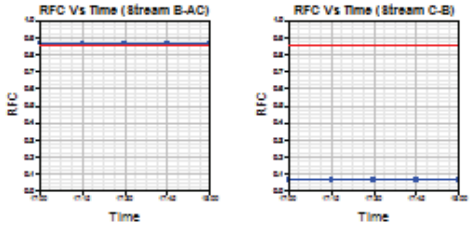


RFC Graph

Demand Set: Sum of Demand Sets for Modelling Period: 08:00 - 09:00
Modelling Period: 08:00-09:00

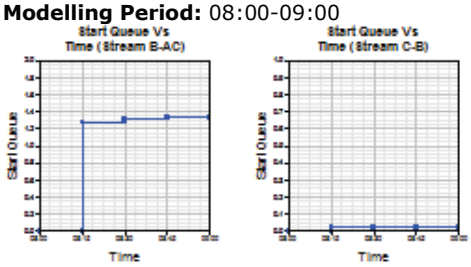


Demand Set: Sum of Demand Sets for Modelling Period: 17:00 - 18:00
Modelling Period: 17:00-18:00

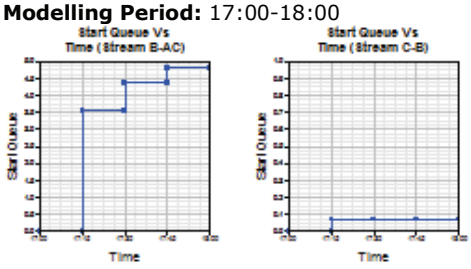


Start Queue Graph

Demand Set: Sum of Demand Sets for Modelling Period: 08:00 - 09:00
Modelling Period: 08:00-09:00

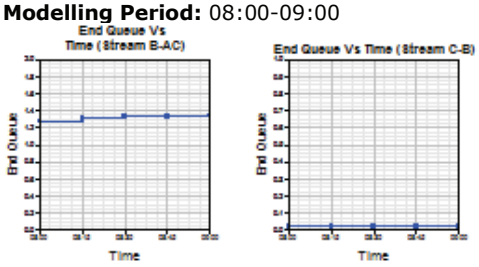


Demand Set: Sum of Demand Sets for Modelling Period: 17:00 - 18:00
Modelling Period: 17:00-18:00

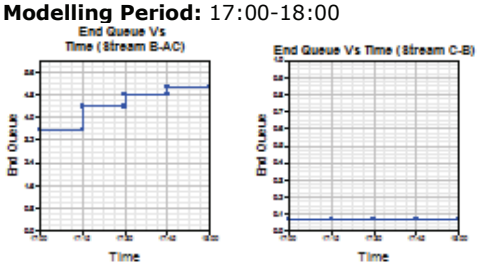


End Queue Graph

Demand Set: Sum of Demand Sets for Modelling Period: 08:00 - 09:00
Modelling Period: 08:00-09:00

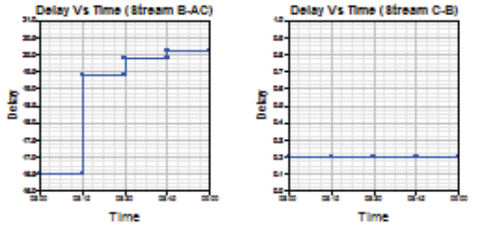


Demand Set: Sum of Demand Sets for Modelling Period: 17:00 - 18:00
Modelling Period: 17:00-18:00

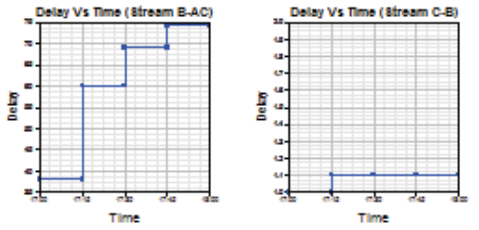


Delay Graph

Demand Set: Sum of Demand Sets for Modelling Period: 08:00 - 09:00
Modelling Period: 08:00-09:00



Demand Set: Sum of Demand Sets for Modelling Period: 17:00 - 18:00
Modelling Period: 17:00-18:00



Queues & Delays

Demand Set: Sum of Demand Sets for Modelling Period: 08:00 - 09:00
Modelling Period: 08:00-09:00

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-AC	2.57	4.44	0.578	-	0.00	1.27	-	16.5	0.49
	C-A	19.13	-	-	-	-	-	-	-	-
	C-B	0.15	9.38	0.016	-	0.00	0.02	-	0.2	0.11
	A-B	1.65	-	-	-	-	-	-	-	-
	A-C	11.28	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-AC	2.57	4.44	0.578	-	1.27	1.32	-	19.4	0.53
	C-A	19.13	-	-	-	-	-	-	-	-
	C-B	0.15	9.38	0.016	-	0.02	0.02	-	0.2	0.11
	A-B	1.65	-	-	-	-	-	-	-	-
	A-C	11.28	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-AC	2.57	4.44	0.578	-	1.32	1.33	-	19.9	0.53
	C-A	19.13	-	-	-	-	-	-	-	-
	C-B	0.15	9.38	0.016	-	0.02	0.02	-	0.2	0.11
	A-B	1.65	-	-	-	-	-	-	-	-
	A-C	11.28	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-AC	2.57	4.44	0.578	-	1.33	1.34	-	20.1	0.53
	C-A	19.13	-	-	-	-	-	-	-	-
	C-B	0.15	9.38	0.016	-	0.02	0.02	-	0.2	0.11
	A-B	1.65	-	-	-	-	-	-	-	-
	A-C	11.28	-	-	-	-	-	-	-	-

Demand Set: Sum of Demand Sets for Modelling Period: 17:00 - 18:00
Modelling Period: 17:00-18:00

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-AC	2.43	2.81	**0.865**	-	0.00	3.55	-	38.1	1.34
	C-A	12.48	-	-	-	-	-	-	-	-
	C-B	0.45	6.76	0.067	-	0.00	0.07	-	1.0	0.16
	A-B	2.22	-	-	-	-	-	-	-	-
	A-C	19.38	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-AC	2.43	2.81	**0.865**	-	3.55	4.36	-	60.1	1.97
	C-A	12.48	-	-	-	-	-	-	-	-
	C-B	0.45	6.76	0.067	-	0.07	0.07	-	1.1	0.16
	A-B	2.22	-	-	-	-	-	-	-	-
	A-C	19.38	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-AC	2.43	2.81	**0.865**	-	4.36	4.79	-	68.9	2.14
	C-A	12.48	-	-	-	-	-	-	-	-
	C-B	0.45	6.76	0.067	-	0.07	0.07	-	1.1	0.16
	A-B	2.22	-	-	-	-	-	-	-	-
	A-C	19.38	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-AC	2.43	2.81	**0.865**	-	4.79	5.07	-	74.1	2.24
	C-A	12.48	-	-	-	-	-	-	-	-
	C-B	0.45	6.76	0.067	-	0.07	0.07	-	1.1	0.16
	A-B	2.22	-	-	-	-	-	-	-	-
	A-C	19.38	-	-	-	-	-	-	-	-

Entry capacities marked with an '(X)' are dominated by a pedestrian crossing in that time segment.
In time segments marked with a '(B)', traffic leaving the junction may block back from a crossing so impairing normal operation of the junction.
Delays marked with '##' could not be calculated.

Overall Queues & Delays

Queueing Delay Information Over Whole Period

Demand Set: Sum of Demand Sets for Modelling Period: 08:00 - 09:00
Modelling Period: 08:00-09:00

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	154.0	154.0	75.9	0.5	76.1	0.5
C-A	1148.0	1148.0	-	-	-	-
C-B	9.0	9.0	1.0	0.1	1.0	0.1
A-B	99.0	99.0	-	-	-	-
A-C	677.0	677.0	-	-	-	-
All	**2087.0**	**2087.0**	**76.9**	**0.0**	**77.1**	**0.0**

Demand Set: Sum of Demand Sets for Modelling Period: 17:00 - 18:00
Modelling Period: 17:00-18:00

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-AC	146.0	146.0	241.2	1.7	245.8	1.7
C-A	749.0	749.0	-	-	-	-
C-B	27.0	27.0	4.2	0.2	4.2	0.2
A-B	133.0	133.0	-	-	-	-
A-C	1163.0	1163.0	-	-	-	-
All	**2218.0**	**2218.0**	**245.5**	**0.1**	**250.0**	**0.1**

Delay is that occurring only within the time period.
Inclusive delay includes delay suffered by vehicles which are still queuing after the end of the time period.
These will only be significantly different if there is a large queue remaining at the end of the time period.

PICADY 5 Run Successful

Basic Results Summary

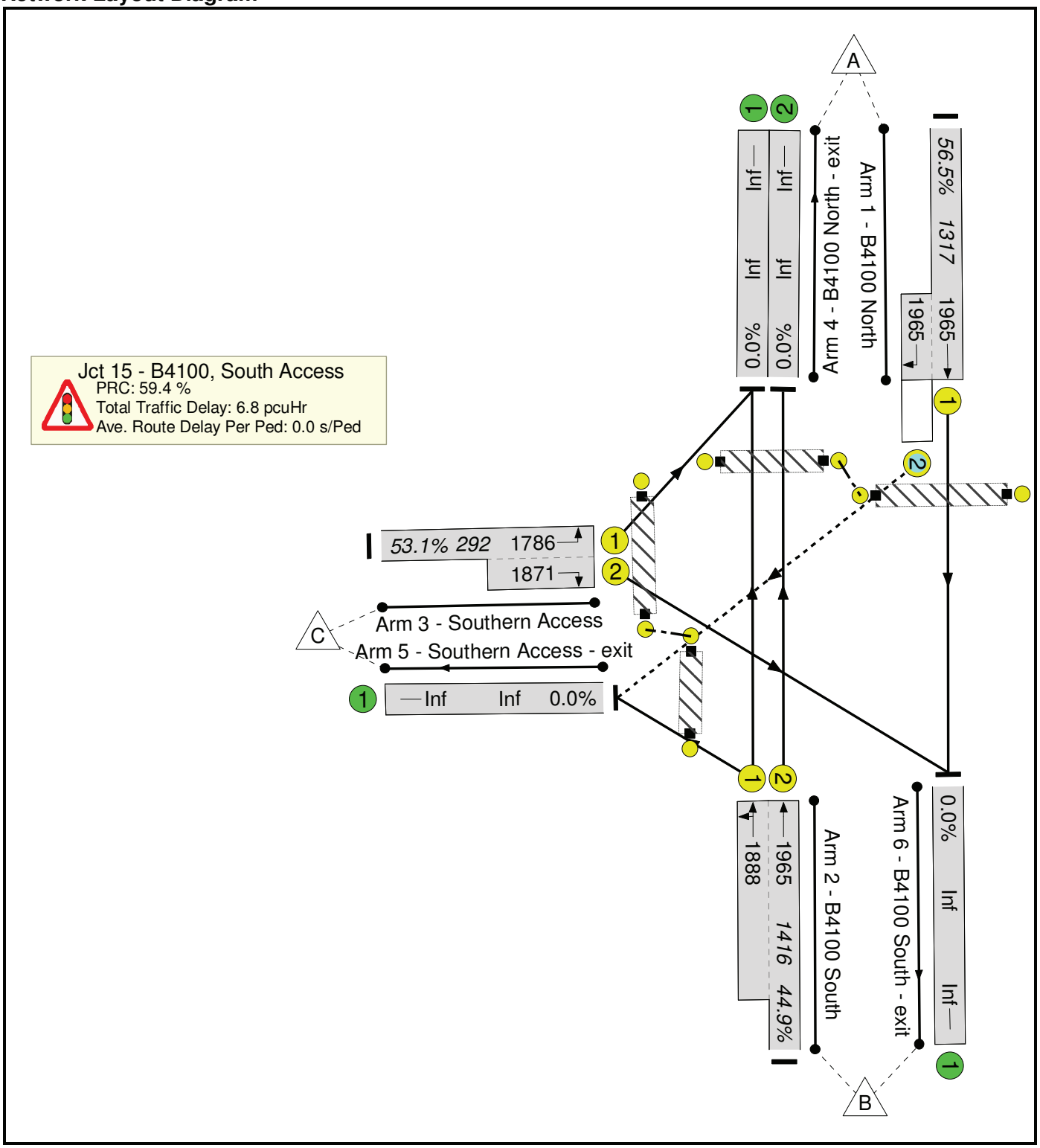
User and Project Details

Project:	
Title:	**Exemplar Site Southern Access Signalised Junction with full Dev 2031 LinSig results**
Location:	
File name:	Exemplar Site Southern Access Signalised Junction with full Dev 2031 LinSig results.lsg3x
Author:	HA
Company:	Hyder consulting
Address:	
Notes:	

Basic Results Summary

Scenario 1: '2031 AM Peak without dev' (FG1: 'AM Peak, 2031 without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J15	-	-	-		-	-	-	-	-	-	**56.5%**	**0**	**0**	**0**	**6.8**	-	-
Jct 15 - B4100, South Access	-	-	-		-	-	-	-	-	-	**56.5%**	**0**	**0**	**0**	**6.8**	-	-
1/1+1/2	B4100 North Right Ahead	U+O	A	H	1	58	9	744	1965:1965	1317	56.5%	0	0	0	2.2	10.8	10.2
2/2+2/1	B4100 South Ahead Left	U	B		1	45	-	636	1965:1888	1416	44.9%	-	-	-	2.5	14.3	4.9
3/1+3/2	Southern Access Left Right	U	C		1	12	-	155	1786:1871	292	53.1%	-	-	-	2.0	47.5	3.8
Ped Link: P1	Unnamed Ped Link	-	D		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	G		1	12	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	E		1	16	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P4	Unnamed Ped Link	-	F		1	62	-	0	-	0	0.0%	-	-	-	-	-	-

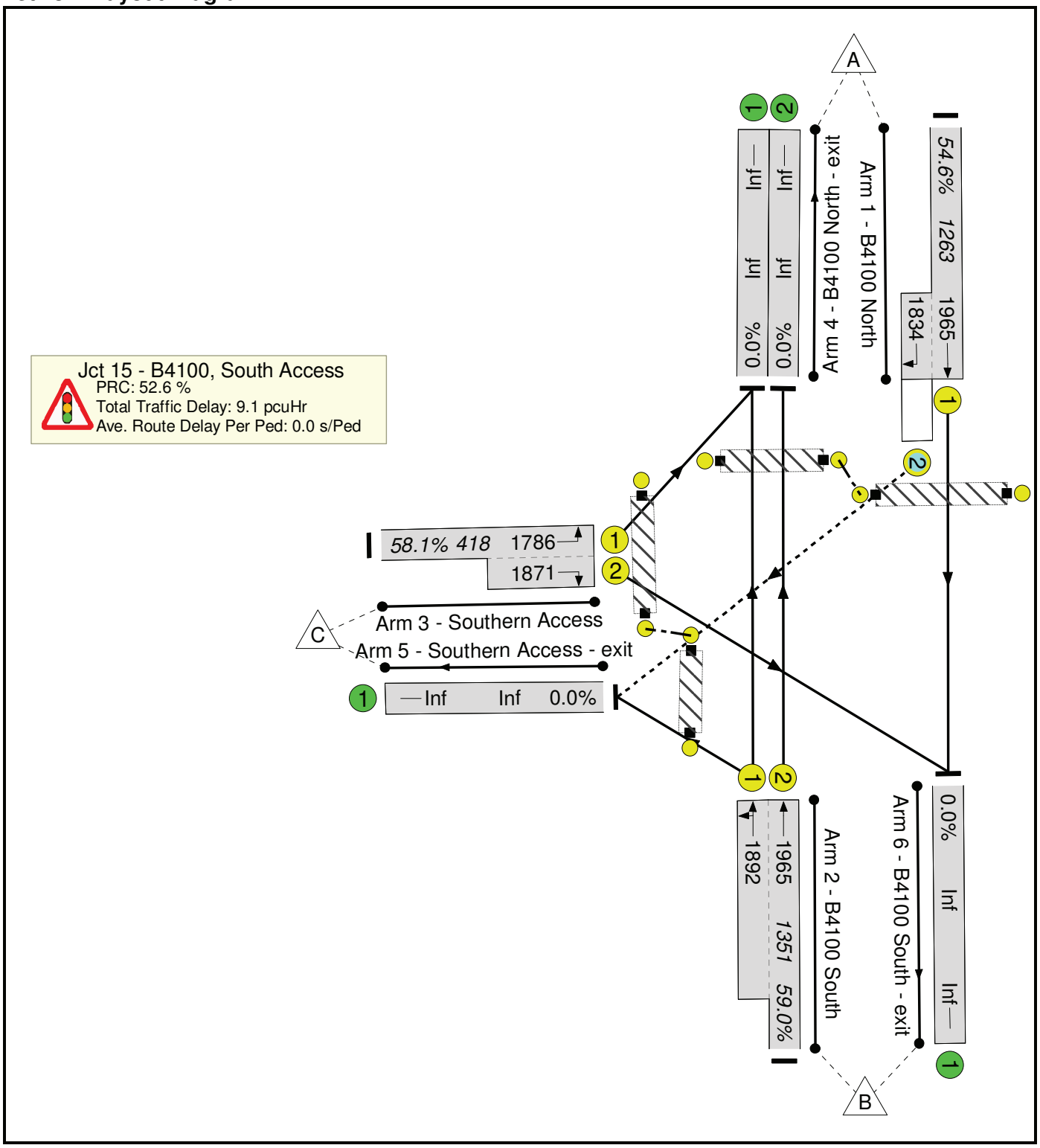
C1 PRC for Signalled Lanes (%): 59.4 Total Delay for Signalled Lanes (pcuHr): 6.81 Cycle Time (s): 88

PRC Over All Lanes (%): 59.4 Total Delay Over All Lanes(pcuHr): 6.81

Basic Results Summary

Scenario 2: '2031 AM Peak with dev' (FG3: 'AM Peak, 2031 with Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

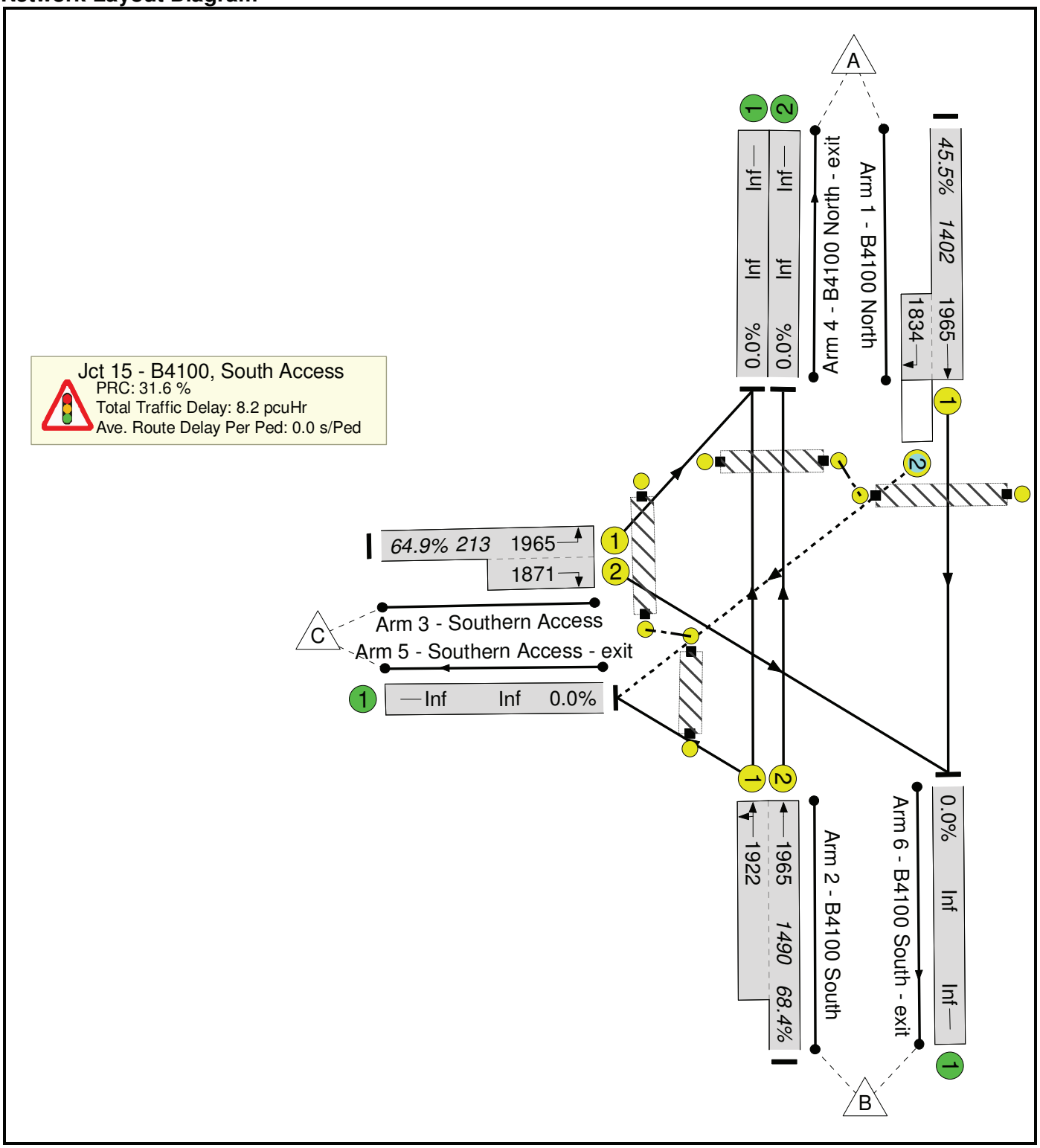
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J15	-	-	-		-	-	-	-	-	-	**59.0%**	**7**	**1**	**0**	**9.1**	-	-
Jct 15 - B4100, South Access	-	-	-		-	-	-	-	-	-	**59.0%**	**7**	**1**	**0**	**9.1**	-	-
1/1+1/2	B4100 North Right Ahead	U+O	A	H	1	55	9	689	1965:1834	1263	54.6%	7	1	0	2.3	12.1	9.7
2/2+2/1	B4100 South Ahead Left	U	B		1	42	-	797	1965:1892	1351	59.0%	-	-	-	3.9	17.7	7.0
3/1+3/2	Southern Access Left Right	U	C		1	15	-	243	1786:1871	418	58.1%	-	-	-	2.8	42.2	4.5
Ped Link: P1	Unnamed Ped Link	-	D		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	G		1	15	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	E		1	19	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P4	Unnamed Ped Link	-	F		1	59	-	0	-	0	0.0%	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 52.6 PRC Over All Lanes (%): 52.6 Total Delay for Signalled Lanes (pcuHr): 9.08 Total Delay Over All Lanes(pcuHr): 9.08 Cycle Time (s): 88

Basic Results Summary

Scenario 3: '2031 PM Peak without dev' (FG2: 'PM Peak, 2031 without Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J15	-	-	-		-	-	-	-	-	-	**68.4%**	**32**	**5**	**1**	**8.2**	-	-
Jct 15 - B4100, South Access	-	-	-		-	-	-	-	-	-	**68.4%**	**32**	**5**	**1**	**8.2**	-	-
1/1+1/2	B4100 North Right Ahead	U+O	A	H	1	61	9	638	1965:1834	1402	45.5%	32	5	1	1.4	8.1	6.7
2/2+2/1	B4100 South Ahead Left	U	B		1	48	-	1019	1965:1922	1490	68.4%	-	-	-	4.4	15.5	8.5
3/1+3/2	Southern Access Left Right	U	C		1	9	-	138	1965:1871	213	64.9%	-	-	-	2.3	60.9	4.1
Ped Link: P1	Unnamed Ped Link	-	D		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	G		1	9	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	E		1	13	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P4	Unnamed Ped Link	-	F		1	65	-	0	-	0	0.0%	-	-	-	-	-	-

