

Capabilities on project:  
Transportation

## Appendix I – Scenario C Flow calcs and TRANSYT outputs



# TRANSYT 15

Version: 15.0.1.2976 []  
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**Last run:** 27/06/2014 12:07:04

**Analysis Set used for last run:** A1 - 2031 AM Scenario 3

**Filename:** Scenario C Existing Rev 3 - AM.t15

**Path:** F:\TEM\Project\BCC - Peddimore Access Modelling\3.

EXECUTION\Modelling\With Water Orton Lane\Scenario C\Existing Water Orton Lane

**Report generation date:** 27/06/2014 14:39:10

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## File summary

### File Description

<b>Title</b>	A38 Peddimore Lane Junction - Minworth roundabout
<b>Location</b>	Birmingham
<b>Site Number</b>	
<b>UTCRegion</b>	
<b>Driving Side</b>	Left
<b>Date</b>	02/03/2014
<b>Version</b>	
<b>Status</b>	Proposed Option
<b>Identifier</b>	
<b>Client</b>	Birmingham City Council
<b>Jobnumber</b>	60316941
<b>Enumerator</b>	EU\vuppalas
<b>Description</b>	2031 SC3 - Peddimore Lane junction flows tested in preferred Option Model for Minworth roundabout

## Units

Cost Units	Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
£	kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

## Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

## Network Diagrams



A38 Peddimore Lane Junction - Mirworth roundabout  
 Cycletime 0s / 88s , Timesteps 87 / 88  
 Diagram produced using TRANSYT 15.0.1.2976



# A1 - 2031 AM Scenario 3 \*: D1 - 2031 AM Scenario 3\*

## Summary

### Data Errors and Warnings

No errors or warnings

### Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Network Cycle Time (s)	Total Network Delay (PCU - hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalled PRC	Item with worst unsignalised PRC	Item with worst over all PRC	Network Within Capacity
A1 - 2031 AM Scenario 3	27/06/2014 12:03:58	27/06/2014 12:07:04	08:00	88	215.16	116.30	E/1	6	6	A/2	C3-1/1	C3-1/1	

### Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
2031 AM Scenario 3		D1	✓	

### Demand Set Details

Demand Set	Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
D1	2031 AM Scenario 3				08:00	

## Network Options

### Network Timings

Network Cycle Time (s)	Restrict To SCOOT Cycle Times	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
88		60	1	60

### Signals Options

Start Displacement (s)	End Displacement (s)
2	3

### Advanced

Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)
10000.00	10000.00	10000.00

## Traffic Options

Traffic Model	Vehicle Flow Scaling Factor (%)	Pedestrian Flow Scaling Factor (%)	Cruise Times Or Speeds
Force To PDM	100	100	Cruise Speeds

## Advanced

Resolution	DOS Threshold (%)	Cruise Scaling Factor (%)	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)	Calculate results for Path Segments
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75	

## Normal Parameters

Dispersal Type	Dispersal Coefficient	Travel Time Coefficient
Default	35	80

## Bus Parameters

Dispersion Coefficient1	Dispersion Coefficient2	Acceleration (ms <sup>-2</sup> )	Travel Time Coefficient1	Travel Time Coefficient2
70	15	0.47	30	85

## Tram Parameters

Dispersion Coefficient1	Dispersion Coefficient2	Acceleration (ms <sup>-2</sup> )	Travel Time Coefficient1	Travel Time Coefficient2
0	0	0.47	100	100

## Pedestrian Parameters

Dispersal Type	Dispersal Coefficient	Travel Time Coefficient
Default	35	80

## Optimisation Options

Enable Optimisation	Auto Redistribute	Optimisation Level	Enable Out Profile Accuracy
✓		Offsets Only	✓

## Advanced

Optimisation Type	Hill Climb Increments	OUTProfile Accuracy	Use Enhanced Optimisation	Auto Optimisation	Optimisation Order
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				<b>Order</b>	
Hill Climb (Fast)	15,40,15,40,15,1,1	50,50,5,5,0.5,0.05,0.05		✓	2,1,3,5,6,7,8,9,10,11,4,12

## Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian Monetary Value Of Delay (£ per Ped-hr)
14.20	2.60	14.20

# Traffic Nodes

## Traffic Nodes

ID	Name	Description
1	A38 N	
2	Lindridge Drive	
3	A4097 Kingsbury Road	
4	A38 S	
5	Wamley Ash Road	
6	Lindridge Drive Circulatory	
7	A38 South Exit	
8	A38 North Exit	
9	A4097 Kingsbury Road Exit	
10	A38 NB	
11	Dev Access	
12	A38 South bound	
13	Peddimore	
14	Dev Access	
15	A38 Southbound	
16	Peddimore	
17	A38 North Exit	
18	Dev Access Exit	
19	Peddimore	
20	A30 Southbound Exit	
21	(untitled)	
22	(untitled)	

23	(untitled)	
24	(untitled)	
25	(untitled)	
26	A4097 Kingsbury Road Exit	

## Links

### Links

Link	Name	Description	Traffic Node	Length (m)	Has Restricted Flow	Use RR67	Saturation Flow (PCU/hr)	Is Signal Controlled	Is Give Way	Traffic Type	Is Minor Shared
1	(untitled)		23	3.50	✓		10000	✓		Pedestrian	
2	(untitled)		25	3.50	✓		10000	✓		Pedestrian	

### Modelling

Link	Traffic Model	Stop Weighting (%)	Delay Weighting (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
1	[Forced to PDM]	100	100		0.00		
2	[Forced to PDM]	100	100		0.00		

### Modelling - Advanced

Link	Initial Queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter	Auto Cycle Time	Cycle Time
1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
2	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

### Flows

Link	Flows	Total Flow (08:00-09:00) (PCU/hr)
1	1	500
2	1	500

### Flows - Advanced

Link	Detectors	Link Sensitivity Multiplier (%)	Cruise Sensitivity Multiplier (%)
1		100	100
2		100	100

## Signals

Link	Controller Stream	Phase	Phase2 Enabled
1	4	E	
2	12	B	

## Entry Sources

Link	Cruise Time (seconds)	Cruise Speed (kph)
1	1.00	30.00
2	1.00	30.00

# Arms and Traffic Streams

## Arms

Arm	Name	Description	Traffic Node
1	A4097 Kingsbury Road EB		26
A	A38 North		1
B	Lindridge Drive		2
C	A4097 Kingsbury Road		3
D	A38 South		4
E	Wamley Ash Road		5
F	A38 South Entry		10
G	Dev Access Entry		11
H	A38 North Entry		12
I	Peddimore Entry		13
Ac	A38 North Circulatory		1
Ax	A38 North Exit		8
Ax1	(untitled)		21
Ax2	A38 North Exit		17
Bc	Lindridge Drive Circulatory		6
Bc1	Lindridge Drive Circulatory 2		2
Bx	Lindridge drive Exit		
C2	A4097 Kingsbury Road WB		9
C3-1	Cottage Lane Entry		23
C4	A4097 Kingsbury Road Entry		23

<b>C5</b>	Water Orton Lane Entry		23
<b>Cc</b>	A4097 Kingsbury Road Circulatory		3
<b>Cx</b>	A4097 Kingsbury Road Exit		24
<b>Cx 2</b>	A4097 Kingsbury Road EB		23
<b>Cx3</b>	Cottage Lane Exit		
<b>Cx4</b>	A4097 Kingsbury Road Exit		25
<b>Cx4-2</b>	(untitled)		
<b>Cx5</b>	Water Orton Lane Exit		
<b>Dc</b>	A38 South Circulatory		4
<b>Dx</b>	A38 South Exit		7
<b>Dx1</b>	A38 South Exit		
<b>Ec</b>	Wamley Ash Road Circulatory		5
<b>Ex</b>	Wamley Ash Road Exit		
<b>Fc</b>	A38 South Circulatory		10
<b>Fx</b>	A38 South Exit		20
<b>Fx1</b>	(untitled)		22
<b>G1</b>	Dev Access Entry 1		14
<b>Gc</b>	Dev access Circulatory		11
<b>Gx</b>	Dev Access exit		18
<b>Gx1</b>	Dev Access Exit 1		
<b>H1</b>	A38 North Entry		15
<b>Hc</b>	A38 North Circulatory		12
<b>Hx</b>	A38 North Exit		
<b>I1</b>	Peddimore Entry 1		16
<b>Ic</b>	Peddimore Circulatory		13
<b>Ix</b>	Peddimore Exit		19
<b>Ix1</b>	Peddimore Exit		

## Traffic Streams

Arm	Traffic Stream	Name	Description	Auto Length	Length (m)	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Is Give Way	Traffic Type
1	1	(untitled)			345.96	✓	SumOfLanes	2083			Normal

<b>A</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	2128	✓		Normal
<b>A</b>	<b>2</b>	(untitled )			150.00	✓	SumOfLanes	2279	✓		Normal
<b>A</b>	<b>3</b>	A38 North Entry			150.00	✓	SumOfLanes	2279	✓		Normal
<b>A</b>	<b>4</b>	(untitled )			150.00	✓	SumOfLanes	2279	✓		Normal
<b>Ax1</b>	<b>1</b>	(untitled )			20.00	✓	SumOfLanes	1800			Normal
<b>Ax1</b>	<b>2</b>	(untitled )			20.00	✓	SumOfLanes	1800			Normal
<b>Ax2</b>	<b>1</b>	A38 North Exit			150.00	✓	SumOfLanes	1800			Normal
<b>Ax2</b>	<b>2</b>	A38 North Exit			150.00	✓	SumOfLanes	1800			Normal
<b>B</b>	<b>1</b>	(untitled )			30.00					✓	Normal
<b>B</b>	<b>2</b>	(untitled )			30.00					✓	Normal
<b>Bc1</b>	<b>1</b>	(untitled )			30.00	✓	SumOfLanes	1800			Normal
<b>Bc1</b>	<b>2</b>	(untitled )			30.00	✓	SumOfLanes	1800			Normal
<b>Bc1</b>	<b>3</b>	(untitled )			30.00	✓	SumOfLanes	1800			Normal
<b>Bc1</b>	<b>4</b>	(untitled )			30.00	✓	SumOfLanes	1800			Normal
<b>C</b>	<b>1</b>	(untitled )			200.00	✓	SumOfLanes	2263	✓		Normal
<b>C</b>	<b>2</b>	(untitled )			200.00	✓	SumOfLanes	2263	✓		Normal
<b>C3-1</b>	<b>1</b>	(untitled )			55.60					✓	Normal
<b>Cx 2</b>	<b>1</b>	(untitled )			68.00	✓	SumOfLanes	2083	✓		Normal
<b>Cx 2</b>	<b>2</b>	(untitled )			68.00	✓	SumOfLanes	2083	✓		Normal
<b>Cx3</b>	<b>1</b>	(untitled )			59.35	✓	SumOfLanes	1800			Normal
<b>Cx4</b>	<b>1</b>	(untitled )			15.00	✓	SumOfLanes	1965	✓		Normal

<b>Cx4-2</b>	<b>1</b>	(untitled )			77.43	✓	SumOfLanes	1965			Normal
<b>Cx5</b>	<b>1</b>	(untitled )			62.61	✓	SumOfLanes	1800			Normal
<b>D</b>	<b>1</b>	(untitled )			300.00	✓	SumOfLanes	2159	✓		Normal
<b>D</b>	<b>2</b>	(untitled )			300.00	✓	SumOfLanes	2317	✓		Normal
<b>D</b>	<b>3</b>	(untitled )			300.00	✓	SumOfLanes	2317	✓		Normal
<b>Dx1</b>	<b>1</b>	A38 South Exit			250.00	✓	SumOfLanes	2155			Normal
<b>Dx1</b>	<b>2</b>	A38 South Exit			250.00	✓	SumOfLanes	2155			Normal
<b>E</b>	<b>1</b>	(untitled )			200.00					✓	Normal
<b>E</b>	<b>2</b>	(untitled )			200.00					✓	Normal
<b>F</b>	<b>1</b>	(untitled )			210.00	✓	SumOfLanes	2134	✓		Normal
<b>F</b>	<b>2</b>	(untitled )			210.00	✓	SumOfLanes	2284	✓		Normal
<b>F</b>	<b>3</b>	(untitled )			210.00	✓	SumOfLanes	2284	✓		Normal
<b>G</b>	<b>1</b>	(untitled )			76.00	✓	SumOfLanes	2123	✓		Normal
<b>G</b>	<b>2</b>	(untitled )			76.00	✓	SumOfLanes	2274	✓		Normal
<b>H</b>	<b>1</b>	(untitled )			96.00	✓	SumOfLanes	2134	✓		Normal
<b>H</b>	<b>2</b>	(untitled )			96.00	✓	SumOfLanes	2284	✓		Normal
<b>H</b>	<b>3</b>	(untitled )			96.00	✓	SumOfLanes	2284	✓		Normal
<b>I</b>	<b>1</b>	(untitled )			60.00	✓	SumOfLanes	2123	✓		Normal
<b>I</b>	<b>2</b>	(untitled )			60.00	✓	SumOfLanes	2274	✓		Normal
<b>Ac</b>	<b>1</b>	(untitled )			54.00	✓	SumOfLanes	2112	✓		Normal
<b>Ac</b>	<b>2</b>	(untitled )			54.00	✓	SumOfLanes	2263	✓		Normal



<b>Ac</b>	<b>3</b>	(untitled )			54.00	✓	SumOfLanes	2263	✓		Normal
<b>Ax</b>	<b>1</b>	(untitled )			20.00	✓	SumOfLanes	1965	✓		Normal
<b>Ax</b>	<b>2</b>	(untitled )			20.00	✓	SumOfLanes	2105	✓		Normal
<b>Ax</b>	<b>3</b>	(untitled )			20.00	✓	SumOfLanes	2105	✓		Normal
<b>Bc</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Bc</b>	<b>2</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Bc</b>	<b>3</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Bc</b>	<b>4</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Bx</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>C2</b>	<b>1</b>	(untitled )			313.96	✓	SumOfLanes	1800			Normal
<b>C4</b>	<b>1</b>	(untitled )			86.62	✓	SumOfLanes	2063	✓		Normal
<b>C5</b>	<b>1</b>	(untitled )			55.00	✓	SumOfLanes	1906	✓		Normal
<b>Cc</b>	<b>1</b>	(untitled )			65.00	✓	SumOfLanes	2059	✓		Normal
<b>Cc</b>	<b>2</b>	(untitled )			65.00	✓	SumOfLanes	2209	✓		Normal
<b>Cc</b>	<b>3</b>	(untitled )			65.00	✓	SumOfLanes	2181	✓		Normal
<b>Cx</b>	<b>1</b>	A4097 Kinsbury Road Exit			100.00	✓	SumOfLanes	2120	✓		Normal
<b>Cx</b>	<b>2</b>	A4097 Kinsbury Road Exit			100.00	✓	SumOfLanes	2120	✓		Normal
<b>Dc</b>	<b>1</b>	(untitled )			90.00	✓	SumOfLanes	2059	✓		Normal
<b>Dc</b>	<b>2</b>	(untitled )			90.00	✓	SumOfLanes	2172	✓		Normal
<b>Dc</b>	<b>3</b>	(untitled )			90.00	✓	SumOfLanes	2185	✓		Normal

<b>Dx</b>	<b>1</b>	(untitled )			56.00	✓	SumOfLanes	1915	✓		Normal
<b>Dx</b>	<b>2</b>	(untitled )			56.00	✓	SumOfLanes	2055	✓		Normal
<b>Dx</b>	<b>3</b>	(untitled )			56.00	✓	SumOfLanes	2055	✓		Normal
<b>Ec</b>	<b>1</b>	(untitled )			50.00	✓	SumOfLanes	1800			Normal
<b>Ec</b>	<b>2</b>	(untitled )			50.00	✓	SumOfLanes	1800			Normal
<b>Ec</b>	<b>3</b>	(untitled )			50.00	✓	SumOfLanes	1800			Normal
<b>Ex</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Ex</b>	<b>2</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Fc</b>	<b>1</b>	(untitled )			74.00	✓	SumOfLanes	2166	✓		Normal
<b>Fc</b>	<b>2</b>	(untitled )			74.00	✓	SumOfLanes	2317	✓		Normal
<b>Fc</b>	<b>3</b>	(untitled )			74.00	✓	SumOfLanes	2317	✓		Normal
<b>Fx</b>	<b>1</b>	(untitled )			200.00	✓	SumOfLanes	2112			Normal
<b>Fx</b>	<b>2</b>	(untitled )			200.00	✓	SumOfLanes	2263			Normal
<b>Fx1</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Fx1</b>	<b>2</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>G1</b>	<b>1</b>	(untitled )			60.00	✓	SumOfLanes	2112			Normal
<b>Gc</b>	<b>1</b>	(untitled )			70.00	✓	SumOfLanes	2166	✓		Normal
<b>Gc</b>	<b>2</b>	(untitled )			70.00	✓	SumOfLanes	2317	✓		Normal
<b>Gc</b>	<b>3</b>	(untitled )			70.00	✓	SumOfLanes	2317	✓		Normal
<b>Gx</b>	<b>1</b>	(untitled )			56.00	✓	SumOfLanes	2112			Normal , Bus, Tram
<b>Gx</b>	<b>2</b>	(untitled )			56.00	✓	SumOfLanes	2263			Normal , Bus, Tram

Gx1	1	(untitled)			20.00	✓	SumOfLanes	1965				Normal, Bus, Tram
H1	1	(untitled)			100.00	✓	SumOfLanes	2112				Normal
H1	2	(untitled)			100.00	✓	SumOfLanes	2263				Normal
Hc	1	(untitled)			67.00	✓	SumOfLanes	2166	✓			Normal
Hc	2	(untitled)			67.00	✓	SumOfLanes	2317	✓			Normal
Hc	3	(untitled)			67.00	✓	SumOfLanes	2317	✓			Normal
Hx	1	(untitled)			100.00	✓	SumOfLanes	2112				Normal
Hx	2	(untitled)			100.00	✓	SumOfLanes	2263				Normal
I1	1	(untitled)			100.00	✓	SumOfLanes	2112				Normal
Ic	1	(untitled)			65.00	✓	SumOfLanes	2166	✓			Normal
Ic	2	(untitled)			65.00	✓	SumOfLanes	2317	✓			Normal
Ic	3	(untitled)			65.00	✓	SumOfLanes	2317	✓			Normal
Ix	1	(untitled)			45.00	✓	SumOfLanes	2112				Normal, Bus, Tram
Ix	2	(untitled)			45.00	✓	SumOfLanes	2263				Normal, Bus, Tram
Ix1	1	(untitled)			15.00	✓	SumOfLanes	2112				Normal, Bus, Tram

## Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR 67	Surface Condition	Site Quality Factor	Gradient (%)	Width (m)	Use Connector Turning Radius	Proportion That Turn (%)	Turning Radius (m)	Nearside Lane	Saturation Flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	4.68		0	10.00	✓	2083
A	1	2	A38 North Entry		✓	N/A	Clearly Good	0	3.65		0	10.00	✓	2128



Cx 2	1	1	(untitled )		✓	N/A	N/A	0	4.68		0	10.00	✓	2083
Cx 2	2	1	(untitled )		✓	N/A	N/A	0	4.68		0	10.00	✓	2083
Cx 3	1	1	(untitled )											1800
Cx 4	1	1	(untitled )		✓	N/A	N/A	0	3.50		0	10.00	✓	1965
Cx 4-2	1	1	(untitled )											1965
Cx 5	1	1	(untitled )											1800
D	1	2	A38 South Entry		✓	N/A	Clearly Good	0	4.00		10	42.00	✓	2159
D	2	1	A38 South Entry		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
D	3	3	A38 South Entry		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
Dx 1	1	1	(untitled )		✓	N/A	N/A	0	4.00		0	10.00		2155
Dx 1	2	1	(untitled )		✓	N/A	N/A	0	4.00		0	10.00		2155
E	1	3	(untitled )											
E	2	3	(untitled )											
F	1	2	A38 North Exit		✓	N/A	Clearly Good	0	3.70		0	10.00	✓	2134
F	2	1	A38 North Exit		✓	N/A	Clearly Good	0	3.70		0	10.00		2284
F	3	1	A38 North Exit		✓	N/A	Clearly Good	0	3.70		0	10.00		2284
G	1	2	A38 North Exit		✓	N/A	Clearly Good	0	3.60		0	10.00	✓	2123
G	2	1	A38 North Exit		✓	N/A	Clearly Good	0	3.60		0	10.00		2274
H	1	2	A38 North Exit		✓	N/A	Clearly Good	0	3.70		0	10.00	✓	2134



			Exit											
<b>C2</b>	<b>1</b>	<b>1</b>	(untitled )											1800
<b>C4</b>	<b>1</b>	<b>1</b>	(untitled )		✓	N/A	N/A	0	4.48		0	10.00	✓	2063
<b>C5</b>	<b>1</b>	<b>1</b>	(untitled )		✓	N/A	N/A	0	2.91		0	10.00	✓	1906
<b>Cc</b>	<b>1</b>	<b>1</b>	A4097 Kingsbury Road Circulatory		✓	N/A	Clearly Good	0	3.00		0	10.00	✓	2059
<b>Cc</b>	<b>2</b>	<b>2</b>	A4097 Kingsbury Road Circulatory		✓	N/A	Clearly Good	0	3.00		0	10.00		2209
<b>Cc</b>	<b>3</b>	<b>2</b>	A4097 Kingsbury Road Circulatory		✓	N/A	Clearly Good	0	3.00		43	50.00		2181
<b>Cx</b>	<b>1</b>	<b>2</b>	A4097 Kingsbury Road Exit		✓	N/A	N/A	0	3.65		0	10.00		2120
<b>Cx</b>	<b>2</b>	<b>3</b>	A4097 Kingsbury Road Exit		✓	N/A	N/A	0	3.65		0	10.00		2120
<b>Dc</b>	<b>1</b>	<b>2</b>	A38 South Circulatory		✓	N/A	Clearly Good	0	3.00		0	10.00	✓	2059
<b>Dc</b>	<b>2</b>	<b>1</b>	A38 South Circulatory		✓	N/A	Clearly Good	0	3.00		56	49.00		2172
<b>Dc</b>	<b>3</b>	<b>1</b>	A38 South Circulatory		✓	N/A	Clearly Good	0	3.00		35	49.00		2185
<b>Dx</b>	<b>1</b>	<b>1</b>	A38 South Exit		✓	N/A	N/A	0	3.00		0	10.00	✓	1915
<b>Dx</b>	<b>2</b>	<b>2</b>	A38 South Exit		✓	N/A	N/A	0	3.00		0	10.00		2055
<b>Dx</b>	<b>3</b>	<b>2</b>	A38 South Exit		✓	N/A	N/A	0	3.00		0	10.00		2055

<b>Ec</b>	<b>1</b>	<b>2</b>	Wamley Ash Road Circulatory											1800
<b>Ec</b>	<b>2</b>	<b>1</b>	Wamley Ash Road Circulatory											1800
<b>Ec</b>	<b>3</b>	<b>3</b>	(untitled)											1800
<b>Ex</b>	<b>1</b>	<b>1</b>	Wamley Ash Road Exit											1800
<b>Ex</b>	<b>2</b>	<b>2</b>	Wamley Ash Road Exit											1800
<b>Fc</b>	<b>1</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00	✓	2166
<b>Fc</b>	<b>2</b>	<b>2</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
<b>Fc</b>	<b>3</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
<b>Fx</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
<b>Fx</b>	<b>2</b>	<b>1</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00		2263
<b>Fx1</b>	<b>1</b>	<b>1</b>	(untitled)											1800
<b>Fx1</b>	<b>2</b>	<b>1</b>	(untitled)											1800
<b>G1</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
<b>Gc</b>	<b>1</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00	✓	2166
<b>Gc</b>	<b>2</b>	<b>2</b>	A38 North		✓	N/A	Clearly	0	4.00		0	10.00		2317



			Circulatory				Good							
<b>Gc</b>	<b>3</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
<b>Gx</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
<b>Gx</b>	<b>2</b>	<b>1</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00		2263
<b>Gx 1</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	N/A	0	3.50		0	10.00	✓	1965
<b>H1</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
<b>H1</b>	<b>2</b>	<b>1</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00		2263
<b>Hc</b>	<b>1</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00	✓	2166
<b>Hc</b>	<b>2</b>	<b>2</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
<b>Hc</b>	<b>3</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
<b>Hx</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
<b>Hx</b>	<b>2</b>	<b>1</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00		2263
<b>I1</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
<b>Ic</b>	<b>1</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00	✓	2166
<b>Ic</b>	<b>2</b>	<b>2</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317

lc	3	1	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
lx	1	2	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
lx	2	1	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00		2263
lx1	1	2	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112

## Modelling

Arm	Traffic Stream	Traffic Model	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Queue Limit (PCU)	Excess Queue Penalty (£)	Has Degree Of Saturation Limit
1	1	[Forced to PDM]	100	100		0.00				
A	1	[Forced to PDM]	20	40	✓	0.00				
A	2	[Forced to PDM]	20	40	✓	0.00				
A	3	[Forced to PDM]	20	40	✓	0.00				
A	4	[Forced to PDM]	20	40	✓	0.00				
Ax1	1	[Forced to PDM]	100	100		0.00				
Ax1	2	[Forced to PDM]	100	100		0.00				
Ax2	1	[Forced to PDM]	100	100		0.00				
Ax2	2	[Forced to PDM]	100	100		0.00				
B	1	[Forced to PDM]	100	100		0.00				
B	2	[Forced to PDM]	100	100		0.00				
Bc1	1	[Forced to PDM]	100	100		0.00	✓	5	0.00	
Bc1	2	[Forced to PDM]	100	100		0.00	✓	5	0.00	
Bc1	3	[Forced	100	100		0.00	✓	5	0.00	

		to PDM]								
<b>Bc1</b>	<b>4</b>	[Forced to PDM]	100	100		0.00	✓	5	0.00	
<b>C</b>	<b>1</b>	[Forced to PDM]	0	40		0.00				
<b>C</b>	<b>2</b>	[Forced to PDM]	0	40		0.00				
<b>C3-1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx 2</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx 2</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Cx3</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx4</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx4-2</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx5</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>D</b>	<b>1</b>	[Forced to PDM]	0	40		0.00				
<b>D</b>	<b>2</b>	[Forced to PDM]	0	40		0.00				
<b>D</b>	<b>3</b>	[Forced to PDM]	0	40		0.00				
<b>Dx1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Dx1</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>E</b>	<b>1</b>	[Forced to PDM]	100	40		0.00				
<b>E</b>	<b>2</b>	[Forced to PDM]	100	40		0.00				
<b>F</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>F</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>F</b>	<b>3</b>	[Forced to PDM]	100	100		0.00				
<b>G</b>	<b>1</b>	[Forced to PDM]	20	50		0.00				

<b>G</b>	<b>2</b>	[Forced to PDM]	20	50		0.00				
<b>H</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>H</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>H</b>	<b>3</b>	[Forced to PDM]	100	100		0.00				
<b>I</b>	<b>1</b>	[Forced to PDM]	0	40	✓	0.00				
<b>I</b>	<b>2</b>	[Forced to PDM]	0	40	✓	0.00				
<b>Ac</b>	<b>1</b>	[Forced to PDM]	100	100		7.00	✓	3	80.00	
<b>Ac</b>	<b>2</b>	[Forced to PDM]	100	100		7.00	✓	4	60.00	
<b>Ac</b>	<b>3</b>	[Forced to PDM]	100	100		7.00	✓	4	60.00	
<b>Ax</b>	<b>1</b>	[Forced to PDM]	100	100		0.00	✓	3	60.00	
<b>Ax</b>	<b>2</b>	[Forced to PDM]	100	100		0.00	✓	3	60.00	
<b>Ax</b>	<b>3</b>	[Forced to PDM]	100	100		0.00	✓	3	60.00	
<b>Bc</b>	<b>1</b>	[Forced to PDM]	100	100		0.00	✓	15	0.00	
<b>Bc</b>	<b>2</b>	[Forced to PDM]	100	100		0.00	✓	15	0.00	
<b>Bc</b>	<b>3</b>	[Forced to PDM]	100	100		0.00	✓	15	0.00	
<b>Bc</b>	<b>4</b>	[Forced to PDM]	100	100		0.00	✓	15	0.00	
<b>Bx</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>C2</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>C4</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>C5</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cc</b>	<b>1</b>	[Forced to PDM]	100	100		6.00	✓	6	60.00	
<b>Cc</b>	<b>2</b>	[Forced to PDM]	100	100		6.00	✓	6	60.00	

<b>Cc</b>	<b>3</b>	[Forced to PDM]	100	100		6.00	✓	6	60.00	
<b>Cx</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Dc</b>	<b>1</b>	[Forced to PDM]	1000	1000		0.00	✓	13	60.00	
<b>Dc</b>	<b>2</b>	[Forced to PDM]	100	100		0.00	✓	13	30.00	
<b>Dc</b>	<b>3</b>	[Forced to PDM]	100	100		0.00	✓	13	0.00	
<b>Dx</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Dx</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Dx</b>	<b>3</b>	[Forced to PDM]	100	100		0.00				
<b>Ec</b>	<b>1</b>	[Forced to PDM]	100	100		0.00	✓	6	0.00	
<b>Ec</b>	<b>2</b>	[Forced to PDM]	100	100		0.00	✓	6	60.00	
<b>Ec</b>	<b>3</b>	[Forced to PDM]	100	100		0.00	✓	6	60.00	
<b>Ex</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Ex</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Fc</b>	<b>1</b>	[Forced to PDM]	100	100		7.00	✓	3	0.00	
<b>Fc</b>	<b>2</b>	[Forced to PDM]	100	100		7.00	✓	3	0.00	
<b>Fc</b>	<b>3</b>	[Forced to PDM]	100	100		7.00	✓	3	0.00	
<b>Fx</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Fx</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Fx1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Fx1</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>G1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				

Gc	1	[Forced to PDM]	100	100		7.00	✓	2	100.00	
Gc	2	[Forced to PDM]	100	100		7.00	✓	2	100.00	
Gc	3	[Forced to PDM]	100	100		7.00	✓	2	100.00	
Gx	1	[Forced to PDM]	100	100		0.00				
Gx	2	[Forced to PDM]	100	100		0.00				
Gx1	1	[Forced to PDM]	100	100		0.00				
H1	1	[Forced to PDM]	100	100		0.00				
H1	2	[Forced to PDM]	100	100		0.00				
Hc	1	[Forced to PDM]	100	100		7.00	✓	3	2000.00	
Hc	2	[Forced to PDM]	100	100		7.00	✓	3	2000.00	
Hc	3	[Forced to PDM]	100	100	✓	7.00	✓	3	2000.00	
Hx	1	[Forced to PDM]	100	100		0.00				
Hx	2	[Forced to PDM]	100	100		0.00				
I1	1	[Forced to PDM]	100	100		0.00				
Ic	1	[Forced to PDM]	100	100		7.00	✓	2	80.00	
Ic	2	[Forced to PDM]	100	100		7.00	✓	2	100.00	
Ic	3	[Forced to PDM]	100	100		7.00	✓	2	0.00	
Ix	1	[Forced to PDM]	100	100		0.00				
Ix	2	[Forced to PDM]	100	100		0.00				
Ix1	1	[Forced to PDM]	100	100		0.00				

## Modelling - Advanced

Arm	Traffic Stream	Cruise Sensitivity	Initial Queue	Type of Vehicle-in-Service	Vehicle-in-	Type Of Random	Random Parameter	Auto Cycle	Cycle Time
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		Multiplier (%)	(PCU)		Service	Parameter		Time	
1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
A	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
A	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
A	3	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
A	4	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ax1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ax1	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ax2	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ax2	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
B	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
B	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Bc1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Bc1	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Bc1	3	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Bc1	4	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
C	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
C	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
C3-1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Cx 2	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Cx 2	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Cx3	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

<b>Cx4</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx4-2</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx5</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>D</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>D</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>D</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dx1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dx1</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>E</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>E</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>F</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>F</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>F</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>G</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>G</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>H</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>H</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>H</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>I</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>I</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ac</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ac</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88



<b>Ac</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc</b>	<b>4</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C2</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C4</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C5</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dx</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

<b>Dx</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ec</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ec</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ec</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ex</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ex</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fx</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fx1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fx1</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>G1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gx</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gx1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>H1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>H1</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

Hc	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Hc	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Hc	3	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Hx	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Hx	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
I1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ic	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ic	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ic	3	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ix	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ix	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ix1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

### Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
1	1	100	100
A	1	100	100
A	2	100	100
A	3	100	100
A	4	100	100
Ax1	1	100	100
Ax1	2	100	100
Ax2	1	100	100
Ax2	2	100	100
B	1	100	100
B	2	100	100
Bc1	1	100	100

<b>Bc1</b>	<b>2</b>	100	100
<b>Bc1</b>	<b>3</b>	100	100
<b>Bc1</b>	<b>4</b>	100	100
<b>C</b>	<b>1</b>	100	100
<b>C</b>	<b>2</b>	100	100
<b>C3-1</b>	<b>1</b>	100	100
<b>Cx 2</b>	<b>1</b>	100	100
<b>Cx 2</b>	<b>2</b>	100	100
<b>Cx3</b>	<b>1</b>	100	100
<b>Cx4</b>	<b>1</b>	100	100
<b>Cx4-2</b>	<b>1</b>	100	100
<b>Cx5</b>	<b>1</b>	100	100
<b>D</b>	<b>1</b>	100	100
<b>D</b>	<b>2</b>	100	100
<b>D</b>	<b>3</b>	100	100
<b>Dx1</b>	<b>1</b>	100	100
<b>Dx1</b>	<b>2</b>	100	100
<b>E</b>	<b>1</b>	100	100
<b>E</b>	<b>2</b>	100	100
<b>F</b>	<b>1</b>	100	100
<b>F</b>	<b>2</b>	100	100
<b>F</b>	<b>3</b>	100	100
<b>G</b>	<b>1</b>	100	100
<b>G</b>	<b>2</b>	100	100
<b>H</b>	<b>1</b>	100	100
<b>H</b>	<b>2</b>	100	100
<b>H</b>	<b>3</b>	100	100
<b>I</b>	<b>1</b>	100	100
<b>I</b>	<b>2</b>	100	100
<b>Ac</b>	<b>1</b>	100	100
<b>Ac</b>	<b>2</b>	100	100
<b>Ac</b>	<b>3</b>	100	100
<b>Ax</b>	<b>1</b>	100	100

<b>Ax</b>	<b>2</b>	100	100
<b>Ax</b>	<b>3</b>	100	100
<b>Bc</b>	<b>1</b>	100	100
<b>Bc</b>	<b>2</b>	100	100
<b>Bc</b>	<b>3</b>	100	100
<b>Bc</b>	<b>4</b>	100	100
<b>Bx</b>	<b>1</b>	100	100
<b>C2</b>	<b>1</b>	100	100
<b>C4</b>	<b>1</b>	100	100
<b>C5</b>	<b>1</b>	100	100
<b>Cc</b>	<b>1</b>	100	100
<b>Cc</b>	<b>2</b>	100	100
<b>Cc</b>	<b>3</b>	100	100
<b>Cx</b>	<b>1</b>	100	100
<b>Cx</b>	<b>2</b>	100	100
<b>Dc</b>	<b>1</b>	100	100
<b>Dc</b>	<b>2</b>	100	100
<b>Dc</b>	<b>3</b>	100	100
<b>Dx</b>	<b>1</b>	100	100
<b>Dx</b>	<b>2</b>	100	100
<b>Dx</b>	<b>3</b>	100	100
<b>Ec</b>	<b>1</b>	100	100
<b>Ec</b>	<b>2</b>	100	100
<b>Ec</b>	<b>3</b>	100	100
<b>Ex</b>	<b>1</b>	100	100
<b>Ex</b>	<b>2</b>	100	100
<b>Fc</b>	<b>1</b>	100	100
<b>Fc</b>	<b>2</b>	100	100
<b>Fc</b>	<b>3</b>	100	100
<b>Fx</b>	<b>1</b>	100	100
<b>Fx</b>	<b>2</b>	100	100
<b>Fx1</b>	<b>1</b>	100	100
<b>Fx1</b>	<b>2</b>	100	100

G1	1	100	100
Gc	1	100	100
Gc	2	100	100
Gc	3	100	100
Gx	1	100	100
Gx	2	100	100
Gx1	1	100	100
H1	1	100	100
H1	2	100	100
Hc	1	100	100
Hc	2	100	100
Hc	3	100	100
Hx	1	100	100
Hx	2	100	100
I1	1	100	100
Ic	1	100	100
Ic	2	100	100
Ic	3	100	100
Ix	1	100	100
Ix	2	100	100
Ix1	1	100	100

### Bus - Modelling

Arm	Traffic Stream	Stationary Time (seconds)	Stop Weighting (%)	Delay Weighting (%)
Gx	1	0.00	100	100
Gx	2	0.00	100	100
Gx1	1	0.00	100	100
Ix	1	0.00	100	100
Ix	2	0.00	100	100
Ix1	1	0.00	100	100

### Tram - Modelling

Arm	Traffic Stream	Stationary Time (seconds)	Stop Weighting (%)	Delay Weighting (%)
Gx	1	0.00	100	100

<b>Gx</b>	<b>2</b>	0.00	100	100
<b>Gx1</b>	<b>1</b>	0.00	100	100
<b>Ix</b>	<b>1</b>	0.00	100	100
<b>Ix</b>	<b>2</b>	0.00	100	100
<b>Ix1</b>	<b>1</b>	0.00	100	100

## Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)
<b>1</b>	<b>1</b>	1489	1489	0	0
<b>A</b>	<b>1</b>	333	333	0	0
<b>A</b>	<b>2</b>	818	818	0	0
<b>A</b>	<b>3</b>	498	498	0	0
<b>A</b>	<b>4</b>	762	762	0	0
<b>Ax1</b>	<b>1</b>	652	652	0	0
<b>Ax1</b>	<b>2</b>	1333	1333	0	0
<b>Ax2</b>	<b>1</b>	649	649	0	0
<b>Ax2</b>	<b>2</b>	1336	1336	0	0
<b>B</b>	<b>1</b>	77	77	0	0
<b>B</b>	<b>2</b>	77	77	0	0
<b>Bc1</b>	<b>1</b>	570	570	0	0
<b>Bc1</b>	<b>2</b>	1352	1352	0	0
<b>Bc1</b>	<b>3</b>	899	899	0	0
<b>Bc1</b>	<b>4</b>	1163	1163	0	0
<b>C</b>	<b>1</b>	524	524	0	0
<b>C</b>	<b>2</b>	810	810	0	0
<b>C3-1</b>	<b>1</b>	0	0	0	0
<b>Cx 2</b>	<b>1</b>	1131	1131	0	0
<b>Cx 2</b>	<b>2</b>	358	358	0	0
<b>Cx3</b>	<b>1</b>	42	42	0	0
<b>Cx4</b>	<b>1</b>	1148	1148	0	0
<b>Cx4-2</b>	<b>1</b>	1148	1148	0	0
<b>Cx5</b>	<b>1</b>	427	427	0	0
<b>D</b>	<b>1</b>	580	580	0	0

<b>D</b>	<b>2</b>	622	622	0	0
<b>D</b>	<b>3</b>	622	622	0	0
<b>Dx1</b>	<b>1</b>	851	851	0	0
<b>Dx1</b>	<b>2</b>	1824	1824	0	0
<b>E</b>	<b>1</b>	559	559	0	0
<b>E</b>	<b>2</b>	801	801	0	0
<b>F</b>	<b>1</b>	649	649	0	0
<b>F</b>	<b>2</b>	845	845	0	0
<b>F</b>	<b>3</b>	491	491	0	0
<b>G</b>	<b>1</b>	601	601	0	0
<b>G</b>	<b>2</b>	643	643	0	0
<b>H</b>	<b>1</b>	611	611	0	0
<b>H</b>	<b>2</b>	653	653	0	0
<b>H</b>	<b>3</b>	23	23	0	0
<b>I</b>	<b>1</b>	135	135	0	0
<b>I</b>	<b>2</b>	145	145	0	0
<b>Ac</b>	<b>1</b>	268	268	0	0
<b>Ac</b>	<b>2</b>	534	534	0	0
<b>Ac</b>	<b>3</b>	801	801	0	0
<b>Ax</b>	<b>1</b>	652	652	0	0
<b>Ax</b>	<b>2</b>	920	920	0	0
<b>Ax</b>	<b>3</b>	413	413	0	0
<b>Bc</b>	<b>1</b>	600	600	0	0
<b>Bc</b>	<b>2</b>	1352	1352	0	0
<b>Bc</b>	<b>3</b>	899	899	0	0
<b>Bc</b>	<b>4</b>	1163	1163	0	0
<b>Bx</b>	<b>1</b>	30	30	0	0
<b>C2</b>	<b>1</b>	1333	1333	0	0
<b>C4</b>	<b>1</b>	1129	1129	0	0
<b>C5</b>	<b>1</b>	332	332	0	0
<b>Cc</b>	<b>1</b>	510	510	0	0
<b>Cc</b>	<b>2</b>	912	912	0	0
<b>Cc</b>	<b>3</b>	1226	1226	0	0



<b>Cx</b>	<b>1</b>	635	635	0	0
<b>Cx</b>	<b>2</b>	854	854	0	0
<b>Dc</b>	<b>1</b>	324	324	0	0
<b>Dc</b>	<b>2</b>	562	562	0	0
<b>Dc</b>	<b>3</b>	420	420	0	0
<b>Dx</b>	<b>1</b>	851	851	0	0
<b>Dx</b>	<b>2</b>	912	912	0	0
<b>Dx</b>	<b>3</b>	912	912	0	0
<b>Ec</b>	<b>1</b>	562	562	0	0
<b>Ec</b>	<b>2</b>	829	829	0	0
<b>Ec</b>	<b>3</b>	836	836	0	0
<b>Ex</b>	<b>1</b>	580	580	0	0
<b>Ex</b>	<b>2</b>	324	324	0	0
<b>Fc</b>	<b>1</b>	22	22	0	0
<b>Fc</b>	<b>2</b>	53	53	0	0
<b>Fc</b>	<b>3</b>	8	8	0	0
<b>Fx</b>	<b>1</b>	1027	1027	0	0
<b>Fx</b>	<b>2</b>	1384	1384	0	0
<b>Fx1</b>	<b>1</b>	1151	1151	0	0
<b>Fx1</b>	<b>2</b>	1260	1260	0	0
<b>G1</b>	<b>1</b>	1244	1244	0	0
<b>Gc</b>	<b>1</b>	366	366	0	0
<b>Gc</b>	<b>2</b>	853	853	0	0
<b>Gc</b>	<b>3</b>	491	491	0	0
<b>Gx</b>	<b>1</b>	313	313	0	0
<b>Gx</b>	<b>2</b>	45	45	0	0
<b>Gx1</b>	<b>1</b>	358	358	0	0
<b>H1</b>	<b>1</b>	1264	1264	0	0
<b>H1</b>	<b>2</b>	23	23	0	0
<b>Hc</b>	<b>1</b>	574	574	0	0
<b>Hc</b>	<b>2</b>	925	925	0	0
<b>Hc</b>	<b>3</b>	645	645	0	0
<b>Hx</b>	<b>1</b>	445	445	0	0

Hx	2	366	366	0	0
I1	1	280	280	0	0
Ic	1	892	892	0	0
Ic	2	1299	1299	0	0
Ic	3	23	23	0	0
Ix	1	644	644	0	0
Ix	2	574	574	0	0
Ix1	1	1217	1217	0	0

## Signals

Arm	Traffic Stream	Controller Stream	Phase	Phase2 Enabled
A	1	1	A	
A	2	1	A	
A	3	1	A	
A	4	1	A	
C	1	3	A	
C	2	3	A	
Cx 2	1	4	A	
Cx 2	2	4	B	
Cx4	1	12	A	
D	1	2	A	
D	2	2	A	
D	3	2	A	
F	1	8	A	
F	2	8	A	
F	3	8	A	
G	1	9	A	
G	2	9	A	
H	1	10	A	
H	2	10	A	
H	3	10	A	
I	1	11	A	
I	2	11	A	

Ac	1	1	B	
Ac	2	1	B	
Ac	3	1	B	
Ax	1	5	A	
Ax	2	5	A	
Ax	3	5	A	
C4	1	4	D	
C5	1	4	C	
Cc	1	3	B	
Cc	2	3	B	
Cc	3	3	B	
Cx	1	6	A	
Cx	2	6	A	
Dc	1	2	B	
Dc	2	2	B	
Dc	3	2	B	
Dx	1	7	A	
Dx	2	7	A	
Dx	3	7	A	
Fc	1	8	B	
Fc	2	8	B	
Fc	3	8	B	
Gc	1	9	B	
Gc	2	9	B	
Gc	3	9	B	
Hc	1	10	B	
Hc	2	10	B	
Hc	3	10	B	
Ic	1	11	B	
Ic	2	11	B	
Ic	3	11	B	

## Entry Sources

Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)
B	1	2.24	48.28
B	2	2.24	48.28
C3-1	1	4.15	48.28
D	1	16.78	64.37
D	2	16.78	64.37
D	3	16.78	64.37
E	1	14.91	48.28
E	2	14.91	48.28
C4	1	6.46	48.28
C5	1	4.10	48.28
G1	1	4.47	48.28
H1	1	7.46	48.28
H1	2	7.46	48.28
I1	1	7.46	48.28

## Sources

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Destination Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)	Auto Turning Radius	Traffic Turn Style	Turning Radius (m)
1	1	1	TrafficStream	Cx/1	1/1	25.80	48.28			✓	Straight	Straight Movement
A	1	1	TrafficStream	Fx1/1	A/1	7.46	48.28			✓	Straight	Straight Movement
A	2	1	TrafficStream	Fx1/1	A/2	11.18	48.28			✓	Straight	Straight Movement
A	3	1	TrafficStream	Fx1/2	A/3	11.18	48.28			✓	Straight	Straight Movement
A	4	1	TrafficStream	Fx1/2	A/4	11.18	48.28			✓	Straight	Straight Movement
Ax1	1	1	TrafficStream	Ax/1	Ax1/1	1.49	48.28			✓	Straight	Straight Movement
Ax1	2	1	TrafficStream	Ax/2	Ax1/2	1.49	48.28			✓	Straight	Straight

			m									Movement
<b>Ax2</b>	<b>1</b>	<b>1</b>	TrafficStream	Ax1/1	Ax2/1	11.18	48.28			✓	Straight	Straight Movement
<b>Ax2</b>	<b>2</b>	<b>1</b>	TrafficStream	Ax1/1	Ax2/2	11.18	48.28			✓	Straight	Straight Movement
<b>Bc1</b>	<b>1</b>	<b>1</b>	TrafficStream	Bc/1	Bc1/1	2.24	48.28			✓	Straight	Straight Movement
<b>Bc1</b>	<b>2</b>	<b>1</b>	TrafficStream	Bc/2	Bc1/2	2.24	48.28			✓	Straight	Straight Movement
<b>Bc1</b>	<b>3</b>	<b>1</b>	TrafficStream	Bc/3	Bc1/3	2.24	48.28			✓	Straight	Straight Movement
<b>Bc1</b>	<b>4</b>	<b>1</b>	TrafficStream	Bc/4	Bc1/4	2.24	48.28			✓	Straight	Straight Movement
<b>C</b>	<b>1</b>	<b>1</b>	TrafficStream	C2/1	C/1	14.91	48.28			✓	Straight	Straight Movement
<b>C</b>	<b>2</b>	<b>1</b>	TrafficStream	C2/1	C/2	14.91	48.28			✓	Straight	Straight Movement
<b>Cx2</b>	<b>1</b>	<b>1</b>	TrafficStream	1/1	Cx 2/1	5.07	48.28			✓	Straight	Straight Movement
<b>Cx2</b>	<b>2</b>	<b>1</b>	TrafficStream	1/1	Cx 2/2	5.07	48.28			✓	Straight	Straight Movement
<b>Cx3</b>	<b>1</b>	<b>1</b>	TrafficStream	Cx 2/1	Cx3/1	4.43	48.28			✓	Straight	Straight Movement
<b>Cx4</b>	<b>1</b>	<b>1</b>	TrafficStream	Cx 2/1	Cx4/1	1.12	48.28			✓	Straight	Straight Movement
<b>Cx4-2</b>	<b>1</b>	<b>1</b>	TrafficStream	Cx4/1	Cx4-2/1	5.77	48.28			✓	Straight	Straight Movement
<b>Cx5</b>	<b>1</b>	<b>1</b>	TrafficStream	C3-1/1	Cx5/1	4.67	48.28			✓	Straight	Straight Movement
<b>F</b>	<b>1</b>	<b>1</b>	TrafficStream	Ax2/1	F/1	15.66	48.28			✓	Straight	Straight Movement
<b>F</b>	<b>2</b>	<b>1</b>	TrafficStream	Ax2/2	F/2	15.66	48.28			✓	Straight	Straight Movement

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<b>F</b>	<b>3</b>	<b>1</b>	TrafficStream	Ax2/2	F/3	15.66	48.28			✓	Straight	Straight Movement
<b>G</b>	<b>1</b>	<b>1</b>	TrafficStream	G1/1	G/1	5.67	48.28			✓	Straight	Straight Movement
<b>G</b>	<b>2</b>	<b>1</b>	TrafficStream	G1/1	G/2	5.67	48.28			✓	Straight	Straight Movement
<b>H</b>	<b>1</b>	<b>1</b>	TrafficStream	H1/1	H/1	7.16	48.28			✓	Straight	Straight Movement
<b>H</b>	<b>2</b>	<b>1</b>	TrafficStream	H1/1	H/2	7.16	48.28			✓	Straight	Straight Movement
<b>H</b>	<b>3</b>	<b>1</b>	TrafficStream	H1/2	H/3	7.16	48.28			✓	Straight	Straight Movement
<b>I</b>	<b>1</b>	<b>1</b>	TrafficStream	I1/1	I/1	4.47	48.28			✓	Straight	Straight Movement
<b>I</b>	<b>2</b>	<b>1</b>	TrafficStream	I1/1	I/2	4.47	48.28			✓	Straight	Straight Movement
<b>Ac</b>	<b>1</b>	<b>1</b>	TrafficStream	E/1	Ac/1	4.03	48.28			✓	Straight	Straight Movement
<b>Ac</b>	<b>2</b>	<b>1</b>	TrafficStream	Ec/3	Ac/2	4.03	48.28			✓	Straight	Straight Movement
<b>Ac</b>	<b>3</b>	<b>1</b>	TrafficStream	E/2	Ac/3	4.03	48.28			✓	Straight	Straight Movement
<b>Ax</b>	<b>1</b>	<b>1</b>	TrafficStream	Ec/1	Ax/1	1.12	64.37			✓	Straight	Straight Movement
<b>Ax</b>	<b>2</b>	<b>1</b>	TrafficStream	Ec/2	Ax/2	1.12	64.37			✓	Straight	Straight Movement
<b>Ax</b>	<b>3</b>	<b>1</b>	TrafficStream	Ec/3	Ax/3	1.12	64.37			✓	Straight	Straight Movement
<b>Bc</b>	<b>1</b>	<b>1</b>	TrafficStream	Ac/1	Bc/1	7.46	48.28			✓	Straight	Straight Movement
<b>Bc</b>	<b>2</b>	<b>1</b>	TrafficStream	A/2	Bc/2	7.46	48.28			✓	Straight	Straight Movement

<b>Bc</b>	<b>3</b>	<b>1</b>	TrafficStream	Ac/3	Bc/3	7.46	48.28			✓	Straight	Straight Movement
<b>Bc</b>	<b>4</b>	<b>1</b>	TrafficStream	Ac/3	Bc/4	7.46	48.28			✓	Straight	Straight Movement
<b>Bx</b>	<b>1</b>	<b>1</b>	TrafficStream	Bc/1	Bx/1	7.46	48.28			✓	Nearsid e	76.24
<b>C2</b>	<b>1</b>	<b>1</b>	TrafficStream	C3-1/1	C2/1	23.41	48.28			✓	Straight	Straight Movement
<b>Cc</b>	<b>1</b>	<b>1</b>	TrafficStream	B/1	Cc/1	4.85	48.28			✓	Straight	Straight Movement
<b>Cc</b>	<b>2</b>	<b>1</b>	TrafficStream	B/2	Cc/2	4.85	48.28			✓	Straight	Straight Movement
<b>Cc</b>	<b>3</b>	<b>1</b>	TrafficStream	B/2	Cc/3	4.85	48.28			✓	Straight	Straight Movement
<b>Cx</b>	<b>1</b>	<b>1</b>	TrafficStream	Bc1/1	Cx/1	5.59	64.37			✓	Straight	Straight Movement
<b>Cx</b>	<b>2</b>	<b>1</b>	TrafficStream	Bc1/2	Cx/2	5.59	64.37			✓	Straight	Straight Movement
<b>Dc</b>	<b>1</b>	<b>1</b>	TrafficStream	C/1	Dc/1	6.71	48.28			✓	Straight	Straight Movement
<b>Dc</b>	<b>2</b>	<b>1</b>	TrafficStream	C/2	Dc/2	6.71	48.28			✓	Straight	Straight Movement
<b>Dc</b>	<b>3</b>	<b>1</b>	TrafficStream	C/2	Dc/3	6.71	48.28			✓	Straight	Straight Movement
<b>Dx</b>	<b>1</b>	<b>1</b>	TrafficStream	Cc/1	Dx/1	3.13	64.37			✓	Straight	Straight Movement
<b>Dx</b>	<b>2</b>	<b>1</b>	TrafficStream	Cc/2	Dx/2	3.13	64.37			✓	Straight	Straight Movement
<b>Dx</b>	<b>3</b>	<b>1</b>	TrafficStream	Cc/3	Dx/3	3.13	64.37			✓	Straight	Straight Movement
<b>Dx1</b>	<b>1</b>	<b>1</b>	TrafficStream	Dx/1	Dx1/1	13.98	64.37			✓	Straight	Straight Movement
<b>Dx1</b>	<b>2</b>	<b>1</b>	TrafficStream	Dx/2	Dx1/2	13.98	64.37			✓	Straight	Straight Movement

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<b>Ec</b>	<b>1</b>	<b>1</b>	TrafficStream	D/1	Ec/1	3.73	48.28			✓	Straight	Straight Movement
<b>Ec</b>	<b>2</b>	<b>1</b>	TrafficStream	D/2	Ec/2	3.73	48.28			✓	Straight	Straight Movement
<b>Ec</b>	<b>3</b>	<b>1</b>	TrafficStream	D/3	Ec/3	3.73	48.28			✓	Straight	Straight Movement
<b>Ex</b>	<b>1</b>	<b>1</b>	TrafficStream	Dc/1	Ex/1	7.46	48.28			✓	Straight	Straight Movement
<b>Ex</b>	<b>2</b>	<b>1</b>	TrafficStream	Dc/2	Ex/2	7.46	48.28			✓	Straight	Straight Movement
<b>Fc</b>	<b>1</b>	<b>1</b>	TrafficStream	lc/2	Fc/1	8.28	32.19			✓	Straight	Straight Movement
<b>Fc</b>	<b>2</b>	<b>1</b>	TrafficStream	l/2	Fc/2	8.28	32.19			✓	Straight	Straight Movement
<b>Fc</b>	<b>3</b>	<b>1</b>	TrafficStream	lc/3	Fc/3	8.28	32.19			✓	Offside	91.25
<b>Fx</b>	<b>1</b>	<b>1</b>	TrafficStream	l/1	Fx/1	14.91	48.28			✓	Straight	Straight Movement
<b>Fx</b>	<b>2</b>	<b>1</b>	TrafficStream	l/2	Fx/2	14.91	48.28			✓	Straight	Straight Movement
<b>Fx1</b>	<b>1</b>	<b>1</b>	TrafficStream	Fx/1	Fx1/1	7.46	48.28			✓	Straight	Straight Movement
<b>Fx1</b>	<b>2</b>	<b>1</b>	TrafficStream	Fx/1	Fx1/2	7.46	48.28			✓	Straight	Straight Movement
<b>Gc</b>	<b>1</b>	<b>1</b>	TrafficStream	F/1	Gc/1	7.83	32.19			✓	Straight	Straight Movement
<b>Gc</b>	<b>2</b>	<b>1</b>	TrafficStream	F/2	Gc/2	7.83	32.19			✓	Straight	Straight Movement
<b>Gc</b>	<b>3</b>	<b>1</b>	TrafficStream	Fc/3	Gc/3	7.83	32.19			✓	Offside	52.91
<b>Gx</b>	<b>1</b>	<b>1</b>	TrafficStream	F/1	Gx/1	4.18	48.28	15.00	15.00	✓	Nearside	63.89
<b>Gx</b>	<b>2</b>	<b>1</b>	TrafficStream	Fc/2	Gx/2	4.18	48.28	15.00	15.00	✓	Straight	Straight Movement



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<b>Gx1</b>	<b>1</b>	<b>1</b>	TrafficStream	Gx/1	Gx1/1	1.49	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>Hc</b>	<b>1</b>	<b>1</b>	TrafficStream	G/1	Hc/1	7.49	32.19			✓	Straight	Straight Movement
<b>Hc</b>	<b>2</b>	<b>1</b>	TrafficStream	Gc/3	Hc/2	7.49	32.19			✓	Straight	Straight Movement
<b>Hc</b>	<b>3</b>	<b>1</b>	TrafficStream	Gc/3	Hc/3	7.49	32.19			✓	Straight	Straight Movement
<b>Hx</b>	<b>1</b>	<b>1</b>	TrafficStream	G/1	Hx/1	7.46	48.28			✓	Nearside	100.00
<b>Hx</b>	<b>2</b>	<b>1</b>	TrafficStream	Gc/2	Hx/2	7.46	48.28			✓	Straight	Straight Movement
<b>lc</b>	<b>1</b>	<b>1</b>	TrafficStream	H/1	lc/1	7.27	32.19			✓	Straight	Straight Movement
<b>lc</b>	<b>2</b>	<b>1</b>	TrafficStream	H/2	lc/2	7.27	32.19			✓	Straight	Straight Movement
<b>lc</b>	<b>3</b>	<b>1</b>	TrafficStream	Hc/3	lc/3	7.27	32.19			✓	Offside	49.48
<b>lx</b>	<b>1</b>	<b>1</b>	TrafficStream	Hc/1	lx/1	3.36	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>lx</b>	<b>2</b>	<b>1</b>	TrafficStream	Hc/2	lx/2	3.36	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>lx1</b>	<b>1</b>	<b>1</b>	TrafficStream	lx/2	lx1/1	1.12	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>1</b>	<b>1</b>	<b>2</b>	TrafficStream	Cx/2	1/1	25.80	48.28			✓	Straight	Straight Movement
<b>Ac</b>	<b>1</b>	<b>2</b>	TrafficStream	Ec/3	Ac/1	4.03	48.28			✓	Straight	Straight Movement
<b>Ac</b>	<b>2</b>	<b>2</b>	TrafficStream	E/1	Ac/2	6.48	30.00			✓	Straight	Straight Movement
<b>Ax</b>	<b>1</b>	<b>2</b>	TrafficStream	E/1	Ax/1	1.12	64.37			✓	Straight	Straight Movement
<b>Ax</b>	<b>2</b>	<b>2</b>	TrafficStream	E/1	Ax/2	1.12	64.37			✓	Straight	Straight

			m									Movement
<b>Ax1</b>	<b>2</b>	<b>2</b>	TrafficStream	Ax/3	Ax1/2	1.49	48.28			✓	Straight	Straight Movement
<b>Ax2</b>	<b>1</b>	<b>2</b>	TrafficStream	Ax1/2	Ax2/1	11.18	48.28			✓	Straight	Straight Movement
<b>Ax2</b>	<b>2</b>	<b>2</b>	TrafficStream	Ax1/2	Ax2/2	11.18	48.28			✓	Straight	Straight Movement
<b>Bc</b>	<b>1</b>	<b>2</b>	TrafficStream	A/1	Bc/1	7.46	48.28			✓	Nearside	83.93
<b>Bc</b>	<b>2</b>	<b>2</b>	TrafficStream	Ac/2	Bc/2	7.46	48.28			✓	Straight	Straight Movement
<b>Bc</b>	<b>3</b>	<b>2</b>	TrafficStream	A/3	Bc/3	7.46	48.28			✓	Straight	Straight Movement
<b>Bc</b>	<b>4</b>	<b>2</b>	TrafficStream	A/4	Bc/4	7.46	48.28			✓	Straight	Straight Movement
<b>C2</b>	<b>1</b>	<b>2</b>	TrafficStream	C4/1	C2/1	23.41	48.28			✓	Straight	Straight Movement
<b>Cc</b>	<b>1</b>	<b>2</b>	TrafficStream	Bc1/2	Cc/1	4.85	48.28			✓	Straight	Straight Movement
<b>Cc</b>	<b>2</b>	<b>2</b>	TrafficStream	Bc1/3	Cc/2	4.85	48.28			✓	Straight	Straight Movement
<b>Cc</b>	<b>3</b>	<b>2</b>	TrafficStream	Bc1/4	Cc/3	4.85	48.28			✓	Straight	Straight Movement
<b>Cx</b>	<b>1</b>	<b>2</b>	TrafficStream	B/1	Cx/1	5.59	64.37			✓	Nearside	73.56
<b>Cx3</b>	<b>1</b>	<b>2</b>	TrafficStream	C4/1	Cx3/1	4.43	48.28			✓	Straight	Straight Movement
<b>Cx4</b>	<b>1</b>	<b>2</b>	TrafficStream	C3-1/1	Cx4/1	1.12	48.28			✓	Straight	Straight Movement
<b>Cx5</b>	<b>1</b>	<b>2</b>	TrafficStream	C4/1	Cx5/1	4.67	48.28			✓	Straight	Straight Movement
<b>Dc</b>	<b>1</b>	<b>2</b>	TrafficStream	Cc/3	Dc/1	10.80	30.00			✓	Straight	Straight Movement

<b>Dc</b>	<b>2</b>	<b>2</b>	TrafficStream	Cc/3	Dc/2	6.71	48.28			✓	Straight	Straight Movement
<b>Dx</b>	<b>1</b>	<b>2</b>	TrafficStream	C/1	Dx/1	3.13	64.37			✓	Straight	Straight Movement
<b>Dx1</b>	<b>2</b>	<b>2</b>	TrafficStream	Dx/3	Dx1/2	13.98	64.37			✓	Straight	Straight Movement
<b>Ec</b>	<b>1</b>	<b>2</b>	TrafficStream	Dc/2	Ec/1	3.73	48.28			✓	Straight	Straight Movement
<b>Ec</b>	<b>2</b>	<b>2</b>	TrafficStream	Dc/3	Ec/2	3.73	48.28			✓	Straight	Straight Movement
<b>Ec</b>	<b>3</b>	<b>2</b>	TrafficStream	Dc/3	Ec/3	3.73	48.28			✓	Straight	Straight Movement
<b>Ex</b>	<b>1</b>	<b>2</b>	TrafficStream	D/1	Ex/1	7.46	48.28			✓	Straight	Straight Movement
<b>Fc</b>	<b>1</b>	<b>2</b>	TrafficStream	I/2	Fc/1	8.28	32.19			✓	Straight	Straight Movement
<b>Fc</b>	<b>2</b>	<b>2</b>	TrafficStream	Ic/3	Fc/2	8.28	32.19			✓	Straight	Straight Movement
<b>Fc</b>	<b>3</b>	<b>2</b>	TrafficStream	I/2	Fc/3	8.28	32.19			✓	Straight	Straight Movement
<b>Fx</b>	<b>1</b>	<b>2</b>	TrafficStream	Ic/1	Fx/1	14.91	48.28			✓	Straight	Straight Movement
<b>Fx</b>	<b>2</b>	<b>2</b>	TrafficStream	Ic/2	Fx/2	14.91	48.28			✓	Straight	Straight Movement
<b>Fx1</b>	<b>1</b>	<b>2</b>	TrafficStream	Fx/2	Fx1/1	7.46	48.28			✓	Straight	Straight Movement
<b>Fx1</b>	<b>2</b>	<b>2</b>	TrafficStream	Fx/2	Fx1/2	7.46	48.28			✓	Straight	Straight Movement
<b>Gc</b>	<b>1</b>	<b>2</b>	TrafficStream	Fc/2	Gc/1	7.83	32.19			✓	Offside	72.91
<b>Gc</b>	<b>2</b>	<b>2</b>	TrafficStream	Fc/3	Gc/2	7.83	32.19			✓	Offside	52.91
<b>Gc</b>	<b>3</b>	<b>2</b>	TrafficStream	F/3	Gc/3	7.83	32.19			✓	Straight	Straight Movement

Gx	1	2	TrafficStream	Fc/1	Gx/1	4.18	48.28	15.00	15.00	✓	Straight	Straight Movement
Gx1	1	2	TrafficStream	Gx/2	Gx1/1	1.49	48.28	15.00	15.00	✓	Straight	Straight Movement
Hc	1	2	TrafficStream	Gc/2	Hc/1	7.49	32.19			✓	Straight	Straight Movement
Hc	2	2	TrafficStream	G/1	Hc/2	7.49	32.19			✓	Straight	Straight Movement
Hc	3	2	TrafficStream	G/2	Hc/3	7.49	32.19			✓	Straight	Straight Movement
Hx	1	2	TrafficStream	Gc/1	Hx/1	7.46	48.28			✓	Straight	Straight Movement
lc	1	2	TrafficStream	Hc/2	lc/1	7.27	32.19			✓	Offside	69.48
lc	2	2	TrafficStream	Hc/3	lc/2	7.27	32.19			✓	Offside	49.48
lc	3	2	TrafficStream	H/3	lc/3	7.27	32.19			✓	Straight	Straight Movement
lx	1	2	TrafficStream	H/1	lx/1	3.36	48.28	15.00	15.00	✓	Straight	Straight Movement
lx1	1	2	TrafficStream	lx/1	lx1/1	1.12	48.28	15.00	15.00	✓	Straight	Straight Movement
C2	1	3	TrafficStream	C5/1	C2/1	23.41	48.28			✓	Straight	Straight Movement
Cx3	1	3	TrafficStream	C5/1	Cx3/1	4.43	48.28			✓	Straight	Straight Movement
Cx4	1	3	TrafficStream	C5/1	Cx4/1	1.12	48.28			✓	Straight	Straight Movement
Cx5	1	3	TrafficStream	Cx 2/2	Cx5/1	4.67	48.28			✓	Straight	Straight Movement

### Give Way Data

Arm	Traffic Stream	Opposed Traffic	Use Step-wise Opposed Turn Model	Visibility Restricted
B	1	AllTraffic		

B	2	AllTraffic		
C3-1	1	AllTraffic		
E	1	AllTraffic		
E	2	AllTraffic		

### Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling Type	Controlling Traffic Stream	Percentage Opposing (%)	Slope Coefficient	Upstream Signals Visible	Conflict Shift	Conflict Duration
1		TrafficStream	Bc1/1	100	0.18		0	0
1		TrafficStream	Bc1/2	100	0.18		0	0
2		TrafficStream	Bc1/1	100	0.18		0	0
2		TrafficStream	Bc1/2	100	0.18		0	0
2		TrafficStream	Bc1/3	100	0.18		0	0
2		TrafficStream	Bc1/4	100	0.18		0	0
1		TrafficStream	Cx 2/1	100	0.22		0	0
1		TrafficStream	Cx 2/2	100	0.22		0	0
1	Roundabout Circulating	TrafficStream	Ec/1	100	0.21		0	0
1		TrafficStream	Ec/2	100	0.21		0	0
1		TrafficStream	Ec/3	100	0.21		0	0
2	Roundabout Circulating	TrafficStream	Ec/1	100	0.42		0	0
2		TrafficStream	Ec/2	100	0.42		0	0
2		TrafficStream	Ec/3	100	0.42		0	0

### Quick Flares

Arm	Traffic Stream	Description	Saturation Flow (PCU/hr)	Use Que Prob	Effective Storage (Vehs)
C	1		1800		7.00
C	2		1800		7.00
G	2		1800		3.00
I	2		1800		2.00

## Local OD Matrix - Local Matrix: 2031 AM S3

Normal Input Flows (PCU/hr)

		To								
From		1	2	3	4	5	6	7	8	9
	1	0	70	6	1	239	76	741	131	23
	2	16	0	1	0	44	14	137	24	44
	3	11	15	0	0	49	16	39	19	5
	4	0	0	0	0	0	0	0	0	0
	5	176	240	6	11	0	69	268	287	72
	6	48	65	1	25	23	0	73	78	19
	7	415	567	6	2	311	99	0	256	169
	8	65	88	5	2	283	90	801	0	26
	9	79	172	5	1	199	63	616	109	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

## Locations

OD Matrix	Location	Name	Entries	Exits
2031 AM S3	1	(untitled)	H1/1,H1/2	Hx2,Hx/1
2031 AM S3	2	(untitled)	I1/1	Ix1/1
2031 AM S3	3	(untitled)	B/1,B/2	Bx/1
2031 AM S3	4	(untitled)	C3-1/1	Cx3/1
2031 AM S3	5	(untitled)	C4/1	Cx4-2/1
2031 AM S3	6	(untitled)	C5/1	Cx5/1
2031 AM S3	7	(untitled)	D/1,D/2,D/3	Dx1/2,Dx1/1
2031 AM S3	8	(untitled)	E/1,E/2	Ex1,Ex2
2031 AM S3	9	(untitled)	G1/1	Gx1/1

## Paths

OD Matrix	Path	Description	From Location	To Location	Path Items
2031 AM S3	1		7	9	D/1,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031	2		7	1	D/1,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1

AM S3					
2031 AM S3	3		7	1	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/2, Gc/2, Hx/2
2031 AM S3	4		7	2	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/2, Gc/2, Hc/1, lx/1, lx1/1
2031 AM S3	5		7	2	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lx/2, lx1/1
2031 AM S3	6		7	3	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bx/1
2031 AM S3	7		7	4	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/ 1, Cx 2/1, Cx3/1
2031 AM S3	8		7	5	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/ 1, Cx 2/1, Cx4/1, Cx4-2/1
2031 AM S3	9		7	6	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/ 1, Cx 2/2, Cx5/1
2031 AM S3	10		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx /1, Dx1/1
2031 AM S3	11		7	4	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/ 1, Cx 2/1, Cx3/1
2031 AM S3	12		7	5	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/ 1, Cx 2/1, Cx4/1, Cx4-2/1
2031 AM S3	13		7	6	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/ 1, Cx 2/2, Cx5/1
2031 AM S3	14		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx /2, Dx1/2
2031 AM S3	15		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dx /3, Dx1/2
2031 AM S3	16		7	3	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, lc/2, Fx/2, Fx1/1, A/1, Bc/1, Bx/1
2031 AM S3	17		7	4	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, lc/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/ 1, Cx 2/1, Cx3/1
2031 AM	18		7	5	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, lc/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/ 1, Cx 2/1, Cx4/1, Cx4-2/1

S3					
2031 AM S3	19		7	6	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/2, Cx5/1
2031 AM S3	20		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx/1, Dx1/1
2031 AM S3	21		7	4	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx3/1
2031 AM S3	22		7	5	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx4/1, Cx4-2/1
2031 AM S3	23		7	6	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/2, Cx5/1
2031 AM S3	24		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx/2, Dx1/2
2031 AM S3	25		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dx/3, Dx1/2
2031 AM S3	26		7	8	D/1, Ex/1
2031 AM S3	27		7	9	D/2, Ec/2, Ax/2, Ax1/2, Ax2/1, F/1, Gx/1, Gx1/1
2031 AM S3	28		7	1	D/2, Ec/2, Ax/2, Ax1/2, Ax2/1, F/1, Gc/1, Hx/1
2031 AM S3	29		7	1	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/2, Gc/2, Hx/2
2031 AM S3	30		7	2	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/2, Gc/2, Hc/1, Ix/1, Ix1/1
2031 AM S3	31		7	2	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ix/2, Ix1/1
2031 AM S3	32		7	3	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/1, Bc/1, Bx/1
2031 AM S3	33		7	4	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/1, Cx3/1
2031 AM S3	34		7	5	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/1, Cx4/1, Cx4-2/1



2031 AM S3	35		7	6	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/2, Cx5/1
2031 AM S3	36		7	7	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx/1, Dx1/1
2031 AM S3	37		7	4	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx3/1
2031 AM S3	38		7	5	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx4/1, Cx4-2/1
2031 AM S3	39		7	6	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/2, Cx5/1
2031 AM S3	40		7	7	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx/2, Dx1/2
2031 AM S3	41		7	7	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dx/3, Dx1/2
2031 AM S3	42		7	3	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, lc/2, Fx/2, Fx1/1, A/1, Bc/1, Bx/1
2031 AM S3	43		7	4	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, lc/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/1, Cx3/1
2031 AM S3	44		7	5	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, lc/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/1, Cx4/1, Cx4-2/1
2031 AM S3	45		7	6	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, lc/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/2, Cx5/1
2031 AM S3	46		7	7	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, lc/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx/1, Dx1/1
2031 AM S3	47		7	4	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, lc/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx3/1
2031 AM S3	48		7	5	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, lc/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx4/1, Cx4-2/1
2031 AM S3	49		7	6	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, lc/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/2, Cx5/1
2031 AM S3	50		7	7	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, lc/2, Fx/2, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx/2, Dx1/2
2031	51		7	7	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, lc/2, Fx/2, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dx

AM S3					/3,Dx1/2
2031 AM S3	52		7	9	D/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	53		7	1	D/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	54		7	1	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	55		7	2	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM S3	56		7	2	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	57		7	3	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 AM S3	58		7	4	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/ 1,Cx 2/1,Cx3/1
2031 AM S3	59		7	5	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/ 1,Cx 2/1,Cx4/1,Cx4-2/1
2031 AM S3	60		7	6	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/ 1,Cx 2/2,Cx5/1
2031 AM S3	61		7	7	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx /1,Dx1/1
2031 AM S3	62		7	4	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/ 1,Cx 2/1,Cx3/1
2031 AM S3	63		7	5	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/ 1,Cx 2/1,Cx4/1,Cx4-2/1
2031 AM S3	64		7	6	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/ 1,Cx 2/2,Cx5/1
2031 AM S3	65		7	7	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx /2,Dx1/2
2031 AM S3	66		7	7	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx /3,Dx1/2
2031 AM	67		7	3	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1

<b>S3</b>					
<b>2031 AM S3</b>	<b>68</b>		7	4	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/ 1,Cx 2/1,Cx3/1
<b>2031 AM S3</b>	<b>69</b>		7	5	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/ 1,Cx 2/1,Cx4/1,Cx4-2/1
<b>2031 AM S3</b>	<b>70</b>		7	6	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/ 1,Cx 2/2,Cx5/1
<b>2031 AM S3</b>	<b>71</b>		7	7	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx /1,Dx1/1
<b>2031 AM S3</b>	<b>72</b>		7	4	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/ 1,Cx 2/1,Cx3/1
<b>2031 AM S3</b>	<b>73</b>		7	5	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/ 1,Cx 2/1,Cx4/1,Cx4-2/1
<b>2031 AM S3</b>	<b>74</b>		7	6	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/ 1,Cx 2/2,Cx5/1
<b>2031 AM S3</b>	<b>75</b>		7	7	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx /2,Dx1/2
<b>2031 AM S3</b>	<b>76</b>		7	7	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx /3,Dx1/2
<b>2031 AM S3</b>	<b>77</b>		7	3	D/3,Ec/3,Ac/1,Bc/1,Bx/1
<b>2031 AM S3</b>	<b>78</b>		7	4	D/3,Ec/3,Ac/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1
<b>2031 AM S3</b>	<b>79</b>		7	5	D/3,Ec/3,Ac/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
<b>2031 AM S3</b>	<b>80</b>		7	6	D/3,Ec/3,Ac/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
<b>2031 AM S3</b>	<b>81</b>		7	7	D/3,Ec/3,Ac/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
<b>2031 AM S3</b>	<b>82</b>		7	4	D/3,Ec/3,Ac/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
<b>2031 AM S3</b>	<b>83</b>		7	5	D/3,Ec/3,Ac/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1

2031 AM S3	84		7	6	D/3, Ec/3, Ac/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/2, Cx5/1
2031 AM S3	85		8	9	E/1, Ax/1, Ax1/1, Ax2/1, F/1, Gx/1, Gx1/1
2031 AM S3	86		8	1	E/1, Ax/1, Ax1/1, Ax2/1, F/1, Gc/1, Hx/1
2031 AM S3	87		8	1	E/1, Ax/1, Ax1/1, Ax2/2, F/2, Gc/2, Hx/2
2031 AM S3	88		8	2	E/1, Ax/1, Ax1/1, Ax2/2, F/2, Gc/2, Hc/1, lx/1, lx1/1
2031 AM S3	89		8	2	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lx/2, lx1/1
2031 AM S3	90		8	3	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bx/1
2031 AM S3	91		8	4	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/1, Cx3/1
2031 AM S3	92		8	5	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/1, Cx4/1, Cx4-2/1
2031 AM S3	93		8	6	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/2, Cx5/1
2031 AM S3	94		8	7	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx/1, Dx 1/1
2031 AM S3	95		8	4	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx3/1
2031 AM S3	96		8	5	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx4/1, Cx4-2/1
2031 AM S3	97		8	6	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/2, Cx5/1
2031 AM S3	98		8	7	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx/2, Dx 1/2
2031 AM S3	99		8	8	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dc/1, Ex /1
2031	100		8	8	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dc/2, Ex

AM S3					/2
2031 AM S3	101		8	7	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx 1/2
2031 AM S3	102		8	3	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 AM S3	103		8	4	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1
2031 AM S3	104		8	5	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 AM S3	105		8	6	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
2031 AM S3	106		8	7	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx 1/1
2031 AM S3	107		8	4	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
2031 AM S3	108		8	5	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 AM S3	109		8	6	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1
2031 AM S3	110		8	7	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx 1/2
2031 AM S3	111		8	8	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex /1
2031 AM S3	112		8	8	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex /2
2031 AM S3	113		8	7	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx 1/2
2031 AM S3	114		8	9	E/1,Ax/2,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	115		8	1	E/1,Ax/2,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 AM	116		8	1	E/1,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2

<b>S3</b>					
<b>2031 AM S3</b>	<b>117</b>		8	2	E/1,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
<b>2031 AM S3</b>	<b>118</b>		8	2	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
<b>2031 AM S3</b>	<b>119</b>		8	3	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
<b>2031 AM S3</b>	<b>120</b>		8	4	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1
<b>2031 AM S3</b>	<b>121</b>		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
<b>2031 AM S3</b>	<b>122</b>		8	6	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
<b>2031 AM S3</b>	<b>123</b>		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx 1/1
<b>2031 AM S3</b>	<b>124</b>		8	4	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
<b>2031 AM S3</b>	<b>125</b>		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1
<b>2031 AM S3</b>	<b>126</b>		8	6	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1
<b>2031 AM S3</b>	<b>127</b>		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx 1/2
<b>2031 AM S3</b>	<b>128</b>		8	8	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex /1
<b>2031 AM S3</b>	<b>129</b>		8	8	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex /2
<b>2031 AM S3</b>	<b>130</b>		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx 1/2
<b>2031 AM S3</b>	<b>131</b>		8	3	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
<b>2031 AM S3</b>	<b>132</b>		8	4	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1

2031 AM S3	133		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 AM S3	134		8	6	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
2031 AM S3	135		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx 1/1
2031 AM S3	136		8	4	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
2031 AM S3	137		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 AM S3	138		8	6	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1
2031 AM S3	139		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx 1/2
2031 AM S3	140		8	8	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex /1
2031 AM S3	141		8	8	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex /2
2031 AM S3	142		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx 1/2
2031 AM S3	143		8	3	E/1,Ac/1,Bc/1,Bx/1
2031 AM S3	144		8	4	E/1,Ac/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1
2031 AM S3	145		8	5	E/1,Ac/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 AM S3	146		8	6	E/1,Ac/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
2031 AM S3	147		8	7	E/1,Ac/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 AM S3	148		8	4	E/1,Ac/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
2031	149		8	5	E/1,Ac/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1

AM S3					
2031 AM S3	150		8	6	E/1,Ac/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1
2031 AM S3	151		8	7	E/2,Ac/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 AM S3	152		8	8	E/2,Ac/3,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 AM S3	153		8	8	E/2,Ac/3,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 AM S3	154		8	7	E/2,Ac/3,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 AM S3	155		3	7	B/1,Cc/1,Dx/1,Dx1/1
2031 AM S3	156		3	4	B/1,Cx/1,1/1,Cx 2/1,Cx3/1
2031 AM S3	157		3	5	B/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 AM S3	158		3	6	B/1,Cx/1,1/1,Cx 2/2,Cx5/1
2031 AM S3	159		3	7	B/2,Cc/2,Dx/2,Dx1/2
2031 AM S3	160		3	8	B/2,Cc/3,Dc/1,Ex/1
2031 AM S3	161		3	9	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	162		3	1	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	163		3	1	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	164		3	2	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM	165		3	2	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1



<b>S3</b>					
<b>2031 AM S3</b>	<b>166</b>		3	3	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
<b>2031 AM S3</b>	<b>167</b>		3	3	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
<b>2031 AM S3</b>	<b>168</b>		3	8	B/2,Cc/3,Dc/2,Ex/2
<b>2031 AM S3</b>	<b>169</b>		3	7	B/2,Cc/3,Dx/3,Dx1/2
<b>2031 AM S3</b>	<b>170</b>		4	6	C3-1/1,Cx5/1
<b>2031 AM S3</b>	<b>171</b>		4	5	C3-1/1,Cx4/1,Cx4-2/1
<b>2031 AM S3</b>	<b>172</b>		4	8	C3-1/1,C2/1,C/1,Dc/1,Ex/1
<b>2031 AM S3</b>	<b>173</b>		4	7	C3-1/1,C2/1,C/1,Dx/1,Dx1/1
<b>2031 AM S3</b>	<b>174</b>		4	9	C3-1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
<b>2031 AM S3</b>	<b>175</b>		4	1	C3-1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
<b>2031 AM S3</b>	<b>176</b>		4	1	C3-1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
<b>2031 AM S3</b>	<b>177</b>		4	2	C3-1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
<b>2031 AM S3</b>	<b>178</b>		4	2	C3-1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
<b>2031 AM S3</b>	<b>179</b>		4	3	C3-1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
<b>2031 AM S3</b>	<b>180</b>		4	3	C3-1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
<b>2031 AM S3</b>	<b>181</b>		4	8	C3-1/1,C2/1,C/2,Dc/2,Ex/2

2031 AM S3	182		4	9	C3-1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	183		4	1	C3-1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	184		4	1	C3-1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	185		4	2	C3-1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM S3	186		4	2	C3-1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	187		4	3	C3- 1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/1,Fx/1,Fx1/1,A/1,Bc/1, Bx/1
2031 AM S3	188		4	3	C3- 1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lx/2,Fx/2,Fx1/1,A/1,Bc/1, Bx/1
2031 AM S3	189		4	9	C3-1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	190		4	1	C3-1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	191		4	1	C3-1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	192		4	2	C3-1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM S3	193		4	2	C3-1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	194		4	3	C3- 1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/1,Fx/1,Fx1/1,A/1,Bc/1, Bx/1
2031 AM S3	195		4	3	C3- 1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lx/2,Fx/2,Fx1/1,A/1,Bc/1, Bx/1
2031 AM S3	196		4	3	C3-1/1,C2/1,C/2,Dc/3,Ec/3,Ac/1,Bc/1,Bx/1
2031 AM S3	197		2	3	l1/1,l/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031	198		2	4	l1/1,l/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1

AM S3					
2031 AM S3	199		2	5	I1/1,I/1,Fx1,Fx1/1,A/1,Bc1,Bc1/1,Cx1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 AM S3	200		2	6	I1/1,I/1,Fx1,Fx1/1,A/1,Bc1,Bc1/1,Cx1,1/1,Cx 2/2,Cx5/1
2031 AM S3	201		2	7	I1/1,I/1,Fx1,Fx1/1,A/2,Bc2,Bc1/2,Cc/1,Dx1,Dx1/1
2031 AM S3	202		2	4	I1/1,I/1,Fx1,Fx1/1,A/2,Bc2,Bc1/2,Cx2,1/1,Cx 2/1,Cx3/1
2031 AM S3	203		2	5	I1/1,I/1,Fx1,Fx1/1,A/2,Bc2,Bc1/2,Cx2,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 AM S3	204		2	6	I1/1,I/1,Fx1,Fx1/1,A/2,Bc2,Bc1/2,Cx2,1/1,Cx 2/2,Cx5/1
2031 AM S3	205		2	7	I1/1,I/1,Fx1,Fx1/2,A/3,Bc3,Bc1/3,Cc2,Dx2,Dx1/2
2031 AM S3	206		2	8	I1/1,I/1,Fx1,Fx1/2,A/4,Bc4,Bc1/4,Cc3,Dc1,Ex1
2031 AM S3	207		2	9	I1/1,I/1,Fx1,Fx1/2,A/4,Bc4,Bc1/4,Cc3,Dc2,Ec1,Ax1,Ax1/1,Ax2/1,F1,Gx1,Gx 1/1
2031 AM S3	208		2	1	I1/1,I/1,Fx1,Fx1/2,A/4,Bc4,Bc1/4,Cc3,Dc2,Ec1,Ax1,Ax1/1,Ax2/1,F1,Gc1,Hx/ 1
2031 AM S3	209		2	1	I1/1,I/1,Fx1,Fx1/2,A/4,Bc4,Bc1/4,Cc3,Dc2,Ec1,Ax1,Ax1/1,Ax2/2,F2,Gc2,Hx/ 2
2031 AM S3	210		2	2	I1/1,I/1,Fx1,Fx1/2,A/4,Bc4,Bc1/4,Cc3,Dc2,Ec1,Ax1,Ax1/1,Ax2/2,F2,Gc2,Hc/ 1,lx1,lx1/1
2031 AM S3	211		2	2	I1/1,I/1,Fx1,Fx1/2,A/4,Bc4,Bc1/4,Cc3,Dc2,Ec1,Ax1,Ax1/1,Ax2/2,F3,Gc3,Hc/ 2,lx2,lx1/1
2031 AM S3	212		2	8	I1/1,I/1,Fx1,Fx1/2,A/4,Bc4,Bc1/4,Cc3,Dc2,Ex2
2031 AM S3	213		2	7	I1/1,I/1,Fx1,Fx1/2,A/4,Bc4,Bc1/4,Cc3,Dx3,Dx1/2
2031 AM	214		2	3	I1/1,I/2,Fx2,Fx1/1,A/1,Bc1,Bx1

<b>S3</b>					
<b>2031 AM S3</b>	<b>215</b>		2	4	I1/1,I/2,Fx2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1
<b>2031 AM S3</b>	<b>216</b>		2	5	I1/1,I/2,Fx2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
<b>2031 AM S3</b>	<b>217</b>		2	6	I1/1,I/2,Fx2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
<b>2031 AM S3</b>	<b>218</b>		2	7	I1/1,I/2,Fx2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
<b>2031 AM S3</b>	<b>219</b>		2	4	I1/1,I/2,Fx2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
<b>2031 AM S3</b>	<b>220</b>		2	5	I1/1,I/2,Fx2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1
<b>2031 AM S3</b>	<b>221</b>		2	6	I1/1,I/2,Fx2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1
<b>2031 AM S3</b>	<b>222</b>		2	7	I1/1,I/2,Fx2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
<b>2031 AM S3</b>	<b>223</b>		2	8	I1/1,I/2,Fx2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
<b>2031 AM S3</b>	<b>224</b>		2	9	I1/1,I/2,Fx2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx 1/1
<b>2031 AM S3</b>	<b>225</b>		2	1	I1/1,I/2,Fx2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/ 1
<b>2031 AM S3</b>	<b>226</b>		2	1	I1/1,I/2,Fx2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/ 2
<b>2031 AM S3</b>	<b>227</b>		2	2	I1/1,I/2,Fx2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/ 1,lx/1,lx1/1
<b>2031 AM S3</b>	<b>228</b>		2	2	I1/1,I/2,Fx2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/ 2,lx/2,lx1/1
<b>2031 AM S3</b>	<b>229</b>		2	8	I1/1,I/2,Fx2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
<b>2031 AM S3</b>	<b>230</b>		2	7	I1/1,I/2,Fx2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2

2031 AM S3	231		2	9	I1/1,I/2,Fc/1,Gx/1,Gx1/1
2031 AM S3	232		2	9	I1/1,I/2,Fc/2,Gx/2,Gx1/1
2031 AM S3	233		2	1	I1/1,I/2,Fc/2,Gc/1,Hx/1
2031 AM S3	234		2	1	I1/1,I/2,Fc/3,Gc/2,Hx/2
2031 AM S3	235		2	2	I1/1,I/2,Fc/3,Gc/2,Hc/1,Ix/1,Ix1/1
2031 AM S3	236		2	2	I1/1,I/2,Fc/3,Gc/3,Hc/2,Ix/2,Ix1/1
2031 AM S3	237		9	1	G1/1,G/1,Hx/1
2031 AM S3	238		9	2	G1/1,G/1,Hc/1,Ix/1,Ix1/1
2031 AM S3	239		9	2	G1/1,G/1,Hc/2,Ix/2,Ix1/1
2031 AM S3	240		9	3	G1/1,G/1,Hc/2,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 AM S3	241		9	4	G1/1,G/1,Hc/2,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1
2031 AM S3	242		9	5	G1/1,G/1,Hc/2,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 AM S3	243		9	6	G1/1,G/1,Hc/2,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
2031 AM S3	244		9	7	G1/1,G/1,Hc/2,Ic/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 AM S3	245		9	4	G1/1,G/1,Hc/2,Ic/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
2031 AM S3	246		9	5	G1/1,G/1,Hc/2,Ic/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031	247		9	6	G1/1,G/1,Hc/2,Ic/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1

AM S3					
2031 AM S3	248		9	7	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 AM S3	249		9	8	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 AM S3	250		9	9	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1, F/1,Gx/1,Gx1/1
2031 AM S3	251		9	8	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 AM S3	252		9	7	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 AM S3	253		9	3	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 AM S3	254		9	4	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1
2031 AM S3	255		9	5	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 AM S3	256		9	6	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
2031 AM S3	257		9	7	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 AM S3	258		9	4	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
2031 AM S3	259		9	5	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 AM S3	260		9	6	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1
2031 AM S3	261		9	7	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 AM S3	262		9	8	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 AM	263		9	9	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1, F/1,Gx/1,Gx1/1

<b>S3</b>					
<b>2031 AM S3</b>	<b>264</b>		9	8	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
<b>2031 AM S3</b>	<b>265</b>		9	7	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
<b>2031 AM S3</b>	<b>266</b>		9	9	G1/1,G/2,Hc/3,lc/2,Fc/1,Gx/1,Gx1/1
<b>2031 AM S3</b>	<b>267</b>		9	9	G1/1,G/2,Hc/3,lc/3,Fc/2,Gx/2,Gx1/1
<b>2031 AM S3</b>	<b>268</b>		1	2	H1/1,H/1,lx/1,lx1/1
<b>2031 AM S3</b>	<b>269</b>		1	3	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
<b>2031 AM S3</b>	<b>270</b>		1	4	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1
<b>2031 AM S3</b>	<b>271</b>		1	5	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
<b>2031 AM S3</b>	<b>272</b>		1	6	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
<b>2031 AM S3</b>	<b>273</b>		1	7	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
<b>2031 AM S3</b>	<b>274</b>		1	4	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
<b>2031 AM S3</b>	<b>275</b>		1	5	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1
<b>2031 AM S3</b>	<b>276</b>		1	6	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1
<b>2031 AM S3</b>	<b>277</b>		1	7	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
<b>2031 AM S3</b>	<b>278</b>		1	8	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
<b>2031 AM S3</b>	<b>279</b>		1	9	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1

2031 AM S3	280		1	1	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,G c/1,Hx/1
2031 AM S3	281		1	1	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,G c/2,Hx/2
2031 AM S3	282		1	8	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 AM S3	283		1	7	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 AM S3	284		1	3	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 AM S3	285		1	4	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1
2031 AM S3	286		1	5	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 AM S3	287		1	6	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
2031 AM S3	288		1	7	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 AM S3	289		1	4	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
2031 AM S3	290		1	5	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 AM S3	291		1	6	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1
2031 AM S3	292		1	7	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 AM S3	293		1	8	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 AM S3	294		1	9	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,G x/1,Gx1/1
2031 AM S3	295		1	1	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,G c/1,Hx/1
2031	296		1	1	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,G



AM S3					c/2,Hx/2
2031 AM S3	297		1	8	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 AM S3	298		1	7	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 AM S3	299		1	9	H1/1,H/2,lc/2,Fc/1,Gx/1,Gx1/1
2031 AM S3	300		1	9	H1/2,H/3,lc/3,Fc/2,Gx/2,Gx1/1
2031 AM S3	301		1	1	H1/2,H/3,lc/3,Fc/2,Gc/1,Hx/1
2031 AM S3	302		1	1	H1/2,H/3,lc/3,Fc/3,Gc/2,Hx/2
2031 AM S3	303		5	6	C4/1,Cx5/1
2031 AM S3	304		5	4	C4/1,Cx3/1
2031 AM S3	305		5	8	C4/1,C2/1,C/1,Dc/1,Ex/1
2031 AM S3	306		5	7	C4/1,C2/1,C/1,Dx/1,Dx1/1
2031 AM S3	307		5	9	C4/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	308		5	1	C4/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	309		5	1	C4/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	310		5	2	C4/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM S3	311		5	2	C4/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM	312		5	3	C4/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1

<b>S3</b>					
<b>2031 AM S3</b>	<b>313</b>		5	3	C4/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
<b>2031 AM S3</b>	<b>314</b>		5	8	C4/1,C2/1,C/2,Dc/2,Ex/2
<b>2031 AM S3</b>	<b>315</b>		5	9	C4/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
<b>2031 AM S3</b>	<b>316</b>		5	1	C4/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
<b>2031 AM S3</b>	<b>317</b>		5	1	C4/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
<b>2031 AM S3</b>	<b>318</b>		5	2	C4/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
<b>2031 AM S3</b>	<b>319</b>		5	2	C4/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
<b>2031 AM S3</b>	<b>320</b>		5	3	C4/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
<b>2031 AM S3</b>	<b>321</b>		5	3	C4/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
<b>2031 AM S3</b>	<b>322</b>		5	9	C4/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
<b>2031 AM S3</b>	<b>323</b>		5	1	C4/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
<b>2031 AM S3</b>	<b>324</b>		5	1	C4/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
<b>2031 AM S3</b>	<b>325</b>		5	2	C4/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
<b>2031 AM S3</b>	<b>326</b>		5	2	C4/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
<b>2031 AM S3</b>	<b>327</b>		5	3	C4/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
<b>2031 AM S3</b>	<b>328</b>		5	3	C4/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1

2031 AM S3	329		5	3	C4/1,C2/1,C/2,Dc/3,Ec/3,Ac/1,Bc/1,Bx/1
2031 AM S3	330		6	4	C5/1,Cx3/1
2031 AM S3	331		6	5	C5/1,Cx4/1,Cx4-2/1
2031 AM S3	332		6	8	C5/1,C2/1,C/1,Dc/1,Ex/1
2031 AM S3	333		6	7	C5/1,C2/1,C/1,Dx/1,Dx1/1
2031 AM S3	334		6	9	C5/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	335		6	1	C5/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	336		6	1	C5/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	337		6	2	C5/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM S3	338		6	2	C5/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	339		6	3	C5/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 AM S3	340		6	3	C5/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lx/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 AM S3	341		6	8	C5/1,C2/1,C/2,Dc/2,Ex/2
2031 AM S3	342		6	9	C5/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	343		6	1	C5/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	344		6	1	C5/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031	345		6	2	C5/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1

AM S3					
2031 AM S3	346		6	2	C5/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	347		6	3	C5/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 AM S3	348		6	3	C5/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 AM S3	349		6	9	C5/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	350		6	1	C5/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	351		6	1	C5/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	352		6	2	C5/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM S3	353		6	2	C5/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	354		6	3	C5/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 AM S3	355		6	3	C5/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 AM S3	356		6	3	C5/1,C2/1,C/2,Dc/3,Ec/3,Ac/1,Bc/1,Bx/1

### Normal Path Flows

OD Matrix	Path	Permitted Flow Type	Allocation Type
2031 AM S3	1	✓	Normal
2031 AM S3	2	✓	Normal
2031 AM S3	3	✓	Normal
2031 AM S3	4	✓	Normal
2031 AM S3	5	✓	Normal
2031 AM S3	6	✓	Normal

2031 AM S3	7	✓	Normal
2031 AM S3	8	✓	Disabled
2031 AM S3	9	✓	Disabled
2031 AM S3	10	✓	Disabled
2031 AM S3	11	✓	Normal
2031 AM S3	12	✓	Disabled
2031 AM S3	13	✓	Disabled
2031 AM S3	14	✓	Disabled
2031 AM S3	15	✓	Normal
2031 AM S3	16	✓	Normal
2031 AM S3	17	✓	Normal
2031 AM S3	18	✓	Disabled
2031 AM S3	19	✓	Disabled
2031 AM S3	20	✓	Disabled
2031 AM S3	21	✓	Disabled
2031 AM S3	22	✓	Disabled
2031 AM S3	23	✓	Disabled
2031 AM S3	24	✓	Normal
2031 AM S3	25	✓	Normal
2031 AM S3	26	✓	Normal
2031 AM S3	27	✓	Normal
2031 AM S3	28	✓	Normal
2031 AM S3	29	✓	Normal
2031 AM S3	30	✓	Normal
2031 AM S3	31	✓	Normal
2031 AM S3	32	✓	Disabled
2031 AM S3	33	✓	Normal
2031 AM S3	34	✓	Disabled
2031 AM S3	35	✓	Disabled
2031 AM S3	36	✓	Normal

2031 AM S3	37	✓	Normal
2031 AM S3	38	✓	Disabled
2031 AM S3	39	✓	Disabled
2031 AM S3	40	✓	Normal
2031 AM S3	41	✓	Normal
2031 AM S3	42	✓	Disabled
2031 AM S3	43	✓	Disabled
2031 AM S3	44	✓	Disabled
2031 AM S3	45	✓	Disabled
2031 AM S3	46	✓	Normal
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2031 AM S3	64	✓	Disabled
2031 AM S3	65	✓	Normal
2031 AM S3	66	✓	Normal

2031 AM S3	67	✓	Disabled
2031 AM S3	68	✓	Normal
2031 AM S3	69	✓	Disabled
2031 AM S3	70	✓	Disabled
2031 AM S3	71	✓	Normal
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2031 AM S3	92	✓	Disabled
2031 AM S3	93	✓	Disabled
2031 AM S3	94	✓	Disabled
2031 AM S3	95	✓	Normal
2031 AM S3	96	✓	Disabled

2031 AM S3	97	✓	Disabled
2031 AM S3	98	✓	Disabled
2031 AM S3	99	✓	Normal
2031 AM S3	100	✓	Normal
2031 AM S3	101	✓	Disabled
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2031 AM S3	122	✓	Disabled
2031 AM S3	123	✓	Disabled
2031 AM S3	124	✓	Normal
2031 AM S3	125	✓	Disabled
2031 AM S3	126	✓	Disabled



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2031 AM S3	302	✓	Normal
2031 AM S3	303	✓	Normal
2031 AM S3	304	✓	Normal
2031 AM S3	305	✓	Normal
2031 AM S3	306	✓	Normal

2031 AM S3	307	✓	Normal
2031 AM S3	308	✓	Normal
2031 AM S3	309	✓	Normal
2031 AM S3	310	✓	Normal
2031 AM S3	311	✓	Normal
2031 AM S3	312	✓	Disabled
2031 AM S3	313	✓	Disabled
2031 AM S3	314	✓	Normal
2031 AM S3	315	✓	Normal
2031 AM S3	316	✓	Normal
2031 AM S3	317	✓	Normal
2031 AM S3	318	✓	Normal
2031 AM S3	319	✓	Normal
2031 AM S3	320	✓	Disabled
2031 AM S3	321	✓	Disabled
2031 AM S3	322	✓	Normal
2031 AM S3	323	✓	Normal
2031 AM S3	324	✓	Normal
2031 AM S3	325	✓	Normal
2031 AM S3	326	✓	Normal
2031 AM S3	327	✓	Disabled
2031 AM S3	328	✓	Disabled
2031 AM S3	329	✓	Normal
2031 AM S3	330	✓	Normal
2031 AM S3	331	✓	Normal
2031 AM S3	332	✓	Normal
2031 AM S3	333	✓	Normal
2031 AM S3	334	✓	Normal
2031 AM S3	335	✓	Normal
2031 AM S3	336	✓	Normal

2031 AM S3	337	✓	Normal
2031 AM S3	338	✓	Normal
2031 AM S3	339	✓	Normal
2031 AM S3	340	✓	Normal
2031 AM S3	341	✓	Normal
2031 AM S3	342	✓	Normal
2031 AM S3	343	✓	Normal
2031 AM S3	344	✓	Normal
2031 AM S3	345	✓	Normal
2031 AM S3	346	✓	Normal
2031 AM S3	347	✓	Normal
2031 AM S3	348	✓	Normal
2031 AM S3	349	✓	Normal
2031 AM S3	350	✓	Normal
2031 AM S3	351	✓	Normal
2031 AM S3	352	✓	Normal
2031 AM S3	353	✓	Normal
2031 AM S3	354	✓	Normal
2031 AM S3	355	✓	Normal
2031 AM S3	356	✓	Normal

## Signal Timings

Network Default: 88s cycle time; 88 steps

### Controller Stream 1

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
1	(untitled)		1	NetworkDefault	88

### Controller Stream 1 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
1	Unspecified						Absolute



## Controller Stream 1 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
1	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
1	A	(untitled)	7	300	0	0	Not Specified
1	B	(untitled)	7	300	0	0	Not Specified
1	C	(untitled)	7	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	A	1
1	2	B,C	1

## Losing/ Gaining delays at each Controller Stream

Controller Stream	Delay	Type	Phase	From Stage	To Stage	Relative Delay	Absolute Delay
1	1	Losing	B	2	1	9	
1	2	Gaining	A	2	1	0	10
1	3	Losing	A	1	2	2	

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
1	1	(untitled)	Single	1,2	32,79

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	1	A	5	32	27	1	5
1	2	✓	2	B,C	39	79	40	1	7

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	5	34	29

1	B	1	✓	39	0	49
1	C	1	✓	39	79	40

**Intergreen Matrix for Controller Stream 1**

		To		
		A	B	C
From	A		5	5
	B	5		
	C	14		

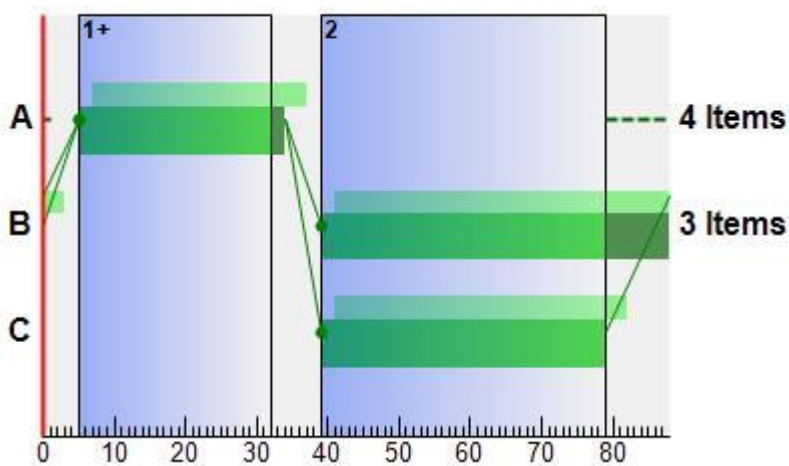
**Interstage Matrix for Controller Stream 1**

		To	
		1	2
From	1	0	7
	2	14	0

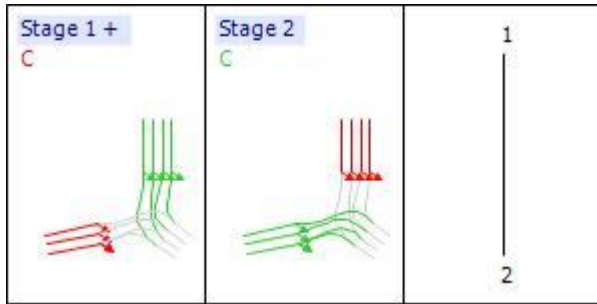
**Banned Stage transitions for Controller Stream 1**

		To	
		1	2
From	1		
	2		

**Phase Timings Diagram for Controller Stream 1**



**Stage Sequence Diagram for Controller Stream 1**



## Controller Stream 2

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
2	(untitled)		1	NetworkDefault	88

## Controller Stream 2 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
2	Unspecified						Absolute

## Controller Stream 2 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
2	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
2	A	(untitled)	7	300	0	0	Not Specified
2	B	(untitled)	7	300	0	0	Not Specified
2	C	(untitled)	5	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
2	1	A	1
2	2	B,C	1

## Losing/ Gaining delays at each Controller Stream

Controller Stream	Delay	Type	Phase	From Stage	To Stage	Relative Delay
2	1	Losing	B	2	1	5

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
2	1	(untitled)	Single	1,2	39,77

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
2	1	✓	1	A	87	39	40	1	7
2	2	✓	2	B,C	44	77	33	1	5

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
2	A	1	✓	87	39	40
2	B	1	✓	44	82	38
2	C	1	✓	44	77	33

## Intergreen Matrix for Controller Stream 2

		To		
		A	B	C
From	A		5	5
	B	5		
	C	10		

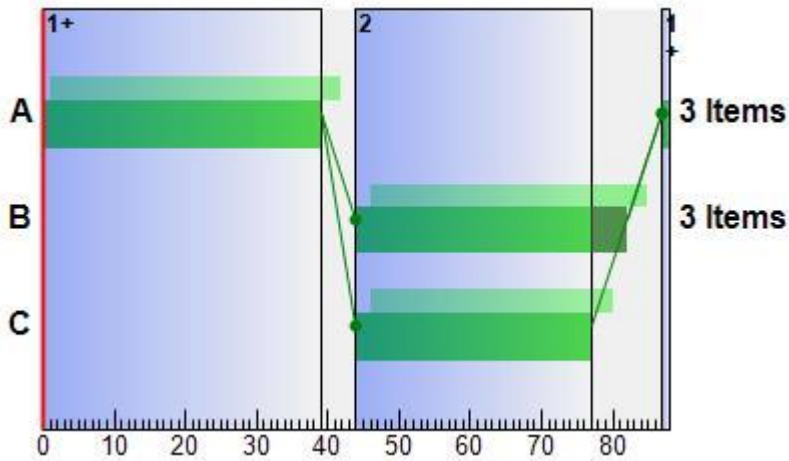
## Interstage Matrix for Controller Stream 2

		To	
		1	2
From	1	0	5
	2	10	0

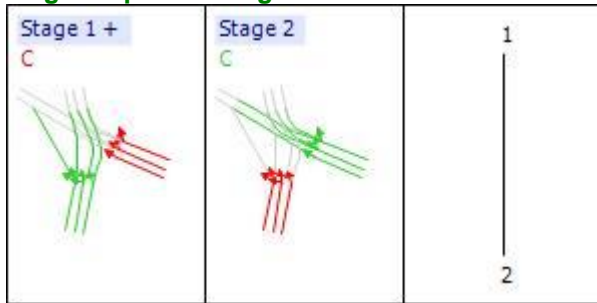
## Banned Stage transitions for Controller Stream 2

		To	
		1	2
From	1		
	2		

## Phase Timings Diagram for Controller Stream 2



### Stage Sequence Diagram for Controller Stream 2



### Controller Stream 3

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
3	(untitled)		1	NetworkDefault	88

### Controller Stream 3 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
3	Unspecified						Absolute

### Controller Stream 3 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
3	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
3	A	(untitled)	7	300	0	0	Not Specified
3	B	(untitled)	7	300	0	0	Not Specified

3	C	(untitled)	5	300	0	0	Not Specified
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### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
3	1	A	1
3	2	B,C	1

### Losing/ Gaining delays at each Controller Stream

Controller Stream	Delay	Type	Phase	From Stage	To Stage	Relative Delay	Absolute Delay
3	1	Losing	B	2	1	9	
3	2	Gaining	A	2	1	0	10

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
3	1	(untitled)	Single	1,2	74,41

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
3	1	✓	1	A	55	74	19	1	7
3	2	✓	2	B,C	79	41	50	1	5

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
3	A	1	✓	55	74	19
3	B	1	✓	79	50	59
3	C	1	✓	79	41	50

### Intergreen Matrix for Controller Stream 3

		To		
		A	B	C
From	A		5	5
	B	5		
	C	14		

### Interstage Matrix for Controller Stream 3



4	Unspecified						Absolute
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### Controller Stream 4 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
4	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
4	A	(untitled)	7	300	0	0	Not Specified
4	B	(untitled)	7	300	0	0	Not Specified
4	C	(untitled)	7	300	0	0	Not Specified
4	D	(untitled)	7	300	0	0	Not Specified
4	E	(untitled)	5	300	0	0	Not Specified

### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
4	1	A,B,D	1
4	2	A,B,E	1
4	3	C,E	1

### Losing/ Gaining delays at each Controller Stream

Controller Stream	Delay	Type	Phase	From Stage	To Stage	Relative Delay
4	1	Losing	A	3	1	3
4	2	Losing	B	3	1	3

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
4	1	(untitled)	Single	1,3	43,68
4	2	(untitled)	Single	1,3,2	0,31,54
4	3	(untitled)	Single	1,2,3	0,23,55

### Resultant Stages

Controller	Stage	Is Base	Library	Phases In	Stage	Stage	Stage	User Stage	Stage
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Stream		Stage	Stage ID	This Stage	Start (s)	End (s)	Duration (s)	Minimum (s)	Minimum (s)
4	1	✓	1	A,B,D	77	43	54	1	7
4	2	✓	3	C,E	51	68	17	1	7

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
4	A	1	✓	74	43	57
4	B	1	✓	74	43	57
4	C	1	✓	51	68	17
4	D	1	✓	77	43	54
4	E	1	✓	48	68	20

### Intergreen Matrix for Controller Stream 4

		To				
		A	B	C	D	E
From	A			8		
	B			7		
	C	6	6		5	
	D			8		5
	E				9	

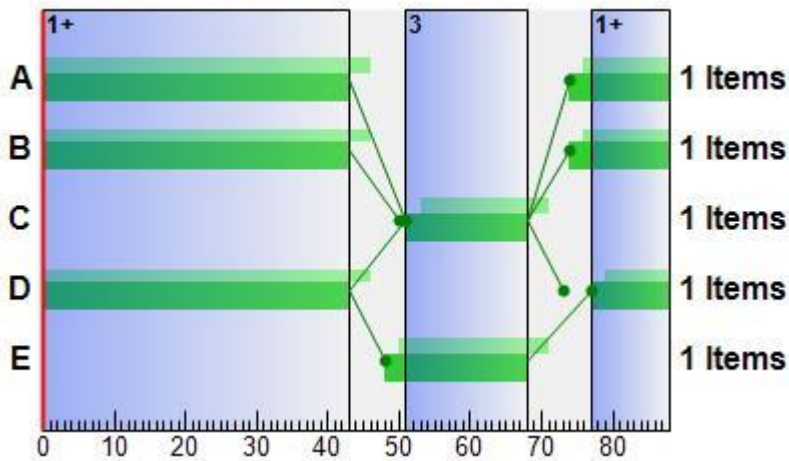
### Interstage Matrix for Controller Stream 4

		To		
		1	2	3
From	1	0	5	8
	2	9	0	8
	3	9	6	0

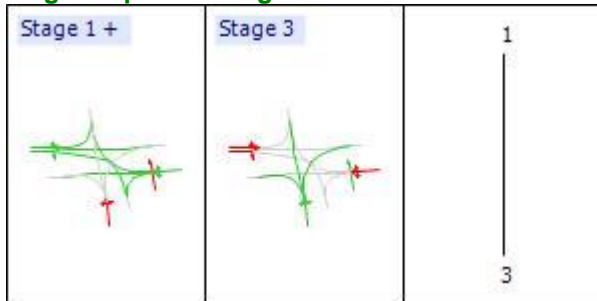
### Banned Stage transitions for Controller Stream 4

		To		
		1	2	3
From	1			
	2			
	3			

### Phase Timings Diagram for Controller Stream 4



### Stage Sequence Diagram for Controller Stream 4



### Controller Stream 5

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
5	(untitled)		1	NetworkDefault	88

### Controller Stream 5 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
5	Unspecified						Absolute

### Controller Stream 5 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
5	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
5	A	(untitled)	7	300	0	0	Not Specified
5	B	(untitled)	5	300	0	0	Not

										Specified
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### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
5	1	A	1
5	2	B	1

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
5	1	(untitled)	Single	1,2	53,63

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
5	1	✓	1	A	74	53	67	1	7
5	2	✓	2	B	58	63	5	1	5

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
5	A	1	✓	74	53	67
5	B	1	✓	58	63	5

### Intergreen Matrix for Controller Stream 5

		To	
		A	B
From	A		5
	B	11	

### Interstage Matrix for Controller Stream 5

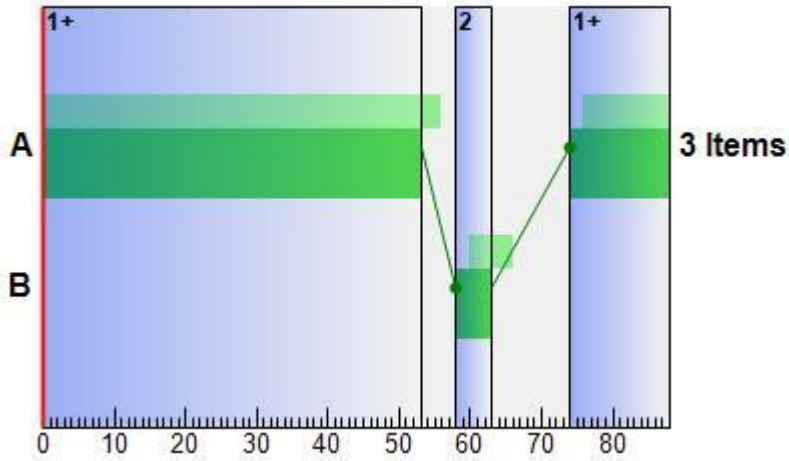
		To	
		1	2
From	1	0	5
	2	11	0

### Banned Stage transitions for Controller Stream 5

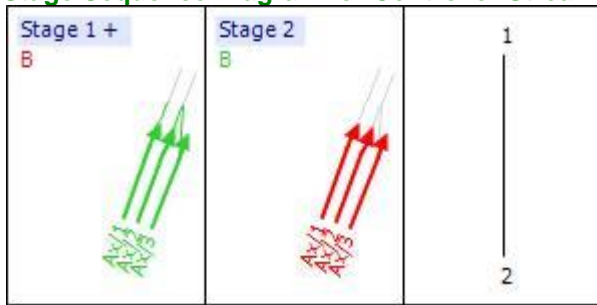
		To	
		1	2
From			

	1		
	2		

### Phase Timings Diagram for Controller Stream 5



### Stage Sequence Diagram for Controller Stream 5



### Controller Stream 6

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
6	(untitled)		1	NetworkDefault	88

### Controller Stream 6 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
6	Unspecified						Absolute

### Controller Stream 6 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
6	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
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6	A	(untitled)	7	300	0	0	Not Specified
6	B	(untitled)	5	300	0	0	Not Specified

### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
6	1	A	1
6	2	B	1

### Losing/ Gaining delays at each Controller Stream

Controller Stream	Delay	Type	Phase	From Stage	To Stage	Relative Delay	Absolute Delay
6	1	Gaining	A	2	1	0	8

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
6	1	(untitled)	Single	1,2	75,85

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
6	1	✓	1	A	5	75	70	1	7
6	2	✓	2	B	80	85	5	1	5

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
6	A	1	✓	5	75	70
6	B	1	✓	80	85	5

### Intergreen Matrix for Controller Stream 6

		To	
		A	B
From	A		5
	B	8	

### Interstage Matrix for Controller Stream 6

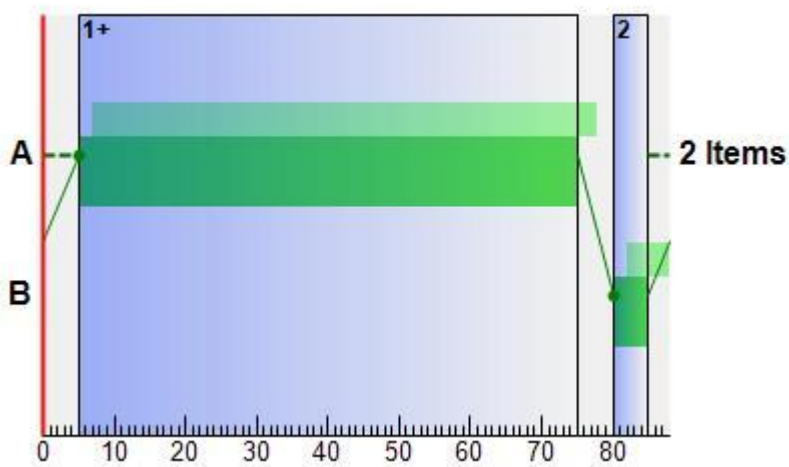
		To	
		1	2
From			

	1	0	5
	2	8	0

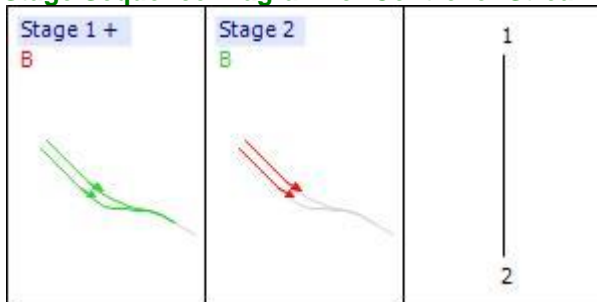
### Banned Stage transitions for Controller Stream 6

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 6



### Stage Sequence Diagram for Controller Stream 6



### Controller Stream 7

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
7	(untitled)		1	NetworkDefault	88

### Controller Stream 7 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
7	Unspecified						Absolute

### Controller Stream 7 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
7	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
7	A	(untitled)	7	300	0	0	Not Specified
7	B	(untitled)	5	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
7	1	A	1
7	2	B	1

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
7	1	(untitled)	Single	1,2	53,63

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
7	1	✓	1	A	73	53	68	1	7
7	2	✓	2	B	58	63	5	1	5

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
7	A	1	✓	73	53	68
7	B	1	✓	58	63	5

## Intergreen Matrix for Controller Stream 7

		To	
		A	B
From	A		5
	B	10	

## Interstage Matrix for Controller Stream 7





8	Unspecified						Absolute
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### Controller Stream 8 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
8	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
8	A	(untitled)	7	300	0	0	Not Specified
8	B	(untitled)	7	300	0	0	Not Specified

### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
8	1	A	1
8	2	B	1

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
8	1	(untitled)	Single	1,2	6,49

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
8	1	✓	1	A	54	6	40	1	7
8	2	✓	2	B	11	49	38	1	7

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
8	A	1	✓	54	6	40
8	B	1	✓	11	49	38

### Intergreen Matrix for Controller Stream 8

		To	
		A	B
From	A		5
	B		

	B	5	
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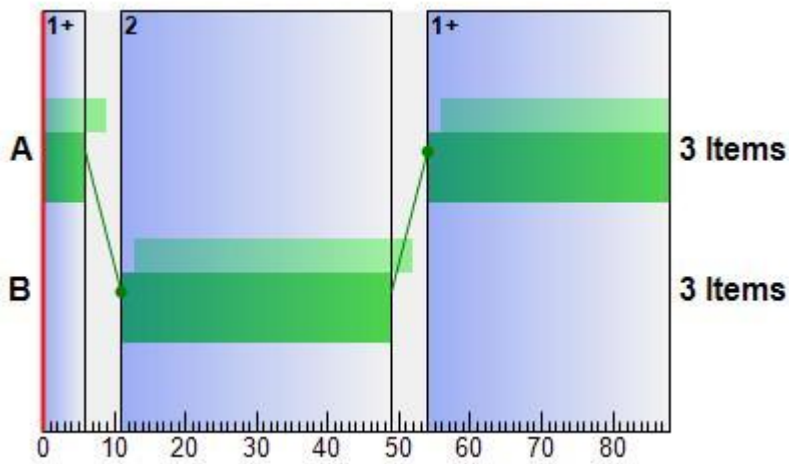
### Interstage Matrix for Controller Stream 8

		To	
		1	2
From	1	0	5
	2	5	0

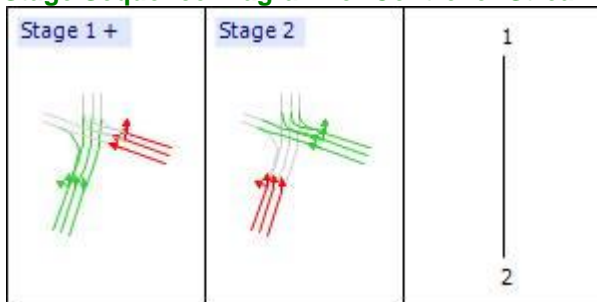
### Banned Stage transitions for Controller Stream 8

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 8



### Stage Sequence Diagram for Controller Stream 8



### Controller Stream 9

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
9	(untitled)		1	NetworkDefault	88

## Controller Stream 9 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
9	Unspecified						Absolute

## Controller Stream 9 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
9	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
9	A	(untitled)	7	300	0	0	Not Specified
9	B	(untitled)	7	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
9	1	A	1
9	2	B	1

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
9	1	(untitled)	Single	1,2	42,85

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
9	1	✓	1	A	2	42	40	1	7
9	2	✓	2	B	47	85	38	1	7

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
9	A	1	✓	2	42	40
9	B	1	✓	47	85	38

## Intergreen Matrix for Controller Stream 9

		To	
		A	B
From	A		5
	B	5	

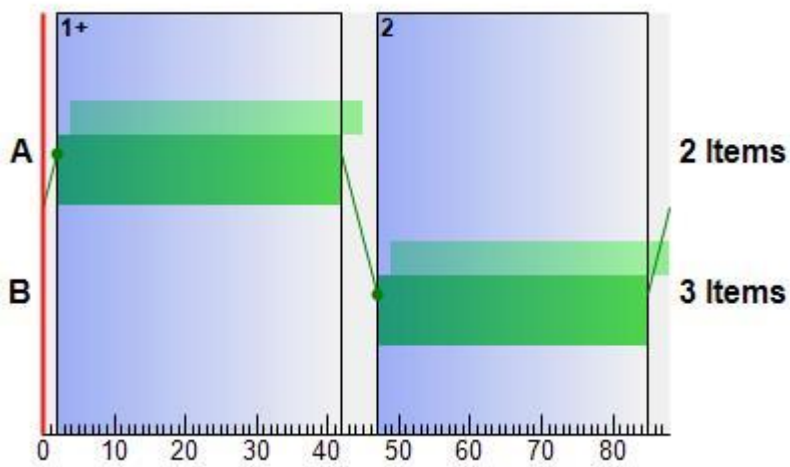
**Interstage Matrix for Controller Stream 9**

		To	
		1	2
From	1	0	5
	2	5	0

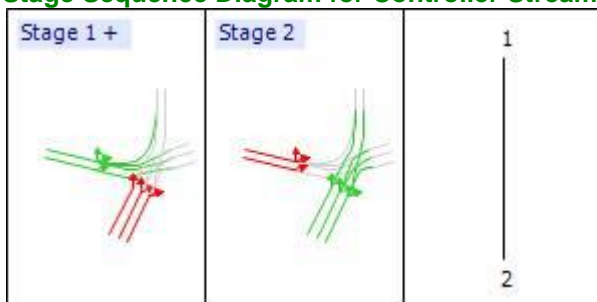
**Banned Stage transitions for Controller Stream 9**

		To	
		1	2
From	1		
	2		

**Phase Timings Diagram for Controller Stream 9**



**Stage Sequence Diagram for Controller Stream 9**



**Controller Stream 10**

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
10	(untitled)		1	NetworkDefault	88

### Controller Stream 10 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
10	Unspecified						Absolute

### Controller Stream 10 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
10	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
10	A	(untitled)	7	300	0	0	Not Specified
10	B	(untitled)	7	300	0	0	Not Specified

### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
10	1	A	1
10	2	B	1

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
10	1	(untitled)	Single	1,2	58,28

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
10	1	✓	1	A	33	58	25	1	7
10	2	✓	2	B	63	28	53	1	7

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
10	A	1	✓	33	58	25

10	B	1	✓	63	28	53
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**Intergreen Matrix for Controller Stream 10**

		To	
		A	B
From	A		5
	B	5	

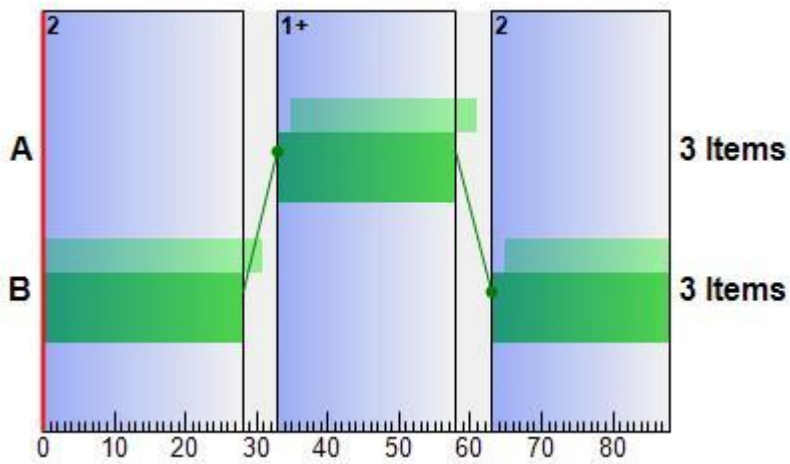
**Interstage Matrix for Controller Stream 10**

		To	
		1	2
From	1	0	5
	2	5	0

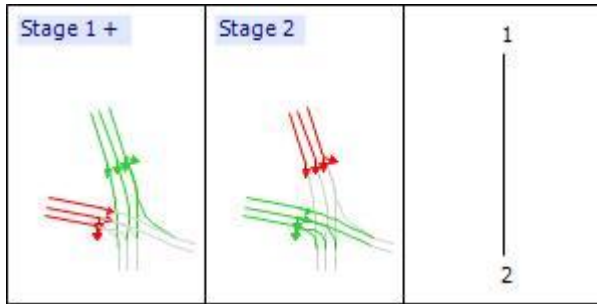
**Banned Stage transitions for Controller Stream 10**

		To	
		1	2
From	1		
	2		

**Phase Timings Diagram for Controller Stream 10**



**Stage Sequence Diagram for Controller Stream 10**



## Controller Stream 11

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
11	(untitled)		1	NetworkDefault	88

## Controller Stream 11 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
11	Unspecified						Absolute

## Controller Stream 11 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
11	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
11	A	(untitled)	7	300	0	0	Not Specified
11	B	(untitled)	7	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
11	1	A	1
11	2	B	1

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
11	1	(untitled)	Single	1,2	6,82

## Resultant Stages

Controller	Stage	Is Base	Library	Phases In	Stage	Stage	Stage	User Stage	Stage
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Stream		Stage	Stage ID	This Stage	Start (s)	End (s)	Duration (s)	Minimum (s)	Minimum (s)
11	1	✓	1	A	87	6	7	1	7
11	2	✓	2	B	11	82	71	1	7

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
11	A	1	✓	87	6	7
11	B	1	✓	11	82	71

### Intergreen Matrix for Controller Stream 11

		To	
		A	B
From	A		5
	B	5	

### Interstage Matrix for Controller Stream 11

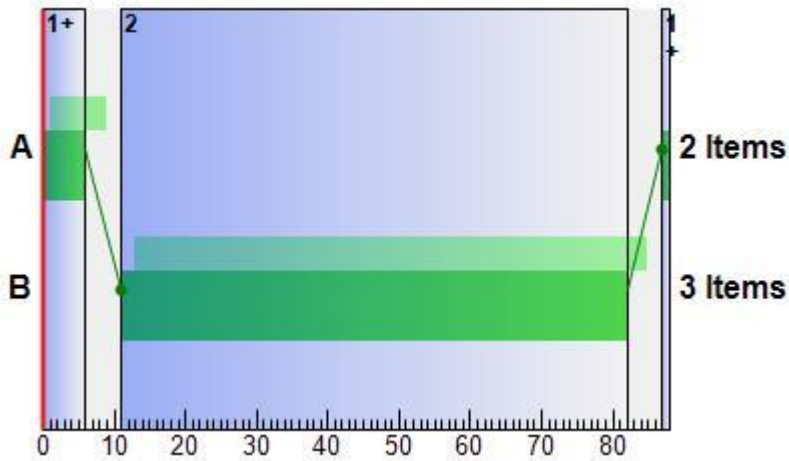
		To	
		1	2
From	1	0	5
	2	5	0

### Banned Stage transitions for Controller Stream 11

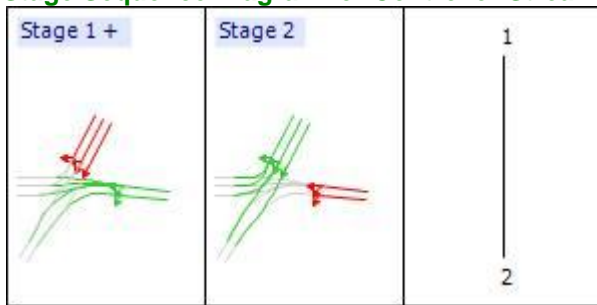
		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 11





### Stage Sequence Diagram for Controller Stream 11



### Controller Stream 12

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
12	(untitled)		1	NetworkDefault	88

### Controller Stream 12 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
12	Unspecified						Absolute

### Controller Stream 12 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
12	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
12	A	(untitled)	7	300	0	0	Not Specified
12	B	(untitled)	5	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
12	1	A	1
12	2	B	1

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
12	1	(untitled)	Single	1,2	45,55

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
12	1	✓	1	A	60	45	73	1	7
12	2	✓	2	B	50	55	5	1	5

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
12	A	1	✓	60	45	73
12	B	1	✓	50	55	5

## Intergreen Matrix for Controller Stream 12

		To	
		A	B
From	A		5
	B	5	

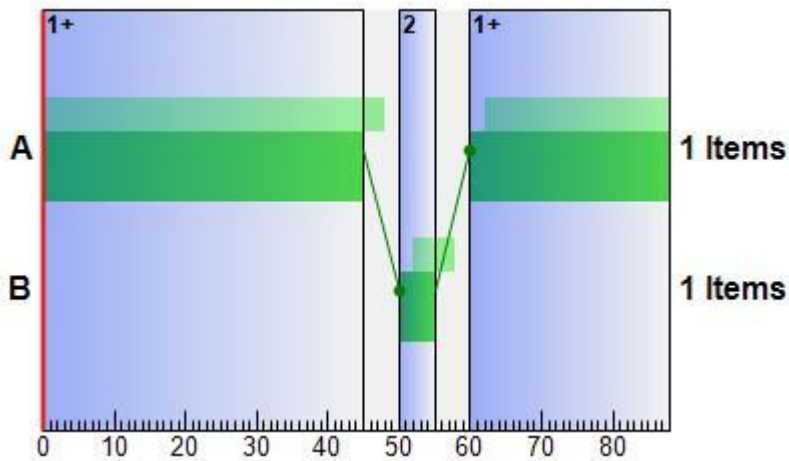
## Interstage Matrix for Controller Stream 12

		To	
		1	2
From	1	0	5
	2	5	0

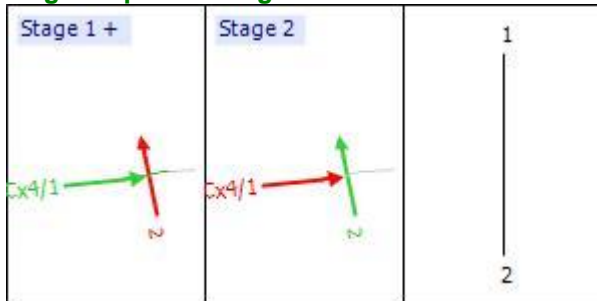
## Banned Stage transitions for Controller Stream 12

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 12



### Stage Sequence Diagram for Controller Stream 12



## Final Prediction Table

### Link Results

		SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P. I.	
Link	Name	Traffic Node	Controller Stream	Phase	Calculate d Flow Entering (PCU /hr)	Calculate d Sat Flow (PCU /hr)	Actual Green (s (per cycle))	Waste d Time Total (s (per cycle))	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Journey Time Per PCU (s)	Mean Delay Per PCU (s)	Mean Stops Per PCU (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Delay Weighting (%)	Stop Weighting (%)	Cost Of Penalties (£ per hr)	P. I.
1 P	(untitled)	23	4	E	0	0	0	0.00	0	0	28.07	27.07	0.00	9.33	9.33	100	100	0.00	0.00
2 P	(untitled)	25	12	B	0 <	0	0	0.00	0	0	48.36	47.36	0.00	12.38+	12.38	100	100	0.00	0.00

## Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUE S		WEIGHTS		PENALTI ES	P.I.
Arm	Traffic Stream	Name	Traffic Node	Controller Stream	Phase	Calculated Flow Entering (PCU /hr)	Calculated Sat Flow (PCU /hr)	Actual Green (s per cycle)	Wasted Time Total (s per cycle)	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Journey Time Per PCU (s)	Mean Delay Per PCU (s)	Mean Stops Per PCU (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Delay Weighting Multiplier (%)	Stop Weighting Multiplier (%)	Cost Of Penalties (£ per hr)	P.I.
1	1	(untitled)	26			1420	2083	88	36.00	68	32	28.15	2.35	18.69	13.67		100	100	0.00	21.79
A	1	(untitled)	1	1	A	331	2128	29	0.00	46	97	29.99	22.54	86.05	7.29	5.92	40	20	0.00	13.62
A	2	(untitled)	1	1	A	816<	2279	29	0.00	105!	-14	156.25	145.06	202.07	45.42+	39.25	40	20	0.00	196.96
A	3	A38 North Entry	1	1	A	497	2279	29	0.00	64	41	36.53	25.34	91.59	11.57	8.49	40	20	0.00	22.83
A	4	(untitled)	1	1	A	761<	2279	29	0.00	98!	-8	83.80	72.61	143.70	28.35+	22.02	40	20	0.00	94.29
Ax1	1	(untitled)	21			638<	1800	88	19.00	35	154	2.13	0.64	4.67	4.32+		100	100	0.00	2.57
Ax1	2	(untitled)	21			1312<	1800	88	20.00	73	23	10.88	9.39	87.65	32.72+		100	100	0.00	85.96
Ax2	1	A38 North Exit	17			637	1800	88	14.00	35	154	11.73	0.55	0.00	0.10		100	100	0.00	1.38
Ax2	2	A38 North Exit	17			1313	1800	88	11.00	73	23	14.50	3.32	29.71	23.51		100	100	0.00	29.86
B	1	(untitled)	2			77	266	88	0.00	29	211	7.29	5.05	37.58	0.49		100	100	0.00	2.47
B	2	(untitled)	2			81	131	88	43.	62	46	48.	46.	10	2.1		100	100	0.00	17.

		itled )						00			31	07	3.8	4					45	
B c 1	1	(unt itled )	2			564	1800	88	24. 00	31	187	2.6 9	0.4 6	0.0 0	0.0 7		100	100	0.00	1.0 1
B c 1	2	(unt itled )	2			1265	1800	88	0.0 0	70	28	4.5 9	2.3 5	0.0 0	0.8 3		100	100	0.00	11. 73
B c 1	3	(unt itled )	2			898	1800	88	21. 00	50	80	3.2 3	0.9 9	0.0 0	0.2 5		100	100	0.00	3.5 2
B c 1	4	(unt itled )	2			1162	1800	88	43. 00	65	39	4.0 5	1.8 1	0.0 0	0.5 9		100	100	0.00	8.3 2
C	1	(unt itled )	3	3	A	524	3523 f	19	0.0 0	65	38	43. 67	28. 76	86. 54	11. 54	9.7 7	40	0	0.00	23. 78
C	2	(unt itled )	3	3	A	807	3523 f	19	0.0 0	101!	-11	110 .53	95. 62	16 0.5 0	34. 74	29. 37	40	0	0.00	121 .75
C 3- 1	1	(unt itled )	23			0	0	88	88. 00	0	-100	0.0 0	0.0 0	0.0 0	0.0 0		100	100	0.00	0.0 0
C x 2	1	(unt itled )	23	4	A	1077 <	2083	57	38. 00	78	15	22. 06	16. 99	89. 47	24. 83 +	10. 76	100	100	0.00	103 .43
C x 2	2	(unt itled )	23	4	B	344	2083	57	0.0 0	25	259	11. 49	6.4 2	38. 27	3.3 9	3.0 0	100	100	0.00	12. 98
C x 3	1	(unt itled )				36	1800	88	72. 00	2	440 0	4.4 5	0.0 2	0.0 0	0.0 0		100	100	0.00	0.0 0
C x 4	1	(unt itled )	25	12	A	1100 <	1965	73	8.0 0	67	35	4.3 0	3.1 8	37. 91	23. 33 +	0.9 5	100	100	0.00	27. 33
C x 4- 2	1	(unt itled )				1100	1965	88	16. 00	56	61	6.9 4	1.1 6	0.0 0	0.3 5		100	100	0.00	5.0 4
C x 5	1	(unt itled )				413	1800	88	28. 00	23	293	5.0 0	0.3 3	1.9 8	2.0 9		100	100	0.00	0.8 1
D	1	(unt itled )	4	2	A	580	2159	40	0.0 0	58	56	36. 37	19. 59	70. 78	10. 70	7.9 6	40	0	0.00	17. 93
D	2	(unt itled )	4	2	A	622	2317	40	9.0 0	58	56	36. 20	19. 42	70. 56	11. 45	8.5 1	40	0	0.00	19. 06
D	3	(unt	4	2	A	623	2317	40	9.0	58	56	36.	19.	70.	11.	8.5	40	0	0.00	19.

		itled )						0			21	44	63	47	3				10	
<b>D</b>	<b>x</b>	A38 South Exit				826	2155	88	7.00	38	135	14.50	0.52	0.00	0.12		100	100	0.00	1.69
<b>D</b>	<b>x</b>	A38 South Exit			1824 <	2155	88	5.00	85	6	26.14	12.16	83.16	45.25 +		100	100	0.00	175.06	
<b>E</b>	<b>1</b>	(untitled)	5		556 <	478	88	16.00	116!	-23	294.23	279.32	281.32	53.31 +		40	100	0.00	288.71	
<b>E</b>	<b>2</b>	(untitled)	5		802	933	88	13.00	86	5	34.49	19.58	90.35	14.75		40	100	0.00	48.30	
<b>F</b>	<b>1</b>	(untitled)	10	8	A	637	2134	40	4.00	64	40	40.60	24.94	95.81	15.44	10.85	100	100	0.00	82.53
<b>F</b>	<b>2</b>	(untitled)	10	8	A	832	2284	40	3.00	78	15	45.06	29.40	103.67	21.41	14.23	100	100	0.00	124.55
<b>F</b>	<b>3</b>	(untitled)	10	8	A	481	2284	40	5.00	45	99	33.20	17.54	77.55	9.74	6.97	100	100	0.00	45.35
<b>G</b>	<b>1</b>	(untitled)	11	9	A	602	2123	40	0.00	61	48	26.00	20.34	73.80	11.34	8.33	50	20	0.00	27.03
<b>G</b>	<b>2</b>	(untitled)	11	9	A	643	2537 f	40	8.00	54	65	22.65	16.98	64.93	10.68	8.72	50	20	0.00	24.24
<b>H</b>	<b>1</b>	(untitled)	12	10	A	609 <	2134	25	0.00	97!	-7	82.73	75.57	139.72	22.16 +	18.10	100	100	0.00	209.16
<b>H</b>	<b>2</b>	(untitled)	12	10	A	654 <	2284	25	0.00	97!	-7	82.51	75.35	139.56	23.75 +	19.39	100	100	0.00	224.01
<b>H</b>	<b>3</b>	(untitled)	12	10	A	23	2284	25	25.00	3	2541	29.45	22.29	68.28	0.40	0.40	100	100	0.00	2.53
<b>I</b>	<b>1</b>	(untitled)	13	11	A	134	2123	7	0.00	69	30	63.50	59.03	115.84	3.92	3.73	40	0	0.00	12.48
<b>I</b>	<b>2</b>	(untitled)	13	11	A	144	3174 f	7	0.00	50	80	48.33	43.86	97.77	3.53	3.45	40	0	0.00	9.96
<b>A</b>	<b>c</b>	(untitled)	1	1	B	261	2112	49	10.00	22	314	22.42	18.39	84.84	5.56	4.93	100	100	36.12	62.24

A c	2	(untitled)	1	1	B	488 <	2263	49	28.00	38	137	19.72	14.27	65.34	8.03+	6.28	100	100	39.70	75.25
A c	3	(untitled)	1	1	B	802 <	2263	49	11.00	62	44	11.63	7.61	47.60	12.51+	4.92	100	100	61.00	97.47
A x	1	(untitled)	8	5	A	638 <	1965	67	2.00	42	114	3.89	2.77	25.07	5.23+	2.82	100	100	7.56	23.77
A x	2	(untitled)	8	5	A	903 <	2105	67	61.00	56	62	3.70	2.58	17.24	5.15+	2.95	100	100	6.76	24.95
A x	3	(untitled)	8	5	A	409 <	2105	67	65.00	25	258	2.91	1.79	23.98	3.67+	2.02	100	100	0.85	9.41
B c	1	(untitled)	6			592	1800	88	15.00	33	174	8.16	0.70	10.89	5.30		100	100	0.00	3.74
B c	2	(untitled)	6			1265 <	1800	88	1.00	70	28	12.93	5.47	62.02	27.95+		100	100	0.00	52.78
B c	3	(untitled)	6			898	1800	88	0.00	50	80	9.15	1.69	22.13	10.49		100	100	0.00	12.44
B c	4	(untitled)	6			1162 <	1800	88	0.00	65	39	11.25	3.80	43.18	19.79+		100	100	0.00	33.70
B x	1	(untitled)				28	1800	88	79.00	2	5634	7.47	0.02	0.00	0.00		100	100	0.00	0.00
C 2	1	(untitled)	9			1331	1800	88	0.00	74	22	26.43	3.02	12.56	15.16		100	100	0.00	21.29
C 4	1	(untitled)	23	4	D	1128 <	2063	54	0.00	87	3	29.43	22.97	86.76	25.48+	13.26	100	100	0.00	134.00
C 5	1	(untitled)	23	4	C	331 <	1906	17	0.00	85	6	61.35	57.25	117.85	9.89+	8.60	100	100	0.00	87.42
C c	1	(untitled)	3	3	B	485	2059	59	22.00	35	160	10.25	5.40	19.37	2.30	2.29	100	100	0.00	13.39
C c	2	(untitled)	3	3	B	912 <	2209	59	0.00	61	49	13.19	8.34	40.33	9.28+	7.49	100	100	28.32	70.26
C c	3	(untitled)	3	3	B	1229 <	2181	59	0.00	83	9	20.01	15.16	51.52	15.94+	12.09	100	100	177.31	271.38
C	1	A40	24	6	A	629	2120	70	0.0	37	145	6.5	0.9	3.9	0.7	0.6	100	100	0.00	3.8

x		97 Kin sbu ry Road Exit						0			7	8	5	1	8				6	
C x	2	A40 97 Kin sbu ry Road Exit	24	6	A	792	2120	70	0.00	46	94	8.13	2.54	13.78	2.90	2.66	100	100	0.00	14.22
D c	1	(unt itled )	4	2	B	325	2059	38	1.00	36	153	14.30	5.80	26.31	2.20	1.94	1000	1000	0.00	85.81
D c	2	(unt itled )	4	2	B	561	2172	38	1.00	58	54	15.29	8.58	28.70	4.16	3.64	100	100	0.00	24.20
D c	3	(unt itled )	4	2	B	415	2185	38	15.00	43	110	8.94	2.23	3.36	0.34	0.34	100	100	0.00	4.10
D x	1	(unt itled )	7	7	A	826 <	1915	68	14.00	55	64	12.25	9.12	53.05	11.17 +	8.33	100	100	0.00	55.01
D x	2	(unt itled )	7	7	A	912	2055	68	9.00	57	59	4.75	1.62	6.60	7.52	0.43	100	100	0.00	9.28
D x	3	(unt itled )	7	7	A	912	2055	68	9.00	57	59	4.86	1.73	4.73	6.14	0.65	100	100	0.00	8.71
E c	1	(unt itled )	5			561	1800	88	20.00	31	189	4.18	0.45	0.00	0.07		100	100	0.00	1.00
E c	2	(unt itled )	5			826 <	1800	88	24.00	46	96	5.72	1.99	31.00	11.49 +		100	100	31.76	46.58
E c	3	(unt itled )	5			833 <	1800	88	23.00	46	94	5.73	2.00	30.86	11.51 +		100	100	31.88	46.81
E x	1	(unt itled )				581	1800	88	3.00	32	179	7.93	0.48	0.00	0.08		100	100	0.00	1.09
E x	2	(unt itled )				324	1800	88	45.00	18	401	7.68	0.22	0.00	0.02		100	100	0.00	0.28
F c	1	(unt itled )	10	8	B	22	2166	38	36.00	2	3827	10.48	2.20	55.45	0.39	0.39	100	100	0.00	0.37



F c	2	(untitled)	10	8	B	53	2317	38	31.00	5	1644	21.13	12.85	63.35	0.94	0.88	100	100	0.00	3.17
F c	3	(untitled)	10	8	B	8	2317	38	38.00	1	11452	10.45	2.17	55.41	0.14	0.14	100	100	0.00	0.13
F x	1	(untitled)	20			1024	2112	88	0.00	48	86	15.71	0.80	0.00	0.23		100	100	0.00	3.24
F x	2	(untitled)	20			1381	2263	88	0.00	61	47	16.16	1.24	1.41	0.48		100	100	0.00	7.40
F x 1	1	(untitled)	22			1147	1800	88	88.00	64	41	9.32	1.86	6.97	8.61		100	100	0.00	11.01
F x 1	2	(untitled)	22			1258	1800	88	16.00	70	29	10.23	2.77	19.04	14.34		100	100	0.00	21.54
G 1	1	(untitled)	14			1245	2112	88	0.00	59	53	5.69	1.22	0.00	0.42		100	100	0.00	6.00
G c	1	(untitled)	11	9	B	360	2166	38	11.00	37	140	13.29	5.46	11.70	1.03	1.03	100	100	0.00	8.36
G c	2	(untitled)	11	9	B	840<	2317	38	4.00	82	10	28.18	20.35	35.00	7.23+	7.23	100	100	308.56	380.25
G c	3	(untitled)	11	9	B	481	2317	38	11.00	47	92	12.50	4.67	8.80	1.04	1.04	100	100	0.00	9.47
G x	1 NB T	(untitled)	18			308	2112	88	47.00	15	518	4.32	0.15	0.00	0.01		100	100	0.00	0.18
G x	2 NB T	(untitled)	18			45	2263	88	76.00	2	4426	4.19	0.02	0.00	0.00		100	100	0.00	0.00
G x 1	1 NB T	(untitled)				353	1965	88	38.00	18	401	1.69	0.20	0.00	0.02		100	100	0.00	0.28
H 1	1	(untitled)	15			1263	2112	88	39.00	60	50	8.72	1.26	0.00	0.44		100	100	0.00	6.30
H 1	2	(untitled)	15			23	2263	88	88.00	1	8755	7.46	0.01	0.00	0.00		100	100	0.00	0.00
H c	1	(untitled)	12	10	B	567	2166	53	0.00	43	111	11.51	4.02	31.80	4.67	3.82	100	100	238.98	250.56
H	2	(untitled)	12	10	B	918	2317	53	0.00	65	39	13.	6.1	20.	5.1	4.3	100	100	559.3	584

c		itled )							0			66	7	69	3	3			6	.43
Hc	3	(untitled)	12	10	B	643 <	2317	53	26.00	45	99	16.19	8.69	64.41	10.12 +	4.16	100	100	1817.35	1845.38
Hx	1	(untitled)				439	2112	88	9.00	21	333	7.68	0.22	0.00	0.03		100	100	0.00	0.39
Hx	2	(untitled)				360	2263	88	43.00	16	466	7.61	0.15	0.00	0.02		100	100	0.00	0.21
l1	1	(untitled)	16			278	2112	88	0.00	13	584	7.59	0.13	0.00	0.01		100	100	0.00	0.14
lc	1	(untitled)	13	11	B	890	2166	71	4.00	50	79	8.31	1.04	1.26	0.27	0.27	100	100	0.00	3.80
lc	2	(untitled)	13	11	B	1297	2317	71	2.00	68	32	9.34	2.07	2.48	0.79	0.79	100	100	0.00	11.06
lc	3	(untitled)	13	11	B	23	2317	71	65.00	1	7318	7.28	0.01	0.00	0.00	0.00	100	100	0.00	0.00
lx	1	(untitled)	19			637	2112	88	46.00	30	199	3.72	0.37	0.49	1.26		100	100	0.00	1.03
lx	2	(untitled)	19			567	2263	88	73.00	25	259	3.62	0.27	0.00	0.04		100	100	0.00	0.59
lx	1	(untitled)				1203 <	2112	88	4.00	57	58	7.47	6.35	68.28	25.71 +		100	100	0.00	56.82

## Network Results

	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Excess Queue Penalty (£ per hr)	Performance Index (£ per hr)
<b>TOTAL</b>	6878.65	354.02	19.43	102.51	112.65	2369.45	700.76	1528.17	4598.38
<b>BUSES</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TRAMS</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>PEDESTRIANS</b>									
<b>OTHER (NORMAL)</b>	7282.61	422.14	17.25	123.40	151.06	2719.53	728.84	3345.53	6793.90

- B = at least one source for this link carries buses

- T = at least one source for this link carries trams
- P = this link is a pedestrian link
- < = adjusted flow warning (upstream links are over-saturated)
- ! = DoS threshold exceeded
- f = average saturation flow for flared link
- \* = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

## Link Results

### Link Results: Flows And Signals

Time Segment	Link	Calculated Flow Entering (PCU/hr)	Calculated Flow Out (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Mean Modulus Of Error	Actual Green (s (per cycle))	Effective Green (s (per cycle))
08:00-09:00	1	500	500	0		10000	2386	21		330	0.00	20	21
08:00-09:00	2	500	500	0		10000	682	73		23	0.00	5	6

### Link Results: Stops And Delays

Time Segment	Link	Mean Cruise Time Per PCU (s)	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	1	1.00	27.07	3.73	0.03	53.40	53.40	0.00	0.00	0.00	0.00	0.00
08:00-09:00	2	1.00	47.36	5.59	0.99	93.41	93.41	0.00	0.00	0.00	0.00	0.00

### Link Results: Queues And Blocking

Time Segment	Link	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Utilised Storage (%)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
08:00-09:00	1	0.00	9.33	10.00	93.33	0.00	0.00	0.00	0.03	9.33	0.00	0.00	0.00	
08:00-	2	0.00	12.38	10.00	123.7	0.25	0.00	0.00	0.99	12.38	0.00	0.00	0.00	

09:00					8									
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### Link Results: Journey Times

Time Segment	Link	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	1	1.75	3.90	0.45	28.07
08:00-09:00	2	1.75	6.72	0.26	48.36

### Link Results: Advanced

Time Segment	Link	Degree Of Saturation Penalty (£ per hr)	Phase Min Max Penalty (£ per hr)	Intergreen Broken Penalty (£ per hr)	Stage Constraint Broken Penalty (£ per hr)	Ped Gap Accepting Penalty (£ per hr)	Warmed Up	Warmed Up Error	Mean Max Queue EoTS (PCU)	Max End Of Green Queue EoTS (PCU)	Max End Of Red Queue EoTS (PCU)	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	9.33	0.03	9.33	0.00	53.40	53.40
08:00-09:00	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	12.39	1.00	12.39	0.00	93.41	93.41

## Traffic Stream Results

### Traffic Stream Results: Vehicle Summary

Time Segment	Arm	Traffic Stream	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Calculated Flow Entering (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s per cycle)	Mean Delay Per PCU (s)	Mean Max Queue (PCU)	Utilised Storage (%)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	68	32	1420	2083	88	2.35	13.67	22.73	13.17	8.62	21.79
08:00-09:00	A	1	46	97	331	2128	29	22.54	7.29	41.93	11.77	1.85	13.62
08:00-09:00	A	2	105!	-14	816	2279	29	145.06	45.42	174.12	186.76	10.20	196.96
08:00-09:00	A	3	64	41	497	2279	29	25.34	11.57	44.34	19.87	2.96	22.83
08:00-09:00	A	4	98!	-8	761	2279	29	72.61	28.35	108.69	87.18	7.10	94.29
08:00-09:00	Ax1	1	35	154	638	1800	88	0.64	4.32	124.27	1.60	0.97	2.57

08:00-09:00	Ax 1	2	73	23	1312	1800	88	9.39	32.7 2	940.5 7	48.61	37.35	85.96
08:00-09:00	Ax 2	1	35	154	637	1800	88	0.55	0.10	0.37	1.38	0.00	1.38
08:00-09:00	Ax 2	2	73	23	1313	1800	88	3.32	23.5 1	90.14	17.19	12.67	29.86
08:00-09:00	B	1	29	211	77	266	88	5.05	0.49	9.32	1.53	0.94	2.47
08:00-09:00	B	2	62	46	81	131	88	46.0 7	2.14	41.06	14.72	2.73	17.45
08:00-09:00	Bc 1	1	31	187	564	1800	88	0.46	0.07	1.37	1.01	0.00	1.01
08:00-09:00	Bc 1	2	70	28	1265	1800	88	2.35	0.83	15.83	11.73	0.00	11.73
08:00-09:00	Bc 1	3	50	80	898	1800	88	0.99	0.25	4.75	3.52	0.00	3.52
08:00-09:00	Bc 1	4	65	39	1162	1800	88	1.81	0.59	11.22	8.32	0.00	8.32
08:00-09:00	C	1	65	38	524	3523	19	28.7 6	11.5 4	33.18	23.78	0.00	23.78
08:00-09:00	C	2	101!	-11	807	3523	19	95.6 2	34.7 4	99.88	121.75	0.00	121.75
08:00-09:00	C3-1	1	0	-100	0	0	88	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Cx 2	1	78	15	1077	2083	57	16.9 9	24.8 3	210.0 0	72.14	31.28	103.43
08:00-09:00	Cx 2	2	25	259	344	2083	57	6.42	3.39	28.68	8.71	4.27	12.98
08:00-09:00	Cx 3	1	2	4400	36	1800	88	0.02	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Cx 4	1	67	35	1100	1965	73	3.18	23.3 3	894.1 7	13.79	13.54	27.33
08:00-09:00	Cx 4-2	1	56	61	1100	1965	88	1.16	0.35	2.64	5.04	0.00	5.04
08:00-09:00	Cx 5	1	23	293	413	1800	88	0.33	2.09	19.15	0.54	0.27	0.81
08:00-09:00	D	1	58	56	580	2159	40	19.5 9	10.7 0	20.51	17.93	0.00	17.93
08:00-09:00	D	2	58	56	622	2317	40	19.4 2	11.4 5	21.94	19.06	0.00	19.06
08:00-09:00	D	3	58	56	623	2317	40	19.4 4	11.4 7	21.98	19.10	0.00	19.10
08:00-09:00	Dx 1	1	38	135	826	2155	88	0.52	0.12	0.27	1.69	0.00	1.69

08:00-09:00	Dx 1	2	85	6	1824	2155	88	12.16	45.25	104.07	87.49	87.56	175.06
08:00-09:00	E	1	116!	-23	556	478	88	279.32	53.31	153.26	245.03	43.68	288.71
08:00-09:00	E	2	86	5	802	933	88	19.58	14.75	42.41	24.77	23.53	48.30
08:00-09:00	F	1	64	40	637	2134	40	24.94	15.44	42.27	62.70	19.83	82.53
08:00-09:00	F	2	78	15	832	2284	40	29.40	21.41	58.63	96.53	28.02	124.55
08:00-09:00	F	3	45	99	481	2284	40	17.54	9.74	26.67	33.25	12.10	45.35
08:00-09:00	G	1	61	48	602	2123	40	20.34	11.34	85.80	24.14	2.89	27.03
08:00-09:00	G	2	54	65	643	2537	40	16.98	10.68	80.82	21.53	2.71	24.24
08:00-09:00	H	1	97!	-7	609	2134	25	75.57	22.16	132.74	181.53	27.63	209.16
08:00-09:00	H	2	97!	-7	654	2284	25	75.35	23.75	142.26	194.37	29.64	224.01
08:00-09:00	H	3	3	2541	23	2284	25	22.29	0.40	2.38	2.02	0.51	2.53
08:00-09:00	I	1	69	30	134	2123	7	59.03	3.92	37.52	12.48	0.00	12.48
08:00-09:00	I	2	50	80	144	3174	7	43.86	3.53	33.79	9.96	0.00	9.96
08:00-09:00	Ac	1	22	314	261	2112	49	18.39	5.56	79.45	18.93	7.19	62.24
08:00-09:00	Ac	2	38	137	488	2263	49	14.27	8.03	114.73	27.48	8.07	75.25
08:00-09:00	Ac	3	62	44	802	2263	49	7.61	12.51	178.68	24.07	12.40	97.47
08:00-09:00	Ax	1	42	114	638	1965	67	2.77	5.23	150.43	6.97	9.23	23.77
08:00-09:00	Ax	2	56	62	903	2105	67	2.58	5.15	148.07	9.20	8.99	24.95
08:00-09:00	Ax	3	25	258	409	2105	67	1.79	3.67	105.51	2.89	5.67	9.41
08:00-09:00	Bc	1	33	174	592	1800	88	0.70	5.30	30.46	1.64	2.09	3.74
08:00-09:00	Bc	2	70	28	1265	1800	88	5.47	27.95	160.71	27.30	25.48	52.78
08:00-09:00	Bc	3	50	80	898	1800	88	1.69	10.49	60.34	5.98	6.45	12.44

08:00-09:00	Bc	4	65	39	1162	1800	88	3.80	19.79	113.82	17.41	16.29	33.70
08:00-09:00	Bx	1	2	5634	28	1800	88	0.02	0.00	0.00	0.00	0.00	0.00
08:00-09:00	C2	1	74	22	1331	1800	88	3.02	15.16	27.76	15.86	5.43	21.29
08:00-09:00	C4	1	87	3	1128	2063	54	22.97	25.48	169.14	102.21	31.78	134.00
08:00-09:00	C5	1	85	6	331	1906	17	57.25	9.89	103.38	74.75	12.67	87.42
08:00-09:00	Cc	1	35	160	485	2059	59	5.40	2.30	38.41	10.34	3.05	13.39
08:00-09:00	Cc	2	61	49	912	2209	59	8.34	9.28	154.68	30.00	11.94	70.26
08:00-09:00	Cc	3	83	9	1229	2181	59	15.16	15.94	265.62	73.51	20.56	271.38
08:00-09:00	Cx	1	37	145	629	2120	70	0.98	0.71	4.06	2.43	1.43	3.86
08:00-09:00	Cx	2	46	94	792	2120	70	2.54	2.90	16.66	7.92	6.30	14.22
08:00-09:00	Dc	1	36	153	325	2059	38	5.80	2.20	14.06	74.39	11.41	85.81
08:00-09:00	Dc	2	58	54	561	2172	38	8.58	4.16	26.58	18.98	5.23	24.20
08:00-09:00	Dc	3	43	110	415	2185	38	2.23	0.34	2.18	3.65	0.45	4.10
08:00-09:00	Dx	1	55	64	826	1915	68	9.12	11.17	114.72	29.71	25.30	55.01
08:00-09:00	Dx	2	57	59	912	2055	68	1.62	7.52	77.22	5.81	3.47	9.28
08:00-09:00	Dx	3	57	59	912	2055	68	1.73	6.14	63.07	6.22	2.49	8.71
08:00-09:00	Ec	1	31	189	561	1800	88	0.45	0.07	0.81	1.00	0.00	1.00
08:00-09:00	Ec	2	46	96	826	1800	88	1.99	11.49	132.10	6.50	8.32	46.58
08:00-09:00	Ec	3	46	94	833	1800	88	2.00	11.51	132.37	6.58	8.35	46.81
08:00-09:00	Ex	1	32	179	581	1800	88	0.48	0.08	0.44	1.09	0.00	1.09
08:00-09:00	Ex	2	18	401	324	1800	88	0.22	0.02	0.11	0.28	0.00	0.28
08:00-09:00	Fc	1	2	3827	22	2166	38	2.20	0.39	5.54	0.19	0.18	0.37

08:00-09:00	Fc	2	5	1644	53	2317	38	12.8 5	0.94	13.45	2.69	0.48	3.17
08:00-09:00	Fc	3	1	11452	8	2317	38	2.17	0.14	2.01	0.07	0.06	0.13
08:00-09:00	Fx	1	48	86	1024	2112	88	0.80	0.23	0.66	3.24	0.00	3.24
08:00-09:00	Fx	2	61	47	1381	2263	88	1.24	0.48	1.37	6.77	0.63	7.40
08:00-09:00	Fx 1	1	64	41	1147	1800	88	1.86	8.61	49.53	8.41	2.60	11.01
08:00-09:00	Fx 1	2	70	29	1258	1800	88	2.77	14.3 4	82.46	13.76	7.78	21.54
08:00-09:00	G1	1	59	53	1245	2112	88	1.22	0.42	4.05	6.00	0.00	6.00
08:00-09:00	Gc	1	37	140	360	2166	38	5.46	1.03	14.70	7.75	0.61	8.36
08:00-09:00	Gc	2	82	10	840	2317	38	20.3 5	7.23	103.2 6	67.44	4.25	380.25
08:00-09:00	Gc	3	47	92	481	2317	38	4.67	1.04	14.79	8.86	0.61	9.47
08:00-09:00	Gx	1	15	518	308	2112	88	0.15	0.01	0.13	0.18	0.00	0.18
08:00-09:00	Gx	2	2	4426	45	2263	88	0.02	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Gx 1	1	18	401	353	1965	88	0.20	0.02	0.56	0.28	0.00	0.28
08:00-09:00	H1	1	60	50	1263	2112	88	1.26	0.44	2.55	6.30	0.00	6.30
08:00-09:00	H1	2	1	8755	23	2263	88	0.01	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Hc	1	43	111	567	2166	53	4.02	4.67	66.72	8.98	2.60	250.56
08:00-09:00	Hc	2	65	39	918	2317	53	6.17	5.13	73.32	22.33	2.74	584.43
08:00-09:00	Hc	3	45	99	643	2317	53	8.69	10.1 2	144.6 0	22.05	5.98	1845.38
08:00-09:00	Hx	1	21	333	439	2112	88	0.22	0.03	0.16	0.39	0.00	0.39
08:00-09:00	Hx	2	16	466	360	2263	88	0.15	0.02	0.09	0.21	0.00	0.21
08:00-09:00	I1	1	13	584	278	2112	88	0.13	0.01	0.06	0.14	0.00	0.14
08:00-09:00	Ic	1	50	79	890	2166	71	1.04	0.27	3.92	3.64	0.16	3.80