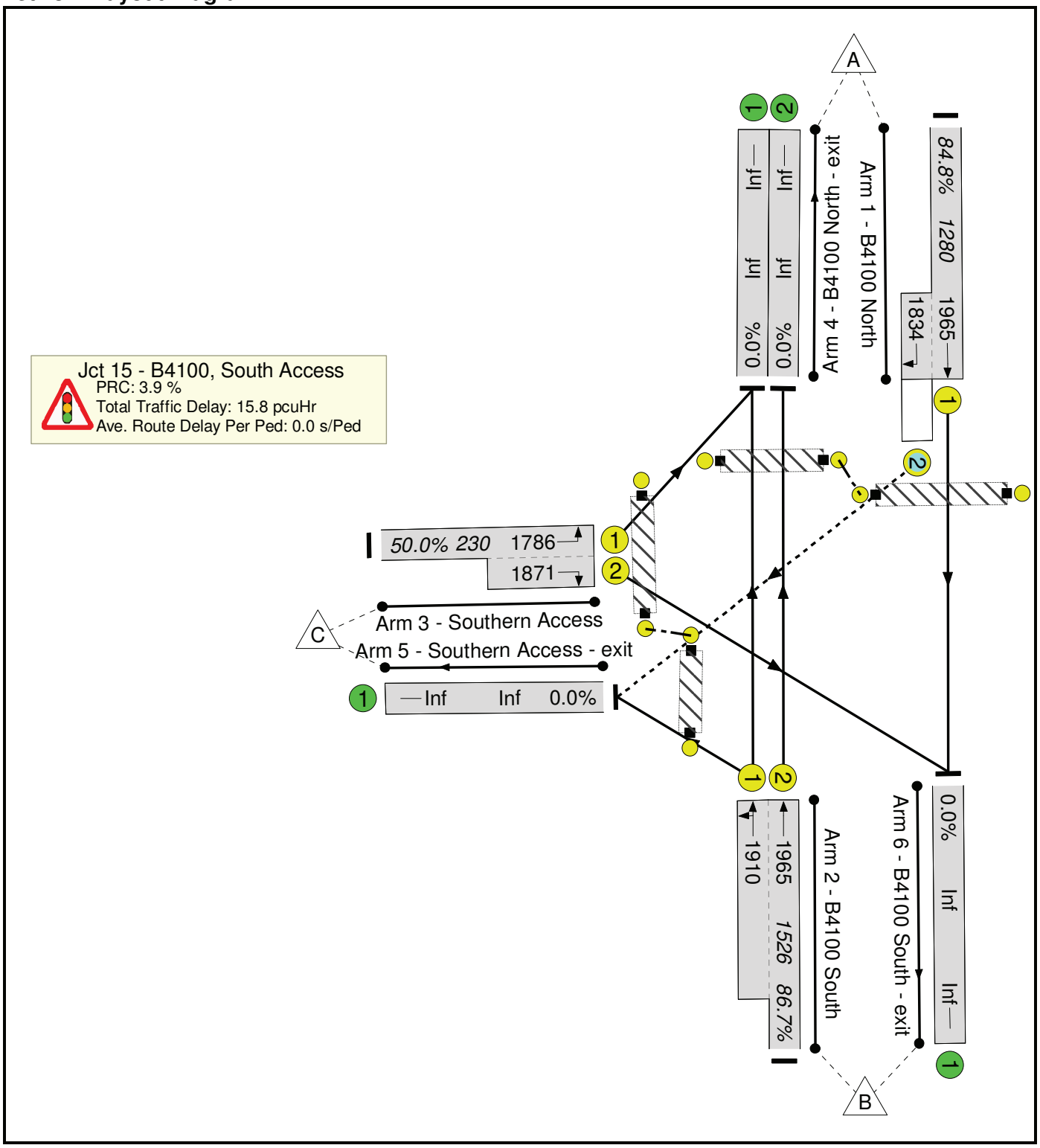
C1 PRC for Signalled Lanes (%): 31.6 Total Delay for Signalled Lanes (pcuHr): 8.17 Cycle Time (s): 88

PRC Over All Lanes (%): 31.6 Total Delay Over All Lanes(pcuHr): 8.17

Basic Results Summary

Scenario 4: '2031 PM Peak with dev' (FG4: 'PM Peak, 2031 with Development', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J15	-	-	-		-	-	-	-	-	-	**86.7%**	**0**	**245**	**9**	**15.8**	-	-
Jct 15 - B4100, South Access	-	-	-		-	-	-	-	-	-	**86.7%**	**0**	**245**	**9**	**15.8**	-	-
1/1+1/2	B4100 North Right Ahead	U+O	A	H	1	63	9	1086	1965:1834	1280	84.8%	0	245	9	6.6	21.9	15.6
2/2+2/1	B4100 South Ahead Left	U	B		1	50	-	1322	1965:1910	1526	86.7%	-	-	-	7.5	20.4	15.4
3/1+3/2	Southern Access Left Right	U	C		1	7	-	115	1786:1871	230	50.0%	-	-	-	1.7	53.3	2.5
Ped Link: P1	Unnamed Ped Link	-	D		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	G		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	E		1	11	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P4	Unnamed Ped Link	-	F		1	67	-	0	-	0	0.0%	-	-	-	-	-	-

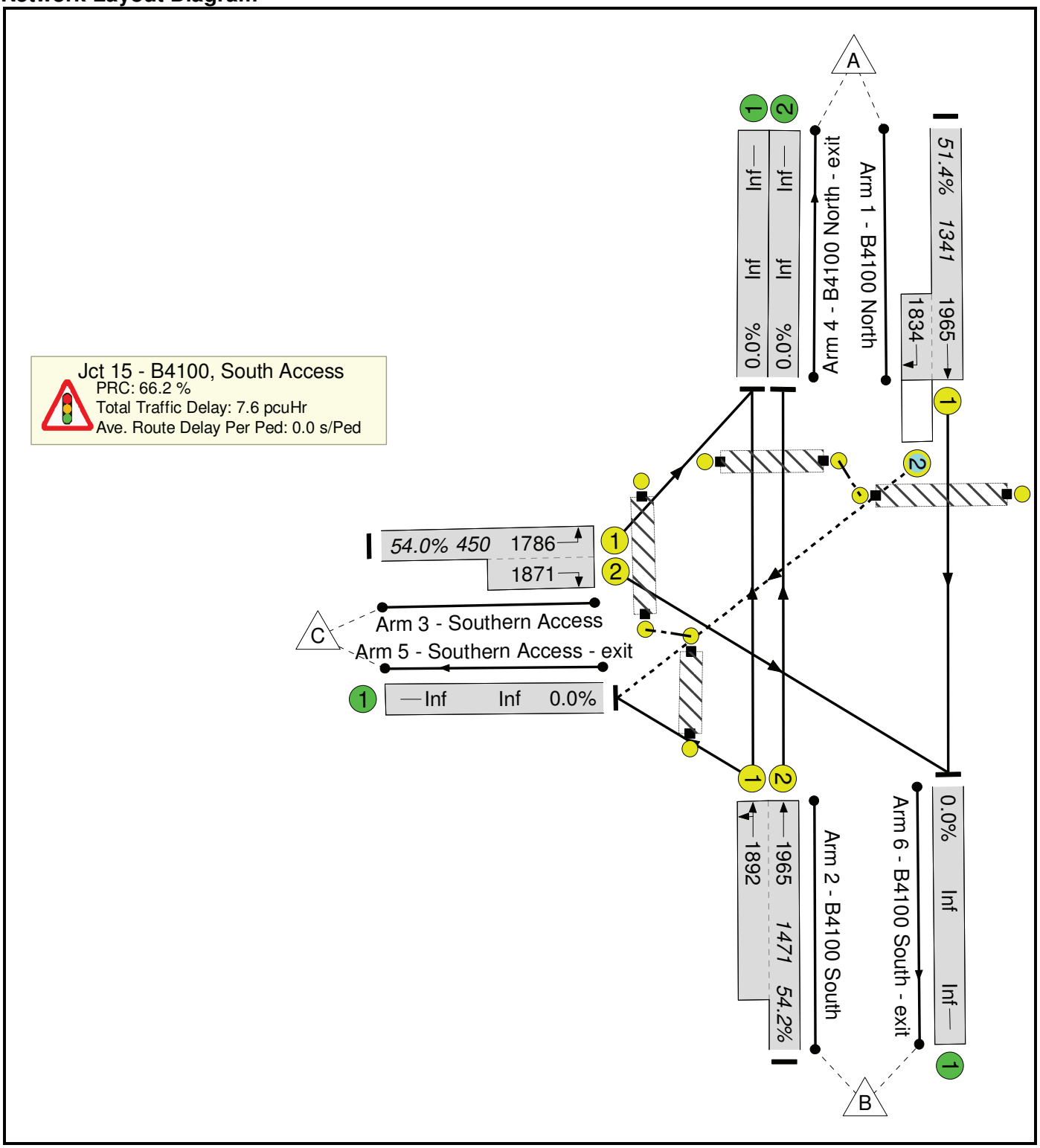
C1 PRC for Signalled Lanes (%): 3.9 Total Delay for Signalled Lanes (pcuHr): 15.81 Cycle Time (s): 88

PRC Over All Lanes (%): 3.9 Total Delay Over All Lanes(pcuHr): 15.81

Basic Results Summary

Scenario 5: '2031 AM Peak with dev ped 1 every 2 cycle' (FG3: 'AM Peak, 2031 with Development', Plan 2: 'Network Control Plan 2')

Network Layout Diagram



Basic Results Summary

Network Results

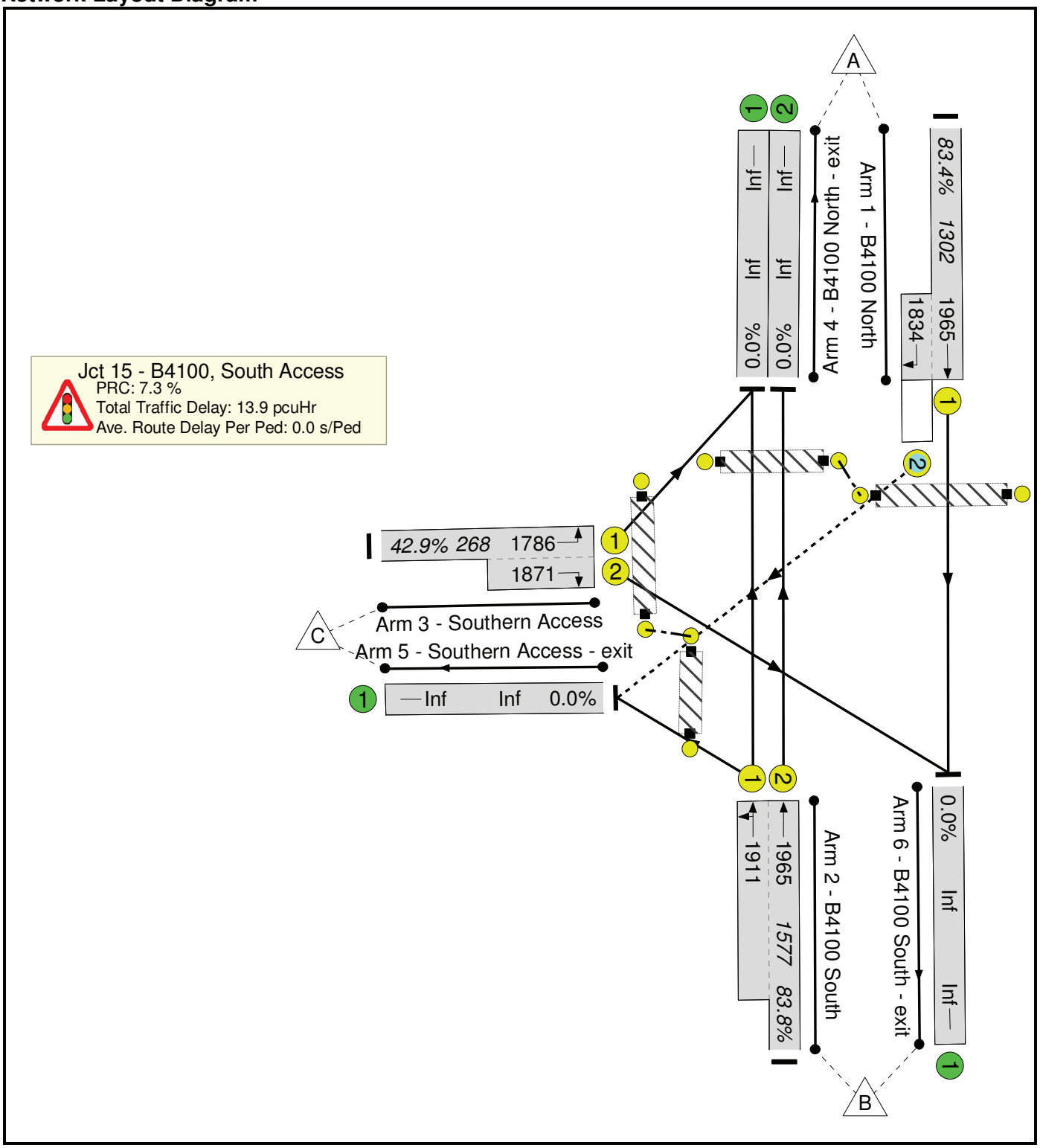
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J15	-	-	-		-	-	-	-	-	-	**54.2%**	**8**	**1**	**0**	**7.6**	-	-
Jct 15 - B4100, South Access	-	-	-		-	-	-	-	-	-	**54.2%**	**8**	**1**	**0**	**7.6**	-	-
1/1+1/2	B4100 North Right Ahead	U+O	A	H	2	117	13	689	1965:1834	1341	51.4%	8	1	0	1.9	9.8	8.8
2/2+2/1	B4100 South Ahead Left	U	B		2	95	-	797	1965:1892	1471	54.2%	-	-	-	3.1	13.9	6.3
3/1+3/2	Southern Access Left Right	U	C		2	33	-	243	1786:1871	450	54.0%	-	-	-	2.7	39.3	4.4
Ped Link: P1	Unnamed Ped Link	-	D		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	G		1	11	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	E		1	15	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P4	Unnamed Ped Link	-	F		1	57	-	0	-	0	0.0%	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 66.2 Total Delay for Signalled Lanes (pcuHr): 7.61 Cycle Time (s): 176
PRC Over All Lanes (%): 66.2 Total Delay Over All Lanes(pcuHr): 7.61

Basic Results Summary

Scenario 6: '2031 PM Peak with dev ped 1 every 2 cycle' (FG4: 'PM Peak, 2031 with Development', Plan 2: 'Network Control Plan 2')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J15	-	-	-		-	-	-	-	-	-	**83.8%**	**0**	**245**	**9**	**13.9**	-	-
Jct 15 - B4100, South Access	-	-	-		-	-	-	-	-	-	**83.8%**	**0**	**245**	**9**	**13.9**	-	-
1/1+1/2	B4100 North Right Ahead	U+O	A	H	2	133	20	1086	1965:1834	1302	83.4%	0	245	9	5.9	19.6	15.4
2/2+2/1	B4100 South Ahead Left	U	B		2	104	-	1322	1965:1911	1577	83.8%	-	-	-	6.4	17.5	14.4
3/1+3/2	Southern Access Left Right	U	C		2	17	-	115	1786:1871	268	42.9%	-	-	-	1.5	48.2	2.4
Ped Link: P1	Unnamed Ped Link	-	D		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	G		1	7	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	E		1	11	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P4	Unnamed Ped Link	-	F		1	68	-	0	-	0	0.0%	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 7.3 Total Delay for Signalled Lanes (pcuHr): 13.89 Cycle Time (s): 176
PRC Over All Lanes (%): 7.3 Total Delay Over All Lanes(pcuHr): 13.89

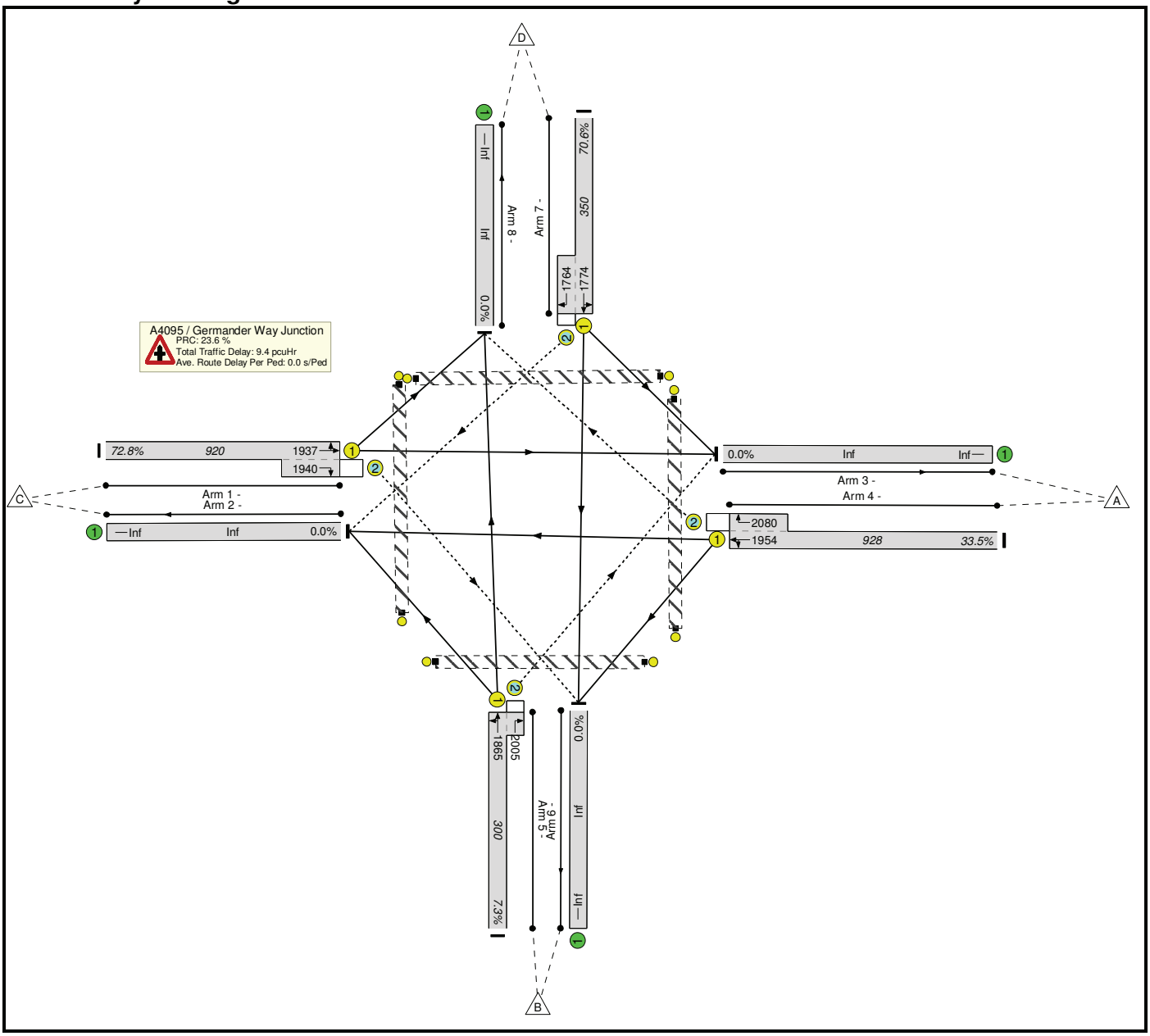
Basic Results Summary

User and Project Details

Project:	**Bicester**
Title:	**Lord's Lane/ Site Access/ Germander Way with Development 2031 LinSig model results (J17)**
Location:	
File name:	**Lord's Lane/ Site Access/ Germander Way with Development 2031 LinSig model results (J17)**
Author:	Fiachra de Bhuldh
Company:	
Address:	
Notes:	

Scenario 1: 'AM Scenario' (FG1: '2031 Full Dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Junction 17	-	-	-		-	-	-	-	-	-	**72.8%**	**51**	**0**	**0**	**9.4**	-	-
A4095 / Germander Way Junction	-	-	-		-	-	-	-	-	-	**72.8%**	**51**	**0**	**0**	**9.4**	-	-
1/1+1/2	Ahead Right Left	U+O	A		1	37	-	670	1937:1940	920	72.8%	0	0	0	4.5	24.0	13.2
4/1+4/2	Ahead Left Right	U+O	B		1	37	-	311	1954:2080	928	33.5%	0	0	0	1.4	16.0	4.5
5/1+5/2	Left Right Ahead	U+O	C		1	12	-	22	1865:2005	300	7.3%	0	0	0	0.2	35.0	0.4
7/1+7/2	Right Left Ahead	U+O	D		1	12	-	247	1774:1764	350	70.6%	51	0	0	3.3	48.5	5.3
Ped Link: P1	Unnamed Ped Link	-	E		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	E		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	E		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P4	Unnamed Ped Link	-	E		1	6	-	0	-	0	0.0%	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): 23.6
PRC Over All Lanes (%): 23.6

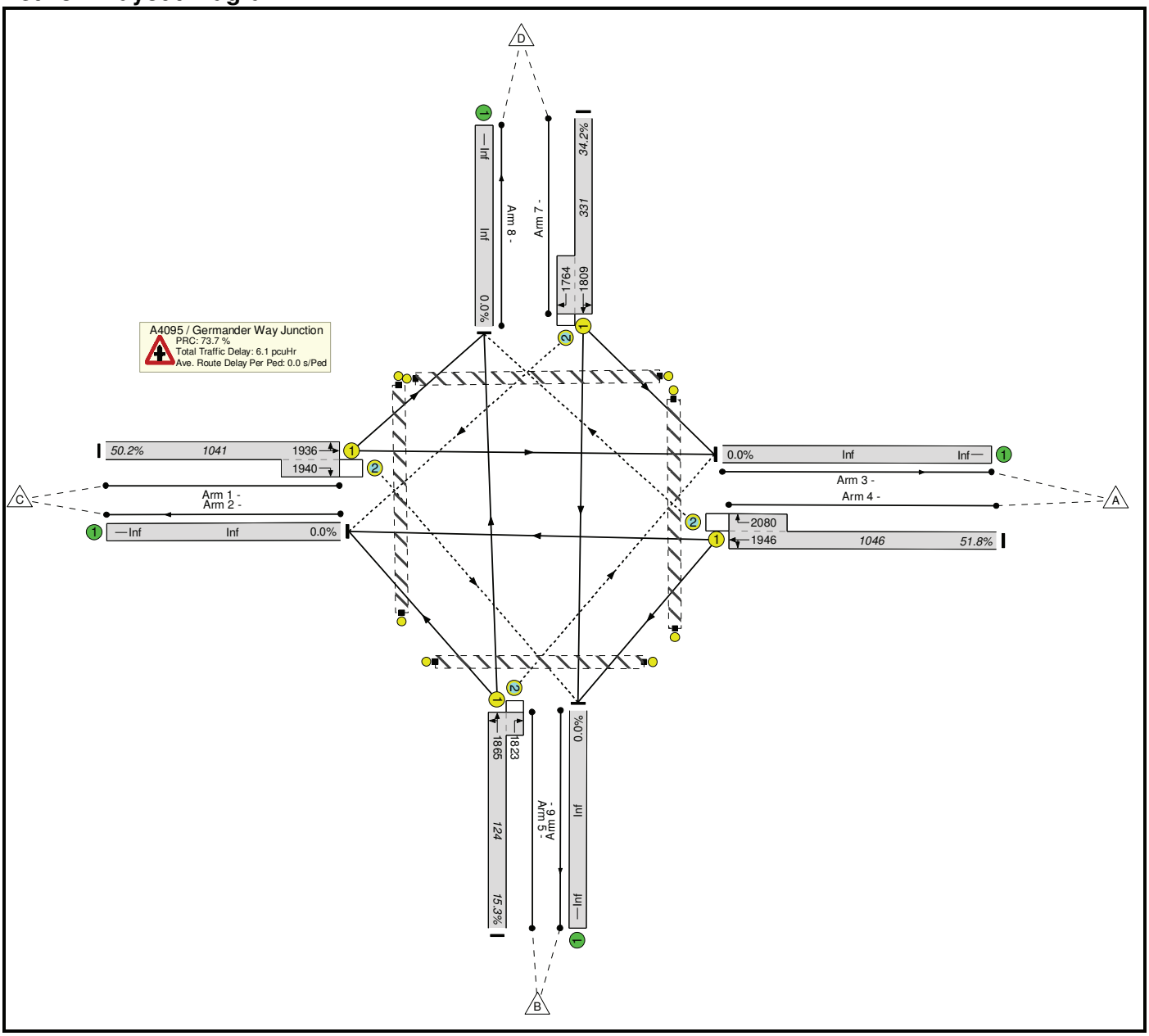
Total Delay for Signalled Lanes (pcuHr): 9.39
Total Delay Over All Lanes(pcuHr): 9.39

Cycle Time (s): 80

Basic Results Summary

Scenario 2: 'PM Scenario' (FG2: '2031 Full Dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Junction 17	-	-	-		-	-	-	-	-	-	**51.8%**	**71**	**0**	**0**	**6.1**	-	-
A4095 / Germander Way Junction	-	-	-		-	-	-	-	-	-	**51.8%**	**71**	**0**	**0**	**6.1**	-	-
1/1+1/2	Ahead Right Left	U+O	A		1	42	-	522	1936:1940	1041	50.2%	0	0	0	2.2	15.2	7.8
4/1+4/2	Ahead Left Right	U+O	B		1	42	-	542	1946:2080	1046	51.8%	0	0	0	2.3	15.4	8.2
5/1+5/2	Left Right Ahead	U+O	C		1	7	-	19	1865:1823	124	15.3%	16	0	0	0.3	52.6	0.4
7/1+7/2	Right Left Ahead	U+O	D		1	7	-	113	1809:1764	331	34.2%	55	0	0	1.3	42.4	1.5
Ped Link: P1	Unnamed Ped Link	-	E		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	E		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	E		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P4	Unnamed Ped Link	-	E		1	6	-	0	-	0	0.0%	-	-	-	-	-	-

C1

PRC for Signalled Lanes (%): 73.7
PRC Over All Lanes (%): 73.7

Total Delay for Signalled Lanes (pcuHr): 6.13
Total Delay Over All Lanes(pcuHr): 6.13

Cycle Time (s): 80

PICADY
GUI Version: 5.1 AE Analysis Program Release: 5.0 (MAY 2010) © Copyright TRL Limited, 2010 Adapted from PICADY/3 which is Crown Copyright by permission of the controller of HMSO
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Run Analysis

Parameter	Values
File Run	K:\..\J24\Site Access South from Middleton Stoney Road with Development 2031 PICADY model results (J24) .vpi
Date Run	30 July 2014
Time Run	13:26:22
Driving Side	Drive On The Left

Arm Names and Flow Scaling Factors

Arm	Arm Name	Flow Scaling Factor (%)
Arm A	B4030 West	100
Arm B	New Dev Access	100
Arm C	B4030 East	100

Stream Labelling Convention

Stream A-B contains traffic going from A to B etc.

Run Information

Parameter	Values
Run Title	Site Access South from Middleton Stoney Road (J24)
Location	Bicester
Date	19 May 2014
Enumerator	fda76470 [HCL51987]
Job Number	-
Status	-
Client	-
Description	-

Errors and Warnings

Parameter	Values
Warning	No Errors Or Warnings

Geometric Data

Geometric Parameters

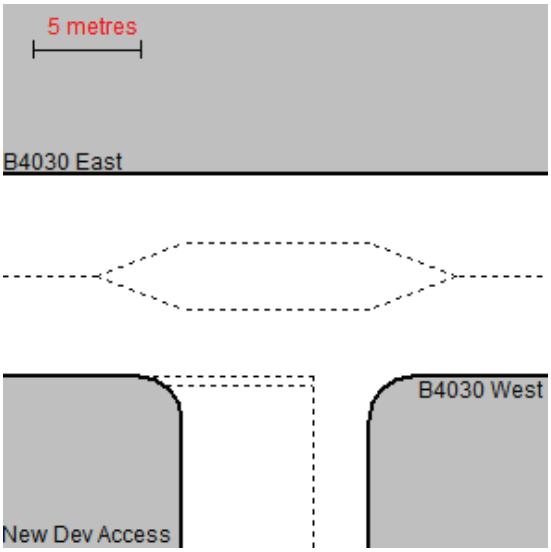
Parameter	Minor Arm B
Major Road Carriageway Width (m)	6.20
Major Road Kerbed Central Reserve Width (m)	0.00
Major Road Right Turning Lane Width (m)	3.00
Minor Road First Lane Width (m)	3.00
Minor Road Second Lane Width (m)	3.00
Minor Road Visibility To Right (m)	75
Minor Road Visibility To Left (m)	75
Major Road Right Turn Visibility (m)	150
Major Road Right Turn Blocks Traffic	Yes (if over 4 veh)

Slope and Intercept Values

Stream	Intercept for Stream	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	539.430	0.097	0.246	0.155	0.352
B-C	671.152	0.102	0.258	-	-
C-B	718.366	0.276	0.276	-	-

Note: Streams may be combined in which case capacity will be adjusted
These values do not allow for any site-specific corrections

Junction Diagram



Demand Data

Modelling Periods

Parameter	Period	Duration (min)	Segment Length (min)
First Modelling Period	08:00-09:00	60	15
Second Modelling Period	17:00-18:00	60	15

Direct Entry Flows

Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

Segment: 17:00-17:15

Arm	Flow (veh/interval)
Arm A	164.00
Arm B	47.75
Arm C	202.00

Segment: 17:15-17:30

Arm	Flow (veh/interval)
Arm A	164.00
Arm B	47.75
Arm C	202.00

Segment: 17:30-17:45

Arm	Flow (veh/interval)
Arm A	164.00
Arm B	47.75
Arm C	202.00

Segment: 17:45-18:00

Arm	Flow (veh/interval)
Arm A	164.00
Arm B	47.75
Arm C	202.00

Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

Segment: 08:00-08:15

Arm	Flow (veh/interval)
Arm A	189.00
Arm B	18.25
Arm C	153.75

Segment: 08:15-08:30

Arm	Flow (veh/interval)
Arm A	189.00
Arm B	18.25
Arm C	153.75

Segment: 08:30-08:45

Arm	Flow (veh/interval)
Arm A	189.00
Arm B	18.25
Arm C	153.75

Segment: 08:45-09:00

Arm	Flow (veh/interval)
Arm A	189.00
Arm B	18.25
Arm C	153.75

Turning Counts

Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

From/To	Arm A	Arm B	Arm C
Arm A	-	12	644
Arm B	18	-	173
Arm C	778	30	-

Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

From/To	Arm A	Arm B	Arm C
Arm A	-	9	747
Arm B	7	-	66
Arm C	466	149	-

Turning proportions are calculated from turning count data

Turning Proportions

Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

From/To	Arm A	Arm B	Arm C
Arm A	0.000	0.018	0.982
Arm B	0.094	0.000	0.906
Arm C	0.963	0.037	0.000

Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

From/To	Arm A	Arm B	Arm C
Arm A	0.000	0.012	0.988
Arm B	0.096	0.000	0.904
Arm C	0.758	0.242	0.000

Heavy Vehicles Percentages

Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

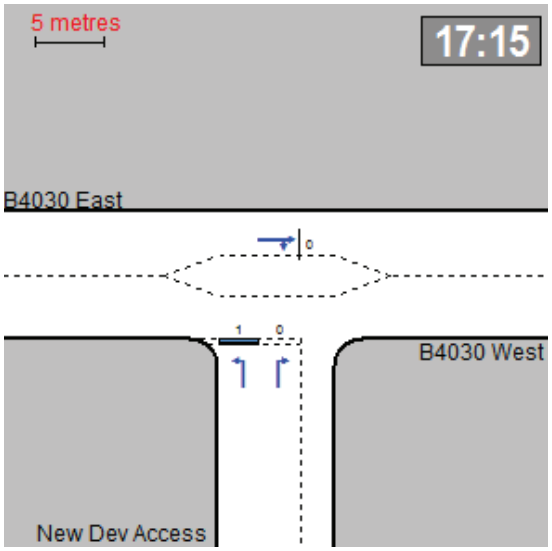
Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

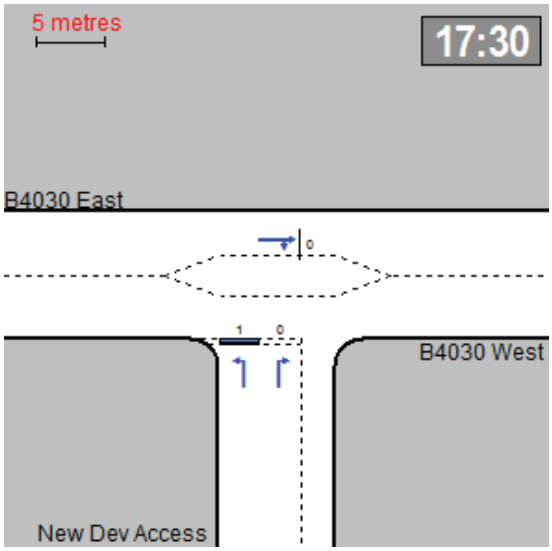
Queue Diagrams

Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00
View Extent: 40m

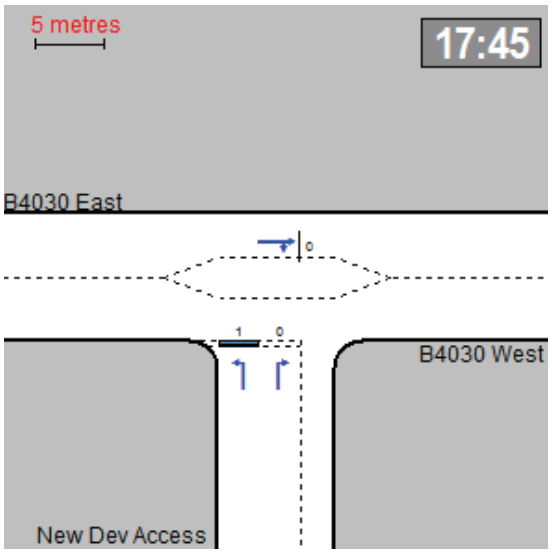
Queue Interval 1: 17:00-17:15



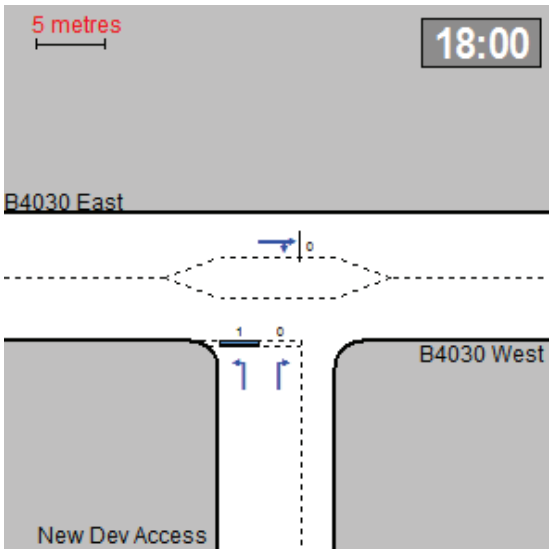
Queue Interval 2: 17:15-17:30



Queue Interval 3: 17:30-17:45

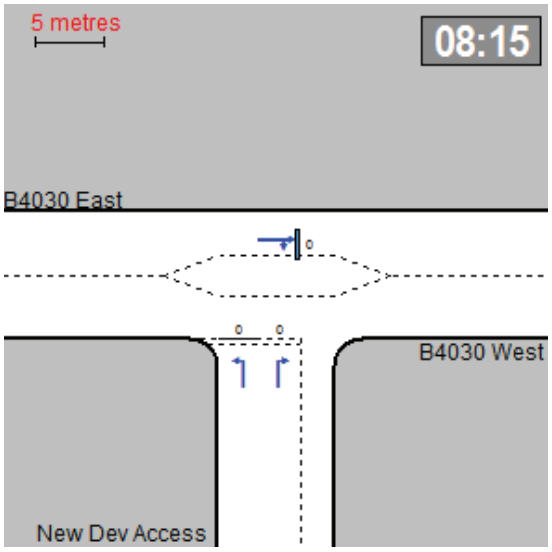


Queue Interval 4: 17:45-18:00

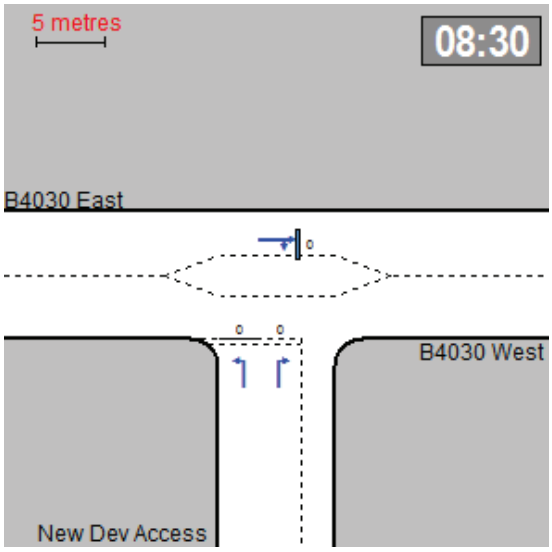


Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00
View Extent: 40m

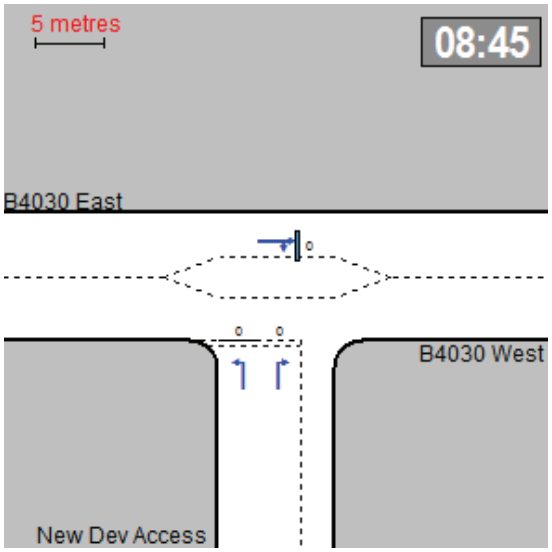
Queue Interval 1: 08:00-08:15



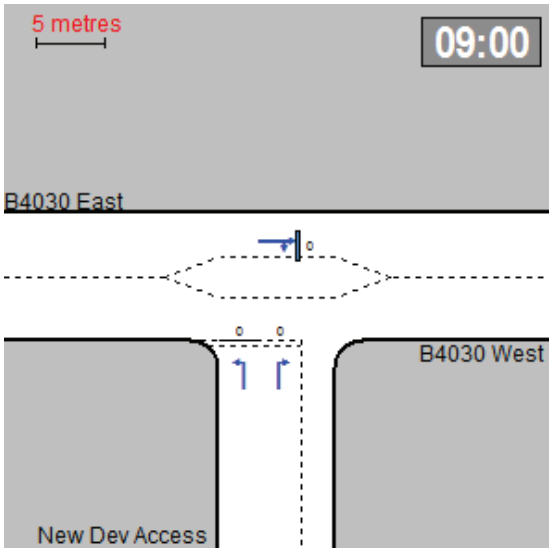
Queue Interval 2: 08:15-08:30



Queue Interval 3: 08:30-08:45

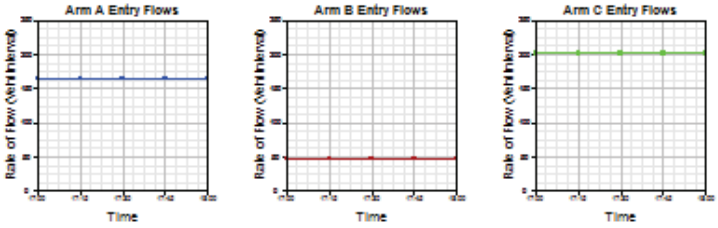


Queue Interval 4: 08:45-09:00

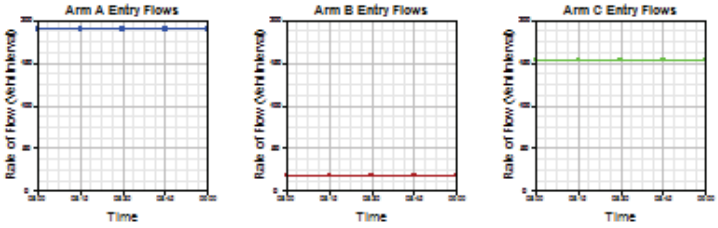


Demand Data Graph

Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

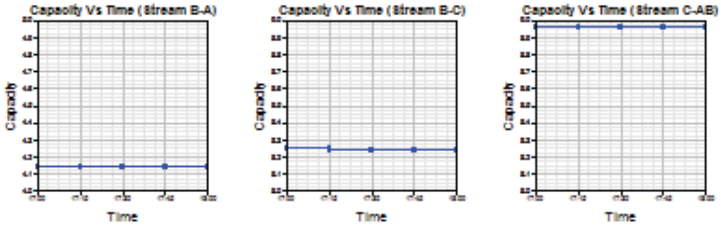


Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

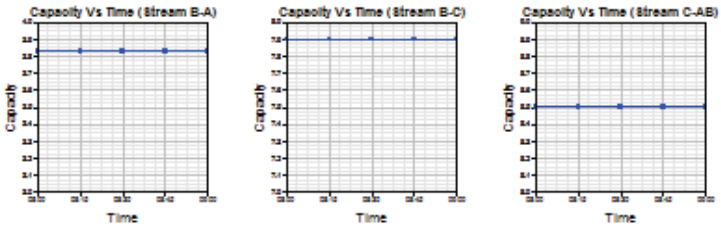


Capacity Graph

Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

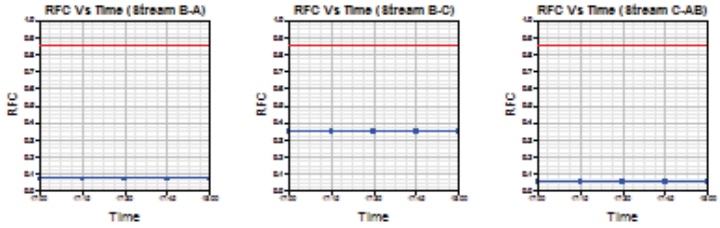


Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

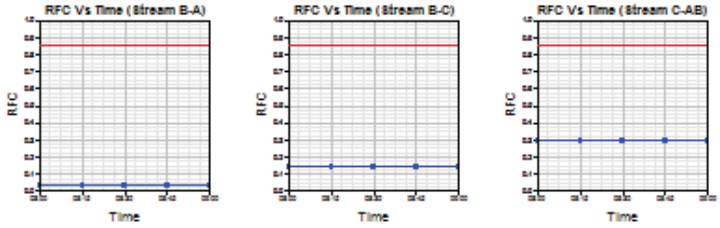


RFC Graph

Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

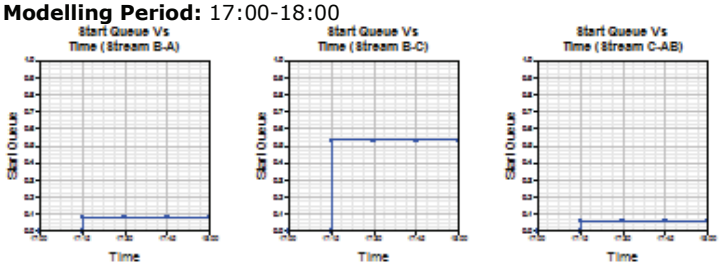


Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

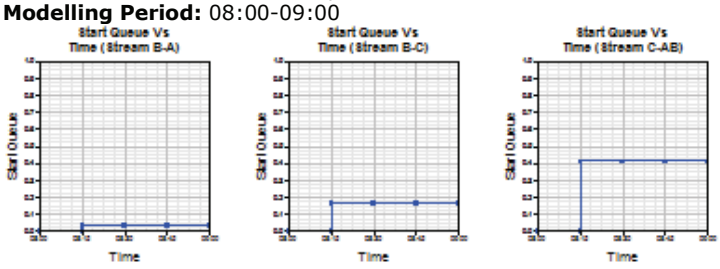


Start Queue Graph

Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

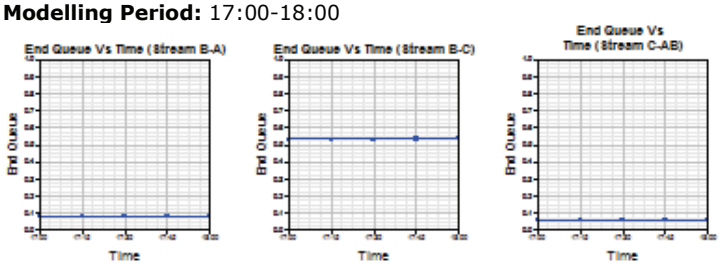


Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

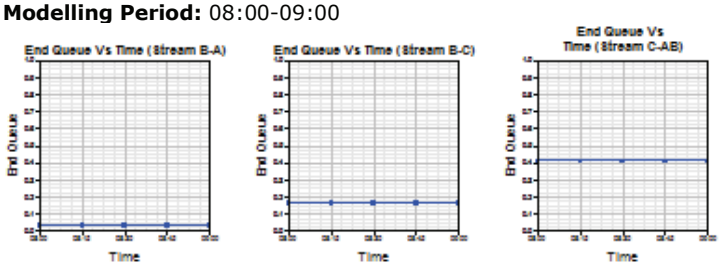


End Queue Graph

Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

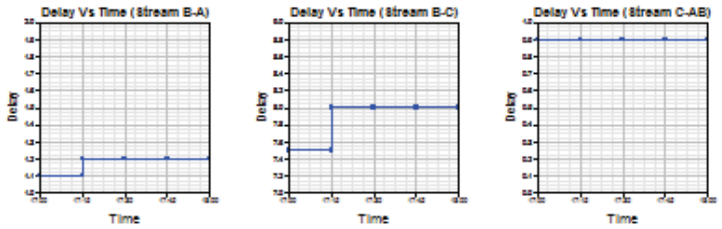


Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

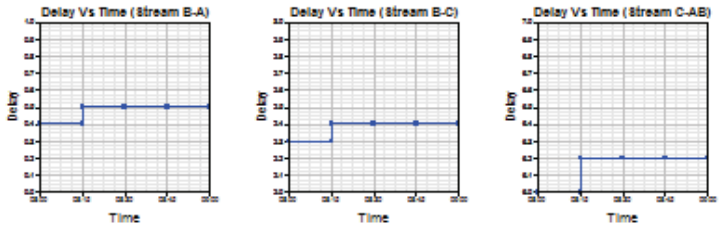


Delay Graph

Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00



Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00



Queues & Delays

Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-A	0.30	4.14	0.072	-	0.00	0.08	-	1.1	0.26
	B-C	2.88	8.25	0.350	-	0.00	0.53	-	7.5	0.18
	C-AB	0.50	8.96	0.056	-	0.00	0.06	-	0.9	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.20	-	-	-	-	-	-	-	-
	A-C	10.73	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-A	0.30	4.14	0.072	-	0.08	0.08	-	1.2	0.26
	B-C	2.88	8.24	0.350	-	0.53	0.53	-	8.0	0.19
	C-AB	0.50	8.96	0.056	-	0.06	0.06	-	0.9	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.20	-	-	-	-	-	-	-	-
	A-C	10.73	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-A	0.30	4.14	0.072	-	0.08	0.08	-	1.2	0.26
	B-C	2.88	8.24	0.350	-	0.53	0.53	-	8.0	0.19
	C-AB	0.50	8.96	0.056	-	0.06	0.06	-	0.9	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.20	-	-	-	-	-	-	-	-
	A-C	10.73	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-A	0.30	4.14	0.072	-	0.08	0.08	-	1.2	0.26
	B-C	2.88	8.24	0.350	-	0.53	0.54	-	8.0	0.19
	C-AB	0.50	8.96	0.056	-	0.06	0.06	-	0.9	0.12
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.20	-	-	-	-	-	-	-	-
	A-C	10.73	-	-	-	-	-	-	-	-

Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-A	0.12	3.83	0.030	-	0.00	0.03	-	0.4	0.27
	B-C	1.10	7.90	0.139	-	0.00	0.16	-	2.3	0.15
	C-AB	2.48	8.50	0.292	-	0.00	0.41	-	6.0	0.16
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.15	-	-	-	-	-	-	-	-
	A-C	12.45	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-A	0.12	3.83	0.030	-	0.03	0.03	-	0.5	0.27
	B-C	1.10	7.90	0.139	-	0.16	0.16	-	2.4	0.15
	C-AB	2.48	8.50	0.292	-	0.41	0.41	-	6.2	0.17
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.15	-	-	-	-	-	-	-	-
	A-C	12.45	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-A	0.12	3.83	0.031	-	0.03	0.03	-	0.5	0.27
	B-C	1.10	7.90	0.139	-	0.16	0.16	-	2.4	0.15
	C-AB	2.48	8.50	0.292	-	0.41	0.41	-	6.2	0.17
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.15	-	-	-	-	-	-	-	-
	A-C	12.45	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-A	0.12	3.83	0.031	-	0.03	0.03	-	0.5	0.27
	B-C	1.10	7.90	0.139	-	0.16	0.16	-	2.4	0.15
	C-AB	2.48	8.50	0.292	-	0.41	0.41	-	6.2	0.17
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.15	-	-	-	-	-	-	-	-
	A-C	12.45	-	-	-	-	-	-	-	-

Entry capacities marked with an '(X)' are dominated by a pedestrian crossing in that time segment.
In time segments marked with a '(B)', traffic leaving the junction may block back from a crossing so impairing normal operation of the junction.
Delays marked with '##' could not be calculated.