08:00-09:00	lc	2	68	32	1297	2317	71	2.07	0.79	11.31	10.60	0.46	11.06
08:00-09:00	lc	3	1	7318	23	2317	71	0.01	0.00	0.00	0.00	0.00	0.00
08:00-09:00	lx	1	30	199	637	2112	88	0.37	1.26	16.06	0.93	0.10	1.03
08:00-09:00	lx	2	25	259	567	2263	88	0.27	0.04	0.53	0.59	0.00	0.59
08:00-09:00	lx1	1	57	58	1203	2112	88	6.35	25.71	985.65	30.14	26.68	56.82

### Traffic Stream Results: Flows And Signals

Time Segment	Arm	Traffic Stream	Calculated Flow Entering (PCU/hr)	Calculated Flow Out (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Mean Modulus Of Error	Actual Green (s (per cycle))	Effective Green (s (per cycle))
08:00 - 09:00	1	1	1420	1420	63	✓	2083	2083	68		32	0.37	88	88
08:00 - 09:00	A	1	331	331	-2		2128	725	46		97	0.36	29	30
08:00 - 09:00	A	2	816	777	-1		2279	777	105!	✓	-14	0.34	29	30
08:00 - 09:00	A	3	497	497	1		2279	777	64		41	0.32	29	30
08:00 - 09:00	A	4	761	761	1		2279	777	98!	✓	-8	0.33	29	30
08:00 - 09:00	Ax 1	1	638	638	13	✓	1800	1800	35		154	0.76	88	88
08:00 - 09:00	Ax 1	2	1312	1312	17	✓	1800	1800	73		23	0.80	88	88
08:00 - 09:00	Ax 2	1	637	637	11	✓	1800	1800	35		154	0.46	88	88
08:00 - 09:00	Ax 2	2	1313	1313	19	✓	1800	1800	73		23	0.44	88	88
08:00 -	B	1	77	77	0		266	266	29		211	0.00	88	88

09:00														
08:00 - 09:00	B	2	81	81	-4		131	131	62		46	0.00	88	88
08:00 - 09:00	Bc 1	1	564	564	4	✓	1800	1800	31		187	1.04	88	88
08:00 - 09:00	Bc 1	2	1265	1265	84	✓	1800	1800	70		28	0.52	88	88
08:00 - 09:00	Bc 1	3	898	898	1	✓	1800	1800	50		80	0.56	88	88
08:00 - 09:00	Bc 1	4	1162	1162	1	✓	1800	1800	65		39	0.49	88	88
08:00 - 09:00	C	1	524	524	-1		3523	801	65		38	0.26	19	20
08:00 - 09:00	C	2	807	801	2		3523	801	101!	✓	-11	0.26	19	20
08:00 - 09:00	C3 -1	1	0	0	0		0	0	0		-100	0.00	88	88
08:00 - 09:00	Cx 2	1	1077	1077	48	✓	2083	1373	78		15	0.33	57	58
08:00 - 09:00	Cx 2	2	344	344	14	✓	2083	1373	25		259	0.34	57	58
08:00 - 09:00	Cx 3	1	36	36	0		1800	1800	2		4400	0.95	88	88
08:00 - 09:00	Cx 4	1	1100	1100	48	✓	1965	1652	67		35	0.81	73	74
08:00 - 09:00	Cx 4-2	1	1100	1100	48	✓	1965	1965	56		61	0.72	88	88
08:00 - 09:00	Cx 5	1	413	413	14	✓	1800	1800	23		293	0.83	88	88
08:00 - 09:00	D	1	580	580	0		2159	1006	58		56	0.00	40	41
08:00 - 09:00	D	2	622	622	0		2317	1080	58		56	0.00	40	41

08:00 - 09:00	D	3	623	623	-3		2317	1080	58		56	0.00	40	41
08:00 - 09:00	Dx 1	1	826	826	25	✓	2155	2155	38		135	0.61	88	88
08:00 - 09:00	Dx 1	2	1824	1824	0	✓	2155	2155	85		6	0.59	88	88
08:00 - 09:00	E	1	556	478	1		478	478	116!	✓	-23	0.00	88	88
08:00 - 09:00	E	2	802	802	-1	✓	933	933	86		5	0.00	88	88
08:00 - 09:00	F	1	637	637	11	✓	2134	994	64		40	0.41	40	41
08:00 - 09:00	F	2	832	832	13	✓	2284	1064	78		15	0.40	40	41
08:00 - 09:00	F	3	481	481	7	✓	2284	1064	45		99	0.38	40	41
08:00 - 09:00	G	1	602	602	-2		2123	989	61		48	0.00	40	41
08:00 - 09:00	G	2	643	643	0		2537	1182	54		65	0.00	40	41
08:00 - 09:00	H	1	609	609	1		2134	631	97!	✓	-7	0.00	25	26
08:00 - 09:00	H	2	654	654	-1		2284	675	97!	✓	-7	0.00	25	26
08:00 - 09:00	H	3	23	23	0		2284	675	3		2541	0.00	25	26
08:00 - 09:00	I	1	134	134	1		2123	193	69		30	0.00	7	8
08:00 - 09:00	I	2	144	144	1		3174	289	50		80	0.00	7	8
08:00 - 09:00	Ac	1	261	261	6	✓	2112	1200	22		314	0.74	49	50

08:00 - 09:00	Ac	2	488	488	45	✓	2263	1286	38		137	0.25	49	50
08:00 - 09:00	Ac	3	802	802	-1	✓	2263	1286	62		44	0.56	49	50
08:00 - 09:00	Ax	1	638	638	13	✓	1965	1518	42		114	0.52	67	68
08:00 - 09:00	Ax	2	903	903	16	✓	2105	1627	56		62	0.57	67	68
08:00 - 09:00	Ax	3	409	409	2		2105	1627	25		258	0.70	67	68
08:00 - 09:00	Bc	1	592	592	5	✓	1800	1800	33		174	1.05	88	88
08:00 - 09:00	Bc	2	1265	1265	84	✓	1800	1800	70		28	0.65	88	88
08:00 - 09:00	Bc	3	898	898	1	✓	1800	1800	50		80	0.61	88	88
08:00 - 09:00	Bc	4	1162	1162	1	✓	1800	1800	65		39	0.57	88	88
08:00 - 09:00	Bx	1	28	28	1	✓	1800	1800	2		5634	0.57	88	88
08:00 - 09:00	C2	1	1331	1331	1		1800	1800	74		22	0.30	88	88
08:00 - 09:00	C4	1	1128	1128	1		2063	1289	87		3	0.00	54	55
08:00 - 09:00	C5	1	331	331	0		1906	390	85		6	0.00	17	18
08:00 - 09:00	Cc	1	485	485	25	✓	2059	1404	35		160	1.02	59	60
08:00 - 09:00	Cc	2	912	912	0	✓	2209	1506	61		49	0.51	59	60
08:00 - 09:00	Cc	3	1229	1229	-3	✓	2181	1487	83		9	0.40	59	60

08:00 - 09:00	Cx	1	629	629	4	✓	2120	1710	37		145	0.83	70	71
08:00 - 09:00	Cx	2	792	792	59	✓	2120	1710	46		94	0.50	70	71
08:00 - 09:00	Dc	1	325	325	-1		2059	913	36		153	0.74	38	39
08:00 - 09:00	Dc	2	561	561	1	✓	2172	963	58		54	0.85	38	39
08:00 - 09:00	Dc	3	415	415	5		2185	968	43		110	1.45	38	39
08:00 - 09:00	Dx	1	826	826	25	✓	1915	1502	55		64	0.74	68	69
08:00 - 09:00	Dx	2	912	912	0	✓	2055	1611	57		59	0.85	68	69
08:00 - 09:00	Dx	3	912	912	0	✓	2055	1611	57		59	0.67	68	69
08:00 - 09:00	Ec	1	561	561	0		1800	1800	31		189	0.66	88	88
08:00 - 09:00	Ec	2	826	826	3		1800	1800	46		96	0.71	88	88
08:00 - 09:00	Ec	3	833	833	0		1800	1800	46		94	0.71	88	88
08:00 - 09:00	Ex	1	581	581	-1		1800	1800	32		179	0.57	88	88
08:00 - 09:00	Ex	2	324	324	0	✓	1800	1800	18		401	1.09	88	88
08:00 - 09:00	Fc	1	22	22	0		2166	960	2		3827	1.68	38	39
08:00 - 09:00	Fc	2	53	53	0		2317	1027	5		1644	1.24	38	39
08:00 - 09:00	Fc	3	8	8	0		2317	1027	1		11452	1.68	38	39
08:00	Fx	1	1024	1024	-1		2112	2112	48		86	0.40	88	88

- 09:00														
08:00 - 09:00	Fx	2	1381	1381	1		2263	2263	61		47	0.42	88	88
08:00 - 09:00	Fx 1	1	1147	1147	-2		1800	1800	64		41	0.37	88	88
08:00 - 09:00	Fx 1	2	1258	1258	2		1800	1800	70		29	0.36	88	88
08:00 - 09:00	G1	1	1245	1245	-2		2112	2112	59		53	0.00	88	88
08:00 - 09:00	Gc	1	360	360	6	✓	2166	960	37		140	1.22	38	39
08:00 - 09:00	Gc	2	840	840	13	✓	2317	1027	82		10	1.13	38	39
08:00 - 09:00	Gc	3	481	481	7	✓	2317	1027	47		92	1.27	38	39
08:00 - 09:00	Gx	1	308	308	5	✓	2112	2112	15		518	1.17	88	88
08:00 - 09:00	Gx	2	45	45	0		2263	2263	2		4426	1.61	88	88
08:00 - 09:00	Gx 1	1	353	353	5	✓	1965	1965	18		401	1.07	88	88
08:00 - 09:00	H1	1	1263	1263	0		2112	2112	60		50	0.00	88	88
08:00 - 09:00	H1	2	23	23	0		2263	2263	1		8755	0.00	88	88
08:00 - 09:00	Hc	1	567	567	7	✓	2166	1329	43		111	0.76	53	54
08:00 - 09:00	Hc	2	918	918	4	✓	2317	1422	65		39	0.62	53	54
08:00 - 09:00	Hc	3	643	643	0		2317	1422	45		99	1.02	53	54
08:00 -	Hx	1	439	439	6	✓	2112	2112	21		333	0.86	88	88

09:00														
08:00 - 09:00	Hx	2	360	360	6	✓	2263	2263	16		466	1.06	88	88
08:00 - 09:00	l1	1	278	278	2		2112	2112	13		584	0.00	88	88
08:00 - 09:00	lc	1	890	890	-2		2166	1772	50		79	0.71	71	72
08:00 - 09:00	lc	2	1297	1297	0		2317	1896	68		32	0.67	71	72
08:00 - 09:00	lc	3	23	23	0		2317	1896	1		7318	1.36	71	72
08:00 - 09:00	lx	1	637	637	7	✓	2112	2112	30		199	0.80	88	88
08:00 - 09:00	lx	2	567	567	7	✓	2263	2263	25		259	1.08	88	88
08:00 - 09:00	lx1	1	1203	1203	14	✓	2112	2112	57		58	0.91	88	88

### Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Overs at Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	1	1	25.80	2.35	0.20	0.73	13.17	13.17	18.69	235.88	29.62	8.62	8.62
08:00-09:00	A	1	7.46	22.54	1.88	0.19	29.42	11.77	86.05	277.08	7.76	9.25	1.85
08:00-09:00	A	2	11.18	145.06	6.30	26.58	466.91	186.76	202.07	776.21	793.76	50.98	10.20
08:00-09:00	A	3	11.18	25.34	2.94	0.56	49.68	19.87	91.59	432.45	22.77	14.78	2.96
08:00-09:00	A	4	11.18	72.61	5.45	9.90	217.96	87.18	143.70	738.08	355.49	35.51	7.10
08:00-09:00	Ax 1	1	1.49	0.64	0.02	0.10	1.60	1.60	4.67	25.79	3.97	0.97	0.97
08:00-09:00	Ax 1	2	1.49	9.39	2.45	0.97	48.61	48.61	87.65	1110.67	39.55	37.35	37.35

08:00-09:00	Ax 2	1	11.18	0.55	0.00	0.10	1.38	1.38	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Ax 2	2	11.18	3.32	0.23	0.98	17.19	17.19	29.71	350.47	39.63	12.67	12.67
08:00-09:00	B	1	2.24	5.05	0.05	0.06	1.53	1.53	37.58	24.20	4.73	0.94	0.94
08:00-09:00	B	2	2.24	46.07	0.56	0.48	14.72	14.72	103.88	65.75	18.39	2.73	2.73
08:00-09:00	Bc 1	1	2.24	0.46	0.00	0.07	1.01	1.01	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Bc 1	2	2.24	2.35	0.00	0.83	11.73	11.73	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Bc 1	3	2.24	0.99	0.00	0.25	3.52	3.52	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Bc 1	4	2.24	1.81	0.00	0.59	8.32	8.32	0.00	0.00	0.00	0.00	0.00
08:00-09:00	C	1	14.91	28.76	3.57	0.61	59.44	23.78	86.54	428.67	24.82	14.73	0.00
08:00-09:00	C	2	14.91	95.62	6.05	15.39	304.37	121.75	160.50	763.90	521.21	41.73	0.00
08:00-09:00	C3-1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Cx 2	1	5.07	16.99	3.68	1.41	72.14	72.14	89.47	906.64	56.72	31.28	31.28
08:00-09:00	Cx 2	2	5.07	6.42	0.57	0.04	8.71	8.71	38.27	129.84	1.71	4.27	4.27
08:00-09:00	Cx 3	1	4.43	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Cx 4	1	1.12	3.18	0.31	0.66	13.79	13.79	37.91	390.17	26.80	13.54	13.54
08:00-09:00	Cx 4-2	1	5.77	1.16	0.00	0.35	5.04	5.04	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Cx 5	1	4.67	0.33	0.00	0.03	0.54	0.54	1.98	6.78	1.39	0.27	0.27
08:00-09:00	D	1	16.78	19.59	2.77	0.39	44.82	17.93	70.78	394.63	15.88	23.70	0.00
08:00-09:00	D	2	16.78	19.42	2.96	0.39	47.64	19.06	70.56	423.03	15.85	25.34	0.00
08:00-09:00	D	3	16.78	19.44	2.97	0.39	47.76	19.10	70.63	424.10	15.94	25.40	0.00
08:00-09:00	Dx 1	1	13.98	0.52	0.00	0.12	1.69	1.69	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Dx 1	2	13.98	12.16	3.87	2.29	87.49	87.49	83.16	1424.45	92.44	87.56	87.56



08:00-09:00	E	1	14.91	279.3 2	1.39	41.75	612.57	245.03	281.3 2	472.31	872.66	43.68	43.68
08:00-09:00	E	2	14.91	19.58	1.86	2.50	61.93	24.77	90.35	532.71	191.87	23.53	23.53
08:00-09:00	F	1	15.66	24.94	3.85	0.57	62.70	62.70	95.81	587.57	23.04	19.83	19.83
08:00-09:00	F	2	15.66	29.40	5.42	1.38	96.53	96.53	103.6 7	807.39	55.43	28.02	28.02
08:00-09:00	F	3	15.66	17.54	2.16	0.19	33.25	33.25	77.55	365.18	7.56	12.10	12.10
08:00-09:00	G	1	5.67	20.34	2.93	0.47	48.29	24.14	73.80	425.15	19.10	14.43	2.89
08:00-09:00	G	2	5.67	16.98	2.71	0.32	43.06	21.53	64.93	404.33	13.16	13.56	2.71
08:00-09:00	H	1	7.16	75.57	5.17	7.61	181.53	181.53	139.7 2	576.08	274.81	27.63	27.63
08:00-09:00	H	2	7.16	75.35	5.56	8.13	194.37	194.37	139.5 6	619.10	293.62	29.64	29.64
08:00-09:00	H	3	7.16	22.29	0.14	0.00	2.02	2.02	68.28	15.68	0.02	0.51	0.51
08:00-09:00	I	1	4.47	59.03	1.45	0.75	31.20	12.48	115.8 4	126.17	29.05	5.04	0.00
08:00-09:00	I	2	4.47	43.86	1.51	0.25	24.91	9.96	97.77	130.90	9.89	4.57	0.00
08:00-09:00	Ac	1	4.03	18.39	1.30	0.03	18.93	18.93	84.84	220.16	1.23	7.19	7.19
08:00-09:00	Ac	2	5.44	14.27	1.82	0.12	27.48	27.48	65.34	314.13	4.73	8.07	8.07
08:00-09:00	Ac	3	4.03	7.61	1.18	0.51	24.07	24.07	47.60	360.85	20.91	12.40	12.40
08:00-09:00	Ax	1	1.12	2.77	0.34	0.15	6.97	6.97	25.07	153.75	6.20	9.23	9.23
08:00-09:00	Ax	2	1.12	2.58	0.30	0.35	9.20	9.20	17.24	141.61	14.08	8.99	8.99
08:00-09:00	Ax	3	1.12	1.79	0.16	0.04	2.89	2.89	23.98	96.43	1.73	5.67	5.67
08:00-09:00	Bc	1	7.46	0.70	0.04	0.08	1.64	1.64	10.89	57.89	6.57	2.09	2.09
08:00-09:00	Bc	2	7.46	5.47	1.10	0.83	27.30	27.30	62.02	751.02	33.57	25.48	25.48
08:00-09:00	Bc	3	7.46	1.69	0.17	0.25	5.98	5.98	22.13	188.58	10.11	6.45	6.45
08:00-09:00	Bc	4	7.46	3.80	0.64	0.59	17.41	17.41	43.18	477.93	23.83	16.29	16.29

08:00-09:00	Bx	1	7.46	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	C2	1	23.41	3.02	0.08	1.04	15.86	15.86	12.56	124.89	42.26	5.43	5.43
08:00-09:00	C4	1	6.46	22.97	4.28	2.92	102.21	102.21	86.76	862.29	116.36	31.78	31.78
08:00-09:00	C5	1	4.10	57.25	3.10	2.17	74.75	74.75	117.85	307.16	82.92	12.67	12.67
08:00-09:00	Cc	1	4.85	5.40	0.64	0.09	10.34	10.34	19.37	90.27	3.72	3.05	3.05
08:00-09:00	Cc	2	4.85	8.34	1.65	0.46	30.00	30.00	40.33	348.97	18.85	11.94	11.94
08:00-09:00	Cc	3	4.85	15.16	3.25	1.93	73.51	73.51	51.52	555.55	77.58	20.56	20.56
08:00-09:00	Cx	1	5.59	0.98	0.06	0.11	2.43	2.43	3.95	20.47	4.36	1.43	1.43
08:00-09:00	Cx	2	5.59	2.54	0.36	0.20	7.92	7.92	13.78	100.98	8.13	6.30	6.30
08:00-09:00	Dc	1	8.50	5.80	0.43	0.10	7.44	74.39	26.31	81.49	4.01	1.14	11.41
08:00-09:00	Dc	2	6.71	8.58	0.93	0.40	18.98	18.98	28.70	144.54	16.45	5.23	5.23
08:00-09:00	Dc	3	6.71	2.23	0.10	0.16	3.65	3.65	3.36	7.40	6.52	0.45	0.45
08:00-09:00	Dx	1	3.13	9.12	1.76	0.34	29.71	29.71	53.05	424.66	13.68	25.30	25.30
08:00-09:00	Dx	2	3.13	1.62	0.04	0.37	5.81	5.81	6.60	45.19	15.00	3.47	3.47
08:00-09:00	Dx	3	3.13	1.73	0.07	0.37	6.22	6.22	4.73	28.15	15.00	2.49	2.49
08:00-09:00	Ec	1	3.73	0.45	0.00	0.07	1.00	1.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Ec	2	3.73	1.99	0.26	0.19	6.50	6.50	31.00	248.24	7.94	8.32	8.32
08:00-09:00	Ec	3	3.73	2.00	0.26	0.20	6.58	6.58	30.86	249.02	8.13	8.35	8.35
08:00-09:00	Ex	1	7.46	0.48	0.00	0.08	1.09	1.09	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Ex	2	7.46	0.22	0.00	0.02	0.28	0.28	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Fc	1	8.28	2.20	0.01	0.00	0.19	0.19	55.45	12.19	0.01	0.18	0.18
08:00-09:00	Fc	2	8.28	12.85	0.19	0.00	2.69	2.69	63.35	33.52	0.06	0.48	0.48

08:00-09:00	Fc	3	8.28	2.17	0.00	0.00	0.07	0.07	55.41	4.43	0.00	0.06	0.06
08:00-09:00	Fx	1	14.91	0.80	0.00	0.23	3.24	3.24	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Fx	2	14.91	1.24	0.00	0.48	6.77	6.77	1.41	0.01	19.43	0.63	0.63
08:00-09:00	Fx1	1	7.46	1.86	0.03	0.56	8.41	8.41	6.97	57.22	22.70	2.60	2.60
08:00-09:00	Fx1	2	7.46	2.77	0.16	0.81	13.76	13.76	19.04	206.69	32.78	7.78	7.78
08:00-09:00	G1	1	4.47	1.22	0.00	0.42	6.00	6.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Gc	1	7.83	5.46	0.43	0.11	7.75	7.75	11.70	37.50	4.57	0.61	0.61
08:00-09:00	Gc	2	7.83	20.35	2.96	1.79	67.44	67.44	35.00	222.35	71.76	4.25	4.25
08:00-09:00	Gc	3	7.83	4.67	0.42	0.21	8.86	8.86	8.80	33.95	8.37	0.61	0.61
08:00-09:00	Gx	1	4.18	0.15	0.00	0.01	0.18	0.18	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Gx	2	4.18	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Gx 1	1	1.49	0.20	0.00	0.02	0.28	0.28	0.00	0.00	0.00	0.00	0.00
08:00-09:00	H1	1	7.46	1.26	0.00	0.44	6.30	6.30	0.00	0.00	0.00	0.00	0.00
08:00-09:00	H1	2	7.46	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Hc	1	7.49	4.02	0.47	0.16	8.98	8.98	31.80	173.73	6.45	2.60	2.60
08:00-09:00	Hc	2	7.49	6.17	0.99	0.58	22.33	22.33	20.69	166.07	23.76	2.74	2.74
08:00-09:00	Hc	3	7.49	8.69	1.37	0.19	22.05	22.05	64.41	398.97	15.16	5.98	5.98
08:00-09:00	Hx	1	7.46	0.22	0.00	0.03	0.39	0.39	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Hx	2	7.46	0.15	0.00	0.02	0.21	0.21	0.00	0.00	0.00	0.00	0.00
08:00-09:00	I1	1	7.46	0.13	0.00	0.01	0.14	0.14	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Ic	1	7.27	1.04	0.00	0.25	3.64	3.64	1.26	0.88	10.32	0.16	0.16
08:00-09:00	Ic	2	7.27	2.07	0.01	0.74	10.60	10.60	2.48	2.21	30.00	0.46	0.46

08:00-09:00	lc	3	7.27	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	lx	1	3.36	0.37	0.00	0.07	0.93	0.93	0.49	0.48	2.66	0.10	0.10
08:00-09:00	lx	2	3.36	0.27	0.00	0.04	0.59	0.59	0.00	0.00	0.00	0.00	0.00
08:00-09:00	lx1	1	1.12	6.35	1.75	0.38	30.14	30.14	68.28	806.30	15.35	26.68	26.68

### Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Utilised Storage (%)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
08:00-09:00	1	1	0.00	13.67	60.17	22.73	0.00	0.00	0.00			0.00	36.00	36.00	
08:00-09:00	A	1	0.00	7.29	17.39	41.93	0.00	0.00	0.00	0.19	5.92	0.00	0.00	0.00	
08:00-09:00	A	2	0.00	45.42	26.09	174.12	9.31	0.00	0.00	26.58	39.25	0.00	0.00	0.00	
08:00-09:00	A	3	0.00	11.57	26.09	44.34	0.00	0.00	0.00	0.56	8.49	0.00	0.00	0.00	
08:00-09:00	A	4	0.00	28.35	26.09	108.69	0.23	0.00	0.00	9.90	22.02	0.00	0.00	0.00	
08:00-09:00	Ax 1	1	0.00	4.32	3.48	124.27	0.01	0.00	0.00			19.00	0.00	19.00	
08:00-09:00	Ax 1	2	0.00	32.72	3.48	940.57	12.14	0.00	0.00			20.00	0.00	20.00	
08:00-09:00	Ax 2	1	0.00	0.10	26.09	0.37	0.00	0.00	0.00			14.00	0.00	14.00	
08:00-09:00	Ax 2	2	0.00	23.51	26.09	90.14	0.00	0.00	0.00			11.00	0.00	11.00	
08:00-09:00	B	1	0.00	0.49	5.22	9.32	0.00	0.00	0.00			0.00	0.00	0.00	
08:00-09:00	B	2	0.00	2.14	5.22	41.06	0.00	0.00	0.00			0.00	43.00	43.00	
08:00-09:00	Bc 1	1	0.00	0.07	5.22	1.37	0.00	0.00	0.00			24.00	0.00	24.00	
08:00-09:00	Bc 1	2	0.00	0.83	5.22	15.83	0.00	0.00	0.00			0.00	0.00	0.00	
08:00-09:00	Bc	3	0.00	0.25	5.22	4.75	0.00	0.00	0.00			0.00	21.00	21.00	

09:00	1														
08:00-09:00	Bc 1	4	0.00	0.59	5.22	11.22	0.00	0.00	0.00			0.00	43.00	43.00	
08:00-09:00	C	1	0.00	11.54	34.78	33.18	0.00	0.00	0.00	0.61	9.77	0.00	0.00	0.00	
08:00-09:00	C	2	0.00	34.74	34.78	99.88	0.00	0.00	0.00	15.39	29.37	0.00	0.00	0.00	
08:00-09:00	C3-1	1	0.00	0.00	9.67	0.00	0.00	0.00	0.00			88.00	0.00	88.00	
08:00-09:00	Cx 2	1	0.00	24.83	11.83	210.00	2.80	0.00	0.00	1.41	10.76	0.00	38.00	38.00	
08:00-09:00	Cx 2	2	0.00	3.39	11.83	28.68	0.00	0.00	0.00	0.04	3.00	0.00	0.00	0.00	
08:00-09:00	Cx 3	1	0.00	0.00	10.32	0.00	0.00	0.00	0.00			72.00	0.00	72.00	
08:00-09:00	Cx 4	1	0.00	23.33	2.61	894.17	4.76	0.00	0.00	0.66	0.95	8.00	0.00	8.00	
08:00-09:00	Cx 4-2	1	0.00	0.35	13.47	2.64	0.00	0.00	0.00			16.00	0.00	16.00	
08:00-09:00	Cx 5	1	0.00	2.09	10.89	19.15	0.00	0.00	0.00			28.00	0.00	28.00	
08:00-09:00	D	1	0.00	10.70	52.17	20.51	0.00	0.00	0.00	0.39	7.96	0.00	0.00	0.00	
08:00-09:00	D	2	0.00	11.45	52.17	21.94	0.00	0.00	0.00	0.39	8.51	0.00	9.00	9.00	
08:00-09:00	D	3	0.00	11.47	52.17	21.98	0.00	0.00	0.00	0.39	8.53	0.00	9.00	9.00	
08:00-09:00	Dx 1	1	0.00	0.12	43.48	0.27	0.00	0.00	0.00			7.00	0.00	7.00	
08:00-09:00	Dx 1	2	0.00	45.25	43.48	104.07	0.23	0.00	0.00			5.00	0.00	5.00	
08:00-09:00	E	1	0.00	53.31	34.78	153.26	12.75	0.00	0.00			0.00	16.00	16.00	
08:00-09:00	E	2	0.00	14.75	34.78	42.41	0.00	0.00	0.00			0.00	13.00	13.00	
08:00-09:00	F	1	0.00	15.44	36.52	42.27	0.00	0.00	0.00	0.57	10.85	4.00	0.00	4.00	
08:00-09:00	F	2	0.00	21.41	36.52	58.63	0.00	0.00	0.00	1.38	14.23	2.00	1.00	3.00	
08:00-09:00	F	3	0.00	9.74	36.52	26.67	0.00	0.00	0.00	0.19	6.97	5.00	0.00	5.00	
08:00-09:00	G	1	0.00	11.34	13.22	85.80	0.00	0.00	0.00	0.47	8.33	0.00	0.00	0.00	

08:00-09:00	G	2	0.00	10.68	13.22	80.82	0.00	0.00	0.00	0.32	8.72	0.00	8.00	8.00	
08:00-09:00	H	1	0.00	22.16	16.70	132.74	1.03	0.00	0.00	7.61	18.10	0.00	0.00	0.00	
08:00-09:00	H	2	0.00	23.75	16.70	142.26	1.60	0.00	0.00	8.13	19.39	0.00	0.00	0.00	
08:00-09:00	H	3	0.00	0.40	16.70	2.38	0.00	0.00	0.00	0.00	0.40	25.00	0.00	25.00	
08:00-09:00	I	1	0.00	3.92	10.43	37.52	0.00	0.00	0.00	0.75	3.73	0.00	0.00	0.00	
08:00-09:00	I	2	0.00	3.53	10.43	33.79	0.00	0.00	0.00	0.25	3.45	0.00	0.00	0.00	
08:00-09:00	Ac	1	0.00	5.56	7.00	79.45	0.00	0.45	36.12	0.03	4.93	10.00	0.00	10.00	
08:00-09:00	Ac	2	0.00	8.03	7.00	114.73	0.05	0.66	39.70	0.12	6.28	0.00	28.00	28.00	
08:00-09:00	Ac	3	0.00	12.51	7.00	178.68	0.41	1.02	61.00	0.51	4.92	0.00	11.00	11.00	
08:00-09:00	Ax	1	0.00	5.23	3.48	150.43	0.08	0.13	7.56	0.15	2.82	0.00	2.00	2.00	
08:00-09:00	Ax	2	0.00	5.15	3.48	148.07	0.07	0.11	6.76	0.35	2.95	0.00	61.00	61.00	
08:00-09:00	Ax	3	0.00	3.67	3.48	105.51	0.00	0.01	0.85	0.04	2.02	8.00	57.00	65.00	
08:00-09:00	Bc	1	0.00	5.30	17.39	30.46	0.00	0.00	0.00			15.00	0.00	15.00	
08:00-09:00	Bc	2	0.00	27.95	17.39	160.71	1.85	2.65	0.00			1.00	0.00	1.00	
08:00-09:00	Bc	3	0.00	10.49	17.39	60.34	0.00	0.00	0.00			0.00	0.00	0.00	
08:00-09:00	Bc	4	0.00	19.79	17.39	113.82	0.14	0.50	0.00			0.00	0.00	0.00	
08:00-09:00	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			79.00	0.00	79.00	
08:00-09:00	C2	1	0.00	15.16	54.60	27.76	0.00	0.00	0.00			0.00	0.00	0.00	
08:00-09:00	C4	1	0.00	25.48	15.06	169.14	2.03	0.00	0.00	2.92	13.26	0.00	0.00	0.00	
08:00-09:00	C5	1	0.00	9.89	9.57	103.38	0.01	0.00	0.00	2.17	8.60	0.00	0.00	0.00	
08:00-09:00	Cc	1	0.00	2.30	6.00	38.41	0.00	0.00	0.00	0.09	2.29	22.00	0.00	22.00	
08:00-09:00	Cc	2	0.00	9.28	6.00	154.68	0.47	0.47	28.32	0.46	7.49	0.00	0.00	0.00	

08:00-09:00	Cc	3	0.00	15.94	6.00	265.62	2.96	2.96	177.31	1.93	12.09	0.00	0.00	0.00	
08:00-09:00	Cx	1	0.00	0.71	17.39	4.06	0.00	0.00	0.00	0.11	0.68	0.00	0.00	0.00	
08:00-09:00	Cx	2	0.00	2.90	17.39	16.66	0.00	0.00	0.00	0.20	2.66	0.00	0.00	0.00	
08:00-09:00	Dc	1	0.00	2.20	15.65	14.06	0.00	0.00	0.00	0.10	1.94	1.00	0.00	1.00	
08:00-09:00	Dc	2	0.00	4.16	15.65	26.58	0.00	0.00	0.00	0.40	3.64	1.00	0.00	1.00	
08:00-09:00	Dc	3	0.00	0.34	15.65	2.18	0.00	0.00	0.00	0.16	0.34	15.00	0.00	15.00	
08:00-09:00	Dx	1	0.00	11.17	9.74	114.72	0.13	0.00	0.00	0.34	8.33	14.00	0.00	14.00	
08:00-09:00	Dx	2	0.00	7.52	9.74	77.22	0.00	0.00	0.00	0.37	0.43	8.00	1.00	9.00	
08:00-09:00	Dx	3	0.00	6.14	9.74	63.07	0.00	0.00	0.00	0.37	0.65	8.00	1.00	9.00	
08:00-09:00	Ec	1	0.00	0.07	8.70	0.81	0.00	0.00	0.00			13.00	7.00	20.00	
08:00-09:00	Ec	2	0.00	11.49	8.70	132.10	0.19	0.53	31.76			17.00	7.00	24.00	
08:00-09:00	Ec	3	0.00	11.51	8.70	132.37	0.19	0.53	31.88			17.00	6.00	23.00	
08:00-09:00	Ex	1	0.00	0.08	17.39	0.44	0.00	0.00	0.00			3.00	0.00	3.00	
08:00-09:00	Ex	2	0.00	0.02	17.39	0.11	0.00	0.00	0.00			45.00	0.00	45.00	
08:00-09:00	Fc	1	0.00	0.39	7.00	5.54	0.00	0.00	0.00	0.00	0.39	36.00	0.00	36.00	
08:00-09:00	Fc	2	0.00	0.94	7.00	13.45	0.00	0.00	0.00	0.00	0.88	31.00	0.00	31.00	
08:00-09:00	Fc	3	0.00	0.14	7.00	2.01	0.00	0.00	0.00	0.00	0.14	38.00	0.00	38.00	
08:00-09:00	Fx	1	0.00	0.23	34.78	0.66	0.00	0.00	0.00			0.00	0.00	0.00	
08:00-09:00	Fx	2	0.00	0.48	34.78	1.37	0.00	0.00	0.00			0.00	0.00	0.00	
08:00-09:00	Fx1	1	0.00	8.61	17.39	49.53	0.00	0.00	0.00			0.00	88.00	88.00	
08:00-09:00	Fx1	2	0.00	14.34	17.39	82.46	0.00	0.00	0.00			0.00	16.00	16.00	
08:00-09:00	G1	1	0.00	0.42	10.43	4.05	0.00	0.00	0.00			0.00	0.00	0.00	

08:00-09:00	Gc	1	0.00	1.03	7.00	14.70	0.00	0.00	0.00	0.11	1.03	11.00	0.00	11.00	
08:00-09:00	Gc	2	0.00	7.23	7.00	103.26	0.09	3.09	308.56	1.79	7.23	4.00	0.00	4.00	
08:00-09:00	Gc	3	0.00	1.04	7.00	14.79	0.00	0.00	0.00	0.21	1.04	11.00	0.00	11.00	
08:00-09:00	Gx	1	0.00	0.01	9.74	0.13	0.00	0.00	0.00			47.00	0.00	47.00	
08:00-09:00	Gx	2	0.00	0.00	9.74	0.00	0.00	0.00	0.00			76.00	0.00	76.00	
08:00-09:00	Gx	1	0.00	0.02	3.48	0.56	0.00	0.00	0.00			38.00	0.00	38.00	
08:00-09:00	H1	1	0.00	0.44	17.39	2.55	0.00	0.00	0.00			0.00	39.00	39.00	
08:00-09:00	H1	2	0.00	0.00	17.39	0.00	0.00	0.00	0.00			88.00	0.00	88.00	
08:00-09:00	Hc	1	0.00	4.67	7.00	66.72	0.00	0.12	238.98	0.16	3.82	0.00	0.00	0.00	
08:00-09:00	Hc	2	0.00	5.13	7.00	73.32	0.00	0.28	559.36	0.58	4.33	0.00	0.00	0.00	
08:00-09:00	Hc	3	0.00	10.12	7.00	144.60	0.17	0.91	1817.35	0.19	4.16	26.00	0.00	26.00	
08:00-09:00	Hx	1	0.00	0.03	17.39	0.16	0.00	0.00	0.00			9.00	0.00	9.00	
08:00-09:00	Hx	2	0.00	0.02	17.39	0.09	0.00	0.00	0.00			43.00	0.00	43.00	
08:00-09:00	I1	1	0.00	0.01	17.39	0.06	0.00	0.00	0.00			0.00	0.00	0.00	
08:00-09:00	Ic	1	0.00	0.27	7.00	3.92	0.00	0.00	0.00	0.25	0.27	4.00	0.00	4.00	
08:00-09:00	Ic	2	0.00	0.79	7.00	11.31	0.00	0.00	0.00	0.74	0.79	2.00	0.00	2.00	
08:00-09:00	Ic	3	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00	65.00	0.00	65.00	
08:00-09:00	Ix	1	0.00	1.26	7.83	16.06	0.00	0.00	0.00			6.00	40.00	46.00	
08:00-09:00	Ix	2	0.00	0.04	7.83	0.53	0.00	0.00	0.00			33.00	40.00	73.00	
08:00-09:00	Ix1	1	0.00	25.71	2.61	985.65	6.99	0.00	0.00			4.00	0.00	4.00	

### Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
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08:00-09:00	1	1	491.42	11.11	44.25	28.15
08:00-09:00	A	1	33.10	2.76	12.00	29.99
08:00-09:00	A	2	122.40	35.42	3.46	156.25
08:00-09:00	A	3	74.55	5.04	14.78	36.53
08:00-09:00	A	4	114.15	17.71	6.44	83.80
08:00-09:00	Ax1	1	12.76	0.38	33.83	2.13
08:00-09:00	Ax1	2	26.25	3.97	6.62	10.88
08:00-09:00	Ax2	1	95.59	2.08	46.03	11.73
08:00-09:00	Ax2	2	196.94	5.29	37.23	14.50
08:00-09:00	B	1	2.31	0.16	14.82	7.29
08:00-09:00	B	2	2.43	1.09	2.24	48.31
08:00-09:00	Bc1	1	16.91	0.42	40.11	2.69
08:00-09:00	Bc1	2	37.95	1.61	23.54	4.59
08:00-09:00	Bc1	3	26.94	0.81	33.43	3.23
08:00-09:00	Bc1	4	34.86	1.31	26.66	4.05
08:00-09:00	C	1	104.80	6.36	16.49	43.67
08:00-09:00	C	2	161.40	24.78	6.51	110.53
08:00-09:00	C3-1	1	0.00	0.00	0.00	0.00
08:00-09:00	Cx 2	1	73.22	6.60	11.10	22.06
08:00-09:00	Cx 2	2	23.37	1.10	21.30	11.49
08:00-09:00	Cx3	1	2.14	0.04	48.06	4.45
08:00-09:00	Cx4	1	16.50	1.31	12.57	4.30
08:00-09:00	Cx4-2	1	85.15	2.12	40.19	6.94
08:00-09:00	Cx5	1	25.84	0.57	45.06	5.00
08:00-09:00	D	1	174.00	5.86	29.70	36.37
08:00-09:00	D	2	186.60	6.25	29.84	36.20
08:00-09:00	D	3	186.90	6.27	29.82	36.21
08:00-09:00	Dx1	1	206.55	3.33	62.07	14.50
08:00-09:00	Dx1	2	456.00	13.25	34.43	26.14
08:00-09:00	E	1	111.20	45.44	2.45	294.23
08:00-09:00	E	2	160.40	7.68	20.88	34.49
08:00-09:00	F	1	133.83	7.19	18.62	40.60

08:00-09:00	F	2	174.78	10.42	16.78	45.06
08:00-09:00	F	3	100.93	4.43	22.77	33.20
08:00-09:00	G	1	45.75	4.35	10.52	26.00
08:00-09:00	G	2	48.87	4.04	12.08	22.65
08:00-09:00	H	1	58.46	13.99	4.18	82.73
08:00-09:00	H	2	62.78	14.99	4.19	82.51
08:00-09:00	H	3	2.21	0.19	11.74	29.45
08:00-09:00	I	1	8.04	2.36	3.40	63.50
08:00-09:00	I	2	8.64	1.93	4.47	48.33
08:00-09:00	Ac	1	14.09	1.62	8.67	22.42
08:00-09:00	Ac	2	26.35	2.67	9.86	19.72
08:00-09:00	Ac	3	43.31	2.59	16.71	11.63
08:00-09:00	Ax	1	12.76	0.69	18.51	3.89
08:00-09:00	Ax	2	18.06	0.93	19.45	3.70
08:00-09:00	Ax	3	8.19	0.33	24.75	2.91
08:00-09:00	Bc	1	59.19	1.34	44.12	8.16
08:00-09:00	Bc	2	126.50	4.54	27.85	12.93
08:00-09:00	Bc	3	89.80	2.28	39.36	9.15
08:00-09:00	Bc	4	116.20	3.63	31.99	11.25
08:00-09:00	Bx	1	2.83	0.06	48.18	7.47
08:00-09:00	C2	1	417.88	9.77	42.76	26.43
08:00-09:00	C4	1	97.71	9.22	10.60	29.43
08:00-09:00	C5	1	18.21	5.64	3.23	61.35
08:00-09:00	Cc	1	31.54	1.38	22.83	10.25
08:00-09:00	Cc	2	59.28	3.34	17.75	13.19
08:00-09:00	Cc	3	79.89	6.83	11.69	20.01
08:00-09:00	Cx	1	62.87	1.15	54.78	6.57
08:00-09:00	Cx	2	79.18	1.79	44.29	8.13
08:00-09:00	Dc	1	29.25	1.29	22.66	14.30
08:00-09:00	Dc	2	50.49	2.38	21.19	15.29
08:00-09:00	Dc	3	37.33	1.03	36.24	8.94
08:00-09:00	Dx	1	46.27	2.81	16.46	12.25
08:00-09:00	Dx	2	51.07	1.20	42.47	4.75

08:00-09:00	Dx	3	51.07	1.23	41.48	4.86
08:00-09:00	Ec	1	28.07	0.65	43.05	4.18
08:00-09:00	Ec	2	41.32	1.31	31.46	5.72
08:00-09:00	Ec	3	41.67	1.33	31.41	5.73
08:00-09:00	Ex	1	58.10	1.28	45.38	7.93
08:00-09:00	Ex	2	32.36	0.69	46.90	7.68
08:00-09:00	Fc	1	1.63	0.06	25.42	10.48
08:00-09:00	Fc	2	3.92	0.31	12.61	21.13
08:00-09:00	Fc	3	0.59	0.02	25.49	10.45
08:00-09:00	Fx	1	204.80	4.47	45.82	15.71
08:00-09:00	Fx	2	276.20	6.20	44.57	16.16
08:00-09:00	Fx1	1	114.70	2.97	38.64	9.32
08:00-09:00	Fx1	2	125.80	3.57	35.19	10.23
08:00-09:00	G1	1	74.70	1.97	37.93	5.69
08:00-09:00	Gc	1	25.18	1.33	18.96	13.29
08:00-09:00	Gc	2	58.82	6.58	8.94	28.18
08:00-09:00	Gc	3	33.64	1.67	20.16	12.50
08:00-09:00	Gx	1	17.23	0.37	46.66	4.32
08:00-09:00	Gx	2	2.52	0.05	48.09	4.19
08:00-09:00	Gx1	1	7.05	0.17	42.56	1.69
08:00-09:00	H1	1	126.30	3.06	41.28	8.72
08:00-09:00	H1	2	2.30	0.05	48.23	7.46
08:00-09:00	Hc	1	37.96	1.81	20.95	11.51
08:00-09:00	Hc	2	61.48	3.48	17.65	13.66
08:00-09:00	Hc	3	43.08	2.89	14.90	16.19
08:00-09:00	Hx	1	43.86	0.94	46.88	7.68
08:00-09:00	Hx	2	35.96	0.76	47.33	7.61
08:00-09:00	l1	1	27.80	0.59	47.46	7.59
08:00-09:00	lc	1	57.85	2.05	28.17	8.31
08:00-09:00	lc	2	84.31	3.37	25.05	9.34
08:00-09:00	lc	3	1.50	0.05	32.14	7.28
08:00-09:00	lx	1	28.65	0.66	43.49	3.72
08:00-09:00	lx	2	25.50	0.57	44.74	3.62

08:00-09:00	lx1	1	18.05	2.50	7.23	7.47
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### Traffic Stream Results: Flare

Time Segment	Arm	Traffic Stream	Flare Present	Flare Components	Degree Of Saturation (%)	Mean Max Queue (PCU)	Calculated Capacity (PCU/hr)	Practical Reserve Capacity (%)
08:00-09:00	C	1	✓	Quick Flare	65	11.54	801	38
08:00-09:00	C	2	✓	Quick Flare	101	34.74	801	-11
08:00-09:00	G	2	✓	Quick Flare	54	10.68	1182	65
08:00-09:00	I	2	✓	Quick Flare	50	3.53	289	80

### Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree Of Saturation Penalty (£ per hr)	Phase Min Max Penalty (£ per hr)	Intergr een Broken Penalty (£ per hr)	Stage Constr aint Broken Penalty (£ per hr)	Ped Gap Accep ting Penalty (£ per hr)	War med Up	War med Up Error	Mea n Max Queue EoT S (PC U)	Max End Of Gre en Queue Eo TS (PC U)	Max End Of Red Queue Eo TS (PC U)	Cost Of Penalties (£ per hr)	Unweig hted Perform ance Index (£ per hr)	Perform ance Index (£ per hr)
08:00 - 09:00	1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	13.67			0.00	21.79	21.79
08:00 - 09:00	A	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	7.29	0.19	5.92	0.00	38.67	13.62
08:00 - 09:00	A	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	65.98	47.14	59.81	0.00	517.89	196.96
08:00 - 09:00	A	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	11.57	0.57	8.49	0.00	64.46	22.83
08:00 - 09:00	A	4	0.00	0.00	0.00	0.00	0.00	✓	0.00	31.08	12.62	24.75	0.00	253.48	94.29
08:00 - 09:00	Ax 1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	4.32			0.00	2.57	2.57
08:00 - 09:00	Ax 1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	32.72			0.00	85.96	85.96
08:00	Ax	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.10			0.00	1.38	1.38

- 09:00	2														
08:00 - 09:00	Ax 2	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	23.5 2			0.00	29.86	29.86
08:00 - 09:00	B	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.49			0.00	2.47	2.47
08:00 - 09:00	B	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.15			0.00	17.45	17.45
08:00 - 09:00	Bc 1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.07			0.00	1.01	1.01
08:00 - 09:00	Bc 1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.83			0.00	11.73	11.73
08:00 - 09:00	Bc 1	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.25			0.00	3.52	3.52
08:00 - 09:00	Bc 1	4	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.59			0.00	8.32	8.32
08:00 - 09:00	C	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	11.5 4	0.62	9.78	0.00	74.17	23.78
08:00 - 09:00	C	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	42.3 6	23.0 0	36.9 9	0.00	346.10	121.75
08:00 - 09:00	C3 -1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00
08:00 - 09:00	Cx 2	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	24.8 5	1.42	10.7 7	0.00	103.43	103.43
08:00 - 09:00	Cx 2	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.39	0.04	3.00	0.00	12.98	12.98
08:00 - 09:00	Cx 3	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00
08:00 - 09:00	Cx 4	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	23.3 3	0.66	0.95	0.00	27.33	27.33
08:00 - 09:00	Cx 4- 2	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.36			0.00	5.04	5.04
08:00 - 09:00	Cx 5	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.09			0.00	0.81	0.81

09:00															
08:00 - 09:00	D	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	10.7 0	0.39	7.96	0.00	68.52	17.93
08:00 - 09:00	D	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	11.4 5	0.39	8.51	0.00	72.97	19.06
08:00 - 09:00	D	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	11.4 7	0.39	8.53	0.00	73.16	19.10
08:00 - 09:00	Dx 1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.12			0.00	1.69	1.69
08:00 - 09:00	Dx 1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	45.2 7			0.00	175.06	175.06
08:00 - 09:00	E	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	92.3 9			0.00	656.25	288.71
08:00 - 09:00	E	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	14.8 1			0.00	85.46	48.30
08:00 - 09:00	F	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	15.4 4	0.57	10.8 6	0.00	82.53	82.53
08:00 - 09:00	F	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	21.4 2	1.39	14.2 4	0.00	124.55	124.55
08:00 - 09:00	F	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	9.74	0.19	6.97	0.00	45.35	45.35
08:00 - 09:00	G	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	11.3 4	0.47	8.33	0.00	62.72	27.03
08:00 - 09:00	G	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	10.6 8	0.32	8.72	0.00	56.62	24.24
08:00 - 09:00	H	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	23.8 2	9.27	19.7 6	0.00	209.16	209.16
08:00 - 09:00	H	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	25.6 0	9.98	21.2 4	0.00	224.01	224.01
08:00 - 09:00	H	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.40	0.00	0.40	0.00	2.53	2.53
08:00 - 09:00	I	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.93	0.77	3.75	0.00	36.24	12.48

08:00 - 09:00	I	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.53	0.25	3.45	0.00	29.48	9.96
08:00 - 09:00	Ac	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	5.56	0.03	4.93	36.12	26.12	62.24
08:00 - 09:00	Ac	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	8.03	0.12	6.28	39.70	35.55	75.25
08:00 - 09:00	Ac	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	12.5 1	0.52	4.93	61.00	36.46	97.47
08:00 - 09:00	Ax	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	5.23	0.15	2.82	7.56	16.21	23.77
08:00 - 09:00	Ax	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	5.15	0.35	2.95	6.76	18.19	24.95
08:00 - 09:00	Ax	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.67	0.04	2.02	0.85	8.56	9.41
08:00 - 09:00	Bc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	5.30			0.00	3.74	3.74
08:00 - 09:00	Bc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	27.9 5			0.00	52.78	52.78
08:00 - 09:00	Bc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	10.4 9			0.00	12.44	12.44
08:00 - 09:00	Bc	4	0.00	0.00	0.00	0.00	0.00	✓	0.00	19.8 0			0.00	33.70	33.70
08:00 - 09:00	Bx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00
08:00 - 09:00	C2	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	15.1 6			0.00	21.29	21.29
08:00 - 09:00	C4	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	25.5 5	2.99	13.3 3	0.00	134.00	134.00
08:00 - 09:00	C5	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	9.99	2.27	8.70	0.00	87.42	87.42
08:00 - 09:00	Cc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.30	0.09	2.29	0.00	13.39	13.39

08:00 - 09:00	Cc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	9.28	0.46	7.49	28.32	41.94	70.26
08:00 - 09:00	Cc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	15.96	1.95	12.11	177.31	94.07	271.38
08:00 - 09:00	Cx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.71	0.11	0.68	0.00	3.86	3.86
08:00 - 09:00	Cx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.90	0.20	2.66	0.00	14.22	14.22
08:00 - 09:00	Dc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.20	0.10	1.94	0.00	8.58	85.81
08:00 - 09:00	Dc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	4.16	0.41	3.64	0.00	24.20	24.20
08:00 - 09:00	Dc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.34	0.16	0.34	0.00	4.10	4.10
08:00 - 09:00	Dx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	11.17	0.34	8.33	0.00	55.01	55.01
08:00 - 09:00	Dx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	7.52	0.37	0.43	0.00	9.28	9.28
08:00 - 09:00	Dx	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	6.14	0.37	0.65	0.00	8.71	8.71
08:00 - 09:00	Ec	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.07			0.00	1.00	1.00
08:00 - 09:00	Ec	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	11.49			31.76	14.82	46.58
08:00 - 09:00	Ec	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	11.51			31.88	14.93	46.81
08:00 - 09:00	Ex	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.08			0.00	1.09	1.09
08:00 - 09:00	Ex	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.02			0.00	0.28	0.28
08:00 - 09:00	Fc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.39	0.00	0.39	0.00	0.37	0.37



08:00 - 09:00	Fc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.94	0.00	0.88	0.00	3.17	3.17
08:00 - 09:00	Fc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.14	0.00	0.14	0.00	0.13	0.13
08:00 - 09:00	Fx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.23			0.00	3.24	3.24
08:00 - 09:00	Fx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.48			0.00	7.40	7.40
08:00 - 09:00	Fx 1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	8.61			0.00	11.01	11.01
08:00 - 09:00	Fx 1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	14.3 4			0.00	21.54	21.54
08:00 - 09:00	G1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.42			0.00	6.00	6.00
08:00 - 09:00	Gc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.03	0.11	1.03	0.00	8.36	8.36
08:00 - 09:00	Gc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	7.25	1.82	7.25	308.5 6	71.69	380.25
08:00 - 09:00	Gc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.04	0.21	1.04	0.00	9.47	9.47
08:00 - 09:00	Gx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.01			0.00	0.18	0.18
08:00 - 09:00	Gx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00
08:00 - 09:00	Gx 1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.02			0.00	0.28	0.28
08:00 - 09:00	H1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.44			0.00	6.30	6.30
08:00 - 09:00	H1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00
08:00 - 09:00	Hc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	4.67	0.16	3.82	238.9 8	11.58	250.56

08:00 - 09:00	Hc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	5.13	0.59	4.34	559.36	25.07	584.43
08:00 - 09:00	Hc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	10.12	0.19	4.16	1817.35	28.03	1845.38
08:00 - 09:00	Hx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.03			0.00	0.39	0.39
08:00 - 09:00	Hx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.02			0.00	0.21	0.21
08:00 - 09:00	l1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.01			0.00	0.14	0.14
08:00 - 09:00	lc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.27	0.25	0.27	0.00	3.80	3.80
08:00 - 09:00	lc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.79	0.74	0.79	0.00	11.06	11.06
08:00 - 09:00	lc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00 - 09:00	lx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.26			0.00	1.03	1.03
08:00 - 09:00	lx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.04			0.00	0.59	0.59
08:00 - 09:00	lx1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	25.71			0.00	56.82	56.82

## Network Results

### Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Network Cycle Time (s)	Total Network Delay (PCU - hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over all PRC	Network Within Capacity
A1 - 2031 AM Scenario 3	27/06/2014 12:03:58	27/06/2014 12:07:04	08:00	88	215.16	116.30	E/1	6	6	A/2	C3-1/1	C3-1/1	

### Network Results: Vehicle Summary

Time Segment	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Calculated Flow Entering (PCU/hr)	Actual Green (s per cycle)	Mean Delay Per PCU (s)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	116!	-100	63428	6269	11.44	2222.64	700.76	4451.57

### Network Results: Pedestrian Summary

Time Segment	Degree Of Saturation (%)	Calculated Flow Entering (Ped/hr)	Actual Green (s per cycle)	Mean Delay Per Ped (s)	Weighted Cost Of Delay (£ per hr)	Performance Index (£ per hr)
08:00-09:00	116!	1000	25	0.58	146.81	146.81

### Network Results: Flows And Signals

Time Segment	Calculated Flow Entering (PCU/hr)	Calculated Flow Out (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s per cycle)	Effective Green (s per cycle)
08:00-09:00	64428	64344	805	✓	116!	✓	-100	6294	6342

### Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	7.76	12.02	102.51	112.65	3055.29	2369.45	36.90	20069.63	3472.01	843.77	700.76

### Network Results: Queues And Blocking

Time Segment	Max Queue Storage (PCU)	Excess Queue Penalty (£ per hr)	Wasted Time Starvation (s per cycle)	Wasted Time Blocking Back (s per cycle)	Wasted Time Total (s per cycle)
08:00-09:00	1517.31	1528.17	1171.00	641.00	1812.00

### Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)
08:00-09:00	6878.65	354.02	19.43

# TRANSYT 15

Version: 15.0.1.2976 []  
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**Last run:** 26/06/2014 21:33:21

**Analysis Set used for last run:** A1 - 2031 PM Scenario C

**Filename:** Scenario C Existing Rev 3 - PM.t15

**Path:** F:\TEM\Project\BCC - Peddimore Access Modelling\3.

EXECUTION\Modelling\With Water Orton Lane\Scenario C\Existing Water Orton Lane

**Report generation date:** 27/06/2014 14:44:02

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## File summary

### File Description

<b>Title</b>	A38 Peddimore Lane Junction - Minworth roundabout
<b>Location</b>	Birmingham
<b>Site Number</b>	
<b>UTCRegion</b>	
<b>Driving Side</b>	Left
<b>Date</b>	02/03/2014
<b>Version</b>	
<b>Status</b>	Proposed Option
<b>Identifier</b>	
<b>Client</b>	Birmingham City Council
<b>Jobnumber</b>	60316941
<b>Enumerator</b>	EU\vuppalas
<b>Description</b>	2031 SC3 - Peddimore Lane junction flows tested in preferred Option Model for Minworth roundabout

## Units

Cost Units	Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
£	kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

## Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

## Network Diagrams



A38 Peddimore Lane Junction - Mirworth roundabout  
 Cycletime 0s / 88s , Timesteps 87 / 88  
 Diagram produced using TRANSYT 15.0.1.2976

# A1 - 2031 PM Scenario C \*: D1 - 2031 PM Scenario C\*

## Summary

### Data Errors and Warnings

No errors or warnings

### Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Network Cycle Time (s)	Total Network Delay (PCU - hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over all PRC	Network Within Capacity
A1 - 2031 PM Scenario C	26/06/2014 21:30:58	26/06/2014 21:33:21	17:00	88	236.10	122.80	E/1	7	7	C5/1	C3-1/1	C3-1/1	

### Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
2031 PM Scenario C		D1	✓	

### Demand Set Details

Demand Set	Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
D1	2031 PM Scenario C				17:00	

## Network Options

### Network Timings

Network Cycle Time (s)	Restrict To SCOOT Cycle Times	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
88		60	1	60

### Signals Options

Start Displacement (s)	End Displacement (s)
2	3

### Advanced

Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)
10000.00	10000.00	10000.00

## Traffic Options

Traffic Model	Vehicle Flow Scaling Factor (%)	Pedestrian Flow Scaling Factor (%)	Cruise Times Or Speeds
Force To PDM	100	100	Cruise Speeds

## Advanced

Resolution	DOS Threshold (%)	Cruise Scaling Factor (%)	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)	Calculate results for Path Segments
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75	

## Normal Parameters

Dispersal Type	Dispersal Coefficient	Travel Time Coefficient
Default	35	80

## Bus Parameters

Dispersion Coefficient1	Dispersion Coefficient2	Acceleration (ms <sup>-2</sup> )	Travel Time Coefficient1	Travel Time Coefficient2
70	15	0.47	30	85

## Tram Parameters

Dispersion Coefficient1	Dispersion Coefficient2	Acceleration (ms <sup>-2</sup> )	Travel Time Coefficient1	Travel Time Coefficient2
0	0	0.47	100	100

## Pedestrian Parameters

Dispersal Type	Dispersal Coefficient	Travel Time Coefficient
Default	35	80

## Optimisation Options

Enable Optimisation	Auto Redistribute	Optimisation Level	Enable Out Profile Accuracy
✓		Offsets Only	✓

## Advanced

Optimisation Type	Hill Climb Increments	OUTProfile Accuracy	Use Enhanced Optimisation	Auto Optimisation	Optimisation Order
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				<b>Order</b>	
Hill Climb (Fast)	15,40,15,40,15,1,1	50,50,5,5,0.5,0.05,0.05		✓	2,1,3,5,6,7,8,9,10,11,4,12

## Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian Monetary Value Of Delay (£ per Ped-hr)
14.20	2.60	14.20

# Traffic Nodes

## Traffic Nodes

ID	Name	Description
1	A38 N	
2	Lindridge Drive	
3	A4097 Kingsbury Road	
4	A38 S	
5	Wamley Ash Road	
6	Lindridge Drive Circulatory	
7	A38 South Exit	
8	A38 North Exit	
9	A4097 Kingsbury Road Exit	
10	A38 NB	
11	Dev Access	
12	A38 South bound	
13	Peddimore	
14	Dev Access	
15	A38 Southbound	
16	Peddimore	
17	A38 North Exit	
18	Dev Access Exit	
19	Peddimore	
20	A30 Southbound Exit	
21	(untitled)	
22	(untitled)	



23	(untitled)	
24	(untitled)	
25	(untitled)	
26	A4097 Kingsbury Road Exit	

## Links

### Links

Link	Name	Description	Traffic Node	Length (m)	Has Restricted Flow	Use RR67	Saturation Flow (PCU/hr)	Is Signal Controlled	Is Give Way	Traffic Type	Is Minor Shared
1	(untitled)		23	3.50	✓		10000	✓		Pedestrian	
2	(untitled)		25	3.50	✓		10000	✓		Pedestrian	

### Modelling

Link	Traffic Model	Stop Weighting (%)	Delay Weighting (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
1	[Forced to PDM]	100	100		0.00		
2	[Forced to PDM]	100	100		0.00		

### Modelling - Advanced

Link	Initial Queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter	Auto Cycle Time	Cycle Time
1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
2	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

### Flows

Link	Flows	Total Flow (17:00-18:00) (PCU/hr)
1	1	500
2	1	500

### Flows - Advanced

Link	Detectors	Link Sensitivity Multiplier (%)	Cruise Sensitivity Multiplier (%)
1		100	100
2		100	100

## Signals

Link	Controller Stream	Phase	Phase2 Enabled
1	4	E	
2	12	B	

## Entry Sources

Link	Cruise Time (seconds)	Cruise Speed (kph)
1	1.00	30.00
2	1.00	30.00

# Arms and Traffic Streams

## Arms

Arm	Name	Description	Traffic Node
1	A4097 Kingsbury Road EB		26
A	A38 North		1
B	Lindridge Drive		2
C	A4097 Kingsbury Road		3
D	A38 South		4
E	Wamley Ash Road		5
F	A38 South Entry		10
G	Dev Access Entry		11
H	A38 North Entry		12
I	Peddimore Entry		13
Ac	A38 North Circulatory		1
Ax	A38 North Exit		8
Ax1	(untitled)		21
Ax2	A38 North Exit		17
Bc	Lindridge Drive Circulatory		6
Bc1	Lindridge Drive Circulatory 2		2
Bx	Lindridge drive Exit		
C2	A4097 Kingsbury Road WB		9
C3-1	Cottage Lane Entry		23
C4	A4097 Kingsbury Road Entry		23

<b>C5</b>	Water Orton Lane Entry		23
<b>Cc</b>	A4097 Kingsbury Road Circulatory		3
<b>Cx</b>	A4097 Kingsbury Road Exit		24
<b>Cx 2</b>	A4097 Kingsbury Road EB		23
<b>Cx3</b>	Cottage Lane Exit		
<b>Cx4</b>	A4097 Kingsbury Road Exit		25
<b>Cx4-2</b>	(untitled)		
<b>Cx5</b>	Water Orton Lane Exit		
<b>Dc</b>	A38 South Circulatory		4
<b>Dx</b>	A38 South Exit		7
<b>Dx1</b>	A38 South Exit		
<b>Ec</b>	Wamley Ash Road Circulatory		5
<b>Ex</b>	Wamley Ash Road Exit		
<b>Fc</b>	A38 South Circulatory		10
<b>Fx</b>	A38 South Exit		20
<b>Fx1</b>	(untitled)		22
<b>G1</b>	Dev Access Entry 1		14
<b>Gc</b>	Dev access Circulatory		11
<b>Gx</b>	Dev Access exit		18
<b>Gx1</b>	Dev Access Exit 1		
<b>H1</b>	A38 North Entry		15
<b>Hc</b>	A38 North Circulatory		12
<b>Hx</b>	A38 North Exit		
<b>I1</b>	Peddimore Entry 1		16
<b>Ic</b>	Peddimore Circulatory		13
<b>Ix</b>	Peddimore Exit		19
<b>Ix1</b>	Peddimore Exit		

## Traffic Streams

Arm	Traffic Stream	Name	Description	Auto Length	Length (m)	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Is Give Way	Traffic Type
1	1	(untitled)			345.96	✓	SumOfLanes	2083			Normal

<b>A</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	2128	✓		Normal
<b>A</b>	<b>2</b>	(untitled )			150.00	✓	SumOfLanes	2279	✓		Normal
<b>A</b>	<b>3</b>	A38 North Entry			150.00	✓	SumOfLanes	2279	✓		Normal
<b>A</b>	<b>4</b>	(untitled )			150.00	✓	SumOfLanes	2279	✓		Normal
<b>Ax1</b>	<b>1</b>	(untitled )			20.00	✓	SumOfLanes	1800			Normal
<b>Ax1</b>	<b>2</b>	(untitled )			20.00	✓	SumOfLanes	1800			Normal
<b>Ax2</b>	<b>1</b>	A38 North Exit			150.00	✓	SumOfLanes	1800			Normal
<b>Ax2</b>	<b>2</b>	A38 North Exit			150.00	✓	SumOfLanes	1800			Normal
<b>B</b>	<b>1</b>	(untitled )			30.00					✓	Normal
<b>B</b>	<b>2</b>	(untitled )			30.00					✓	Normal
<b>Bc1</b>	<b>1</b>	(untitled )			30.00	✓	SumOfLanes	1800			Normal
<b>Bc1</b>	<b>2</b>	(untitled )			30.00	✓	SumOfLanes	1800			Normal
<b>Bc1</b>	<b>3</b>	(untitled )			30.00	✓	SumOfLanes	1800			Normal
<b>Bc1</b>	<b>4</b>	(untitled )			30.00	✓	SumOfLanes	1800			Normal
<b>C</b>	<b>1</b>	(untitled )			200.00	✓	SumOfLanes	2263	✓		Normal
<b>C</b>	<b>2</b>	(untitled )			200.00	✓	SumOfLanes	2263	✓		Normal
<b>C3-1</b>	<b>1</b>	(untitled )			55.60					✓	Normal
<b>Cx 2</b>	<b>1</b>	(untitled )			68.00	✓	SumOfLanes	2083	✓		Normal
<b>Cx 2</b>	<b>2</b>	(untitled )			68.00	✓	SumOfLanes	2083	✓		Normal
<b>Cx3</b>	<b>1</b>	(untitled )			59.35	✓	SumOfLanes	1800			Normal
<b>Cx4</b>	<b>1</b>	(untitled )			15.00	✓	SumOfLanes	1965	✓		Normal

<b>Cx4-2</b>	<b>1</b>	(untitled )			77.43	✓	SumOfLanes	1965			Normal
<b>Cx5</b>	<b>1</b>	(untitled )			62.61	✓	SumOfLanes	1800			Normal
<b>D</b>	<b>1</b>	(untitled )			300.00	✓	SumOfLanes	2159	✓		Normal
<b>D</b>	<b>2</b>	(untitled )			300.00	✓	SumOfLanes	2317	✓		Normal
<b>D</b>	<b>3</b>	(untitled )			300.00	✓	SumOfLanes	2317	✓		Normal
<b>Dx1</b>	<b>1</b>	A38 South Exit			250.00	✓	SumOfLanes	2155			Normal
<b>Dx1</b>	<b>2</b>	A38 South Exit			250.00	✓	SumOfLanes	2155			Normal
<b>E</b>	<b>1</b>	(untitled )			200.00					✓	Normal
<b>E</b>	<b>2</b>	(untitled )			200.00					✓	Normal
<b>F</b>	<b>1</b>	(untitled )			210.00	✓	SumOfLanes	2134	✓		Normal
<b>F</b>	<b>2</b>	(untitled )			210.00	✓	SumOfLanes	2284	✓		Normal
<b>F</b>	<b>3</b>	(untitled )			210.00	✓	SumOfLanes	2284	✓		Normal
<b>G</b>	<b>1</b>	(untitled )			76.00	✓	SumOfLanes	2123	✓		Normal
<b>G</b>	<b>2</b>	(untitled )			76.00	✓	SumOfLanes	2274	✓		Normal
<b>H</b>	<b>1</b>	(untitled )			96.00	✓	SumOfLanes	2134	✓		Normal
<b>H</b>	<b>2</b>	(untitled )			96.00	✓	SumOfLanes	2284	✓		Normal
<b>H</b>	<b>3</b>	(untitled )			96.00	✓	SumOfLanes	2284	✓		Normal
<b>I</b>	<b>1</b>	(untitled )			60.00	✓	SumOfLanes	2123	✓		Normal
<b>I</b>	<b>2</b>	(untitled )			60.00	✓	SumOfLanes	2274	✓		Normal
<b>Ac</b>	<b>1</b>	(untitled )			54.00	✓	SumOfLanes	2112	✓		Normal
<b>Ac</b>	<b>2</b>	(untitled )			54.00	✓	SumOfLanes	2263	✓		Normal

<b>Ac</b>	<b>3</b>	(untitled )			54.00	✓	SumOfLanes	2263	✓		Normal
<b>Ax</b>	<b>1</b>	(untitled )			20.00	✓	SumOfLanes	1965	✓		Normal
<b>Ax</b>	<b>2</b>	(untitled )			20.00	✓	SumOfLanes	2105	✓		Normal
<b>Ax</b>	<b>3</b>	(untitled )			20.00	✓	SumOfLanes	2105	✓		Normal
<b>Bc</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Bc</b>	<b>2</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Bc</b>	<b>3</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Bc</b>	<b>4</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Bx</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>C2</b>	<b>1</b>	(untitled )			313.96	✓	SumOfLanes	1800			Normal
<b>C4</b>	<b>1</b>	(untitled )			86.62	✓	SumOfLanes	2063	✓		Normal
<b>C5</b>	<b>1</b>	(untitled )			55.00	✓	SumOfLanes	1906	✓		Normal
<b>Cc</b>	<b>1</b>	(untitled )			65.00	✓	SumOfLanes	2059	✓		Normal
<b>Cc</b>	<b>2</b>	(untitled )			65.00	✓	SumOfLanes	2209	✓		Normal
<b>Cc</b>	<b>3</b>	(untitled )			65.00	✓	SumOfLanes	2181	✓		Normal
<b>Cx</b>	<b>1</b>	A4097 Kinsbury Road Exit			100.00	✓	SumOfLanes	2120	✓		Normal
<b>Cx</b>	<b>2</b>	A4097 Kinsbury Road Exit			100.00	✓	SumOfLanes	2120	✓		Normal
<b>Dc</b>	<b>1</b>	(untitled )			90.00	✓	SumOfLanes	2059	✓		Normal
<b>Dc</b>	<b>2</b>	(untitled )			90.00	✓	SumOfLanes	2172	✓		Normal
<b>Dc</b>	<b>3</b>	(untitled )			90.00	✓	SumOfLanes	2185	✓		Normal

<b>Dx</b>	<b>1</b>	(untitled )			56.00	✓	SumOfLanes	1915	✓		Normal
<b>Dx</b>	<b>2</b>	(untitled )			56.00	✓	SumOfLanes	2055	✓		Normal
<b>Dx</b>	<b>3</b>	(untitled )			56.00	✓	SumOfLanes	2055	✓		Normal
<b>Ec</b>	<b>1</b>	(untitled )			50.00	✓	SumOfLanes	1800			Normal
<b>Ec</b>	<b>2</b>	(untitled )			50.00	✓	SumOfLanes	1800			Normal
<b>Ec</b>	<b>3</b>	(untitled )			50.00	✓	SumOfLanes	1800			Normal
<b>Ex</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Ex</b>	<b>2</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Fc</b>	<b>1</b>	(untitled )			74.00	✓	SumOfLanes	2166	✓		Normal
<b>Fc</b>	<b>2</b>	(untitled )			74.00	✓	SumOfLanes	2317	✓		Normal
<b>Fc</b>	<b>3</b>	(untitled )			74.00	✓	SumOfLanes	2317	✓		Normal
<b>Fx</b>	<b>1</b>	(untitled )			200.00	✓	SumOfLanes	2112			Normal
<b>Fx</b>	<b>2</b>	(untitled )			200.00	✓	SumOfLanes	2263			Normal
<b>Fx1</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Fx1</b>	<b>2</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>G1</b>	<b>1</b>	(untitled )			60.00	✓	SumOfLanes	2112			Normal
<b>Gc</b>	<b>1</b>	(untitled )			70.00	✓	SumOfLanes	2166	✓		Normal
<b>Gc</b>	<b>2</b>	(untitled )			70.00	✓	SumOfLanes	2317	✓		Normal
<b>Gc</b>	<b>3</b>	(untitled )			70.00	✓	SumOfLanes	2317	✓		Normal
<b>Gx</b>	<b>1</b>	(untitled )			56.00	✓	SumOfLanes	2112			Normal , Bus, Tram
<b>Gx</b>	<b>2</b>	(untitled )			56.00	✓	SumOfLanes	2263			Normal , Bus, Tram

Gx1	1	(untitled)			20.00	✓	SumOfLanes	1965			Normal, Bus, Tram
H1	1	(untitled)			100.00	✓	SumOfLanes	2112			Normal
H1	2	(untitled)			100.00	✓	SumOfLanes	2263			Normal
Hc	1	(untitled)			67.00	✓	SumOfLanes	2166	✓		Normal
Hc	2	(untitled)			67.00	✓	SumOfLanes	2317	✓		Normal
Hc	3	(untitled)			67.00	✓	SumOfLanes	2317	✓		Normal
Hx	1	(untitled)			100.00	✓	SumOfLanes	2112			Normal
Hx	2	(untitled)			100.00	✓	SumOfLanes	2263			Normal
l1	1	(untitled)			100.00	✓	SumOfLanes	2112			Normal
lc	1	(untitled)			65.00	✓	SumOfLanes	2166	✓		Normal
lc	2	(untitled)			65.00	✓	SumOfLanes	2317	✓		Normal
lc	3	(untitled)			65.00	✓	SumOfLanes	2317	✓		Normal
lx	1	(untitled)			45.00	✓	SumOfLanes	2112			Normal, Bus, Tram
lx	2	(untitled)			45.00	✓	SumOfLanes	2263			Normal, Bus, Tram
lx1	1	(untitled)			15.00	✓	SumOfLanes	2112			Normal, Bus, Tram

## Lanes

Arm	Traffic Stream	Lane	Name	Description	Use RR 67	Surface Condition	Site Quality Factor	Gradient (%)	Width (m)	Use Connector Turning Radius	Proportion That Turn (%)	Turning Radius (m)	Nearside Lane	Saturation Flow (PCU/hr)
1	1	1	(untitled)		✓	N/A	N/A	0	4.68		0	10.00	✓	2083
A	1	2	A38 North Entry		✓	N/A	Clearly Good	0	3.65		0	10.00	✓	2128





Cx 2	1	1	(untitled )		✓	N/A	N/A	0	4.68		0	10.00	✓	2083
Cx 2	2	1	(untitled )		✓	N/A	N/A	0	4.68		0	10.00	✓	2083
Cx 3	1	1	(untitled )											1800
Cx 4	1	1	(untitled )		✓	N/A	N/A	0	3.50		0	10.00	✓	1965
Cx 4-2	1	1	(untitled )											1965
Cx 5	1	1	(untitled )											1800
D	1	2	A38 South Entry		✓	N/A	Clearly Good	0	4.00		10	42.00	✓	2159
D	2	1	A38 South Entry		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
D	3	3	A38 South Entry		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
Dx 1	1	1	(untitled )		✓	N/A	N/A	0	4.00		0	10.00		2155
Dx 1	2	1	(untitled )		✓	N/A	N/A	0	4.00		0	10.00		2155
E	1	3	(untitled )											
E	2	3	(untitled )											
F	1	2	A38 North Exit		✓	N/A	Clearly Good	0	3.70		0	10.00	✓	2134
F	2	1	A38 North Exit		✓	N/A	Clearly Good	0	3.70		0	10.00		2284
F	3	1	A38 North Exit		✓	N/A	Clearly Good	0	3.70		0	10.00		2284
G	1	2	A38 North Exit		✓	N/A	Clearly Good	0	3.60		0	10.00	✓	2123
G	2	1	A38 North Exit		✓	N/A	Clearly Good	0	3.60		0	10.00		2274
H	1	2	A38 North Exit		✓	N/A	Clearly Good	0	3.70		0	10.00	✓	2134



			Exit											
<b>C2</b>	<b>1</b>	<b>1</b>	(untitled )											1800
<b>C4</b>	<b>1</b>	<b>1</b>	(untitled )		✓	N/A	N/A	0	4.48		0	10.00	✓	2063
<b>C5</b>	<b>1</b>	<b>1</b>	(untitled )		✓	N/A	N/A	0	2.91		0	10.00	✓	1906
<b>Cc</b>	<b>1</b>	<b>1</b>	A4097 Kingsbury Road Circulatory		✓	N/A	Clearly Good	0	3.00		0	10.00	✓	2059
<b>Cc</b>	<b>2</b>	<b>2</b>	A4097 Kingsbury Road Circulatory		✓	N/A	Clearly Good	0	3.00		0	10.00		2209
<b>Cc</b>	<b>3</b>	<b>2</b>	A4097 Kingsbury Road Circulatory		✓	N/A	Clearly Good	0	3.00		43	50.00		2181
<b>Cx</b>	<b>1</b>	<b>2</b>	A4097 Kingsbury Road Exit		✓	N/A	N/A	0	3.65		0	10.00		2120
<b>Cx</b>	<b>2</b>	<b>3</b>	A4097 Kingsbury Road Exit		✓	N/A	N/A	0	3.65		0	10.00		2120
<b>Dc</b>	<b>1</b>	<b>2</b>	A38 South Circulatory		✓	N/A	Clearly Good	0	3.00		0	10.00	✓	2059
<b>Dc</b>	<b>2</b>	<b>1</b>	A38 South Circulatory		✓	N/A	Clearly Good	0	3.00		56	49.00		2172
<b>Dc</b>	<b>3</b>	<b>1</b>	A38 South Circulatory		✓	N/A	Clearly Good	0	3.00		35	49.00		2185
<b>Dx</b>	<b>1</b>	<b>1</b>	A38 South Exit		✓	N/A	N/A	0	3.00		0	10.00	✓	1915
<b>Dx</b>	<b>2</b>	<b>2</b>	A38 South Exit		✓	N/A	N/A	0	3.00		0	10.00		2055
<b>Dx</b>	<b>3</b>	<b>2</b>	A38 South Exit		✓	N/A	N/A	0	3.00		0	10.00		2055

<b>Ec</b>	<b>1</b>	<b>2</b>	Wamley Ash Road Circulatory											1800
<b>Ec</b>	<b>2</b>	<b>1</b>	Wamley Ash Road Circulatory											1800
<b>Ec</b>	<b>3</b>	<b>3</b>	(untitled)											1800
<b>Ex</b>	<b>1</b>	<b>1</b>	Wamley Ash Road Exit											1800
<b>Ex</b>	<b>2</b>	<b>2</b>	Wamley Ash Road Exit											1800
<b>Fc</b>	<b>1</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00	✓	2166
<b>Fc</b>	<b>2</b>	<b>2</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
<b>Fc</b>	<b>3</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
<b>Fx</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
<b>Fx</b>	<b>2</b>	<b>1</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00		2263
<b>Fx</b> <b>1</b>	<b>1</b>	<b>1</b>	(untitled)											1800
<b>Fx</b> <b>1</b>	<b>2</b>	<b>1</b>	(untitled)											1800
<b>G1</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
<b>Gc</b>	<b>1</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00	✓	2166
<b>Gc</b>	<b>2</b>	<b>2</b>	A38 North		✓	N/A	Clearly	0	4.00		0	10.00		2317

			Circulatory				Good							
<b>Gc</b>	<b>3</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
<b>Gx</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
<b>Gx</b>	<b>2</b>	<b>1</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00		2263
<b>Gx 1</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	N/A	0	3.50		0	10.00	✓	1965
<b>H1</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
<b>H1</b>	<b>2</b>	<b>1</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00		2263
<b>Hc</b>	<b>1</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00	✓	2166
<b>Hc</b>	<b>2</b>	<b>2</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
<b>Hc</b>	<b>3</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
<b>Hx</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
<b>Hx</b>	<b>2</b>	<b>1</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00		2263
<b>I1</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
<b>Ic</b>	<b>1</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00	✓	2166
<b>Ic</b>	<b>2</b>	<b>2</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317

lc	3	1	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
lx	1	2	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
lx	2	1	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00		2263
lx1	1	2	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112

## Modelling

Arm	Traffic Stream	Traffic Model	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Queue Limit (PCU)	Excess Queue Penalty (£)	Has Degree Of Saturation Limit
1	1	[Forced to PDM]	100	100		0.00				
A	1	[Forced to PDM]	20	40	✓	0.00				
A	2	[Forced to PDM]	20	40	✓	0.00				
A	3	[Forced to PDM]	20	40	✓	0.00				
A	4	[Forced to PDM]	20	40	✓	0.00				
Ax1	1	[Forced to PDM]	100	100		0.00				
Ax1	2	[Forced to PDM]	100	100		0.00				
Ax2	1	[Forced to PDM]	100	100		0.00				
Ax2	2	[Forced to PDM]	100	100		0.00				
B	1	[Forced to PDM]	100	100		0.00				
B	2	[Forced to PDM]	100	100		0.00				
Bc1	1	[Forced to PDM]	100	100		0.00	✓	5	0.00	
Bc1	2	[Forced to PDM]	100	100		0.00	✓	5	0.00	
Bc1	3	[Forced	100	100		0.00	✓	5	0.00	

		to PDM]								
<b>Bc1</b>	<b>4</b>	[Forced to PDM]	100	100		0.00	✓	5	0.00	
<b>C</b>	<b>1</b>	[Forced to PDM]	0	40		0.00				
<b>C</b>	<b>2</b>	[Forced to PDM]	0	40		0.00				
<b>C3-1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx 2</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx 2</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Cx3</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx4</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx4-2</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx5</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>D</b>	<b>1</b>	[Forced to PDM]	0	40		0.00				
<b>D</b>	<b>2</b>	[Forced to PDM]	0	40		0.00				
<b>D</b>	<b>3</b>	[Forced to PDM]	0	40		0.00				
<b>Dx1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Dx1</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>E</b>	<b>1</b>	[Forced to PDM]	100	40		0.00				
<b>E</b>	<b>2</b>	[Forced to PDM]	100	40		0.00				
<b>F</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>F</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>F</b>	<b>3</b>	[Forced to PDM]	100	100		0.00				
<b>G</b>	<b>1</b>	[Forced to PDM]	20	50		0.00				