Overall Queues & Delays

Queueing Delay Information Over Whole Period

Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-A	18.0	18.0	4.6	0.3	4.6	0.3
B-C	173.0	173.0	31.5	0.2	31.5	0.2
C-AB	30.0	30.0	3.5	0.1	3.5	0.1
C-A	-	-	-	-	-	-
A-B	12.0	12.0	-	-	-	-
A-C	644.0	644.0	-	-	-	-
All	**1655.0**	**1655.0**	**39.6**	**0.0**	**39.6**	**0.0**

Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-A	7.0	7.0	1.8	0.3	1.8	0.3
B-C	66.0	66.0	9.5	0.1	9.5	0.1
C-AB	149.0	149.0	24.7	0.2	24.7	0.2
C-A	-	-	-	-	-	-
A-B	9.0	9.0	-	-	-	-
A-C	747.0	747.0	-	-	-	-
All	**1444.0**	**1444.0**	**36.1**	**0.0**	**36.1**	**0.0**

Delay is that occurring only within the time period.
Inclusive delay includes delay suffered by vehicles which are still queuing after the end of the time period.
These will only be significantly different if there is a large queue remaining at the end of the time period.

PICADY 5 Run Successful

PICADY
GUI Version: 5.1 AE Analysis Program Release: 5.0 (MAY 2010) © Copyright TRL Limited, 2010 Adapted from PICADY/3 which is Crown Copyright by permission of the controller of HMSO
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The user of this computer program for the solution of an engineering problem is in no way relieved of their responsibility for the correctness of the solution

Run Analysis

Parameter	Values
File Run	C:\..\Desktop\Site Access North from Middleton Stoney Road with Development 2031 PICADY model results (J25).vpi
Date Run	30 July 2014
Time Run	16:29:58
Driving Side	Drive On The Left

Arm Names and Flow Scaling Factors

Arm	Arm Name	Flow Scaling Factor (%)
Arm A	B4030 West	100
Arm B	New Dev Access	100
Arm C	B4030 East	100

Stream Labelling Convention

Stream A-B contains traffic going from A to B etc.

Run Information

Parameter	Values
Run Title	Southern Access (J25)
Location	Bicester
Date	19 May 2014
Enumerator	fda76470 [HCL51987]
Job Number	-
Status	-
Client	-
Description	-

Errors and Warnings

Parameter	Values
Warning	No Errors Or Warnings

Geometric Data

Geometric Parameters

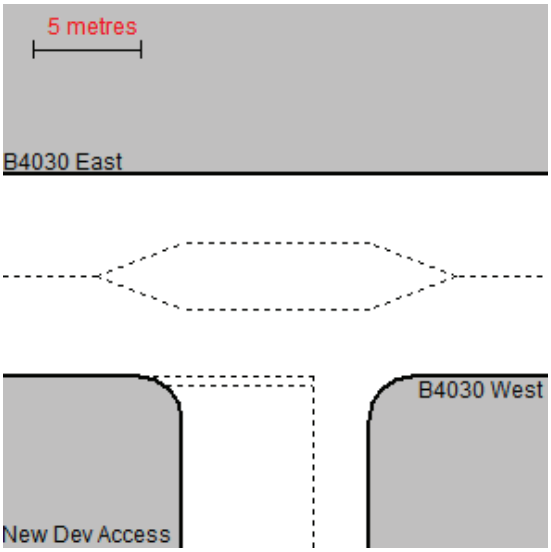
Parameter	Minor Arm B
Major Road Carriageway Width (m)	6.20
Major Road Kerbed Central Reserve Width (m)	0.00
Major Road Right Turning Lane Width (m)	3.00
Minor Road First Lane Width (m)	3.00
Minor Road Second Lane Width (m)	3.00
Minor Road Visibility To Right (m)	75
Minor Road Visibility To Left (m)	75
Major Road Right Turn Visibility (m)	150
Major Road Right Turn Blocks Traffic	Yes (if over 4 veh)

Slope and Intercept Values

Stream	Intercept for Stream	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	539.430	0.097	0.246	0.155	0.352
B-C	671.152	0.102	0.258	-	-
C-B	718.366	0.276	0.276	-	-

Note: Streams may be combined in which case capacity will be adjusted
These values do not allow for any site-specific corrections

Junction Diagram



Demand Data

Modelling Periods

Parameter	Period	Duration (min)	Segment Length (min)
First Modelling Period	08:00-09:00	60	15
Second Modelling Period	17:00-18:00	60	15

Direct Entry Flows

Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

Segment: 08:00-08:15

Arm	Flow (veh/interval)
Arm A	113.75
Arm B	100.75
Arm C	118.50

Segment: 08:15-08:30

Arm	Flow (veh/interval)
Arm A	113.75
Arm B	100.75
Arm C	118.50

Segment: 08:30-08:45

Arm	Flow (veh/interval)
Arm A	113.75
Arm B	100.75
Arm C	118.50

Segment: 08:45-09:00

Arm	Flow (veh/interval)
Arm A	113.75
Arm B	100.75
Arm C	118.50

Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

Segment: 17:00-17:15

Arm	Flow (veh/interval)
Arm A	114.00
Arm B	77.00
Arm C	199.00

Segment: 17:15-17:30

Arm	Flow (veh/interval)
Arm A	114.00
Arm B	77.00
Arm C	199.00

Segment: 17:30-17:45

Arm	Flow (veh/interval)
Arm A	114.00
Arm B	77.00
Arm C	199.00

Segment: 17:45-18:00

Arm	Flow (veh/interval)
Arm A	114.00
Arm B	77.00
Arm C	199.00

Turning Counts

Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

From/To	Arm A	Arm B	Arm C
Arm A	-	48	407
Arm B	55	-	348
Arm C	244	230	-

Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

From/To	Arm A	Arm B	Arm C
Arm A	-	66	390
Arm B	42	-	266
Arm C	531	265	-

Turning proportions are calculated from turning count data

Turning Proportions

Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

From/To	Arm A	Arm B	Arm C
Arm A	0.000	0.105	0.895
Arm B	0.136	0.000	0.864
Arm C	0.515	0.485	0.000

Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

From/To	Arm A	Arm B	Arm C
Arm A	0.000	0.145	0.855
Arm B	0.136	0.000	0.864
Arm C	0.667	0.333	0.000

Heavy Vehicles Percentages

Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

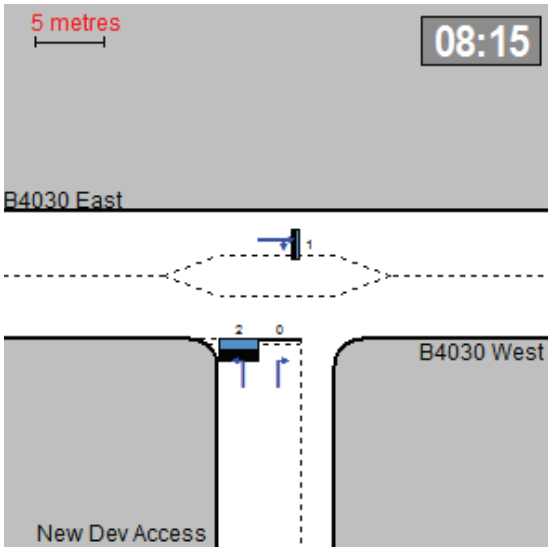
Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

From/To	Arm A	Arm B	Arm C
Arm A	-	0.0	0.0
Arm B	0.0	-	0.0
Arm C	0.0	0.0	-

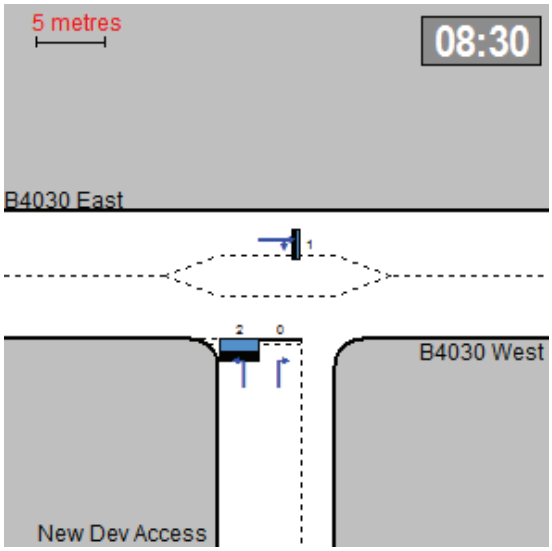
Queue Diagrams

Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00
View Extent: 40m

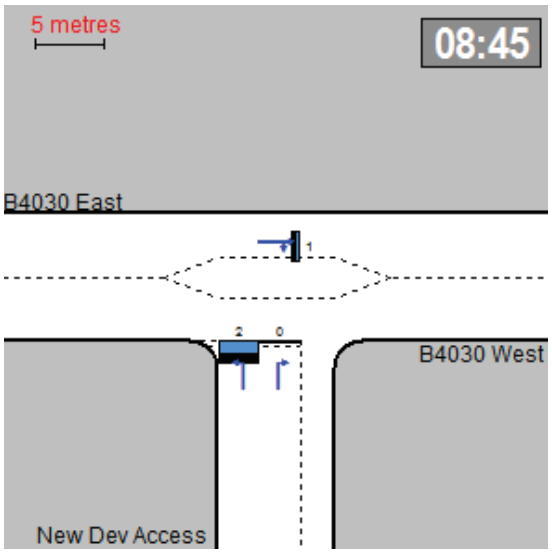
Queue Interval 1: 08:00-08:15



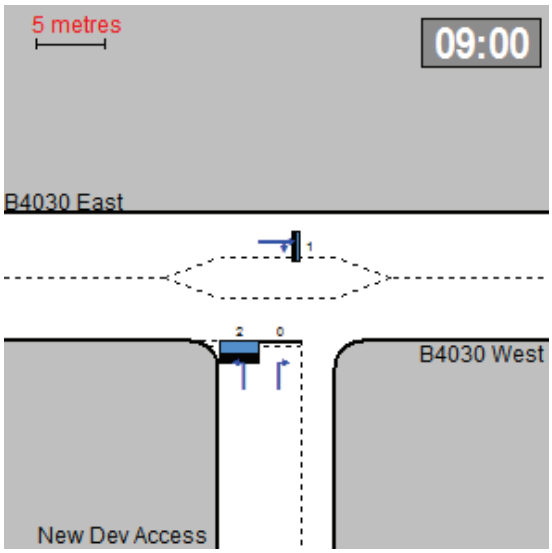
Queue Interval 2: 08:15-08:30



Queue Interval 3: 08:30-08:45

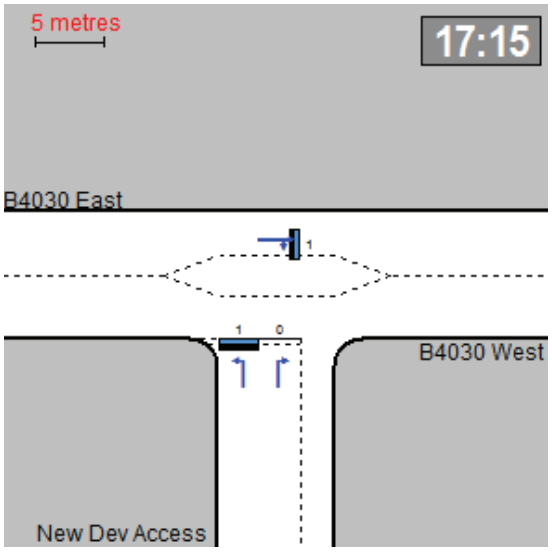


Queue Interval 4: 08:45-09:00

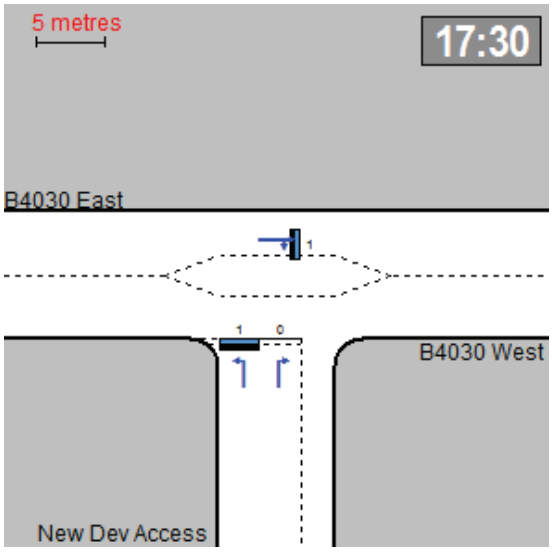


Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00
View Extent: 40m

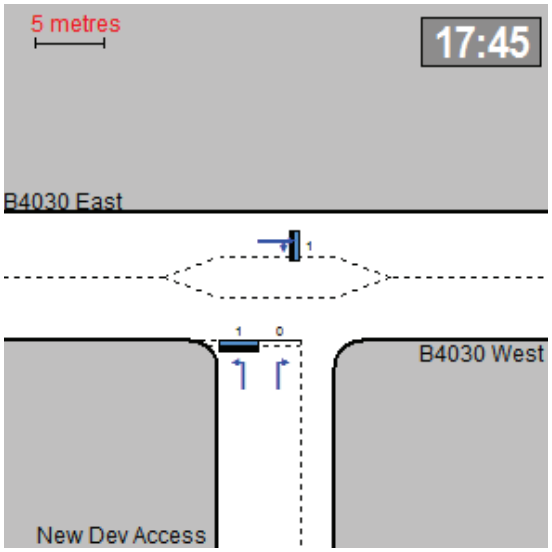
Queue Interval 1: 17:00-17:15



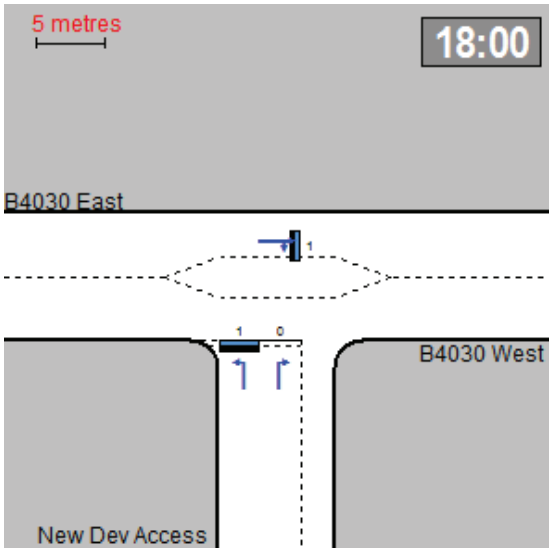
Queue Interval 2: 17:15-17:30



Queue Interval 3: 17:30-17:45

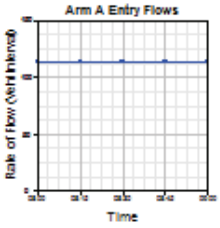


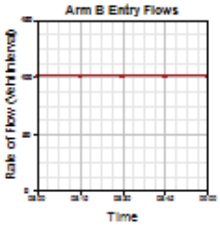
Queue Interval 4: 17:45-18:00

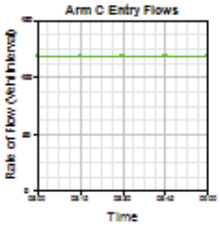


Demand Data Graph

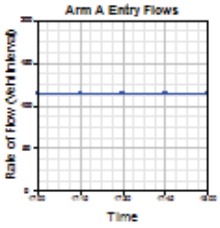
Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

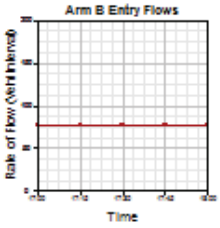


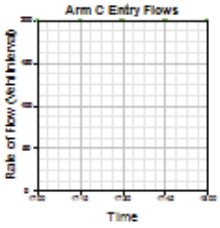




Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

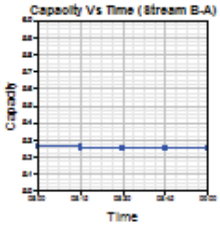


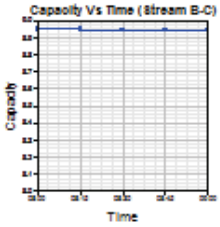


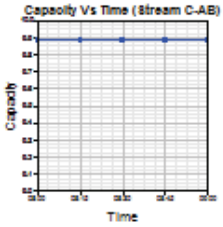


Capacity Graph

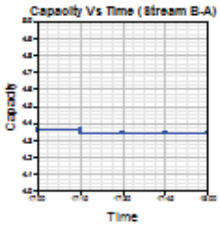
Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

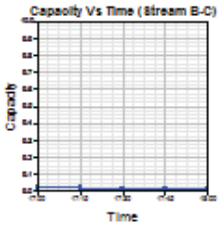


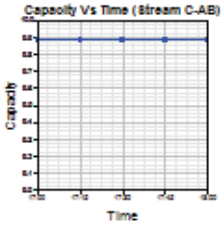




Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

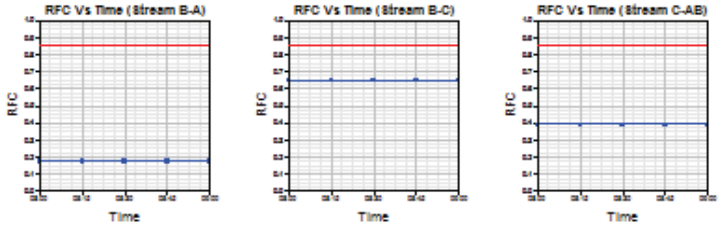




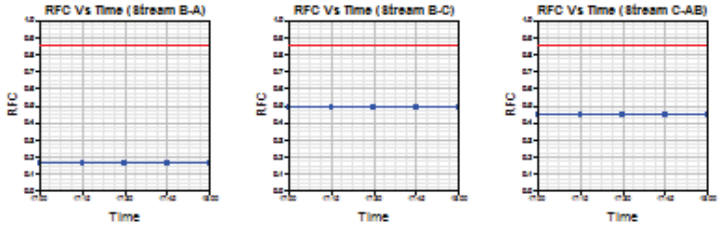


RFC Graph

Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

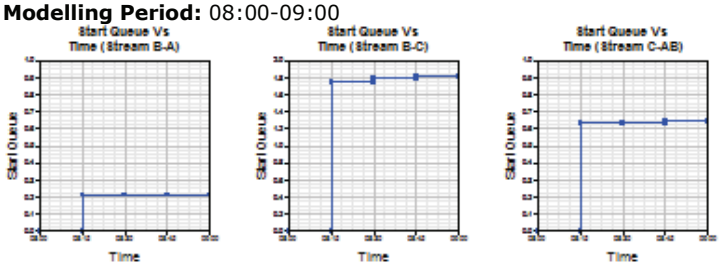


Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

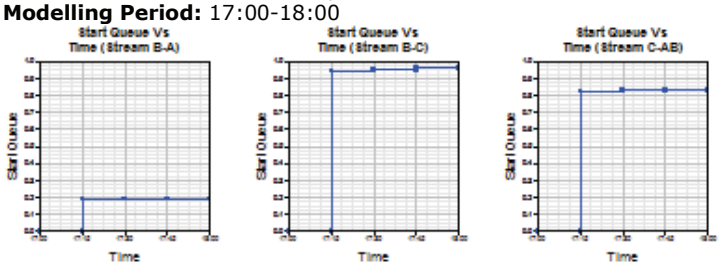


Start Queue Graph

Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

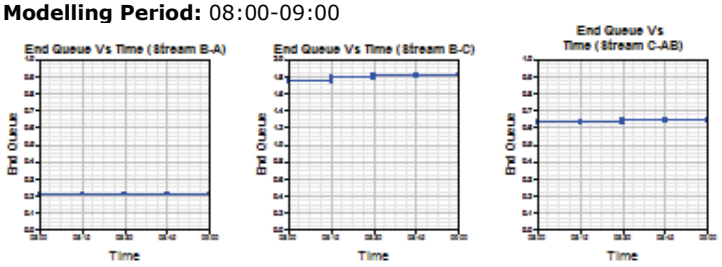


Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

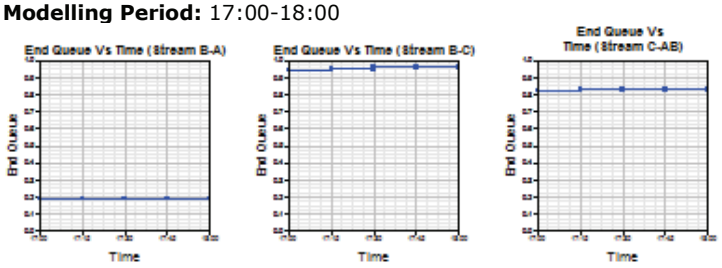


End Queue Graph

Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

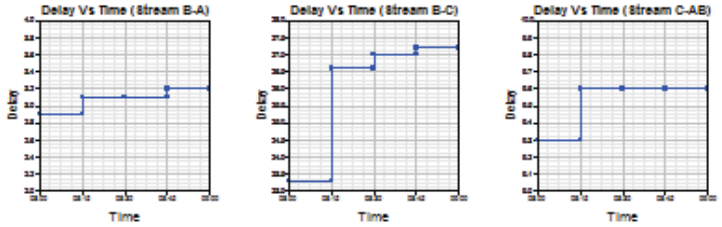


Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

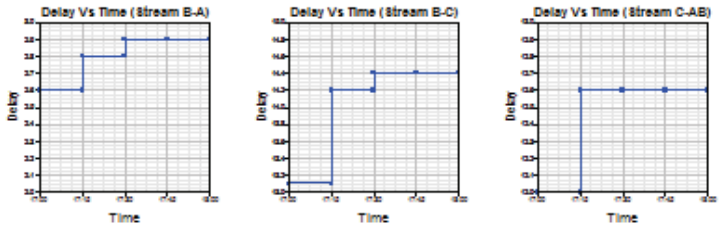


Delay Graph

Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00



Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00



Queues & Delays

Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:00-08:15	B-A	0.92	5.26	0.174	-	0.00	0.21	-	2.9	0.23
	B-C	5.80	8.95	0.648	-	0.00	1.74	-	23.3	0.30
	C-AB	3.83	9.88	0.388	-	0.00	0.63	-	9.3	0.16
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.80	-	-	-	-	-	-	-	-
	A-C	6.78	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:15-08:30	B-A	0.92	5.25	0.175	-	0.21	0.21	-	3.1	0.23
	B-C	5.80	8.94	0.649	-	1.74	1.79	-	26.6	0.32
	C-AB	3.83	9.88	0.388	-	0.63	0.63	-	9.6	0.17
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.80	-	-	-	-	-	-	-	-
	A-C	6.78	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:30-08:45	B-A	0.92	5.25	0.175	-	0.21	0.21	-	3.1	0.23
	B-C	5.80	8.94	0.649	-	1.79	1.81	-	27.0	0.32
	C-AB	3.83	9.88	0.388	-	0.63	0.64	-	9.6	0.17
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.80	-	-	-	-	-	-	-	-
	A-C	6.78	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
08:45-09:00	B-A	0.92	5.25	0.175	-	0.21	0.21	-	3.2	0.23
	B-C	5.80	8.94	0.649	-	1.81	1.82	-	27.2	0.32
	C-AB	3.83	9.88	0.388	-	0.64	0.64	-	9.6	0.17
	C-A	-	-	-	-	-	-	-	-	-
	A-B	0.80	-	-	-	-	-	-	-	-
	A-C	6.78	-	-	-	-	-	-	-	-

Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:00-17:15	B-A	0.70	4.36	0.161	-	0.00	0.19	-	2.6	0.27
	B-C	4.43	9.02	0.491	-	0.00	0.94	-	13.1	0.21
	C-AB	4.42	9.88	0.447	-	0.00	0.82	-	12.0	0.18
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.10	-	-	-	-	-	-	-	-
	A-C	6.50	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:15-17:30	B-A	0.70	4.34	0.161	-	0.19	0.19	-	2.8	0.27
	B-C	4.43	9.01	0.492	-	0.94	0.95	-	14.2	0.22
	C-AB	4.42	9.88	0.447	-	0.82	0.83	-	12.6	0.18
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.10	-	-	-	-	-	-	-	-
	A-C	6.50	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:30-17:45	B-A	0.70	4.34	0.161	-	0.19	0.19	-	2.9	0.27
	B-C	4.43	9.01	0.492	-	0.95	0.96	-	14.4	0.22
	C-AB	4.42	9.88	0.447	-	0.83	0.83	-	12.6	0.18
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.10	-	-	-	-	-	-	-	-
	A-C	6.50	-	-	-	-	-	-	-	-

Segment	Stream	Demand (veh/min)	Capacity (veh/min)	RFC	Ped. Flow (ped/min)	Start Queue (veh)	End Queue (veh)	Geometric Delay (veh.min/ segment)	Delay (veh.min/ segment)	Mean Arriving Vehicle Delay (min)
17:45-18:00	B-A	0.70	4.34	0.161	-	0.19	0.19	-	2.9	0.27
	B-C	4.43	9.01	0.492	-	0.96	0.96	-	14.4	0.22
	C-AB	4.42	9.88	0.447	-	0.83	0.83	-	12.6	0.18
	C-A	-	-	-	-	-	-	-	-	-
	A-B	1.10	-	-	-	-	-	-	-	-
	A-C	6.50	-	-	-	-	-	-	-	-

Entry capacities marked with an '(X)' are dominated by a pedestrian crossing in that time segment.
In time segments marked with a '(B)', traffic leaving the junction may block back from a crossing so impairing normal operation of the junction.
Delays marked with '##' could not be calculated.

Overall Queues & Delays

Queueing Delay Information Over Whole Period

Demand Set: 2031 Full Development AM
Modelling Period: 08:00-09:00

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-A	55.0	55.0	12.4	0.2	12.4	0.2
B-C	348.0	348.0	104.2	0.3	104.4	0.3
C-AB	230.0	230.0	38.0	0.2	38.1	0.2
C-A	-	-	-	-	-	-
A-B	48.0	48.0	-	-	-	-
A-C	407.0	407.0	-	-	-	-
All	**1332.0**	**1332.0**	**154.6**	**0.1**	**154.8**	**0.1**

Demand Set: 2031 Full Development PM
Modelling Period: 17:00-18:00

Stream	Total Demand (veh)	Total Demand (veh/h)	Queueing Delay (min)	Queueing Delay (min/veh)	Inclusive Delay (min)	Inclusive Delay (min/veh)
B-A	42.0	42.0	11.2	0.3	11.2	0.3
B-C	266.0	266.0	56.1	0.2	56.1	0.2
C-AB	265.0	265.0	49.7	0.2	49.7	0.2
C-A	-	-	-	-	-	-
A-B	66.0	66.0	-	-	-	-
A-C	390.0	390.0	-	-	-	-
All	**1560.0**	**1560.0**	**116.9**	**0.1**	**117.0**	**0.1**

Delay is that occurring only within the time period.
Inclusive delay includes delay suffered by vehicles which are still queuing after the end of the time period.
These will only be significantly different if there is a large queue remaining at the end of the time period.

PICADY 5 Run Successful

ARCADY 6

GUI Version: 6.2 AG
Analysis Program: Release 7.0 (FEBRUARY 2010)

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The user of this computer program for the solution of an engineering problem is in no way relieved of their responsibility for the correctness of the solution

Run Information

Run with file:- **k:\UA005241 - Bicester Traffic Modelling\D-Calcs\Traffic Modelling\J13\A4421 Skimmingdish Lane Buckingham Road ARCADY model AM (J13) Reference Case.vai**
At: **17:14:41 on Wednesday, July 30, 2014**
Mode: **Drive On The Left**
Units: **Metric**

Arm Labelling

Arm	Full Arm Names
Arm A	A4421 Skimmingdish Lane
Arm B	Buckingham Road
Arm C	A4095 West
Arm D	A4421 North

Flow Scaling Factor

Arm	Flow Scaling Factor (%)
Arm A	100
Arm B	100
Arm C	100
Arm D	100

File Properties

Run Title	A4421 Skimmingdish Lane Buckingham Road ARCADY model AM (13) Reference Case
Location	Bicester
Date	05/06/2014
Client	
Enumerator	fda76470 [HCL51987]
Job Number	
Status	
Description	

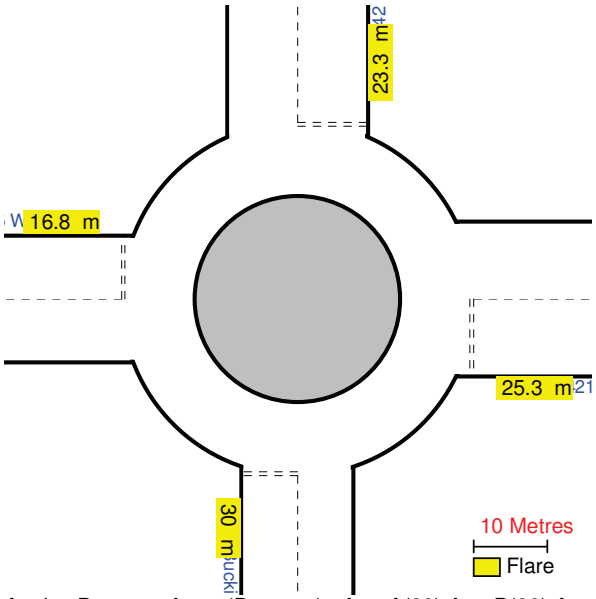
Errors and Warnings

[No errors or warnings]

Geometric Data

Data Item	Arm A	Arm B	Arm C	Arm D
Approach Road Half-Width (m)	3.50	3.35	3.45	3.50
Entry Width (m)	10.50	7.67	8.61	9.60
Flare Length (m)	25.30	30.00	16.80	23.30
Entry Radius (m)	15.50	21.00	25.00	42.50
Inscribed Circle Diameter (m)	49.00	49.00	49.00	49.00
Entry Angle (degrees)	34.00	32.50	26.00	17.00
Slope	0.686	0.649	0.653	0.731
Intercept (PCU/Min)	35.402	31.650	31.287	36.882

Junction Diagram: (View Extent = 80m)



Angles Between Arms (Degrees): Arm A(90) Arm B(90) Arm C(90) Arm D(90)

Demand Data

Demand Profiles are Synthesised using **DIRECT** Data
Period of interest (for Queue and Delay calculations): **08:00 to 09:00**
Length of Time Period: **60 min**
Length of Time Segment: **15 min**

Direct Data for Demand Set: AM No Development

Time Period	Arm	Demand Data (Veh/Min)
Segment : 1 - 08:00 to 08:15	A	9.33
	B	12.55
	C	19.03
	D	18.58
Segment : 2 - 08:15 to 08:30	A	9.33
	B	12.55
	C	19.03
	D	18.58
Segment : 3 - 08:30 to 08:45	A	9.33
	B	12.55
	C	19.03
	D	18.58
Segment : 4 - 08:45 to 09:00	A	9.33
	B	12.55
	C	19.03
	D	18.58

Turning Proportions for Demand Set: AM No Development

Turning proportions vary over entry and calculated from turning count data (shaded)

Time Period	From/To	Arm A	Arm B	Arm C	Arm D
08:00 to 09:00	Arm A	0.000	0.007	0.654	0.339
		0.0	4.0	366.0	190.0
	Arm B	0.345	0.000	0.113	0.542
		260.0	0.0	85.0	408.0
	Arm C	0.883	0.025	0.000	0.093
		999.0	28.0	0.0	105.0
	Arm D	0.318	0.424	0.257	0.000
		355.0	473.0	287.0	0.0

Heavy Vehicle Percentages for Demand Set: AM No Development

Vehicle percentages constant over time and entry

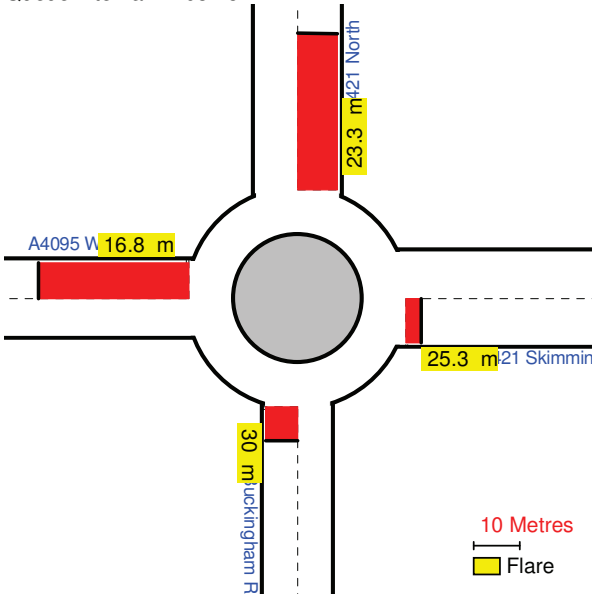
Time Period	From/To	Arm A	Arm B	Arm C	Arm D
08:00 to 09:00	Arm A	0.0	0.0	0.0	0.0
	Arm B	0.0	0.0	0.0	0.0
	Arm C	0.0	0.0	0.0	0.0
	Arm D	0.0	0.0	0.0	0.0

Queue Diagrams: (View Extent = 80m)

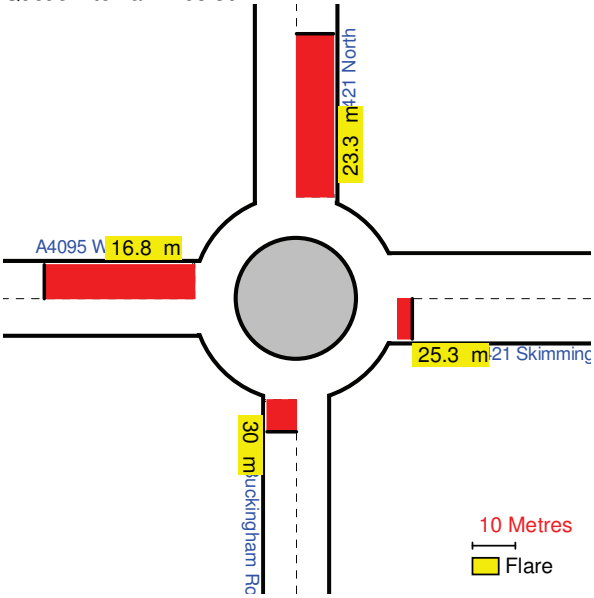
Queue Length	Colour
Mean Queue	
5 th % ile	
90 th % ile	
95 th % ile	

Start Time: 08:00---> End Time: 09:00

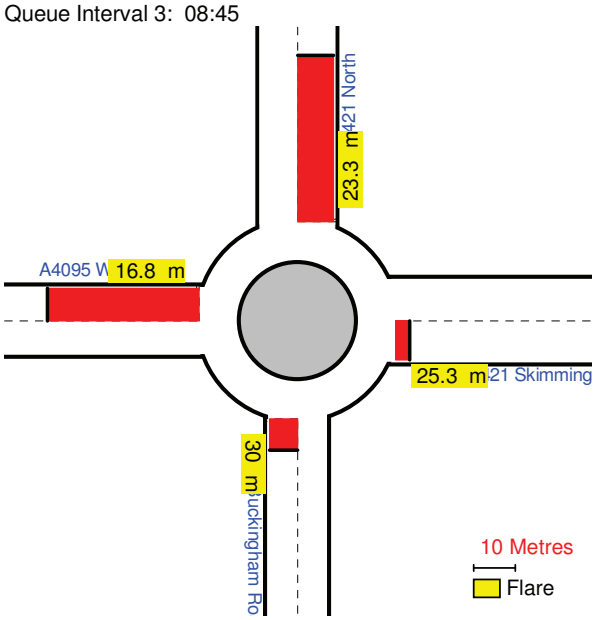
Queue Interval 1: 08:15



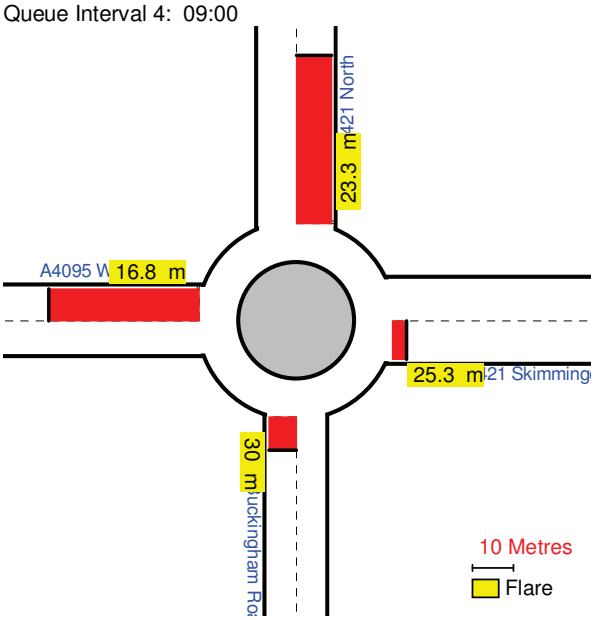
Queue Interval 2: 08:30



Queue Interval 3: 08:45

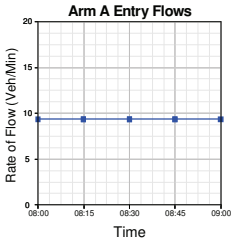


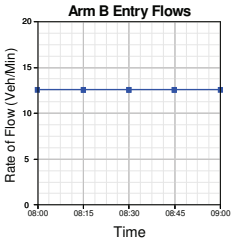
Queue Interval 4: 09:00

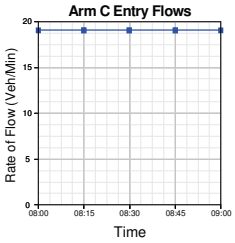


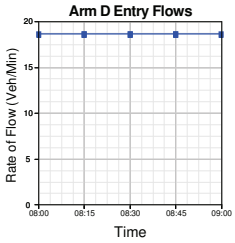
Demand Data Graphs

Direct Entry/Exit Flows for Demand Set: AM No Development



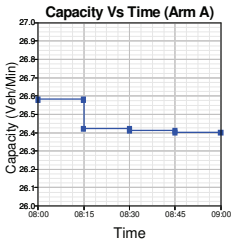


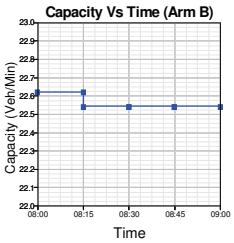


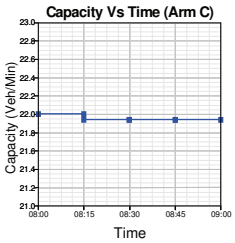


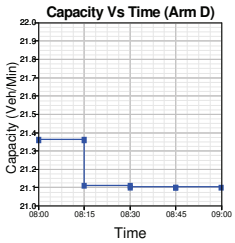
Capacity (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)



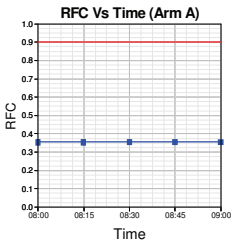


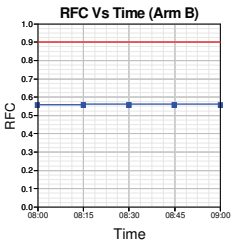


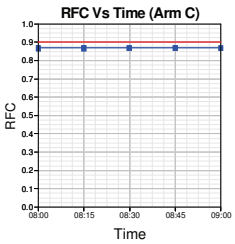


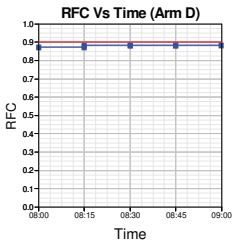
RFC (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)



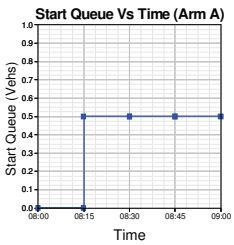


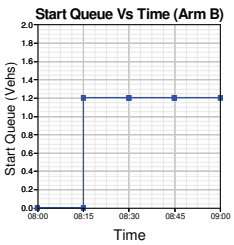


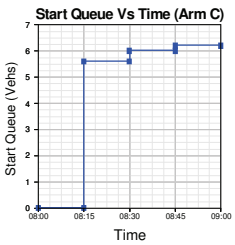


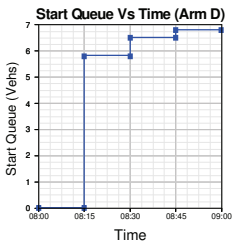
Start Queue (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)



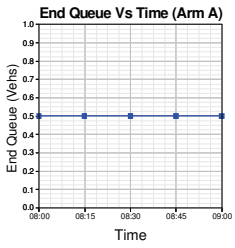


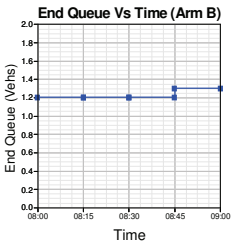


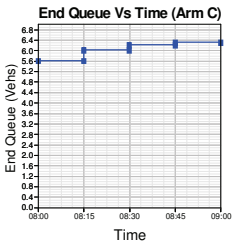


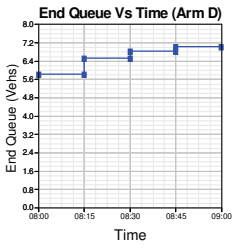
End Queue (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)







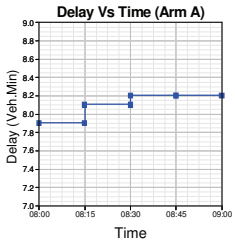


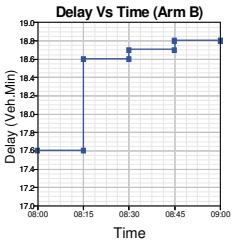
Geometric Delay Graph

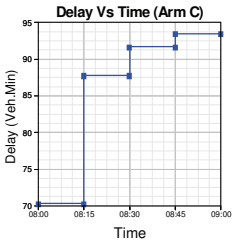
No Data. Please select 'Geometric Delay' in 'Principal Options' and try again.

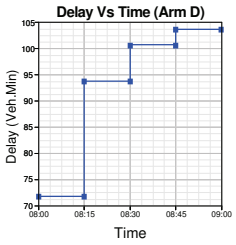
Delay (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)









Queues and Delay:

Segment	Arm	Demand (Veh / Min)	Capacity (Veh / Min)	Demand / Capacity (RFC)	Ped Flow (Ped / Min)	Start Queue (Veh)	End Queue (Veh)	Delay (Veh.Min / Time Segment)	Geometric Delay (Veh.Min / Time Segment)	Arrival Delay (Min / Veh)
Segment : 1 - 08:00 to 08:15	A	9.33	26.58	0.351	-	0.0	0.5	7.9	-	0.058
	B	12.55	22.62	0.555	-	0.0	1.2	17.6	-	0.098
	C	19.03	22.00	0.865	-	0.0	5.6	70.2	-	0.275
	D	18.58	21.36	0.870	-	0.0	5.8	71.7	-	0.289
Segment : 2 - 08:15 to 08:30	A	9.33	26.42	0.353	-	0.5	0.5	8.1	-	0.058
	B	12.55	22.54	0.557	-	1.2	1.2	18.6	-	0.100
	C	19.03	21.94	0.867	-	5.6	6.0	87.7	-	0.332
	D	18.58	21.11	0.880	-	5.8	6.5	93.7	-	0.373
Segment : 3 - 08:30 to 08:45	A	9.33	26.41	0.353	-	0.5	0.5	8.2	-	0.059
	B	12.55	22.54	0.557	-	1.2	1.2	18.7	-	0.100
	C	19.03	21.94	0.867	-	6.0	6.2	91.6	-	0.337
	D	18.58	21.10	0.881	-	6.5	6.8	100.6	-	0.385
Segment : 4 - 08:45 to 09:00	A	9.33	26.40	0.353	-	0.5	0.5	8.2	-	0.059
	B	12.55	22.54	0.557	-	1.2	1.3	18.8	-	0.100
	C	19.03	21.94	0.867	-	6.2	6.3	93.4	-	0.339
	D	18.58	21.10	0.881	-	6.8	7.0	103.6	-	0.390

Queuing Delay Information Over Whole Period

Arm	Total Demand		Queueing Delay		Inclusive Queueing Delay	
	(Veh)	(Veh/Hr)	(Min)	(Min/Veh)	(Min)	(Min/Veh)
A	559.8	559.8	32.3	0.06	32.3	0.06
B	753.0	753.0	73.6	0.10	73.7	0.10
C	1141.8	1141.8	342.8	0.30	343.7	0.30
D	1114.8	1114.8	369.6	0.33	370.7	0.33
ALL	3569.4	3569.4	818.4	0.23	820.5	0.23

Delay is that occuring only within the time period.
Inclusive delay includes delay suffered by vehicles that are still queueing after the end of the time period.
These will only be significantly different if there is a large queue remaining at the end of the time period.

Accident Data

No Data, please select the 'Accident Analysis' option in 'Principal Options' and try again.

Accident Results

No Data, please select the 'Accident Analysis' option in 'Principal Options' and try again.