<b>G</b>	<b>2</b>	[Forced to PDM]	20	50		0.00				
<b>H</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>H</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>H</b>	<b>3</b>	[Forced to PDM]	100	100		0.00				
<b>I</b>	<b>1</b>	[Forced to PDM]	0	40	✓	0.00				
<b>I</b>	<b>2</b>	[Forced to PDM]	0	40	✓	0.00				
<b>Ac</b>	<b>1</b>	[Forced to PDM]	100	100		7.00	✓	3	80.00	
<b>Ac</b>	<b>2</b>	[Forced to PDM]	100	100		7.00	✓	4	60.00	
<b>Ac</b>	<b>3</b>	[Forced to PDM]	100	100		7.00	✓	4	60.00	
<b>Ax</b>	<b>1</b>	[Forced to PDM]	100	100		0.00	✓	3	60.00	
<b>Ax</b>	<b>2</b>	[Forced to PDM]	100	100		0.00	✓	3	60.00	
<b>Ax</b>	<b>3</b>	[Forced to PDM]	100	100		0.00	✓	3	60.00	
<b>Bc</b>	<b>1</b>	[Forced to PDM]	100	100		0.00	✓	15	0.00	
<b>Bc</b>	<b>2</b>	[Forced to PDM]	100	100		0.00	✓	15	0.00	
<b>Bc</b>	<b>3</b>	[Forced to PDM]	100	100		0.00	✓	15	0.00	
<b>Bc</b>	<b>4</b>	[Forced to PDM]	100	100		0.00	✓	15	0.00	
<b>Bx</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>C2</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>C4</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>C5</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cc</b>	<b>1</b>	[Forced to PDM]	100	100		6.00	✓	6	60.00	
<b>Cc</b>	<b>2</b>	[Forced to PDM]	100	100		6.00	✓	6	60.00	

<b>Cc</b>	<b>3</b>	[Forced to PDM]	100	100		6.00	✓	6	60.00	
<b>Cx</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Dc</b>	<b>1</b>	[Forced to PDM]	1000	1000		0.00	✓	13	60.00	
<b>Dc</b>	<b>2</b>	[Forced to PDM]	100	100		0.00	✓	13	30.00	
<b>Dc</b>	<b>3</b>	[Forced to PDM]	100	100		0.00	✓	13	0.00	
<b>Dx</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Dx</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Dx</b>	<b>3</b>	[Forced to PDM]	100	100		0.00				
<b>Ec</b>	<b>1</b>	[Forced to PDM]	100	100		0.00	✓	6	0.00	
<b>Ec</b>	<b>2</b>	[Forced to PDM]	100	100		0.00	✓	6	60.00	
<b>Ec</b>	<b>3</b>	[Forced to PDM]	100	100		0.00	✓	6	60.00	
<b>Ex</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Ex</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Fc</b>	<b>1</b>	[Forced to PDM]	100	100		7.00	✓	3	0.00	
<b>Fc</b>	<b>2</b>	[Forced to PDM]	100	100		7.00	✓	3	0.00	
<b>Fc</b>	<b>3</b>	[Forced to PDM]	100	100		7.00	✓	3	0.00	
<b>Fx</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Fx</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Fx1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Fx1</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>G1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				

Gc	1	[Forced to PDM]	100	100		7.00	✓	2	100.00	
Gc	2	[Forced to PDM]	100	100		7.00	✓	2	100.00	
Gc	3	[Forced to PDM]	100	100		7.00	✓	2	100.00	
Gx	1	[Forced to PDM]	100	100		0.00				
Gx	2	[Forced to PDM]	100	100		0.00				
Gx1	1	[Forced to PDM]	100	100		0.00				
H1	1	[Forced to PDM]	100	100		0.00				
H1	2	[Forced to PDM]	100	100		0.00				
Hc	1	[Forced to PDM]	100	100		7.00	✓	3	2000.00	
Hc	2	[Forced to PDM]	100	100		7.00	✓	3	2000.00	
Hc	3	[Forced to PDM]	100	100	✓	7.00	✓	3	2000.00	
Hx	1	[Forced to PDM]	100	100		0.00				
Hx	2	[Forced to PDM]	100	100		0.00				
I1	1	[Forced to PDM]	100	100		0.00				
Ic	1	[Forced to PDM]	100	100		7.00	✓	2	80.00	
Ic	2	[Forced to PDM]	100	100		7.00	✓	2	100.00	
Ic	3	[Forced to PDM]	100	100		7.00	✓	2	0.00	
Ix	1	[Forced to PDM]	100	100		0.00				
Ix	2	[Forced to PDM]	100	100		0.00				
Ix1	1	[Forced to PDM]	100	100		0.00				

## Modelling - Advanced

Arm	Traffic Stream	Cruise Sensitivity	Initial Queue	Type of Vehicle-in-Service	Vehicle-in-	Type Of Random	Random Parameter	Auto Cycle	Cycle Time
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		Multiplier (%)	(PCU)		Service	Parameter		Time	
1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
A	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
A	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
A	3	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
A	4	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ax1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ax1	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ax2	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ax2	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
B	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
B	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Bc1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Bc1	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Bc1	3	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Bc1	4	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
C	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
C	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
C3-1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Cx 2	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Cx 2	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Cx3	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

<b>Cx4</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx4-2</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx5</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>D</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>D</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>D</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dx1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dx1</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>E</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>E</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>F</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>F</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>F</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>G</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>G</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>H</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>H</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>H</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>I</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>I</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ac</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ac</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

<b>Ac</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc</b>	<b>4</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C2</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C4</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C5</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dx</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

<b>Dx</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ec</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ec</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ec</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ex</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ex</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fx</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fx1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fx1</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>G1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gx</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gx1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>H1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>H1</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

Hc	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Hc	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Hc	3	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Hx	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Hx	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
I1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ic	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ic	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ic	3	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ix	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ix	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ix1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

### Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
1	1	100	100
A	1	100	100
A	2	100	100
A	3	100	100
A	4	100	100
Ax1	1	100	100
Ax1	2	100	100
Ax2	1	100	100
Ax2	2	100	100
B	1	100	100
B	2	100	100
Bc1	1	100	100



<b>Bc1</b>	<b>2</b>	100	100
<b>Bc1</b>	<b>3</b>	100	100
<b>Bc1</b>	<b>4</b>	100	100
<b>C</b>	<b>1</b>	100	100
<b>C</b>	<b>2</b>	100	100
<b>C3-1</b>	<b>1</b>	100	100
<b>Cx 2</b>	<b>1</b>	100	100
<b>Cx 2</b>	<b>2</b>	100	100
<b>Cx3</b>	<b>1</b>	100	100
<b>Cx4</b>	<b>1</b>	100	100
<b>Cx4-2</b>	<b>1</b>	100	100
<b>Cx5</b>	<b>1</b>	100	100
<b>D</b>	<b>1</b>	100	100
<b>D</b>	<b>2</b>	100	100
<b>D</b>	<b>3</b>	100	100
<b>Dx1</b>	<b>1</b>	100	100
<b>Dx1</b>	<b>2</b>	100	100
<b>E</b>	<b>1</b>	100	100
<b>E</b>	<b>2</b>	100	100
<b>F</b>	<b>1</b>	100	100
<b>F</b>	<b>2</b>	100	100
<b>F</b>	<b>3</b>	100	100
<b>G</b>	<b>1</b>	100	100
<b>G</b>	<b>2</b>	100	100
<b>H</b>	<b>1</b>	100	100
<b>H</b>	<b>2</b>	100	100
<b>H</b>	<b>3</b>	100	100
<b>I</b>	<b>1</b>	100	100
<b>I</b>	<b>2</b>	100	100
<b>Ac</b>	<b>1</b>	100	100
<b>Ac</b>	<b>2</b>	100	100
<b>Ac</b>	<b>3</b>	100	100
<b>Ax</b>	<b>1</b>	100	100

<b>Ax</b>	<b>2</b>	100	100
<b>Ax</b>	<b>3</b>	100	100
<b>Bc</b>	<b>1</b>	100	100
<b>Bc</b>	<b>2</b>	100	100
<b>Bc</b>	<b>3</b>	100	100
<b>Bc</b>	<b>4</b>	100	100
<b>Bx</b>	<b>1</b>	100	100
<b>C2</b>	<b>1</b>	100	100
<b>C4</b>	<b>1</b>	100	100
<b>C5</b>	<b>1</b>	100	100
<b>Cc</b>	<b>1</b>	100	100
<b>Cc</b>	<b>2</b>	100	100
<b>Cc</b>	<b>3</b>	100	100
<b>Cx</b>	<b>1</b>	100	100
<b>Cx</b>	<b>2</b>	100	100
<b>Dc</b>	<b>1</b>	100	100
<b>Dc</b>	<b>2</b>	100	100
<b>Dc</b>	<b>3</b>	100	100
<b>Dx</b>	<b>1</b>	100	100
<b>Dx</b>	<b>2</b>	100	100
<b>Dx</b>	<b>3</b>	100	100
<b>Ec</b>	<b>1</b>	100	100
<b>Ec</b>	<b>2</b>	100	100
<b>Ec</b>	<b>3</b>	100	100
<b>Ex</b>	<b>1</b>	100	100
<b>Ex</b>	<b>2</b>	100	100
<b>Fc</b>	<b>1</b>	100	100
<b>Fc</b>	<b>2</b>	100	100
<b>Fc</b>	<b>3</b>	100	100
<b>Fx</b>	<b>1</b>	100	100
<b>Fx</b>	<b>2</b>	100	100
<b>Fx1</b>	<b>1</b>	100	100
<b>Fx1</b>	<b>2</b>	100	100

G1	1	100	100
Gc	1	100	100
Gc	2	100	100
Gc	3	100	100
Gx	1	100	100
Gx	2	100	100
Gx1	1	100	100
H1	1	100	100
H1	2	100	100
Hc	1	100	100
Hc	2	100	100
Hc	3	100	100
Hx	1	100	100
Hx	2	100	100
I1	1	100	100
Ic	1	100	100
Ic	2	100	100
Ic	3	100	100
Ix	1	100	100
Ix	2	100	100
Ix1	1	100	100

### Bus - Modelling

Arm	Traffic Stream	Stationary Time (seconds)	Stop Weighting (%)	Delay Weighting (%)
Gx	1	0.00	100	100
Gx	2	0.00	100	100
Gx1	1	0.00	100	100
Ix	1	0.00	100	100
Ix	2	0.00	100	100
Ix1	1	0.00	100	100

### Tram - Modelling

Arm	Traffic Stream	Stationary Time (seconds)	Stop Weighting (%)	Delay Weighting (%)
Gx	1	0.00	100	100

<b>Gx</b>	<b>2</b>	0.00	100	100
<b>Gx1</b>	<b>1</b>	0.00	100	100
<b>Ix</b>	<b>1</b>	0.00	100	100
<b>Ix</b>	<b>2</b>	0.00	100	100
<b>Ix1</b>	<b>1</b>	0.00	100	100

## Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)
<b>1</b>	<b>1</b>	1416	1416	0	0
<b>A</b>	<b>1</b>	323	323	0	0
<b>A</b>	<b>2</b>	751	751	0	0
<b>A</b>	<b>3</b>	457	457	0	0
<b>A</b>	<b>4</b>	828	828	0	0
<b>Ax1</b>	<b>1</b>	590	590	0	0
<b>Ax1</b>	<b>2</b>	1640	1640	0	0
<b>Ax2</b>	<b>1</b>	1409	1409	0	0
<b>Ax2</b>	<b>2</b>	821	821	0	0
<b>B</b>	<b>1</b>	26	26	0	0
<b>B</b>	<b>2</b>	26	26	0	0
<b>Bc1</b>	<b>1</b>	599	599	0	0
<b>Bc1</b>	<b>2</b>	1256	1256	0	0
<b>Bc1</b>	<b>3</b>	770	770	0	0
<b>Bc1</b>	<b>4</b>	1141	1141	0	0
<b>C</b>	<b>1</b>	666	666	0	0
<b>C</b>	<b>2</b>	912	912	0	0
<b>C3-1</b>	<b>1</b>	0	0	0	0
<b>Cx 2</b>	<b>1</b>	1141	1141	0	0
<b>Cx 2</b>	<b>2</b>	275	275	0	0
<b>Cx3</b>	<b>1</b>	68	68	0	0
<b>Cx4</b>	<b>1</b>	1174	1174	0	0
<b>Cx4-2</b>	<b>1</b>	1174	1174	0	0
<b>Cx5</b>	<b>1</b>	308	308	0	0
<b>D</b>	<b>1</b>	813	813	0	0

<b>D</b>	<b>2</b>	872	872	0	0
<b>D</b>	<b>3</b>	872	872	0	0
<b>Dx1</b>	<b>1</b>	812	812	0	0
<b>Dx1</b>	<b>2</b>	1542	1542	0	0
<b>E</b>	<b>1</b>	468	468	0	0
<b>E</b>	<b>2</b>	625	625	0	0
<b>F</b>	<b>1</b>	1409	1409	0	0
<b>F</b>	<b>2</b>	729	729	0	0
<b>F</b>	<b>3</b>	92	92	0	0
<b>G</b>	<b>1</b>	292	292	0	0
<b>G</b>	<b>2</b>	313	313	0	0
<b>H</b>	<b>1</b>	468	468	0	0
<b>H</b>	<b>2</b>	501	501	0	0
<b>H</b>	<b>3</b>	63	63	0	0
<b>I</b>	<b>1</b>	529	529	0	0
<b>I</b>	<b>2</b>	566	566	0	0
<b>Ac</b>	<b>1</b>	360	360	0	0
<b>Ac</b>	<b>2</b>	506	506	0	0
<b>Ac</b>	<b>3</b>	625	625	0	0
<b>Ax</b>	<b>1</b>	590	590	0	0
<b>Ax</b>	<b>2</b>	1172	1172	0	0
<b>Ax</b>	<b>3</b>	468	468	0	0
<b>Bc</b>	<b>1</b>	683	683	0	0
<b>Bc</b>	<b>2</b>	1256	1256	0	0
<b>Bc</b>	<b>3</b>	770	770	0	0
<b>Bc</b>	<b>4</b>	1141	1141	0	0
<b>Bx</b>	<b>1</b>	84	84	0	0
<b>C2</b>	<b>1</b>	1577	1577	0	0
<b>C4</b>	<b>1</b>	1378	1378	0	0
<b>C5</b>	<b>1</b>	333	333	0	0
<b>Cc</b>	<b>1</b>	465	465	0	0
<b>Cc</b>	<b>2</b>	771	771	0	0
<b>Cc</b>	<b>3</b>	1165	1165	0	0

<b>Cx</b>	<b>1</b>	617	617	0	0
<b>Cx</b>	<b>2</b>	799	799	0	0
<b>Dc</b>	<b>1</b>	510	510	0	0
<b>Dc</b>	<b>2</b>	718	718	0	0
<b>Dc</b>	<b>3</b>	396	396	0	0
<b>Dx</b>	<b>1</b>	812	812	0	0
<b>Dx</b>	<b>2</b>	771	771	0	0
<b>Dx</b>	<b>3</b>	771	771	0	0
<b>Ec</b>	<b>1</b>	487	487	0	0
<b>Ec</b>	<b>2</b>	1069	1069	0	0
<b>Ec</b>	<b>3</b>	1071	1071	0	0
<b>Ex</b>	<b>1</b>	1044	1044	0	0
<b>Ex</b>	<b>2</b>	510	510	0	0
<b>Fc</b>	<b>1</b>	71	71	0	0
<b>Fc</b>	<b>2</b>	166	166	0	0
<b>Fc</b>	<b>3</b>	32	32	0	0
<b>Fx</b>	<b>1</b>	1182	1182	0	0
<b>Fx</b>	<b>2</b>	1177	1177	0	0
<b>Fx1</b>	<b>1</b>	1074	1074	0	0
<b>Fx1</b>	<b>2</b>	1285	1285	0	0
<b>G1</b>	<b>1</b>	605	605	0	0
<b>Gc</b>	<b>1</b>	673	673	0	0
<b>Gc</b>	<b>2</b>	761	761	0	0
<b>Gc</b>	<b>3</b>	92	92	0	0
<b>Gx</b>	<b>1</b>	839	839	0	0
<b>Gx</b>	<b>2</b>	134	134	0	0
<b>Gx1</b>	<b>1</b>	972	972	0	0
<b>H1</b>	<b>1</b>	969	969	0	0
<b>H1</b>	<b>2</b>	63	63	0	0
<b>Hc</b>	<b>1</b>	116	116	0	0
<b>Hc</b>	<b>2</b>	315	315	0	0
<b>Hc</b>	<b>3</b>	314	314	0	0
<b>Hx</b>	<b>1</b>	714	714	0	0

Hx	2	673	673	0	0
I1	1	1095	1095	0	0
lc	1	654	654	0	0
lc	2	815	815	0	0
lc	3	63	63	0	0
lx	1	129	129	0	0
lx	2	116	116	0	0
lx1	1	245	245	0	0

## Signals

Arm	Traffic Stream	Controller Stream	Phase	Phase2 Enabled
A	1	1	A	
A	2	1	A	
A	3	1	A	
A	4	1	A	
C	1	3	A	
C	2	3	A	
Cx 2	1	4	A	
Cx 2	2	4	B	
Cx4	1	12	A	
D	1	2	A	
D	2	2	A	
D	3	2	A	
F	1	8	A	
F	2	8	A	
F	3	8	A	
G	1	9	A	
G	2	9	A	
H	1	10	A	
H	2	10	A	
H	3	10	A	
I	1	11	A	
I	2	11	A	

Ac	1	1	B	
Ac	2	1	B	
Ac	3	1	B	
Ax	1	5	A	
Ax	2	5	A	
Ax	3	5	A	
C4	1	4	D	
C5	1	4	C	
Cc	1	3	B	
Cc	2	3	B	
Cc	3	3	B	
Cx	1	6	A	
Cx	2	6	A	
Dc	1	2	B	
Dc	2	2	B	
Dc	3	2	B	
Dx	1	7	A	
Dx	2	7	A	
Dx	3	7	A	
Fc	1	8	B	
Fc	2	8	B	
Fc	3	8	B	
Gc	1	9	B	
Gc	2	9	B	
Gc	3	9	B	
Hc	1	10	B	
Hc	2	10	B	
Hc	3	10	B	
Ic	1	11	B	
Ic	2	11	B	
Ic	3	11	B	

## Entry Sources



Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)
B	1	2.24	48.28
B	2	2.24	48.28
C3-1	1	4.15	48.28
D	1	16.78	64.37
D	2	16.78	64.37
D	3	16.78	64.37
E	1	14.91	48.28
E	2	14.91	48.28
C4	1	6.46	48.28
C5	1	4.10	48.28
G1	1	4.47	48.28
H1	1	7.46	48.28
H1	2	7.46	48.28
I1	1	7.46	48.28

## Sources

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Destination Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)	Auto Turning Radius	Traffic Turn Style	Turning Radius (m)
1	1	1	TrafficStream	Cx/1	1/1	25.80	48.28			✓	Straight	Straight Movement
A	1	1	TrafficStream	Fx1/1	A/1	7.46	48.28			✓	Straight	Straight Movement
A	2	1	TrafficStream	Fx1/1	A/2	11.18	48.28			✓	Straight	Straight Movement
A	3	1	TrafficStream	Fx1/2	A/3	11.18	48.28			✓	Straight	Straight Movement
A	4	1	TrafficStream	Fx1/2	A/4	11.18	48.28			✓	Straight	Straight Movement
Ax1	1	1	TrafficStream	Ax/1	Ax1/1	1.49	48.28			✓	Straight	Straight Movement
Ax1	2	1	TrafficStream	Ax/2	Ax1/2	1.49	48.28			✓	Straight	Straight

			m									Movement
<b>Ax2</b>	<b>1</b>	<b>1</b>	TrafficStream	Ax1/1	Ax2/1	11.18	48.28			✓	Straight	Straight Movement
<b>Ax2</b>	<b>2</b>	<b>1</b>	TrafficStream	Ax1/1	Ax2/2	11.18	48.28			✓	Straight	Straight Movement
<b>Bc1</b>	<b>1</b>	<b>1</b>	TrafficStream	Bc/1	Bc1/1	2.24	48.28			✓	Straight	Straight Movement
<b>Bc1</b>	<b>2</b>	<b>1</b>	TrafficStream	Bc/2	Bc1/2	2.24	48.28			✓	Straight	Straight Movement
<b>Bc1</b>	<b>3</b>	<b>1</b>	TrafficStream	Bc/3	Bc1/3	2.24	48.28			✓	Straight	Straight Movement
<b>Bc1</b>	<b>4</b>	<b>1</b>	TrafficStream	Bc/4	Bc1/4	2.24	48.28			✓	Straight	Straight Movement
<b>C</b>	<b>1</b>	<b>1</b>	TrafficStream	C2/1	C/1	14.91	48.28			✓	Straight	Straight Movement
<b>C</b>	<b>2</b>	<b>1</b>	TrafficStream	C2/1	C/2	14.91	48.28			✓	Straight	Straight Movement
<b>Cx2</b>	<b>1</b>	<b>1</b>	TrafficStream	1/1	Cx 2/1	5.07	48.28			✓	Straight	Straight Movement
<b>Cx2</b>	<b>2</b>	<b>1</b>	TrafficStream	1/1	Cx 2/2	5.07	48.28			✓	Straight	Straight Movement
<b>Cx3</b>	<b>1</b>	<b>1</b>	TrafficStream	Cx 2/1	Cx3/1	4.43	48.28			✓	Straight	Straight Movement
<b>Cx4</b>	<b>1</b>	<b>1</b>	TrafficStream	Cx 2/1	Cx4/1	1.12	48.28			✓	Straight	Straight Movement
<b>Cx4-2</b>	<b>1</b>	<b>1</b>	TrafficStream	Cx4/1	Cx4-2/1	5.77	48.28			✓	Straight	Straight Movement
<b>Cx5</b>	<b>1</b>	<b>1</b>	TrafficStream	C3-1/1	Cx5/1	4.67	48.28			✓	Straight	Straight Movement
<b>F</b>	<b>1</b>	<b>1</b>	TrafficStream	Ax2/1	F/1	15.66	48.28			✓	Straight	Straight Movement
<b>F</b>	<b>2</b>	<b>1</b>	TrafficStream	Ax2/2	F/2	15.66	48.28			✓	Straight	Straight Movement

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<b>F</b>	<b>3</b>	<b>1</b>	TrafficStream	Ax2/2	F/3	15.66	48.28			✓	Straight	Straight Movement
<b>G</b>	<b>1</b>	<b>1</b>	TrafficStream	G1/1	G/1	5.67	48.28			✓	Straight	Straight Movement
<b>G</b>	<b>2</b>	<b>1</b>	TrafficStream	G1/1	G/2	5.67	48.28			✓	Straight	Straight Movement
<b>H</b>	<b>1</b>	<b>1</b>	TrafficStream	H1/1	H/1	7.16	48.28			✓	Straight	Straight Movement
<b>H</b>	<b>2</b>	<b>1</b>	TrafficStream	H1/1	H/2	7.16	48.28			✓	Straight	Straight Movement
<b>H</b>	<b>3</b>	<b>1</b>	TrafficStream	H1/2	H/3	7.16	48.28			✓	Straight	Straight Movement
<b>I</b>	<b>1</b>	<b>1</b>	TrafficStream	I1/1	I/1	4.47	48.28			✓	Straight	Straight Movement
<b>I</b>	<b>2</b>	<b>1</b>	TrafficStream	I1/1	I/2	4.47	48.28			✓	Straight	Straight Movement
<b>Ac</b>	<b>1</b>	<b>1</b>	TrafficStream	E/1	Ac/1	4.03	48.28			✓	Straight	Straight Movement
<b>Ac</b>	<b>2</b>	<b>1</b>	TrafficStream	Ec/3	Ac/2	4.03	48.28			✓	Straight	Straight Movement
<b>Ac</b>	<b>3</b>	<b>1</b>	TrafficStream	E/2	Ac/3	4.03	48.28			✓	Straight	Straight Movement
<b>Ax</b>	<b>1</b>	<b>1</b>	TrafficStream	Ec/1	Ax/1	1.12	64.37			✓	Straight	Straight Movement
<b>Ax</b>	<b>2</b>	<b>1</b>	TrafficStream	Ec/2	Ax/2	1.12	64.37			✓	Straight	Straight Movement
<b>Ax</b>	<b>3</b>	<b>1</b>	TrafficStream	Ec/3	Ax/3	1.12	64.37			✓	Straight	Straight Movement
<b>Bc</b>	<b>1</b>	<b>1</b>	TrafficStream	Ac/1	Bc/1	7.46	48.28			✓	Straight	Straight Movement
<b>Bc</b>	<b>2</b>	<b>1</b>	TrafficStream	A/2	Bc/2	7.46	48.28			✓	Straight	Straight Movement

<b>Bc</b>	<b>3</b>	<b>1</b>	TrafficStream	Ac/3	Bc/3	7.46	48.28			✓	Straight	Straight Movement
<b>Bc</b>	<b>4</b>	<b>1</b>	TrafficStream	Ac/3	Bc/4	7.46	48.28			✓	Straight	Straight Movement
<b>Bx</b>	<b>1</b>	<b>1</b>	TrafficStream	Bc/1	Bx/1	7.46	48.28			✓	Nearsid e	76.24
<b>C2</b>	<b>1</b>	<b>1</b>	TrafficStream	C3-1/1	C2/1	23.41	48.28			✓	Straight	Straight Movement
<b>Cc</b>	<b>1</b>	<b>1</b>	TrafficStream	B/1	Cc/1	4.85	48.28			✓	Straight	Straight Movement
<b>Cc</b>	<b>2</b>	<b>1</b>	TrafficStream	B/2	Cc/2	4.85	48.28			✓	Straight	Straight Movement
<b>Cc</b>	<b>3</b>	<b>1</b>	TrafficStream	B/2	Cc/3	4.85	48.28			✓	Straight	Straight Movement
<b>Cx</b>	<b>1</b>	<b>1</b>	TrafficStream	Bc1/1	Cx/1	5.59	64.37			✓	Straight	Straight Movement
<b>Cx</b>	<b>2</b>	<b>1</b>	TrafficStream	Bc1/2	Cx/2	5.59	64.37			✓	Straight	Straight Movement
<b>Dc</b>	<b>1</b>	<b>1</b>	TrafficStream	C/1	Dc/1	6.71	48.28			✓	Straight	Straight Movement
<b>Dc</b>	<b>2</b>	<b>1</b>	TrafficStream	C/2	Dc/2	6.71	48.28			✓	Straight	Straight Movement
<b>Dc</b>	<b>3</b>	<b>1</b>	TrafficStream	C/2	Dc/3	6.71	48.28			✓	Straight	Straight Movement
<b>Dx</b>	<b>1</b>	<b>1</b>	TrafficStream	Cc/1	Dx/1	3.13	64.37			✓	Straight	Straight Movement
<b>Dx</b>	<b>2</b>	<b>1</b>	TrafficStream	Cc/2	Dx/2	3.13	64.37			✓	Straight	Straight Movement
<b>Dx</b>	<b>3</b>	<b>1</b>	TrafficStream	Cc/3	Dx/3	3.13	64.37			✓	Straight	Straight Movement
<b>Dx1</b>	<b>1</b>	<b>1</b>	TrafficStream	Dx/1	Dx1/1	13.98	64.37			✓	Straight	Straight Movement
<b>Dx1</b>	<b>2</b>	<b>1</b>	TrafficStream	Dx/2	Dx1/2	13.98	64.37			✓	Straight	Straight Movement

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<b>Ec</b>	<b>1</b>	<b>1</b>	TrafficStream	D/1	Ec/1	3.73	48.28			✓	Straight	Straight Movement
<b>Ec</b>	<b>2</b>	<b>1</b>	TrafficStream	D/2	Ec/2	3.73	48.28			✓	Straight	Straight Movement
<b>Ec</b>	<b>3</b>	<b>1</b>	TrafficStream	D/3	Ec/3	3.73	48.28			✓	Straight	Straight Movement
<b>Ex</b>	<b>1</b>	<b>1</b>	TrafficStream	Dc/1	Ex/1	7.46	48.28			✓	Straight	Straight Movement
<b>Ex</b>	<b>2</b>	<b>1</b>	TrafficStream	Dc/2	Ex/2	7.46	48.28			✓	Straight	Straight Movement
<b>Fc</b>	<b>1</b>	<b>1</b>	TrafficStream	lc/2	Fc/1	8.28	32.19			✓	Straight	Straight Movement
<b>Fc</b>	<b>2</b>	<b>1</b>	TrafficStream	l/2	Fc/2	8.28	32.19			✓	Straight	Straight Movement
<b>Fc</b>	<b>3</b>	<b>1</b>	TrafficStream	lc/3	Fc/3	8.28	32.19			✓	Offside	91.25
<b>Fx</b>	<b>1</b>	<b>1</b>	TrafficStream	l/1	Fx/1	14.91	48.28			✓	Straight	Straight Movement
<b>Fx</b>	<b>2</b>	<b>1</b>	TrafficStream	l/2	Fx/2	14.91	48.28			✓	Straight	Straight Movement
<b>Fx1</b>	<b>1</b>	<b>1</b>	TrafficStream	Fx/1	Fx1/1	7.46	48.28			✓	Straight	Straight Movement
<b>Fx1</b>	<b>2</b>	<b>1</b>	TrafficStream	Fx/1	Fx1/2	7.46	48.28			✓	Straight	Straight Movement
<b>Gc</b>	<b>1</b>	<b>1</b>	TrafficStream	F/1	Gc/1	7.83	32.19			✓	Straight	Straight Movement
<b>Gc</b>	<b>2</b>	<b>1</b>	TrafficStream	F/2	Gc/2	7.83	32.19			✓	Straight	Straight Movement
<b>Gc</b>	<b>3</b>	<b>1</b>	TrafficStream	Fc/3	Gc/3	7.83	32.19			✓	Offside	52.91
<b>Gx</b>	<b>1</b>	<b>1</b>	TrafficStream	F/1	Gx/1	4.18	48.28	15.00	15.00	✓	Nearside	63.89
<b>Gx</b>	<b>2</b>	<b>1</b>	TrafficStream	Fc/2	Gx/2	4.18	48.28	15.00	15.00	✓	Straight	Straight Movement

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<b>Gx1</b>	<b>1</b>	<b>1</b>	TrafficStream	Gx/1	Gx1/1	1.49	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>Hc</b>	<b>1</b>	<b>1</b>	TrafficStream	G/1	Hc/1	7.49	32.19			✓	Straight	Straight Movement
<b>Hc</b>	<b>2</b>	<b>1</b>	TrafficStream	Gc/3	Hc/2	7.49	32.19			✓	Straight	Straight Movement
<b>Hc</b>	<b>3</b>	<b>1</b>	TrafficStream	Gc/3	Hc/3	7.49	32.19			✓	Straight	Straight Movement
<b>Hx</b>	<b>1</b>	<b>1</b>	TrafficStream	G/1	Hx/1	7.46	48.28			✓	Nearside	100.00
<b>Hx</b>	<b>2</b>	<b>1</b>	TrafficStream	Gc/2	Hx/2	7.46	48.28			✓	Straight	Straight Movement
<b>lc</b>	<b>1</b>	<b>1</b>	TrafficStream	H/1	lc/1	7.27	32.19			✓	Straight	Straight Movement
<b>lc</b>	<b>2</b>	<b>1</b>	TrafficStream	H/2	lc/2	7.27	32.19			✓	Straight	Straight Movement
<b>lc</b>	<b>3</b>	<b>1</b>	TrafficStream	Hc/3	lc/3	7.27	32.19			✓	Offside	49.48
<b>lx</b>	<b>1</b>	<b>1</b>	TrafficStream	Hc/1	lx/1	3.36	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>lx</b>	<b>2</b>	<b>1</b>	TrafficStream	Hc/2	lx/2	3.36	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>lx1</b>	<b>1</b>	<b>1</b>	TrafficStream	lx/2	lx1/1	1.12	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>1</b>	<b>1</b>	<b>2</b>	TrafficStream	Cx/2	1/1	25.80	48.28			✓	Straight	Straight Movement
<b>Ac</b>	<b>1</b>	<b>2</b>	TrafficStream	Ec/3	Ac/1	4.03	48.28			✓	Straight	Straight Movement
<b>Ac</b>	<b>2</b>	<b>2</b>	TrafficStream	E/1	Ac/2	6.48	30.00			✓	Straight	Straight Movement
<b>Ax</b>	<b>1</b>	<b>2</b>	TrafficStream	E/1	Ax/1	1.12	64.37			✓	Straight	Straight Movement
<b>Ax</b>	<b>2</b>	<b>2</b>	TrafficStream	E/1	Ax/2	1.12	64.37			✓	Straight	Straight

			m									Movement
<b>Ax1</b>	<b>2</b>	<b>2</b>	TrafficStream	Ax/3	Ax1/2	1.49	48.28			✓	Straight	Straight Movement
<b>Ax2</b>	<b>1</b>	<b>2</b>	TrafficStream	Ax1/2	Ax2/1	11.18	48.28			✓	Straight	Straight Movement
<b>Ax2</b>	<b>2</b>	<b>2</b>	TrafficStream	Ax1/2	Ax2/2	11.18	48.28			✓	Straight	Straight Movement
<b>Bc</b>	<b>1</b>	<b>2</b>	TrafficStream	A/1	Bc/1	7.46	48.28			✓	Nearside	83.93
<b>Bc</b>	<b>2</b>	<b>2</b>	TrafficStream	Ac/2	Bc/2	7.46	48.28			✓	Straight	Straight Movement
<b>Bc</b>	<b>3</b>	<b>2</b>	TrafficStream	A/3	Bc/3	7.46	48.28			✓	Straight	Straight Movement
<b>Bc</b>	<b>4</b>	<b>2</b>	TrafficStream	A/4	Bc/4	7.46	48.28			✓	Straight	Straight Movement
<b>C2</b>	<b>1</b>	<b>2</b>	TrafficStream	C4/1	C2/1	23.41	48.28			✓	Straight	Straight Movement
<b>Cc</b>	<b>1</b>	<b>2</b>	TrafficStream	Bc1/2	Cc/1	4.85	48.28			✓	Straight	Straight Movement
<b>Cc</b>	<b>2</b>	<b>2</b>	TrafficStream	Bc1/3	Cc/2	4.85	48.28			✓	Straight	Straight Movement
<b>Cc</b>	<b>3</b>	<b>2</b>	TrafficStream	Bc1/4	Cc/3	4.85	48.28			✓	Straight	Straight Movement
<b>Cx</b>	<b>1</b>	<b>2</b>	TrafficStream	B/1	Cx/1	5.59	64.37			✓	Nearside	73.56
<b>Cx3</b>	<b>1</b>	<b>2</b>	TrafficStream	C4/1	Cx3/1	4.43	48.28			✓	Straight	Straight Movement
<b>Cx4</b>	<b>1</b>	<b>2</b>	TrafficStream	C3-1/1	Cx4/1	1.12	48.28			✓	Straight	Straight Movement
<b>Cx5</b>	<b>1</b>	<b>2</b>	TrafficStream	C4/1	Cx5/1	4.67	48.28			✓	Straight	Straight Movement
<b>Dc</b>	<b>1</b>	<b>2</b>	TrafficStream	Cc/3	Dc/1	10.80	30.00			✓	Straight	Straight Movement

<b>Dc</b>	<b>2</b>	<b>2</b>	TrafficStream	Cc/3	Dc/2	6.71	48.28			✓	Straight	Straight Movement
<b>Dx</b>	<b>1</b>	<b>2</b>	TrafficStream	C/1	Dx/1	3.13	64.37			✓	Straight	Straight Movement
<b>Dx1</b>	<b>2</b>	<b>2</b>	TrafficStream	Dx/3	Dx1/2	13.98	64.37			✓	Straight	Straight Movement
<b>Ec</b>	<b>1</b>	<b>2</b>	TrafficStream	Dc/2	Ec/1	3.73	48.28			✓	Straight	Straight Movement
<b>Ec</b>	<b>2</b>	<b>2</b>	TrafficStream	Dc/3	Ec/2	3.73	48.28			✓	Straight	Straight Movement
<b>Ec</b>	<b>3</b>	<b>2</b>	TrafficStream	Dc/3	Ec/3	3.73	48.28			✓	Straight	Straight Movement
<b>Ex</b>	<b>1</b>	<b>2</b>	TrafficStream	D/1	Ex/1	7.46	48.28			✓	Straight	Straight Movement
<b>Fc</b>	<b>1</b>	<b>2</b>	TrafficStream	I/2	Fc/1	8.28	32.19			✓	Straight	Straight Movement
<b>Fc</b>	<b>2</b>	<b>2</b>	TrafficStream	Ic/3	Fc/2	8.28	32.19			✓	Straight	Straight Movement
<b>Fc</b>	<b>3</b>	<b>2</b>	TrafficStream	I/2	Fc/3	8.28	32.19			✓	Straight	Straight Movement
<b>Fx</b>	<b>1</b>	<b>2</b>	TrafficStream	Ic/1	Fx/1	14.91	48.28			✓	Straight	Straight Movement
<b>Fx</b>	<b>2</b>	<b>2</b>	TrafficStream	Ic/2	Fx/2	14.91	48.28			✓	Straight	Straight Movement
<b>Fx1</b>	<b>1</b>	<b>2</b>	TrafficStream	Fx/2	Fx1/1	7.46	48.28			✓	Straight	Straight Movement
<b>Fx1</b>	<b>2</b>	<b>2</b>	TrafficStream	Fx/2	Fx1/2	7.46	48.28			✓	Straight	Straight Movement
<b>Gc</b>	<b>1</b>	<b>2</b>	TrafficStream	Fc/2	Gc/1	7.83	32.19			✓	Offside	72.91
<b>Gc</b>	<b>2</b>	<b>2</b>	TrafficStream	Fc/3	Gc/2	7.83	32.19			✓	Offside	52.91
<b>Gc</b>	<b>3</b>	<b>2</b>	TrafficStream	F/3	Gc/3	7.83	32.19			✓	Straight	Straight Movement



Gx	1	2	TrafficStream	Fc/1	Gx/1	4.18	48.28	15.00	15.00	✓	Straight	Straight Movement
Gx1	1	2	TrafficStream	Gx/2	Gx1/1	1.49	48.28	15.00	15.00	✓	Straight	Straight Movement
Hc	1	2	TrafficStream	Gc/2	Hc/1	7.49	32.19			✓	Straight	Straight Movement
Hc	2	2	TrafficStream	G/1	Hc/2	7.49	32.19			✓	Straight	Straight Movement
Hc	3	2	TrafficStream	G/2	Hc/3	7.49	32.19			✓	Straight	Straight Movement
Hx	1	2	TrafficStream	Gc/1	Hx/1	7.46	48.28			✓	Straight	Straight Movement
lc	1	2	TrafficStream	Hc/2	lc/1	7.27	32.19			✓	Offside	69.48
lc	2	2	TrafficStream	Hc/3	lc/2	7.27	32.19			✓	Offside	49.48
lc	3	2	TrafficStream	H/3	lc/3	7.27	32.19			✓	Straight	Straight Movement
lx	1	2	TrafficStream	H/1	lx/1	3.36	48.28	15.00	15.00	✓	Straight	Straight Movement
lx1	1	2	TrafficStream	lx/1	lx1/1	1.12	48.28	15.00	15.00	✓	Straight	Straight Movement
C2	1	3	TrafficStream	C5/1	C2/1	23.41	48.28			✓	Straight	Straight Movement
Cx3	1	3	TrafficStream	C5/1	Cx3/1	4.43	48.28			✓	Straight	Straight Movement
Cx4	1	3	TrafficStream	C5/1	Cx4/1	1.12	48.28			✓	Straight	Straight Movement
Cx5	1	3	TrafficStream	Cx 2/2	Cx5/1	4.67	48.28			✓	Straight	Straight Movement

### Give Way Data

Arm	Traffic Stream	Opposed Traffic	Use Step-wise Opposed Turn Model	Visibility Restricted
B	1	AllTraffic		

B	2	AllTraffic		
C3-1	1	AllTraffic		
E	1	AllTraffic		
E	2	AllTraffic		

### Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling Type	Controlling Traffic Stream	Percentage Opposing (%)	Slope Coefficient	Upstream Signals Visible	Conflict Shift	Conflict Duration
1		TrafficStream	Bc1/1	100	0.18		0	0
1		TrafficStream	Bc1/2	100	0.18		0	0
2		TrafficStream	Bc1/1	100	0.18		0	0
2		TrafficStream	Bc1/2	100	0.18		0	0
2		TrafficStream	Bc1/3	100	0.18		0	0
2		TrafficStream	Bc1/4	100	0.18		0	0
1		TrafficStream	Cx 2/1	100	0.22		0	0
1		TrafficStream	Cx 2/2	100	0.22		0	0
1	Roundabout Circulating	TrafficStream	Ec/1	100	0.21		0	0
1		TrafficStream	Ec/2	100	0.21		0	0
1		TrafficStream	Ec/3	100	0.21		0	0
2	Roundabout Circulating	TrafficStream	Ec/1	100	0.42		0	0
2		TrafficStream	Ec/2	100	0.42		0	0
2		TrafficStream	Ec/3	100	0.42		0	0

### Quick Flares

Arm	Traffic Stream	Description	Saturation Flow (PCU/hr)	Use Que Prob	Effective Storage (Vehs)
C	1		1800		7.00
C	2		1800		7.00
G	2		1800		3.00
I	2		1800		2.00

## Local OD Matrix - Local Matrix: 2031 PM SC

### Normal Input Flows (PCU/hr)

	To									
	1	2	3	4	5	6	7	8	9	
From	1	0	13	12	1	195	45	554	149	63
	2	64	0	11	1	175	42	520	141	141
	3	6	1	0	0	14	4	10	12	4
	4	0	0	0	0	0	0	0	0	0
	5	276	41	2	37	0	33	295	524	170
	6	60	7	0	24	40	0	52	113	37
	7	821	112	38	3	452	111	0	534	486
	8	118	16	14	1	200	48	625	0	71
	9	41	55	7	1	98	25	297	81	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

### Locations

OD Matrix	Location	Name	Entries	Exits
2031 PM SC	1	(untitled)	H1/1,H1/2	Hx/2,Hx/1
2031 PM SC	2	(untitled)	I1/1	Ix1/1
2031 PM SC	3	(untitled)	B/1,B/2	Bx/1
2031 PM SC	4	(untitled)	C3-1/1	Cx3/1
2031 PM SC	5	(untitled)	C4/1	Cx4-2/1
2031 PM SC	6	(untitled)	C5/1	Cx5/1
2031 PM SC	7	(untitled)	D/1,D/2,D/3	Dx1/2,Dx1/1
2031 PM SC	8	(untitled)	E/1,E/2	Ex/1,Ex/2
2031 PM SC	9	(untitled)	G1/1	Gx1/1

### Paths

OD Matrix	Path	Description	From Location	To Location	Path Items
2031 PM SC	1		7	9	D/1,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1

2031 PM SC	2		7	1	D/1, Ec/1, Ax/1, Ax1/1, Ax2/1, F/1, Gc/1, Hx/1
2031 PM SC	3		7	1	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/2, Gc/2, Hx/2
2031 PM SC	4		7	2	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/2, Gc/2, Hc/1, lx/1, lx1/1
2031 PM SC	5		7	2	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lx/2, lx1/1
2031 PM SC	6		7	3	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bx/1
2031 PM SC	7		7	4	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/1, Cx3/1
2031 PM SC	8		7	5	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/1, Cx4/1, Cx4-2/1
2031 PM SC	9		7	6	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/2, Cx5/1
2031 PM SC	10		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx/1, Dx1/1
2031 PM SC	11		7	4	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx3/1
2031 PM SC	12		7	5	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx4/1, Cx4-2/1
2031 PM SC	13		7	6	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/2, Cx5/1
2031 PM SC	14		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx/2, Dx1/2
2031 PM SC	15		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dx/3, Dx1/2
2031 PM SC	16		7	3	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, lc/2, Fx/2, Fx1/1, A/1, Bc/1, Bx/1
2031 PM SC	17		7	4	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, lc/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/1, Cx3/1
2031	18		7	5	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, lc/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1

PM SC					1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	19		7	6	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/ 1,Cx 2/2,Cx5/1
2031 PM SC	20		7	7	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx /1,Dx1/1
2031 PM SC	21		7	4	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/ 1,Cx 2/1,Cx3/1
2031 PM SC	22		7	5	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/ 1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	23		7	6	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/ 1,Cx 2/2,Cx5/1
2031 PM SC	24		7	7	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx /2,Dx1/2
2031 PM SC	25		7	7	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx /3,Dx1/2
2031 PM SC	26		7	8	D/1,Ex/1
2031 PM SC	27		7	9	D/2,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	28		7	1	D/2,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	29		7	1	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	30		7	2	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	31		7	2	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 PM SC	32		7	3	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	33		7	4	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/ 1,Cx 2/1,Cx3/1
2031 PM	34		7	5	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/ 1,Cx 2/1,Cx4/1,Cx4-2/1

SC					
2031 PM SC	35		7	6	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/2, Cx5/1
2031 PM SC	36		7	7	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx/1, Dx1/1
2031 PM SC	37		7	4	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx3/1
2031 PM SC	38		7	5	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx4/1, Cx4-2/1
2031 PM SC	39		7	6	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/2, Cx5/1
2031 PM SC	40		7	7	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx/2, Dx1/2
2031 PM SC	41		7	7	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dx/3, Dx1/2
2031 PM SC	42		7	3	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bx/1
2031 PM SC	43		7	4	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/1, Cx3/1
2031 PM SC	44		7	5	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/1, Cx4/1, Cx4-2/1
2031 PM SC	45		7	6	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/2, Cx5/1
2031 PM SC	46		7	7	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx/1, Dx1/1
2031 PM SC	47		7	4	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx3/1
2031 PM SC	48		7	5	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx4/1, Cx4-2/1
2031 PM SC	49		7	6	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/2, Cx5/1
2031 PM SC	50		7	7	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx/2, Dx1/2

2031 PM SC	51		7	7	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dx /3, Dx1/2
2031 PM SC	52		7	9	D/3, Ec/3, Ax/3, Ax1/2, Ax2/1, F/1, Gx/1, Gx1/1
2031 PM SC	53		7	1	D/3, Ec/3, Ax/3, Ax1/2, Ax2/1, F/1, Gc/1, Hx/1
2031 PM SC	54		7	1	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/2, Gc/2, Hx/2
2031 PM SC	55		7	2	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/2, Gc/2, Hc/1, Ix/1, Ix1/1
2031 PM SC	56		7	2	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ix/2, Ix1/1
2031 PM SC	57		7	3	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/1, Bc/1, Bx/1
2031 PM SC	58		7	4	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/ 1, Cx 2/1, Cx3/1
2031 PM SC	59		7	5	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/ 1, Cx 2/1, Cx4/1, Cx4-2/1
2031 PM SC	60		7	6	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/ 1, Cx 2/2, Cx5/1
2031 PM SC	61		7	7	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx /1, Dx1/1
2031 PM SC	62		7	4	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/ 1, Cx 2/1, Cx3/1
2031 PM SC	63		7	5	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/ 1, Cx 2/1, Cx4/1, Cx4-2/1
2031 PM SC	64		7	6	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/ 1, Cx 2/2, Cx5/1
2031 PM SC	65		7	7	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx /2, Dx1/2
2031 PM SC	66		7	7	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dx /3, Dx1/2
2031	67		7	3	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bx/1

PM SC					
2031 PM SC	68		7	4	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/1, Cx3/1
2031 PM SC	69		7	5	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/1, Cx4/1, Cx4-2/1
2031 PM SC	70		7	6	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/2, Cx5/1
2031 PM SC	71		7	7	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx/1, Dx1/1
2031 PM SC	72		7	4	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx3/1
2031 PM SC	73		7	5	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx4/1, Cx4-2/1
2031 PM SC	74		7	6	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/2, Cx5/1
2031 PM SC	75		7	7	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx/2, Dx1/2
2031 PM SC	76		7	7	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dx/3, Dx1/2
2031 PM SC	77		7	3	D/3, Ec/3, Ac/1, Bc/1, Bx/1
2031 PM SC	78		7	4	D/3, Ec/3, Ac/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/1, Cx3/1
2031 PM SC	79		7	5	D/3, Ec/3, Ac/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/1, Cx4/1, Cx4-2/1
2031 PM SC	80		7	6	D/3, Ec/3, Ac/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/2, Cx5/1
2031 PM SC	81		7	7	D/3, Ec/3, Ac/2, Bc/2, Bc1/2, Cc/1, Dx/1, Dx1/1
2031 PM SC	82		7	4	D/3, Ec/3, Ac/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx3/1
2031 PM	83		7	5	D/3, Ec/3, Ac/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx4/1, Cx4-2/1



SC					
2031 PM SC	84		7	6	D/3, Ec/3, Ac/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/2, Cx5/1
2031 PM SC	85		8	9	E/1, Ax/1, Ax1/1, Ax2/1, F/1, Gx/1, Gx1/1
2031 PM SC	86		8	1	E/1, Ax/1, Ax1/1, Ax2/1, F/1, Gc/1, Hx/1
2031 PM SC	87		8	1	E/1, Ax/1, Ax1/1, Ax2/2, F/2, Gc/2, Hx/2
2031 PM SC	88		8	2	E/1, Ax/1, Ax1/1, Ax2/2, F/2, Gc/2, Hc/1, lx/1, lx1/1
2031 PM SC	89		8	2	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lx/2, lx1/1
2031 PM SC	90		8	3	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bx/1
2031 PM SC	91		8	4	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/1, Cx3/1
2031 PM SC	92		8	5	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/1, Cx4/1, Cx4-2/1
2031 PM SC	93		8	6	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, 1/1, Cx 2/2, Cx5/1
2031 PM SC	94		8	7	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx/1, Dx 1/1
2031 PM SC	95		8	4	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx3/1
2031 PM SC	96		8	5	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/1, Cx4/1, Cx4-2/1
2031 PM SC	97		8	6	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, 1/1, Cx 2/2, Cx5/1
2031 PM SC	98		8	7	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx/2, Dx 1/2
2031 PM SC	99		8	8	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dc/1, Ex /1

2031 PM SC	100		8	8	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex /2
2031 PM SC	101		8	7	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx 1/2
2031 PM SC	102		8	3	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	103		8	4	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1
2031 PM SC	104		8	5	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	105		8	6	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
2031 PM SC	106		8	7	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx 1/1
2031 PM SC	107		8	4	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
2031 PM SC	108		8	5	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	109		8	6	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1
2031 PM SC	110		8	7	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx 1/2
2031 PM SC	111		8	8	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex /1
2031 PM SC	112		8	8	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex /2
2031 PM SC	113		8	7	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx 1/2
2031 PM SC	114		8	9	E/1,Ax/2,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	115		8	1	E/1,Ax/2,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031	116		8	1	E/1,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2

PM SC					
2031 PM SC	117		8	2	E/1,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	118		8	2	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 PM SC	119		8	3	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	120		8	4	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1
2031 PM SC	121		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	122		8	6	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
2031 PM SC	123		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx 1/1
2031 PM SC	124		8	4	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
2031 PM SC	125		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	126		8	6	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1
2031 PM SC	127		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx 1/2
2031 PM SC	128		8	8	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex /1
2031 PM SC	129		8	8	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex /2
2031 PM SC	130		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx 1/2
2031 PM SC	131		8	3	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 PM	132		8	4	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1

SC					
2031 PM SC	133		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	134		8	6	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
2031 PM SC	135		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx 1/1
2031 PM SC	136		8	4	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
2031 PM SC	137		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	138		8	6	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1
2031 PM SC	139		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx 1/2
2031 PM SC	140		8	8	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex /1
2031 PM SC	141		8	8	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex /2
2031 PM SC	142		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx 1/2
2031 PM SC	143		8	3	E/1,Ac/1,Bc/1,Bx/1
2031 PM SC	144		8	4	E/1,Ac/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1
2031 PM SC	145		8	5	E/1,Ac/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	146		8	6	E/1,Ac/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
2031 PM SC	147		8	7	E/1,Ac/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 PM SC	148		8	4	E/1,Ac/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1

2031 PM SC	149		8	5	E/1,Ac/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	150		8	6	E/1,Ac/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1
2031 PM SC	151		8	7	E/2,Ac/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 PM SC	152		8	8	E/2,Ac/3,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 PM SC	153		8	8	E/2,Ac/3,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 PM SC	154		8	7	E/2,Ac/3,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 PM SC	155		3	7	B/1,Cc/1,Dx/1,Dx1/1
2031 PM SC	156		3	4	B/1,Cx/1,1/1,Cx 2/1,Cx3/1
2031 PM SC	157		3	5	B/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	158		3	6	B/1,Cx/1,1/1,Cx 2/2,Cx5/1
2031 PM SC	159		3	7	B/2,Cc/2,Dx/2,Dx1/2
2031 PM SC	160		3	8	B/2,Cc/3,Dc/1,Ex/1
2031 PM SC	161		3	9	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	162		3	1	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	163		3	1	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	164		3	2	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031	165		3	2	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1

PM SC					
2031 PM SC	166		3	3	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	167		3	3	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	168		3	8	B/2,Cc/3,Dc/2,Ex/2
2031 PM SC	169		3	7	B/2,Cc/3,Dx/3,Dx1/2
2031 PM SC	170		4	6	C3-1/1,Cx5/1
2031 PM SC	171		4	5	C3-1/1,Cx4/1,Cx4-2/1
2031 PM SC	172		4	8	C3-1/1,C2/1,C/1,Dc/1,Ex/1
2031 PM SC	173		4	7	C3-1/1,C2/1,C/1,Dx/1,Dx1/1
2031 PM SC	174		4	9	C3-1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	175		4	1	C3-1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	176		4	1	C3-1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	177		4	2	C3-1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	178		4	2	C3-1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 PM SC	179		4	3	C3-1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	180		4	3	C3-1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 PM	181		4	8	C3-1/1,C2/1,C/2,Dc/2,Ex/2

SC					
2031 PM SC	182		4	9	C3-1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	183		4	1	C3-1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	184		4	1	C3-1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	185		4	2	C3-1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	186		4	2	C3-1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 PM SC	187		4	3	C3- 1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/1,Fx/1,Fx1/1,A/1,Bc/1, Bx/1
2031 PM SC	188		4	3	C3- 1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lx/2,Fx/2,Fx1/1,A/1,Bc/1, Bx/1
2031 PM SC	189		4	9	C3-1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	190		4	1	C3-1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	191		4	1	C3-1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	192		4	2	C3-1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	193		4	2	C3-1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 PM SC	194		4	3	C3- 1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/1,Fx/1,Fx1/1,A/1,Bc/1, Bx/1
2031 PM SC	195		4	3	C3- 1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lx/2,Fx/2,Fx1/1,A/1,Bc/1, Bx/1
2031 PM SC	196		4	3	C3-1/1,C2/1,C/2,Dc/3,Ec/3,Ac/1,Bc/1,Bx/1
2031 PM SC	197		2	3	l1/1,l/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1

2031 PM SC	198		2	4	I1/1,I/1,Fx1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1
2031 PM SC	199		2	5	I1/1,I/1,Fx1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	200		2	6	I1/1,I/1,Fx1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
2031 PM SC	201		2	7	I1/1,I/1,Fx1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 PM SC	202		2	4	I1/1,I/1,Fx1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
2031 PM SC	203		2	5	I1/1,I/1,Fx1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	204		2	6	I1/1,I/1,Fx1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1
2031 PM SC	205		2	7	I1/1,I/1,Fx1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 PM SC	206		2	8	I1/1,I/1,Fx1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 PM SC	207		2	9	I1/1,I/1,Fx1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx 1/1
2031 PM SC	208		2	1	I1/1,I/1,Fx1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/ 1
2031 PM SC	209		2	1	I1/1,I/1,Fx1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/ 2
2031 PM SC	210		2	2	I1/1,I/1,Fx1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/ 1,lx/1,lx1/1
2031 PM SC	211		2	2	I1/1,I/1,Fx1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/ 2,lx/2,lx1/1
2031 PM SC	212		2	8	I1/1,I/1,Fx1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 PM SC	213		2	7	I1/1,I/1,Fx1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031	214		2	3	I1/1,I/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1



PM SC					
2031 PM SC	215		2	4	I1/1,I/2,Fx2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1
2031 PM SC	216		2	5	I1/1,I/2,Fx2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	217		2	6	I1/1,I/2,Fx2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
2031 PM SC	218		2	7	I1/1,I/2,Fx2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 PM SC	219		2	4	I1/1,I/2,Fx2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
2031 PM SC	220		2	5	I1/1,I/2,Fx2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	221		2	6	I1/1,I/2,Fx2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1
2031 PM SC	222		2	7	I1/1,I/2,Fx2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 PM SC	223		2	8	I1/1,I/2,Fx2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 PM SC	224		2	9	I1/1,I/2,Fx2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx 1/1
2031 PM SC	225		2	1	I1/1,I/2,Fx2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/ 1
2031 PM SC	226		2	1	I1/1,I/2,Fx2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/ 2
2031 PM SC	227		2	2	I1/1,I/2,Fx2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/ 1,lx/1,lx1/1
2031 PM SC	228		2	2	I1/1,I/2,Fx2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/ 2,lx/2,lx1/1
2031 PM SC	229		2	8	I1/1,I/2,Fx2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 PM	230		2	7	I1/1,I/2,Fx2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2

SC					
2031 PM SC	231		2	9	I1/1,I/2,Fc/1,Gx/1,Gx1/1
2031 PM SC	232		2	9	I1/1,I/2,Fc/2,Gx/2,Gx1/1
2031 PM SC	233		2	1	I1/1,I/2,Fc/2,Gc/1,Hx/1
2031 PM SC	234		2	1	I1/1,I/2,Fc/3,Gc/2,Hx/2
2031 PM SC	235		2	2	I1/1,I/2,Fc/3,Gc/2,Hc/1,Ix/1,Ix1/1
2031 PM SC	236		2	2	I1/1,I/2,Fc/3,Gc/3,Hc/2,Ix/2,Ix1/1
2031 PM SC	237		9	1	G1/1,G/1,Hx/1
2031 PM SC	238		9	2	G1/1,G/1,Hc/1,Ix/1,Ix1/1
2031 PM SC	239		9	2	G1/1,G/1,Hc/2,Ix/2,Ix1/1
2031 PM SC	240		9	3	G1/1,G/1,Hc/2,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	241		9	4	G1/1,G/1,Hc/2,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1
2031 PM SC	242		9	5	G1/1,G/1,Hc/2,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	243		9	6	G1/1,G/1,Hc/2,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
2031 PM SC	244		9	7	G1/1,G/1,Hc/2,Ic/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 PM SC	245		9	4	G1/1,G/1,Hc/2,Ic/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
2031 PM SC	246		9	5	G1/1,G/1,Hc/2,Ic/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1

2031 PM SC	247		9	6	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1
2031 PM SC	248		9	7	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 PM SC	249		9	8	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 PM SC	250		9	9	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1, F/1,Gx/1,Gx1/1
2031 PM SC	251		9	8	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 PM SC	252		9	7	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 PM SC	253		9	3	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	254		9	4	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1
2031 PM SC	255		9	5	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	256		9	6	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
2031 PM SC	257		9	7	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 PM SC	258		9	4	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
2031 PM SC	259		9	5	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	260		9	6	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1
2031 PM SC	261		9	7	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 PM SC	262		9	8	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031	263		9	9	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,

PM SC					F/1,Gx/1,Gx1/1
2031 PM SC	264		9	8	G1/1,G/2,Hc/3,Ic/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 PM SC	265		9	7	G1/1,G/2,Hc/3,Ic/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 PM SC	266		9	9	G1/1,G/2,Hc/3,Ic/2,Fc/1,Gx/1,Gx1/1
2031 PM SC	267		9	9	G1/1,G/2,Hc/3,Ic/3,Fc/2,Gx/2,Gx1/1
2031 PM SC	268		1	2	H1/1,H/1,Ix/1,Ix1/1
2031 PM SC	269		1	3	H1/1,H/1,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	270		1	4	H1/1,H/1,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1
2031 PM SC	271		1	5	H1/1,H/1,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	272		1	6	H1/1,H/1,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
2031 PM SC	273		1	7	H1/1,H/1,Ic/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 PM SC	274		1	4	H1/1,H/1,Ic/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
2031 PM SC	275		1	5	H1/1,H/1,Ic/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	276		1	6	H1/1,H/1,Ic/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1
2031 PM SC	277		1	7	H1/1,H/1,Ic/1,Fx/1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 PM SC	278		1	8	H1/1,H/1,Ic/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 PM	279		1	9	H1/1,H/1,Ic/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1

SC					
2031 PM SC	280		1	1	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	281		1	1	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	282		1	8	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 PM SC	283		1	7	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 PM SC	284		1	3	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	285		1	4	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx3/1
2031 PM SC	286		1	5	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	287		1	6	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,1/1,Cx 2/2,Cx5/1
2031 PM SC	288		1	7	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 PM SC	289		1	4	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx3/1
2031 PM SC	290		1	5	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/1,Cx4/1,Cx4-2/1
2031 PM SC	291		1	6	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,1/1,Cx 2/2,Cx5/1
2031 PM SC	292		1	7	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 PM SC	293		1	8	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 PM SC	294		1	9	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	295		1	1	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1

2031 PM SC	296		1	1	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	297		1	8	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 PM SC	298		1	7	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 PM SC	299		1	9	H1/1,H/2,lc/2,Fc/1,Gx/1,Gx1/1
2031 PM SC	300		1	9	H1/2,H/3,lc/3,Fc/2,Gx/2,Gx1/1
2031 PM SC	301		1	1	H1/2,H/3,lc/3,Fc/2,Gc/1,Hx/1
2031 PM SC	302		1	1	H1/2,H/3,lc/3,Fc/3,Gc/2,Hx/2
2031 PM SC	303		5	6	C4/1,Cx5/1
2031 PM SC	304		5	4	C4/1,Cx3/1
2031 PM SC	305		5	8	C4/1,C2/1,C/1,Dc/1,Ex/1
2031 PM SC	306		5	7	C4/1,C2/1,C/1,Dx/1,Dx1/1
2031 PM SC	307		5	9	C4/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	308		5	1	C4/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	309		5	1	C4/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	310		5	2	C4/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	311		5	2	C4/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031	312		5	3	C4/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/

PM SC					1,Bx/1
2031 PM SC	313		5	3	C4/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	314		5	8	C4/1,C2/1,C/2,Dc/2,Ex/2
2031 PM SC	315		5	9	C4/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	316		5	1	C4/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	317		5	1	C4/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	318		5	2	C4/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	319		5	2	C4/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 PM SC	320		5	3	C4/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	321		5	3	C4/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	322		5	9	C4/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	323		5	1	C4/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	324		5	1	C4/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	325		5	2	C4/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	326		5	2	C4/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 PM SC	327		5	3	C4/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM	328		5	3	C4/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1

SC					
2031 PM SC	329		5	3	C4/1,C2/1,C/2,Dc/3,Ec/3,Ac/1,Bc/1,Bx/1
2031 PM SC	330		6	4	C5/1,Cx3/1
2031 PM SC	331		6	5	C5/1,Cx4/1,Cx4-2/1
2031 PM SC	332		6	8	C5/1,C2/1,C/1,Dc/1,Ex/1
2031 PM SC	333		6	7	C5/1,C2/1,C/1,Dx/1,Dx1/1
2031 PM SC	334		6	9	C5/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	335		6	1	C5/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	336		6	1	C5/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	337		6	2	C5/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,Ix/1,Ix1/1
2031 PM SC	338		6	2	C5/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,Ix/2,Ix1/1
2031 PM SC	339		6	3	C5/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	340		6	3	C5/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,Ic/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	341		6	8	C5/1,C2/1,C/2,Dc/2,Ex/2
2031 PM SC	342		6	9	C5/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	343		6	1	C5/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	344		6	1	C5/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2



2031 PM SC	345		6	2	C5/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,Ix/1,Ix1/1
2031 PM SC	346		6	2	C5/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ix/2,Ix1/1
2031 PM SC	347		6	3	C5/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	348		6	3	C5/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,Ic/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	349		6	9	C5/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	350		6	1	C5/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	351		6	1	C5/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	352		6	2	C5/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,Ix/1,Ix1/1
2031 PM SC	353		6	2	C5/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ix/2,Ix1/1
2031 PM SC	354		6	3	C5/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	355		6	3	C5/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,Ic/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	356		6	3	C5/1,C2/1,C/2,Dc/3,Ec/3,Ac/1,Bc/1,Bx/1

### Normal Path Flows

OD Matrix	Path	Permitted Flow Type	Allocation Type
2031 PM SC	1	✓	Normal
2031 PM SC	2	✓	Normal
2031 PM SC	3	✓	Normal
2031 PM SC	4	✓	Normal
2031 PM SC	5	✓	Normal
2031 PM SC	6	✓	Normal

2031 PM SC	7	✓	Normal
2031 PM SC	8	✓	Disabled
2031 PM SC	9	✓	Disabled
2031 PM SC	10	✓	Disabled
2031 PM SC	11	✓	Normal
2031 PM SC	12	✓	Disabled
2031 PM SC	13	✓	Disabled
2031 PM SC	14	✓	Disabled
2031 PM SC	15	✓	Normal
2031 PM SC	16	✓	Normal
2031 PM SC	17	✓	Normal
2031 PM SC	18	✓	Disabled
2031 PM SC	19	✓	Disabled
2031 PM SC	20	✓	Disabled
2031 PM SC	21	✓	Disabled
2031 PM SC	22	✓	Disabled
2031 PM SC	23	✓	Disabled
2031 PM SC	24	✓	Normal
2031 PM SC	25	✓	Normal
2031 PM SC	26	✓	Normal
2031 PM SC	27	✓	Normal
2031 PM SC	28	✓	Normal
2031 PM SC	29	✓	Normal
2031 PM SC	30	✓	Normal
2031 PM SC	31	✓	Normal
2031 PM SC	32	✓	Disabled
2031 PM SC	33	✓	Normal
2031 PM SC	34	✓	Disabled
2031 PM SC	35	✓	Disabled
2031 PM SC	36	✓	Normal

2031 PM SC	37	✓	Normal
2031 PM SC	38	✓	Disabled
2031 PM SC	39	✓	Disabled
2031 PM SC	40	✓	Normal
2031 PM SC	41	✓	Normal
2031 PM SC	42	✓	Disabled
2031 PM SC	43	✓	Disabled
2031 PM SC	44	✓	Disabled
2031 PM SC	45	✓	Disabled
2031 PM SC	46	✓	Normal
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2031 PM SC	48	✓	Disabled
2031 PM SC	49	✓	Disabled
2031 PM SC	50	✓	Normal
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2031 PM SC	55	✓	Normal
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2031 PM SC	62	✓	Normal
2031 PM SC	63	✓	Disabled
2031 PM SC	64	✓	Disabled
2031 PM SC	65	✓	Normal
2031 PM SC	66	✓	Normal

2031 PM SC	67	✓	Disabled
2031 PM SC	68	✓	Normal
2031 PM SC	69	✓	Disabled
2031 PM SC	70	✓	Disabled
2031 PM SC	71	✓	Normal
2031 PM SC	72	✓	Normal
2031 PM SC	73	✓	Disabled
2031 PM SC	74	✓	Disabled
2031 PM SC	75	✓	Normal
2031 PM SC	76	✓	Normal
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2031 PM SC	79	✓	Normal
2031 PM SC	80	✓	Normal
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2031 PM SC	90	✓	Disabled
2031 PM SC	91	✓	Normal
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2031 PM SC	93	✓	Disabled
2031 PM SC	94	✓	Disabled
2031 PM SC	95	✓	Normal
2031 PM SC	96	✓	Disabled

2031 PM SC	97	✓	Disabled
2031 PM SC	98	✓	Disabled
2031 PM SC	99	✓	Normal
2031 PM SC	100	✓	Normal
2031 PM SC	101	✓	Disabled
2031 PM SC	102	✓	Disabled
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2031 PM SC	109	✓	Disabled
2031 PM SC	110	✓	Disabled
2031 PM SC	111	✓	Normal
2031 PM SC	112	✓	Normal
2031 PM SC	113	✓	Disabled
2031 PM SC	114	✓	Normal
2031 PM SC	115	✓	Normal
2031 PM SC	116	✓	Normal
2031 PM SC	117	✓	Normal
2031 PM SC	118	✓	Normal
2031 PM SC	119	✓	Disabled
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2031 PM SC	121	✓	Disabled
2031 PM SC	122	✓	Disabled
2031 PM SC	123	✓	Disabled
2031 PM SC	124	✓	Normal
2031 PM SC	125	✓	Disabled
2031 PM SC	126	✓	Disabled

2031 PM SC	127	✓	Disabled
2031 PM SC	128	✓	Normal
2031 PM SC	129	✓	Normal
2031 PM SC	130	✓	Disabled
2031 PM SC	131	✓	Disabled
2031 PM SC	132	✓	Normal
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2031 PM SC	138	✓	Disabled
2031 PM SC	139	✓	Disabled
2031 PM SC	140	✓	Normal
2031 PM SC	141	✓	Normal
2031 PM SC	142	✓	Disabled
2031 PM SC	143	✓	Normal
2031 PM SC	144	✓	Normal
2031 PM SC	145	✓	Disabled
2031 PM SC	146	✓	Normal
2031 PM SC	147	✓	Normal
2031 PM SC	148	✓	Normal
2031 PM SC	149	✓	Normal
2031 PM SC	150	✓	Normal
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2031 PM SC	153	✓	Disabled
2031 PM SC	154	✓	Normal
2031 PM SC	155	✓	Normal
2031 PM SC	156	✓	Normal

2031 PM SC	157	✓	Normal
2031 PM SC	158	✓	Normal
2031 PM SC	159	✓	Normal
2031 PM SC	160	✓	Normal
2031 PM SC	161	✓	Normal
2031 PM SC	162	✓	Normal
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2031 PM SC	165	✓	Normal
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2031 PM SC	178	✓	Normal
2031 PM SC	179	✓	Normal
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2031 PM SC	181	✓	Normal
2031 PM SC	182	✓	Normal
2031 PM SC	183	✓	Normal
2031 PM SC	184	✓	Normal
2031 PM SC	185	✓	Normal
2031 PM SC	186	✓	Normal

2031 PM SC	187	✓	Normal
2031 PM SC	188	✓	Normal
2031 PM SC	189	✓	Normal
2031 PM SC	190	✓	Normal
2031 PM SC	191	✓	Normal
2031 PM SC	192	✓	Normal
2031 PM SC	193	✓	Normal
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2031 PM SC	211	✓	Normal
2031 PM SC	212	✓	Normal
2031 PM SC	213	✓	Normal
2031 PM SC	214	✓	Normal
2031 PM SC	215	✓	Normal
2031 PM SC	216	✓	Normal



2031 PM SC	217	✓	Normal
2031 PM SC	218	✓	Normal
2031 PM SC	219	✓	Normal
2031 PM SC	220	✓	Normal
2031 PM SC	221	✓	Normal
2031 PM SC	222	✓	Normal
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2031 PM SC	241	✓	Normal
2031 PM SC	242	✓	Normal
2031 PM SC	243	✓	Normal
2031 PM SC	244	✓	Normal
2031 PM SC	245	✓	Normal
2031 PM SC	246	✓	Normal

2031 PM SC	247	✓	Normal
2031 PM SC	248	✓	Normal
2031 PM SC	249	✓	Normal
2031 PM SC	250	✓	Normal
2031 PM SC	251	✓	Normal
2031 PM SC	252	✓	Normal
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2031 PM SC	254	✓	Normal
2031 PM SC	255	✓	Normal
2031 PM SC	256	✓	Normal
2031 PM SC	257	✓	Normal
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2031 PM SC	267	✓	Normal
2031 PM SC	268	✓	Normal
2031 PM SC	269	✓	Normal
2031 PM SC	270	✓	Normal
2031 PM SC	271	✓	Normal
2031 PM SC	272	✓	Normal
2031 PM SC	273	✓	Normal
2031 PM SC	274	✓	Normal
2031 PM SC	275	✓	Normal
2031 PM SC	276	✓	Normal

2031 PM SC	277	✓	Normal
2031 PM SC	278	✓	Normal
2031 PM SC	279	✓	Normal
2031 PM SC	280	✓	Normal
2031 PM SC	281	✓	Normal
2031 PM SC	282	✓	Normal
2031 PM SC	283	✓	Normal
2031 PM SC	284	✓	Normal
2031 PM SC	285	✓	Normal
2031 PM SC	286	✓	Normal
2031 PM SC	287	✓	Normal
2031 PM SC	288	✓	Normal
2031 PM SC	289	✓	Normal
2031 PM SC	290	✓	Normal
2031 PM SC	291	✓	Normal
2031 PM SC	292	✓	Normal
2031 PM SC	293	✓	Normal
2031 PM SC	294	✓	Normal
2031 PM SC	295	✓	Normal
2031 PM SC	296	✓	Normal
2031 PM SC	297	✓	Normal
2031 PM SC	298	✓	Normal
2031 PM SC	299	✓	Normal
2031 PM SC	300	✓	Normal
2031 PM SC	301	✓	Normal
2031 PM SC	302	✓	Normal
2031 PM SC	303	✓	Normal
2031 PM SC	304	✓	Normal
2031 PM SC	305	✓	Normal
2031 PM SC	306	✓	Normal

2031 PM SC	307	✓	Normal
2031 PM SC	308	✓	Normal
2031 PM SC	309	✓	Normal
2031 PM SC	310	✓	Normal
2031 PM SC	311	✓	Normal
2031 PM SC	312	✓	Disabled
2031 PM SC	313	✓	Disabled
2031 PM SC	314	✓	Normal
2031 PM SC	315	✓	Normal
2031 PM SC	316	✓	Normal
2031 PM SC	317	✓	Normal
2031 PM SC	318	✓	Normal
2031 PM SC	319	✓	Normal
2031 PM SC	320	✓	Disabled
2031 PM SC	321	✓	Disabled
2031 PM SC	322	✓	Normal
2031 PM SC	323	✓	Normal
2031 PM SC	324	✓	Normal
2031 PM SC	325	✓	Normal
2031 PM SC	326	✓	Normal
2031 PM SC	327	✓	Disabled
2031 PM SC	328	✓	Disabled
2031 PM SC	329	✓	Normal
2031 PM SC	330	✓	Normal
2031 PM SC	331	✓	Normal
2031 PM SC	332	✓	Normal
2031 PM SC	333	✓	Normal
2031 PM SC	334	✓	Normal
2031 PM SC	335	✓	Normal
2031 PM SC	336	✓	Normal

2031 PM SC	337	✓	Normal
2031 PM SC	338	✓	Normal
2031 PM SC	339	✓	Normal
2031 PM SC	340	✓	Normal
2031 PM SC	341	✓	Normal
2031 PM SC	342	✓	Normal
2031 PM SC	343	✓	Normal
2031 PM SC	344	✓	Normal
2031 PM SC	345	✓	Normal
2031 PM SC	346	✓	Normal
2031 PM SC	347	✓	Normal
2031 PM SC	348	✓	Normal
2031 PM SC	349	✓	Normal
2031 PM SC	350	✓	Normal
2031 PM SC	351	✓	Normal
2031 PM SC	352	✓	Normal
2031 PM SC	353	✓	Normal
2031 PM SC	354	✓	Normal
2031 PM SC	355	✓	Normal
2031 PM SC	356	✓	Normal

## Signal Timings

Network Default: 88s cycle time; 88 steps

### Controller Stream 1

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
1	(untitled)		1	NetworkDefault	88

### Controller Stream 1 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
1	Unspecified						Absolute

## Controller Stream 1 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
1	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
1	A	(untitled)	7	300	0	0	Not Specified
1	B	(untitled)	7	300	0	0	Not Specified
1	C	(untitled)	7	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	A	1
1	2	B,C	1

## Losing/ Gaining delays at each Controller Stream

Controller Stream	Delay	Type	Phase	From Stage	To Stage	Relative Delay	Absolute Delay
1	1	Losing	B	2	1	9	
1	2	Gaining	A	2	1	0	2
1	3	Losing	A	1	2	2	

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
1	1	(untitled)	Single	1,2	64,20

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	1	A	34	64	30	1	5
1	2	✓	2	B,C	71	20	37	1	7

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	34	66	32

1	B	1	✓	71	29	46
1	C	1	✓	71	20	37

**Intergreen Matrix for Controller Stream 1**

		To		
		A	B	C
From	A		5	5
	B	5		
	C	14		

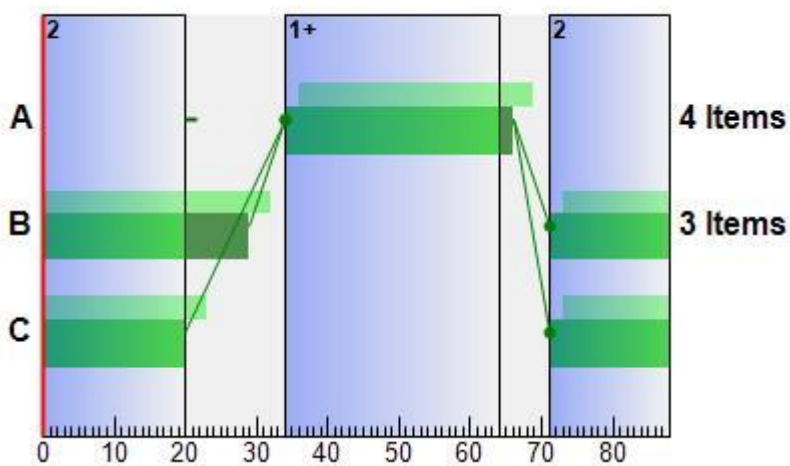
**Interstage Matrix for Controller Stream 1**

		To	
		1	2
From	1	0	7
	2	14	0

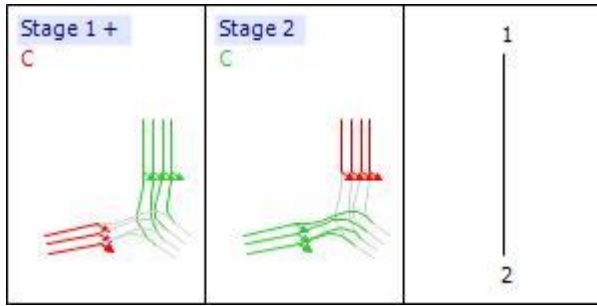
**Banned Stage transitions for Controller Stream 1**

		To	
		1	2
From	1		
	2		

**Phase Timings Diagram for Controller Stream 1**



**Stage Sequence Diagram for Controller Stream 1**



## Controller Stream 2

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
2	(untitled)		1	NetworkDefault	88

## Controller Stream 2 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
2	Unspecified						Absolute

## Controller Stream 2 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
2	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
2	A	(untitled)	7	300	0	0	Not Specified
2	B	(untitled)	7	300	0	0	Not Specified
2	C	(untitled)	5	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
2	1	A	1
2	2	B,C	1

## Losing/ Gaining delays at each Controller Stream

Controller Stream	Delay	Type	Phase	From Stage	To Stage	Relative Delay
2	1	Losing	B	2	1	5



## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
2	1	(untitled)	Single	1,2	11,50

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
2	1	✓	1	A	60	11	39	1	7
2	2	✓	2	B,C	16	50	34	1	5

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
2	A	1	✓	60	11	39
2	B	1	✓	16	55	39
2	C	1	✓	16	50	34

## Intergreen Matrix for Controller Stream 2

		To		
		A	B	C
From	A		5	5
	B	5		
	C	10		

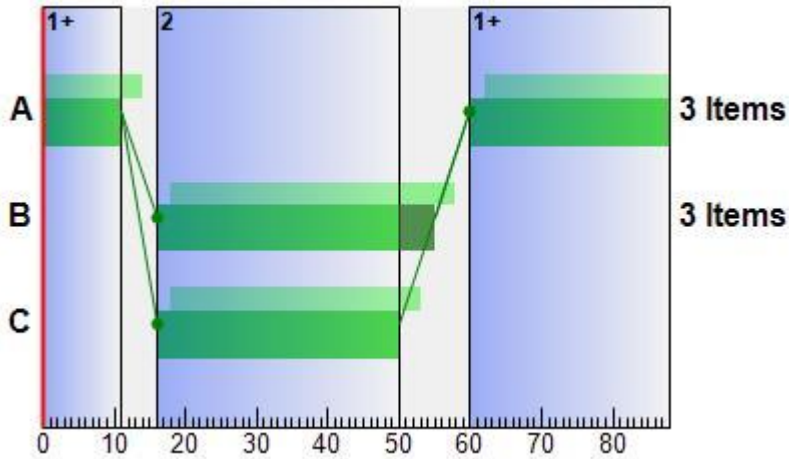
## Interstage Matrix for Controller Stream 2