ARCADY 6

GUI Version: 6.2 AG
Analysis Program: Release 7.0 (FEBRUARY 2010)
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Email: software@ trl.co.uk
Web:www.trlsoftware.co.uk

The user of this computer program for the solution of an engineering problem is in no way relieved of their responsibility for the correctness of the solution

Run Information

Run with file:- **k:\UA005241 - Bicester Traffic Modelling\D-Calcs\Traffic Modelling\J13\A4421 Skimmingdish Lane Buckingham Road ARCADY model AM (J13) Full Development.vai**
At: **17:11:43 on Wednesday, July 30, 2014**
Mode: **Drive On The Left**
Units: **Metric**

Arm Labelling

Arm	Full Arm Names
Arm A	A4421 Skimmingdish Lane
Arm B	Buckingham Road
Arm C	A4095 West
Arm D	A4421 North

Flow Scaling Factor

Arm	Flow Scaling Factor (%)
Arm A	100
Arm B	100
Arm C	100
Arm D	100

File Properties

Run Title	A4421 Skimmingdish Lane Buckingham Road ARCADY model AM (J13) Full Development
Location	Bicester
Date	05/06/2014
Client	
Enumerator	fda76470 [HCL51987]
Job Number	
Status	
Description	

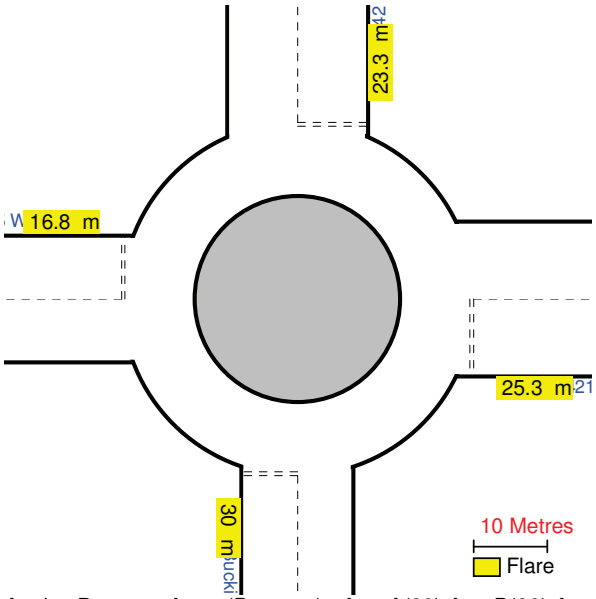
Errors and Warnings

[No errors or warnings]

Geometric Data

Data Item	Arm A	Arm B	Arm C	Arm D
Approach Road Half-Width (m)	3.50	3.35	3.45	3.50
Entry Width (m)	10.50	7.67	8.61	9.60
Flare Length (m)	25.30	30.00	16.80	23.30
Entry Radius (m)	15.50	21.00	25.00	42.50
Inscribed Circle Diameter (m)	49.00	49.00	49.00	49.00
Entry Angle (degrees)	34.00	32.50	26.00	17.00
Slope	0.686	0.649	0.653	0.731
Intercept (PCU/Min)	35.402	31.650	31.287	36.882

Junction Diagram: (View Extent = 80m)



Angles Between Arms (Degrees): Arm A(90) Arm B(90) Arm C(90) Arm D(90)

Demand Data

Demand Profiles are Synthesised using **DIRECT** Data
Period of interest (for Queue and Delay calculations): **08:00 to 09:00**
Length of Time Period: **60 min**
Length of Time Segment: **15 min**

Direct Data for Demand Set: AM With Development

Time Period	Arm	Demand Data (Veh/Min)
Segment : 1 - 08:00 to 08:15	A	11.33
	B	16.03
	C	19.67
	D	17.37
Segment : 2 - 08:15 to 08:30	A	11.33
	B	16.03
	C	19.67
	D	17.37
Segment : 3 - 08:30 to 08:45	A	11.33
	B	16.03
	C	19.67
	D	17.37
Segment : 4 - 08:45 to 09:00	A	11.33
	B	16.03
	C	19.67
	D	17.37

Turning Proportions for Demand Set: AM With Development

Turning proportions vary over entry and calculated from turning count data (shaded)

Time Period	From/To	Arm A	Arm B	Arm C	Arm D
08:00 to 09:00	Arm A	0.132	0.006	0.644	0.218
		90.0	4.0	438.0	148.0
	Arm B	0.357	0.000	0.125	0.519
		343.0	0.0	120.0	499.0
	Arm C	0.887	0.034	0.000	0.079
		999.0	38.0	0.0	89.0
	Arm D	0.235	0.616	0.149	0.000
		245.0	642.0	155.0	0.0

Heavy Vehicle Percentages for Demand Set: AM With Development

Vehicle percentages constant over time and entry

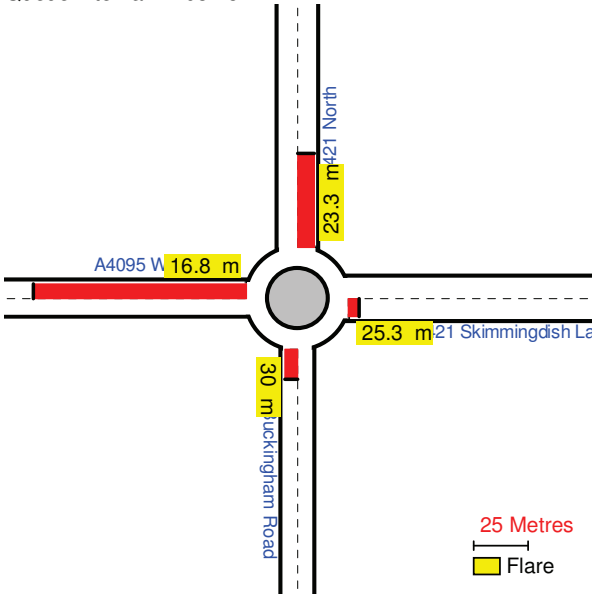
Time Period	From/To	Arm A	Arm B	Arm C	Arm D
08:00 to 09:00	Arm A	0.0	0.0	0.0	0.0
	Arm B	0.0	0.0	0.0	0.0
	Arm C	0.0	0.0	0.0	0.0
	Arm D	0.0	0.0	0.0	0.0

Queue Diagrams: (View Extent = 80m)

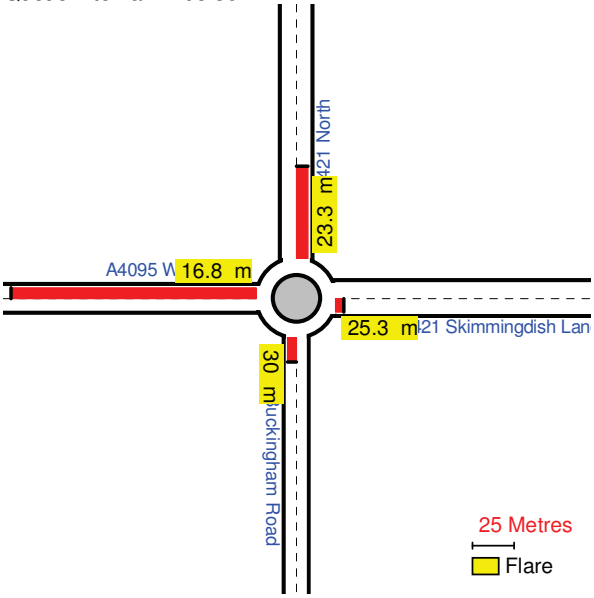
Queue Length	Colour
Mean Queue	
5 th % ile	
90 th % ile	
95 th % ile	

Start Time: 08:00---> End Time: 09:00

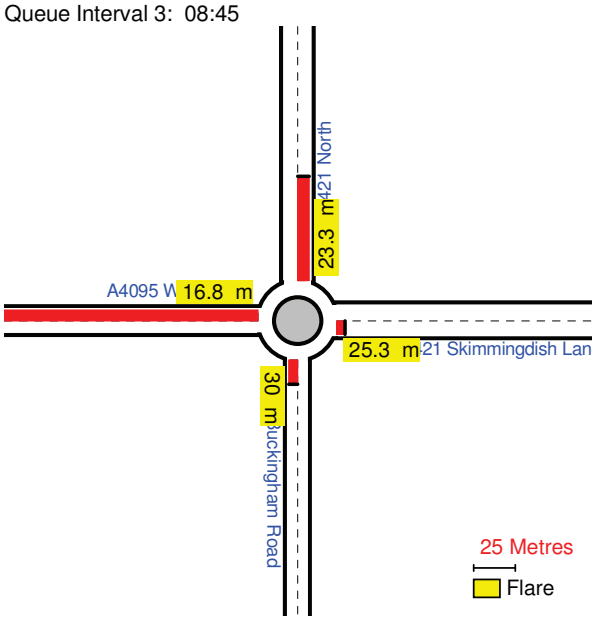
Queue Interval 1: 08:15



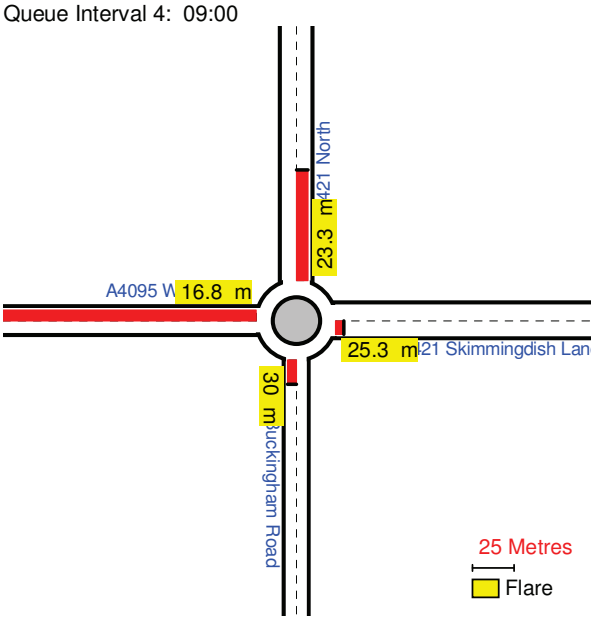
Queue Interval 2: 08:30



Queue Interval 3: 08:45

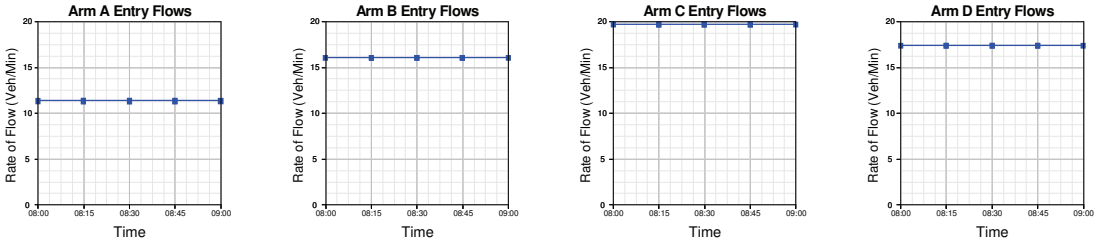


Queue Interval 4: 09:00



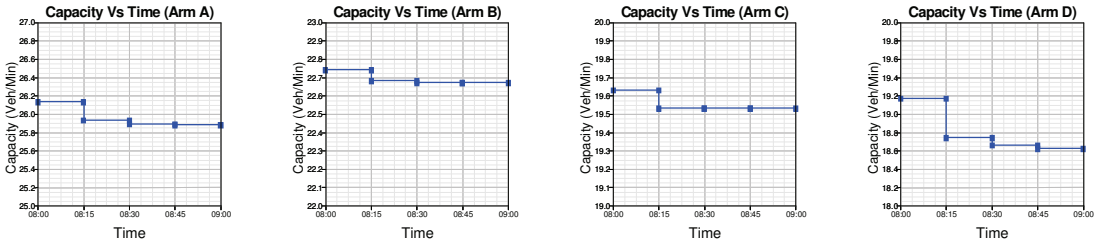
Demand Data Graphs

Direct Entry/Exit Flows for Demand Set: AM With Development



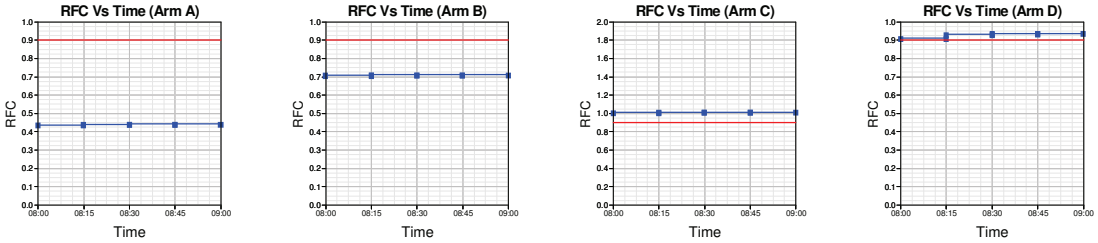
Capacity (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)



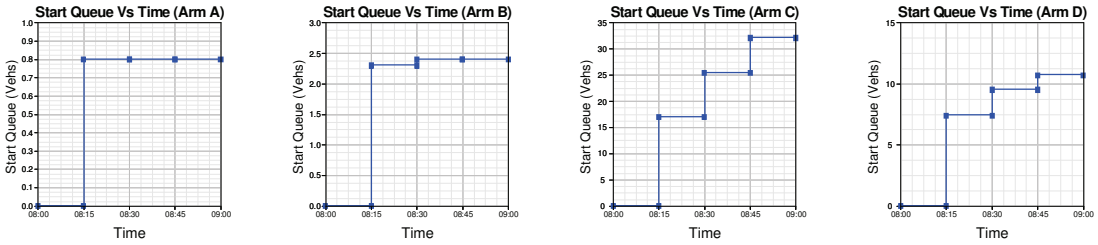
RFC (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)



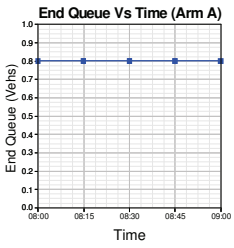
Start Queue (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

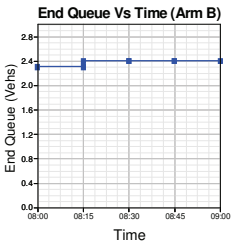
(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)

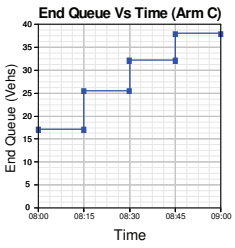


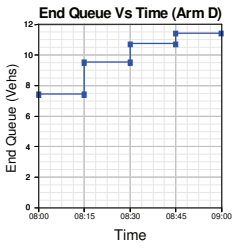
End Queue (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)







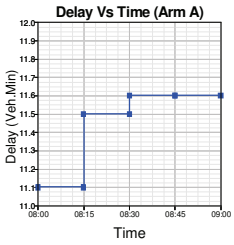


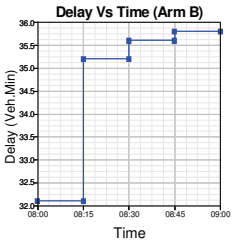
Geometric Delay Graph

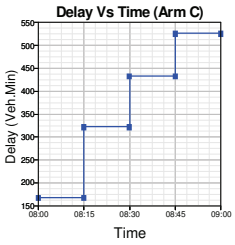
No Data. Please select 'Geometric Delay' in 'Principal Options' and try again.

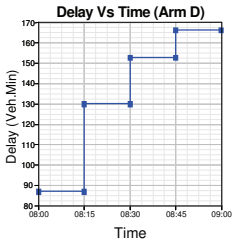
Delay (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)









Queues and Delay:

Segment	Arm	Demand (Veh / Min)	Capacity (Veh / Min)	Demand / Capacity (RFC)	Ped Flow (Ped / Min)	Start Queue (Veh)	End Queue (Veh)	Delay (Veh.Min / Time Segment)	Geometric Delay (Veh.Min / Time Segment)	Arrival Delay (Min / Veh)
Segment : 1 - 08:00 to 08:15	A	11.33	26.13	0.434	-	0.0	0.8	11.1	-	0.067
	B	16.03	22.74	0.705	-	0.0	2.3	32.1	-	0.143
	C	19.67	19.63	1.002	-	0.0	17.0	166.8	-	-0.051
	D	17.37	19.17	0.906	-	0.0	7.4	86.8	-	0.379
Segment : 2 - 08:15 to 08:30	A	11.33	25.93	0.437	-	0.8	0.8	11.5	-	0.069
	B	16.03	22.68	0.707	-	2.3	2.4	35.2	-	0.150
	C	19.67	19.53	1.007	-	17.0	25.4	321.2	-	1.275
	D	17.37	18.74	0.927	-	7.4	9.5	129.9	-	0.585
Segment : 3 - 08:30 to 08:45	A	11.33	25.89	0.438	-	0.8	0.8	11.6	-	0.069
	B	16.03	22.67	0.707	-	2.4	2.4	35.6	-	0.151
	C	19.67	19.53	1.007	-	25.4	32.1	432.4	-	1.639
	D	17.37	18.66	0.931	-	9.5	10.7	152.6	-	0.657
Segment : 4 - 08:45 to 09:00	A	11.33	25.88	0.438	-	0.8	0.8	11.6	-	0.069
	B	16.03	22.67	0.707	-	2.4	2.4	35.8	-	0.151
	C	19.67	19.53	1.007	-	32.1	37.9	525.4	-	1.945
	D	17.37	18.62	0.933	-	10.7	11.4	166.1	-	0.701

Queuing Delay Information Over Whole Period

Arm	Total Demand		Queueing Delay		Inclusive Queueing Delay	
	(Veh)	(Veh/Hr)	(Min)	(Min/Veh)	(Min)	(Min/Veh)
A	679.8	679.8	45.8	0.07	45.8	0.07
B	961.8	961.8	138.7	0.14	138.9	0.14
C	1180.2	1180.2	1445.8	1.23	1482.5	1.26
D	1042.2	1042.2	535.5	0.51	539.0	0.52
ALL	3864.0	3864.0	2165.9	0.56	2206.2	0.57

Delay is that occuring only within the time period.
Inclusive delay includes delay suffered by vehicles that are still queueing after the end of the time period.
These will only be significantly different if there is a large queue remaining at the end of the time period.

Accident Data

No Data, please select the 'Accident Analysis' option in 'Principal Options' and try again.

Accident Results

No Data, please select the 'Accident Analysis' option in 'Principal Options' and try again.

ARCADY 6

GUI Version: 6.2 AG
Analysis Program: Release 7.0 (FEBRUARY 2010)
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Fax:+44 (0)1344 770864
Email: software@ trl.co.uk
Web:www.trlsoftware.co.uk

The user of this computer program for the solution of an engineering problem is in no way relieved of their responsibility for the correctness of the solution

Run Information

Run with file:- **k:\UA005241 - Bicester Traffic Modelling\D-Calcs\Traffic Modelling\J13\A4421 Skimmingdish Lane Buckingham Road ARCADY model PM (J13) Reference Case.vai**
At: **17:18:23 on Wednesday, July 30, 2014**
Mode: **Drive On The Left**
Units: **Metric**

Arm Labelling

Arm	Full Arm Names
Arm A	A4421 Skimmingdish Lane
Arm B	Buckingham Road
Arm C	A4095 West
Arm D	A4421 North

Flow Scaling Factor

Arm	Flow Scaling Factor (%)
Arm A	100
Arm B	100
Arm C	100
Arm D	100

File Properties

Run Title	J13 - Skimmingdish Roundabout
Location	Bicester
Date	05/06/2014
Client	
Enumerator	fda76470 [HCL51987]
Job Number	
Status	
Description	

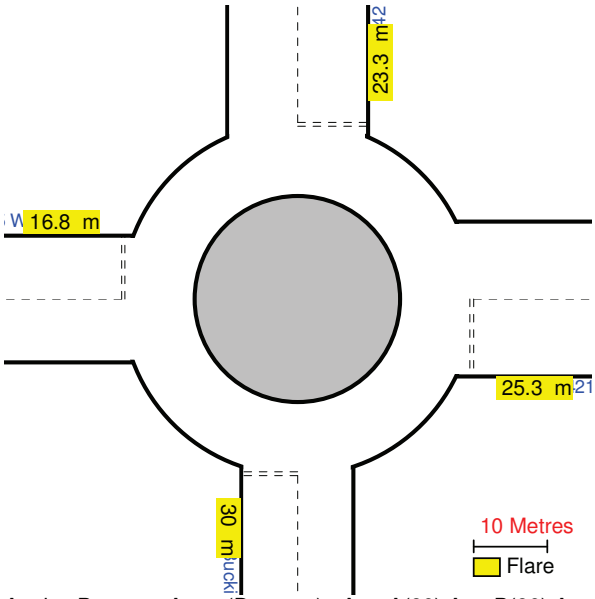
Errors and Warnings

[No errors or warnings]

Geometric Data

Data Item	Arm A	Arm B	Arm C	Arm D
Approach Road Half-Width (m)	3.50	3.35	3.45	3.50
Entry Width (m)	10.50	7.67	8.61	9.60
Flare Length (m)	25.30	30.00	16.80	23.30
Entry Radius (m)	15.50	21.00	25.00	42.50
Inscribed Circle Diameter (m)	49.00	49.00	49.00	49.00
Entry Angle (degrees)	34.00	32.50	26.00	17.00
Slope	0.686	0.649	0.653	0.731
Intercept (PCU/Min)	35.402	31.650	31.287	36.882

Junction Diagram: (View Extent = 80m)



Angles Between Arms (Degrees): Arm A(90) Arm B(90) Arm C(90) Arm D(90)

Demand Data

Demand Profiles are Synthesised using **DIRECT** Data
Period of interest (for Queue and Delay calculations): **17:00 to 18:00**
Length of Time Period: **60 min**
Length of Time Segment: **15 min**

Direct Data for Demand Set: PM No Development

Time Period	Arm	Demand Data (Veh/Min)
Segment : 1 - 17:00 to 17:15	A	23.42
	B	10.50
	C	5.75
	D	21.48
Segment : 2 - 17:15 to 17:30	A	23.42
	B	10.50
	C	5.75
	D	21.48
Segment : 3 - 17:30 to 17:45	A	23.42
	B	10.50
	C	5.75
	D	21.48
Segment : 4 - 17:45 to 18:00	A	23.42
	B	10.50
	C	5.75
	D	21.48

Turning Proportions for Demand Set: PM No Development

Turning proportions vary over entry and calculated from turning count data (shaded)

Time Period	From/To	Arm A	Arm B	Arm C	Arm D
17:00 to 18:00	Arm A	0.000	0.051	0.560	0.389
		0.0	71.0	787.0	547.0
	Arm B	0.243	0.000	0.243	0.514
		153.0	0.0	153.0	324.0
	Arm C	0.858	0.043	0.000	0.099
		296.0	15.0	0.0	34.0
	Arm D	0.276	0.416	0.308	0.000
		356.0	536.0	397.0	0.0

Heavy Vehicle Percentages for Demand Set: PM No Development

Vehicle percentages constant over time and entry

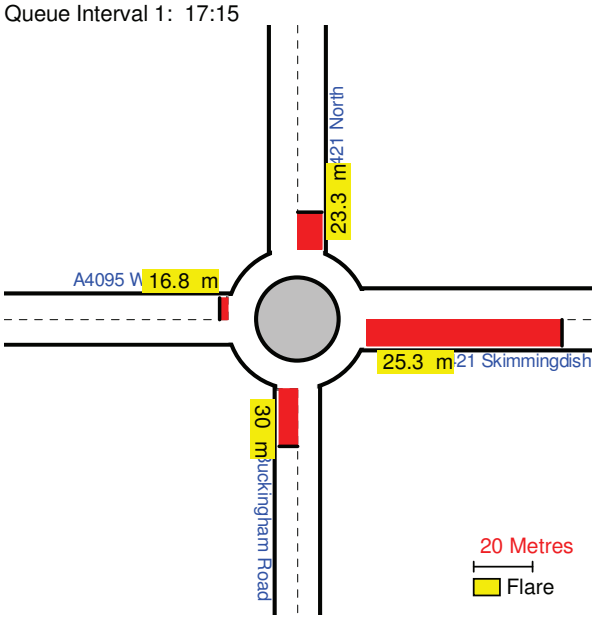
Time Period	From/To	Arm A	Arm B	Arm C	Arm D
17:00 to 18:00	Arm A	0.0	0.0	0.0	0.0
	Arm B	0.0	0.0	0.0	0.0
	Arm C	0.0	0.0	0.0	0.0
	Arm D	0.0	0.0	0.0	0.0