		To	
		1	2
From	1	0	5
	2	10	0

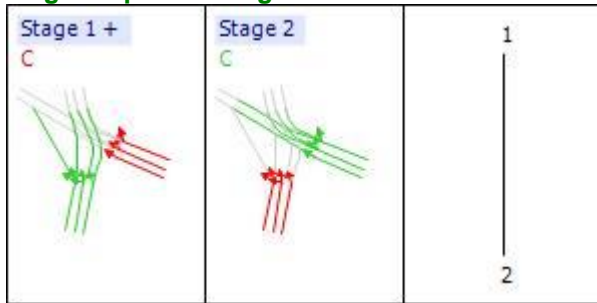
## Banned Stage transitions for Controller Stream 2

		To	
		1	2
From	1		
	2		

## Phase Timings Diagram for Controller Stream 2



### Stage Sequence Diagram for Controller Stream 2



### Controller Stream 3

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
3	(untitled)		1	NetworkDefault	88

### Controller Stream 3 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
3	Unspecified						Absolute

### Controller Stream 3 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
3	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
3	A	(untitled)	7	300	0	0	Not Specified
3	B	(untitled)	7	300	0	0	Not Specified

3	C	(untitled)	5	300	0	0	Not Specified
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### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
3	1	A	1
3	2	B,C	1

### Losing/ Gaining delays at each Controller Stream

Controller Stream	Delay	Type	Phase	From Stage	To Stage	Relative Delay	Absolute Delay
3	1	Losing	B	2	1	9	
3	2	Gaining	A	2	1	0	10

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
3	1	(untitled)	Single	1,2	34,81

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
3	1	✓	1	A	7	34	27	1	7
3	2	✓	2	B,C	39	81	42	1	5

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
3	A	1	✓	7	34	27
3	B	1	✓	39	2	51
3	C	1	✓	39	81	42

### Intergreen Matrix for Controller Stream 3

		To		
		A	B	C
From	A		5	5
	B	5		
	C	14		

### Interstage Matrix for Controller Stream 3



4	Unspecified						Absolute
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### Controller Stream 4 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
4	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
4	A	(untitled)	7	300	0	0	Not Specified
4	B	(untitled)	7	300	0	0	Not Specified
4	C	(untitled)	7	300	0	0	Not Specified
4	D	(untitled)	7	300	0	0	Not Specified
4	E	(untitled)	5	300	0	0	Not Specified

### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
4	1	A,B,D	1
4	2	A,B,E	1
4	3	C,E	1

### Losing/ Gaining delays at each Controller Stream

Controller Stream	Delay	Type	Phase	From Stage	To Stage	Relative Delay
4	1	Losing	A	3	1	3
4	2	Losing	B	3	1	3

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
4	1	(untitled)	Single	1,3	10,32
4	2	(untitled)	Single	1,3,2	0,31,54
4	3	(untitled)	Single	1,2,3	0,23,55

### Resultant Stages

Controller	Stage	Is Base	Library	Phases In	Stage	Stage	Stage	User Stage	Stage
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Stream		Stage	Stage ID	This Stage	Start (s)	End (s)	Duration (s)	Minimum (s)	Minimum (s)
4	1	✓	1	A,B,D	41	10	57	1	7
4	2	✓	3	C,E	18	32	14	1	7

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
4	A	1	✓	38	10	60
4	B	1	✓	38	10	60
4	C	1	✓	18	32	14
4	D	1	✓	41	10	57
4	E	1	✓	15	32	17

### Intergreen Matrix for Controller Stream 4

		To				
		A	B	C	D	E
From	A			8		
	B			7		
	C	6	6		5	
	D			8		5
	E				9	

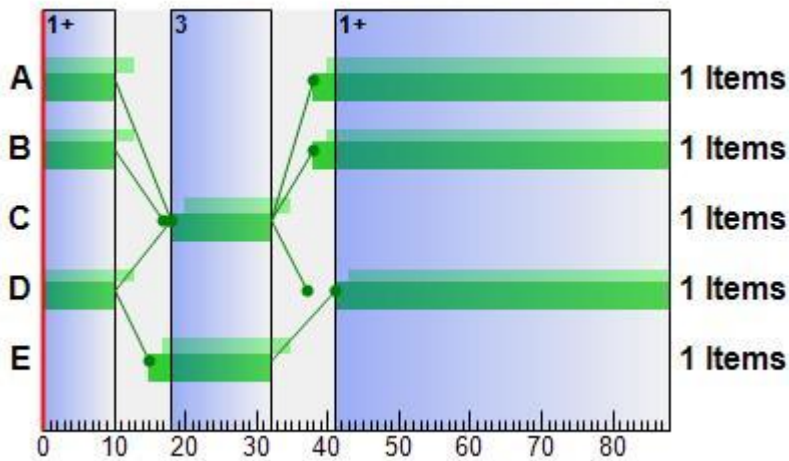
### Interstage Matrix for Controller Stream 4

		To		
		1	2	3
From	1	0	5	8
	2	9	0	8
	3	9	6	0

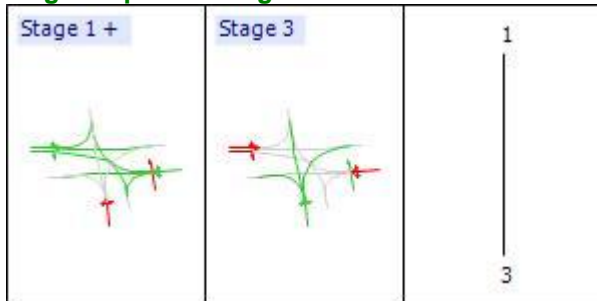
### Banned Stage transitions for Controller Stream 4

		To		
		1	2	3
From	1			
	2			
	3			

### Phase Timings Diagram for Controller Stream 4



### Stage Sequence Diagram for Controller Stream 4



### Controller Stream 5

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
5	(untitled)		1	NetworkDefault	88

### Controller Stream 5 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
5	Unspecified						Absolute

### Controller Stream 5 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
5	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
5	A	(untitled)	7	300	0	0	Not Specified
5	B	(untitled)	5	300	0	0	Not

							Specified
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## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
5	1	A	1
5	2	B	1

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
5	1	(untitled)	Single	1,2	1,11

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
5	1	✓	1	A	22	1	67	1	7
5	2	✓	2	B	6	11	5	1	5

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
5	A	1	✓	22	1	67
5	B	1	✓	6	11	5

## Intergreen Matrix for Controller Stream 5

		To	
		A	B
From	A		5
	B	11	

## Interstage Matrix for Controller Stream 5

		To	
		1	2
From	1	0	5
	2	11	0

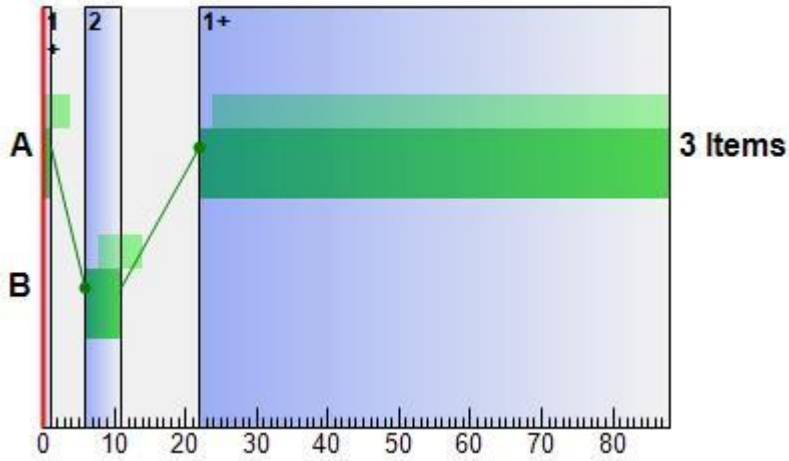
## Banned Stage transitions for Controller Stream 5

		To	
		1	2
From			

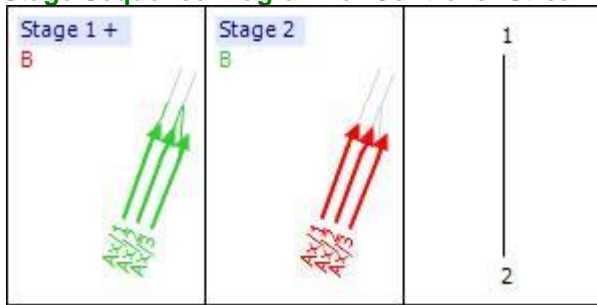


	1		
	2		

### Phase Timings Diagram for Controller Stream 5



### Stage Sequence Diagram for Controller Stream 5



### Controller Stream 6

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
6	(untitled)		1	NetworkDefault	88

### Controller Stream 6 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
6	Unspecified						Absolute

### Controller Stream 6 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
6	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
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6	A	(untitled)	7	300	0	0	Not Specified
6	B	(untitled)	5	300	0	0	Not Specified

### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
6	1	A	1
6	2	B	1

### Losing/ Gaining delays at each Controller Stream

Controller Stream	Delay	Type	Phase	From Stage	To Stage	Relative Delay	Absolute Delay
6	1	Gaining	A	2	1	0	8

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
6	1	(untitled)	Single	1,2	21,31

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
6	1	✓	1	A	39	21	70	1	7
6	2	✓	2	B	26	31	5	1	5

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
6	A	1	✓	39	21	70
6	B	1	✓	26	31	5

### Intergreen Matrix for Controller Stream 6

		To	
		A	B
From	A		5
	B	8	

### Interstage Matrix for Controller Stream 6

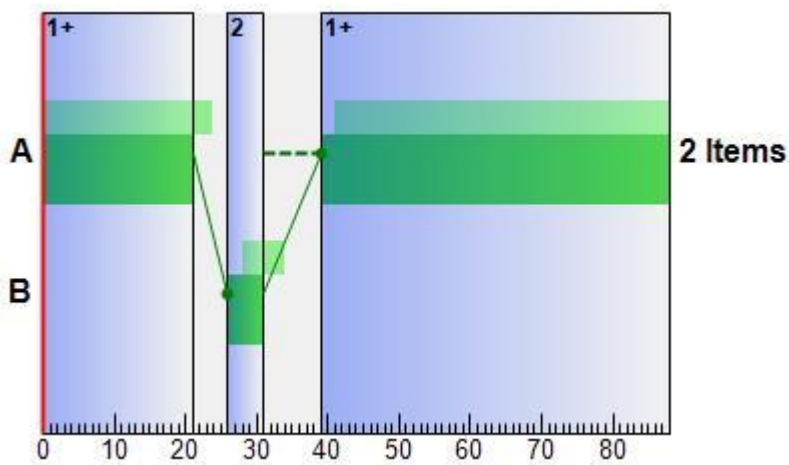
		To	
From		1	2

	1	0	5
	2	8	0

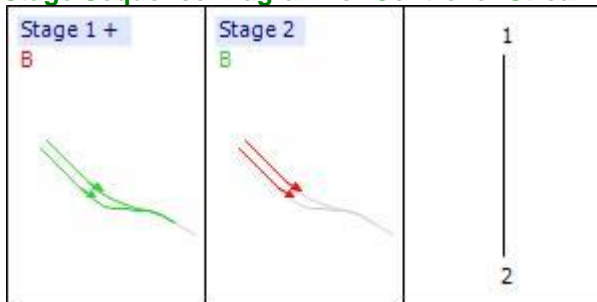
### Banned Stage transitions for Controller Stream 6

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 6



### Stage Sequence Diagram for Controller Stream 6



### Controller Stream 7

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
7	(untitled)		1	NetworkDefault	88

### Controller Stream 7 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
7	Unspecified						Absolute

### Controller Stream 7 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
7	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
7	A	(untitled)	7	300	0	0	Not Specified
7	B	(untitled)	5	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
7	1	A	1
7	2	B	1

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
7	1	(untitled)	Single	1,2	22,32

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
7	1	✓	1	A	42	22	68	1	7
7	2	✓	2	B	27	32	5	1	5

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
7	A	1	✓	42	22	68
7	B	1	✓	27	32	5

## Intergreen Matrix for Controller Stream 7

		To	
		A	B
From	A		5
	B	10	

## Interstage Matrix for Controller Stream 7



8	Unspecified						Absolute
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### Controller Stream 8 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
8	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
8	A	(untitled)	7	300	0	0	Not Specified
8	B	(untitled)	7	300	0	0	Not Specified

### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
8	1	A	1
8	2	B	1

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
8	1	(untitled)	Single	1,2	85,13

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
8	1	✓	1	A	18	85	67	1	7
8	2	✓	2	B	2	13	11	1	7

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
8	A	1	✓	18	85	67
8	B	1	✓	2	13	11

### Intergreen Matrix for Controller Stream 8

		To	
		A	B
From	A		5
	B		

	B	5	
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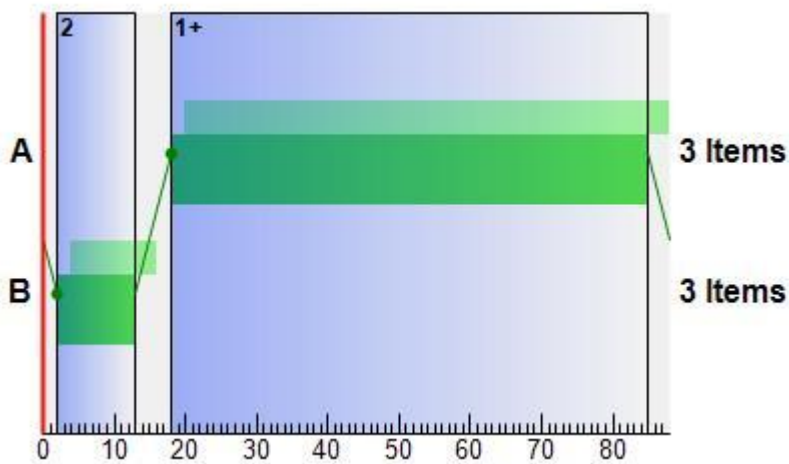
### Interstage Matrix for Controller Stream 8

		To	
		1	2
From	1	0	5
	2	5	0

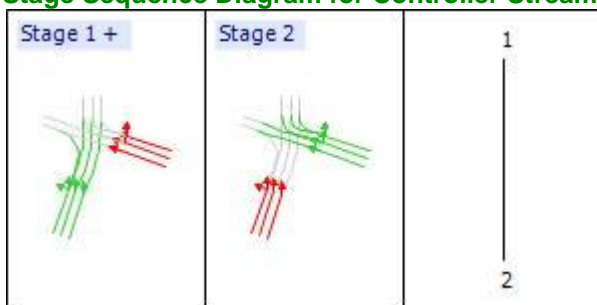
### Banned Stage transitions for Controller Stream 8

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 8



### Stage Sequence Diagram for Controller Stream 8



### Controller Stream 9

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
9	(untitled)		1	NetworkDefault	88

## Controller Stream 9 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
9	Unspecified						Absolute

## Controller Stream 9 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
9	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
9	A	(untitled)	7	300	0	0	Not Specified
9	B	(untitled)	7	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
9	1	A	1
9	2	B	1

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
9	1	(untitled)	Single	1,2	16,0

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
9	1	✓	1	A	5	16	11	1	7
9	2	✓	2	B	21	0	67	1	7

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
9	A	1	✓	5	16	11
9	B	1	✓	21	0	67

## Intergreen Matrix for Controller Stream 9



		To	
		A	B
From	A		5
	B	5	

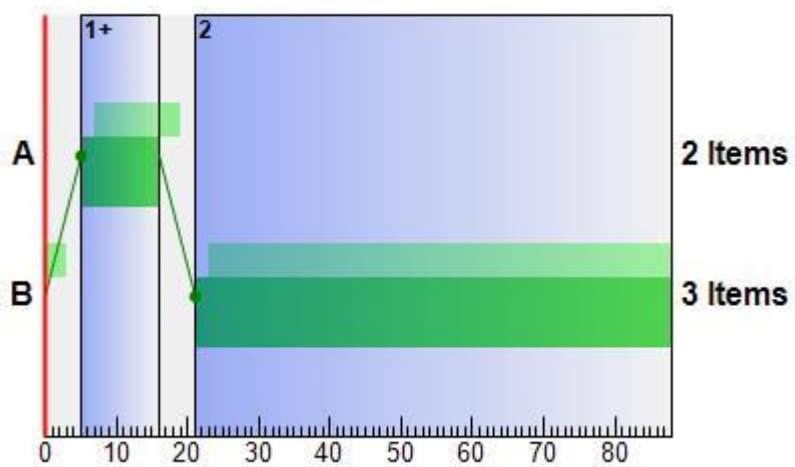
### Interstage Matrix for Controller Stream 9

		To	
		1	2
From	1	0	5
	2	5	0

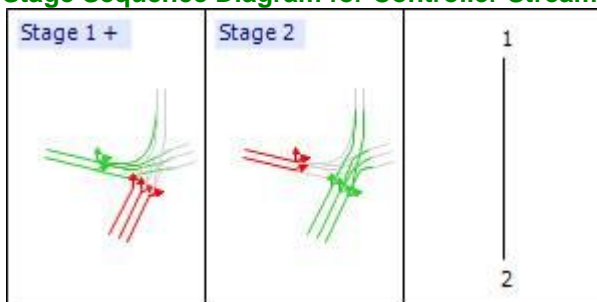
### Banned Stage transitions for Controller Stream 9

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 9



### Stage Sequence Diagram for Controller Stream 9



### Controller Stream 10

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
10	(untitled)		1	NetworkDefault	88

### Controller Stream 10 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
10	Unspecified						Absolute

### Controller Stream 10 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
10	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
10	A	(untitled)	7	300	0	0	Not Specified
10	B	(untitled)	7	300	0	0	Not Specified

### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
10	1	A	1
10	2	B	1

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
10	1	(untitled)	Single	1,2	1,24

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
10	1	✓	1	A	29	1	60	1	7
10	2	✓	2	B	6	24	18	1	7

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
10	A	1	✓	29	1	60

10	B	1	✓	6	24	18
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**Intergreen Matrix for Controller Stream 10**

		To	
		A	B
From	A		5
	B	5	

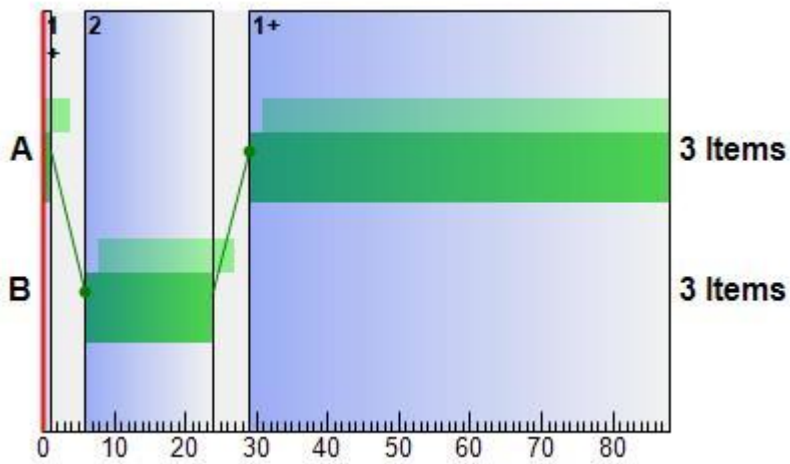
**Interstage Matrix for Controller Stream 10**

		To	
		1	2
From	1	0	5
	2	5	0

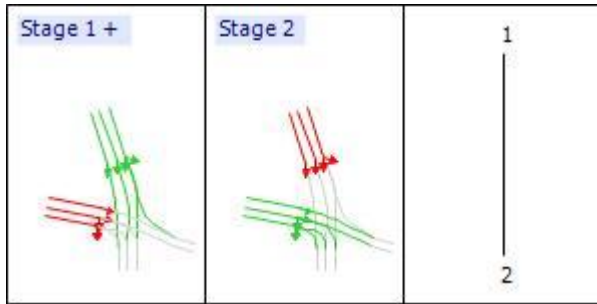
**Banned Stage transitions for Controller Stream 10**

		To	
		1	2
From	1		
	2		

**Phase Timings Diagram for Controller Stream 10**



**Stage Sequence Diagram for Controller Stream 10**



## Controller Stream 11

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
11	(untitled)		1	NetworkDefault	88

## Controller Stream 11 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
11	Unspecified						Absolute

## Controller Stream 11 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
11	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
11	A	(untitled)	7	300	0	0	Not Specified
11	B	(untitled)	7	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
11	1	A	1
11	2	B	1

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
11	1	(untitled)	Single	1,2	86,58

## Resultant Stages

Controller	Stage	Is Base	Library	Phases In	Stage	Stage	Stage	User Stage	Stage
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Stream		Stage	Stage ID	This Stage	Start (s)	End (s)	Duration (s)	Minimum (s)	Minimum (s)
11	1	✓	1	A	63	86	23	1	7
11	2	✓	2	B	3	58	55	1	7

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
11	A	1	✓	63	86	23
11	B	1	✓	3	58	55

### Intergreen Matrix for Controller Stream 11

		To	
		A	B
From	A		5
	B	5	

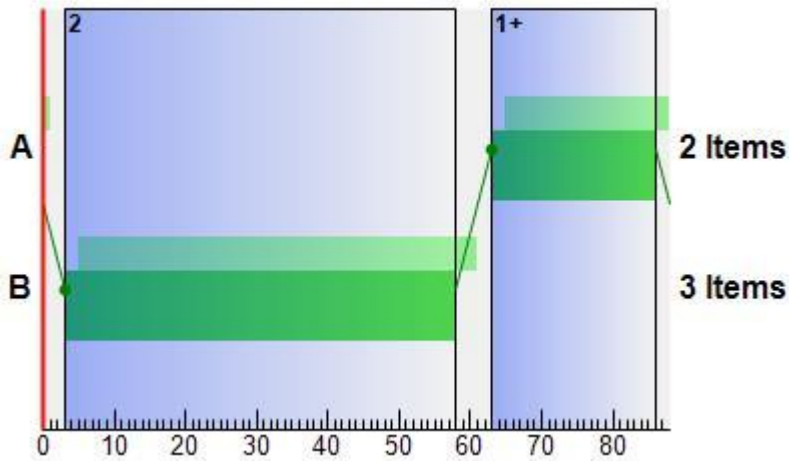
### Interstage Matrix for Controller Stream 11

		To	
		1	2
From	1	0	5
	2	5	0

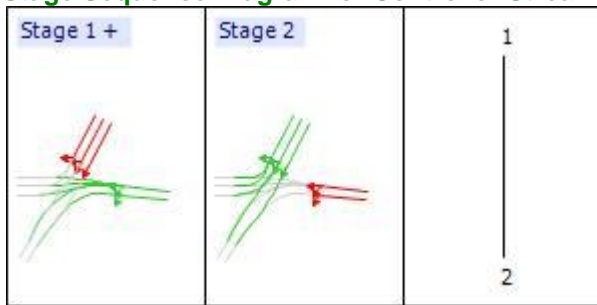
### Banned Stage transitions for Controller Stream 11

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 11



### Stage Sequence Diagram for Controller Stream 11



### Controller Stream 12

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
12	(untitled)		1	NetworkDefault	88

### Controller Stream 12 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
12	Unspecified						Absolute

### Controller Stream 12 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
12	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
12	A	(untitled)	7	300	0	0	Not Specified
12	B	(untitled)	5	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
12	1	A	1
12	2	B	1

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
12	1	(untitled)	Single	1,2	4,14

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
12	1	✓	1	A	19	4	73	1	7
12	2	✓	2	B	9	14	5	1	5

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
12	A	1	✓	19	4	73
12	B	1	✓	9	14	5

## Intergreen Matrix for Controller Stream 12

		To	
		A	B
From	A		5
	B	5	

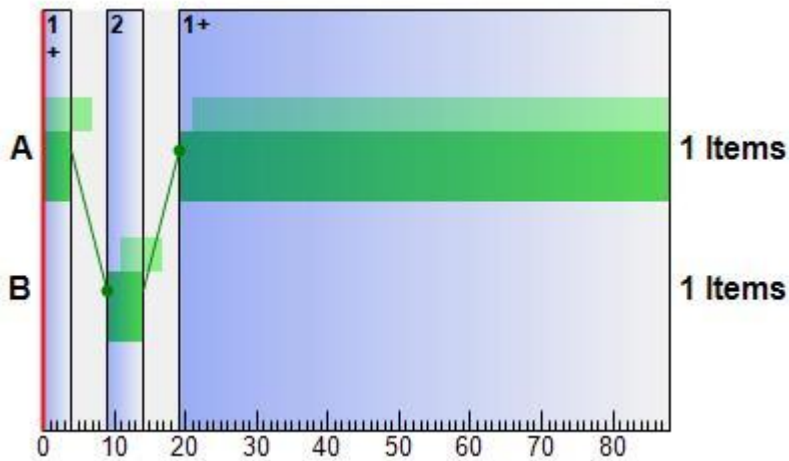
## Interstage Matrix for Controller Stream 12

		To	
		1	2
From	1	0	5
	2	5	0

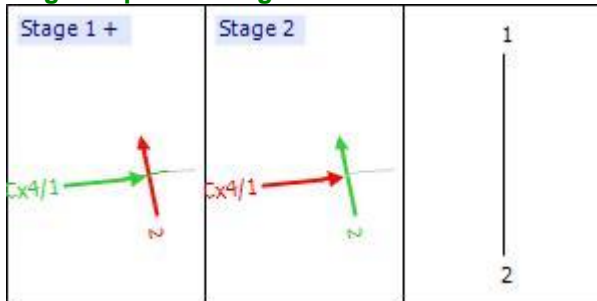
## Banned Stage transitions for Controller Stream 12

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 12



### Stage Sequence Diagram for Controller Stream 12



## Final Prediction Table

### Link Results

			SIGNALS	FLOWS	PERFORMANCE						PER PCU			QUEUES		WEIGHTS		PENALTIES	P. I.
Link	Name	Traffic Node	Controller Stream	Phase	Calculate d Flow Entering (PCU /hr)	Calculate d Sat Flow (PCU /hr)	Actual Green (s (per cycle))	Waste d Time Total (s (per cycle))	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Journey Time Per PCU (s)	Mean Delay Per PCU (s)	Mean Stops Per PCU (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Delay Weighting (%)	Stop Weighting (%)	Cost Of Penalties (£ per hr)	P. I.
1 P	(untitled)	23	4	E	0	0	0	0.00	0	0	30.61	29.61	0.00	9.76	9.76	100	100	0.00	0.00
2 P	(untitled)	25	12	B	0 <	0	0	0.00	0	0	48.36	47.36	0.00	12.38+	12.38	100	100	0.00	0.00



## Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUE S		WEIGHTS		PENALTI ES	P.I .
Arm	Traffic Stream	Name	Traffic No de	Cont roller Stream	Pha se	Calcu late d Flow Entering (PCU /hr)	Calcu late d Sat Flow (PCU /hr)	Actua l Green (s (per cycle))	Waste d Time Total (s (per cycle))	Degr ee Of Satu ratio n (%)	Prac tical Reserve Capacity (%)	Jour ney Time Per PCU (s)	Me an Delay Per PCU (s)	Me an Stop s Per PCU (%)	Me an Max Queue (PCU )	Ma x End Of Red Queue (PCU )	De la y Wei ghting Multi plier (%)	Stop Wei ghting Multi plier (%)	Cost Of Penal ties (£ per hr)	P.I .
1	1	(unt itled )	26			1366	2083	88	21.00	66	37	27.44	1.64	1.86	1.78		100	100	0.00	9.67
A	1	(unt itled )	1	1	A	321	2128	32	0.00	40	124	28.32	20.87	73.29	5.97	5.00	40	20	0.00	12.09
A	2	(unt itled )	1	1	A	748	2279	32	0.00	88	3	49.95	38.76	103.79	19.71	14.25	40	20	0.00	50.79
A	3	A38 North Entry	1	1	A	457	2279	32	0.00	53	68	34.48	23.30	77.80	8.99	7.26	40	20	0.00	19.11
A	4	(unt itled )	1	1	A	828 <	2279	32	0.00	97!	-7	75.27	64.09	132.58	28.53+	21.29	40	20	0.00	90.86
Ax1	1	(unt itled )	21			567	1800	88	18.00	31	186	1.96	0.47	0.80	1.12		100	100	0.00	1.19
Ax1	2	(unt itled )	21			1614 <	1800	88	0.00	90	0	18.77	17.28	97.35	43.18+		100	100	0.00	16.106
Ax2	1	A38 North Exit	17			1381	1800	88	0.00	77	17	14.46	3.28	4.50	7.26		100	100	0.00	19.87
Ax2	2	A38 North Exit	17			800	1800	88	1.00	44	102	11.98	0.80	0.00	0.18		100	100	0.00	2.53
B	1	(unt itled )	2			26	263	88	77.00	10	812	3.51	1.27	9.61	0.08		100	100	0.00	0.21
B	2	(unt itled )	2			24	119	88	54.00	20	348	25.00	23.00	71.00	0.40		100	100	0.00	2.80

		itled )						00			97	73	26	3					0	
B c 1	1	(unt itled )	2			593	1800	88	4.00	33	173	2.73	0.49	0.00	0.08		100	100	0.00	1.15
B c 1	2	(unt itled )	2			1212	1800	88	0.00	67	34	4.29	2.05	0.00	0.69		100	100	0.00	9.82
B c 1	3	(unt itled )	2			770	1800	88	11.00	43	110	2.98	0.75	0.00	0.16		100	100	0.00	2.27
B c 1	4	(unt itled )	2			1141	1800	88	54.00	63	42	3.96	1.73	0.00	0.55		100	100	0.00	7.76
C	1	(unt itled )	3	3	A	655	3163 f	27	0.00	65	38	41.45	26.54	76.88	12.80	10.69	40	0	0.00	27.44
C	2	(unt itled )	3	3	A	898	3163 f	27	4.00	89	1	53.85	38.94	98.78	23.05	17.32	40	0	0.00	55.14
C 3-1	1	(unt itled )	23			0	0	88	88.00	0	-100	0.00	0.00	0.00	0.00		100	100	0.00	0.00
C x 2	1	(unt itled )	23	4	A	1097 <	2083	60	23.00	76	18	18.06	12.99	58.83	15.99 +	10.12	100	100	0.00	77.21
C x 2	2	(unt itled )	23	4	B	269	2083	60	4.00	19	384	10.16	5.09	36.46	2.63	2.24	100	100	0.00	8.58
C x 3	1	(unt itled )				60	1800	88	72.00	3	2603	4.46	0.03	0.00	0.00		100	100	0.00	0.01
C x 4	1	(unt itled )	25	12	A	1137 <	1965	73	5.00	69	31	4.92	3.81	29.26	14.64 +	3.07	100	100	0.00	27.86
C x 4-2	1	(unt itled )				1137	1965	88	10.00	58	56	7.03	1.25	0.00	0.40		100	100	0.00	5.62
C x 5	1	(unt itled )				301	1800	88	25.00	17	438	4.87	0.20	0.38	0.54		100	100	0.00	0.28
D	1	(unt itled )	4	2	A	812	2159	39	0.00	83	9	46.28	29.50	90.92	19.06	12.75	40	0	0.00	37.79
D	2	(unt itled )	4	2	A	870	2317	39	22.00	83	9	45.62	28.85	90.18	20.27	13.50	40	0	0.00	39.59
D	3	(unt	4	2	A	874	2317	39	22.	83	8	45.	29.	90.	20.	13.	40	0	0.00	40.

		itled )						00			88	11	60	66	62				14	
<b>D</b>	<b>x</b>	A38 South Exit				807	2155	88	5.00	37	140	14.48	0.50	0.00	0.11		100	100	0.00	1.59
<b>D</b>	<b>x</b>	A38 South Exit				1542	2155	88	20.00	72	26	23.75	9.77	79.71	36.95		100	100	0.00	130.37
<b>E</b>	<b>1</b>	(untitled)	5			470<	383	88	39.00	123!	-27	381.89	366.97	310.54	54.94+		40	100	0.00	310.73
<b>E</b>	<b>2</b>	(untitled)	5			626	737	88	39.00	85	6	46.53	31.61	98.97	15.82		40	100	0.00	51.34
<b>F</b>	<b>1</b>	(untitled)	10	8	A	1381	2134	67	0.00	84	8	28.10	12.44	57.77	20.11	10.30	100	100	0.00	93.62
<b>F</b>	<b>2</b>	(untitled)	10	8	A	714	2284	67	0.00	40	122	20.03	4.37	34.55	6.78	4.43	100	100	0.00	20.32
<b>F</b>	<b>3</b>	(untitled)	10	8	A	86	2284	67	8.00	5	1744	17.93	2.27	19.37	0.46	0.46	100	100	0.00	1.31
<b>G</b>	<b>1</b>	(untitled)	11	9	A	294<	2123	11	0.00	102!	-11	156.91	151.25	194.55	16.29+	15.41	50	20	0.00	91.36
<b>G</b>	<b>2</b>	(untitled)	11	9	A	313	3174f	11	0.00	72	24	51.81	46.14	102.30	8.05	7.53	50	20	0.00	30.56
<b>H</b>	<b>1</b>	(untitled)	12	10	A	469	2134	60	0.00	32	184	13.04	5.88	36.36	4.50	3.59	100	100	0.00	16.41
<b>H</b>	<b>2</b>	(untitled)	12	10	A	501	2284	60	0.00	32	184	12.99	5.84	36.31	4.80	3.83	100	100	0.00	17.44
<b>H</b>	<b>3</b>	(untitled)	12	10	A	63	2284	60	0.00	4	2162	11.50	4.34	28.46	0.47	0.47	100	100	0.00	1.66
<b>I</b>	<b>1</b>	(untitled)	13	11	A	530<	2123	23	0.00	92!	-2	63.40	58.93	122.55	16.62+	13.53	40	0	0.00	49.28
<b>I</b>	<b>2</b>	(untitled)	13	11	A	566<	2574f	23	0.00	81	12	43.29	38.82	99.47	14.20+	11.68	40	0	0.00	34.66
<b>A</b>	<b>c</b>	(untitled)	1	1	B	353	2112	46	3.00	31	188	6.63	2.60	16.17	1.89	1.35	100	100	0.00	5.47

A c	2	(untitled)	1	1	B	464	2263	46	5.00	38	134	13.59	8.60	47.35	5.88	4.34	100	100	7.78	27.59
A c	3	(untitled)	1	1	B	626<	2263	46	14.00	52	74	30.12	26.09	80.16	12.27+	12.18	100	100	202.32	283.03
A x	1	(untitled)	8	5	A	567	1965	67	0.00	37	141	3.95	2.83	15.11	2.23	2.11	100	100	0.00	11.26
A x	2	(untitled)	8	5	A	1149<	2105	67	68.00	71	27	11.81	10.69	52.06	15.12+	10.00	100	100	211.37	294.30
A x	3	(untitled)	8	5	A	466<	2105	67	68.00	29	214	5.59	4.47	38.90	5.61+	3.08	100	100	9.13	27.81
B c	1	(untitled)	6			674	1800	88	3.00	37	140	8.12	0.67	3.78	4.14		100	100	0.00	2.60
B c	2	(untitled)	6			1212<	1800	88	1.00	67	34	11.23	3.77	42.65	17.90+		100	100	0.00	34.82
B c	3	(untitled)	6			770	1800	88	0.00	43	110	8.63	1.17	16.11	7.95		100	100	0.00	7.58
B c	4	(untitled)	6			1141<	1800	88	0.00	63	42	11.63	4.17	49.69	21.70+		100	100	0.00	37.20
B x	1	(untitled)				81	1800	88	31.00	5	1894	7.50	0.05	0.00	0.00		100	100	0.00	0.02
C 2	1	(untitled)	9			1553	1800	88	0.00	86	4	30.50	7.09	36.49	28.18		100	100	0.00	61.84
C 4	1	(untitled)	23	4	D	1380<	2063	57	0.00	101!	-11	83.43	76.97	154.88	56.70+	35.17	100	100	0.00	487.35
C 5	1	(untitled)	23	4	C	332<	1906	14	5.00	102!	-12	154.57	15.047	19.599	18.43+	17.17	100	100	0.00	217.72
C c	1	(untitled)	3	3	B	465	2059	51	7.00	38	135	5.96	1.11	1.89	0.22	0.22	100	100	0.00	2.32
C c	2	(untitled)	3	3	B	771<	2209	51	0.00	59	52	15.59	10.75	37.11	7.89+	5.86	100	100	5.77	47.75
C c	3	(untitled)	3	3	B	1164<	2181	51	5.00	90!	0	24.46	19.61	49.11	17.86+	10.42	100	100	178.54	287.15
C	1	A40	24	6	A	611	2120	70	0.0	36	152	8.1	2.6	17.	2.8	2.6	100	100	0.00	12.

x		97 Kin sbu ry Road Exit						0			9	0	61	8	9				46	
C x	2	A40 97 Kin sbu ry Road Exit	24	6	A	755	2120	70	0.00	44	104	8.14	2.55	15.98	3.32	2.89	100	100	0.00	14.56
D c	1	(unt itled )	4	2	B	505	2059	39	0.00	54	67	25.99	17.73	93.98	12.03	6.20	1000	1000	0.00	468.87
D c	2	(unt itled )	4	2	B	709 <	2172	39	4.00	72	25	26.52	19.81	99.69	17.86 +	7.07	100	100	21.19	99.59
D c	3	(unt itled )	4	2	B	390	2185	39	14.00	39	129	8.62	1.91	25.28	5.08	1.34	100	100	0.00	6.13
D x	1	(unt itled )	7	7	A	807	1915	68	7.00	54	68	5.86	2.72	15.44	5.78	2.18	100	100	0.00	15.85
D x	2	(unt itled )	7	7	A	771	2055	68	14.00	48	88	4.29	1.16	6.57	8.27	0.22	100	100	0.00	6.44
D x	3	(unt itled )	7	7	A	771	2055	68	13.00	48	88	4.16	1.03	1.56	2.57	0.22	100	100	0.00	3.84
E c	1	(unt itled )	5			482	1800	88	14.00	27	236	4.09	0.37	0.00	0.05		100	100	0.00	0.69
E c	2	(unt itled )	5			1064 <	1800	88	55.00	59	52	8.18	4.45	55.70	20.84 +		100	100	196.30	234.22
E c	3	(unt itled )	5			1070 <	1800	88	24.00	59	51	8.23	4.50	55.91	20.97 +		100	100	207.49	245.89
E x	1	(unt itled )				1039	1800	88	12.00	58	56	9.18	1.73	15.39	10.22		100	100	0.00	12.27
E x	2	(unt itled )				505	1800	88	48.00	28	221	7.90	0.44	2.81	3.59		100	100	0.00	1.34
F c	1	(unt itled )	10	8	B	71	2166	11	7.00	24	274	21.13	12.85	93.12	1.67	1.61	100	100	0.00	4.55

<b>F</b>	<b>c</b>	<b>2</b>	(untitled)	10	8	B	166	2317	11	2.00	53	71	34.84	26.57	92.98	3.83	3.64	100	100	0.00	19.62
<b>F</b>	<b>c</b>	<b>3</b>	(untitled)	10	8	B	32	2317	11	10.00	10	789	19.12	10.85	88.86	0.73	0.71	100	100	0.00	1.78
<b>F</b>	<b>x</b>	<b>1</b>	(untitled)	20			1180	2112	88	0.00	56	61	15.99	1.08	0.00	0.35		100	100	0.00	5.01
<b>F</b>	<b>x</b>	<b>2</b>	(untitled)	20			1174	2263	88	0.00	52	73	15.77	0.86	0.00	0.28		100	100	0.00	3.97
<b>F</b>	<b>x</b>	<b>1</b>	(untitled)	22			1069	1800	88	0.00	59	52	8.91	1.46	0.00	0.43		100	100	0.00	6.15
<b>F</b>	<b>x</b>	<b>1</b>	(untitled)	22			1285	1800	88	10.00	71	26	9.98	2.52	7.37	6.96		100	100	0.00	15.84
<b>G</b>	<b>1</b>	<b>1</b>	(untitled)	14			607	2112	88	39.00	29	213	4.82	0.34	0.00	0.06		100	100	0.00	0.82
<b>G</b>	<b>c</b>	<b>1</b>	(untitled)	11	9	B	660	2166	67	0.00	39	128	9.96	2.13	11.07	1.80	1.79	100	100	0.00	6.61
<b>G</b>	<b>c</b>	<b>2</b>	(untitled)	11	9	B	746	2317	67	0.00	42	116	10.03	2.20	10.55	1.93	1.93	100	100	0.00	7.63
<b>G</b>	<b>c</b>	<b>3</b>	(untitled)	11	9	B	86	2317	67	10.00	5	1771	8.76	0.94	5.19	0.11	0.11	100	100	0.00	0.38
<b>G</b>	<b>x</b>	<b>1</b>	(untitled)	18			823	2112	88	10.00	39	131	4.72	0.54	0.00	0.12		100	100	0.00	1.77
<b>G</b>	<b>x</b>	<b>2</b>	(untitled)	18			134	2263	88	77.00	6	1420	4.23	0.05	0.00	0.00		100	100	0.00	0.03
<b>G</b>	<b>x</b>	<b>1</b>	(untitled)				957<	1965	88	1.00	49	85	2.50	1.01	6.78	4.14+		100	100	0.00	5.91
<b>H</b>	<b>1</b>	<b>1</b>	(untitled)	15			970	2112	88	0.00	46	96	8.18	0.72	0.00	0.19		100	100	0.00	2.77
<b>H</b>	<b>1</b>	<b>2</b>	(untitled)	15			63	2263	88	0.00	3	3133	7.48	0.02	0.00	0.00		100	100	0.00	0.01
<b>H</b>	<b>c</b>	<b>1</b>	(untitled)	12	10	B	114	2166	18	1.00	24	270	38.00	30.51	77.63	2.18	2.13	100	100	0.00	14.96
<b>H</b>	<b>2</b>	(untitled)	12	10	B	308	2317	18	1.00	62	46	27.	20.	39.	3.0	2.9		100	100	0.03	26.

c		itled )						0			76	26	54	0	6				38	
Hc	3	(untitled )	12	10	B	313	2317	18	4.00	63	44	15.95	8.45	46.17	6.59	0.70	100	100	362.15	374.67
Hx	1	(untitled )				701	2112	88	0.00	33	171	7.88	0.42	0.00	0.08		100	100	0.00	1.17
Hx	2	(untitled )				660	2263	88	14.00	29	209	7.78	0.33	0.00	0.06		100	100	0.00	0.85
l1	1	(untitled )	16			1096	2112	88	43.00	52	73	8.37	0.92	0.00	0.28		100	100	0.00	3.97
lc	1	(untitled )	13	11	B	650	2166	55	0.00	47	91	13.59	6.32	31.08	5.08	4.26	100	100	39.73	58.85
lc	2	(untitled )	13	11	B	814	2317	55	1.00	55	63	13.32	6.05	27.91	5.69	4.79	100	100	64.12	86.84
lc	3	(untitled )	13	11	B	63	2317	55	27.00	4	2006	13.32	6.06	34.97	0.56	0.56	100	100	0.00	1.82
lx	1	(untitled )	19			127	2112	88	72.00	6	1400	3.41	0.05	0.00	0.00		100	100	0.00	0.03
lx	2	(untitled )	19			114	2263	88	72.00	5	1691	3.40	0.04	0.00	0.00		100	100	0.00	0.02
lx	1	(untitled )				240<	2112	88	67.00	11	691	1.84	0.73	23.85	3.85+		100	100	0.00	2.55

## Network Results

	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Excess Queue Penalty (£ per hr)	Performance Index (£ per hr)
<b>TOTAL</b>	7086.48	377.41	18.78	101.07	135.03	2799.29	751.71	1143.77	4694.76
<b>BUSES</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TRAMS</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>PEDESTRIANS</b>									
<b>OTHER (NORMAL)</b>	7510.26	429.53	17.48	125.92	153.30	3050.51	769.80	1505.92	5326.23

- B = at least one source for this link carries buses

- T = at least one source for this link carries trams
- P = this link is a pedestrian link
- < = adjusted flow warning (upstream links are over-saturated)
- ! = DoS threshold exceeded
- f = average saturation flow for flared link
- \* = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

## Link Results

### Link Results: Flows And Signals

Time Segment	Link	Calculated Flow Entering (PCU/hr)	Calculated Flow Out (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Mean Modulus Of Error	Actual Green (s (per cycle))	Effective Green (s (per cycle))
17:00-18:00	1	500	500	0		10000	2045	24		268	0.00	17	18
17:00-18:00	2	500	500	0		10000	682	73		23	0.00	5	6

### Link Results: Stops And Delays

Time Segment	Link	Mean Cruise Time Per PCU (s)	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-18:00	1	1.00	29.61	4.07	0.04	58.41	58.41	0.00	0.00	0.00	0.00	0.00
17:00-18:00	2	1.00	47.36	5.59	0.99	93.41	93.41	0.00	0.00	0.00	0.00	0.00

### Link Results: Queues And Blocking

Time Segment	Link	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Utilised Storage (%)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
17:00-18:00	1	0.00	9.76	10.00	97.62	0.00	0.00	0.00	0.04	9.76	0.00	0.00	0.00	
17:00-	2	0.00	12.38	10.00	123.7	0.25	0.00	0.00	0.99	12.38	0.00	0.00	0.00	



18:00					8									
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### Link Results: Journey Times

Time Segment	Link	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
17:00-18:00	1	1.75	4.25	0.41	30.61
17:00-18:00	2	1.75	6.72	0.26	48.36

### Link Results: Advanced

Time Segment	Link	Degree Of Saturation Penalty (£ per hr)	Phase Min Max Penalty (£ per hr)	Intergreen Broken Penalty (£ per hr)	Stage Constraint Broken Penalty (£ per hr)	Ped Gap Accepting Penalty (£ per hr)	Warmed Up	Warmed Up Error	Mean Max Queue EoTS (PCU)	Max End Of Green Queue EoTS (PCU)	Max End Of Red Queue EoTS (PCU)	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)	Performance Index (£ per hr)
17:00-18:00	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	9.76	0.04	9.76	0.00	58.41	58.41
17:00-18:00	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	12.39	1.00	12.39	0.00	93.41	93.41

## Traffic Stream Results

### Traffic Stream Results: Vehicle Summary

Time Segment	Arm	Traffic Stream	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Calculated Flow Entering (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s per cycle))	Mean Delay Per PCU (s)	Mean Max Queue (PCU)	Utilised Storage (%)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	1	1	66	37	1366	2083	88	1.64	1.78	2.97	8.84	0.83	9.67
17:00-18:00	A	1	40	124	321	2128	32	20.87	5.97	34.32	10.57	1.53	12.09
17:00-18:00	A	2	88	3	748	2279	32	38.76	19.71	75.57	45.75	5.04	50.79
17:00-18:00	A	3	53	68	457	2279	32	23.30	8.99	34.46	16.80	2.31	19.11
17:00-18:00	A	4	97!	-7	828	2279	32	64.09	28.53	109.35	83.73	7.13	90.86
17:00-18:00	Ax1	1	31	186	567	1800	88	0.47	1.12	32.32	1.04	0.15	1.19

17:00-18:00	Ax 1	2	90	0	1614	1800	88	17.28	43.18	1241.45	110.02	51.04	161.06
17:00-18:00	Ax 2	1	77	17	1381	1800	88	3.28	7.26	27.83	17.85	2.02	19.87
17:00-18:00	Ax 2	2	44	102	800	1800	88	0.80	0.18	0.68	2.53	0.00	2.53
17:00-18:00	B	1	10	812	26	263	88	1.27	0.08	1.49	0.13	0.08	0.21
17:00-18:00	B	2	20	348	24	119	88	23.73	0.43	8.28	2.25	0.56	2.80
17:00-18:00	Bc 1	1	33	173	593	1800	88	0.49	0.08	1.55	1.15	0.00	1.15
17:00-18:00	Bc 1	2	67	34	1212	1800	88	2.05	0.69	13.26	9.82	0.00	9.82
17:00-18:00	Bc 1	3	43	110	770	1800	88	0.75	0.16	3.06	2.27	0.00	2.27
17:00-18:00	Bc 1	4	63	42	1141	1800	88	1.73	0.55	10.48	7.76	0.00	7.76
17:00-18:00	C	1	65	38	655	3163	27	26.54	12.80	36.81	27.44	0.00	27.44
17:00-18:00	C	2	89	1	898	3163	27	38.94	23.05	66.26	55.14	0.00	55.14
17:00-18:00	C3-1	1	0	-100	0	0	88	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Cx 2	1	76	18	1097	2083	60	12.99	15.99	135.17	56.24	20.97	77.21
17:00-18:00	Cx 2	2	19	384	269	2083	60	5.09	2.63	22.25	5.40	3.18	8.58
17:00-18:00	Cx 3	1	3	2603	60	1800	88	0.03	0.00	0.01	0.01	0.00	0.01
17:00-18:00	Cx 4	1	69	31	1137	1965	73	3.81	14.64	561.22	17.06	10.80	27.86
17:00-18:00	Cx 4-2	1	58	56	1137	1965	88	1.25	0.40	2.94	5.62	0.00	5.62
17:00-18:00	Cx 5	1	17	438	301	1800	88	0.20	0.54	4.98	0.24	0.04	0.28
17:00-18:00	D	1	83	9	812	2159	39	29.50	19.06	36.54	37.79	0.00	37.79
17:00-18:00	D	2	83	9	870	2317	39	28.85	20.27	38.85	39.59	0.00	39.59
17:00-18:00	D	3	83	8	874	2317	39	29.11	20.66	39.59	40.14	0.00	40.14
17:00-18:00	Dx 1	1	37	140	807	2155	88	0.50	0.11	0.26	1.59	0.00	1.59

17:00-18:00	Dx 1	2	72	26	1542	2155	88	9.77	36.9 5	84.99	59.42	70.95	130.37
17:00-18:00	E	1	123!	-27	470	383	88	366. 97	54.9 4	157.9 4	272.13	38.60	310.73
17:00-18:00	E	2	85	6	626	737	88	31.6 1	15.8 2	45.49	31.23	20.12	51.34
17:00-18:00	F	1	84	8	1381	2134	67	12.4 4	20.1 1	55.06	67.72	25.90	93.62
17:00-18:00	F	2	40	122	714	2284	67	4.37	6.78	18.57	12.31	8.01	20.32
17:00-18:00	F	3	5	1744	86	2284	67	2.27	0.46	1.25	0.77	0.54	1.31
17:00-18:00	G	1	102!	-11	294	2123	11	151. 25	16.2 9	123.2 6	87.70	3.66	91.36
17:00-18:00	G	2	72	24	313	3174	11	46.1 4	8.05	60.90	28.48	2.08	30.56
17:00-18:00	H	1	32	184	469	2134	60	5.88	4.50	26.97	10.87	5.54	16.41
17:00-18:00	H	2	32	184	501	2284	60	5.84	4.80	28.78	11.53	5.91	17.44
17:00-18:00	H	3	4	2162	63	2284	60	4.34	0.47	2.84	1.08	0.58	1.66
17:00-18:00	I	1	92!	-2	530	2123	23	58.9 3	16.6 2	159.3 0	49.28	0.00	49.28
17:00-18:00	I	2	81	12	566	2574	23	38.8 2	14.2 0	136.0 6	34.66	0.00	34.66
17:00-18:00	Ac	1	31	188	353	2112	46	2.60	1.89	27.05	3.62	1.85	5.47
17:00-18:00	Ac	2	38	134	464	2263	46	8.60	5.88	84.05	15.75	4.05	27.59
17:00-18:00	Ac	3	52	74	626	2263	46	26.0 9	12.2 7	175.3 5	64.42	16.30	283.03
17:00-18:00	Ax	1	37	141	567	1965	67	2.83	2.23	64.17	6.32	4.94	11.26
17:00-18:00	Ax	2	71	27	1149	2105	67	10.6 9	15.1 2	434.7 0	48.42	34.51	294.30
17:00-18:00	Ax	3	29	214	466	2105	67	4.47	5.61	161.1 8	8.21	10.46	27.81
17:00-18:00	Bc	1	37	140	674	1800	88	0.67	4.14	23.81	1.77	0.83	2.60
17:00-18:00	Bc	2	67	34	1212	1800	88	3.77	17.9 0	102.9 1	18.03	16.79	34.82
17:00-18:00	Bc	3	43	110	770	1800	88	1.17	7.95	45.73	3.55	4.03	7.58

17:00-18:00	Bc	4	63	42	1141	1800	88	4.17	21.70	124.75	18.79	18.41	37.20
17:00-18:00	Bx	1	5	1894	81	1800	88	0.05	0.00	0.01	0.02	0.00	0.02
17:00-18:00	C2	1	86	4	1553	1800	88	7.09	28.18	51.62	43.43	18.40	61.84
17:00-18:00	C4	1	101!	-11	1380	2063	57	76.97	56.70	376.37	418.96	68.39	487.35
17:00-18:00	C5	1	102!	-12	332	1906	14	150.47	18.43	192.72	197.05	20.68	217.72
17:00-18:00	Cc	1	38	135	465	2059	51	1.11	0.22	3.66	2.03	0.29	2.32
17:00-18:00	Cc	2	59	52	771	2209	51	10.75	7.89	131.58	32.69	9.29	47.75
17:00-18:00	Cc	3	90!	0	1164	2181	51	19.61	17.86	297.74	90.05	18.56	287.15
17:00-18:00	Cx	1	36	152	611	2120	70	2.60	2.88	16.58	6.25	6.21	12.46
17:00-18:00	Cx	2	44	104	755	2120	70	2.55	3.32	19.06	7.59	6.97	14.56
17:00-18:00	Dc	1	54	67	505	2059	39	17.73	12.03	76.89	353.39	115.48	468.87
17:00-18:00	Dc	2	72	25	709	2172	39	19.81	17.86	114.08	55.43	22.96	99.59
17:00-18:00	Dc	3	39	129	390	2185	39	1.91	5.08	32.47	2.93	3.20	6.13
17:00-18:00	Dx	1	54	68	807	1915	68	2.72	5.78	59.33	8.66	7.19	15.85
17:00-18:00	Dx	2	48	88	771	2055	68	1.16	8.27	84.87	3.52	2.92	6.44
17:00-18:00	Dx	3	48	88	771	2055	68	1.03	2.57	26.35	3.14	0.69	3.84
17:00-18:00	Ec	1	27	236	482	1800	88	0.37	0.05	0.56	0.69	0.00	0.69
17:00-18:00	Ec	2	59	52	1064	1800	88	4.45	20.84	239.62	18.67	19.25	234.22
17:00-18:00	Ec	3	59	51	1070	1800	88	4.50	20.97	241.20	18.98	19.42	245.89
17:00-18:00	Ex	1	58	56	1039	1800	88	1.73	10.22	58.74	7.08	5.19	12.27
17:00-18:00	Ex	2	28	221	505	1800	88	0.44	3.59	20.62	0.88	0.46	1.34
17:00-18:00	Fc	1	24	274	71	2166	11	12.85	1.67	23.84	3.60	0.95	4.55

17:00-18:00	Fc	2	53	71	166	2317	11	26.5 7	3.83	54.67	17.40	2.23	19.62
17:00-18:00	Fc	3	10	789	32	2317	11	10.8 5	0.73	10.39	1.37	0.41	1.78
17:00-18:00	Fx	1	56	61	1180	2112	88	1.08	0.35	1.01	5.01	0.00	5.01
17:00-18:00	Fx	2	52	73	1174	2263	88	0.86	0.28	0.80	3.97	0.00	3.97
17:00-18:00	Fx 1	1	59	52	1069	1800	88	1.46	0.43	2.49	6.15	0.00	6.15
17:00-18:00	Fx 1	2	71	26	1285	1800	88	2.52	6.96	40.03	12.77	3.07	15.84
17:00-18:00	G1	1	29	213	607	2112	88	0.34	0.06	0.56	0.82	0.00	0.82
17:00-18:00	Gc	1	39	128	660	2166	67	2.13	1.80	25.73	5.55	1.06	6.61
17:00-18:00	Gc	2	42	116	746	2317	67	2.20	1.93	27.58	6.49	1.14	7.63
17:00-18:00	Gc	3	5	1771	86	2317	67	0.94	0.11	1.56	0.32	0.06	0.38
17:00-18:00	Gx	1	39	131	823	2112	88	0.54	0.12	1.28	1.77	0.00	1.77
17:00-18:00	Gx	2	6	1420	134	2263	88	0.05	0.00	0.02	0.03	0.00	0.03
17:00-18:00	Gx 1	1	49	85	957	1965	88	1.01	4.14	118.9 3	3.81	2.11	5.91
17:00-18:00	H1	1	46	96	970	2112	88	0.72	0.19	1.12	2.77	0.00	2.77
17:00-18:00	H1	2	3	3133	63	2263	88	0.02	0.00	0.00	0.01	0.00	0.01
17:00-18:00	Hc	1	24	270	114	2166	18	30.5 1	2.18	31.11	13.68	1.27	14.96
17:00-18:00	Hc	2	62	46	308	2317	18	20.2 6	3.00	42.88	24.59	1.76	26.38
17:00-18:00	Hc	3	63	44	313	2317	18	8.45	6.59	94.18	10.44	2.09	374.67
17:00-18:00	Hx	1	33	171	701	2112	88	0.42	0.08	0.47	1.17	0.00	1.17
17:00-18:00	Hx	2	29	209	660	2263	88	0.33	0.06	0.35	0.85	0.00	0.85
17:00-18:00	I1	1	52	73	1096	2112	88	0.92	0.28	1.61	3.97	0.00	3.97
17:00-18:00	Ic	1	47	91	650	2166	55	6.32	5.08	72.54	16.20	2.92	58.85

17:00-18:00	lc	2	55	63	814	2317	55	6.05	5.69	81.25	19.44	3.28	86.84
17:00-18:00	lc	3	4	2006	63	2317	55	6.06	0.56	8.01	1.50	0.32	1.82
17:00-18:00	lx	1	6	1400	127	2112	88	0.05	0.00	0.02	0.03	0.00	0.03
17:00-18:00	lx	2	5	1691	114	2263	88	0.04	0.00	0.02	0.02	0.00	0.02
17:00-18:00	lx1	1	11	691	240	2112	88	0.73	3.85	147.72	0.69	1.86	2.55

### Traffic Stream Results: Flows And Signals

Time Segment	Arm	Traffic Stream	Calculated Flow Entering (PCU/hr)	Calculated Flow Out (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Mean Modulus Of Error	Actual Green (s (per cycle))	Effective Green (s (per cycle))
17:00 - 18:00	1	1	1366	1366	43	✓	2083	2083	66		37	0.30	88	88
17:00 - 18:00	A	1	321	321	-1	✓	2128	798	40		124	0.22	32	33
17:00 - 18:00	A	2	748	748	-1	✓	2279	855	88		3	0.19	32	33
17:00 - 18:00	A	3	457	457	0		2279	855	53		68	0.20	32	33
17:00 - 18:00	A	4	828	828	0	✓	2279	855	97!	✓	-7	0.19	32	33
17:00 - 18:00	Ax 1	1	567	567	21	✓	1800	1800	31		186	0.63	88	88
17:00 - 18:00	Ax 1	2	1614	1614	23	✓	1800	1800	90		0	0.77	88	88
17:00 - 18:00	Ax 2	1	1381	1381	28	✓	1800	1800	77		17	0.20	88	88
17:00 - 18:00	Ax 2	2	800	800	16	✓	1800	1800	44		102	0.21	88	88
17:00 -	B	1	26	26	-1		263	263	10		812	0.00	88	88

18:00														
17:00 - 18:00	B	2	24	24	1		119	119	20		348	0.00	88	88
17:00 - 18:00	Bc 1	1	593	593	3	✓	1800	1800	33		173	0.48	88	88
17:00 - 18:00	Bc 1	2	1212	1212	40	✓	1800	1800	67		34	0.50	88	88
17:00 - 18:00	Bc 1	3	770	770	-1	✓	1800	1800	43		110	0.66	88	88
17:00 - 18:00	Bc 1	4	1141	1141	0	✓	1800	1800	63		42	0.57	88	88
17:00 - 18:00	C	1	655	655	10	✓	3163	1006	65		38	0.18	27	28
17:00 - 18:00	C	2	898	898	14	✓	3163	1006	89		1	0.17	27	28
17:00 - 18:00	C3 -1	1	0	0	0		0	0	0		-100	0.00	88	88
17:00 - 18:00	Cx 2	1	1097	1097	37	✓	2083	1444	76		18	0.29	60	61
17:00 - 18:00	Cx 2	2	269	269	6	✓	2083	1444	19		384	0.28	60	61
17:00 - 18:00	Cx 3	1	60	60	1	✓	1800	1800	3		2603	0.38	88	88
17:00 - 18:00	Cx 4	1	1137	1137	37	✓	1965	1652	69		31	0.57	73	74
17:00 - 18:00	Cx 4-2	1	1137	1137	37	✓	1965	1965	58		56	0.53	88	88
17:00 - 18:00	Cx 5	1	301	301	7	✓	1800	1800	17		438	0.76	88	88
17:00 - 18:00	D	1	812	812	0		2159	981	83		9	0.00	39	40
17:00 - 18:00	D	2	870	870	-1		2317	1053	83		9	0.00	39	40

17:00 - 18:00	D	3	874	874	-2		2317	1053	83		8	0.00	39	40
17:00 - 18:00	Dx 1	1	807	807	5	✓	2155	2155	37		140	0.47	88	88
17:00 - 18:00	Dx 1	2	1542	1542	-1	✓	2155	2155	72		26	0.72	88	88
17:00 - 18:00	E	1	470	383	-3		383	383	123!	✓	-27	0.00	88	88
17:00 - 18:00	E	2	626	626	-1	✓	737	737	85		6	0.00	88	88
17:00 - 18:00	F	1	1381	1381	28	✓	2134	1649	84		8	0.18	67	68
17:00 - 18:00	F	2	714	714	14	✓	2284	1765	40		122	0.16	67	68
17:00 - 18:00	F	3	86	86	2	✓	2284	1765	5		1744	0.18	67	68
17:00 - 18:00	G	1	294	290	-3	✓	2123	290	102!	✓	-11	0.00	11	12
17:00 - 18:00	G	2	313	313	0		3174	433	72		24	0.00	11	12
17:00 - 18:00	H	1	469	469	-2	✓	2134	1479	32		184	0.00	60	61
17:00 - 18:00	H	2	501	501	0		2284	1583	32		184	0.00	60	61
17:00 - 18:00	H	3	63	63	0		2284	1583	4		2162	0.00	60	61
17:00 - 18:00	I	1	530	530	-2	✓	2123	579	92!	✓	-2	0.00	23	24
17:00 - 18:00	I	2	566	566	0	✓	2574	702	81		12	0.00	23	24
17:00 - 18:00	Ac	1	353	353	7	✓	2112	1128	31		188	0.81	46	47



17:00 - 18:00	Ac	2	464	464	41	✓	2263	1209	38		134	0.33	46	47
17:00 - 18:00	Ac	3	626	626	-1	✓	2263	1209	52		74	0.81	46	47
17:00 - 18:00	Ax	1	567	567	21	✓	1965	1518	37		141	0.46	67	68
17:00 - 18:00	Ax	2	1149	1149	20	✓	2105	1627	71		27	0.54	67	68
17:00 - 18:00	Ax	3	466	466	2	✓	2105	1627	29		214	0.49	67	68
17:00 - 18:00	Bc	1	674	674	6	✓	1800	1800	37		140	0.50	88	88
17:00 - 18:00	Bc	2	1212	1212	40	✓	1800	1800	67		34	0.60	88	88
17:00 - 18:00	Bc	3	770	770	0	✓	1800	1800	43		110	0.68	88	88
17:00 - 18:00	Bc	4	1141	1141	0	✓	1800	1800	63		42	0.65	88	88
17:00 - 18:00	Bx	1	81	81	3	✓	1800	1800	5		1894	0.43	88	88
17:00 - 18:00	C2	1	1553	1553	24	✓	1800	1800	86		4	0.25	88	88
17:00 - 18:00	C4	1	1380	1360	-2		2063	1360	101!	✓	-11	0.00	57	58
17:00 - 18:00	C5	1	332	325	1	✓	1906	325	102!	✓	-12	0.00	14	15
17:00 - 18:00	Cc	1	465	465	-1		2059	1217	38		135	1.06	51	52
17:00 - 18:00	Cc	2	771	771	0	✓	2209	1305	59		52	0.62	51	52
17:00 - 18:00	Cc	3	1164	1164	0	✓	2181	1289	90!	✓	0	0.52	51	52

17:00 - 18:00	Cx	1	611	611	3	✓	2120	1710	36		152	0.42	70	71
17:00 - 18:00	Cx	2	755	755	40	✓	2120	1710	44		104	0.34	70	71
17:00 - 18:00	Dc	1	505	505	5	✓	2059	936	54		67	0.67	39	40
17:00 - 18:00	Dc	2	709	709	8	✓	2172	987	72		25	0.77	39	40
17:00 - 18:00	Dc	3	390	390	6	✓	2185	993	39		129	1.31	39	40
17:00 - 18:00	Dx	1	807	807	5	✓	1915	1502	54		68	0.62	68	69
17:00 - 18:00	Dx	2	771	771	0	✓	2055	1611	48		88	0.95	68	69
17:00 - 18:00	Dx	3	771	771	0	✓	2055	1611	48		88	0.78	68	69
17:00 - 18:00	Ec	1	482	482	4	✓	1800	1800	27		236	0.62	88	88
17:00 - 18:00	Ec	2	1064	1064	3	✓	1800	1800	59		52	0.74	88	88
17:00 - 18:00	Ec	3	1070	1070	1	✓	1800	1800	59		51	0.74	88	88
17:00 - 18:00	Ex	1	1039	1039	5	✓	1800	1800	58		56	0.59	88	88
17:00 - 18:00	Ex	2	505	505	5	✓	1800	1800	28		221	1.23	88	88
17:00 - 18:00	Fc	1	71	71	-1	✓	2166	295	24		274	1.39	11	12
17:00 - 18:00	Fc	2	166	166	-1	✓	2317	316	53		71	0.87	11	12
17:00 - 18:00	Fc	3	32	32	0		2317	316	10		789	1.39	11	12

17:00 - 18:00	Fx	1	1180	1180	-3	✓	2112	2112	56		61	0.37	88	88
17:00 - 18:00	Fx	2	1174	1174	1		2263	2263	52		73	0.34	88	88
17:00 - 18:00	Fx 1	1	1069	1069	-2	✓	1800	1800	59		52	0.26	88	88
17:00 - 18:00	Fx 1	2	1285	1285	0	✓	1800	1800	71		26	0.26	88	88
17:00 - 18:00	G1	1	607	607	-3	✓	2112	2112	29		213	0.00	88	88
17:00 - 18:00	Gc	1	660	660	12	✓	2166	1674	39		128	0.34	67	68
17:00 - 18:00	Gc	2	746	746	14	✓	2317	1790	42		116	0.49	67	68
17:00 - 18:00	Gc	3	86	86	2	✓	2317	1790	5		1771	0.54	67	68
17:00 - 18:00	Gx	1	823	823	15	✓	2112	2112	39		131	0.39	88	88
17:00 - 18:00	Gx	2	134	134	-1	✓	2263	2263	6		1420	1.67	88	88
17:00 - 18:00	Gx 1	1	957	957	15	✓	1965	1965	49		85	0.33	88	88
17:00 - 18:00	H1	1	970	970	-2	✓	2112	2112	46		96	0.00	88	88
17:00 - 18:00	H1	2	63	63	0		2263	2263	3		3133	0.00	88	88
17:00 - 18:00	Hc	1	114	114	2	✓	2166	468	24		270	0.35	18	19
17:00 - 18:00	Hc	2	308	308	3	✓	2317	500	62		46	1.03	18	19
17:00 - 18:00	Hc	3	313	313	0		2317	500	63		44	1.63	18	19

17:00 - 18:00	Hx	1	701	701	13	✓	2112	2112	33		171	0.31	88	88
17:00 - 18:00	Hx	2	660	660	12	✓	2263	2263	29		209	0.56	88	88
17:00 - 18:00	l1	1	1096	1096	-2	✓	2112	2112	52		73	0.00	88	88
17:00 - 18:00	lc	1	650	650	-1	✓	2166	1378	47		91	0.50	55	56
17:00 - 18:00	lc	2	814	814	0		2317	1474	55		63	0.62	55	56
17:00 - 18:00	lc	3	63	63	0		2317	1474	4		2006	0.57	55	56
17:00 - 18:00	lx	1	127	127	2	✓	2112	2112	6		1400	1.34	88	88
17:00 - 18:00	lx	2	114	114	2	✓	2263	2263	5		1691	1.54	88	88
17:00 - 18:00	lx1	1	240	240	4	✓	2112	2112	11		691	1.43	88	88

### Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Overs at Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-18:00	1	1	25.80	1.64	0.00	0.62	8.84	8.84	1.86	0.12	25.35	0.83	0.83
17:00-18:00	A	1	7.46	20.87	1.73	0.13	26.42	10.57	73.29	229.72	5.50	7.64	1.53
17:00-18:00	A	2	11.18	38.76	5.18	2.87	114.37	45.75	103.79	663.50	112.93	25.21	5.04
17:00-18:00	A	3	11.18	23.30	2.65	0.31	42.00	16.80	77.80	343.13	12.43	11.55	2.31
17:00-18:00	A	4	11.18	64.09	6.02	8.72	209.31	83.73	132.58	776.77	320.94	35.65	7.13
17:00-18:00	Ax1	1	1.49	0.47	0.00	0.07	1.04	1.04	0.80	1.57	2.95	0.15	0.15

17:00-18:00	Ax 1	2	1.49	17.28	4.03	3.72	110.02	110.02	97.35	1423.13	148.53	51.04	51.04
17:00-18:00	Ax 2	1	11.18	3.28	0.01	1.25	17.85	17.85	4.50	11.47	50.67	2.02	2.02
17:00-18:00	Ax 2	2	11.18	0.80	0.00	0.18	2.53	2.53	0.00	0.00	0.00	0.00	0.00
17:00-18:00	B	1	2.24	1.27	0.00	0.01	0.13	0.13	9.61	2.28	0.22	0.08	0.08
17:00-18:00	B	2	2.24	23.73	0.13	0.03	2.25	2.25	71.26	16.08	1.02	0.56	0.56
17:00-18:00	Bc 1	1	2.24	0.49	0.00	0.08	1.15	1.15	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Bc 1	2	2.24	2.05	0.00	0.69	9.82	9.82	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Bc 1	3	2.24	0.75	0.00	0.16	2.27	2.27	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Bc 1	4	2.24	1.73	0.00	0.55	7.76	7.76	0.00	0.00	0.00	0.00	0.00
17:00-18:00	C	1	14.91	26.54	4.23	0.60	68.61	27.44	76.88	479.45	24.47	16.36	0.00
17:00-18:00	C	2	14.91	38.94	6.30	3.41	137.85	55.14	98.78	752.44	134.09	28.79	0.00
17:00-18:00	C3-1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Cx 2	1	5.07	12.99	2.77	1.19	56.24	56.24	58.83	597.46	48.14	20.97	20.97
17:00-18:00	Cx 2	2	5.07	5.09	0.36	0.02	5.40	5.40	36.46	97.10	0.87	3.18	3.18
17:00-18:00	Cx 3	1	4.43	0.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Cx 4	1	1.12	3.81	0.45	0.75	17.06	17.06	29.26	271.68	60.81	10.80	10.80
17:00-18:00	Cx 4-2	1	5.77	1.25	0.00	0.40	5.62	5.62	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Cx 5	1	4.67	0.20	0.00	0.02	0.24	0.24	0.38	0.47	0.69	0.04	0.04
17:00-18:00	D	1	16.78	29.50	4.73	1.92	94.49	37.79	90.92	661.56	76.72	42.62	0.00
17:00-18:00	D	2	16.78	28.85	5.07	1.90	98.99	39.59	90.18	708.39	76.21	45.29	0.00
17:00-18:00	D	3	16.78	29.11	5.10	1.96	100.34	40.14	90.60	713.33	78.48	45.71	0.00
17:00-18:00	Dx 1	1	13.98	0.50	0.00	0.11	1.59	1.59	0.00	0.00	0.00	0.00	0.00

17:00-18:00	Dx 1	2	13.98	9.77	3.29	0.90	59.42	59.42	79.71	1192.68	36.41	70.95	70.95
17:00-18:00	E	1	14.91	366.97	2.22	45.69	680.33	272.13	310.54	377.24	811.29	38.60	38.60
17:00-18:00	E	2	14.91	31.61	3.24	2.26	78.06	31.23	98.97	530.48	89.05	20.12	20.12
17:00-18:00	F	1	15.66	12.44	2.66	2.11	67.72	67.72	57.77	712.71	84.84	25.90	25.90
17:00-18:00	F	2	15.66	4.37	0.73	0.14	12.31	12.31	34.55	241.15	5.61	8.01	8.01
17:00-18:00	F	3	15.66	2.27	0.05	0.00	0.77	0.77	19.37	16.64	0.05	0.54	0.54
17:00-18:00	G	1	5.67	151.25	3.06	9.30	175.40	87.70	194.55	283.17	280.04	18.29	3.66
17:00-18:00	G	2	5.67	46.14	3.09	0.92	56.96	28.48	102.30	283.70	36.50	10.40	2.08
17:00-18:00	H	1	7.16	5.88	0.69	0.07	10.87	10.87	36.36	167.52	3.00	5.54	5.54
17:00-18:00	H	2	7.16	5.84	0.74	0.07	11.53	11.53	36.31	178.90	2.99	5.91	5.91
17:00-18:00	H	3	7.16	4.34	0.08	0.00	1.08	1.08	28.46	17.89	0.03	0.58	0.58
17:00-18:00	I	1	4.47	58.93	4.57	4.11	123.20	49.28	122.55	494.09	155.44	21.09	0.00
17:00-18:00	I	2	4.47	38.82	4.48	1.62	86.66	34.66	99.47	498.61	64.37	18.28	0.00
17:00-18:00	Ac	1	4.03	2.60	0.18	0.07	3.62	3.62	16.17	54.15	2.90	1.85	1.85
17:00-18:00	Ac	2	4.99	8.60	0.99	0.12	15.75	15.75	47.35	215.03	4.88	4.05	4.05
17:00-18:00	Ac	3	4.03	26.09	4.26	0.28	64.42	64.42	80.16	490.48	11.30	16.30	16.30
17:00-18:00	Ax	1	1.12	2.83	0.33	0.11	6.32	6.32	15.11	81.08	4.53	4.94	4.94
17:00-18:00	Ax	2	1.12	10.69	2.57	0.84	48.42	48.42	52.06	563.66	34.22	34.51	34.51
17:00-18:00	Ax	3	1.12	4.47	0.52	0.06	8.21	8.21	38.90	178.87	2.35	10.46	10.46
17:00-18:00	Bc	1	7.46	0.67	0.01	0.11	1.77	1.77	3.78	20.91	4.57	0.83	0.83
17:00-18:00	Bc	2	7.46	3.77	0.58	0.69	18.03	18.03	42.65	461.13	55.95	16.79	16.79
17:00-18:00	Bc	3	7.46	1.17	0.09	0.16	3.55	3.55	16.11	117.52	6.52	4.03	4.03

17:00-18:00	Bc	4	7.46	4.17	0.78	0.55	18.79	18.79	49.69	544.68	22.26	18.41	18.41
17:00-18:00	Bx	1	7.46	0.05	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00
17:00-18:00	C2	1	23.41	7.09	0.42	2.64	43.43	43.43	36.49	460.69	106.05	18.40	18.40
17:00-18:00	C4	1	6.46	76.97	5.67	23.84	418.96	418.96	154.88	1284.43	821.55	68.39	68.39
17:00-18:00	C5	1	4.10	150.47	3.29	10.58	197.05	197.05	195.99	318.69	318.05	20.68	20.68
17:00-18:00	Cc	1	4.85	1.11	0.03	0.12	2.03	2.03	1.89	3.96	4.82	0.29	0.29
17:00-18:00	Cc	2	4.85	10.75	1.88	0.42	32.69	32.69	37.11	268.87	17.27	9.29	9.29
17:00-18:00	Cc	3	4.85	19.61	2.43	3.91	90.05	90.05	49.11	417.03	154.62	18.56	18.56
17:00-18:00	Cx	1	5.59	2.60	0.34	0.10	6.25	6.25	17.61	103.49	4.04	6.21	6.21
17:00-18:00	Cx	2	5.59	2.55	0.36	0.17	7.59	7.59	15.98	113.62	7.12	6.97	6.97
17:00-18:00	Dc	1	8.26	17.73	2.17	0.32	35.34	353.39	93.98	462.16	12.84	11.55	115.48
17:00-18:00	Dc	2	6.71	19.81	3.00	0.91	55.43	55.43	99.69	670.50	36.58	22.96	22.96
17:00-18:00	Dc	3	6.71	1.91	0.08	0.13	2.93	2.93	25.28	93.35	5.16	3.20	3.20
17:00-18:00	Dx	1	3.13	2.72	0.30	0.31	8.66	8.66	15.44	99.30	25.24	7.19	7.19
17:00-18:00	Dx	2	3.13	1.16	0.03	0.22	3.52	3.52	6.57	41.69	8.94	2.92	2.92
17:00-18:00	Dx	3	3.13	1.03	0.00	0.22	3.14	3.14	1.56	3.07	8.94	0.69	0.69
17:00-18:00	Ec	1	3.73	0.37	0.00	0.05	0.69	0.69	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Ec	2	3.73	4.45	0.89	0.43	18.67	18.67	55.70	575.27	17.35	19.25	19.25
17:00-18:00	Ec	3	3.73	4.50	0.90	0.43	18.98	18.98	55.91	580.45	17.69	19.42	19.42
17:00-18:00	Ex	1	7.46	1.73	0.10	0.39	7.08	7.08	15.39	143.92	16.04	5.19	5.19
17:00-18:00	Ex	2	7.46	0.44	0.01	0.05	0.88	0.88	2.81	11.96	2.24	0.46	0.46
17:00-18:00	Fc	1	8.28	12.85	0.22	0.04	3.60	3.60	93.12	64.57	1.54	0.95	0.95

17:00-18:00	Fc	2	8.28	26.57	0.94	0.29	17.40	17.40	92.98	142.78	11.56	2.23	2.23
17:00-18:00	Fc	3	8.28	10.85	0.09	0.01	1.37	1.37	88.86	28.20	0.23	0.41	0.41
17:00-18:00	Fx	1	14.91	1.08	0.00	0.35	5.01	5.01	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Fx	2	14.91	0.86	0.00	0.28	3.97	3.97	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Fx1	1	7.46	1.46	0.00	0.43	6.15	6.15	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Fx1	2	7.46	2.52	0.01	0.89	12.77	12.77	7.37	23.27	71.41	3.07	3.07
17:00-18:00	G1	1	4.47	0.34	0.00	0.06	0.82	0.82	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Gc	1	7.83	2.13	0.26	0.13	5.55	5.55	11.07	67.85	5.24	1.06	1.06
17:00-18:00	Gc	2	7.83	2.20	0.31	0.15	6.49	6.49	10.55	72.66	6.08	1.14	1.14
17:00-18:00	Gc	3	7.83	0.94	0.02	0.00	0.32	0.32	5.19	4.42	0.05	0.06	0.06
17:00-18:00	Gx	1	4.18	0.54	0.00	0.12	1.77	1.77	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Gx	2	4.18	0.05	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Gx 1	1	1.49	1.01	0.04	0.23	3.81	3.81	6.78	55.46	9.43	2.11	2.11
17:00-18:00	H1	1	7.46	0.72	0.00	0.19	2.77	2.77	0.00	0.00	0.00	0.00	0.00
17:00-18:00	H1	2	7.46	0.02	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Hc	1	7.49	30.51	0.92	0.04	13.68	13.68	77.63	86.69	1.59	1.27	1.27
17:00-18:00	Hc	2	7.49	20.26	1.25	0.49	24.59	24.59	39.54	102.10	19.56	1.76	1.76
17:00-18:00	Hc	3	7.49	8.45	0.22	0.52	10.44	10.44	46.17	123.72	20.78	2.09	2.09
17:00-18:00	Hx	1	7.46	0.42	0.00	0.08	1.17	1.17	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Hx	2	7.46	0.33	0.00	0.06	0.85	0.85	0.00	0.00	0.00	0.00	0.00
17:00-18:00	I1	1	7.46	0.92	0.00	0.28	3.97	3.97	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Ic	1	7.27	6.32	0.93	0.21	16.20	16.20	31.08	193.43	8.56	2.92	2.92



17:00-18:00	lc	2	7.27	6.05	1.03	0.34	19.44	19.44	27.91	213.35	13.82	3.28	3.28
17:00-18:00	lc	3	7.27	6.06	0.11	0.00	1.50	1.50	34.97	21.99	0.04	0.32	0.32
17:00-18:00	lx	1	3.36	0.05	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.00	0.00
17:00-18:00	lx	2	3.36	0.04	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00
17:00-18:00	lx1	1	1.12	0.73	0.04	0.01	0.69	0.69	23.85	57.04	0.30	1.86	1.86

### Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Utilised Storage (%)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s per cycle)	Waste d Time Blocking Back (s per cycle)	Waste d Time Total (s per cycle)	Estima ted Blocking
17:00-18:00	1	1	0.00	1.78	60.17	2.97	0.00	0.00	0.00			0.00	21.00	21.00	
17:00-18:00	A	1	0.00	5.97	17.39	34.32	0.00	0.00	0.00	0.13	5.00	0.00	0.00	0.00	
17:00-18:00	A	2	0.00	19.71	26.09	75.57	0.00	0.00	0.00	2.87	14.25	0.00	0.00	0.00	
17:00-18:00	A	3	0.00	8.99	26.09	34.46	0.00	0.00	0.00	0.31	7.26	0.00	0.00	0.00	
17:00-18:00	A	4	0.00	28.53	26.09	109.35	0.15	0.00	0.00	8.72	21.29	0.00	0.00	0.00	
17:00-18:00	Ax 1	1	0.00	1.12	3.48	32.32	0.00	0.00	0.00			18.00	0.00	18.00	
17:00-18:00	Ax 1	2	0.00	43.18	3.48	1241.45	21.78	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	Ax 2	1	0.00	7.26	26.09	27.83	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	Ax 2	2	0.00	0.18	26.09	0.68	0.00	0.00	0.00			1.00	0.00	1.00	
17:00-18:00	B	1	0.00	0.08	5.22	1.49	0.00	0.00	0.00			77.00	0.00	77.00	
17:00-18:00	B	2	0.00	0.43	5.22	8.28	0.00	0.00	0.00			26.00	28.00	54.00	
17:00-18:00	Bc 1	1	0.00	0.08	5.22	1.55	0.00	0.00	0.00			4.00	0.00	4.00	
17:00-18:00	Bc	2	0.00	0.69	5.22	13.26	0.00	0.00	0.00			0.00	0.00	0.00	

18:00	1														
17:00-18:00	Bc 1	3	0.00	0.16	5.22	3.06	0.00	0.00	0.00			0.00	11.00	11.00	
17:00-18:00	Bc 1	4	0.00	0.55	5.22	10.48	0.00	0.00	0.00			0.00	54.00	54.00	
17:00-18:00	C	1	0.00	12.80	34.78	36.81	0.00	0.00	0.00	0.60	10.69	0.00	0.00	0.00	
17:00-18:00	C	2	0.00	23.05	34.78	66.26	0.00	0.00	0.00	3.41	17.32	0.00	4.00	4.00	
17:00-18:00	C3-1	1	0.00	0.00	9.67	0.00	0.00	0.00	0.00			88.00	0.00	88.00	
17:00-18:00	Cx 2	1	0.00	15.99	11.83	135.17	0.67	0.00	0.00	1.19	10.12	0.00	23.00	23.00	
17:00-18:00	Cx 2	2	0.00	2.63	11.83	22.25	0.00	0.00	0.00	0.02	2.24	4.00	0.00	4.00	
17:00-18:00	Cx 3	1	0.00	0.00	10.32	0.01	0.00	0.00	0.00			72.00	0.00	72.00	
17:00-18:00	Cx 4	1	0.00	14.64	2.61	561.22	1.69	0.00	0.00	0.75	3.07	5.00	0.00	5.00	
17:00-18:00	Cx 4-2	1	0.00	0.40	13.47	2.94	0.00	0.00	0.00			10.00	0.00	10.00	
17:00-18:00	Cx 5	1	0.00	0.54	10.89	4.98	0.00	0.00	0.00			25.00	0.00	25.00	
17:00-18:00	D	1	0.00	19.06	52.17	36.54	0.00	0.00	0.00	1.92	12.75	0.00	0.00	0.00	
17:00-18:00	D	2	0.00	20.27	52.17	38.85	0.00	0.00	0.00	1.90	13.50	0.00	22.00	22.00	
17:00-18:00	D	3	0.00	20.66	52.17	39.59	0.00	0.00	0.00	1.96	13.62	0.00	22.00	22.00	
17:00-18:00	Dx 1	1	0.00	0.11	43.48	0.26	0.00	0.00	0.00			5.00	0.00	5.00	
17:00-18:00	Dx 1	2	0.00	36.95	43.48	84.99	0.00	0.00	0.00			20.00	0.00	20.00	
17:00-18:00	E	1	0.00	54.94	34.78	157.94	15.53	0.00	0.00			0.00	39.00	39.00	
17:00-18:00	E	2	0.00	15.82	34.78	45.49	0.00	0.00	0.00			0.00	39.00	39.00	
17:00-18:00	F	1	0.00	20.11	36.52	55.06	0.00	0.00	0.00	2.11	10.30	0.00	0.00	0.00	
17:00-18:00	F	2	0.00	6.78	36.52	18.57	0.00	0.00	0.00	0.14	4.43	0.00	0.00	0.00	
17:00-18:00	F	3	0.00	0.46	36.52	1.25	0.00	0.00	0.00	0.00	0.46	8.00	0.00	8.00	

17:00-18:00	G	1	0.00	16.29	13.22	123.26	0.69	0.00	0.00	9.30	15.41	0.00	0.00	0.00	
17:00-18:00	G	2	0.00	8.05	13.22	60.90	0.00	0.00	0.00	0.92	7.53	0.00	0.00	0.00	
17:00-18:00	H	1	0.00	4.50	16.70	26.97	0.00	0.00	0.00	0.07	3.59	0.00	0.00	0.00	
17:00-18:00	H	2	0.00	4.80	16.70	28.78	0.00	0.00	0.00	0.07	3.83	0.00	0.00	0.00	
17:00-18:00	H	3	0.00	0.47	16.70	2.84	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00	
17:00-18:00	I	1	0.00	16.62	10.43	159.30	1.51	0.00	0.00	4.11	13.53	0.00	0.00	0.00	
17:00-18:00	I	2	0.00	14.20	10.43	136.06	0.53	0.00	0.00	1.62	11.68	0.00	0.00	0.00	
17:00-18:00	Ac	1	0.00	1.89	7.00	27.05	0.00	0.00	0.00	0.07	1.35	3.00	0.00	3.00	
17:00-18:00	Ac	2	0.00	5.88	7.00	84.05	0.00	0.13	7.78	0.12	4.34	0.00	5.00	5.00	
17:00-18:00	Ac	3	0.00	12.27	7.00	175.35	1.92	3.37	202.32	0.28	12.18	0.00	14.00	14.00	
17:00-18:00	Ax	1	0.00	2.23	3.48	64.17	0.00	0.00	0.00	0.11	2.11	0.00	0.00	0.00	
17:00-18:00	Ax	2	0.00	15.12	3.48	434.70	3.31	3.52	211.37	0.84	10.00	0.00	68.00	68.00	
17:00-18:00	Ax	3	0.00	5.61	3.48	161.18	0.10	0.15	9.13	0.06	3.08	15.00	53.00	68.00	
17:00-18:00	Bc	1	0.00	4.14	17.39	23.81	0.00	0.00	0.00			3.00	0.00	3.00	
17:00-18:00	Bc	2	0.00	17.90	17.39	102.91	0.02	0.26	0.00			1.00	0.00	1.00	
17:00-18:00	Bc	3	0.00	7.95	17.39	45.73	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	Bc	4	0.00	21.70	17.39	124.75	0.43	0.89	0.00			0.00	0.00	0.00	
17:00-18:00	Bx	1	0.00	0.00	17.39	0.01	0.00	0.00	0.00			31.00	0.00	31.00	
17:00-18:00	C2	1	0.00	28.18	54.60	51.62	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	C4	1	0.00	56.70	15.06	376.37	25.20	0.00	0.00	23.84	35.17	0.00	0.00	0.00	
17:00-18:00	C5	1	0.00	18.43	9.57	192.72	4.94	0.00	0.00	10.58	17.17	0.00	5.00	5.00	
17:00-18:00	Cc	1	0.00	0.22	6.00	3.66	0.00	0.00	0.00	0.12	0.22	7.00	0.00	7.00	

17:00-18:00	Cc	2	0.00	7.89	6.00	131.58	0.10	0.10	5.77	0.42	5.86	0.00	0.00	0.00	
17:00-18:00	Cc	3	0.00	17.86	6.00	297.74	2.98	2.98	178.54	3.91	10.42	0.00	5.00	5.00	
17:00-18:00	Cx	1	0.00	2.88	17.39	16.58	0.00	0.00	0.00	0.10	2.69	0.00	0.00	0.00	
17:00-18:00	Cx	2	0.00	3.32	17.39	19.06	0.00	0.00	0.00	0.17	2.89	0.00	0.00	0.00	
17:00-18:00	Dc	1	0.00	12.03	15.65	76.89	0.00	0.00	0.00	0.32	6.20	0.00	0.00	0.00	
17:00-18:00	Dc	2	0.00	17.86	15.65	114.08	0.22	0.71	21.19	0.91	7.07	4.00	0.00	4.00	
17:00-18:00	Dc	3	0.00	5.08	15.65	32.47	0.00	0.00	0.00	0.13	1.34	12.00	2.00	14.00	
17:00-18:00	Dx	1	0.00	5.78	9.74	59.33	0.00	0.00	0.00	0.31	2.18	7.00	0.00	7.00	
17:00-18:00	Dx	2	0.00	8.27	9.74	84.87	0.00	0.00	0.00	0.22	0.22	14.00	0.00	14.00	
17:00-18:00	Dx	3	0.00	2.57	9.74	26.35	0.00	0.00	0.00	0.22	0.22	13.00	0.00	13.00	
17:00-18:00	Ec	1	0.00	0.05	8.70	0.56	0.00	0.00	0.00			14.00	0.00	14.00	
17:00-18:00	Ec	2	0.00	20.84	8.70	239.62	2.37	3.27	196.30			17.00	38.00	55.00	
17:00-18:00	Ec	3	0.00	20.97	8.70	241.20	2.52	3.46	207.49			16.00	8.00	24.00	
17:00-18:00	Ex	1	0.00	10.22	17.39	58.74	0.00	0.00	0.00			12.00	0.00	12.00	
17:00-18:00	Ex	2	0.00	3.59	17.39	20.62	0.00	0.00	0.00			48.00	0.00	48.00	
17:00-18:00	Fc	1	0.00	1.67	7.00	23.84	0.00	0.00	0.00	0.04	1.61	7.00	0.00	7.00	
17:00-18:00	Fc	2	0.00	3.83	7.00	54.67	0.00	0.07	0.00	0.29	3.64	2.00	0.00	2.00	
17:00-18:00	Fc	3	0.00	0.73	7.00	10.39	0.00	0.00	0.00	0.01	0.71	10.00	0.00	10.00	
17:00-18:00	Fx	1	0.00	0.35	34.78	1.01	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	Fx	2	0.00	0.28	34.78	0.80	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	Fx 1	1	0.00	0.43	17.39	2.49	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	Fx 1	2	0.00	6.96	17.39	40.03	0.00	0.00	0.00			0.00	10.00	10.00	

17:00-18:00	G1	1	0.00	0.06	10.43	0.56	0.00	0.00	0.00			0.00	39.00	39.00	
17:00-18:00	Gc	1	0.00	1.80	7.00	25.73	0.00	0.00	0.00	0.13	1.79	0.00	0.00	0.00	
17:00-18:00	Gc	2	0.00	1.93	7.00	27.58	0.00	0.00	0.00	0.15	1.93	0.00	0.00	0.00	
17:00-18:00	Gc	3	0.00	0.11	7.00	1.56	0.00	0.00	0.00	0.00	0.11	10.00	0.00	10.00	
17:00-18:00	Gx	1	0.00	0.12	9.74	1.28	0.00	0.00	0.00			7.00	3.00	10.00	
17:00-18:00	Gx	2	0.00	0.00	9.74	0.02	0.00	0.00	0.00			74.00	3.00	77.00	
17:00-18:00	Gx1	1	0.00	4.14	3.48	118.93	0.01	0.00	0.00			1.00	0.00	1.00	
17:00-18:00	H1	1	0.00	0.19	17.39	1.12	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	H1	2	0.00	0.00	17.39	0.00	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	Hc	1	0.00	2.18	7.00	31.11	0.00	0.00	0.00	0.04	2.13	1.00	0.00	1.00	
17:00-18:00	Hc	2	0.00	3.00	7.00	42.88	0.00	0.00	0.03	0.49	2.96	1.00	0.00	1.00	
17:00-18:00	Hc	3	0.00	6.59	7.00	94.18	0.00	0.18	362.15	0.52	0.70	4.00	0.00	4.00	
17:00-18:00	Hx	1	0.00	0.08	17.39	0.47	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	Hx	2	0.00	0.06	17.39	0.35	0.00	0.00	0.00			14.00	0.00	14.00	
17:00-18:00	l1	1	0.00	0.28	17.39	1.61	0.00	0.00	0.00			0.00	43.00	43.00	
17:00-18:00	lc	1	0.00	5.08	7.00	72.54	0.00	0.50	39.73	0.21	4.26	0.00	0.00	0.00	
17:00-18:00	lc	2	0.00	5.69	7.00	81.25	0.00	0.64	64.12	0.34	4.79	1.00	0.00	1.00	
17:00-18:00	lc	3	0.00	0.56	7.00	8.01	0.00	0.00	0.00	0.00	0.56	27.00	0.00	27.00	
17:00-18:00	lx	1	0.00	0.00	7.83	0.02	0.00	0.00	0.00			68.00	4.00	72.00	
17:00-18:00	lx	2	0.00	0.00	7.83	0.02	0.00	0.00	0.00			68.00	4.00	72.00	
17:00-18:00	lx1	1	0.00	3.85	2.61	147.72	0.04	0.00	0.00			67.00	0.00	67.00	

### Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
17:00-18:00	1	1	472.60	10.41	45.39	27.44
17:00-18:00	A	1	32.09	2.53	12.71	28.32
17:00-18:00	A	2	112.21	10.38	10.81	49.95
17:00-18:00	A	3	68.55	4.38	15.66	34.48
17:00-18:00	A	4	124.20	17.31	7.17	75.27
17:00-18:00	Ax1	1	11.33	0.31	36.80	1.96
17:00-18:00	Ax1	2	32.29	8.42	3.84	18.77
17:00-18:00	Ax2	1	207.08	5.55	37.34	14.46
17:00-18:00	Ax2	2	120.07	2.66	45.06	11.98
17:00-18:00	B	1	0.78	0.03	30.80	3.51
17:00-18:00	B	2	0.72	0.17	4.16	25.97
17:00-18:00	Bc1	1	17.78	0.45	39.60	2.73
17:00-18:00	Bc1	2	36.37	1.45	25.17	4.29
17:00-18:00	Bc1	3	23.10	0.64	36.20	2.98
17:00-18:00	Bc1	4	34.23	1.26	27.26	3.96
17:00-18:00	C	1	131.09	7.55	17.37	41.45
17:00-18:00	C	2	179.50	13.43	13.37	53.85
17:00-18:00	C3-1	1	0.00	0.00	0.00	0.00
17:00-18:00	Cx 2	1	74.62	5.51	13.55	18.06
17:00-18:00	Cx 2	2	18.27	0.76	24.09	10.16
17:00-18:00	Cx3	1	3.56	0.07	47.91	4.46
17:00-18:00	Cx4	1	17.05	1.55	10.97	4.92
17:00-18:00	Cx4-2	1	88.00	2.22	39.67	7.03
17:00-18:00	Cx5	1	18.86	0.41	46.26	4.87
17:00-18:00	D	1	243.60	10.44	23.34	46.28
17:00-18:00	D	2	261.00	11.03	23.67	45.62
17:00-18:00	D	3	262.20	11.14	23.54	45.88
17:00-18:00	Dx1	1	201.64	3.24	62.15	14.48
17:00-18:00	Dx1	2	385.50	10.17	37.89	23.75
17:00-18:00	E	1	94.00	49.86	1.89	381.89
17:00-18:00	E	2	125.20	8.09	15.47	46.53

17:00-18:00	F	1	289.91	10.77	26.91	28.10
17:00-18:00	F	2	150.01	3.97	37.75	20.03
17:00-18:00	F	3	18.09	0.43	42.17	17.93
17:00-18:00	G	1	22.34	12.81	1.74	156.91
17:00-18:00	G	2	23.79	4.50	5.28	51.81
17:00-18:00	H	1	45.02	1.70	26.51	13.04
17:00-18:00	H	2	48.10	1.81	26.59	12.99
17:00-18:00	H	3	6.05	0.20	30.05	11.50
17:00-18:00	I	1	31.80	9.33	3.41	63.40
17:00-18:00	I	2	33.96	6.81	4.99	43.29
17:00-18:00	Ac	1	19.06	0.65	29.34	6.63
17:00-18:00	Ac	2	25.08	1.75	14.30	13.59
17:00-18:00	Ac	3	33.80	5.24	6.46	30.12
17:00-18:00	Ax	1	11.33	0.62	18.25	3.95
17:00-18:00	Ax	2	22.97	3.77	6.10	11.81
17:00-18:00	Ax	3	9.32	0.72	12.89	5.59
17:00-18:00	Bc	1	67.39	1.52	44.32	8.12
17:00-18:00	Bc	2	121.25	3.78	32.07	11.23
17:00-18:00	Bc	3	77.00	1.85	41.73	8.63
17:00-18:00	Bc	4	114.10	3.69	30.95	11.63
17:00-18:00	Bx	1	8.13	0.17	47.98	7.50
17:00-18:00	C2	1	487.58	13.16	37.06	30.50
17:00-18:00	C4	1	119.54	31.98	3.74	83.43
17:00-18:00	C5	1	18.26	14.25	1.28	154.57
17:00-18:00	Cc	1	30.23	0.77	39.29	5.96
17:00-18:00	Cc	2	50.12	3.34	15.00	15.59
17:00-18:00	Cc	3	75.66	7.91	9.57	24.46
17:00-18:00	Cx	1	61.06	1.39	43.96	8.19
17:00-18:00	Cx	2	75.55	1.71	44.22	8.14
17:00-18:00	Dc	1	45.49	3.65	12.47	25.99
17:00-18:00	Dc	2	63.84	5.23	12.22	26.52
17:00-18:00	Dc	3	35.07	0.93	37.60	8.62
17:00-18:00	Dx	1	45.17	1.31	34.43	5.86

17:00-18:00	Dx	2	43.18	0.92	47.02	4.29
17:00-18:00	Dx	3	43.18	0.89	48.40	4.16
17:00-18:00	Ec	1	24.09	0.55	43.97	4.09
17:00-18:00	Ec	2	53.19	2.42	22.01	8.18
17:00-18:00	Ec	3	53.49	2.44	21.88	8.23
17:00-18:00	Ex	1	103.94	2.65	39.20	9.18
17:00-18:00	Ex	2	50.54	1.11	45.58	7.90
17:00-18:00	Fc	1	5.25	0.42	12.61	21.13
17:00-18:00	Fc	2	12.28	1.61	7.65	34.84
17:00-18:00	Fc	3	2.37	0.17	13.93	19.12
17:00-18:00	Fx	1	236.00	5.24	45.03	15.99
17:00-18:00	Fx	2	234.80	5.14	45.66	15.77
17:00-18:00	Fx1	1	106.90	2.65	40.38	8.91
17:00-18:00	Fx1	2	128.50	3.56	36.09	9.98
17:00-18:00	G1	1	36.42	0.81	44.84	4.82
17:00-18:00	Gc	1	46.21	1.83	25.30	9.96
17:00-18:00	Gc	2	52.24	2.08	25.12	10.03
17:00-18:00	Gc	3	6.03	0.21	28.75	8.76
17:00-18:00	Gx	1	46.11	1.08	42.71	4.72
17:00-18:00	Gx	2	7.50	0.16	47.71	4.23
17:00-18:00	Gx1	1	19.15	0.66	28.80	2.50
17:00-18:00	H1	1	97.00	2.20	44.01	8.18
17:00-18:00	H1	2	6.30	0.13	48.13	7.48
17:00-18:00	Hc	1	7.62	1.20	6.35	38.00
17:00-18:00	Hc	2	20.62	2.37	8.69	27.76
17:00-18:00	Hc	3	20.97	1.39	15.13	15.95
17:00-18:00	Hx	1	70.06	1.53	45.69	7.88
17:00-18:00	Hx	2	66.02	1.43	46.25	7.78
17:00-18:00	I1	1	109.60	2.55	42.99	8.37
17:00-18:00	lc	1	42.25	2.45	17.22	13.59
17:00-18:00	lc	2	52.91	3.01	17.56	13.32
17:00-18:00	lc	3	4.10	0.23	17.56	13.32
17:00-18:00	lx	1	5.70	0.12	47.51	3.41



17:00-18:00	lx	2	5.12	0.11	47.68	3.40
17:00-18:00	lx1	1	3.61	0.12	29.28	1.84

### Traffic Stream Results: Flare

Time Segment	Arm	Traffic Stream	Flare Present	Flare Components	Degree Of Saturation (%)	Mean Max Queue (PCU)	Calculated Capacity (PCU/hr)	Practical Reserve Capacity (%)
17:00-18:00	C	1	✓	Quick Flare	65	12.80	1006	38
17:00-18:00	C	2	✓	Quick Flare	89	23.05	1006	1
17:00-18:00	G	2	✓	Quick Flare	72	8.05	433	24
17:00-18:00	I	2	✓	Quick Flare	81	14.20	702	12

### Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree Of Saturation Penalty (£ per hr)	Phase Min Max Penalty (£ per hr)	Intergreen Broken Penalty (£ per hr)	Stage Constraint Broken Penalty (£ per hr)	Ped Gap Accepting Penalty (£ per hr)	Warmed Up	Warmed Up Error	Mean Max Queue EoTS (PCU)	Max End Of Green Queue EoTS (PCU)	Max End Of Red Queue EoTS (PCU)	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)	Performance Index (£ per hr)
17:00 - 18:00	1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.79			0.00	9.67	9.67
17:00 - 18:00	A	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	5.97	0.14	5.00	0.00	34.06	12.09
17:00 - 18:00	A	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	19.81	2.97	14.34	0.00	139.59	50.79
17:00 - 18:00	A	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	8.99	0.31	7.26	0.00	53.54	19.11
17:00 - 18:00	A	4	0.00	0.00	0.00	0.00	0.00	✓	0.00	30.33	10.52	23.09	0.00	244.96	90.86
17:00 - 18:00	Ax1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.12			0.00	1.19	1.19
17:00 - 18:00	Ax1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	43.27			0.00	161.06	161.06

17:00 - 18:00	Ax 2	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	7.27			0.00	19.87	19.87
17:00 - 18:00	Ax 2	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.18			0.00	2.53	2.53
17:00 - 18:00	B	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.08			0.00	0.21	0.21
17:00 - 18:00	B	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.43			0.00	2.80	2.80
17:00 - 18:00	Bc 1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.08			0.00	1.15	1.15
17:00 - 18:00	Bc 1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.69			0.00	9.82	9.82
17:00 - 18:00	Bc 1	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.16			0.00	2.27	2.27
17:00 - 18:00	Bc 1	4	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.55			0.00	7.76	7.76
17:00 - 18:00	C	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	12.8 0	0.61	10.7 0	0.00	84.97	27.44
17:00 - 18:00	C	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	23.1 7	3.53	17.4 5	0.00	166.64	55.14
17:00 - 18:00	C3 -1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00
17:00 - 18:00	Cx 2	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	15.9 9	1.20	10.1 3	0.00	77.21	77.21
17:00 - 18:00	Cx 2	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.63	0.02	2.24	0.00	8.58	8.58
17:00 - 18:00	Cx 3	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.01	0.01
17:00 - 18:00	Cx 4	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	14.6 4	0.76	3.07	0.00	27.86	27.86
17:00 - 18:00	Cx 4- 2	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.40			0.00	5.62	5.62

17:00 - 18:00	Cx 5	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.54			0.00	0.28	0.28
17:00 - 18:00	D	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	19.0 9	1.95	12.7 8	0.00	137.11	37.79
17:00 - 18:00	D	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	20.3 0	1.93	13.5 3	0.00	144.28	39.59
17:00 - 18:00	D	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	20.6 9	1.99	13.6 5	0.00	146.05	40.14
17:00 - 18:00	Dx 1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.11			0.00	1.59	1.59
17:00 - 18:00	Dx 1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	36.9 5			0.00	130.37	130.37
17:00 - 18:00	E	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	98.6 4			0.00	718.93	310.73
17:00 - 18:00	E	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	15.8 8			0.00	98.18	51.34
17:00 - 18:00	F	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	20.1 3	2.13	10.3 3	0.00	93.62	93.62
17:00 - 18:00	F	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	6.78	0.14	4.43	0.00	20.32	20.32
17:00 - 18:00	F	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.46	0.00	0.46	0.00	1.31	1.31
17:00 - 18:00	G	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	21.0 9	14.1 0	20.2 1	0.00	193.69	91.36
17:00 - 18:00	G	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	8.06	0.93	7.54	0.00	67.36	30.56
17:00 - 18:00	H	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	4.50	0.07	3.59	0.00	16.41	16.41
17:00 - 18:00	H	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	4.80	0.07	3.83	0.00	17.44	17.44
17:00 - 18:00	H	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.47	0.00	0.47	0.00	1.66	1.66

17:00 - 18:00	I	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	16.9 8	4.46	13.8 8	0.00	144.29	49.28
17:00 - 18:00	I	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	14.2 3	1.65	11.7 1	0.00	104.94	34.66
17:00 - 18:00	Ac	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.89	0.07	1.35	0.00	5.47	5.47
17:00 - 18:00	Ac	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	5.88	0.12	4.34	7.78	19.81	27.59
17:00 - 18:00	Ac	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	12.2 7	0.28	12.1 8	202.3 2	80.71	283.03
17:00 - 18:00	Ax	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.23	0.11	2.11	0.00	11.26	11.26
17:00 - 18:00	Ax	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	15.1 2	0.85	10.0 1	211.3 7	82.93	294.30
17:00 - 18:00	Ax	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	5.61	0.06	3.08	9.13	18.67	27.81
17:00 - 18:00	Bc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	4.14			0.00	2.60	2.60
17:00 - 18:00	Bc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	17.9 0			0.00	34.82	34.82
17:00 - 18:00	Bc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	7.95			0.00	7.58	7.58
17:00 - 18:00	Bc	4	0.00	0.00	0.00	0.00	0.00	✓	0.00	21.7 0			0.00	37.20	37.20
17:00 - 18:00	Bx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.02	0.02
17:00 - 18:00	C2	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	28.2 2			0.00	61.84	61.84
17:00 - 18:00	C4	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	70.6 7	37.8 1	49.1 4	0.00	487.35	487.35
17:00 - 18:00	C5	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	24.2 9	16.4 4	23.0 3	0.00	217.72	217.72

17:00 - 18:00	Cc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.22	0.12	0.22	0.00	2.32	2.32
17:00 - 18:00	Cc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	7.90	0.43	5.86	5.77	41.98	47.75
17:00 - 18:00	Cc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	18.0 1	4.05	10.5 6	178.5 4	108.62	287.15
17:00 - 18:00	Cx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.88	0.10	2.69	0.00	12.46	12.46
17:00 - 18:00	Cx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.32	0.17	2.89	0.00	14.56	14.56
17:00 - 18:00	Dc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	12.0 4	0.32	6.20	0.00	46.89	468.87
17:00 - 18:00	Dc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	17.8 6	0.91	7.07	21.19	78.39	99.59
17:00 - 18:00	Dc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	5.08	0.13	1.34	0.00	6.13	6.13
17:00 - 18:00	Dx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	5.78	0.31	2.19	0.00	15.85	15.85
17:00 - 18:00	Dx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	8.27	0.22	0.22	0.00	6.44	6.44
17:00 - 18:00	Dx	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.57	0.22	0.22	0.00	3.84	3.84
17:00 - 18:00	Ec	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.05			0.00	0.69	0.69
17:00 - 18:00	Ec	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	20.8 4			196.3 0	37.92	234.22
17:00 - 18:00	Ec	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	20.9 7			207.4 9	38.41	245.89
17:00 - 18:00	Ex	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	10.2 2			0.00	12.27	12.27
17:00 - 18:00	Ex	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.59			0.00	1.34	1.34

17:00 - 18:00	Fc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.67	0.04	1.61	0.00	4.55	4.55
17:00 - 18:00	Fc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.83	0.29	3.64	0.00	19.62	19.62
17:00 - 18:00	Fc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.73	0.01	0.71	0.00	1.78	1.78
17:00 - 18:00	Fx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.35			0.00	5.01	5.01
17:00 - 18:00	Fx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.28			0.00	3.97	3.97
17:00 - 18:00	Fx 1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.43			0.00	6.15	6.15
17:00 - 18:00	Fx 1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	6.96			0.00	15.84	15.84
17:00 - 18:00	G1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.06			0.00	0.82	0.82
17:00 - 18:00	Gc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.80	0.13	1.79	0.00	6.61	6.61
17:00 - 18:00	Gc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.93	0.15	1.93	0.00	7.63	7.63
17:00 - 18:00	Gc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.11	0.00	0.11	0.00	0.38	0.38
17:00 - 18:00	Gx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.12			0.00	1.77	1.77
17:00 - 18:00	Gx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.03	0.03
17:00 - 18:00	Gx 1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	4.14			0.00	5.91	5.91
17:00 - 18:00	H1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.19			0.00	2.77	2.77
17:00 - 18:00	H1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.01	0.01

17:00 - 18:00	Hc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.18	0.04	2.13	0.00	14.96	14.96
17:00 - 18:00	Hc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.00	0.49	2.96	0.03	26.35	26.38
17:00 - 18:00	Hc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	6.60	0.52	0.71	362.15	12.52	374.67
17:00 - 18:00	Hx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.08			0.00	1.17	1.17
17:00 - 18:00	Hx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.06			0.00	0.85	0.85
17:00 - 18:00	l1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.28			0.00	3.97	3.97
17:00 - 18:00	lc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	5.08	0.21	4.26	39.73	19.11	58.85
17:00 - 18:00	lc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	5.69	0.34	4.79	64.12	22.72	86.84
17:00 - 18:00	lc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.56	0.00	0.56	0.00	1.82	1.82
17:00 - 18:00	lx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.03	0.03
17:00 - 18:00	lx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.02	0.02
17:00 - 18:00	lx1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.85			0.00	2.55	2.55

## Network Results

### Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Network Cycle Time (s)	Total Network Delay (PCU - hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalled PRC	Item with worst unsignalled PRC	Item with worst over all PRC	Network Within Capacity
A1 -	26/06/2	26/06/2	17:00	88	236.1	122.8	E/1	7	7	C5/1	C3-1/1	C3-	

2031 PM Scenario C	014 21:30:5 8	014 21:33:2 1			0	0						1/1	
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### Network Results: Vehicle Summary

Time Segment	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Calculated Flow Entering (PCU/hr)	Actual Green (s per cycle)	Mean Delay Per PCU (s)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	123!	-100	62426	6274	12.79	2647.47	751.71	4542.95

### Network Results: Pedestrian Summary

Time Segment	Degree Of Saturation (%)	Calculated Flow Entering (Ped/hr)	Actual Green (s per cycle)	Mean Delay Per Ped (s)	Weighted Cost Of Delay (£ per hr)	Performance Index (£ per hr)
17:00-18:00	123!	1000	22	0.61	151.82	151.82

### Network Results: Flows And Signals

Time Segment	Calculated Flow Entering (PCU/hr)	Calculated Flow Out (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s per cycle)	Effective Green (s per cycle)
17:00-18:00	63426	63307	685	✓	123!	✓	-100	6296	6344

### Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-18:00	8.02	13.40	101.07	135.03	3352.61	2799.29	37.11	19252.45	3962.47	849.50	751.71

### Network Results: Queues And Blocking

Time Segment	Max Queue Storage (PCU)	Excess Queue Penalty (£ per hr)	Wasted Time Starvation (s per cycle)	Wasted Time Blocking Back (s per cycle)	Wasted Time Total (s per cycle)
17:00-18:00	1517.31	1143.77	938.00	567.00	1505.00

### Network Results: Journey Times

Time Segment	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)
17:00-18:00	7086.48	377.41	18.78





# TRANSYT 15

Version: 15.0.1.2976 []  
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**Last run:** 27/06/2014 11:39:02

**Analysis Set used for last run:** A1 - 2031 AM Scenario 3

**Filename:** Scenario C Proposed Rev 3- AM.t15

**Path:** F:\TEM\Project\BCC - Peddimore Access Modelling\3.

EXECUTION\Modelling\With Water Orton Lane\Scenario C\Proposed Water Orton Lane

**Report generation date:** 27/06/2014 14:19:50

## File summary

### File Description

<b>Title</b>	A38 Peddimore Lane Junction - Minworth roundabout
<b>Location</b>	Birmingham
<b>Site Number</b>	
<b>UTCRegion</b>	
<b>Driving Side</b>	Left
<b>Date</b>	02/03/2014
<b>Version</b>	
<b>Status</b>	Proposed Option
<b>Identifier</b>	
<b>Client</b>	Birmingham City Council
<b>Jobnumber</b>	60316941
<b>Enumerator</b>	EU\vuppalas
<b>Description</b>	2031 SC3 - Peddimore Lane junction flows tested in preferred Option Model for Minworth roundabout

## Units

Cost Units	Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
£	kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

## Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

## Network Diagrams



A38 Peddimore Lane Junction - Mirworth roundabout  
 Cycletime 0s / 88s , Timesteps 87 / 88  
 Diagram produced using TRANSYT 15.0.1.2976

# A1 - 2031 AM Scenario 3 \*: D1 - 2031 AM Scenario 3\*

## Summary

### Data Errors and Warnings

No errors or warnings

### Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Network Cycle Time (s)	Total Network Delay (PCU - hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over all PRC	Network Within Capacity
A1 - 2031 AM Scenario 3	27/06/2014 11:30:10	27/06/2014 11:39:02	08:00	88	218.42	115.61	E/1	6	6	A/2	C3-1/1	C3-1/1	

### Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
2031 AM Scenario 3		D1	✓	

### Demand Set Details

Demand Set	Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
D1	2031 AM Scenario 3				08:00	

## Network Options

### Network Timings

Network Cycle Time (s)	Restrict To SCOOT Cycle Times	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
88		60	1	60

### Signals Options

Start Displacement (s)	End Displacement (s)
2	3

### Advanced

Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)
10000.00	10000.00	10000.00

## Traffic Options

Traffic Model	Vehicle Flow Scaling Factor (%)	Pedestrian Flow Scaling Factor (%)	Cruise Times Or Speeds
Force To PDM	100	100	Cruise Speeds

## Advanced

Resolution	DOS Threshold (%)	Cruise Scaling Factor (%)	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)	Calculate results for Path Segments
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75	

## Normal Parameters

Dispersal Type	Dispersal Coefficient	Travel Time Coefficient
Default	35	80

## Bus Parameters

Dispersion Coefficient1	Dispersion Coefficient2	Acceleration (ms <sup>-2</sup> )	Travel Time Coefficient1	Travel Time Coefficient2
70	15	0.47	30	85

## Tram Parameters

Dispersion Coefficient1	Dispersion Coefficient2	Acceleration (ms <sup>-2</sup> )	Travel Time Coefficient1	Travel Time Coefficient2
0	0	0.47	100	100

## Pedestrian Parameters

Dispersal Type	Dispersal Coefficient	Travel Time Coefficient
Default	35	80

## Optimisation Options

Enable Optimisation	Auto Redistribute	Optimisation Level	Enable Out Profile Accuracy
✓		Offsets Only	✓

## Advanced

Optimisation Type	Hill Climb Increments	OUTProfile Accuracy	Use Enhanced Optimisation	Auto Optimisation	Optimisation Order
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				<b>Order</b>	
Hill Climb (Fast)	15,40,15,40,15,1,1	50,50,5,5,0.5,0.05,0.05		✓	2,1,3,5,6,7,8,9,10,11,4

## Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian Monetary Value Of Delay (£ per Ped-hr)
14.20	2.60	14.20

# Traffic Nodes

## Traffic Nodes

ID	Name	Description
1	A38 N	
2	Lindridge Drive	
3	A4097 Kingsbury Road	
4	A38 S	
5	Wamley Ash Road	
6	Lindridge Drive Circulatory	
7	A38 South Exit	
8	A38 North Exit	
9	A4097 Kingsbury Road Exit	
10	A38 NB	
11	Dev Access	
12	A38 South bound	
13	Peddimore	
14	Dev Access	
15	A38 Southbound	
16	Peddimore	
17	A38 North Exit	
18	Dev Access Exit	
19	Peddimore	
20	A30 Southbound Exit	
21	(untitled)	
22	(untitled)	

23	(untitled)	
24	(untitled)	

## Links

### Links

Link	Name	Description	Traffic Node	Length (m)	Has Restricted Flow	Use RR67	Saturation Flow (PCU/hr)	Is Signal Controlled	Is Give Way	Traffic Type	Is Minor Shared
1	(untitled)		23	12.00	✓		10000	✓		Pedestrian	

### Modelling

Link	Traffic Model	Stop Weighting (%)	Delay Weighting (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
1	[Forced to PDM]	100	100		0.00		

### Modelling - Advanced

Link	Initial Queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter	Auto Cycle Time	Cycle Time
1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

### Flows

Link	Flows	Total Flow (08:00-09:00) (PCU/hr)
1	1	500

### Flows - Advanced

Link	Detectors	Link Sensitivity Multiplier (%)	Cruise Sensitivity Multiplier (%)
1		100	100

### Signals

Link	Controller Stream	Phase	Phase2 Enabled
1	4	E	

### Entry Sources

Link	Cruise Time (seconds)	Cruise Speed (kph)
1	1.44	30.00

# Arms and Traffic Streams

## Arms

Arm	Name	Description	Traffic Node
1	A4097 Kingsbury Road WB		24
A	A38 North		1
Ax1	(untitled)		21
Ax2	A38 North Exit		17
B	Lindridge Drive		2
Bc1	Lindridge Drive Circulatory 2		2
C	A4097 Kingsbury Road		3
C3-1	Cottage Lane Entry		23
Cx 2	A4097 Kingsbury Road EB		23
Cx3	Cottage Lane Exit		
Cx4-2	(untitled)		
Cx5	Water Orton Lane Exit		
D	A38 South		4
Dx1	A38 South Exit		
E	Wamley Ash Road		5
F	A38 South Entry		10
Fx1	(untitled)		22
G	Dev Access Entry		11
Gx1	Dev Access Exit 1		
H	A38 North Entry		12
I	Peddimore Entry		13
Ac	A38 North Circulatory		1
Ax	A38 North Exit		8
Bc	Lindridge Drive Circulatory		6
Bx	Lindridge drive Exit		
C2	A4097 Kingsbury Road WB		9
C4	A4097 Kingsbury Road Entry		23
C5	Water Orton Lane Entry		23
Cc	A4097 Kingsbury Road Circulatory		3



<b>Cx</b>	A4097 Kinsbury Road Exit		24
<b>Dc</b>	A38 South Circulatory		4
<b>Dx</b>	A38 South Exit		7
<b>Ec</b>	Wamley Ash Road Circulatory		5
<b>Ex</b>	Wamley Ash Road Exit		
<b>Fc</b>	A38 South Circulatory		10
<b>Fx</b>	A38 South Exit		20
<b>G1</b>	Dev Access Entry 1		14
<b>Gc</b>	Dev access Circulatory		11
<b>Gx</b>	Dev Access exit		18
<b>H1</b>	A38 North Entry		15
<b>Hc</b>	A38 North Circulatory		12
<b>Hx</b>	A38 North Exit		
<b>I1</b>	Peddimore Entry 1		16
<b>Ic</b>	Peddimore Circulatory		13
<b>Ix</b>	Peddimore Exit		19
<b>Ix1</b>	Peddimore Exit		

## Traffic Streams

Arm	Traffic Stream	Name	Description	Auto Length	Length (m)	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Is Give Way	Traffic Type
1	1	(untitled )			100.00	✓	SumOfLanes	1800			Normal
1	2	(untitled )			100.00	✓	SumOfLanes	1800			Normal
A	1	(untitled )			100.00	✓	SumOfLanes	2128	✓		Normal
A	2	(untitled )			150.00	✓	SumOfLanes	2279	✓		Normal
A	3	A38 North Entry			150.00	✓	SumOfLanes	2279	✓		Normal
A	4	(untitled )			150.00	✓	SumOfLanes	2279	✓		Normal
Ax1	1	(untitled )			20.00	✓	SumOfLanes	1800			Normal
Ax1	2	(untitled )			20.00	✓	SumOfLane	1800			Normal

		)					s				
<b>Ax2</b>	<b>1</b>	A38 North Exit			150.00	✓	SumOfLanes	1800			Normal
<b>Ax2</b>	<b>2</b>	A38 North Exit			150.00	✓	SumOfLanes	1800			Normal
<b>B</b>	<b>1</b>	(untitled)			30.00					✓	Normal
<b>B</b>	<b>2</b>	(untitled)			30.00					✓	Normal
<b>Bc1</b>	<b>1</b>	(untitled)			30.00	✓	SumOfLanes	1800			Normal
<b>Bc1</b>	<b>2</b>	(untitled)			30.00	✓	SumOfLanes	1800			Normal
<b>Bc1</b>	<b>3</b>	(untitled)			30.00	✓	SumOfLanes	1800			Normal
<b>Bc1</b>	<b>4</b>	(untitled)			30.00	✓	SumOfLanes	1800			Normal
<b>C</b>	<b>1</b>	(untitled)			200.00	✓	SumOfLanes	2263	✓		Normal
<b>C</b>	<b>2</b>	(untitled)			200.00	✓	SumOfLanes	2263	✓		Normal
<b>C3-1</b>	<b>1</b>	(untitled)			55.60					✓	Normal
<b>Cx 2</b>	<b>1</b>	(untitled)			413.96	✓	SumOfLanes	2083	✓		Normal
<b>Cx 2</b>	<b>2</b>	(untitled)			413.96	✓	SumOfLanes	2083	✓		Normal
<b>Cx3</b>	<b>1</b>	(untitled)			59.35	✓	SumOfLanes	1800			Normal
<b>Cx4-2</b>	<b>1</b>	(untitled)			77.43	✓	SumOfLanes	1800			Normal
<b>Cx4-2</b>	<b>2</b>	(untitled)			77.43	✓	SumOfLanes	1800			Normal
<b>Cx5</b>	<b>1</b>	(untitled)			62.61	✓	SumOfLanes	1800			Normal
<b>D</b>	<b>1</b>	(untitled)			300.00	✓	SumOfLanes	2159	✓		Normal
<b>D</b>	<b>2</b>	(untitled)			300.00	✓	SumOfLanes	2317	✓		Normal
<b>D</b>	<b>3</b>	(untitled)			300.00	✓	SumOfLanes	2317	✓		Normal
<b>Dx1</b>	<b>1</b>	A38			250.00	✓	SumOfLane	2155			Normal

		South Exit					s				
<b>Dx1</b>	<b>2</b>	A38 South Exit			250.00	✓	SumOfLanes	2155			Normal
<b>E</b>	<b>1</b>	(untitled )			200.00					✓	Normal
<b>E</b>	<b>2</b>	(untitled )			200.00					✓	Normal
<b>F</b>	<b>1</b>	(untitled )			210.00	✓	SumOfLanes	2134	✓		Normal
<b>F</b>	<b>2</b>	(untitled )			210.00	✓	SumOfLanes	2284	✓		Normal
<b>F</b>	<b>3</b>	(untitled )			210.00	✓	SumOfLanes	2284	✓		Normal
<b>G</b>	<b>1</b>	(untitled )			76.00	✓	SumOfLanes	2123	✓		Normal
<b>G</b>	<b>2</b>	(untitled )			76.00	✓	SumOfLanes	2274	✓		Normal
<b>H</b>	<b>1</b>	(untitled )			96.00	✓	SumOfLanes	2134	✓		Normal
<b>H</b>	<b>2</b>	(untitled )			96.00	✓	SumOfLanes	2284	✓		Normal
<b>H</b>	<b>3</b>	(untitled )			96.00	✓	SumOfLanes	2284	✓		Normal
<b>I</b>	<b>1</b>	(untitled )			60.00	✓	SumOfLanes	2123	✓		Normal
<b>I</b>	<b>2</b>	(untitled )			60.00	✓	SumOfLanes	2274	✓		Normal
<b>Ac</b>	<b>1</b>	(untitled )			54.00	✓	SumOfLanes	2112	✓		Normal
<b>Ac</b>	<b>2</b>	(untitled )			54.00	✓	SumOfLanes	2263	✓		Normal
<b>Ac</b>	<b>3</b>	(untitled )			54.00	✓	SumOfLanes	2263	✓		Normal
<b>Ax</b>	<b>1</b>	(untitled )			20.00	✓	SumOfLanes	1965	✓		Normal
<b>Ax</b>	<b>2</b>	(untitled )			20.00	✓	SumOfLanes	2105	✓		Normal
<b>Ax</b>	<b>3</b>	(untitled )			20.00	✓	SumOfLanes	2105	✓		Normal
<b>Bc</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Bc</b>	<b>2</b>	(untitled )			100.00	✓	SumOfLane	1800			Normal

		)					s				
<b>Bc</b>	<b>3</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Bc</b>	<b>4</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Bx</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>C2</b>	<b>1</b>	(untitled )			213.96	✓	SumOfLanes	1800			Normal
<b>C4</b>	<b>1</b>	(untitled )			86.62	✓	SumOfLanes	1887	✓		Normal
<b>C4</b>	<b>2</b>	(untitled )			86.62	✓	SumOfLanes	2055	✓		Normal
<b>C5</b>	<b>1</b>	(untitled )			55.00	✓	SumOfLanes	1906	✓		Normal
<b>Cc</b>	<b>1</b>	(untitled )			65.00	✓	SumOfLanes	2059	✓		Normal
<b>Cc</b>	<b>2</b>	(untitled )			65.00	✓	SumOfLanes	2209	✓		Normal
<b>Cc</b>	<b>3</b>	(untitled )			65.00	✓	SumOfLanes	2181	✓		Normal
<b>Cx</b>	<b>1</b>	A4097 Kinsbury Road Exit			100.00	✓	SumOfLanes	2120	✓		Normal
<b>Cx</b>	<b>2</b>	A4097 Kinsbury Road Exit			100.00	✓	SumOfLanes	2120	✓		Normal
<b>Dc</b>	<b>1</b>	(untitled )			90.00	✓	SumOfLanes	2059	✓		Normal
<b>Dc</b>	<b>2</b>	(untitled )			90.00	✓	SumOfLanes	2172	✓		Normal
<b>Dc</b>	<b>3</b>	(untitled )			90.00	✓	SumOfLanes	2185	✓		Normal
<b>Dx</b>	<b>1</b>	(untitled )			56.00	✓	SumOfLanes	1915	✓		Normal
<b>Dx</b>	<b>2</b>	(untitled )			56.00	✓	SumOfLanes	2055	✓		Normal
<b>Dx</b>	<b>3</b>	(untitled )			56.00	✓	SumOfLanes	2055	✓		Normal
<b>Ec</b>	<b>1</b>	(untitled )			50.00	✓	SumOfLanes	1800			Normal
<b>Ec</b>	<b>2</b>	(untitled )			50.00	✓	SumOfLanes	1800			Normal

<b>Ec</b>	<b>3</b>	(untitled )			50.00	✓	SumOfLanes	1800			Normal
<b>Ex</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Ex</b>	<b>2</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Fc</b>	<b>1</b>	(untitled )			74.00	✓	SumOfLanes	2166	✓		Normal
<b>Fc</b>	<b>2</b>	(untitled )			74.00	✓	SumOfLanes	2317	✓		Normal
<b>Fc</b>	<b>3</b>	(untitled )			74.00	✓	SumOfLanes	2317	✓		Normal
<b>Fx</b>	<b>1</b>	(untitled )			200.00	✓	SumOfLanes	2112			Normal
<b>Fx</b>	<b>2</b>	(untitled )			200.00	✓	SumOfLanes	2263			Normal
<b>Fx1</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Fx1</b>	<b>2</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>G1</b>	<b>1</b>	(untitled )			60.00	✓	SumOfLanes	2112			Normal
<b>Gc</b>	<b>1</b>	(untitled )			70.00	✓	SumOfLanes	2166	✓		Normal
<b>Gc</b>	<b>2</b>	(untitled )			70.00	✓	SumOfLanes	2317	✓		Normal
<b>Gc</b>	<b>3</b>	(untitled )			70.00	✓	SumOfLanes	2317	✓		Normal
<b>Gx</b>	<b>1</b>	(untitled )			56.00	✓	SumOfLanes	2112			Normal , Bus, Tram
<b>Gx</b>	<b>2</b>	(untitled )			56.00	✓	SumOfLanes	2263			Normal , Bus, Tram
<b>Gx1</b>	<b>1</b>	(untitled )			20.00	✓	SumOfLanes	1965			Normal , Bus, Tram
<b>H1</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	2112			Normal
<b>H1</b>	<b>2</b>	(untitled )			100.00	✓	SumOfLanes	2263			Normal
<b>Hc</b>	<b>1</b>	(untitled )			67.00	✓	SumOfLanes	2166	✓		Normal
<b>Hc</b>	<b>2</b>	(untitled )			67.00	✓	SumOfLanes	2317	✓		Normal





4-2			)											
Cx 5	1	1	(untitled )											1800
D	1	2	A38 South Entry		✓	N/A	Clear ly Good	0	4.00		10	42.00	✓	2159
D	2	1	A38 South Entry		✓	N/A	Clear ly Good	0	4.00		0	10.00		2317
D	3	3	A38 South Entry		✓	N/A	Clear ly Good	0	4.00		0	10.00		2317
Dx 1	1	1	(untitled )		✓	N/A	N/A	0	4.00		0	10.00		2155
Dx 1	2	1	(untitled )		✓	N/A	N/A	0	4.00		0	10.00		2155
E	1	3	(untitled )											
E	2	3	(untitled )											
F	1	2	A38 North Exit		✓	N/A	Clear ly Good	0	3.70		0	10.00	✓	2134
F	2	1	A38 North Exit		✓	N/A	Clear ly Good	0	3.70		0	10.00		2284
F	3	1	A38 North Exit		✓	N/A	Clear ly Good	0	3.70		0	10.00		2284
G	1	2	A38 North Exit		✓	N/A	Clear ly Good	0	3.60		0	10.00	✓	2123
G	2	1	A38 North Exit		✓	N/A	Clear ly Good	0	3.60		0	10.00		2274
H	1	2	A38 North Exit		✓	N/A	Clear ly Good	0	3.70		0	10.00	✓	2134
H	2	1	A38 North Exit		✓	N/A	Clear ly Good	0	3.70		0	10.00		2284
H	3	1	A38 North Exit		✓	N/A	Clear ly Good	0	3.70		0	10.00		2284
I	1	2	A38 North Exit		✓	N/A	Clear ly Good	0	3.60		0	10.00	✓	2123



I	2	1	A38 North Exit		✓	N/A	Clearly Good	0	3.60		0	10.00		2274
Ac	1	1	A38 North Circulatory		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
Ac	2	2	A38 North Circulatory		✓	N/A	Clearly Good	0	3.50		0	10.00		2263
Ac	3	1	A38 North Circulatory		✓	N/A	Clearly Good	0	3.50		0	10.00		2263
Ax	1	2	A38 North Exit		✓	N/A	N/A	0	3.50		0	10.00	✓	1965
Ax	2	1	A38 North Exit		✓	N/A	N/A	0	3.50		0	10.00		2105
Ax	3	1	A38 North Exit		✓	N/A	N/A	0	3.50		0	10.00		2105
Bc	1	2	Lindridge Drive Circulatory											1800
Bc	2	1	Lindridge Drive Circulatory											1800
Bc	3	3	Lindridge Drive Circulatory											1800
Bc	4	3	Lindridge Drive Circulatory											1800
Bx	1	2	Lindridge drive Exit											1800
C2	1	1	(untitled )											1800
C4	1	1	(untitled )		✓	N/A	N/A	0	3.00		7	7.20	✓	1887
C4	2	1	(untitled )		✓	N/A	N/A	0	3.00		0	10.00		2055



			Ash Road Circulatory											
<b>Ec</b>	<b>3</b>	<b>3</b>	(untitled)											1800
<b>Ex</b>	<b>1</b>	<b>1</b>	Wamley Ash Road Exit											1800
<b>Ex</b>	<b>2</b>	<b>2</b>	Wamley Ash Road Exit											1800
<b>Fc</b>	<b>1</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00	✓	2166
<b>Fc</b>	<b>2</b>	<b>2</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
<b>Fc</b>	<b>3</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
<b>Fx</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
<b>Fx</b>	<b>2</b>	<b>1</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00		2263
<b>Fx 1</b>	<b>1</b>	<b>1</b>	(untitled)											1800
<b>Fx 1</b>	<b>2</b>	<b>1</b>	(untitled)											1800
<b>G1</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
<b>Gc</b>	<b>1</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00	✓	2166
<b>Gc</b>	<b>2</b>	<b>2</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
<b>Gc</b>	<b>3</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317

<b>Gx</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clear ly Good	0	3.50		0	10.00	✓	2112
<b>Gx</b>	<b>2</b>	<b>1</b>	A38 North Exit		✓	N/A	Clear ly Good	0	3.50		0	10.00		2263
<b>Gx 1</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	N/A	0	3.50		0	10.00	✓	1965
<b>H1</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clear ly Good	0	3.50		0	10.00	✓	2112
<b>H1</b>	<b>2</b>	<b>1</b>	A38 North Exit		✓	N/A	Clear ly Good	0	3.50		0	10.00		2263
<b>Hc</b>	<b>1</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clear ly Good	0	4.00		0	10.00	✓	2166
<b>Hc</b>	<b>2</b>	<b>2</b>	A38 North Circulatory		✓	N/A	Clear ly Good	0	4.00		0	10.00		2317
<b>Hc</b>	<b>3</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clear ly Good	0	4.00		0	10.00		2317
<b>Hx</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clear ly Good	0	3.50		0	10.00	✓	2112
<b>Hx</b>	<b>2</b>	<b>1</b>	A38 North Exit		✓	N/A	Clear ly Good	0	3.50		0	10.00		2263
<b>I1</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clear ly Good	0	3.50		0	10.00	✓	2112
<b>Ic</b>	<b>1</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clear ly Good	0	4.00		0	10.00	✓	2166
<b>Ic</b>	<b>2</b>	<b>2</b>	A38 North Circulatory		✓	N/A	Clear ly Good	0	4.00		0	10.00		2317
<b>Ic</b>	<b>3</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clear ly Good	0	4.00		0	10.00		2317
<b>Ix</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clear ly Good	0	3.50		0	10.00	✓	2112

<b>lx</b>	<b>2</b>	<b>1</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00		2263
<b>lx1</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112

## Modelling

Arm	Traffic Stream	Traffic Model	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Queue Limit (PCU)	Excess Queue Penalty (£)	Has Degree Of Saturation Limit
<b>1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>1</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>A</b>	<b>1</b>	[Forced to PDM]	20	40	✓	0.00				
<b>A</b>	<b>2</b>	[Forced to PDM]	20	40	✓	0.00				
<b>A</b>	<b>3</b>	[Forced to PDM]	20	40	✓	0.00				
<b>A</b>	<b>4</b>	[Forced to PDM]	20	40	✓	0.00				
<b>Ax1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Ax1</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Ax2</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Ax2</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>B</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>B</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Bc1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00	✓	5	0.00	
<b>Bc1</b>	<b>2</b>	[Forced to PDM]	100	100		0.00	✓	5	0.00	
<b>Bc1</b>	<b>3</b>	[Forced to PDM]	100	100		0.00	✓	5	0.00	
<b>Bc1</b>	<b>4</b>	[Forced to PDM]	100	100		0.00	✓	5	0.00	
<b>C</b>	<b>1</b>	[Forced	0	40		0.00				

		to PDM]								
<b>C</b>	<b>2</b>	[Forced to PDM]	0	40		0.00				
<b>C3-1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx 2</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx 2</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Cx3</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx4-2</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx4-2</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Cx5</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>D</b>	<b>1</b>	[Forced to PDM]	0	40		0.00				
<b>D</b>	<b>2</b>	[Forced to PDM]	0	40		0.00				
<b>D</b>	<b>3</b>	[Forced to PDM]	0	40		0.00				
<b>Dx1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Dx1</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>E</b>	<b>1</b>	[Forced to PDM]	100	40		0.00				
<b>E</b>	<b>2</b>	[Forced to PDM]	100	40		0.00				
<b>F</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>F</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>F</b>	<b>3</b>	[Forced to PDM]	100	100		0.00				
<b>G</b>	<b>1</b>	[Forced to PDM]	20	50		0.00				
<b>G</b>	<b>2</b>	[Forced to PDM]	20	50		0.00				
<b>H</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				

H	2	[Forced to PDM]	100	100		0.00				
H	3	[Forced to PDM]	100	100		0.00				
I	1	[Forced to PDM]	0	40	✓	0.00				
I	2	[Forced to PDM]	0	40	✓	0.00				
Ac	1	[Forced to PDM]	100	100		7.00	✓	3	80.00	
Ac	2	[Forced to PDM]	100	100		7.00	✓	5	0.00	
Ac	3	[Forced to PDM]	100	100		7.00	✓	5	0.00	
Ax	1	[Forced to PDM]	100	100		0.00	✓	3	0.00	
Ax	2	[Forced to PDM]	100	100		0.00	✓	3	0.00	
Ax	3	[Forced to PDM]	100	100		0.00	✓	3	0.00	
Bc	1	[Forced to PDM]	100	100		0.00	✓	15	0.00	
Bc	2	[Forced to PDM]	100	100		0.00	✓	15	0.00	
Bc	3	[Forced to PDM]	100	100		0.00	✓	15	0.00	
Bc	4	[Forced to PDM]	100	100		0.00	✓	15	0.00	
Bx	1	[Forced to PDM]	100	100		0.00				
C2	1	[Forced to PDM]	100	100		0.00				
C4	1	[Forced to PDM]	100	100		0.00				
C4	2	[Forced to PDM]	100	100		0.00				
C5	1	[Forced to PDM]	100	100		0.00				
Cc	1	[Forced to PDM]	100	100		6.00	✓	6	60.00	
Cc	2	[Forced to PDM]	100	100		6.00	✓	6	60.00	
Cc	3	[Forced to PDM]	100	100		6.00	✓	6	60.00	

<b>Cx</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Dc</b>	<b>1</b>	[Forced to PDM]	1000	1000		0.00	✓	13	60.00	
<b>Dc</b>	<b>2</b>	[Forced to PDM]	100	100		0.00	✓	13	30.00	
<b>Dc</b>	<b>3</b>	[Forced to PDM]	100	100		0.00	✓	13	0.00	
<b>Dx</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Dx</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Dx</b>	<b>3</b>	[Forced to PDM]	100	100		0.00				
<b>Ec</b>	<b>1</b>	[Forced to PDM]	100	100		0.00	✓	6	0.00	
<b>Ec</b>	<b>2</b>	[Forced to PDM]	100	100		0.00	✓	6	60.00	
<b>Ec</b>	<b>3</b>	[Forced to PDM]	100	100		0.00	✓	6	60.00	
<b>Ex</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Ex</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Fc</b>	<b>1</b>	[Forced to PDM]	100	100		7.00	✓	3	0.00	
<b>Fc</b>	<b>2</b>	[Forced to PDM]	100	100		7.00	✓	3	0.00	
<b>Fc</b>	<b>3</b>	[Forced to PDM]	100	100		7.00	✓	3	0.00	
<b>Fx</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Fx</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Fx1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Fx1</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>G1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Gc</b>	<b>1</b>	[Forced to PDM]	100	100		7.00	✓	2	100.00	



Gc	2	[Forced to PDM]	100	100		7.00	✓	2	100.00	
Gc	3	[Forced to PDM]	100	100		7.00	✓	2	100.00	
Gx	1	[Forced to PDM]	100	100		0.00				
Gx	2	[Forced to PDM]	100	100		0.00				
Gx1	1	[Forced to PDM]	100	100		0.00				
H1	1	[Forced to PDM]	100	100		0.00				
H1	2	[Forced to PDM]	100	100		0.00				
Hc	1	[Forced to PDM]	100	100		7.00	✓	3	2000.00	
Hc	2	[Forced to PDM]	100	100		7.00	✓	3	2000.00	
Hc	3	[Forced to PDM]	100	100	✓	7.00	✓	3	2000.00	
Hx	1	[Forced to PDM]	100	100		0.00				
Hx	2	[Forced to PDM]	100	100		0.00				
I1	1	[Forced to PDM]	100	100		0.00				
Ic	1	[Forced to PDM]	100	100		7.00	✓	2	80.00	
Ic	2	[Forced to PDM]	100	100		7.00	✓	2	100.00	
Ic	3	[Forced to PDM]	100	100		7.00	✓	2	0.00	
Ix	1	[Forced to PDM]	100	100		0.00				
Ix	2	[Forced to PDM]	100	100		0.00				
Ix1	1	[Forced to PDM]	100	100		0.00				

## Modelling - Advanced

Arm	Traffic Stream	Cruise Sensitivity Multiplier (%)	Initial Queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter	Auto Cycle Time	Cycle Time
1	1	100	0.00	NetworkDefault	Not-	NetworkDefault	0.50	✓	88

					Included				
<b>1</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>A</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>A</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>A</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>A</b>	<b>4</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax1</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax2</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax2</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>B</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>B</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc1</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc1</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc1</b>	<b>4</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C3-1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx 2</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx 2</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx3</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

<b>Cx4-2</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx4-2</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx5</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>D</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>D</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>D</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dx1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dx1</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>E</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>E</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>F</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>F</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>F</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>G</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>G</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>H</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>H</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>H</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>I</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>I</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ac</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ac</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

<b>Ac</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc</b>	<b>4</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C2</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C4</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C4</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C5</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

<b>Dx</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dx</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ec</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ec</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ec</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ex</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ex</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fx</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fx1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fx1</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>G1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gx</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gx1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>H1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

H1	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Hc	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Hc	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Hc	3	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Hx	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Hx	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
I1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ic	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ic	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ic	3	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ix	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ix	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ix1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

## Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
1	1	100	100
1	2	100	100
A	1	100	100
A	2	100	100
A	3	100	100
A	4	100	100
Ax1	1	100	100
Ax1	2	100	100
Ax2	1	100	100
Ax2	2	100	100
B	1	100	100

<b>B</b>	<b>2</b>	100	100
<b>Bc1</b>	<b>1</b>	100	100
<b>Bc1</b>	<b>2</b>	100	100
<b>Bc1</b>	<b>3</b>	100	100
<b>Bc1</b>	<b>4</b>	100	100
<b>C</b>	<b>1</b>	100	100
<b>C</b>	<b>2</b>	100	100
<b>C3-1</b>	<b>1</b>	100	100
<b>Cx 2</b>	<b>1</b>	100	100
<b>Cx 2</b>	<b>2</b>	100	100
<b>Cx3</b>	<b>1</b>	100	100
<b>Cx4-2</b>	<b>1</b>	100	100
<b>Cx4-2</b>	<b>2</b>	100	100
<b>Cx5</b>	<b>1</b>	100	100
<b>D</b>	<b>1</b>	100	100
<b>D</b>	<b>2</b>	100	100
<b>D</b>	<b>3</b>	100	100
<b>Dx1</b>	<b>1</b>	100	100
<b>Dx1</b>	<b>2</b>	100	100
<b>E</b>	<b>1</b>	100	100
<b>E</b>	<b>2</b>	100	100
<b>F</b>	<b>1</b>	100	100
<b>F</b>	<b>2</b>	100	100
<b>F</b>	<b>3</b>	100	100
<b>G</b>	<b>1</b>	100	100
<b>G</b>	<b>2</b>	100	100
<b>H</b>	<b>1</b>	100	100
<b>H</b>	<b>2</b>	100	100
<b>H</b>	<b>3</b>	100	100
<b>I</b>	<b>1</b>	100	100
<b>I</b>	<b>2</b>	100	100
<b>Ac</b>	<b>1</b>	100	100
<b>Ac</b>	<b>2</b>	100	100

<b>Ac</b>	<b>3</b>	100	100
<b>Ax</b>	<b>1</b>	100	100
<b>Ax</b>	<b>2</b>	100	100
<b>Ax</b>	<b>3</b>	100	100
<b>Bc</b>	<b>1</b>	100	100
<b>Bc</b>	<b>2</b>	100	100
<b>Bc</b>	<b>3</b>	100	100
<b>Bc</b>	<b>4</b>	100	100
<b>Bx</b>	<b>1</b>	100	100
<b>C2</b>	<b>1</b>	100	100
<b>C4</b>	<b>1</b>	100	100
<b>C4</b>	<b>2</b>	100	100
<b>C5</b>	<b>1</b>	100	100
<b>Cc</b>	<b>1</b>	100	100
<b>Cc</b>	<b>2</b>	100	100
<b>Cc</b>	<b>3</b>	100	100
<b>Cx</b>	<b>1</b>	100	100
<b>Cx</b>	<b>2</b>	100	100
<b>Dc</b>	<b>1</b>	100	100
<b>Dc</b>	<b>2</b>	100	100
<b>Dc</b>	<b>3</b>	100	100
<b>Dx</b>	<b>1</b>	100	100
<b>Dx</b>	<b>2</b>	100	100
<b>Dx</b>	<b>3</b>	100	100
<b>Ec</b>	<b>1</b>	100	100
<b>Ec</b>	<b>2</b>	100	100
<b>Ec</b>	<b>3</b>	100	100
<b>Ex</b>	<b>1</b>	100	100
<b>Ex</b>	<b>2</b>	100	100
<b>Fc</b>	<b>1</b>	100	100
<b>Fc</b>	<b>2</b>	100	100
<b>Fc</b>	<b>3</b>	100	100
<b>Fx</b>	<b>1</b>	100	100



Fx	2	100	100
Fx1	1	100	100
Fx1	2	100	100
G1	1	100	100
Gc	1	100	100
Gc	2	100	100
Gc	3	100	100
Gx	1	100	100
Gx	2	100	100
Gx1	1	100	100
H1	1	100	100
H1	2	100	100
Hc	1	100	100
Hc	2	100	100
Hc	3	100	100
Hx	1	100	100
Hx	2	100	100
I1	1	100	100
lc	1	100	100
lc	2	100	100
lc	3	100	100
lx	1	100	100
lx	2	100	100
lx1	1	100	100

## Bus - Modelling

Arm	Traffic Stream	Stationary Time (seconds)	Stop Weighting (%)	Delay Weighting (%)
Gx	1	0.00	100	100
Gx	2	0.00	100	100
Gx1	1	0.00	100	100
lx	1	0.00	100	100
lx	2	0.00	100	100
lx1	1	0.00	100	100

## Tram - Modelling

Arm	Traffic Stream	Stationary Time (seconds)	Stop Weighting (%)	Delay Weighting (%)
Gx	1	0.00	100	100
Gx	2	0.00	100	100
Gx1	1	0.00	100	100
Ix	1	0.00	100	100
Ix	2	0.00	100	100
Ix1	1	0.00	100	100

## Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)
1	1	755	755	0	0
1	2	578	578	0	0
A	1	332	332	0	0
A	2	827	827	0	0
A	3	507	507	0	0
A	4	745	745	0	0
Ax1	1	655	655	0	0
Ax1	2	1329	1329	0	0
Ax2	1	649	649	0	0
Ax2	2	1336	1336	0	0
B	1	77	77	0	0
B	2	77	77	0	0
Bc1	1	664	664	0	0
Bc1	2	1266	1266	0	0
Bc1	3	907	907	0	0
Bc1	4	1145	1145	0	0
C	1	524	524	0	0
C	2	810	810	0	0
C3-1	1	0	0	0	0
Cx 2	1	616	616	0	0
Cx 2	2	873	873	0	0
Cx3	1	42	42	0	0

<b>Cx4-2</b>	<b>1</b>	610	610	0	0
<b>Cx4-2</b>	<b>2</b>	538	538	0	0
<b>Cx5</b>	<b>1</b>	427	427	0	0
<b>D</b>	<b>1</b>	580	580	0	0
<b>D</b>	<b>2</b>	622	622	0	0
<b>D</b>	<b>3</b>	622	622	0	0
<b>Dx1</b>	<b>1</b>	860	860	0	0
<b>Dx1</b>	<b>2</b>	1815	1815	0	0
<b>E</b>	<b>1</b>	559	559	0	0
<b>E</b>	<b>2</b>	801	801	0	0
<b>F</b>	<b>1</b>	649	649	0	0
<b>F</b>	<b>2</b>	845	845	0	0
<b>F</b>	<b>3</b>	491	491	0	0
<b>G</b>	<b>1</b>	601	601	0	0
<b>G</b>	<b>2</b>	643	643	0	0
<b>H</b>	<b>1</b>	611	611	0	0
<b>H</b>	<b>2</b>	653	653	0	0
<b>H</b>	<b>3</b>	23	23	0	0
<b>I</b>	<b>1</b>	135	135	0	0
<b>I</b>	<b>2</b>	145	145	0	0
<b>Ac</b>	<b>1</b>	362	362	0	0
<b>Ac</b>	<b>2</b>	439	439	0	0
<b>Ac</b>	<b>3</b>	801	801	0	0
<b>Ax</b>	<b>1</b>	655	655	0	0
<b>Ax</b>	<b>2</b>	922	922	0	0
<b>Ax</b>	<b>3</b>	407	407	0	0
<b>Bc</b>	<b>1</b>	694	694	0	0
<b>Bc</b>	<b>2</b>	1266	1266	0	0
<b>Bc</b>	<b>3</b>	907	907	0	0
<b>Bc</b>	<b>4</b>	1145	1145	0	0
<b>Bx</b>	<b>1</b>	30	30	0	0
<b>C2</b>	<b>1</b>	1333	1333	0	0
<b>C4</b>	<b>1</b>	540	540	0	0

<b>C4</b>	<b>2</b>	589	589	0	0
<b>C5</b>	<b>1</b>	332	332	0	0
<b>Cc</b>	<b>1</b>	519	519	0	0
<b>Cc</b>	<b>2</b>	921	921	0	0
<b>Cc</b>	<b>3</b>	1209	1209	0	0
<b>Cx</b>	<b>1</b>	729	729	0	0
<b>Cx</b>	<b>2</b>	760	760	0	0
<b>Dc</b>	<b>1</b>	336	336	0	0
<b>Dc</b>	<b>2</b>	553	553	0	0
<b>Dc</b>	<b>3</b>	417	417	0	0
<b>Dx</b>	<b>1</b>	860	860	0	0
<b>Dx</b>	<b>2</b>	921	921	0	0
<b>Dx</b>	<b>3</b>	895	895	0	0
<b>Ec</b>	<b>1</b>	565	565	0	0
<b>Ec</b>	<b>2</b>	832	832	0	0
<b>Ec</b>	<b>3</b>	830	830	0	0
<b>Ex</b>	<b>1</b>	592	592	0	0
<b>Ex</b>	<b>2</b>	312	312	0	0
<b>Fc</b>	<b>1</b>	22	22	0	0
<b>Fc</b>	<b>2</b>	53	53	0	0
<b>Fc</b>	<b>3</b>	8	8	0	0
<b>Fx</b>	<b>1</b>	1027	1027	0	0
<b>Fx</b>	<b>2</b>	1384	1384	0	0
<b>Fx1</b>	<b>1</b>	1159	1159	0	0
<b>Fx1</b>	<b>2</b>	1251	1251	0	0
<b>G1</b>	<b>1</b>	1244	1244	0	0
<b>Gc</b>	<b>1</b>	366	366	0	0
<b>Gc</b>	<b>2</b>	853	853	0	0
<b>Gc</b>	<b>3</b>	491	491	0	0
<b>Gx</b>	<b>1</b>	313	313	0	0
<b>Gx</b>	<b>2</b>	45	45	0	0
<b>Gx1</b>	<b>1</b>	358	358	0	0
<b>H1</b>	<b>1</b>	1264	1264	0	0

H1	2	23	23	0	0
Hc	1	574	574	0	0
Hc	2	924	924	0	0
Hc	3	646	646	0	0
Hx	1	445	445	0	0
Hx	2	366	366	0	0
I1	1	280	280	0	0
Ic	1	891	891	0	0
Ic	2	1299	1299	0	0
Ic	3	23	23	0	0
Ix	1	644	644	0	0
Ix	2	574	574	0	0
Ix1	1	1217	1217	0	0

## Signals

Arm	Traffic Stream	Controller Stream	Phase	Phase2 Enabled
A	1	1	A	
A	2	1	A	
A	3	1	A	
A	4	1	A	
C	1	3	A	
C	2	3	A	
Cx 2	1	4	A	
Cx 2	2	4	A	
D	1	2	A	
D	2	2	A	
D	3	2	A	
F	1	8	A	
F	2	8	A	
F	3	8	A	
G	1	9	A	
G	2	9	A	
H	1	10	A	

H	2	10	A	
H	3	10	A	
I	1	11	A	
I	2	11	A	
Ac	1	1	B	
Ac	2	1	B	
Ac	3	1	B	
Ax	1	5	A	
Ax	2	5	A	
Ax	3	5	A	
C4	1	4	D	
C4	2	4	D	
C5	1	4	C	
Cc	1	3	B	
Cc	2	3	B	
Cc	3	3	B	
Cx	1	6	A	
Cx	2	6	A	
Dc	1	2	B	
Dc	2	2	B	
Dc	3	2	B	
Dx	1	7	A	
Dx	2	7	A	
Dx	3	7	A	
Fc	1	8	B	
Fc	2	8	B	
Fc	3	8	B	
Gc	1	9	B	
Gc	2	9	B	
Gc	3	9	B	
Hc	1	10	B	
Hc	2	10	B	
Hc	3	10	B	

lc	1	11	B	
lc	2	11	B	
lc	3	11	B	

## Entry Sources

Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)
B	1	2.24	48.28
B	2	2.24	48.28
C3-1	1	4.15	48.28
D	1	16.78	64.37
D	2	16.78	64.37
D	3	16.78	64.37
E	1	14.91	48.28
E	2	14.91	48.28
C4	1	6.46	48.28
C4	2	6.46	48.28
C5	1	4.10	48.28
G1	1	4.47	48.28
H1	1	7.46	48.28
H1	2	7.46	48.28
I1	1	7.46	48.28

## Sources

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Destination Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)	Auto Turning Radius	Traffic Turn Style	Turning Radius (m)
1	1	1	TrafficStream	C5/1	1/1	7.46	48.28			✓	Straight	Straight Movement
1	2	1	TrafficStream	C4/2	1/2	7.46	48.28			✓	Straight	Straight Movement
A	1	1	TrafficStream	Fx1/1	A/1	7.46	48.28			✓	Straight	Straight Movement
A	2	1	TrafficStream	Fx1/1	A/2	11.18	48.28			✓	Straight	Straight Movement

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<b>A</b>	<b>3</b>	<b>1</b>	TrafficStream	Fx1/2	A/3	11.18	48.28			✓	Straight	Straight Movement
<b>A</b>	<b>4</b>	<b>1</b>	TrafficStream	Fx1/2	A/4	11.18	48.28			✓	Straight	Straight Movement
<b>Ax1</b>	<b>1</b>	<b>1</b>	TrafficStream	Ax/1	Ax1/1	1.49	48.28			✓	Straight	Straight Movement
<b>Ax1</b>	<b>2</b>	<b>1</b>	TrafficStream	Ax/2	Ax1/2	1.49	48.28			✓	Straight	Straight Movement
<b>Ax2</b>	<b>1</b>	<b>1</b>	TrafficStream	Ax1/1	Ax2/1	11.18	48.28			✓	Straight	Straight Movement
<b>Ax2</b>	<b>2</b>	<b>1</b>	TrafficStream	Ax1/1	Ax2/2	11.18	48.28			✓	Straight	Straight Movement
<b>Bc1</b>	<b>1</b>	<b>1</b>	TrafficStream	Bc/1	Bc1/1	2.24	48.28			✓	Straight	Straight Movement
<b>Bc1</b>	<b>2</b>	<b>1</b>	TrafficStream	Bc/2	Bc1/2	2.24	48.28			✓	Straight	Straight Movement
<b>Bc1</b>	<b>3</b>	<b>1</b>	TrafficStream	Bc/3	Bc1/3	2.24	48.28			✓	Straight	Straight Movement
<b>Bc1</b>	<b>4</b>	<b>1</b>	TrafficStream	Bc/4	Bc1/4	2.24	48.28			✓	Straight	Straight Movement
<b>C</b>	<b>1</b>	<b>1</b>	TrafficStream	C2/1	C/1	14.91	48.28			✓	Straight	Straight Movement
<b>C</b>	<b>2</b>	<b>1</b>	TrafficStream	C2/1	C/2	14.91	48.28			✓	Straight	Straight Movement
<b>Cx2</b>	<b>1</b>	<b>1</b>	TrafficStream	Cx/1	Cx 2/1	30.87	48.28			✓	Straight	Straight Movement
<b>Cx2</b>	<b>2</b>	<b>1</b>	TrafficStream	Cx/2	Cx 2/2	30.87	48.28			✓	Straight	Straight Movement
<b>Cx3</b>	<b>1</b>	<b>1</b>	TrafficStream	Cx 2/1	Cx3/1	4.43	48.28			✓	Straight	Straight Movement
<b>Cx4-2</b>	<b>1</b>	<b>1</b>	TrafficStream	Cx 2/1	Cx4-2/1	5.77	48.28			✓	Straight	Straight Movement



<b>Cx4-2</b>	<b>2</b>	<b>1</b>	TrafficStream	Cx 2/2	Cx4-2/2	5.77	48.28			✓	Straight	Straight Movement
<b>Cx5</b>	<b>1</b>	<b>1</b>	TrafficStream	C3-1/1	Cx5/1	4.67	48.28			✓	Straight	Straight Movement
<b>Dx1</b>	<b>1</b>	<b>1</b>	TrafficStream	Dx/1	Dx1/1	13.98	64.37			✓	Straight	Straight Movement
<b>Dx1</b>	<b>2</b>	<b>1</b>	TrafficStream	Dx/2	Dx1/2	13.98	64.37			✓	Straight	Straight Movement
<b>F</b>	<b>1</b>	<b>1</b>	TrafficStream	Ax2/1	F/1	15.66	48.28			✓	Straight	Straight Movement
<b>F</b>	<b>2</b>	<b>1</b>	TrafficStream	Ax2/2	F/2	15.66	48.28			✓	Straight	Straight Movement
<b>F</b>	<b>3</b>	<b>1</b>	TrafficStream	Ax2/2	F/3	15.66	48.28			✓	Straight	Straight Movement
<b>Fx1</b>	<b>1</b>	<b>1</b>	TrafficStream	Fx/1	Fx1/1	7.46	48.28			✓	Straight	Straight Movement
<b>Fx1</b>	<b>2</b>	<b>1</b>	TrafficStream	Fx/1	Fx1/2	7.46	48.28			✓	Straight	Straight Movement
<b>G</b>	<b>1</b>	<b>1</b>	TrafficStream	G1/1	G/1	5.67	48.28			✓	Straight	Straight Movement
<b>G</b>	<b>2</b>	<b>1</b>	TrafficStream	G1/1	G/2	5.67	48.28			✓	Straight	Straight Movement
<b>Gx1</b>	<b>1</b>	<b>1</b>	TrafficStream	Gx/1	Gx1/1	1.49	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>H</b>	<b>1</b>	<b>1</b>	TrafficStream	H1/1	H/1	7.16	48.28			✓	Straight	Straight Movement
<b>H</b>	<b>2</b>	<b>1</b>	TrafficStream	H1/1	H/2	7.16	48.28			✓	Straight	Straight Movement
<b>H</b>	<b>3</b>	<b>1</b>	TrafficStream	H1/2	H/3	7.16	48.28			✓	Straight	Straight Movement
<b>I</b>	<b>1</b>	<b>1</b>	TrafficStream	I1/1	I/1	4.47	48.28			✓	Straight	Straight Movement

I	2	1	TrafficStream	I1/1	I/2	4.47	48.28			✓	Straight	Straight Movement
Ac	1	1	TrafficStream	E/1	Ac/1	4.03	48.28			✓	Straight	Straight Movement
Ac	2	1	TrafficStream	Ec/3	Ac/2	4.03	48.28			✓	Straight	Straight Movement
Ac	3	1	TrafficStream	E/2	Ac/3	4.03	48.28			✓	Straight	Straight Movement
Ax	1	1	TrafficStream	Ec/1	Ax/1	1.12	64.37			✓	Straight	Straight Movement
Ax	2	1	TrafficStream	Ec/2	Ax/2	1.12	64.37			✓	Straight	Straight Movement
Ax	3	1	TrafficStream	Ec/3	Ax/3	1.12	64.37			✓	Straight	Straight Movement
Bc	1	1	TrafficStream	Ac/1	Bc/1	7.46	48.28			✓	Straight	Straight Movement
Bc	2	1	TrafficStream	A/2	Bc/2	7.46	48.28			✓	Straight	Straight Movement
Bc	3	1	TrafficStream	Ac/3	Bc/3	7.46	48.28			✓	Straight	Straight Movement
Bc	4	1	TrafficStream	Ac/3	Bc/4	7.46	48.28			✓	Straight	Straight Movement
Bx	1	1	TrafficStream	Bc/1	Bx/1	7.46	48.28			✓	Nearside	76.24
C2	1	1	TrafficStream	1/1	C2/1	15.95	48.28			✓	Straight	Straight Movement
Cc	1	1	TrafficStream	B/1	Cc/1	4.85	48.28			✓	Straight	Straight Movement
Cc	2	1	TrafficStream	B/2	Cc/2	4.85	48.28			✓	Straight	Straight Movement
Cc	3	1	TrafficStream	B/2	Cc/3	4.85	48.28			✓	Straight	Straight Movement
Cx	1	1	TrafficStream	Bc1/1	Cx/1	5.59	64.37			✓	Straight	Straight Movement