Queue Diagrams: (View Extent = 80m)

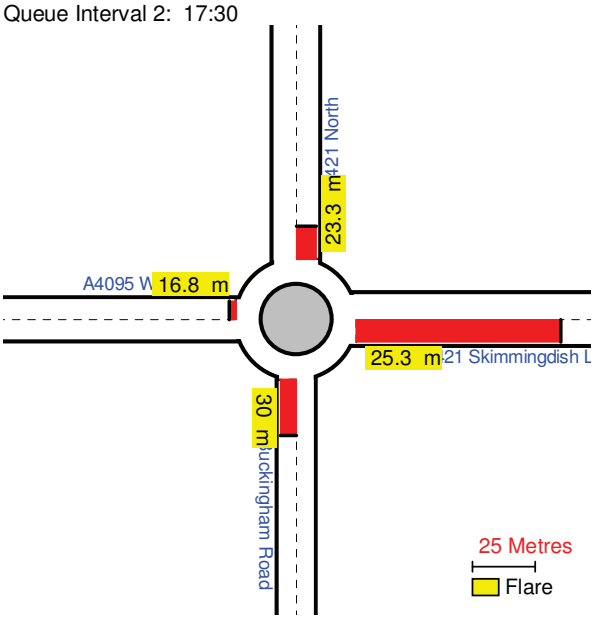
Queue Length	Colour
Mean Queue	
5 th % ile	
90 th % ile	
95 th % ile	

Start Time: 17:00---> End Time: 18:00

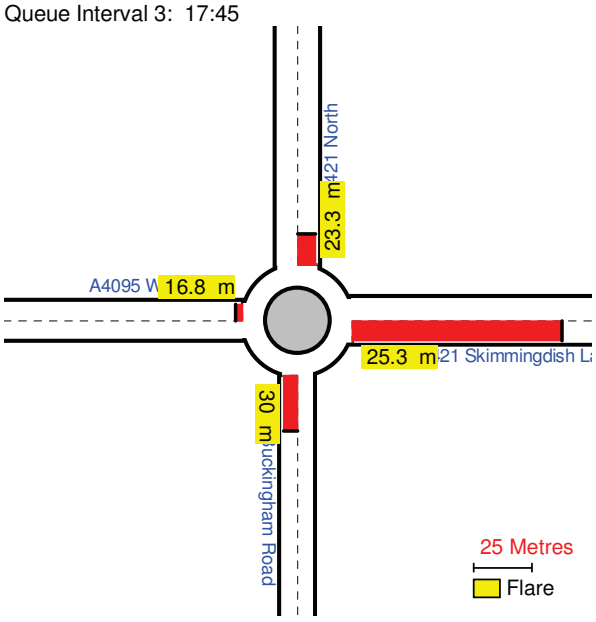
Queue Interval 1: 17:15



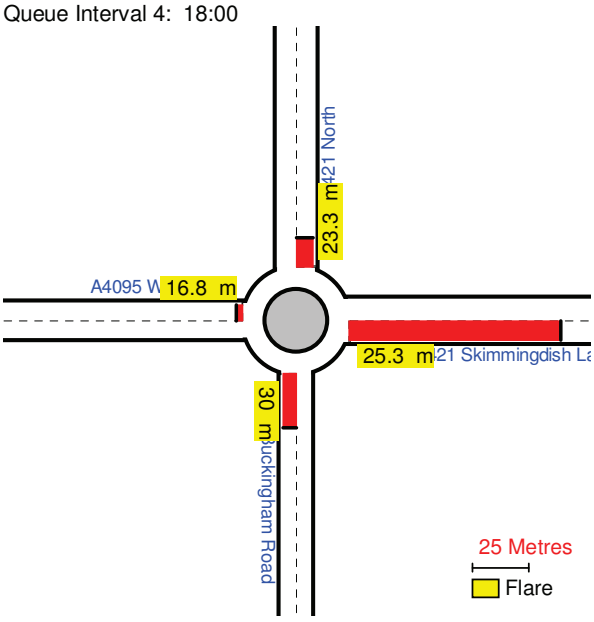
Queue Interval 2: 17:30



Queue Interval 3: 17:45

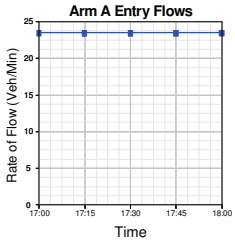


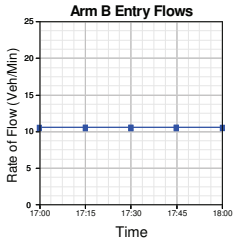
Queue Interval 4: 18:00

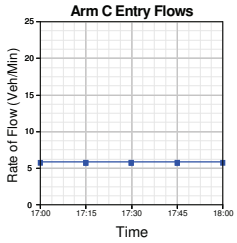


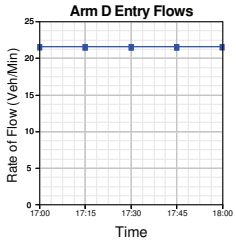
Demand Data Graphs

Direct Entry/Exit Flows for Demand Set: PM No Development



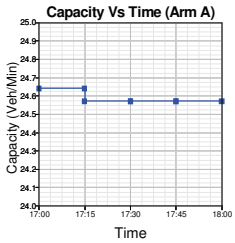


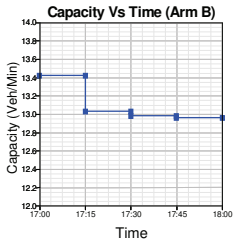


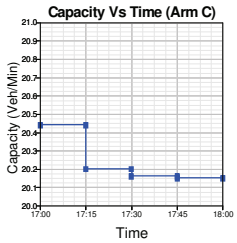


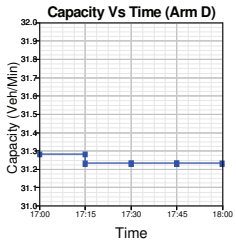
Capacity (against Time) Graphs, for each 15min Interval (17:00 - 18:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)



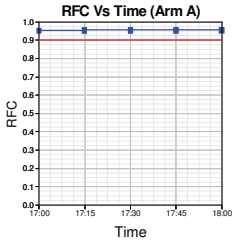


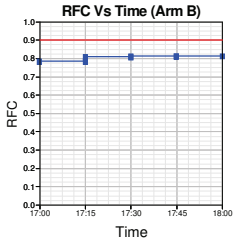


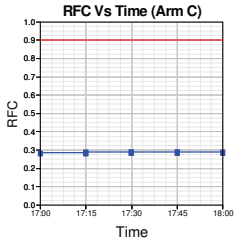


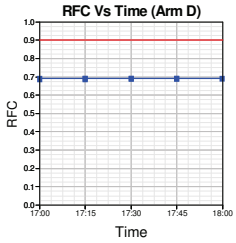
RFC (against Time) Graphs, for each 15min Interval (17:00 - 18:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)



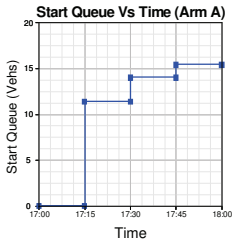


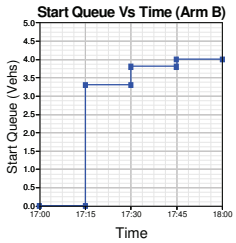


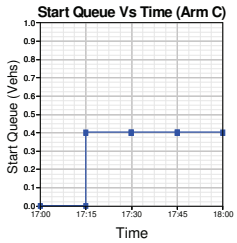


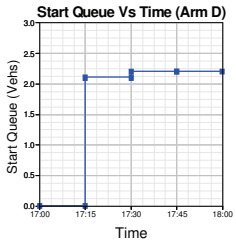
Start Queue (against Time) Graphs, for each 15min Interval (17:00 - 18:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)



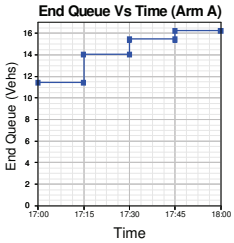


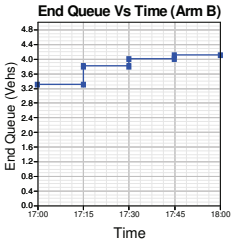


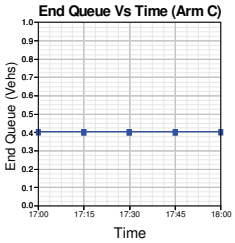


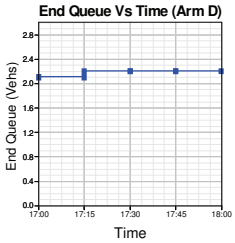
End Queue (against Time) Graphs, for each 15min Interval (17:00 - 18:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)







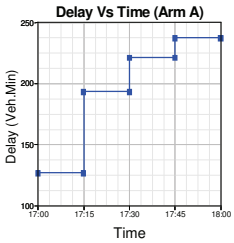


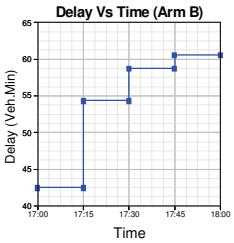
Geometric Delay Graph

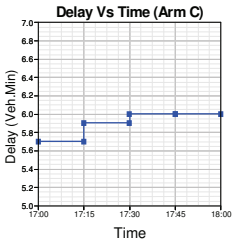
No Data. Please select 'Geometric Delay' in 'Principal Options' and try again.

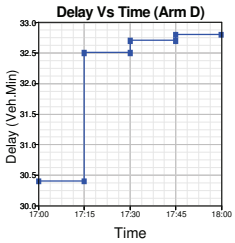
Delay (against Time) Graphs, for each 15min Interval (17:00 - 18:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)









Queues and Delay:

Segment	Arm	Demand (Veh / Min)	Capacity (Veh / Min)	Demand / Capacity (RFC)	Ped Flow (Ped / Min)	Start Queue (Veh)	End Queue (Veh)	Delay (Veh.Min / Time Segment)	Geometric Delay (Veh.Min / Time Segment)	Arrival Delay (Min / Veh)
Segment : 1 - 17:00 to 17:15	A	23.42	24.64	0.950	-	0.0	11.4	126.5	-	0.409
	B	10.50	13.42	0.782	-	0.0	3.3	42.4	-	0.300
	C	5.75	20.44	0.281	-	0.0	0.4	5.7	-	0.068
	D	21.48	31.28	0.687	-	0.0	2.1	30.4	-	0.099
Segment : 2 - 17:15 to 17:30	A	23.42	24.57	0.953	-	11.4	14.0	193.1	-	0.634
	B	10.50	13.03	0.806	-	3.3	3.8	54.3	-	0.382
	C	5.75	20.20	0.285	-	0.4	0.4	5.9	-	0.069
	D	21.48	31.23	0.688	-	2.1	2.2	32.5	-	0.102
Segment : 3 - 17:30 to 17:45	A	23.42	24.57	0.953	-	14.0	15.4	221.0	-	0.696
	B	10.50	12.98	0.809	-	3.8	4.0	58.7	-	0.396
	C	5.75	20.16	0.285	-	0.4	0.4	6.0	-	0.069
	D	21.48	31.23	0.688	-	2.2	2.2	32.7	-	0.103
Segment : 4 - 17:45 to 18:00	A	23.42	24.57	0.953	-	15.4	16.2	237.1	-	0.732
	B	10.50	12.96	0.810	-	4.0	4.1	60.5	-	0.402
	C	5.75	20.15	0.285	-	0.4	0.4	6.0	-	0.069
	D	21.48	31.23	0.688	-	2.2	2.2	32.8	-	0.103

Queuing Delay Information Over Whole Period

Arm	Total Demand		Queueing Delay		Inclusive Queueing Delay	
	(Veh)	(Veh/Hr)	(Min)	(Min/Veh)	(Min)	(Min/Veh)
A	1405.2	1405.2	777.8	0.55	783.1	0.56
B	630.0	630.0	215.9	0.34	216.5	0.34
C	345.0	345.0	23.5	0.07	23.5	0.07
D	1288.8	1288.8	128.4	0.10	128.4	0.10
ALL	3669.0	3669.0	1145.5	0.31	1151.6	0.31

Delay is that occuring only within the time period.
Inclusive delay includes delay suffered by vehicles that are still queueing after the end of the time period.
These will only be significantly different if there is a large queue remaining at the end of the time period.

Accident Data

No Data, please select the 'Accident Analysis' option in 'Principal Options' and try again.

Accident Results

No Data, please select the 'Accident Analysis' option in 'Principal Options' and try again.

ARCADY 6

GUI Version: 6.2 AG
Analysis Program: Release 7.0 (FEBRUARY 2010)
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Email: software@ trl.co.uk
Web:www.trlsoftware.co.uk

The user of this computer program for the solution of an engineering problem is in no way relieved of their responsibility for the correctness of the solution

Run Information

Run with file:- **k:\UA005241 - Bicester Traffic Modelling\D-Calcs\Traffic Modelling\J13\A4421 Skimmingdish Lane Buckingham Road ARCADY model PM (J13) Full Development.vai**
At: **17:16:05 on Wednesday, July 30, 2014**
Mode: **Drive On The Left**
Units: **Metric**

Arm Labelling

Arm	Full Arm Names
Arm A	A4421 Skimmingdish Lane
Arm B	Buckingham Road
Arm C	A4095 West
Arm D	A4421 North

Flow Scaling Factor

Arm	Flow Scaling Factor (%)
Arm A	100
Arm B	100
Arm C	100
Arm D	100

File Properties

Run Title	J13 - Skimmingdish Roundabout
Location	Bicester
Date	05/06/2014
Client	
Enumerator	fda76470 [HCL51987]
Job Number	
Status	
Description	

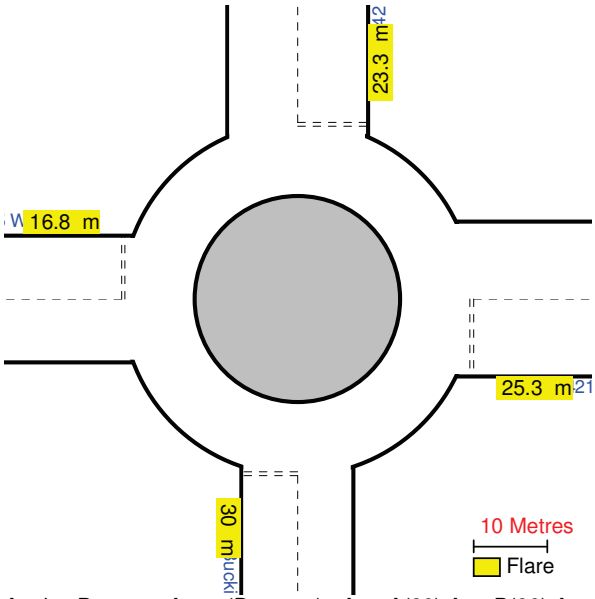
Errors and Warnings

[No errors or warnings]

Geometric Data

Data Item	Arm A	Arm B	Arm C	Arm D
Approach Road Half-Width (m)	3.50	3.35	3.45	3.50
Entry Width (m)	10.50	7.67	8.61	9.60
Flare Length (m)	25.30	30.00	16.80	23.30
Entry Radius (m)	15.50	21.00	25.00	42.50
Inscribed Circle Diameter (m)	49.00	49.00	49.00	49.00
Entry Angle (degrees)	34.00	32.50	26.00	17.00
Slope	0.686	0.649	0.653	0.731
Intercept (PCU/Min)	35.402	31.650	31.287	36.882

Junction Diagram: (View Extent = 80m)



Angles Between Arms (Degrees): Arm A(90) Arm B(90) Arm C(90) Arm D(90)

Demand Data

Demand Profiles are Synthesised using **DIRECT** Data
Period of interest (for Queue and Delay calculations): **17:00 to 18:00**
Length of Time Period: **60 min**
Length of Time Segment: **15 min**

Direct Data for Demand Set: PM With Development

Time Period	Arm	Demand Data (Veh/Min)
Segment : 1 - 17:00 to 17:15	A	27.60
	B	12.90
	C	7.47
	D	22.52
Segment : 2 - 17:15 to 17:30	A	27.60
	B	12.90
	C	7.47
	D	22.52
Segment : 3 - 17:30 to 17:45	A	27.60
	B	12.90
	C	7.47
	D	22.52
Segment : 4 - 17:45 to 18:00	A	27.60
	B	12.90
	C	7.47
	D	22.52

Turning Proportions for Demand Set: PM With Development

Turning proportions vary over entry and calculated from turning count data (shaded)

Time Period	From/To	Arm A	Arm B	Arm C	Arm D
17:00 to 18:00	Arm A	0.000	0.045	0.531	0.423
		0.0	75.0	880.0	701.0
	Arm B	0.199	0.000	0.266	0.535
		154.0	0.0	206.0	414.0
	Arm C	0.883	0.038	0.000	0.078
		394.0	17.0	0.0	35.0
	Arm D	0.241	0.491	0.269	0.000
		325.0	663.0	363.0	0.0

Heavy Vehicle Percentages for Demand Set: PM With Development

Vehicle percentages constant over time and entry

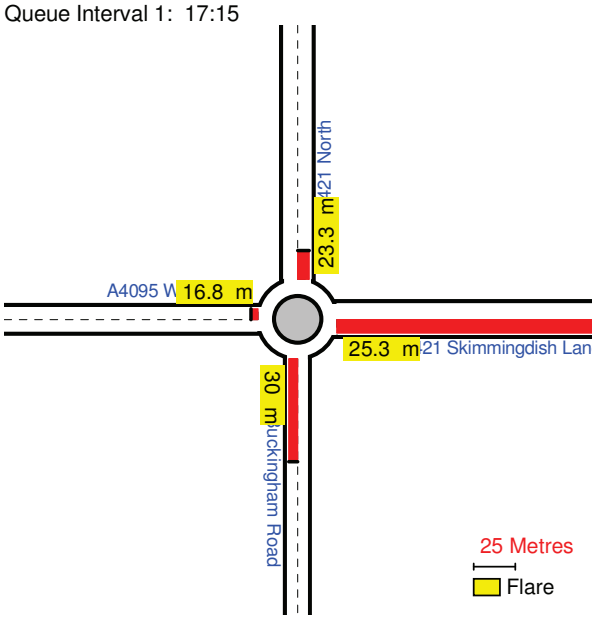
Time Period	From/To	Arm A	Arm B	Arm C	Arm D
17:00 to 18:00	Arm A	0.0	0.0	0.0	0.0
	Arm B	0.0	0.0	0.0	0.0
	Arm C	0.0	0.0	0.0	0.0
	Arm D	0.0	0.0	0.0	0.0

Queue Diagrams: (View Extent = 80m)

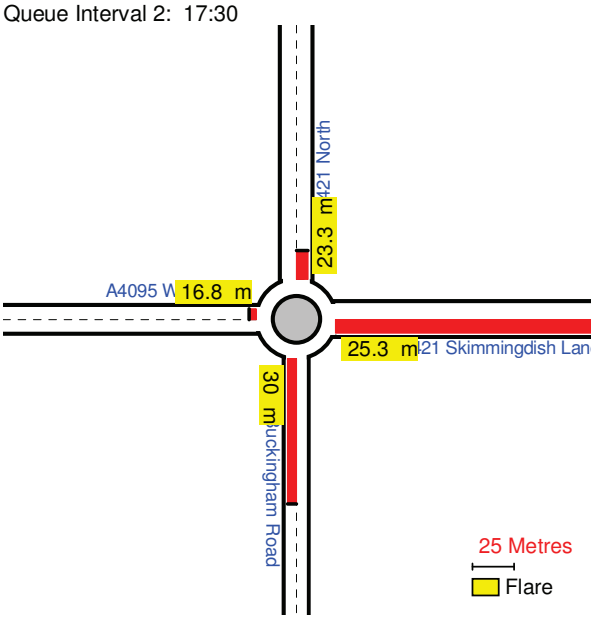
Queue Length	Colour
Mean Queue	
5 th % ile	
90 th % ile	
95 th % ile	

Start Time: 17:00---> End Time: 18:00

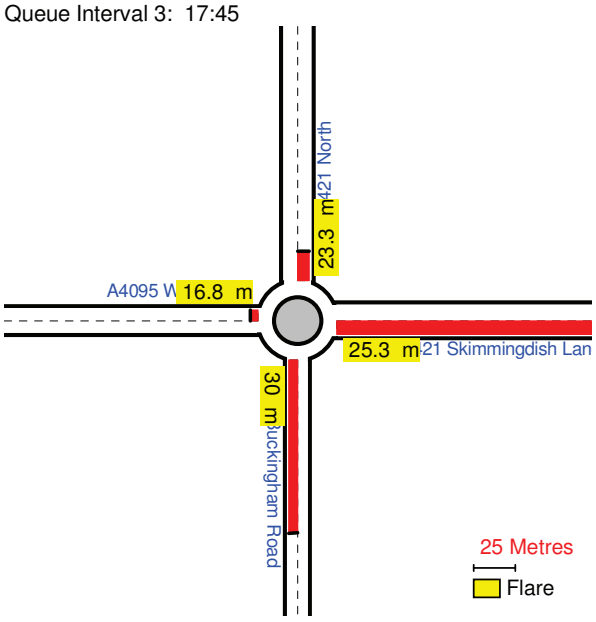
Queue Interval 1: 17:15



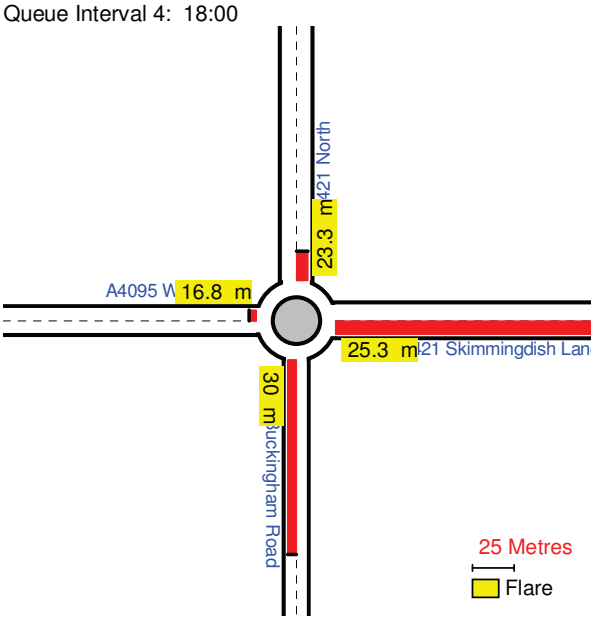
Queue Interval 2: 17:30



Queue Interval 3: 17:45

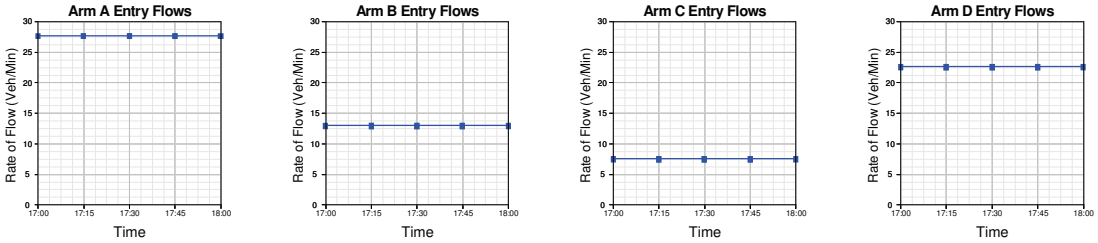


Queue Interval 4: 18:00



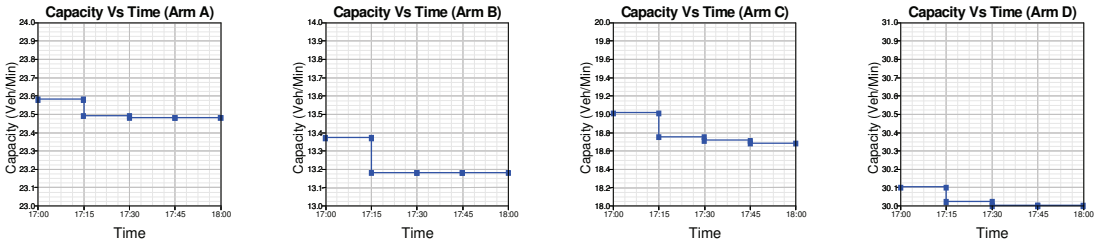
Demand Data Graphs

Direct Entry/Exit Flows for Demand Set: PM With Development



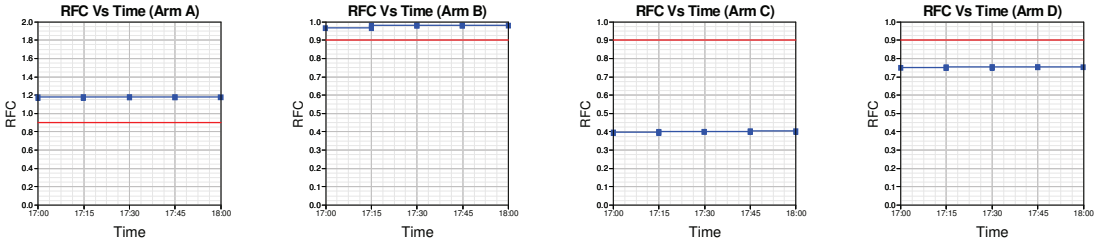
Capacity (against Time) Graphs, for each 15min Interval (17:00 - 18:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)



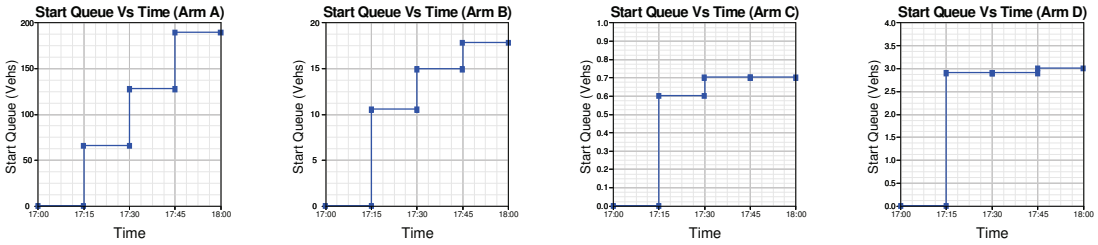
RFC (against Time) Graphs, for each 15min Interval (17:00 - 18:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)



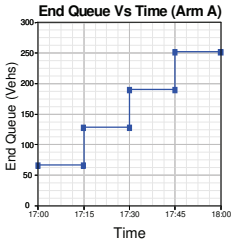
Start Queue (against Time) Graphs, for each 15min Interval (17:00 - 18:00)

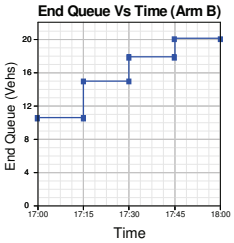
(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)

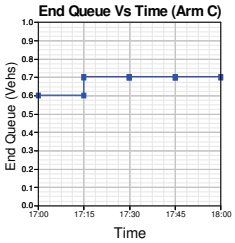


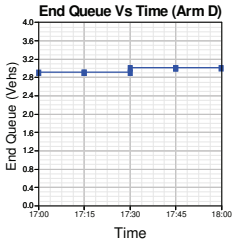
End Queue (against Time) Graphs, for each 15min Interval (17:00 - 18:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)







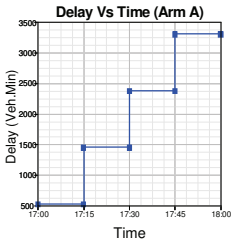


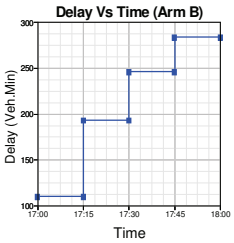
Geometric Delay Graph

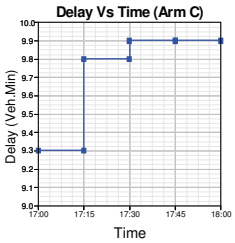
No Data. Please select 'Geometric Delay' in 'Principal Options' and try again.

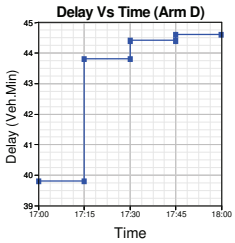
Delay (against Time) Graphs, for each 15min Interval (17:00 - 18:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)









Queues and Delay:

Segment	Arm	Demand (Veh / Min)	Capacity (Veh / Min)	Demand / Capacity (RFC)	Ped Flow (Ped / Min)	Start Queue (Veh)	End Queue (Veh)	Delay (Veh.Min / Time Segment)	Geometric Delay (Veh.Min / Time Segment)	Arrival Delay (Min / Veh)
Segment : 1 - 17:00 to 17:15	A	27.60	23.58	**1.170**	-	0.0	65.6	520.6	-	1.527
	B	12.90	13.37	**0.965**	-	0.0	10.5	109.5	-	0.661
	C	7.47	19.01	0.393	-	0.0	0.6	9.3	-	0.086
	D	22.52	30.10	0.748	-	0.0	2.9	39.8	-	0.126
Segment : 2 - 17:15 to 17:30	A	27.60	23.49	**1.175**	-	65.6	127.5	1448.6	-	4.224
	B	12.90	13.18	**0.978**	-	10.5	14.9	192.9	-	1.187
	C	7.47	18.75	0.398	-	0.6	0.7	9.8	-	0.089
	D	22.52	30.02	0.750	-	2.9	2.9	43.8	-	0.133
Segment : 3 - 17:30 to 17:45	A	27.60	23.48	**1.175**	-	127.5	189.4	2376.8	-	6.832
	B	12.90	13.18	**0.979**	-	14.9	17.8	245.7	-	1.443
	C	7.47	18.71	0.399	-	0.7	0.7	9.9	-	0.089
	D	22.52	30.00	0.751	-	2.9	3.0	44.4	-	0.134
Segment : 4 - 17:45 to 18:00	A	27.60	23.48	**1.175**	-	189.4	251.2	3303.9	-	9.455
	B	12.90	13.18	**0.979**	-	17.8	20.0	283.5	-	1.620
	C	7.47	18.68	0.400	-	0.7	0.7	9.9	-	0.089
	D	22.52	30.00	0.751	-	3.0	3.0	44.6	-	0.134

Queuing Delay Information Over Whole Period

Arm	Total Demand		Queueing Delay		Inclusive Queueing Delay	
	(Veh)	(Veh/Hr)	(Min)	(Min/Veh)	(Min)	(Min/Veh)
A	1656.0	1656.0	7649.9	4.62	8993.0	5.43
B	774.0	774.0	831.7	1.07	846.8	1.09
C	448.2	448.2	38.9	0.09	38.9	0.09
D	1351.2	1351.2	172.6	0.13	172.7	0.13
ALL	4229.4	4229.4	8693.1	2.06	10051.5	2.38

Delay is that occuring only within the time period.
Inclusive delay includes delay suffered by vehicles that are still queueing after the end of the time period.
These will only be significantly different if there is a large queue remaining at the end of the time period.

Accident Data

No Data, please select the 'Accident Analysis' option in 'Principal Options' and try again.

Accident Results

No Data, please select the 'Accident Analysis' option in 'Principal Options' and try again.

ARCADY 6		
GUI Version: 6.2 AG Analysis Program: Release 7.0 (FEBRUARY 2010) (c) Copyright TRL Limited, 2004 Adapted from ARCADY/3 which is Crown Copyright by permission of the controller of HMSO		
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TRL Limited Crowthorne House Nine Mile Ride Wokingham, Berks. RG40 3GA, UK		Tel: +44 (0)1344 770758 Fax:+44 (0)1344 770864 Email: software@ trl.co.uk Web:www.trlsoftware.co.uk
The user of this computer program for the solution of an engineering problem is in no way relieved of their responsibility for the correctness of the solution		

Run Information

Run with file:- **c:\Users\fda76470\Desktop\Bicester\J14\A4095 B4100 Banbury Road ARCADY model results AM Peak Hour (J14) Reference Case.vai**
At: **14:36:20 on Wednesday, July 30, 2014**
Mode: **Drive On The Left**
Units: **Metric**

Arm Labelling

Arm	Full Arm Names
Arm A	B4100
Arm B	A4095 (east)
Arm C	Banbury Road
Arm D	A4095 (west) left
Arm E	A4095 (west) ahead right

Flow Scaling Factor

Arm	Flow Scaling Factor (%)
Arm A	100
Arm B	100
Arm C	100
Arm D	100
Arm E	100

File Properties

Run Title	A4095 B4100 Banbury Road ARCADY model results AM Peak Hour (J14) Reference Case
Location	Bicester
Date	21/02/2014
Client	
Enumerator	afa00534 [HCL51938]
Job Number	
Status	Preliminary
Description	

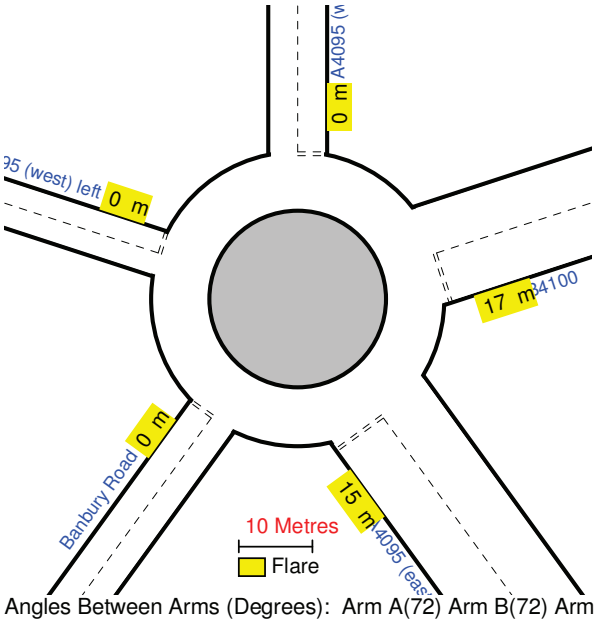
Errors and Warnings

[No errors or warnings]

Geometric Data

Data Item	Arm A	Arm B	Arm C	Arm D	Arm E
Approach Road Half-Width (m)	3.60	3.70	3.65	3.20	4.00
Entry Width (m)	7.00	7.80	3.65	3.20	4.00
Flare Length (m)	17.00	15.00	0.00	0.00	0.00
Entry Radius (m)	34.00	18.00	20.00	24.00	24.00
Inscribed Circle Diameter (m)	40.00	40.00	40.00	40.00	40.00
Entry Angle (degrees)	20.00	27.00	30.00	30.00	30.00
Slope	0.681	0.662	0.523	0.500	0.549
Intercept (PCU/Min)	30.221	29.878	18.433	16.292	20.365

Junction Diagram: (View Extent = 80m)



Angles Between Arms (Degrees): Arm A(72) Arm B(72) Arm C(72) Arm D(72) Arm E(72)

Demand Data

Demand Profiles are Synthesised using **DIRECT** Data
Period of interest (for Queue and Delay calculations): **08:00 to 09:00**
Length of Time Period: **60 min**
Length of Time Segment: **15 min**

Direct Data for Demand Set: AM Peak No Development

Time Period	Arm	Demand Data (Veh/Min)
Segment : 1 - 08:00 to 08:15	A	14.77
	B	14.85
	C	4.65
	D	2.41
	E	11.45
Segment : 2 - 08:15 to 08:30	A	14.77
	B	14.85
	C	4.65
	D	2.41
	E	11.45
Segment : 3 - 08:30 to 08:45	A	14.77
	B	14.85
	C	4.65
	D	2.41
	E	11.45
Segment : 4 - 08:45 to 09:00	A	14.77
	B	14.85
	C	4.65
	D	2.41
	E	11.45

Turning Proportions for Demand Set: AM Peak No Development

Turning proportions vary over entry and calculated from turning count data (shaded)

Time Period	From/To	Arm A	Arm B	Arm C	Arm D	Arm E
08:00 to 09:00	Arm A	0.000	0.475	0.431	0.094	0.000
		0.0	421.0	382.0	83.0	0.0
	Arm B	0.414	0.008	0.094	0.484	0.000
		369.0	7.0	84.0	431.0	0.0
	Arm C	0.437	0.427	0.000	0.136	0.000
		122.0	119.0	0.0	38.0	0.0
	Arm D	0.000	0.000	0.000	0.000	1.000
		0.0	0.0	0.0	0.0	145.0
	Arm E	0.000	0.972	0.028	0.000	0.000
		0.0	668.0	19.0	0.0	0.0

Heavy Vehicle Percentages for Demand Set: AM Peak No Development

Vary over entry

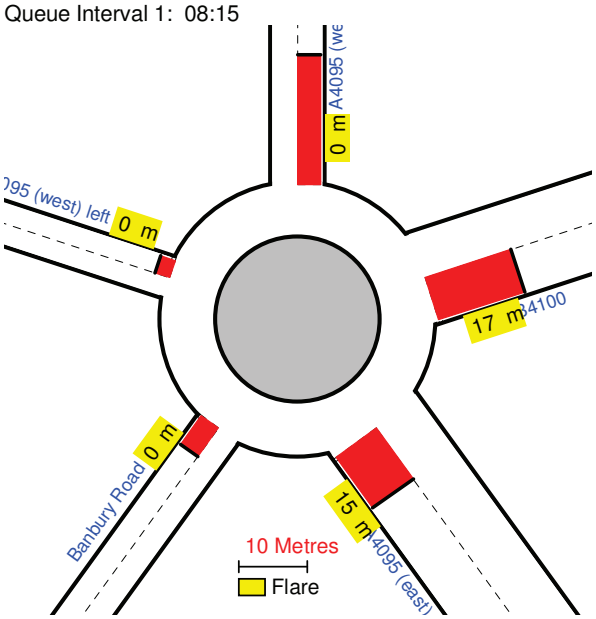
Time Period	From/To	Arm A	Arm B	Arm C	Arm D	Arm E
08:00 to 09:00	Arm A	0.0	0.0	0.0	0.0	0.0
	Arm B	0.0	0.0	0.0	0.0	0.0
	Arm C	0.0	0.0	0.0	0.0	0.0
	Arm D	0.0	0.0	0.0	0.0	0.0
	Arm E	0.0	0.0	0.0	0.0	0.0

Queue Diagrams: (View Extent = 80m)

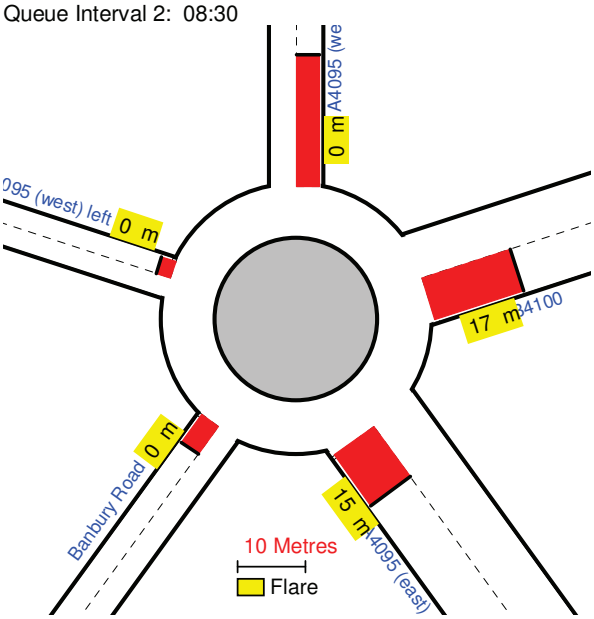
Queue Length	Colour
Mean Queue	
5 th % ile	
90 th % ile	
95 th % ile	

Start Time: 08:00---> End Time: 09:00

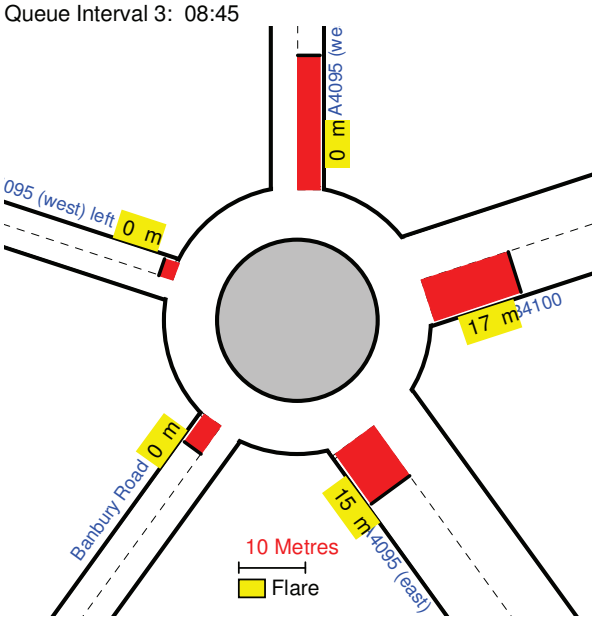
Queue Interval 1: 08:15



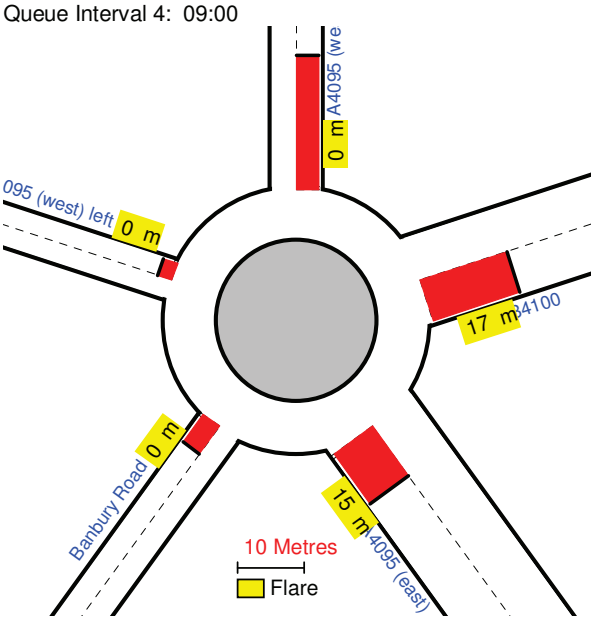
Queue Interval 2: 08:30



Queue Interval 3: 08:45

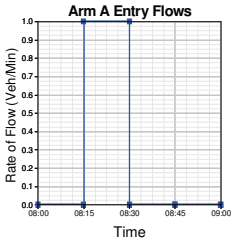


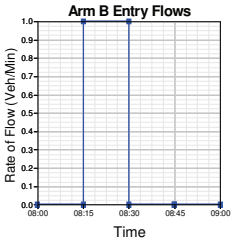
Queue Interval 4: 09:00

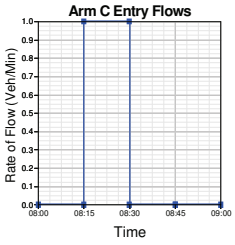


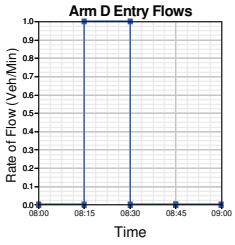
Demand Data Graphs

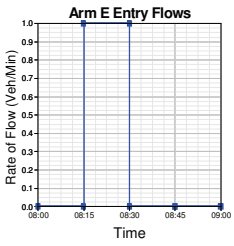
Direct Entry/Exit Flows for Demand Set: AM Peak No Development





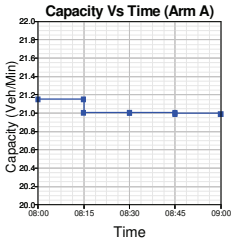


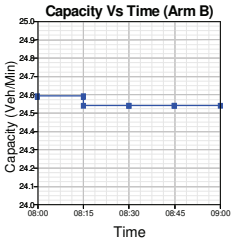


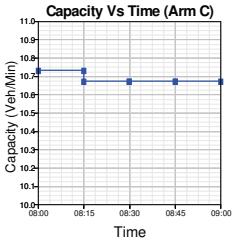


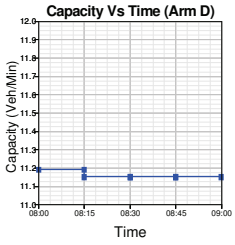
Capacity (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

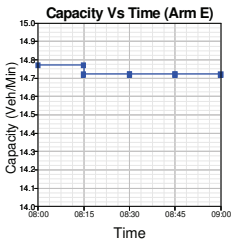
(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)





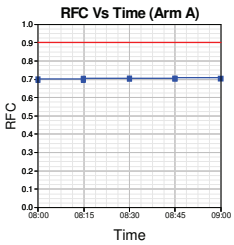


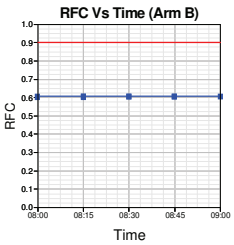


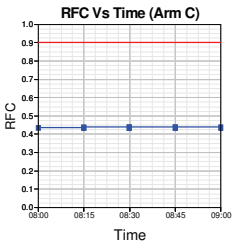


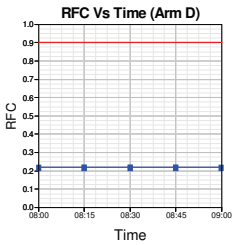
RFC (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

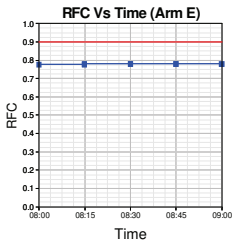
(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)





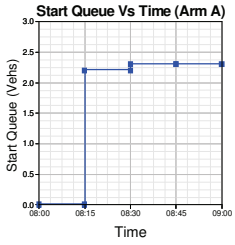


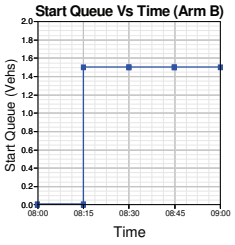


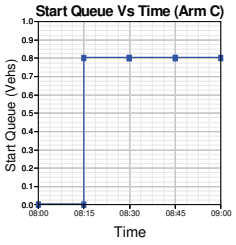


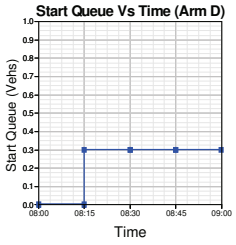
Start Queue (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

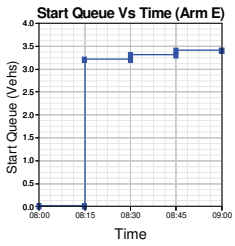
(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)











End Queue (against Time) Graphs, for each 15min Interval (08:00 - 09:00)

(QUEUEING DELAY INFORMATION OVER WHOLE PERIOD)