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<b>Cx</b>	<b>2</b>	<b>1</b>	TrafficStream	Bc1/2	Cx/2	5.59	64.37			✓	Straight	Straight Movement
<b>Dc</b>	<b>1</b>	<b>1</b>	TrafficStream	C/1	Dc/1	6.71	48.28			✓	Straight	Straight Movement
<b>Dc</b>	<b>2</b>	<b>1</b>	TrafficStream	C/2	Dc/2	6.71	48.28			✓	Straight	Straight Movement
<b>Dc</b>	<b>3</b>	<b>1</b>	TrafficStream	C/2	Dc/3	6.71	48.28			✓	Straight	Straight Movement
<b>Dx</b>	<b>1</b>	<b>1</b>	TrafficStream	Cc/1	Dx/1	3.13	64.37			✓	Straight	Straight Movement
<b>Dx</b>	<b>2</b>	<b>1</b>	TrafficStream	Cc/2	Dx/2	3.13	64.37			✓	Straight	Straight Movement
<b>Dx</b>	<b>3</b>	<b>1</b>	TrafficStream	Cc/3	Dx/3	3.13	64.37			✓	Straight	Straight Movement
<b>Ec</b>	<b>1</b>	<b>1</b>	TrafficStream	D/1	Ec/1	3.73	48.28			✓	Straight	Straight Movement
<b>Ec</b>	<b>2</b>	<b>1</b>	TrafficStream	D/2	Ec/2	3.73	48.28			✓	Straight	Straight Movement
<b>Ec</b>	<b>3</b>	<b>1</b>	TrafficStream	D/3	Ec/3	3.73	48.28			✓	Straight	Straight Movement
<b>Ex</b>	<b>1</b>	<b>1</b>	TrafficStream	Dc/1	Ex/1	7.46	48.28			✓	Straight	Straight Movement
<b>Ex</b>	<b>2</b>	<b>1</b>	TrafficStream	Dc/2	Ex/2	7.46	48.28			✓	Straight	Straight Movement
<b>Fc</b>	<b>1</b>	<b>1</b>	TrafficStream	lc/2	Fc/1	8.28	32.19			✓	Straight	Straight Movement
<b>Fc</b>	<b>2</b>	<b>1</b>	TrafficStream	l/2	Fc/2	8.28	32.19			✓	Straight	Straight Movement
<b>Fc</b>	<b>3</b>	<b>1</b>	TrafficStream	lc/3	Fc/3	8.28	32.19			✓	Offside	91.25
<b>Fx</b>	<b>1</b>	<b>1</b>	TrafficStream	l/1	Fx/1	14.91	48.28			✓	Straight	Straight Movement

<b>Fx</b>	<b>2</b>	<b>1</b>	TrafficStream	I/2	Fx/2	14.91	48.28			✓	Straight	Straight Movement
<b>Gc</b>	<b>1</b>	<b>1</b>	TrafficStream	F/1	Gc/1	7.83	32.19			✓	Straight	Straight Movement
<b>Gc</b>	<b>2</b>	<b>1</b>	TrafficStream	F/2	Gc/2	7.83	32.19			✓	Straight	Straight Movement
<b>Gc</b>	<b>3</b>	<b>1</b>	TrafficStream	Fc/3	Gc/3	7.83	32.19			✓	Offside	52.91
<b>Gx</b>	<b>1</b>	<b>1</b>	TrafficStream	F/1	Gx/1	4.18	48.28	15.00	15.00	✓	Nearside	63.89
<b>Gx</b>	<b>2</b>	<b>1</b>	TrafficStream	Fc/2	Gx/2	4.18	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>Hc</b>	<b>1</b>	<b>1</b>	TrafficStream	G/1	Hc/1	7.49	32.19			✓	Straight	Straight Movement
<b>Hc</b>	<b>2</b>	<b>1</b>	TrafficStream	Gc/3	Hc/2	7.49	32.19			✓	Straight	Straight Movement
<b>Hc</b>	<b>3</b>	<b>1</b>	TrafficStream	Gc/3	Hc/3	7.49	32.19			✓	Straight	Straight Movement
<b>Hx</b>	<b>1</b>	<b>1</b>	TrafficStream	G/1	Hx/1	7.46	48.28			✓	Nearside	100.00
<b>Hx</b>	<b>2</b>	<b>1</b>	TrafficStream	Gc/2	Hx/2	7.46	48.28			✓	Straight	Straight Movement
<b>lc</b>	<b>1</b>	<b>1</b>	TrafficStream	H/1	lc/1	7.27	32.19			✓	Straight	Straight Movement
<b>lc</b>	<b>2</b>	<b>1</b>	TrafficStream	H/2	lc/2	7.27	32.19			✓	Straight	Straight Movement
<b>lc</b>	<b>3</b>	<b>1</b>	TrafficStream	Hc/3	lc/3	7.27	32.19			✓	Offside	49.48
<b>lx</b>	<b>1</b>	<b>1</b>	TrafficStream	Hc/1	lx/1	3.36	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>lx</b>	<b>2</b>	<b>1</b>	TrafficStream	Hc/2	lx/2	3.36	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>lx1</b>	<b>1</b>	<b>1</b>	TrafficStream	lx/2	lx1/1	1.12	48.28	15.00	15.00	✓	Straight	Straight Movement

<b>1</b>	<b>1</b>	<b>2</b>	TrafficStream	C4/1	1/1	7.46	48.28			✓	Straight	Straight Movement
<b>Ac</b>	<b>1</b>	<b>2</b>	TrafficStream	Ec/3	Ac/1	4.03	48.28			✓	Straight	Straight Movement
<b>Ac</b>	<b>2</b>	<b>2</b>	TrafficStream	E/1	Ac/2	6.48	30.00			✓	Straight	Straight Movement
<b>Ax</b>	<b>1</b>	<b>2</b>	TrafficStream	E/1	Ax/1	1.12	64.37			✓	Straight	Straight Movement
<b>Ax</b>	<b>2</b>	<b>2</b>	TrafficStream	E/1	Ax/2	1.12	64.37			✓	Straight	Straight Movement
<b>Ax1</b>	<b>2</b>	<b>2</b>	TrafficStream	Ax/3	Ax1/2	1.49	48.28			✓	Straight	Straight Movement
<b>Ax2</b>	<b>1</b>	<b>2</b>	TrafficStream	Ax1/2	Ax2/1	11.18	48.28			✓	Straight	Straight Movement
<b>Ax2</b>	<b>2</b>	<b>2</b>	TrafficStream	Ax1/2	Ax2/2	11.18	48.28			✓	Straight	Straight Movement
<b>Bc</b>	<b>1</b>	<b>2</b>	TrafficStream	A/1	Bc/1	7.46	48.28			✓	Nearside	83.93
<b>Bc</b>	<b>2</b>	<b>2</b>	TrafficStream	Ac/2	Bc/2	7.46	48.28			✓	Straight	Straight Movement
<b>Bc</b>	<b>3</b>	<b>2</b>	TrafficStream	A/3	Bc/3	7.46	48.28			✓	Straight	Straight Movement
<b>Bc</b>	<b>4</b>	<b>2</b>	TrafficStream	A/4	Bc/4	7.46	48.28			✓	Straight	Straight Movement
<b>C2</b>	<b>1</b>	<b>2</b>	TrafficStream	1/2	C2/1	15.95	48.28			✓	Straight	Straight Movement
<b>Cc</b>	<b>1</b>	<b>2</b>	TrafficStream	Bc1/2	Cc/1	4.85	48.28			✓	Straight	Straight Movement
<b>Cc</b>	<b>2</b>	<b>2</b>	TrafficStream	Bc1/3	Cc/2	4.85	48.28			✓	Straight	Straight Movement
<b>Cc</b>	<b>3</b>	<b>2</b>	TrafficStream	Bc1/4	Cc/3	4.85	48.28			✓	Straight	Straight Movement
<b>Cx</b>	<b>1</b>	<b>2</b>	TrafficStream	B/1	Cx/1	5.59	64.37			✓	Nearside	73.56

<b>Cx 2</b>	<b>1</b>	<b>2</b>	TrafficStream	Cx/2	Cx 2/1	30.87	48.28			✓	Straight	Straight Movement
<b>Cx 2</b>	<b>2</b>	<b>2</b>	TrafficStream	Cx/1	Cx 2/2	30.87	48.28			✓	Straight	Straight Movement
<b>Cx3</b>	<b>1</b>	<b>2</b>	TrafficStream	C5/1	Cx3/1	4.43	48.28			✓	Straight	Straight Movement
<b>Cx4-2</b>	<b>2</b>	<b>2</b>	TrafficStream	C5/1	Cx4-2/2	5.77	48.28			✓	Straight	Straight Movement
<b>Cx5</b>	<b>1</b>	<b>2</b>	TrafficStream	C4/1	Cx5/1	4.67	48.28			✓	Straight	Straight Movement
<b>Dc</b>	<b>1</b>	<b>2</b>	TrafficStream	Cc/3	Dc/1	6.71	48.28			✓	Straight	Straight Movement
<b>Dc</b>	<b>2</b>	<b>2</b>	TrafficStream	Cc/3	Dc/2	6.71	48.28			✓	Straight	Straight Movement
<b>Dx</b>	<b>1</b>	<b>2</b>	TrafficStream	C/1	Dx/1	3.13	64.37			✓	Straight	Straight Movement
<b>Dx1</b>	<b>2</b>	<b>2</b>	TrafficStream	Dx/3	Dx1/2	13.98	64.37			✓	Straight	Straight Movement
<b>Ec</b>	<b>1</b>	<b>2</b>	TrafficStream	Dc/2	Ec/1	3.73	48.28			✓	Straight	Straight Movement
<b>Ec</b>	<b>2</b>	<b>2</b>	TrafficStream	Dc/3	Ec/2	3.73	48.28			✓	Straight	Straight Movement
<b>Ec</b>	<b>3</b>	<b>2</b>	TrafficStream	Dc/3	Ec/3	3.73	48.28			✓	Straight	Straight Movement
<b>Ex</b>	<b>1</b>	<b>2</b>	TrafficStream	D/1	Ex/1	7.46	48.28			✓	Straight	Straight Movement
<b>Fc</b>	<b>1</b>	<b>2</b>	TrafficStream	I/2	Fc/1	8.28	32.19			✓	Straight	Straight Movement
<b>Fc</b>	<b>2</b>	<b>2</b>	TrafficStream	Ic/3	Fc/2	8.28	32.19			✓	Straight	Straight Movement
<b>Fc</b>	<b>3</b>	<b>2</b>	TrafficStream	I/2	Fc/3	8.28	32.19			✓	Straight	Straight Movement

<b>Fx</b>	<b>1</b>	<b>2</b>	TrafficStream	lc/1	Fx/1	14.91	48.28			✓	Straight	Straight Movement
<b>Fx</b>	<b>2</b>	<b>2</b>	TrafficStream	lc/2	Fx/2	14.91	48.28			✓	Straight	Straight Movement
<b>Fx1</b>	<b>1</b>	<b>2</b>	TrafficStream	Fx/2	Fx1/1	7.46	48.28			✓	Straight	Straight Movement
<b>Fx1</b>	<b>2</b>	<b>2</b>	TrafficStream	Fx/2	Fx1/2	7.46	48.28			✓	Straight	Straight Movement
<b>Gc</b>	<b>1</b>	<b>2</b>	TrafficStream	Fc/2	Gc/1	7.83	32.19			✓	Offside	72.91
<b>Gc</b>	<b>2</b>	<b>2</b>	TrafficStream	Fc/3	Gc/2	7.83	32.19			✓	Offside	52.91
<b>Gc</b>	<b>3</b>	<b>2</b>	TrafficStream	F/3	Gc/3	7.83	32.19			✓	Straight	Straight Movement
<b>Gx</b>	<b>1</b>	<b>2</b>	TrafficStream	Fc/1	Gx/1	4.18	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>Gx1</b>	<b>1</b>	<b>2</b>	TrafficStream	Gx/2	Gx1/1	1.49	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>Hc</b>	<b>1</b>	<b>2</b>	TrafficStream	Gc/2	Hc/1	7.49	32.19			✓	Straight	Straight Movement
<b>Hc</b>	<b>2</b>	<b>2</b>	TrafficStream	G/1	Hc/2	7.49	32.19			✓	Straight	Straight Movement
<b>Hc</b>	<b>3</b>	<b>2</b>	TrafficStream	G/2	Hc/3	7.49	32.19			✓	Straight	Straight Movement
<b>Hx</b>	<b>1</b>	<b>2</b>	TrafficStream	Gc/1	Hx/1	7.46	48.28			✓	Straight	Straight Movement
<b>lc</b>	<b>1</b>	<b>2</b>	TrafficStream	Hc/2	lc/1	7.27	32.19			✓	Offside	69.48
<b>lc</b>	<b>2</b>	<b>2</b>	TrafficStream	Hc/3	lc/2	7.27	32.19			✓	Offside	49.48
<b>lc</b>	<b>3</b>	<b>2</b>	TrafficStream	H/3	lc/3	7.27	32.19			✓	Straight	Straight Movement
<b>lx</b>	<b>1</b>	<b>2</b>	TrafficStream	H/1	lx/1	3.36	48.28	15.00	15.00	✓	Straight	Straight Movement

Ix1	1	2	TrafficStream	Ix/1	Ix1/1	1.12	48.28	15.00	15.00	✓	Straight	Straight Movement
Cx3	1	3	TrafficStream	C4/2	Cx3/1	4.43	48.28			✓	Straight	Straight Movement
Cx5	1	3	TrafficStream	Cx 2/2	Cx5/1	4.67	48.28			✓	Straight	Straight Movement

### Give Way Data

Arm	Traffic Stream	Opposed Traffic	Use Step-wise Opposed Turn Model	Visibility Restricted
B	1	AllTraffic		
B	2	AllTraffic		
C3-1	1	AllTraffic		
E	1	AllTraffic		
E	2	AllTraffic		

### Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling Type	Controlling Traffic Stream	Percentage Opposing (%)	Slope Coefficient	Upstream Signals Visible	Conflict Shift	Conflict Duration
1		TrafficStream	Bc1/1	100	0.18		0	0
1		TrafficStream	Bc1/2	100	0.18		0	0
2		TrafficStream	Bc1/1	100	0.18		0	0
2		TrafficStream	Bc1/2	100	0.18		0	0
2		TrafficStream	Bc1/3	100	0.18		0	0
2		TrafficStream	Bc1/4	100	0.18		0	0
1		TrafficStream	Cx 2/1	100	0.22		0	0
1		TrafficStream	Cx 2/2	100	0.22		0	0
1	Roundabout Circulating	TrafficStream	Ec/1	100	0.21		0	0
1		TrafficStream	Ec/2	100	0.21		0	0
1		TrafficStream	Ec/3	100	0.21		0	0
2	Roundabout Circulating	TrafficStream	Ec/1	100	0.42		0	0
2		TrafficStream	Ec/2	100	0.42		0	0
2		TrafficStream	Ec/3	100	0.42		0	0



## Quick Flares

Arm	Traffic Stream	Description	Saturation Flow (PCU/hr)	Use Que Prob	Effective Storage (Vehs)
C	1		1800		7.00
C	2		1800		7.00
G	2		1800		3.00
I	2		1800		2.00

## Local OD Matrix - Local Matrix: 2031 AM S3

### Normal Input Flows (PCU/hr)

		To								
		1	2	3	4	5	6	7	8	9
From	1	0	70	6	1	239	76	741	131	23
	2	16	0	1	0	44	14	137	24	44
	3	11	15	0	0	49	16	39	19	5
	4	0	0	0	0	0	0	0	0	0
	5	176	240	6	11	0	69	268	287	72
	6	48	65	1	25	23	0	73	78	19
	7	415	567	6	2	311	99	0	256	169
	8	65	88	5	2	283	90	801	0	26
	9	79	172	5	1	199	63	616	109	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

## Locations

OD Matrix	Location	Name	Entries	Exits
2031 AM S3	1	(untitled)	H1/1,H1/2	Hx/2,Hx/1
2031 AM S3	2	(untitled)	I1/1	Ix1/1
2031 AM S3	3	(untitled)	B/1,B/2	Bx/1
2031 AM S3	4	(untitled)	C3-1/1	Cx3/1
2031 AM S3	5	(untitled)	C4/1,C4/2	Cx4-2/1,Cx4-2/2
2031 AM S3	6	(untitled)	C5/1	Cx5/1

2031 AM S3	7	(untitled)	D/1,D/2,D/3	Dx1/2,Dx1/1
2031 AM S3	8	(untitled)	E/1,E/2	Ex/1,Ex/2
2031 AM S3	9	(untitled)	G1/1	Gx1/1

## Paths

OD Matrix	Path	Description	From Location	To Location	Path Items
2031 AM S3	1		7	9	D/1,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	2		7	1	D/1,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	3		7	1	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	4		7	2	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM S3	5		7	2	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	6		7	3	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 AM S3	7		7	4	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx2/1,Cx3/1
2031 AM S3	8		7	5	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx2/1,Cx4-2/1
2031 AM S3	9		7	6	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx2/2,Cx5/1
2031 AM S3	10		7	5	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx2/2,Cx4-2/2
2031 AM S3	11		7	7	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 AM S3	12		7	4	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx2/1,Cx3/1
2031 AM S3	13		7	5	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx2/1,Cx4-2/1

2031 AM S3	14		7	6	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx2/2, Cx5/1
2031 AM S3	15		7	5	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx2/2, Cx4-2/2
2031 AM S3	16		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx/2, Dx1/2
2031 AM S3	17		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dx/3, Dx1/2
2031 AM S3	18		7	3	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bx/1
2031 AM S3	19		7	4	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx2/1, Cx3/1
2031 AM S3	20		7	5	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx2/1, Cx4-2/1
2031 AM S3	21		7	6	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx2/2, Cx5/1
2031 AM S3	22		7	5	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx2/2, Cx4-2/2
2031 AM S3	23		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx/1, Dx1/1
2031 AM S3	24		7	4	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx2/1, Cx3/1
2031 AM S3	25		7	5	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx2/1, Cx4-2/1
2031 AM S3	26		7	6	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx2/2, Cx5/1
2031 AM S3	27		7	5	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx2/2, Cx4-2/2
2031 AM S3	28		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx/2, Dx1/2
2031 AM S3	29		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dx/3, Dx1/2
2031	30		7	8	D/1, Ex/1

AM S3					
2031 AM S3	31		7	9	D/2, Ec/2, Ax/2, Ax1/2, Ax2/1, F/1, Gx/1, Gx1/1
2031 AM S3	32		7	1	D/2, Ec/2, Ax/2, Ax1/2, Ax2/1, F/1, Gc/1, Hx/1
2031 AM S3	33		7	1	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/2, Gc/2, Hx/2
2031 AM S3	34		7	2	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/2, Gc/2, Hc/1, lx/1, lx1/1
2031 AM S3	35		7	2	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lx/2, lx1/1
2031 AM S3	36		7	3	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bx/1
2031 AM S3	37		7	4	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/1, Cx3/1
2031 AM S3	38		7	5	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/1, Cx4-2/1
2031 AM S3	39		7	6	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/2, Cx5/1
2031 AM S3	40		7	5	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/2, Cx4-2/2
2031 AM S3	41		7	7	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx /1, Dx1/1
2031 AM S3	42		7	4	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx 2/1, Cx3/1
2031 AM S3	43		7	5	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx 2/1, Cx4-2/1
2031 AM S3	44		7	6	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx 2/2, Cx5/1
2031 AM S3	45		7	5	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx 2/2, Cx4-2/2
2031 AM	46		7	7	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx /2, Dx1/2

<b>S3</b>					
<b>2031 AM S3</b>	<b>47</b>		7	7	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dx /3, Dx1/2
<b>2031 AM S3</b>	<b>48</b>		7	3	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bx/1
<b>2031 AM S3</b>	<b>49</b>		7	4	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/1, Cx3/1
<b>2031 AM S3</b>	<b>50</b>		7	5	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/1, Cx4-2/1
<b>2031 AM S3</b>	<b>51</b>		7	6	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/2, Cx5/1
<b>2031 AM S3</b>	<b>52</b>		7	5	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/2, Cx4-2/2
<b>2031 AM S3</b>	<b>53</b>		7	7	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx /1, Dx1/1
<b>2031 AM S3</b>	<b>54</b>		7	4	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx 2/1, Cx3/1
<b>2031 AM S3</b>	<b>55</b>		7	5	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx 2/1, Cx4-2/1
<b>2031 AM S3</b>	<b>56</b>		7	6	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx 2/2, Cx5/1
<b>2031 AM S3</b>	<b>57</b>		7	5	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx 2/2, Cx4-2/2
<b>2031 AM S3</b>	<b>58</b>		7	7	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx /2, Dx1/2
<b>2031 AM S3</b>	<b>59</b>		7	7	D/2, Ec/2, Ax/2, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dx /3, Dx1/2
<b>2031 AM S3</b>	<b>60</b>		7	9	D/3, Ec/3, Ax/3, Ax1/2, Ax2/1, F/1, Gx/1, Gx1/1
<b>2031 AM S3</b>	<b>61</b>		7	1	D/3, Ec/3, Ax/3, Ax1/2, Ax2/1, F/1, Gc/1, Hx/1
<b>2031 AM S3</b>	<b>62</b>		7	1	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/2, Gc/2, Hx/2

2031 AM S3	63		7	2	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/2, Gc/2, Hc/1, Ix/1, Ix1/1
2031 AM S3	64		7	2	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ix/2, Ix1/1
2031 AM S3	65		7	3	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/1, Bc/1, Bx/1
2031 AM S3	66		7	4	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/1, Cx3/1
2031 AM S3	67		7	5	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/1, Cx4-2/1
2031 AM S3	68		7	6	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/2, Cx5/1
2031 AM S3	69		7	5	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/2, Cx4-2/2
2031 AM S3	70		7	7	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx /1, Dx1/1
2031 AM S3	71		7	4	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx 2/1, Cx3/1
2031 AM S3	72		7	5	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx 2/1, Cx4-2/1
2031 AM S3	73		7	6	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx 2/2, Cx5/1
2031 AM S3	74		7	5	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx 2/2, Cx4-2/2
2031 AM S3	75		7	7	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx /2, Dx1/2
2031 AM S3	76		7	7	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dx /3, Dx1/2
2031 AM S3	77		7	3	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bx/1
2031 AM S3	78		7	4	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/1, Cx3/1
2031	79		7	5	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx

AM S3					2/1,Cx4-2/1
2031 AM S3	80		7	6	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 AM S3	81		7	5	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 AM S3	82		7	7	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx /1,Dx1/1
2031 AM S3	83		7	4	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
2031 AM S3	84		7	5	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
2031 AM S3	85		7	6	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
2031 AM S3	86		7	5	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
2031 AM S3	87		7	7	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx /2,Dx1/2
2031 AM S3	88		7	7	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx /3,Dx1/2
2031 AM S3	89		7	3	D/3,Ec/3,Ac/1,Bc/1,Bx/1
2031 AM S3	90		7	4	D/3,Ec/3,Ac/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
2031 AM S3	91		7	5	D/3,Ec/3,Ac/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
2031 AM S3	92		7	6	D/3,Ec/3,Ac/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 AM S3	93		7	5	D/3,Ec/3,Ac/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 AM S3	94		7	7	D/3,Ec/3,Ac/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 AM	95		7	4	D/3,Ec/3,Ac/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1

S3					
2031 AM S3	96		7	5	D/3, Ec/3, Ac/2, Bc/2, Bc1/2, Cx/2, Cx 2/1, Cx4-2/1
2031 AM S3	97		7	6	D/3, Ec/3, Ac/2, Bc/2, Bc1/2, Cx/2, Cx 2/2, Cx5/1
2031 AM S3	98		7	5	D/3, Ec/3, Ac/2, Bc/2, Bc1/2, Cx/2, Cx 2/2, Cx4-2/2
2031 AM S3	99		8	9	E/1, Ax/1, Ax1/1, Ax2/1, F/1, Gx/1, Gx1/1
2031 AM S3	100		8	1	E/1, Ax/1, Ax1/1, Ax2/1, F/1, Gc/1, Hx/1
2031 AM S3	101		8	1	E/1, Ax/1, Ax1/1, Ax2/2, F/2, Gc/2, Hx/2
2031 AM S3	102		8	2	E/1, Ax/1, Ax1/1, Ax2/2, F/2, Gc/2, Hc/1, lx/1, lx1/1
2031 AM S3	103		8	2	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lx/2, lx1/1
2031 AM S3	104		8	3	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bx/1
2031 AM S3	105		8	4	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/1, Cx3/1
2031 AM S3	106		8	5	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/1, Cx4-2/1
2031 AM S3	107		8	6	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/2, Cx5/1
2031 AM S3	108		8	5	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/2, Cx4-2/2
2031 AM S3	109		8	7	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx/1, Dx 1/1
2031 AM S3	110		8	4	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx 2/1, Cx3/1
2031 AM S3	111		8	5	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx 2/1, Cx4-2/1



2031 AM S3	112		8	6	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
2031 AM S3	113		8	5	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
2031 AM S3	114		8	7	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx 1/2
2031 AM S3	115		8	8	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex /1
2031 AM S3	116		8	8	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex /2
2031 AM S3	117		8	7	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx 1/2
2031 AM S3	118		8	3	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 AM S3	119		8	4	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
2031 AM S3	120		8	5	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
2031 AM S3	121		8	6	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 AM S3	122		8	5	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 AM S3	123		8	7	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx 1/1
2031 AM S3	124		8	4	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
2031 AM S3	125		8	5	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
2031 AM S3	126		8	6	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
2031 AM S3	127		8	5	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
2031	128		8	7	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx

AM S3					1/2
2031 AM S3	129		8	8	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex /1
2031 AM S3	130		8	8	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex /2
2031 AM S3	131		8	7	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx 1/2
2031 AM S3	132		8	9	E/1,Ax/2,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	133		8	1	E/1,Ax/2,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	134		8	1	E/1,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	135		8	2	E/1,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM S3	136		8	2	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	137		8	3	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 AM S3	138		8	4	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
2031 AM S3	139		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
2031 AM S3	140		8	6	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 AM S3	141		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 AM S3	142		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx 1/1
2031 AM S3	143		8	4	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
2031 AM	144		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1

<b>S3</b>					
<b>2031 AM S3</b>	<b>145</b>		8	6	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
<b>2031 AM S3</b>	<b>146</b>		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
<b>2031 AM S3</b>	<b>147</b>		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx 1/2
<b>2031 AM S3</b>	<b>148</b>		8	8	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex /1
<b>2031 AM S3</b>	<b>149</b>		8	8	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex /2
<b>2031 AM S3</b>	<b>150</b>		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx 1/2
<b>2031 AM S3</b>	<b>151</b>		8	3	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
<b>2031 AM S3</b>	<b>152</b>		8	4	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
<b>2031 AM S3</b>	<b>153</b>		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
<b>2031 AM S3</b>	<b>154</b>		8	6	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
<b>2031 AM S3</b>	<b>155</b>		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
<b>2031 AM S3</b>	<b>156</b>		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx 1/1
<b>2031 AM S3</b>	<b>157</b>		8	4	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
<b>2031 AM S3</b>	<b>158</b>		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
<b>2031 AM S3</b>	<b>159</b>		8	6	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
<b>2031 AM S3</b>	<b>160</b>		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2

2031 AM S3	161		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx 1/2
2031 AM S3	162		8	8	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex /1
2031 AM S3	163		8	8	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex /2
2031 AM S3	164		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx 1/2
2031 AM S3	165		8	3	E/1,Ac/1,Bc/1,Bx/1
2031 AM S3	166		8	4	E/1,Ac/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
2031 AM S3	167		8	5	E/1,Ac/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
2031 AM S3	168		8	6	E/1,Ac/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 AM S3	169		8	5	E/1,Ac/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 AM S3	170		8	7	E/1,Ac/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 AM S3	171		8	4	E/1,Ac/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
2031 AM S3	172		8	5	E/1,Ac/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
2031 AM S3	173		8	6	E/1,Ac/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
2031 AM S3	174		8	5	E/1,Ac/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
2031 AM S3	175		8	7	E/2,Ac/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 AM S3	176		8	8	E/2,Ac/3,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031	177		8	8	E/2,Ac/3,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2

AM S3					
2031 AM S3	178		8	7	E/2,Ac/3,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 AM S3	179		3	7	B/1,Cc/1,Dx/1,Dx1/1
2031 AM S3	180		3	4	B/1,Cx/1,Cx 2/1,Cx3/1
2031 AM S3	181		3	5	B/1,Cx/1,Cx 2/1,Cx4-2/1
2031 AM S3	182		3	6	B/1,Cx/1,Cx 2/2,Cx5/1
2031 AM S3	183		3	5	B/1,Cx/1,Cx 2/2,Cx4-2/2
2031 AM S3	184		3	7	B/2,Cc/2,Dx/2,Dx1/2
2031 AM S3	185		3	8	B/2,Cc/3,Dc/1,Ex/1
2031 AM S3	186		3	9	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	187		3	1	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	188		3	1	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	189		3	2	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM S3	190		3	2	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	191		3	3	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/ 1
2031 AM S3	192		3	3	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/ 1
2031 AM	193		3	8	B/2,Cc/3,Dc/2,Ex/2

<b>S3</b>					
<b>2031 AM S3</b>	<b>194</b>		3	7	B/2,Cc/3,Dx/3,Dx1/2
<b>2031 AM S3</b>	<b>195</b>		4	6	C3-1/1,Cx5/1
<b>2031 AM S3</b>	<b>196</b>		2	3	I1/1,I/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
<b>2031 AM S3</b>	<b>197</b>		2	4	I1/1,I/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
<b>2031 AM S3</b>	<b>198</b>		2	5	I1/1,I/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
<b>2031 AM S3</b>	<b>199</b>		2	6	I1/1,I/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
<b>2031 AM S3</b>	<b>200</b>		2	5	I1/1,I/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
<b>2031 AM S3</b>	<b>201</b>		2	7	I1/1,I/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
<b>2031 AM S3</b>	<b>202</b>		2	4	I1/1,I/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
<b>2031 AM S3</b>	<b>203</b>		2	5	I1/1,I/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
<b>2031 AM S3</b>	<b>204</b>		2	6	I1/1,I/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
<b>2031 AM S3</b>	<b>205</b>		2	5	I1/1,I/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
<b>2031 AM S3</b>	<b>206</b>		2	7	I1/1,I/1,Fx/1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
<b>2031 AM S3</b>	<b>207</b>		2	8	I1/1,I/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
<b>2031 AM S3</b>	<b>208</b>		2	9	I1/1,I/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx 1/1
<b>2031 AM S3</b>	<b>209</b>		2	1	I1/1,I/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/ 1

2031 AM S3	210		2	1	I1/1,I/1,Fx1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	211		2	2	I1/1,I/1,Fx1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM S3	212		2	2	I1/1,I/1,Fx1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	213		2	8	I1/1,I/1,Fx1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 AM S3	214		2	7	I1/1,I/1,Fx1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 AM S3	215		2	3	I1/1,I/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 AM S3	216		2	4	I1/1,I/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
2031 AM S3	217		2	5	I1/1,I/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
2031 AM S3	218		2	6	I1/1,I/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 AM S3	219		2	5	I1/1,I/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 AM S3	220		2	7	I1/1,I/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 AM S3	221		2	4	I1/1,I/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
2031 AM S3	222		2	5	I1/1,I/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
2031 AM S3	223		2	6	I1/1,I/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
2031 AM S3	224		2	5	I1/1,I/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
2031 AM S3	225		2	7	I1/1,I/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031	226		2	8	I1/1,I/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1

AM S3					
2031 AM S3	227		2	9	I1/1,I/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx 1/1
2031 AM S3	228		2	1	I1/1,I/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/ 1
2031 AM S3	229		2	1	I1/1,I/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/ 2
2031 AM S3	230		2	2	I1/1,I/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/ 1,lx/1,lx1/1
2031 AM S3	231		2	2	I1/1,I/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/ 2,lx/2,lx1/1
2031 AM S3	232		2	8	I1/1,I/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 AM S3	233		2	7	I1/1,I/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 AM S3	234		2	9	I1/1,I/2,Fc/1,Gx/1,Gx1/1
2031 AM S3	235		2	9	I1/1,I/2,Fc/2,Gx/2,Gx1/1
2031 AM S3	236		2	1	I1/1,I/2,Fc/2,Gc/1,Hx/1
2031 AM S3	237		2	1	I1/1,I/2,Fc/3,Gc/2,Hx/2
2031 AM S3	238		2	2	I1/1,I/2,Fc/3,Gc/2,Hc/1,lx/1,lx1/1
2031 AM S3	239		2	2	I1/1,I/2,Fc/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	240		9	1	G1/1,G/1,Hx/1
2031 AM S3	241		9	2	G1/1,G/1,Hc/1,lx/1,lx1/1
2031 AM	242		9	2	G1/1,G/1,Hc/2,lx/2,lx1/1



<b>S3</b>					
<b>2031 AM S3</b>	<b>243</b>		9	3	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
<b>2031 AM S3</b>	<b>244</b>		9	4	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
<b>2031 AM S3</b>	<b>245</b>		9	5	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
<b>2031 AM S3</b>	<b>246</b>		9	6	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
<b>2031 AM S3</b>	<b>247</b>		9	5	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
<b>2031 AM S3</b>	<b>248</b>		9	7	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
<b>2031 AM S3</b>	<b>249</b>		9	4	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
<b>2031 AM S3</b>	<b>250</b>		9	5	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
<b>2031 AM S3</b>	<b>251</b>		9	6	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
<b>2031 AM S3</b>	<b>252</b>		9	5	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
<b>2031 AM S3</b>	<b>253</b>		9	7	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
<b>2031 AM S3</b>	<b>254</b>		9	8	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
<b>2031 AM S3</b>	<b>255</b>		9	9	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1, F/1,Gx/1,Gx1/1
<b>2031 AM S3</b>	<b>256</b>		9	8	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
<b>2031 AM S3</b>	<b>257</b>		9	7	G1/1,G/1,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
<b>2031 AM S3</b>	<b>258</b>		9	3	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1

2031 AM S3	259		9	4	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
2031 AM S3	260		9	5	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
2031 AM S3	261		9	6	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 AM S3	262		9	5	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 AM S3	263		9	7	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 AM S3	264		9	4	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
2031 AM S3	265		9	5	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
2031 AM S3	266		9	6	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
2031 AM S3	267		9	5	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
2031 AM S3	268		9	7	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 AM S3	269		9	8	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 AM S3	270		9	9	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1, F/1,Gx/1,Gx1/1
2031 AM S3	271		9	8	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 AM S3	272		9	7	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 AM S3	273		9	9	G1/1,G/2,Hc/3,lc/2,Fc/1,Gx/1,Gx1/1
2031 AM S3	274		9	9	G1/1,G/2,Hc/3,lc/3,Fc/2,Gx/2,Gx1/1
2031	275		1	2	H1/1,H/1,lx/1,lx1/1

AM S3					
2031 AM S3	276		1	3	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 AM S3	277		1	4	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
2031 AM S3	278		1	5	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
2031 AM S3	279		1	6	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 AM S3	280		1	5	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 AM S3	281		1	7	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 AM S3	282		1	4	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
2031 AM S3	283		1	5	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
2031 AM S3	284		1	6	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
2031 AM S3	285		1	5	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
2031 AM S3	286		1	7	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 AM S3	287		1	8	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 AM S3	288		1	9	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,G x/1,Gx1/1
2031 AM S3	289		1	1	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,G c/1,Hx/1
2031 AM S3	290		1	1	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,G c/2,Hx/2
2031 AM	291		1	8	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2

<b>S3</b>					
<b>2031 AM S3</b>	<b>292</b>		1	7	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
<b>2031 AM S3</b>	<b>293</b>		1	3	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
<b>2031 AM S3</b>	<b>294</b>		1	4	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
<b>2031 AM S3</b>	<b>295</b>		1	5	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
<b>2031 AM S3</b>	<b>296</b>		1	6	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
<b>2031 AM S3</b>	<b>297</b>		1	5	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
<b>2031 AM S3</b>	<b>298</b>		1	7	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
<b>2031 AM S3</b>	<b>299</b>		1	4	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
<b>2031 AM S3</b>	<b>300</b>		1	5	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
<b>2031 AM S3</b>	<b>301</b>		1	6	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
<b>2031 AM S3</b>	<b>302</b>		1	5	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
<b>2031 AM S3</b>	<b>303</b>		1	7	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
<b>2031 AM S3</b>	<b>304</b>		1	8	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
<b>2031 AM S3</b>	<b>305</b>		1	9	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
<b>2031 AM S3</b>	<b>306</b>		1	1	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
<b>2031 AM S3</b>	<b>307</b>		1	1	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2

2031 AM S3	308		1	8	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 AM S3	309		1	7	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 AM S3	310		1	9	H1/1,H/2,lc/2,Fc/1,Gx/1,Gx1/1
2031 AM S3	311		1	9	H1/2,H/3,lc/3,Fc/2,Gx/2,Gx1/1
2031 AM S3	312		1	1	H1/2,H/3,lc/3,Fc/2,Gc/1,Hx/1
2031 AM S3	313		1	1	H1/2,H/3,lc/3,Fc/3,Gc/2,Hx/2
2031 AM S3	314		5	6	C4/1,Cx5/1
2031 AM S3	315		5	8	C4/1,1/1,C2/1,C/1,Dc/1,Ex/1
2031 AM S3	316		5	7	C4/1,1/1,C2/1,C/1,Dx/1,Dx1/1
2031 AM S3	317		5	9	C4/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	318		5	1	C4/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	319		5	1	C4/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	320		5	2	C4/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM S3	321		5	2	C4/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	322		5	3	C4/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1 ,Bc/1,Bx/1
2031 AM S3	323		5	3	C4/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1 ,Bc/1,Bx/1
2031	324		5	8	C4/1,1/1,C2/1,C/2,Dc/2,Ex/2

AM S3					
2031 AM S3	325		5	9	C4/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	326		5	1	C4/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	327		5	1	C4/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	328		5	2	C4/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM S3	329		5	2	C4/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	330		5	3	C4/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1 ,Bc/1,Bx/1
2031 AM S3	331		5	3	C4/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1 ,Bc/1,Bx/1
2031 AM S3	332		5	9	C4/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	333		5	1	C4/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	334		5	1	C4/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	335		5	2	C4/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM S3	336		5	2	C4/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	337		5	3	C4/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1 ,Bc/1,Bx/1
2031 AM S3	338		5	3	C4/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1 ,Bc/1,Bx/1
2031 AM S3	339		5	3	C4/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ac/1,Bc/1,Bx/1
2031 AM	340		5	4	C4/2,Cx3/1

S3					
2031 AM S3	341		5	8	C4/2,1/2,C2/1,C/1,Dc/1,Ex/1
2031 AM S3	342		5	7	C4/2,1/2,C2/1,C/1,Dx/1,Dx1/1
2031 AM S3	343		5	9	C4/2,1/2,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	344		5	1	C4/2,1/2,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	345		5	1	C4/2,1/2,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	346		5	2	C4/2,1/2,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM S3	347		5	2	C4/2,1/2,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	348		5	3	C4/2,1/2,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1 ,Bc/1,Bx/1
2031 AM S3	349		5	3	C4/2,1/2,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1 ,Bc/1,Bx/1
2031 AM S3	350		5	8	C4/2,1/2,C2/1,C/2,Dc/2,Ex/2
2031 AM S3	351		5	9	C4/2,1/2,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	352		5	1	C4/2,1/2,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	353		5	1	C4/2,1/2,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	354		5	2	C4/2,1/2,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM S3	355		5	2	C4/2,1/2,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	356		5	3	C4/2,1/2,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1 ,Bc/1,Bx/1

2031 AM S3	357		5	3	C4/2,1/2,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1 ,Bc/1,Bx/1
2031 AM S3	358		5	9	C4/2,1/2,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	359		5	1	C4/2,1/2,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	360		5	1	C4/2,1/2,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	361		5	2	C4/2,1/2,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM S3	362		5	2	C4/2,1/2,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	363		5	3	C4/2,1/2,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1 ,Bc/1,Bx/1
2031 AM S3	364		5	3	C4/2,1/2,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1 ,Bc/1,Bx/1
2031 AM S3	365		5	3	C4/2,1/2,C2/1,C/2,Dc/3,Ec/3,Ac/1,Bc/1,Bx/1
2031 AM S3	366		6	4	C5/1,Cx3/1
2031 AM S3	367		6	5	C5/1,Cx4-2/2
2031 AM S3	368		6	8	C5/1,1/1,C2/1,C/1,Dc/1,Ex/1
2031 AM S3	369		6	7	C5/1,1/1,C2/1,C/1,Dx/1,Dx1/1
2031 AM S3	370		6	9	C5/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	371		6	1	C5/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	372		6	1	C5/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031	373		6	2	C5/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1



AM S3					
2031 AM S3	374		6	2	C5/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	375		6	3	C5/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1 ,Bc/1,Bx/1
2031 AM S3	376		6	3	C5/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1 ,Bc/1,Bx/1
2031 AM S3	377		6	8	C5/1,1/1,C2/1,C/2,Dc/2,Ex/2
2031 AM S3	378		6	9	C5/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	379		6	1	C5/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	380		6	1	C5/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	381		6	2	C5/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM S3	382		6	2	C5/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 AM S3	383		6	3	C5/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1 ,Bc/1,Bx/1
2031 AM S3	384		6	3	C5/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1 ,Bc/1,Bx/1
2031 AM S3	385		6	9	C5/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 AM S3	386		6	1	C5/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 AM S3	387		6	1	C5/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 AM S3	388		6	2	C5/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 AM	389		6	2	C5/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1

<b>S3</b>					
<b>2031 AM S3</b>	<b>390</b>		<b>6</b>	<b>3</b>	<b>C5/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx1,Fx1/1,A/1,Bc/1,Bx/1</b>
<b>2031 AM S3</b>	<b>391</b>		<b>6</b>	<b>3</b>	<b>C5/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx2,Fx1/1,A/1,Bc/1,Bx/1</b>
<b>2031 AM S3</b>	<b>392</b>		<b>6</b>	<b>3</b>	<b>C5/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ac/1,Bc/1,Bx/1</b>

### Normal Path Flows

OD Matrix	Path	Permitted Flow Type	Allocation Type	Fixed Flow (PCU/hr)
2031 AM S3	1	✓	Normal	
2031 AM S3	2	✓	Normal	
2031 AM S3	3	✓	Normal	
2031 AM S3	4	✓	Normal	
2031 AM S3	5	✓	Normal	
2031 AM S3	6	✓	Normal	
2031 AM S3	7	✓	Normal	
2031 AM S3	8	✓	Disabled	
2031 AM S3	9	✓	Disabled	
2031 AM S3	10	✓	Disabled	
2031 AM S3	11	✓	Disabled	
2031 AM S3	12	✓	Disabled	
2031 AM S3	13	✓	Disabled	
2031 AM S3	14	✓	Disabled	
2031 AM S3	15	✓	Disabled	
2031 AM S3	16	✓	Disabled	
2031 AM S3	17	✓	Disabled	
2031 AM S3	18	✓	Disabled	
2031 AM S3	19	✓	Disabled	
2031 AM S3	20	✓	Disabled	
2031 AM S3	21	✓	Disabled	
2031 AM S3	22	✓	Disabled	

2031 AM S3	23	✓	Disabled	
2031 AM S3	24	✓	Disabled	
2031 AM S3	25	✓	Disabled	
2031 AM S3	26	✓	Disabled	
2031 AM S3	27	✓	Disabled	
2031 AM S3	28	✓	Disabled	
2031 AM S3	29	✓	Disabled	
2031 AM S3	30	✓	Normal	
2031 AM S3	31	✓	Normal	
2031 AM S3	32	✓	Normal	
2031 AM S3	33	✓	Normal	
2031 AM S3	34	✓	Normal	
2031 AM S3	35	✓	Normal	
2031 AM S3	36	✓	Disabled	
2031 AM S3	37	✓	Disabled	
2031 AM S3	38	✓	Disabled	
2031 AM S3	39	✓	Disabled	
2031 AM S3	40	✓	Disabled	
2031 AM S3	41	✓	Normal	
2031 AM S3	42	✓	Disabled	
2031 AM S3	43	✓	Disabled	
2031 AM S3	44	✓	Disabled	
2031 AM S3	45	✓	Disabled	
2031 AM S3	46	✓	Disabled	
2031 AM S3	47	✓	Disabled	
2031 AM S3	48	✓	Disabled	
2031 AM S3	49	✓	Disabled	
2031 AM S3	50	✓	Disabled	
2031 AM S3	51	✓	Disabled	
2031 AM S3	52	✓	Disabled	

2031 AM S3	53	✓	Disabled	
2031 AM S3	54	✓	Disabled	
2031 AM S3	55	✓	Disabled	
2031 AM S3	56	✓	Disabled	
2031 AM S3	57	✓	Disabled	
2031 AM S3	58	✓	Disabled	
2031 AM S3	59	✓	Disabled	
2031 AM S3	60	✓	Normal	
2031 AM S3	61	✓	Normal	
2031 AM S3	62	✓	Normal	
2031 AM S3	63	✓	Normal	
2031 AM S3	64	✓	Normal	
2031 AM S3	65	✓	Disabled	
2031 AM S3	66	✓	Disabled	
2031 AM S3	67	✓	Disabled	
2031 AM S3	68	✓	Disabled	
2031 AM S3	69	✓	Disabled	
2031 AM S3	70	✓	Normal	
2031 AM S3	71	✓	Normal	
2031 AM S3	72	✓	Disabled	
2031 AM S3	73	✓	Disabled	
2031 AM S3	74	✓	Disabled	
2031 AM S3	75	✓	Normal	
2031 AM S3	76	✓	Normal	
2031 AM S3	77	✓	Disabled	
2031 AM S3	78	✓	Normal	
2031 AM S3	79	✓	Disabled	
2031 AM S3	80	✓	Disabled	
2031 AM S3	81	✓	Disabled	
2031 AM S3	82	✓	Normal	

2031 AM S3	83	✓	Normal	
2031 AM S3	84	✓	Disabled	
2031 AM S3	85	✓	Disabled	
2031 AM S3	86	✓	Disabled	
2031 AM S3	87	✓	Normal	
2031 AM S3	88	✓	Normal	
2031 AM S3	89	✓	Normal	
2031 AM S3	90	✓	Normal	
2031 AM S3	91	✓	Normal	
2031 AM S3	92	✓	Normal	
2031 AM S3	93	✓	Normal	
2031 AM S3	94	✓	Normal	
2031 AM S3	95	✓	Normal	
2031 AM S3	96	✓	Normal	
2031 AM S3	97	✓	Normal	
2031 AM S3	98	✓	Normal	
2031 AM S3	99	✓	Normal	
2031 AM S3	100	✓	Normal	
2031 AM S3	101	✓	Normal	
2031 AM S3	102	✓	Normal	
2031 AM S3	103	✓	Normal	
2031 AM S3	104	✓	Disabled	
2031 AM S3	105	✓	Disabled	
2031 AM S3	106	✓	Disabled	
2031 AM S3	107	✓	Disabled	
2031 AM S3	108	✓	Disabled	
2031 AM S3	109	✓	Disabled	
2031 AM S3	110	✓	Normal	
2031 AM S3	111	✓	Disabled	
2031 AM S3	112	✓	Disabled	

2031 AM S3	113	✓	Disabled	
2031 AM S3	114	✓	Disabled	
2031 AM S3	115	✓	Disabled	
2031 AM S3	116	✓	Disabled	
2031 AM S3	117	✓	Disabled	
2031 AM S3	118	✓	Disabled	
2031 AM S3	119	✓	Disabled	
2031 AM S3	120	✓	Disabled	
2031 AM S3	121	✓	Disabled	
2031 AM S3	122	✓	Disabled	
2031 AM S3	123	✓	Disabled	
2031 AM S3	124	✓	Normal	
2031 AM S3	125	✓	Disabled	
2031 AM S3	126	✓	Disabled	
2031 AM S3	127	✓	Disabled	
2031 AM S3	128	✓	Disabled	
2031 AM S3	129	✓	Normal	
2031 AM S3	130	✓	Normal	
2031 AM S3	131	✓	Disabled	
2031 AM S3	132	✓	Normal	
2031 AM S3	133	✓	Normal	
2031 AM S3	134	✓	Normal	
2031 AM S3	135	✓	Normal	
2031 AM S3	136	✓	Normal	
2031 AM S3	137	✓	Disabled	
2031 AM S3	138	✓	Disabled	
2031 AM S3	139	✓	Disabled	
2031 AM S3	140	✓	Disabled	
2031 AM S3	141	✓	Disabled	
2031 AM S3	142	✓	Disabled	

2031 AM S3	143	✓	Disabled	
2031 AM S3	144	✓	Disabled	
2031 AM S3	145	✓	Disabled	
2031 AM S3	146	✓	Disabled	
2031 AM S3	147	✓	Disabled	
2031 AM S3	148	✓	Normal	
2031 AM S3	149	✓	Normal	
2031 AM S3	150	✓	Disabled	
2031 AM S3	151	✓	Disabled	
2031 AM S3	152	✓	Normal	
2031 AM S3	153	✓	Disabled	
2031 AM S3	154	✓	Disabled	
2031 AM S3	155	✓	Disabled	
2031 AM S3	156	✓	Disabled	
2031 AM S3	157	✓	Normal	
2031 AM S3	158	✓	Disabled	
2031 AM S3	159	✓	Disabled	
2031 AM S3	160	✓	Disabled	
2031 AM S3	161	✓	Disabled	
2031 AM S3	162	✓	Normal	
2031 AM S3	163	✓	Normal	
2031 AM S3	164	✓	Disabled	
2031 AM S3	165	✓	Normal	
2031 AM S3	166	✓	Normal	
2031 AM S3	167	✓	Normal	
2031 AM S3	168	✓	Normal	
2031 AM S3	169	✓	Fixed	0
2031 AM S3	170	✓	Normal	
2031 AM S3	171	✓	Normal	
2031 AM S3	172	✓	Normal	

2031 AM S3	173	✓	Normal	
2031 AM S3	174	✓	Normal	
2031 AM S3	175	✓	Normal	
2031 AM S3	176	✓	Normal	
2031 AM S3	177	✓	Disabled	
2031 AM S3	178	✓	Normal	
2031 AM S3	179	✓	Normal	
2031 AM S3	180	✓	Normal	
2031 AM S3	181	✓	Normal	
2031 AM S3	182	✓	Normal	
2031 AM S3	183	✓	Normal	
2031 AM S3	184	✓	Normal	
2031 AM S3	185	✓	Normal	
2031 AM S3	186	✓	Normal	
2031 AM S3	187	✓	Normal	
2031 AM S3	188	✓	Normal	
2031 AM S3	189	✓	Normal	
2031 AM S3	190	✓	Normal	
2031 AM S3	191	✓	Normal	
2031 AM S3	192	✓	Normal	
2031 AM S3	193	✓	Normal	
2031 AM S3	194	✓	Normal	
2031 AM S3	195	✓	Normal	
2031 AM S3	196	✓	Normal	
2031 AM S3	197	✓	Normal	
2031 AM S3	198	✓	Normal	
2031 AM S3	199	✓	Normal	
2031 AM S3	200	✓	Normal	
2031 AM S3	201	✓	Normal	
2031 AM S3	202	✓	Normal	



2031 AM S3	203	✓	Normal	
2031 AM S3	204	✓	Normal	
2031 AM S3	205	✓	Normal	
2031 AM S3	206	✓	Normal	
2031 AM S3	207	✓	Normal	
2031 AM S3	208	✓	Disabled	
2031 AM S3	209	✓	Disabled	
2031 AM S3	210	✓	Disabled	
2031 AM S3	211	✓	Disabled	
2031 AM S3	212	✓	Normal	
2031 AM S3	213	✓	Disabled	
2031 AM S3	214	✓	Disabled	
2031 AM S3	215	✓	Normal	
2031 AM S3	216	✓	Normal	
2031 AM S3	217	✓	Normal	
2031 AM S3	218	✓	Normal	
2031 AM S3	219	✓	Normal	
2031 AM S3	220	✓	Normal	
2031 AM S3	221	✓	Normal	
2031 AM S3	222	✓	Normal	
2031 AM S3	223	✓	Normal	
2031 AM S3	224	✓	Normal	
2031 AM S3	225	✓	Normal	
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2031 AM S3	229	✓	Disabled	
2031 AM S3	230	✓	Normal	
2031 AM S3	231	✓	Normal	
2031 AM S3	232	✓	Normal	

2031 AM S3	233	✓	Normal	
2031 AM S3	234	✓	Normal	
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2031 AM S3	236	✓	Normal	
2031 AM S3	237	✓	Normal	
2031 AM S3	238	✓	Normal	
2031 AM S3	239	✓	Normal	
2031 AM S3	240	✓	Normal	
2031 AM S3	241	✓	Normal	
2031 AM S3	242	✓	Normal	
2031 AM S3	243	✓	Normal	
2031 AM S3	244	✓	Normal	
2031 AM S3	245	✓	Normal	
2031 AM S3	246	✓	Normal	
2031 AM S3	247	✓	Normal	
2031 AM S3	248	✓	Normal	
2031 AM S3	249	✓	Normal	
2031 AM S3	250	✓	Normal	
2031 AM S3	251	✓	Normal	
2031 AM S3	252	✓	Normal	
2031 AM S3	253	✓	Normal	
2031 AM S3	254	✓	Normal	
2031 AM S3	255	✓	Normal	
2031 AM S3	256	✓	Normal	
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2031 AM S3	259	✓	Normal	
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2031 AM S3	261	✓	Normal	
2031 AM S3	262	✓	Normal	

2031 AM S3	263	✓	Normal	
2031 AM S3	264	✓	Normal	
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2031 AM S3	266	✓	Normal	
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2031 AM S3	269	✓	Normal	
2031 AM S3	270	✓	Normal	
2031 AM S3	271	✓	Normal	
2031 AM S3	272	✓	Normal	
2031 AM S3	273	✓	Normal	
2031 AM S3	274	✓	Normal	
2031 AM S3	275	✓	Normal	
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2031 AM S3	285	✓	Normal	
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2031 AM S3	299	✓	Normal	
2031 AM S3	300	✓	Normal	
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2031 AM S3	309	✓	Normal	
2031 AM S3	310	✓	Normal	
2031 AM S3	311	✓	Normal	
2031 AM S3	312	✓	Normal	
2031 AM S3	313	✓	Normal	
2031 AM S3	314	✓	Normal	
2031 AM S3	315	✓	Normal	
2031 AM S3	316	✓	Normal	
2031 AM S3	317	✓	Normal	
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2031 AM S3	319	✓	Normal	
2031 AM S3	320	✓	Normal	
2031 AM S3	321	✓	Normal	
2031 AM S3	322	✓	Normal	

2031 AM S3	323	✓	Normal	
2031 AM S3	324	✓	Normal	
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2031 AM S3	329	✓	Normal	
2031 AM S3	330	✓	Normal	
2031 AM S3	331	✓	Normal	
2031 AM S3	332	✓	Normal	
2031 AM S3	333	✓	Normal	
2031 AM S3	334	✓	Normal	
2031 AM S3	335	✓	Normal	
2031 AM S3	336	✓	Normal	
2031 AM S3	337	✓	Normal	
2031 AM S3	338	✓	Normal	
2031 AM S3	339	✓	Normal	
2031 AM S3	340	✓	Normal	
2031 AM S3	341	✓	Normal	
2031 AM S3	342	✓	Normal	
2031 AM S3	343	✓	Normal	
2031 AM S3	344	✓	Normal	
2031 AM S3	345	✓	Normal	
2031 AM S3	346	✓	Normal	
2031 AM S3	347	✓	Normal	
2031 AM S3	348	✓	Disabled	
2031 AM S3	349	✓	Disabled	
2031 AM S3	350	✓	Normal	
2031 AM S3	351	✓	Normal	
2031 AM S3	352	✓	Normal	

2031 AM S3	353	✓	Normal	
2031 AM S3	354	✓	Normal	
2031 AM S3	355	✓	Normal	
2031 AM S3	356	✓	Disabled	
2031 AM S3	357	✓	Disabled	
2031 AM S3	358	✓	Normal	
2031 AM S3	359	✓	Normal	
2031 AM S3	360	✓	Normal	
2031 AM S3	361	✓	Disabled	
2031 AM S3	362	✓	Disabled	
2031 AM S3	363	✓	Disabled	
2031 AM S3	364	✓	Disabled	
2031 AM S3	365	✓	Normal	
2031 AM S3	366	✓	Normal	
2031 AM S3	367	✓	Normal	
2031 AM S3	368	✓	Normal	
2031 AM S3	369	✓	Normal	
2031 AM S3	370	✓	Normal	
2031 AM S3	371	✓	Normal	
2031 AM S3	372	✓	Normal	
2031 AM S3	373	✓	Normal	
2031 AM S3	374	✓	Normal	
2031 AM S3	375	✓	Normal	
2031 AM S3	376	✓	Normal	
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2031 AM S3	379	✓	Normal	
2031 AM S3	380	✓	Normal	
2031 AM S3	381	✓	Normal	
2031 AM S3	382	✓	Normal	

2031 AM S3	383	✓	Normal	
2031 AM S3	384	✓	Normal	
2031 AM S3	385	✓	Normal	
2031 AM S3	386	✓	Normal	
2031 AM S3	387	✓	Normal	
2031 AM S3	388	✓	Normal	
2031 AM S3	389	✓	Normal	
2031 AM S3	390	✓	Normal	
2031 AM S3	391	✓	Normal	
2031 AM S3	392	✓	Normal	

## Signal Timings

Network Default: 88s cycle time; 88 steps

### Controller Stream 1

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
1	(untitled)		1	NetworkDefault	88

### Controller Stream 1 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
1	Unspecified						Absolute

### Controller Stream 1 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
1	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
1	A	(untitled)	7	300	0	0	Not Specified
1	B	(untitled)	7	300	0	0	Not Specified
1	C	(untitled)	7	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	A	1
1	2	B,C	1

## Losing/ Gaining delays at each Controller Stream

Controller Stream	Delay	Type	Phase	From Stage	To Stage	Relative Delay	Absolute Delay
1	1	Losing	B	2	1	9	
1	2	Gaining	A	2	1	0	10
1	3	Losing	A	1	2	2	

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
1	1	(untitled)	Single	1,2	58,17

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	1	A	31	58	27	1	5
1	2	✓	2	B,C	65	17	40	1	7

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	31	60	29
1	B	1	✓	65	26	49
1	C	1	✓	65	17	40

## Intergreen Matrix for Controller Stream 1

		To		
		A	B	C
From	A		5	5
	B	5		
	C	14		

## Interstage Matrix for Controller Stream 1

		To

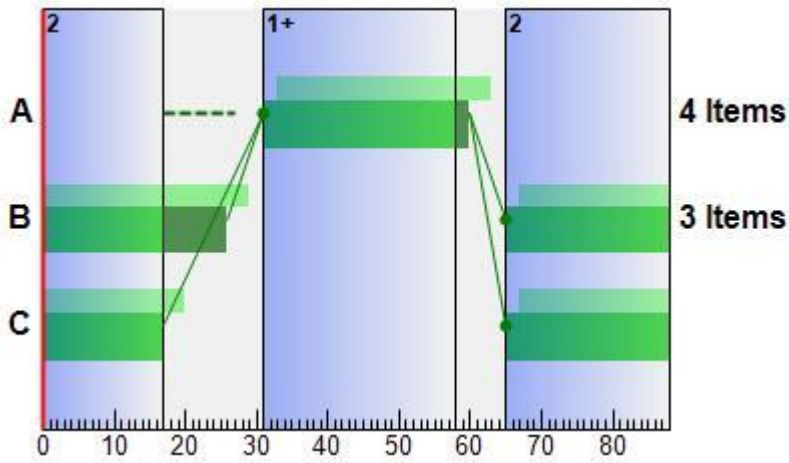


		1	2
From	1	0	7
	2	14	0

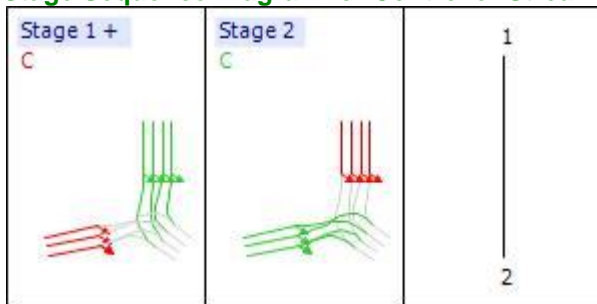
### Banned Stage transitions for Controller Stream 1

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 1



### Stage Sequence Diagram for Controller Stream 1



### Controller Stream 2

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
2	(untitled)		1	NetworkDefault	88

### Controller Stream 2 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
2	Unspecified						Absolute

## Controller Stream 2 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
2	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
2	A	(untitled)	7	300	0	0	Not Specified
2	B	(untitled)	7	300	0	0	Not Specified
2	C	(untitled)	5	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
2	1	A	1
2	2	B,C	1

## Losing/ Gaining delays at each Controller Stream

Controller Stream	Delay	Type	Phase	From Stage	To Stage	Relative Delay
2	1	Losing	B	2	1	5

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
2	1	(untitled)	Single	1,2	85,43

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
2	1	✓	1	A	53	85	32	1	7
2	2	✓	2	B,C	2	43	41	1	5

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
2	A	1	✓	53	85	32
2	B	1	✓	2	48	46
2	C	1	✓	2	43	41

### Intergreen Matrix for Controller Stream 2

		To		
		A	B	C
From	A		5	5
	B	5		
	C	10		

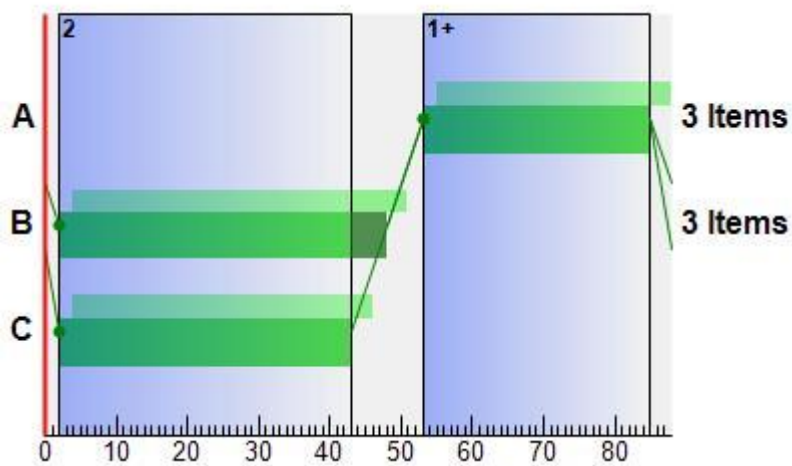
### Interstage Matrix for Controller Stream 2

		To	
		1	2
From	1	0	5
	2	10	0

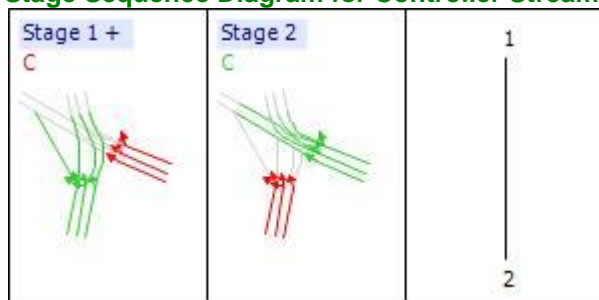
### Banned Stage transitions for Controller Stream 2

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 2



### Stage Sequence Diagram for Controller Stream 2



### Controller Stream 3

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
3	(untitled)		1	NetworkDefault	88

### Controller Stream 3 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
3	Unspecified						Absolute

### Controller Stream 3 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
3	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
3	A	(untitled)	7	300	0	0	Not Specified
3	B	(untitled)	7	300	0	0	Not Specified
3	C	(untitled)	5	300	0	0	Not Specified

### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
3	1	A	1
3	2	B,C	1

### Losing/ Gaining delays at each Controller Stream

Controller Stream	Delay	Type	Phase	From Stage	To Stage	Relative Delay	Absolute Delay
3	1	Losing	B	2	1	9	
3	2	Gaining	A	2	1	0	10

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
3	1	(untitled)	Single	1,2	28,76

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration	User Stage Minimum (s)	Stage Minimum
-------------------	-------	---------------	------------------	----------------------	-----------------	---------------	----------------	------------------------	---------------

							(s)		(s)
3	1	✓	1	A	2	28	26	1	7
3	2	✓	2	B,C	33	76	43	1	5

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
3	A	1	✓	2	28	26
3	B	1	✓	33	85	52
3	C	1	✓	33	76	43

### Intergreen Matrix for Controller Stream 3

		To		
		A	B	C
From	A		5	5
	B	5		
	C	14		

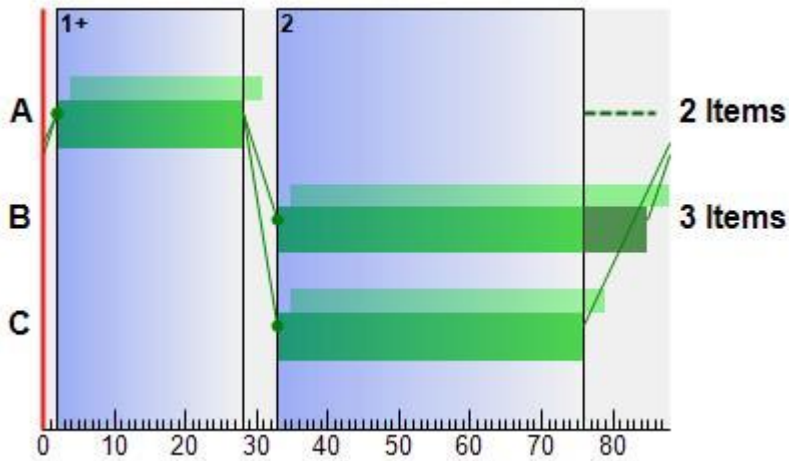
### Interstage Matrix for Controller Stream 3

		To	
		1	2
From	1	0	5
	2	14	0

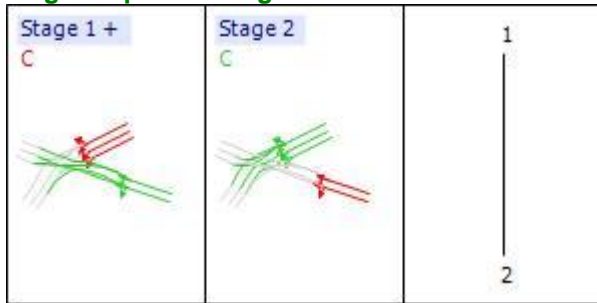
### Banned Stage transitions for Controller Stream 3

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 3



### Stage Sequence Diagram for Controller Stream 3



### Controller Stream 4

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
4	(untitled)		1	NetworkDefault	88

### Controller Stream 4 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
4	Unspecified						Absolute

### Controller Stream 4 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
4	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
4	A	(untitled)	7	300	0	0	Not Specified
4	B	(untitled)	7	300	0	0	Not Specified

4	C	(untitled)	7	300	0	0	Not Specified
4	D	(untitled)	7	300	0	0	Not Specified
4	E	(untitled)	5	300	0	0	Not Specified

### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
4	1	A,B,D	1
4	2	C	1
4	3	E	1

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
4	1	(untitled)	Single	1,3,2	38,49,78
4	2	(untitled)	Single	1,2,3	0,29,53

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
4	1	✓	1	A,B,D	84	38	42	1	7
4	2	✓	3	E	43	49	6	1	5
4	3	✓	2	C	61	78	17	1	7

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
4	A	1	✓	84	38	42
4	B	1	✓	84	38	42
4	C	1	✓	61	78	17
4	D	1	✓	83	38	43
4	E	1	✓	43	49	6

### Intergreen Matrix for Controller Stream 4

From	To				
	A	B	C	D	E
A			8		5

	<b>B</b>			7		5
	<b>C</b>	6	6		5	5
	<b>D</b>			8		5
	<b>E</b>	12	12	12	12	

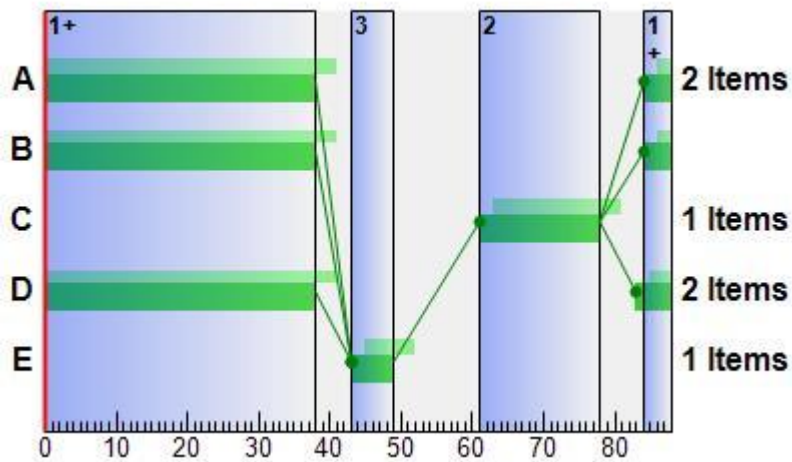
### Interstage Matrix for Controller Stream 4

		To		
		1	2	3
From	1	0	8	5
	2	6	0	5
	3	12	12	0

### Banned Stage transitions for Controller Stream 4

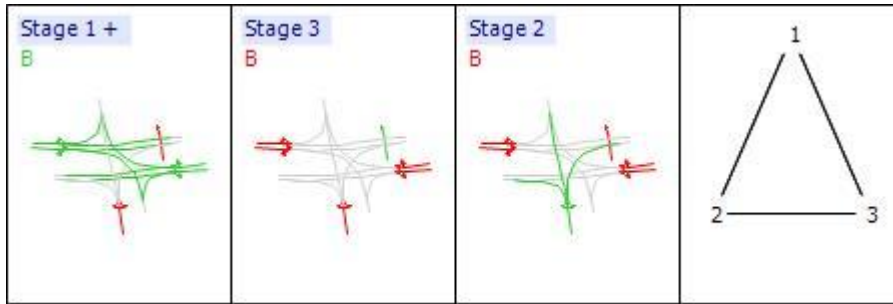
		To		
		1	2	3
From	1			
	2			
	3			

### Phase Timings Diagram for Controller Stream 4



### Stage Sequence Diagram for Controller Stream 4





## Controller Stream 5

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
5	(untitled)		1	NetworkDefault	88

## Controller Stream 5 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
5	Unspecified						Absolute

## Controller Stream 5 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
5	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
5	A	(untitled)	7	300	0	0	Not Specified
5	B	(untitled)	5	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
5	1	A	1
5	2	B	1

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
5	1	(untitled)	Single	1,2	76,86

## Resultant Stages

Controller	Stage	Is Base	Library	Phases In	Stage	Stage	Stage	User Stage	Stage
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Stream		Stage	Stage ID	This Stage	Start (s)	End (s)	Duration (s)	Minimum (s)	Minimum (s)
5	1	✓	1	A	9	76	67	1	7
5	2	✓	2	B	81	86	5	1	5

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
5	A	1	✓	9	76	67
5	B	1	✓	81	86	5

### Intergreen Matrix for Controller Stream 5

		To	
		A	B
From	A		5
	B	11	

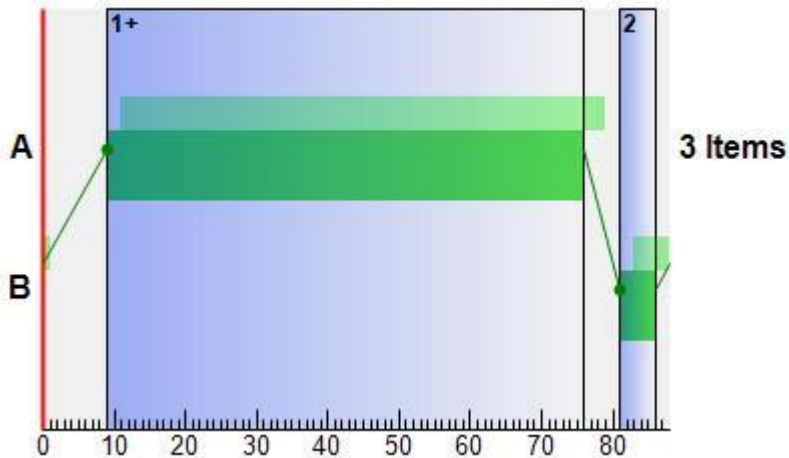
### Interstage Matrix for Controller Stream 5

		To	
		1	2
From	1	0	5
	2	11	0

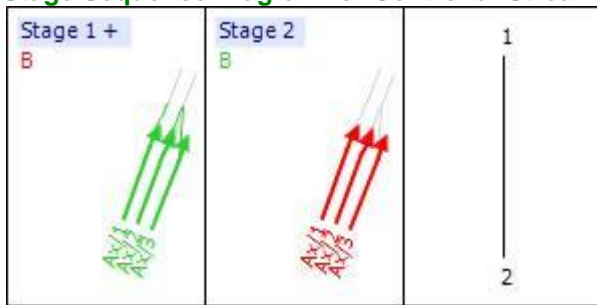
### Banned Stage transitions for Controller Stream 5

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 5



Stage Sequence Diagram for Controller Stream 5



### Controller Stream 6

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
6	(untitled)		1	NetworkDefault	88

### Controller Stream 6 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
6	Unspecified						Absolute

### Controller Stream 6 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
6	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
6	A	(untitled)	7	300	0	0	Not Specified
6	B	(untitled)	5	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
6	1	A	1
6	2	B	1

## Losing/ Gaining delays at each Controller Stream

Controller Stream	Delay	Type	Phase	From Stage	To Stage	Relative Delay	Absolute Delay
6	1	Gaining	A	2	1	0	8

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
6	1	(untitled)	Single	1,2	26,36

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
6	1	✓	1	A	44	26	70	1	7
6	2	✓	2	B	31	36	5	1	5

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
6	A	1	✓	44	26	70
6	B	1	✓	31	36	5

## Intergreen Matrix for Controller Stream 6

		To	
		A	B
From	A		5
	B	8	

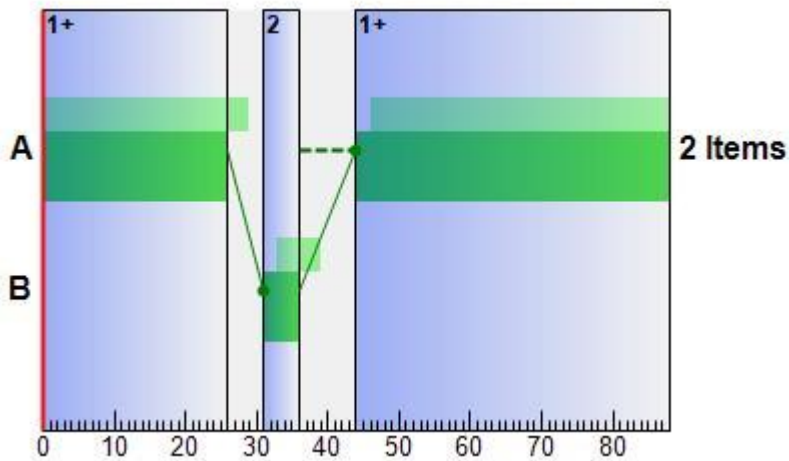
## Interstage Matrix for Controller Stream 6

		To	
		1	2
From	1	0	5
	2	8	0

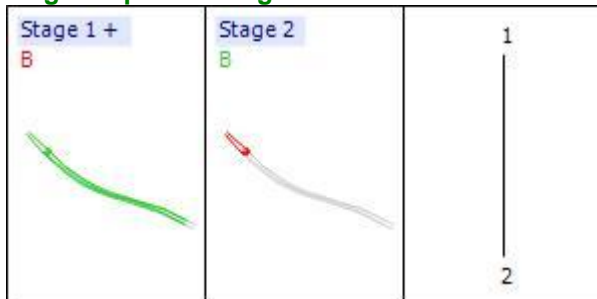
## Banned Stage transitions for Controller Stream 6

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 6



### Stage Sequence Diagram for Controller Stream 6



### Controller Stream 7

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
7	(untitled)		1	NetworkDefault	88

### Controller Stream 7 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
7	Unspecified						Absolute

### Controller Stream 7 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
7	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
7	A	(untitled)	7	300	0	0	Not Specified
7	B	(untitled)	5	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
7	1	A	1
7	2	B	1

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
7	1	(untitled)	Single	1,2	16,26

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
7	1	✓	1	A	36	16	68	1	7
7	2	✓	2	B	21	26	5	1	5

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
7	A	1	✓	36	16	68
7	B	1	✓	21	26	5

## Intergreen Matrix for Controller Stream 7

		To	
		A	B
From	A		5
	B	10	

## Interstage Matrix for Controller Stream 7

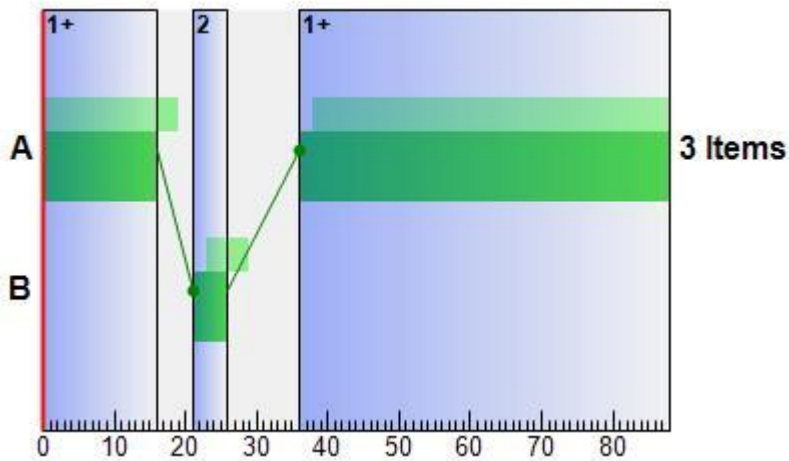
		To	
		1	2
From	1	0	5

	2	10	0
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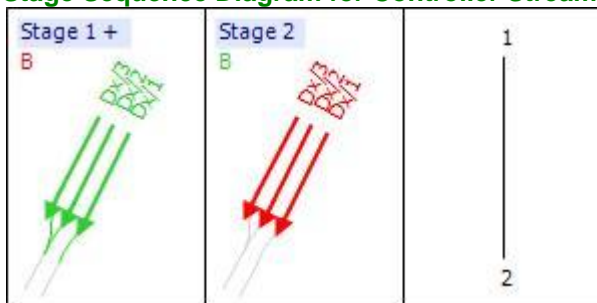
### Banned Stage transitions for Controller Stream 7

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 7



### Stage Sequence Diagram for Controller Stream 7



### Controller Stream 8

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
8	(untitled)		1	NetworkDefault	88

### Controller Stream 8 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
8	Unspecified						Absolute

### Controller Stream 8 - Optimisation

Controller	Allow Offset	Allow Green Split	Optimisation	Auto	Enable Stage

Stream	Optimisation	Optimisation	Level	Redistribute	Constraint
8	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
8	A	(untitled)	7	300	0	0	Not Specified
8	B	(untitled)	7	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
8	1	A	1
8	2	B	1

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
8	1	(untitled)	Single	1,2	74,29

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
8	1	✓	1	A	34	74	40	1	7
8	2	✓	2	B	79	29	38	1	7

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
8	A	1	✓	34	74	40
8	B	1	✓	79	29	38

## Intergreen Matrix for Controller Stream 8

		To	
		A	B
From	A		5
	B	5	

## Interstage Matrix for Controller Stream 8





9	Unspecified						Absolute
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### Controller Stream 9 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
9	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
9	A	(untitled)	7	300	0	0	Not Specified
9	B	(untitled)	7	300	0	0	Not Specified

### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
9	1	A	1
9	2	B	1

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
9	1	(untitled)	Single	1,2	19,69

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
9	1	✓	1	A	74	19	33	1	7
9	2	✓	2	B	24	69	45	1	7

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
9	A	1	✓	74	19	33
9	B	1	✓	24	69	45

### Intergreen Matrix for Controller Stream 9

		To	
		A	B
From	A		5
	B		

	B	5	
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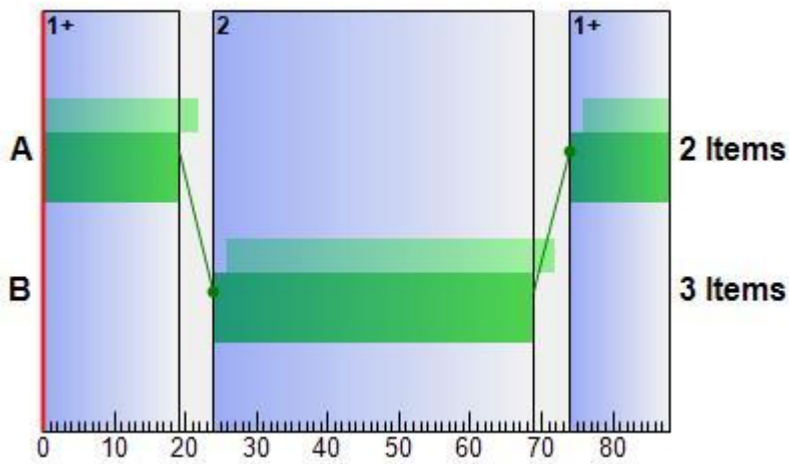
### Interstage Matrix for Controller Stream 9

		To	
		1	2
From	1	0	5
	2	5	0

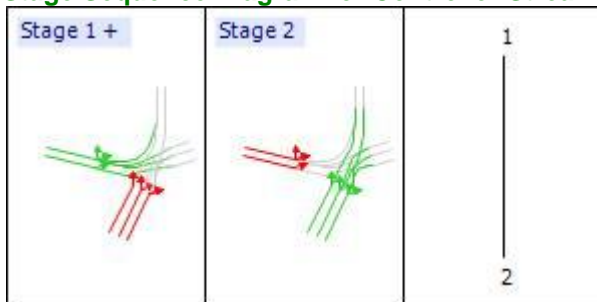
### Banned Stage transitions for Controller Stream 9

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 9



### Stage Sequence Diagram for Controller Stream 9



### Controller Stream 10

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
10	(untitled)		1	NetworkDefault	88

## Controller Stream 10 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
10	Unspecified						Absolute

## Controller Stream 10 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
10	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
10	A	(untitled)	7	300	0	0	Not Specified
10	B	(untitled)	7	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
10	1	A	1
10	2	B	1

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
10	1	(untitled)	Single	1,2	42,13

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
10	1	✓	1	A	18	42	24	1	7
10	2	✓	2	B	47	13	54	1	7

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
10	A	1	✓	18	42	24
10	B	1	✓	47	13	54

## Intergreen Matrix for Controller Stream 10

		To	
		A	B
From	A		5
	B	5	

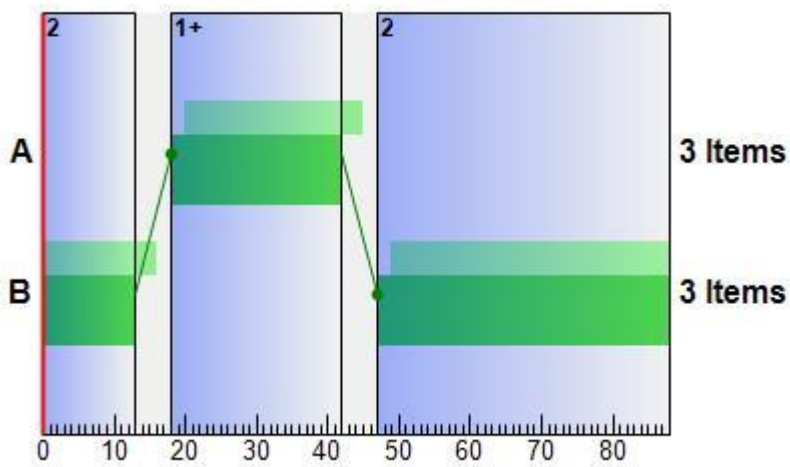
**Interstage Matrix for Controller Stream 10**

		To	
		1	2
From	1	0	5
	2	5	0

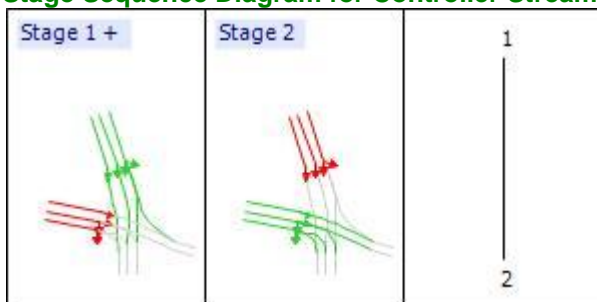
**Banned Stage transitions for Controller Stream 10**

		To	
		1	2
From	1		
	2		

**Phase Timings Diagram for Controller Stream 10**



**Stage Sequence Diagram for Controller Stream 10**



**Controller Stream 11**

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
11	(untitled)		1	NetworkDefault	88

### Controller Stream 11 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
11	Unspecified						Absolute

### Controller Stream 11 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
11	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
11	A	(untitled)	7	300	0	0	Not Specified
11	B	(untitled)	7	300	0	0	Not Specified

### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
11	1	A	1
11	2	B	1

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
11	1	(untitled)	Single	1,2	87,75

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
11	1	✓	1	A	80	87	7	1	7
11	2	✓	2	B	4	75	71	1	7

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
11	A	1	✓	80	87	7

11	B	1	✓	4	75	71
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### Intergreen Matrix for Controller Stream 11

		To	
		A	B
From	A		5
	B	5	

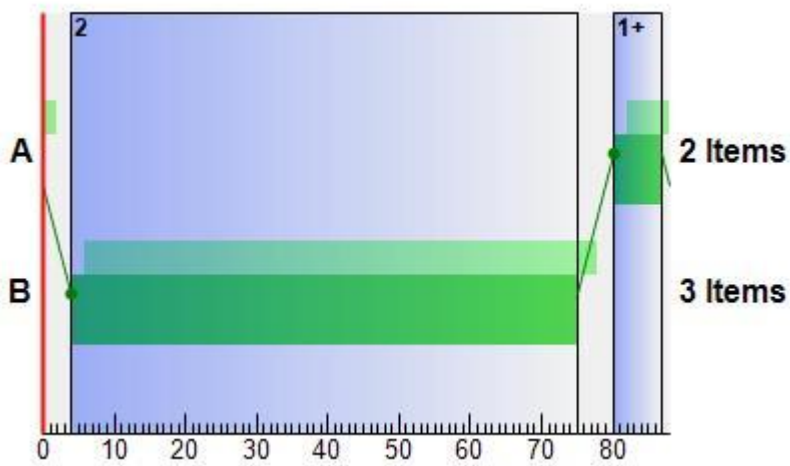
### Interstage Matrix for Controller Stream 11

		To	
		1	2
From	1	0	5
	2	5	0

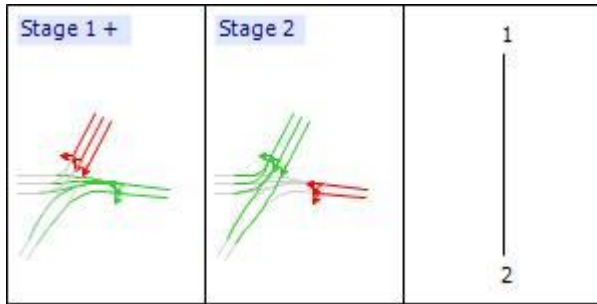
### Banned Stage transitions for Controller Stream 11

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 11



### Stage Sequence Diagram for Controller Stream 11



## Final Prediction Table

### Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUE S		WEIGHTS		PENALTIES	P. I.
Link	Name	Traffic No de	Cont roller Stream	Phase	Calculate d Flow Entering (PCU /hr)	Calculate d Sat Flow (PCU /hr)	Actual Green (s (per cycle))	Waste d Time Total (s (per cycle))	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Journey Time Per PCU (s)	Mean Delay Per PCU (s)	Mean Stops Per PCU (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Delay Weighting (%)	Stop Weighting (%)	Cost Of Penalties (£ per hr)	P. I.
1 P	(untitled)	23	4	E	0 <	0	0	0.0 0	0	0	44.5 0	43. 06	0.0 0	11. 78 +	11. 78	100	100	0.00	0. 0 0

### Traffic Stream Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUE S		WEIGHTS		PENALTI ES	P.I.	
Arm	Traffic Stream	Name	Traffic No de	Cont roller Stream	Phase	Calculate d Flow Entering (PCU /hr)	Calculate d Sat Flow (PCU /hr)	Actual Green (s (per cycle))	Waste d Time Total (s (per cycle))	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Journey Time Per PCU (s)	Mean Delay Per PCU (s)	Mean Stops Per PCU (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Delay Weighting Multiplier (%)	Stop Weighting Multiplier (%)	Cost Of Penalties (£ per hr)	P.I.
1	1	(untitled)	24			751	1800	88	17. 00	42	116	8.1 7	0.7 2	0.0 0	0.1 5		100	100	0.00	2.1 2
1	2	(untitled)	24			578	1800	88	39.	32	180	8.2	0.7	14.	8.1		100	100	0.00	4.5



		itled )						00			5	9	76	5					7	
A	1	(untitled )	1	1	A	330	2128	29	0.00	46	98	34.54	27.08	69.20	5.84	4.93	40	20	0.00	15.59
A	2	(untitled )	1	1	A	822<	2279	29	0.00	106!	-15	171.21	160.03	206.88	47.89+	40.97	40	20	0.00	218.10
A	3	A38 North Entry	1	1	A	504	2279	29	0.00	65	39	42.51	31.32	77.26	9.89	8.23	40	20	0.00	27.44
A	4	(untitled )	1	1	A	742	2279	29	0.00	95!	-6	75.94	64.76	124.10	24.20	18.18	40	20	0.00	81.75
Ax1	1	(untitled )	21			642	1800	88	18.00	36	152	2.07	0.58	1.61	2.21		100	100	0.00	1.79
Ax1	2	(untitled )	21			1312<	1800	88	13.00	73	23	9.43	7.94	78.15	19.73+		100	100	0.00	74.36
Ax2	1	A38 North Exit	17			639	1800	88	6.00	36	153	11.73	0.55	0.00	0.10		100	100	0.00	1.39
Ax2	2	A38 North Exit	17			1315	1800	88	3.00	73	23	14.51	3.32	28.41	15.56		100	100	0.00	29.36
B	1	(untitled )	2			78	262	88	0.00	30	203	6.81	4.58	34.44	0.45		100	100	0.00	2.28
B	2	(untitled )	2			81	120	88	64.00	67	33	54.97	52.73	115.87	2.41		100	100	0.00	19.90
Bc1	1	(untitled )	2			645	1800	88	3.00	36	151	2.79	0.56	0.00	0.10		100	100	0.00	1.42
Bc1	2	(untitled )	2			1184	1800	88	1.00	66	37	4.15	1.92	0.00	0.63		100	100	0.00	8.95
Bc1	3	(untitled )	2			905	1800	88	28.00	50	79	3.25	1.01	0.00	0.25		100	100	0.00	3.61
Bc1	4	(untitled )	2			1143	1800	88	64.00	63	42	3.97	1.73	0.00	0.55		100	100	0.00	7.80
C	1	(untitled )	3	3	A	524	3196f	26	0.00	53	68	47.25	32.34	85.40	11.03	10.73	40	0	0.00	26.74

		)																		
C	2	(untitled)	3	3	A	805	3196 f	26	0.0 0	82	10	55. 99	41. 08	96. 83	19. 63	17. 86	40	0	0.00	52. 18
C 3- 1	1	(untitled)	23			0	0	88	88. 00	0	-100	0.0 0	0.0 0	0.0 0	0.0 0		100	100	0.00	0.0 0
C x 2	1	(untitled)	23	4	A	578	2083	42	0.0 0	57	58	44. 71	13. 85	54. 32	8.1 4	5.9 3	100	100	0.00	41. 79
C x 2	2	(untitled)	23	4	A	840	2083	42	0.0 0	83	9	52. 64	21. 77	72. 73	15. 85	9.9 0	100	100	0.00	92. 00
C x 3	1	(untitled)				36	1800	88	72. 00	2	440 0	4.4 5	0.0 2	0.0 0	0.0 0		100	100	0.00	0.0 0
C x 4- 2	1	(untitled)				578	1800	88	40. 00	32	180	6.5 1	0.7 4	12. 42	6.3 0		100	100	0.00	4.0 2
C x 4- 2	2	(untitled)				520	1800	88	24. 00	29	211	6.1 8	0.4 1	0.0 0	0.0 6		100	100	0.00	0.8 3
C x 5	1	(untitled)				412	1800	88	41. 00	23	293	4.9 7	0.3 0	0.0 0	0.0 3		100	100	0.00	0.4 8
D	1	(untitled)	4	2	A	580	2159	32	0.0 0	72	26	45. 82	29. 04	86. 63	12. 98	9.7 5	40	0	0.00	26. 58
D	2	(untitled)	4	2	A	622	2317	32	14. 00	72	26	45. 43	28. 65	86. 17	13. 85	10. 39	40	0	0.00	28. 12
D	3	(untitled)	4	2	A	623	2317	32	14. 00	72	26	45. 47	28. 69	86. 28	13. 88	10. 41	40	0	0.00	28. 20
D x 1	1	A38 Sou th Exit				829	2155	88	5.0 0	38	134	14. 50	0.5 2	0.0 0	0.1 2		100	100	0.00	1.7 1
D x 1	2	A38 Sou th Exit				1812 <	2155	88	12. 00	84	7	29. 76	15. 78	88. 26	44. 98 +		100	100	0.00	205 .11
E	1	(untitled)	5			555 <	480	88	30. 00	116!	-22	290 .44	27 5.5 3	27 8.1 7	51. 98 +		40	100	0.00	284 .64
E	2	(untitled)	5			802	938	88	38. 00	85	5	37. 88	22. 96	92. 01	19. 11		40	100	0.00	53. 02

F	1	(untitled)	10	8	A	639	2134	40	0.00	64	40	35.13	19.47	72.34	12.03	7.97	100	100	0.00	64.11
F	2	(untitled)	10	8	A	834	2284	40	0.00	78	15	38.60	22.94	77.84	16.95	10.90	100	100	0.00	96.52
F	3	(untitled)	10	8	A	481	2284	40	0.00	45	99	29.66	14.00	50.26	6.19	5.32	100	100	0.00	34.42
G	1	(untitled)	11	9	A	602<	2123	33	0.00	73	23	34.75	29.09	88.44	13.54+	10.03	50	20	0.00	37.99
G	2	(untitled)	11	9	A	643	2592f	33	11.00	64	40	29.12	23.45	77.69	12.72	10.22	50	20	0.00	32.98
H	1	(untitled)	12	10	A	609<	2134	24	0.00	100!	-10	112.79	105.63	165.56	27.22+	23.17	100	100	0.00	286.33
H	2	(untitled)	12	10	A	654<	2284	24	6.00	101!	-11	113.56	106.40	166.83	29.33+	25.01	100	100	0.00	309.64
H	3	(untitled)	12	10	A	23	2284	24	24.00	4	2439	30.17	23.01	69.43	0.40	0.40	100	100	0.00	2.61
I	1	(untitled)	13	11	A	135	2123	7	0.00	70	29	63.99	59.51	116.34	3.96	3.77	40	0	0.00	12.68
I	2	(untitled)	13	11	A	144	3174f	7	0.00	50	80	48.33	43.86	97.77	3.53	3.45	40	0	0.00	9.96
A c	1	(untitled)	1	1	B	343	2112	49	0.00	29	215	10.41	6.39	39.24	3.77	2.75	100	100	1.93	14.93
A c	2	(untitled)	1	1	B	408	2263	49	21.00	32	184	13.10	7.86	48.07	5.27	3.91	100	100	0.00	16.41
A c	3	(untitled)	1	1	B	802<	2263	49	7.00	62	44	23.24	19.22	58.28	11.44+	11.40	100	100	0.00	75.96
A x	1	(untitled)	8	5	A	642	1965	67	0.00	42	113	4.09	2.97	17.37	3.14	2.60	100	100	0.00	13.96
A x	2	(untitled)	8	5	A	907<	2105	67	49.00	56	61	8.06	6.94	37.91	9.80+	6.31	100	100	0.00	44.68
A x	3	(untitled)	8	5	A	405	2105	67	59.00	25	261	4.41	3.29	18.86	1.92	1.88	100	100	0.00	9.67
B	1	(untitled)	6			673	1800	88	3.0	37	141	8.1	0.6	4.3	3.7		100	100	0.00	2.6

c		itled )						0			2	6	0	9					9	
B c	2	(unt itled )	6			1184 <	1800	88	0.0 0	66	37	12. 15	4.6 9	57. 19	24. 95 +		100	100	0.00	43. 93
B c	3	(unt itled )	6			905	1800	88	0.0 0	50	79	8.9 5	1.4 9	17. 60	9.3 9		100	100	0.00	10. 51
B c	4	(unt itled )	6			1143 <	1800	88	0.0 0	63	42	11. 01	3.5 5	40. 55	18. 68 +		100	100	0.00	31. 07
B x	1	(unt itled )				28	1800	88	78. 00	2	562 5	7.4 7	0.0 2	0.0 0	0.0 0		100	100	0.00	0.0 0
C 2	1	(unt itled )	9			1329	1800	88	5.0 0	74	22	23. 94	7.9 9	64. 49	25. 82		100	100	0.00	69. 70
C 4	1	(unt itled )	23	4	D	537	1887	43	0.0 0	57	58	24. 35	17. 89	68. 82	9.4 7	6.9 4	100	100	0.00	49. 89
C 4	2	(unt itled )	23	4	D	589	2055	43	0.0 0	57	57	24. 22	17. 77	68. 76	10. 36	7.5 8	100	100	0.00	54. 43
C 5	1	(unt itled )	23	4	C	331 <	1906	17	0.0 0	85	6	61. 35	57. 25	11 7.8 5	9.8 9+	8.6 0	100	100	0.00	87. 42
C c	1	(unt itled )	3	3	B	488	2059	52	9.0 0	39	129	6.3 6	1.5 1	3.2 0	0.3 9	0.3 9	100	100	0.00	3.4 2
C c	2	(unt itled )	3	3	B	919 <	2209	52	9.0 0	69	30	16. 62	11. 78	44. 45	11. 34 +	8.1 9	100	100	47.86	103 .82
C c	3	(unt itled )	3	3	B	1210 <	2181	52	0.0 0	92!	-2	27. 59	22. 74	65. 56	24. 24 +	13. 34	100	100	334.5 3	468 .79
C x	1	A40 97 Kin sbu ry Roa d Exit	24	6	A	711	2120	70	0.0 0	42	117	6.9 2	1.3 3	6.2 7	1.4 5	1.0 9	100	100	0.00	6.2 9
C x	2	A40 97 Kin sbu ry Roa d Exit	24	6	A	708	2120	70	0.0 0	41	117	7.0 8	1.4 8	7.1 1	1.4 1	1.2 6	100	100	0.00	7.0 5

Dc	1	(untitled)	4	2	B	337	2059	46	9.00	31	194	17.08	10.37	45.58	4.08	3.65	1000	1000	0.00	187.60
Dc	2	(untitled)	4	2	B	554	2172	46	7.00	48	89	14.63	7.92	28.05	3.96	3.72	100	100	0.00	22.34
Dc	3	(untitled)	4	2	B	414	2185	46	16.00	35	154	7.56	0.85	0.96	0.10	0.10	100	100	0.00	1.51
Dx	1	(untitled)	7	7	A	829	1915	68	7.00	55	63	6.71	3.58	22.77	7.06	2.43	100	100	0.00	22.61
Dx	2	(untitled)	7	7	A	919<	2055	68	13.00	57	58	4.93	1.79	14.50	14.10+	0.38	100	100	0.00	14.20
Dx	3	(untitled)	7	7	A	893	2055	68	12.00	55	62	4.52	1.39	1.68	2.09	0.34	100	100	0.00	5.76
Ec	1	(untitled)	5			565	1800	88	12.00	31	187	4.19	0.46	0.00	0.07		100	100	0.00	1.02
Ec	2	(untitled)	5			830<	1800	88	46.00	46	95	6.22	2.49	39.41	13.74+		100	100	61.45	80.22
Ec	3	(untitled)	5			829<	1800	88	22.00	46	95	6.23	2.50	39.61	13.76+		100	100	61.56	80.39
Ex	1	(untitled)				593	1800	88	15.00	33	173	7.95	0.50	0.83	1.59		100	100	0.00	1.32
Ex	2	(untitled)				313	1800	88	51.00	17	418	7.67	0.21	0.30	0.53		100	100	0.00	0.29
Fc	1	(untitled)	10	8	B	22	2166	38	31.00	2	3827	8.32	0.05	0.05	0.00	0.00	100	100	0.00	0.00
Fc	2	(untitled)	10	8	B	53	2317	38	29.00	5	1644	25.83	17.56	43.50	0.56	0.56	100	100	0.00	4.00
Fc	3	(untitled)	10	8	B	8	2317	38	34.00	1	11452	8.29	0.02	0.00	0.00	0.00	100	100	0.00	0.00
Fx	1	(untitled)	20			1023	2112	88	6.00	48	86	15.71	0.80	0.00	0.23		100	100	0.00	3.22
Fx	2	(untitled)	20			1376	2263	88	5.00	61	48	16.15	1.23	2.84	3.00		100	100	0.00	7.96
F	1	(untitled)	22			1153	1800	88	88.	64	41	9.3	1.9	8.3	10.		100	100	0.00	11.

x 1		itled )					00			7	1	6	08					83		
F x 1	2	(unt itled )	22			1246	1800	88	2.0 0	69	30	10. 37	2.9 1	24. 01	15. 97		100	100	0.00	24. 02
G 1	1	(unt itled )	14			1245	2112	88	2.0 0	59	53	5.6 9	1.2 2	0.0 0	0.4 2		100	100	0.00	6.0 0
G c	1	(unt itled )	11	9	B	361	2166	45	13. 00	32	183	14. 37	6.5 4	17. 89	1.5 8	1.5 8	100	100	0.00	10. 23
G c	2	(unt itled )	11	9	B	842	2317	45	9.0 0	69	29	18. 44	10. 62	23. 02	4.7 4	4.7 4	100	100	120.6 2	158 .67
G c	3	(unt itled )	11	9	B	481	2317	45	24. 00	40	127	15. 74	7.9 1	19. 62	2.3 1	2.3 1	100	100	11.19	27. 56
G x	1 NB T	(unt itled )	18			308	2112	88	35. 00	15	516	4.3 2	0.1 5	0.0 0	0.0 1		100	100	0.00	0.1 8
G x	2 NB T	(unt itled )	18			45	2263	88	73. 00	2	442 6	4.1 9	0.0 2	0.0 0	0.0 0		100	100	0.00	0.0 0
G x 1	1 NB T	(unt itled )				353	1965	88	26. 00	18	400	1.6 9	0.2 0	0.0 0	0.0 2		100	100	0.00	0.2 8
H 1	1	(unt itled )	15			1263	2112	88	71. 00	60	50	8.7 2	1.2 6	0.0 0	0.4 4		100	100	0.00	6.3 0
H 1	2	(unt itled )	15			23	2263	88	88. 00	1	875 5	7.4 6	0.0 1	0.0 0	0.0 0		100	100	0.00	0.0 0
H c	1	(unt itled )	12	10	B	567	2166	54	0.0 0	42	115	11. 85	4.3 5	25. 78	3.9 8	2.8 7	100	100	57.96	69. 81
H c	2	(unt itled )	12	10	B	918 <	2317	54	0.0 0	63	42	15. 33	7.8 3	46. 17	11. 62 +	5.0 1	100	100	2722. 47	275 6.9 6
H c	3	(unt itled )	12	10	B	643 <	2317	54	33. 00	44	103	14. 43	6.9 3	63. 89	11. 92 +	2.7 5	100	100	1917. 66	194 1.1 7
H x	1	(unt itled )				440	2112	88	10. 00	21	332	7.6 8	0.2 2	0.0 0	0.0 3		100	100	0.00	0.3 9
H x	2	(unt itled )				361	2263	88	40. 00	16	465	7.6 1	0.1 5	0.0 0	0.0 2		100	100	0.00	0.2 1
I1	1	(unt itled )	16			279	2112	88	0.0 0	13	581	7.5 9	0.1 3	0.0 0	0.0 1		100	100	0.00	0.1 4

		)																		
lc	1	(untitled)	13	11	B	888	2166	71	12.00	50	80	8.44	1.17	5.73	1.72	1.16	100	100	0.00	4.82
lc	2	(untitled)	13	11	B	1292<	2317	71	11.00	68	32	10.75	3.48	36.43	13.69+	3.12	100	100	171.19	195.73
lc	3	(untitled)	13	11	B	23	2317	71	65.00	1	7318	7.28	0.01	0.00	0.00	0.00	100	100	0.00	0.00
lx	1	(untitled)	19			637	2112	88	45.00	30	199	3.72	0.37	0.44	0.66		100	100	0.00	1.02
lx	2	(untitled)	19			567	2263	88	71.00	25	259	3.66	0.30	1.95	5.81		100	100	0.00	1.03
lx	1	(untitled)				1204<	2112	88	3.00	57	58	7.87	6.75	69.46	25.29+		100	100	0.00	59.21

## Network Results

	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Excess Queue Penalty (£ per hr)	Performance Index (£ per hr)
<b>TOTAL</b>	6857.78	356.52	19.24	110.14	108.28	2513.08	730.10	3590.76	6833.94
<b>BUSES</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TRAMS</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>PEDESTRIANS</b>									
<b>OTHER (NORMAL)</b>	7260.85	427.30	16.99	134.04	146.38	2875.76	756.46	5508.42	9140.64

- *B* = at least one source for this link carries buses
- *T* = at least one source for this link carries trams
- *P* = this link is a pedestrian link
- *<* = adjusted flow warning (upstream links are over-saturated)
- *!* = DoS threshold exceeded
- *f* = average saturation flow for flared link
- *\** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- *^* = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- *+* = average link excess queue is greater than 0
- **P.I.** = PERFORMANCE INDEX

## Link Results

### Link Results: Flows And Signals

Time Segment	Link	Calculated Flow Entering (PCU/hr)	Calculated Flow Out (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Mean Modulus Of Error	Actual Green (s (per cycle))	Effective Green (s (per cycle))
08:00-09:00	1	500	500	0		10000	795	63		43	0.00	6	7

### Link Results: Stops And Delays

Time Segment	Link	Mean Cruise Time Per PCU (s)	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	1	1.44	43.06	5.45	0.53	84.93	84.93	0.00	0.00	0.00	0.00	0.00

### Link Results: Queues And Blocking

Time Segment	Link	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Utilised Storage (%)	Average Link Excess Queues (PCU)	Average Limit Excess Queues (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
08:00-09:00	1	0.00	11.78	10.00	117.78	0.14	0.00	0.00	0.53	11.78	0.00	0.00	0.00	

### Link Results: Journey Times

Time Segment	Link	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	1	6.00	6.18	0.97	44.50

### Link Results: Advanced

Time Segment	Link	Degree Of Saturation Penalty (£ per hr)	Phase Min Max Penalty (£ per hr)	Intergreen Broken Penalty (£ per hr)	Stage Constraint Broken Penalty (£ per hr)	Ped Gap Accepting Penalty (£ per hr)	Warmed Up	Warmed Up Error	Mean Max Queue EoTS (PCU)	Max End Of Green Queue EoTS (PCU)	Max End Of Red Queue EoTS (PCU)	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)	Performance Index (£ per hr)
08:00-	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	11.7	0.53	11.7	0.00	84.93	84.93



09:00								8		8			
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# Traffic Stream Results

## Traffic Stream Results: Vehicle Summary

Time Segment	Arm	Traffic Stream	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Calculated Flow Entering (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Mean Delay Per PCU (s)	Mean Max Queue (PCU)	Utilised Storage (%)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	1	1	42	116	751	1800	88	0.72	0.15	0.86	2.12	0.00	2.12
08:00-09:00	1	2	32	180	578	1800	88	0.79	8.15	46.86	1.80	2.77	4.57
08:00-09:00	A	1	46	98	330	2128	29	27.08	5.84	33.59	14.11	1.48	15.59
08:00-09:00	A	2	106!	-15	822	2279	29	160.03	47.89	183.59	207.66	10.44	218.10
08:00-09:00	A	3	65	39	504	2279	29	31.32	9.89	37.90	24.91	2.53	27.44
08:00-09:00	A	4	95!	-6	742	2279	29	64.76	24.20	92.76	75.77	5.98	81.75
08:00-09:00	Ax 1	1	36	152	642	1800	88	0.58	2.21	63.62	1.46	0.34	1.79
08:00-09:00	Ax 1	2	73	23	1312	1800	88	7.94	19.73	567.22	41.07	33.30	74.36
08:00-09:00	Ax 2	1	36	153	639	1800	88	0.55	0.10	0.37	1.39	0.00	1.39
08:00-09:00	Ax 2	2	73	23	1315	1800	88	3.32	15.56	59.66	17.23	12.13	29.36
08:00-09:00	B	1	30	203	78	262	88	4.58	0.45	8.68	1.41	0.87	2.28
08:00-09:00	B	2	67	33	81	120	88	52.73	2.41	46.19	16.85	3.05	19.90
08:00-09:00	Bc 1	1	36	151	645	1800	88	0.56	0.10	1.91	1.42	0.00	1.42
08:00-09:00	Bc 1	2	66	37	1184	1800	88	1.92	0.63	12.08	8.95	0.00	8.95
08:00-09:00	Bc 1	3	50	79	905	1800	88	1.01	0.25	4.87	3.61	0.00	3.61
08:00-09:00	Bc 1	4	63	42	1143	1800	88	1.73	0.55	10.53	7.80	0.00	7.80

08:00-09:00	C	1	53	68	524	3196	26	32.34	11.03	31.70	26.74	0.00	26.74
08:00-09:00	C	2	82	10	805	3196	26	41.08	19.63	56.42	52.18	0.00	52.18
08:00-09:00	C3-1	1	0	-100	0	0	88	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Cx 2	1	57	58	578	2083	42	13.85	8.14	11.30	31.59	10.20	41.79
08:00-09:00	Cx 2	2	83	9	840	2083	42	21.77	15.85	22.02	72.15	19.85	92.00
08:00-09:00	Cx 3	1	2	4400	36	1800	88	0.02	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Cx 4-2	1	32	180	578	1800	88	0.74	6.30	46.79	1.69	2.33	4.02
08:00-09:00	Cx 4-2	2	29	211	520	1800	88	0.41	0.06	0.44	0.83	0.00	0.83
08:00-09:00	Cx 5	1	23	293	412	1800	88	0.30	0.03	0.31	0.48	0.00	0.48
08:00-09:00	D	1	72	26	580	2159	32	29.04	12.98	24.87	26.58	0.00	26.58
08:00-09:00	D	2	72	26	622	2317	32	28.65	13.85	26.54	28.12	0.00	28.12
08:00-09:00	D	3	72	26	623	2317	32	28.69	13.88	26.60	28.20	0.00	28.20
08:00-09:00	Dx 1	1	38	134	829	2155	88	0.52	0.12	0.28	1.71	0.00	1.71
08:00-09:00	Dx 1	2	84	7	1812	2155	88	15.78	44.98	103.46	112.77	92.34	205.11
08:00-09:00	E	1	116!	-22	555	480	88	275.53	51.98	149.44	241.27	43.37	284.64
08:00-09:00	E	2	85	5	802	938	88	22.96	19.11	54.95	29.06	23.96	53.02
08:00-09:00	F	1	64	40	639	2134	40	19.47	12.03	32.93	49.10	15.02	64.11
08:00-09:00	F	2	78	15	834	2284	40	22.94	16.95	46.42	75.45	21.08	96.52
08:00-09:00	F	3	45	99	481	2284	40	14.00	6.19	16.95	26.57	7.85	34.42
08:00-09:00	G	1	73	23	602	2123	33	29.09	13.54	102.43	34.54	3.46	37.99
08:00-09:00	G	2	64	40	643	2592	33	23.45	12.72	96.22	29.74	3.24	32.98
08:00-09:00	H	1	100!	-10	609	2134	24	105.63	27.22	163.01	253.74	32.59	286.33

08:00-09:00	H	2	101!	-11	654	2284	24	106.40	29.33	175.69	274.48	35.15	309.64
08:00-09:00	H	3	4	2439	23	2284	24	23.01	0.40	2.41	2.09	0.52	2.61
08:00-09:00	I	1	70	29	135	2123	7	59.51	3.96	37.97	12.68	0.00	12.68
08:00-09:00	I	2	50	80	144	3174	7	43.86	3.53	33.79	9.96	0.00	9.96
08:00-09:00	Ac	1	29	215	343	2112	49	6.39	3.77	53.79	8.63	4.36	14.93
08:00-09:00	Ac	2	32	184	408	2263	49	7.86	5.27	75.25	12.63	3.78	16.41
08:00-09:00	Ac	3	62	44	802	2263	49	19.22	11.44	163.49	60.79	15.18	75.96
08:00-09:00	Ax	1	42	113	642	1965	67	2.97	3.14	90.40	7.52	6.44	13.96
08:00-09:00	Ax	2	56	61	907	2105	67	6.94	9.80	281.81	24.83	19.85	44.68
08:00-09:00	Ax	3	25	261	405	2105	67	3.29	1.92	55.17	5.26	4.41	9.67
08:00-09:00	Bc	1	37	141	673	1800	88	0.66	3.79	21.77	1.75	0.94	2.69
08:00-09:00	Bc	2	66	37	1184	1800	88	4.69	24.95	143.45	21.93	22.00	43.93
08:00-09:00	Bc	3	50	79	905	1800	88	1.49	9.39	54.01	5.34	5.17	10.51
08:00-09:00	Bc	4	63	42	1143	1800	88	3.55	18.68	107.43	16.02	15.05	31.07
08:00-09:00	Bx	1	2	5625	28	1800	88	0.02	0.00	0.00	0.00	0.00	0.00
08:00-09:00	C2	1	74	22	1329	1800	88	7.99	25.82	69.40	41.86	27.83	69.70
08:00-09:00	C4	1	57	58	537	1887	43	17.89	9.47	62.89	37.89	12.00	49.89
08:00-09:00	C4	2	57	57	589	2055	43	17.77	10.36	68.80	41.27	13.15	54.43
08:00-09:00	C5	1	85	6	331	1906	17	57.25	9.89	103.38	74.75	12.67	87.42
08:00-09:00	Cc	1	39	129	488	2059	52	1.51	0.39	6.48	2.91	0.51	3.42
08:00-09:00	Cc	2	69	30	919	2209	52	11.78	11.34	188.94	42.70	13.27	103.82
08:00-09:00	Cc	3	92!	-2	1210	2181	52	22.74	24.24	403.97	108.51	25.75	468.79

08:00-09:00	Cx	1	42	117	711	2120	70	1.33	1.45	8.35	3.72	2.57	6.29
08:00-09:00	Cx	2	41	117	708	2120	70	1.48	1.41	8.12	4.14	2.91	7.05
08:00-09:00	Dc	1	31	194	337	2059	46	10.37	4.08	26.06	137.76	49.84	187.60
08:00-09:00	Dc	2	48	89	554	2172	46	7.92	3.96	25.33	17.29	5.04	22.34
08:00-09:00	Dc	3	35	154	414	2185	46	0.85	0.10	0.62	1.39	0.13	1.51
08:00-09:00	Dx	1	55	63	829	1915	68	3.58	7.06	72.47	11.71	10.90	22.61
08:00-09:00	Dx	2	57	58	919	2055	68	1.79	14.10	144.78	6.51	7.70	14.20
08:00-09:00	Dx	3	55	62	893	2055	68	1.39	2.09	21.42	4.89	0.86	5.76
08:00-09:00	Ec	1	31	187	565	1800	88	0.46	0.07	0.83	1.02	0.00	1.02
08:00-09:00	Ec	2	46	95	830	1800	88	2.49	13.74	157.99	8.15	10.62	80.22
08:00-09:00	Ec	3	46	95	829	1800	88	2.50	13.76	158.24	8.16	10.66	80.39
08:00-09:00	Ex	1	33	173	593	1800	88	0.50	1.59	9.16	1.16	0.16	1.32
08:00-09:00	Ex	2	17	418	313	1800	88	0.21	0.53	3.04	0.26	0.03	0.29
08:00-09:00	Fc	1	2	3827	22	2166	38	0.05	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Fc	2	5	1644	53	2317	38	17.56	0.56	8.05	3.67	0.33	4.00
08:00-09:00	Fc	3	1	11452	8	2317	38	0.02	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Fx	1	48	86	1023	2112	88	0.80	0.23	0.65	3.22	0.00	3.22
08:00-09:00	Fx	2	61	48	1376	2263	88	1.23	3.00	8.61	6.69	1.27	7.96
08:00-09:00	Fx 1	1	64	41	1153	1800	88	1.91	10.08	57.97	8.70	3.13	11.83
08:00-09:00	Fx 1	2	69	30	1246	1800	88	2.91	15.97	91.81	14.31	9.71	24.02
08:00-09:00	G1	1	59	53	1245	2112	88	1.22	0.42	4.05	6.00	0.00	6.00
08:00-09:00	Gc	1	32	183	361	2166	45	6.54	1.58	22.55	9.30	0.93	10.23

08:00-09:00	Gc	2	69	29	842	2317	45	10.62	4.74	67.78	35.25	2.80	158.67
08:00-09:00	Gc	3	40	127	481	2317	45	7.91	2.31	32.97	15.00	1.36	27.56
08:00-09:00	Gx	1	15	516	308	2112	88	0.15	0.01	0.13	0.18	0.00	0.18
08:00-09:00	Gx	2	2	4426	45	2263	88	0.02	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Gx1	1	18	400	353	1965	88	0.20	0.02	0.57	0.28	0.00	0.28
08:00-09:00	H1	1	60	50	1263	2112	88	1.26	0.44	2.55	6.30	0.00	6.30
08:00-09:00	H1	2	1	8755	23	2263	88	0.01	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Hc	1	42	115	567	2166	54	4.35	3.98	56.80	9.74	2.11	69.81
08:00-09:00	Hc	2	63	42	918	2317	54	7.83	11.62	166.05	28.37	6.12	2756.96
08:00-09:00	Hc	3	44	103	643	2317	54	6.93	11.92	170.25	17.59	5.93	1941.17
08:00-09:00	Hx	1	21	332	440	2112	88	0.22	0.03	0.16	0.39	0.00	0.39
08:00-09:00	Hx	2	16	465	361	2263	88	0.15	0.02	0.09	0.21	0.00	0.21
08:00-09:00	I1	1	13	581	279	2112	88	0.13	0.01	0.06	0.14	0.00	0.14
08:00-09:00	Ic	1	50	80	888	2166	71	1.17	1.72	24.57	4.09	0.73	4.82
08:00-09:00	Ic	2	68	32	1292	2317	71	3.48	13.69	195.54	17.75	6.79	195.73
08:00-09:00	Ic	3	1	7318	23	2317	71	0.01	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Ix	1	30	199	637	2112	88	0.37	0.66	8.42	0.92	0.09	1.02
08:00-09:00	Ix	2	25	259	567	2263	88	0.30	5.81	74.27	0.68	0.36	1.03
08:00-09:00	Ix1	1	57	58	1204	2112	88	6.75	25.29	969.31	32.05	27.15	59.21

### Traffic Stream Results: Flows And Signals

Time Segment	Arm	Traffic Stream	Calculated Flow Entering	Calculated Flow Out (PCU/h)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/h)	Calculated Capacity (PCU/h)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capa	Mean Modulus Of Error	Actual Green (s)	Effective Green (s per
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			(PCU/h r)	r)			r)	r)			city (%)		(per cycl e))	cycle )
08:00 - 09:00	1	1	751	751	3		1800	1800	42		116	0.72	88	88
08:00 - 09:00	1	2	578	578	0		1800	1800	32		180	0.95	88	88
08:00 - 09:00	A	1	330	330	-1		2128	725	46		98	0.43	29	30
08:00 - 09:00	A	2	822	777	2	✓	2279	777	106!	✓	-15	0.43	29	30
08:00 - 09:00	A	3	504	504	3	✓	2279	777	65		39	0.42	29	30
08:00 - 09:00	A	4	742	742	3	✓	2279	777	95!	✓	-6	0.46	29	30
08:00 - 09:00	Ax 1	1	642	642	12	✓	1800	1800	36		152	0.78	88	88
08:00 - 09:00	Ax 1	2	1312	1312	15	✓	1800	1800	73		23	0.88	88	88
08:00 - 09:00	Ax 2	1	639	639	9	✓	1800	1800	36		153	0.42	88	88
08:00 - 09:00	Ax 2	2	1315	1315	18	✓	1800	1800	73		23	0.43	88	88
08:00 - 09:00	B	1	78	78	-1	✓	262	262	30		203	0.00	88	88
08:00 - 09:00	B	2	81	81	-4		120	120	67		33	0.00	88	88
08:00 - 09:00	Bc 1	1	645	645	17	✓	1800	1800	36		151	0.64	88	88
08:00 - 09:00	Bc 1	2	1184	1184	78	✓	1800	1800	66		37	0.58	88	88
08:00 - 09:00	Bc 1	3	905	905	2	✓	1800	1800	50		79	0.49	88	88
08:00	Bc	4	1143	1143	3	✓	1800	1800	63		42	0.48	88	88

- 09:00	1													
08:00 - 09:00	C	1	524	524	-1		3196	981	53		68	0.35	26	27
08:00 - 09:00	C	2	805	805	4		3196	981	82		10	0.36	26	27
08:00 - 09:00	C3 -1	1	0	0	0		0	0	0		-100	0.00	88	88
08:00 - 09:00	Cx 2	1	578	578	31	✓	2083	1018	57		58	0.33	42	43
08:00 - 09:00	Cx 2	2	840	840	33	✓	2083	1018	83		9	0.33	42	43
08:00 - 09:00	Cx 3	1	36	36	0		1800	1800	2		4400	0.96	88	88
08:00 - 09:00	Cx 4-2	1	578	578	31	✓	1800	1800	32		180	0.97	88	88
08:00 - 09:00	Cx 4-2	2	520	520	18	✓	1800	1800	29		211	0.88	88	88
08:00 - 09:00	Cx 5	1	412	412	15	✓	1800	1800	23		293	0.98	88	88
08:00 - 09:00	D	1	580	580	0		2159	810	72		26	0.00	32	33
08:00 - 09:00	D	2	622	622	0		2317	869	72		26	0.00	32	33
08:00 - 09:00	D	3	623	623	-3		2317	869	72		26	0.00	32	33
08:00 - 09:00	Dx 1	1	829	829	30	✓	2155	2155	38		134	0.45	88	88
08:00 - 09:00	Dx 1	2	1812	1812	3	✓	2155	2155	84		7	0.70	88	88
08:00 - 09:00	E	1	555	480	2		480	480	116!	✓	-22	0.00	88	88
08:00 -	E	2	802	802	-1	✓	938	938	85		5	0.00	88	88

09:00														
08:00 - 09:00	F	1	639	639	9	✓	2134	994	64		40	0.32	40	41
08:00 - 09:00	F	2	834	834	11	✓	2284	1064	78		15	0.32	40	41
08:00 - 09:00	F	3	481	481	6	✓	2284	1064	45		99	0.34	40	41
08:00 - 09:00	G	1	602	602	-2		2123	820	73		23	0.00	33	34
08:00 - 09:00	G	2	643	643	0		2592	1001	64		40	0.00	33	34
08:00 - 09:00	H	1	609	606	1		2134	606	100!	✓	-10	0.00	24	25
08:00 - 09:00	H	2	654	649	-1		2284	649	101!	✓	-11	0.00	24	25
08:00 - 09:00	H	3	23	23	0		2284	649	4		2439	0.00	24	25
08:00 - 09:00	I	1	135	135	0		2123	193	70		29	0.00	7	8
08:00 - 09:00	I	2	144	144	1		3174	289	50		80	0.00	7	8
08:00 - 09:00	Ac	1	343	343	19	✓	2112	1200	29		215	0.52	49	50
08:00 - 09:00	Ac	2	408	408	31	✓	2263	1286	32		184	0.36	49	50
08:00 - 09:00	Ac	3	802	802	-1	✓	2263	1286	62		44	0.65	49	50
08:00 - 09:00	Ax	1	642	642	12	✓	1965	1518	42		113	0.55	67	68
08:00 - 09:00	Ax	2	907	907	14	✓	2105	1627	56		61	0.66	67	68
08:00 - 09:00	Ax	3	405	405	1		2105	1627	25		261	0.70	67	68



08:00 - 09:00	Bc	1	673	673	18	✓	1800	1800	37		141	0.65	88	88
08:00 - 09:00	Bc	2	1184	1184	78	✓	1800	1800	66		37	0.67	88	88
08:00 - 09:00	Bc	3	905	905	2	✓	1800	1800	50		79	0.51	88	88
08:00 - 09:00	Bc	4	1143	1143	3	✓	1800	1800	63		42	0.56	88	88
08:00 - 09:00	Bx	1	28	28	1	✓	1800	1800	2		5625	0.51	88	88
08:00 - 09:00	C2	1	1329	1329	3		1800	1800	74		22	0.57	88	88
08:00 - 09:00	C4	1	537	537	3		1887	944	57		58	0.00	43	44
08:00 - 09:00	C4	2	589	589	0		2055	1028	57		57	0.00	43	44
08:00 - 09:00	C5	1	331	331	0		1906	390	85		6	0.00	17	18
08:00 - 09:00	Cc	1	488	488	30	✓	2059	1240	39		129	1.01	52	53
08:00 - 09:00	Cc	2	919	919	2	✓	2209	1330	69		30	0.44	52	53
08:00 - 09:00	Cc	3	1210	1210	-1	✓	2181	1314	92!	✓	-2	0.39	52	53
08:00 - 09:00	Cx	1	711	711	16	✓	2120	1710	42		117	0.53	70	71
08:00 - 09:00	Cx	2	708	708	48	✓	2120	1710	41		117	0.44	70	71
08:00 - 09:00	Dc	1	337	337	-1		2059	1100	31		194	0.70	46	47
08:00 - 09:00	Dc	2	554	554	-1		2172	1160	48		89	0.82	46	47
08:00	Dc	3	414	414	3		2185	1167	35		154	1.36	46	47

- 09:00														
08:00 - 09:00	Dx	1	829	829	30	✓	1915	1502	55		63	0.67	68	69
08:00 - 09:00	Dx	2	919	919	2	✓	2055	1611	57		58	0.87	68	69
08:00 - 09:00	Dx	3	893	893	1	✓	2055	1611	55		62	0.77	68	69
08:00 - 09:00	Ec	1	565	565	-1		1800	1800	31		187	0.71	88	88
08:00 - 09:00	Ec	2	830	830	2		1800	1800	46		95	0.83	88	88
08:00 - 09:00	Ec	3	829	829	-1		1800	1800	46		95	0.83	88	88
08:00 - 09:00	Ex	1	593	593	-1		1800	1800	33		173	0.76	88	88
08:00 - 09:00	Ex	2	313	313	-1		1800	1800	17		418	1.23	88	88
08:00 - 09:00	Fc	1	22	22	0		2166	960	2		3827	1.68	38	39
08:00 - 09:00	Fc	2	53	53	0		2317	1027	5		1644	1.24	38	39
08:00 - 09:00	Fc	3	8	8	0		2317	1027	1		11452	1.68	38	39
08:00 - 09:00	Fx	1	1023	1023	1		2112	2112	48		86	0.45	88	88
08:00 - 09:00	Fx	2	1376	1376	6	✓	2263	2263	61		48	0.54	88	88
08:00 - 09:00	Fx 1	1	1153	1153	1	✓	1800	1800	64		41	0.45	88	88
08:00 - 09:00	Fx 1	2	1246	1246	6	✓	1800	1800	69		30	0.49	88	88
08:00 -	G1	1	1245	1245	-2		2112	2112	59		53	0.00	88	88

09:00														
08:00 - 09:00	Gc	1	361	361	5	✓	2166	1132	32		183	0.99	45	46
08:00 - 09:00	Gc	2	842	842	11	✓	2317	1211	69		29	1.01	45	46
08:00 - 09:00	Gc	3	481	481	6	✓	2317	1211	40		127	1.02	45	46
08:00 - 09:00	Gx	1	308	308	5	✓	2112	2112	15		516	0.93	88	88
08:00 - 09:00	Gx	2	45	45	0		2263	2263	2		4426	1.53	88	88
08:00 - 09:00	Gx 1	1	353	353	5	✓	1965	1965	18		400	0.79	88	88
08:00 - 09:00	H1	1	1263	1263	0		2112	2112	60		50	0.00	88	88
08:00 - 09:00	H1	2	23	23	0		2263	2263	1		8755	0.00	88	88
08:00 - 09:00	Hc	1	567	567	6	✓	2166	1354	42		115	0.75	54	55
08:00 - 09:00	Hc	2	918	918	4	✓	2317	1448	63		42	0.53	54	55
08:00 - 09:00	Hc	3	643	643	0		2317	1448	44		103	1.18	54	55
08:00 - 09:00	Hx	1	440	440	5	✓	2112	2112	21		332	0.77	88	88
08:00 - 09:00	Hx	2	361	361	5	✓	2263	2263	16		465	1.03	88	88
08:00 - 09:00	I1	1	279	279	1		2112	2112	13		581	0.00	88	88
08:00 - 09:00	Ic	1	888	888	1		2166	1772	50		80	0.71	71	72
08:00 - 09:00	Ic	2	1292	1292	5	✓	2317	1896	68		32	0.69	71	72

08:00 - 09:00	lc	3	23	23	0		2317	1896	1		7318	1.39	71	72
08:00 - 09:00	lx	1	637	637	7	✓	2112	2112	30		199	0.81	88	88
08:00 - 09:00	lx	2	567	567	6	✓	2263	2263	25		259	1.04	88	88
08:00 - 09:00	lx1	1	1204	1204	13	✓	2112	2112	57		58	0.90	88	88

### Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Overs at Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	1	1	7.46	0.72	0.00	0.15	2.12	2.12	0.00	0.00	0.00	0.00	0.00
08:00-09:00	1	2	7.46	0.79	0.05	0.08	1.80	1.80	14.76	82.20	3.10	2.77	2.77
08:00-09:00	A	1	7.46	27.08	2.29	0.19	35.27	14.11	69.20	220.84	7.71	7.42	1.48
08:00-09:00	A	2	11.18	160.03	7.37	29.19	519.14	207.66	206.88	758.33	849.02	52.20	10.44
08:00-09:00	A	3	11.18	31.32	3.79	0.59	62.28	24.91	77.26	365.47	24.02	12.65	2.53
08:00-09:00	A	4	11.18	64.76	6.41	6.93	189.42	75.77	124.10	662.36	257.89	29.88	5.98
08:00-09:00	Ax 1	1	1.49	0.58	0.00	0.10	1.46	1.46	1.61	6.32	4.03	0.34	0.34
08:00-09:00	Ax 1	2	1.49	7.94	1.92	0.97	41.07	41.07	78.15	946.92	78.41	33.30	33.30
08:00-09:00	Ax 2	1	11.18	0.55	0.00	0.10	1.39	1.39	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Ax 2	2	11.18	3.32	0.23	0.98	17.23	17.23	28.41	294.30	79.19	12.13	12.13
08:00-09:00	B	1	2.24	4.58	0.04	0.06	1.41	1.41	34.44	21.81	5.05	0.87	0.87
08:00-09:00	B	2	2.24	52.73	0.53	0.65	16.85	16.85	115.87	69.16	24.69	3.05	3.05
08:00-09:00	Bc 1	1	2.24	0.56	0.00	0.10	1.42	1.42	0.00	0.00	0.00	0.00	0.00

08:00-09:00	Bc 1	2	2.24	1.92	0.00	0.63	8.95	8.95	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Bc 1	3	2.24	1.01	0.00	0.25	3.61	3.61	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Bc 1	4	2.24	1.73	0.00	0.55	7.80	7.80	0.00	0.00	0.00	0.00	0.00
08:00-09:00	C	1	14.91	32.34	4.40	0.31	66.85	26.74	85.40	435.08	12.42	14.53	0.00
08:00-09:00	C	2	14.91	41.08	7.36	1.83	130.45	52.18	96.83	706.52	72.98	25.31	0.00
08:00-09:00	C3-1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Cx 2	1	30.87	13.85	1.85	0.37	31.59	31.59	54.32	299.02	15.13	10.20	10.20
08:00-09:00	Cx 2	2	30.87	21.77	3.19	1.90	72.15	72.15	72.73	535.35	75.81	19.85	19.85
08:00-09:00	Cx 3	1	4.43	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Cx 4-2	1	5.77	0.74	0.04	0.08	1.69	1.69	12.42	68.74	3.11	2.33	2.33
08:00-09:00	Cx 4-2	2	5.77	0.41	0.00	0.06	0.83	0.83	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Cx 5	1	4.67	0.30	0.00	0.03	0.48	0.48	0.00	0.00	0.00	0.00	0.00
08:00-09:00	D	1	16.78	29.04	3.79	0.89	66.44	26.58	86.63	466.51	35.93	29.00	0.00
08:00-09:00	D	2	16.78	28.65	4.06	0.89	70.29	28.12	86.17	500.08	35.89	30.94	0.00
08:00-09:00	D	3	16.78	28.69	4.07	0.90	70.51	28.20	86.28	501.35	36.15	31.03	0.00
08:00-09:00	Dx 1	1	13.98	0.52	0.00	0.12	1.71	1.71	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Dx 1	2	13.98	15.78	5.76	2.18	112.77	112.77	88.26	1511.29	88.29	92.34	92.34
08:00-09:00	E	1	14.91	275.53	2.10	40.38	603.18	241.27	278.17	476.02	859.35	43.37	43.37
08:00-09:00	E	2	14.91	22.96	2.71	2.40	72.64	29.06	92.01	642.58	95.36	23.96	23.96
08:00-09:00	F	1	15.66	19.47	2.88	0.57	49.10	49.10	72.34	439.10	23.29	15.02	15.02
08:00-09:00	F	2	15.66	22.94	3.92	1.39	75.45	75.45	77.84	593.02	55.96	21.08	21.08
08:00-09:00	F	3	15.66	14.00	1.68	0.19	26.57	26.57	50.26	234.21	7.58	7.85	7.85

08:00-09:00	G	1	5.67	29.09	3.87	1.00	69.07	34.54	88.44	492.32	40.08	17.29	3.46
08:00-09:00	G	2	5.67	23.45	3.62	0.57	59.47	29.74	77.69	476.37	23.20	16.22	3.24
08:00-09:00	H	1	7.16	105.6 3	5.30	12.56	253.74	253.74	165.5 6	584.39	419.31	32.59	32.59
08:00-09:00	H	2	7.16	106.4 0	5.68	13.65	274.48	274.48	166.8 3	627.90	454.57	35.15	35.15
08:00-09:00	H	3	7.16	23.01	0.15	0.00	2.09	2.09	69.43	15.94	0.03	0.52	0.52
08:00-09:00	I	1	4.47	59.51	1.46	0.77	31.69	12.68	116.3 4	127.15	29.91	5.10	0.00
08:00-09:00	I	2	4.47	43.86	1.51	0.25	24.91	9.96	97.77	130.90	9.89	4.57	0.00
08:00-09:00	Ac	1	4.03	6.39	0.55	0.06	8.63	8.63	39.24	132.08	2.33	4.36	4.36
08:00-09:00	Ac	2	5.24	7.86	0.82	0.07	12.63	12.63	48.07	192.90	3.00	3.78	3.78
08:00-09:00	Ac	3	4.03	19.22	3.77	0.51	60.79	60.79	58.28	446.48	20.91	15.18	15.18
08:00-09:00	Ax	1	1.12	2.97	0.37	0.15	7.52	7.52	17.37	105.22	6.31	6.44	6.44
08:00-09:00	Ax	2	1.12	6.94	1.40	0.35	24.83	24.83	37.91	329.52	14.28	19.85	19.85
08:00-09:00	Ax	3	1.12	3.29	0.33	0.04	5.26	5.26	18.86	74.69	1.69	4.41	4.41
08:00-09:00	Bc	1	7.46	0.66	0.01	0.11	1.75	1.75	4.30	19.85	9.09	0.94	0.94
08:00-09:00	Bc	2	7.46	4.69	0.91	0.63	21.93	21.93	57.19	651.70	25.65	22.00	22.00
08:00-09:00	Bc	3	7.46	1.49	0.12	0.25	5.34	5.34	17.60	148.95	10.36	5.17	5.17
08:00-09:00	Bc	4	7.46	3.55	0.58	0.55	16.02	16.02	40.55	440.99	22.37	15.05	15.05
08:00-09:00	Bx	1	7.46	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	C2	1	15.95	7.99	1.91	1.03	41.86	41.86	64.49	815.15	41.96	27.83	27.83
08:00-09:00	C4	1	6.46	17.89	2.29	0.37	37.89	37.89	68.82	354.38	15.20	12.00	12.00
08:00-09:00	C4	2	6.46	17.77	2.52	0.38	41.27	41.27	68.76	389.44	15.58	13.15	13.15
08:00-09:00	C5	1	4.10	57.25	3.10	2.17	74.75	74.75	117.8 5	307.16	82.92	12.67	12.67

08:00-09:00	Cc	1	4.85	1.51	0.08	0.13	2.91	2.91	3.20	10.42	5.21	0.51	0.51
08:00-09:00	Cc	2	4.85	11.78	2.24	0.77	42.70	42.70	44.45	377.45	31.09	13.27	13.27
08:00-09:00	Cc	3	4.85	22.74	2.82	4.82	108.51	108.51	65.56	603.57	189.45	25.75	25.75
08:00-09:00	Cx	1	5.59	1.33	0.11	0.15	3.72	3.72	6.27	38.56	6.02	2.57	2.57
08:00-09:00	Cx	2	5.59	1.48	0.15	0.15	4.14	4.14	7.11	44.38	5.97	2.91	2.91
08:00-09:00	Dc	1	6.71	10.37	0.90	0.07	13.78	137.76	45.58	150.72	2.76	4.98	49.84
08:00-09:00	Dc	2	6.71	7.92	1.00	0.22	17.29	17.29	28.05	146.43	8.86	5.04	5.04
08:00-09:00	Dc	3	6.71	0.85	0.00	0.10	1.39	1.39	0.96	0.01	3.98	0.13	0.13
08:00-09:00	Dx	1	3.13	3.58	0.49	0.34	11.71	11.71	22.77	175.01	13.84	10.90	10.90
08:00-09:00	Dx	2	3.13	1.79	0.08	0.38	6.51	6.51	14.50	117.93	15.39	7.70	7.70
08:00-09:00	Dx	3	3.13	1.39	0.00	0.34	4.89	4.89	1.68	0.95	14.01	0.86	0.86
08:00-09:00	Ec	1	3.73	0.46	0.00	0.07	1.02	1.02	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Ec	2	3.73	2.49	0.38	0.20	8.15	8.15	39.41	319.03	8.04	10.62	10.62
08:00-09:00	Ec	3	3.73	2.50	0.38	0.20	8.16	8.16	39.61	320.37	8.01	10.66	10.66
08:00-09:00	Ex	1	7.46	0.50	0.00	0.08	1.16	1.16	0.83	1.60	3.30	0.16	0.16
08:00-09:00	Ex	2	7.46	0.21	0.00	0.02	0.26	0.26	0.30	0.18	0.75	0.03	0.03
08:00-09:00	Fc	1	8.28	0.05	0.00	0.00	0.00	0.00	0.05	0.00	0.01	0.00	0.00
08:00-09:00	Fc	2	8.28	17.56	0.26	0.00	3.67	3.67	43.50	23.00	0.06	0.33	0.33
08:00-09:00	Fc	3	8.28	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Fx	1	14.91	0.80	0.00	0.23	3.22	3.22	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Fx	2	14.91	1.23	0.00	0.47	6.69	6.69	2.84	0.93	38.21	1.27	1.27
08:00-09:00	Fx1	1	7.46	1.91	0.04	0.57	8.70	8.70	8.36	73.23	23.12	3.13	3.13

08:00-09:00	Fx1	2	7.46	2.91	0.23	0.77	14.31	14.31	24.01	267.71	31.45	9.71	9.71
08:00-09:00	G1	1	4.47	1.22	0.00	0.42	6.00	6.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Gc	1	7.83	6.54	0.58	0.07	9.30	9.30	17.89	61.49	3.04	0.93	0.93
08:00-09:00	Gc	2	7.83	10.62	1.70	0.79	35.25	35.25	23.02	161.95	31.83	2.80	2.80
08:00-09:00	Gc	3	7.83	7.91	0.93	0.13	15.00	15.00	19.62	89.05	5.33	1.36	1.36
08:00-09:00	Gx	1	4.18	0.15	0.00	0.01	0.18	0.18	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Gx	2	4.18	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Gx 1	1	1.49	0.20	0.00	0.02	0.28	0.28	0.00	0.00	0.00	0.00	0.00
08:00-09:00	H1	1	7.46	1.26	0.00	0.44	6.30	6.30	0.00	0.00	0.00	0.00	0.00
08:00-09:00	H1	2	7.46	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Hc	1	7.49	4.35	0.54	0.15	9.74	9.74	25.78	140.05	6.15	2.11	2.11
08:00-09:00	Hc	2	7.49	7.83	1.45	0.55	28.37	28.37	46.17	401.63	22.22	6.12	6.12
08:00-09:00	Hc	3	7.49	6.93	1.06	0.18	17.59	17.59	63.89	396.42	14.40	5.93	5.93
08:00-09:00	Hx	1	7.46	0.22	0.00	0.03	0.39	0.39	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Hx	2	7.46	0.15	0.00	0.02	0.21	0.21	0.00	0.00	0.00	0.00	0.00
08:00-09:00	I1	1	7.46	0.13	0.00	0.01	0.14	0.14	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Ic	1	7.27	1.17	0.04	0.25	4.09	4.09	5.73	40.61	10.23	0.73	0.73
08:00-09:00	Ic	2	7.27	3.48	0.52	0.73	17.75	17.75	36.43	441.11	29.51	6.79	6.79
08:00-09:00	Ic	3	7.27	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00-09:00	Ix	1	3.36	0.37	0.00	0.07	0.92	0.92	0.44	0.14	2.66	0.09	0.09
08:00-09:00	Ix	2	3.36	0.30	0.01	0.04	0.68	0.68	1.95	9.33	1.71	0.36	0.36
08:00-09:00	Ix1	1	1.12	6.75	1.88	0.38	32.05	32.05	69.46	820.81	15.37	27.15	27.15



## Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Utilised Storage (%)	Average Link Excess Queues (PCU)	Average Limit Excess Queues (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s per cycle)	Wasted Time Blocking Back (s per cycle)	Wasted Time Total (s per cycle)	Estimated Blocking
08:00-09:00	1	1	0.00	0.15	17.39	0.86	0.00	0.00	0.00			17.00	0.00	17.00	
08:00-09:00	1	2	0.00	8.15	17.39	46.86	0.00	0.00	0.00			39.00	0.00	39.00	
08:00-09:00	A	1	0.00	5.84	17.39	33.59	0.00	0.00	0.00	0.19	4.93	0.00	0.00	0.00	
08:00-09:00	A	2	0.00	47.89	26.09	183.59	13.10	0.00	0.00	29.19	40.97	0.00	0.00	0.00	
08:00-09:00	A	3	0.00	9.89	26.09	37.90	0.00	0.00	0.00	0.59	8.23	0.00	0.00	0.00	
08:00-09:00	A	4	0.00	24.20	26.09	92.76	0.00	0.00	0.00	6.93	18.18	0.00	0.00	0.00	
08:00-09:00	Ax 1	1	0.00	2.21	3.48	63.62	0.00	0.00	0.00			18.00	0.00	18.00	
08:00-09:00	Ax 1	2	0.00	19.73	3.48	567.22	5.95	0.00	0.00			13.00	0.00	13.00	
08:00-09:00	Ax 2	1	0.00	0.10	26.09	0.37	0.00	0.00	0.00			6.00	0.00	6.00	
08:00-09:00	Ax 2	2	0.00	15.56	26.09	59.66	0.00	0.00	0.00			3.00	0.00	3.00	
08:00-09:00	B	1	0.00	0.45	5.22	8.68	0.00	0.00	0.00			0.00	0.00	0.00	
08:00-09:00	B	2	0.00	2.41	5.22	46.19	0.00	0.00	0.00			0.00	64.00	64.00	
08:00-09:00	Bc 1	1	0.00	0.10	5.22	1.91	0.00	0.00	0.00			3.00	0.00	3.00	
08:00-09:00	Bc 1	2	0.00	0.63	5.22	12.08	0.00	0.00	0.00			1.00	0.00	1.00	
08:00-09:00	Bc 1	3	0.00	0.25	5.22	4.87	0.00	0.00	0.00			0.00	28.00	28.00	
08:00-09:00	Bc 1	4	0.00	0.55	5.22	10.53	0.00	0.00	0.00			0.00	64.00	64.00	
08:00-09:00	C	1	0.00	11.03	34.78	31.70	0.00	0.00	0.00	0.31	10.73	0.00	0.00	0.00	
08:00-09:00	C	2	0.00	19.63	34.78	56.42	0.00	0.00	0.00	1.83	17.86	0.00	0.00	0.00	

08:00-09:00	C3-1	1	0.00	0.00	9.67	0.00	0.00	0.00	0.00			88.00	0.00	88.00	
08:00-09:00	Cx 2	1	0.00	8.14	71.99	11.30	0.00	0.00	0.00	0.37	5.93	0.00	0.00	0.00	
08:00-09:00	Cx 2	2	0.00	15.85	71.99	22.02	0.00	0.00	0.00	1.90	9.90	0.00	0.00	0.00	
08:00-09:00	Cx 3	1	0.00	0.00	10.32	0.00	0.00	0.00	0.00			72.00	0.00	72.00	
08:00-09:00	Cx 4-2	1	0.00	6.30	13.47	46.79	0.00	0.00	0.00			40.00	0.00	40.00	
08:00-09:00	Cx 4-2	2	0.00	0.06	13.47	0.44	0.00	0.00	0.00			24.00	0.00	24.00	
08:00-09:00	Cx 5	1	0.00	0.03	10.89	0.31	0.00	0.00	0.00			41.00	0.00	41.00	
08:00-09:00	D	1	0.00	12.98	52.17	24.87	0.00	0.00	0.00	0.89	9.75	0.00	0.00	0.00	
08:00-09:00	D	2	0.00	13.85	52.17	26.54	0.00	0.00	0.00	0.89	10.39	0.00	14.00	14.00	
08:00-09:00	D	3	0.00	13.88	52.17	26.60	0.00	0.00	0.00	0.90	10.41	0.00	14.00	14.00	
08:00-09:00	Dx 1	1	0.00	0.12	43.48	0.28	0.00	0.00	0.00			5.00	0.00	5.00	
08:00-09:00	Dx 1	2	0.00	44.98	43.48	103.46	0.26	0.00	0.00			12.00	0.00	12.00	
08:00-09:00	E	1	0.00	51.98	34.78	149.44	11.39	0.00	0.00			0.00	30.00	30.00	
08:00-09:00	E	2	0.00	19.11	34.78	54.95	0.00	0.00	0.00			0.00	38.00	38.00	
08:00-09:00	F	1	0.00	12.03	36.52	32.93	0.00	0.00	0.00	0.57	7.97	0.00	0.00	0.00	
08:00-09:00	F	2	0.00	16.95	36.52	46.42	0.00	0.00	0.00	1.39	10.90	0.00	0.00	0.00	
08:00-09:00	F	3	0.00	6.19	36.52	16.95	0.00	0.00	0.00	0.19	5.32	0.00	0.00	0.00	
08:00-09:00	G	1	0.00	13.54	13.22	102.43	0.01	0.00	0.00	1.00	10.03	0.00	0.00	0.00	
08:00-09:00	G	2	0.00	12.72	13.22	96.22	0.00	0.00	0.00	0.57	10.22	0.00	11.00	11.00	
08:00-09:00	H	1	0.00	27.22	16.70	163.01	3.79	0.00	0.00	12.56	23.17	0.00	0.00	0.00	
08:00-09:00	H	2	0.00	29.33	16.70	175.69	5.11	0.00	0.00	13.65	25.01	0.00	6.00	6.00	
08:00-09:00	H	3	0.00	0.40	16.70	2.41	0.00	0.00	0.00	0.00	0.40	24.00	0.00	24.00	

08:00-09:00	I	1	0.00	3.96	10.43	37.97	0.00	0.00	0.00	0.77	3.77	0.00	0.00	0.00	
08:00-09:00	I	2	0.00	3.53	10.43	33.79	0.00	0.00	0.00	0.25	3.45	0.00	0.00	0.00	
08:00-09:00	Ac	1	0.00	3.77	7.00	53.79	0.00	0.02	1.93	0.06	2.75	0.00	0.00	0.00	
08:00-09:00	Ac	2	0.00	5.27	7.00	75.25	0.00	0.00	0.00	0.07	3.91	0.00	21.00	21.00	
08:00-09:00	Ac	3	0.00	11.44	7.00	163.49	1.54	2.44	0.00	0.51	11.40	0.00	7.00	7.00	
08:00-09:00	Ax	1	0.00	3.14	3.48	90.40	0.00	0.00	0.00	0.15	2.60	0.00	0.00	0.00	
08:00-09:00	Ax	2	0.00	9.80	3.48	281.81	1.12	1.28	0.00	0.35	6.31	0.00	49.00	49.00	
08:00-09:00	Ax	3	0.00	1.92	3.48	55.17	0.00	0.00	0.00	0.04	1.88	15.00	44.00	59.00	
08:00-09:00	Bc	1	0.00	3.79	17.39	21.77	0.00	0.00	0.00			3.00	0.00	3.00	
08:00-09:00	Bc	2	0.00	24.95	17.39	143.45	0.99	1.62	0.00			0.00	0.00	0.00	
08:00-09:00	Bc	3	0.00	9.39	17.39	54.01	0.00	0.00	0.00			0.00	0.00	0.00	
08:00-09:00	Bc	4	0.00	18.68	17.39	107.43	0.05	0.34	0.00			0.00	0.00	0.00	
08:00-09:00	Bx	1	0.00	0.00	17.39	0.00	0.00	0.00	0.00			78.00	0.00	78.00	
08:00-09:00	C2	1	0.00	25.82	37.21	69.40	0.00	0.00	0.00			5.00	0.00	5.00	
08:00-09:00	C4	1	0.00	9.47	15.06	62.89	0.00	0.00	0.00	0.37	6.94	0.00	0.00	0.00	
08:00-09:00	C4	2	0.00	10.36	15.06	68.80	0.00	0.00	0.00	0.38	7.58	0.00	0.00	0.00	
08:00-09:00	C5	1	0.00	9.89	9.57	103.38	0.01	0.00	0.00	2.17	8.60	0.00	0.00	0.00	
08:00-09:00	Cc	1	0.00	0.39	6.00	6.48	0.00	0.00	0.00	0.13	0.39	9.00	0.00	9.00	
08:00-09:00	Cc	2	0.00	11.34	6.00	188.94	0.80	0.80	47.86	0.77	8.19	0.00	9.00	9.00	
08:00-09:00	Cc	3	0.00	24.24	6.00	403.97	5.58	5.58	334.53	4.82	13.34	0.00	0.00	0.00	
08:00-09:00	Cx	1	0.00	1.45	17.39	8.35	0.00	0.00	0.00	0.15	1.09	0.00	0.00	0.00	
08:00-09:00	Cx	2	0.00	1.41	17.39	8.12	0.00	0.00	0.00	0.15	1.26	0.00	0.00	0.00	

08:00-09:00	Dc	1	0.00	4.08	15.65	26.06	0.00	0.00	0.00	0.07	3.65	9.00	0.00	9.00	
08:00-09:00	Dc	2	0.00	3.96	15.65	25.33	0.00	0.00	0.00	0.22	3.72	7.00	0.00	7.00	
08:00-09:00	Dc	3	0.00	0.10	15.65	0.62	0.00	0.00	0.00	0.10	0.10	16.00	0.00	16.00	
08:00-09:00	Dx	1	0.00	7.06	9.74	72.47	0.00	0.00	0.00	1.09	2.43	7.00	0.00	7.00	
08:00-09:00	Dx	2	0.00	14.10	9.74	144.78	0.24	0.00	0.00	0.38	0.38	13.00	0.00	13.00	
08:00-09:00	Dx	3	0.00	2.09	9.74	21.42	0.00	0.00	0.00	0.34	0.34	12.00	0.00	12.00	
08:00-09:00	Ec	1	0.00	0.07	8.70	0.83	0.00	0.00	0.00			12.00	0.00	12.00	
08:00-09:00	Ec	2	0.00	13.74	8.70	157.99	0.53	1.02	61.45			22.00	24.00	46.00	
08:00-09:00	Ec	3	0.00	13.76	8.70	158.24	0.53	1.03	61.56			22.00	0.00	22.00	
08:00-09:00	Ex	1	0.00	1.59	17.39	9.16	0.00	0.00	0.00			15.00	0.00	15.00	
08:00-09:00	Ex	2	0.00	0.53	17.39	3.04	0.00	0.00	0.00			51.00	0.00	51.00	
08:00-09:00	Fc	1	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00	31.00	0.00	31.00	
08:00-09:00	Fc	2	0.00	0.56	7.00	8.05	0.00	0.00	0.00	0.00	0.56	29.00	0.00	29.00	
08:00-09:00	Fc	3	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00	34.00	0.00	34.00	
08:00-09:00	Fx	1	0.00	0.23	34.78	0.65	0.00	0.00	0.00			6.00	0.00	6.00	
08:00-09:00	Fx	2	0.00	3.00	34.78	8.61	0.00	0.00	0.00			5.00	0.00	5.00	
08:00-09:00	Fx <sub>1</sub>	1	0.00	10.08	17.39	57.97	0.00	0.00	0.00			3.00	85.00	88.00	
08:00-09:00	Fx <sub>1</sub>	2	0.00	15.97	17.39	91.81	0.00	0.00	0.00			2.00	0.00	2.00	
08:00-09:00	G1	1	0.00	0.42	10.43	4.05	0.00	0.00	0.00			0.00	2.00	2.00	
08:00-09:00	Gc	1	0.00	1.58	7.00	22.55	0.00	0.00	0.00	0.07	1.58	13.00	0.00	13.00	
08:00-09:00	Gc	2	0.00	4.74	7.00	67.78	0.00	1.21	120.62	0.79	4.74	9.00	0.00	9.00	
08:00-09:00	Gc	3	0.00	2.31	7.00	32.97	0.00	0.11	11.19	0.13	2.31	12.00	12.00	24.00	

08:00-09:00	Gx	1	0.00	0.01	9.74	0.13	0.00	0.00	0.00			35.00	0.00	35.00	
08:00-09:00	Gx	2	0.00	0.00	9.74	0.00	0.00	0.00	0.00			73.00	0.00	73.00	
08:00-09:00	Gx 1	1	0.00	0.02	3.48	0.57	0.00	0.00	0.00			26.00	0.00	26.00	
08:00-09:00	H1	1	0.00	0.44	17.39	2.55	0.00	0.00	0.00			0.00	71.00	71.00	
08:00-09:00	H1	2	0.00	0.00	17.39	0.00	0.00	0.00	0.00			88.00	0.00	88.00	
08:00-09:00	Hc	1	0.00	3.98	7.00	56.80	0.00	0.03	57.96	0.15	2.87	0.00	0.00	0.00	
08:00-09:00	Hc	2	0.00	11.62	7.00	166.05	0.36	1.36	2722.47	0.55	5.01	0.00	0.00	0.00	
08:00-09:00	Hc	3	0.00	11.92	7.00	170.25	0.36	0.96	1917.66	0.18	2.75	29.00	4.00	33.00	
08:00-09:00	Hx	1	0.00	0.03	17.39	0.16	0.00	0.00	0.00			10.00	0.00	10.00	
08:00-09:00	Hx	2	0.00	0.02	17.39	0.09	0.00	0.00	0.00			40.00	0.00	40.00	
08:00-09:00	l1	1	0.00	0.01	17.39	0.06	0.00	0.00	0.00			0.00	0.00	0.00	
08:00-09:00	lc	1	0.00	1.72	7.00	24.57	0.00	0.00	0.00	0.25	1.16	12.00	0.00	12.00	
08:00-09:00	lc	2	0.00	13.69	7.00	195.54	0.67	1.71	171.19	0.73	3.12	11.00	0.00	11.00	
08:00-09:00	lc	3	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00	65.00	0.00	65.00	
08:00-09:00	lx	1	0.00	0.66	7.83	8.42	0.00	0.00	0.00			5.00	40.00	45.00	
08:00-09:00	lx	2	0.00	5.81	7.83	74.27	0.00	0.00	0.00			31.00	40.00	71.00	
08:00-09:00	lx1	1	0.00	25.29	2.61	969.31	6.86	0.00	0.00			3.00	0.00	3.00	

### Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
08:00-09:00	1	1	75.10	1.70	44.05	8.17
08:00-09:00	1	2	57.80	1.32	43.65	8.25
08:00-09:00	A	1	33.03	3.17	10.42	34.54
08:00-09:00	A	2	123.37	39.11	3.15	171.21

08:00-09:00	A	3	75.62	5.95	12.70	42.51
08:00-09:00	A	4	111.24	15.64	7.11	75.94
08:00-09:00	Ax1	1	12.84	0.37	34.84	2.07
08:00-09:00	Ax1	2	26.24	3.44	7.64	9.43
08:00-09:00	Ax2	1	95.87	2.08	46.02	11.73
08:00-09:00	Ax2	2	197.22	5.30	37.22	14.51
08:00-09:00	B	1	2.34	0.15	15.85	6.81
08:00-09:00	B	2	2.43	1.24	1.96	54.97
08:00-09:00	Bc1	1	19.34	0.50	38.65	2.79
08:00-09:00	Bc1	2	35.53	1.37	26.00	4.15
08:00-09:00	Bc1	3	27.15	0.82	33.26	3.25
08:00-09:00	Bc1	4	34.28	1.26	27.21	3.97
08:00-09:00	C	1	104.80	6.88	15.24	47.25
08:00-09:00	C	2	161.00	12.52	12.86	55.99
08:00-09:00	C3-1	1	0.00	0.00	0.00	0.00
08:00-09:00	Cx 2	1	239.43	7.18	33.33	44.71
08:00-09:00	Cx 2	2	347.86	12.29	28.31	52.64
08:00-09:00	Cx3	1	2.14	0.04	48.06	4.45
08:00-09:00	Cx4-2	1	44.78	1.05	42.79	6.51
08:00-09:00	Cx4-2	2	40.27	0.89	45.11	6.18
08:00-09:00	Cx5	1	25.81	0.57	45.39	4.97
08:00-09:00	D	1	174.00	7.38	23.57	45.82
08:00-09:00	D	2	186.60	7.85	23.77	45.43
08:00-09:00	D	3	186.90	7.87	23.75	45.47
08:00-09:00	Dx1	1	207.31	3.34	62.05	14.50
08:00-09:00	Dx1	2	453.07	14.98	30.24	29.76
08:00-09:00	E	1	111.00	44.78	2.48	290.44
08:00-09:00	E	2	160.40	8.44	19.01	37.88
08:00-09:00	F	1	134.22	6.24	21.52	35.13
08:00-09:00	F	2	175.08	8.94	19.59	38.60
08:00-09:00	F	3	101.02	3.96	25.49	29.66
08:00-09:00	G	1	45.75	5.81	7.87	34.75

08:00-09:00	G	2	48.87	5.20	9.40	29.12
08:00-09:00	H	1	58.46	19.08	3.06	112.79
08:00-09:00	H	2	62.78	20.63	3.04	113.56
08:00-09:00	H	3	2.21	0.19	11.46	30.17
08:00-09:00	I	1	8.10	2.40	3.38	63.99
08:00-09:00	I	2	8.64	1.93	4.47	48.33
08:00-09:00	Ac	1	18.50	0.99	18.67	10.41
08:00-09:00	Ac	2	22.01	1.48	14.84	13.10
08:00-09:00	Ac	3	43.31	5.18	8.36	23.24
08:00-09:00	Ax	1	12.84	0.73	17.62	4.09
08:00-09:00	Ax	2	18.14	2.03	8.93	8.06
08:00-09:00	Ax	3	8.10	0.50	16.33	4.41
08:00-09:00	Bc	1	67.28	1.52	44.35	8.12
08:00-09:00	Bc	2	118.45	4.00	29.63	12.15
08:00-09:00	Bc	3	90.52	2.25	40.22	8.95
08:00-09:00	Bc	4	114.26	3.49	32.69	11.01
08:00-09:00	Bx	1	2.83	0.06	48.18	7.47
08:00-09:00	C2	1	284.35	8.84	32.18	23.94
08:00-09:00	C4	1	46.51	3.63	12.81	24.35
08:00-09:00	C4	2	51.02	3.96	12.87	24.22
08:00-09:00	C5	1	18.21	5.64	3.23	61.35
08:00-09:00	Cc	1	31.74	0.86	36.81	6.36
08:00-09:00	Cc	2	59.74	4.24	14.08	16.62
08:00-09:00	Cc	3	78.62	9.27	8.48	27.59
08:00-09:00	Cx	1	71.05	1.37	52.02	6.92
08:00-09:00	Cx	2	70.82	1.39	50.87	7.08
08:00-09:00	Dc	1	30.30	1.60	18.97	17.08
08:00-09:00	Dc	2	49.83	2.25	22.15	14.63
08:00-09:00	Dc	3	37.26	0.87	42.86	7.56
08:00-09:00	Dx	1	46.44	1.55	30.03	6.71
08:00-09:00	Dx	2	51.47	1.26	40.92	4.93
08:00-09:00	Dx	3	50.02	1.12	44.60	4.52
08:00-09:00	Ec	1	28.25	0.66	43.01	4.19

08:00-09:00	Ec	2	41.50	1.43	28.96	6.22
08:00-09:00	Ec	3	41.45	1.43	28.91	6.23
08:00-09:00	Ex	1	59.27	1.31	45.27	7.95
08:00-09:00	Ex	2	31.27	0.67	46.95	7.67
08:00-09:00	Fc	1	1.63	0.05	32.02	8.32
08:00-09:00	Fc	2	3.92	0.38	10.31	25.83
08:00-09:00	Fc	3	0.59	0.02	32.13	8.29
08:00-09:00	Fx	1	204.51	4.46	45.83	15.71
08:00-09:00	Fx	2	275.17	6.17	44.60	16.15
08:00-09:00	Fx1	1	115.27	3.00	38.42	9.37
08:00-09:00	Fx1	2	124.57	3.59	34.72	10.37
08:00-09:00	G1	1	74.70	1.97	37.93	5.69
08:00-09:00	Gc	1	25.25	1.44	17.54	14.37
08:00-09:00	Gc	2	58.92	4.31	13.66	18.44
08:00-09:00	Gc	3	33.67	2.10	16.01	15.74
08:00-09:00	Gx	1	17.28	0.37	46.65	4.32
08:00-09:00	Gx	2	2.52	0.05	48.09	4.19
08:00-09:00	Gx1	1	7.07	0.17	42.55	1.69
08:00-09:00	H1	1	126.30	3.06	41.28	8.72
08:00-09:00	H1	2	2.30	0.05	48.23	7.46
08:00-09:00	Hc	1	37.99	1.87	20.36	11.85
08:00-09:00	Hc	2	61.51	3.91	15.74	15.33
08:00-09:00	Hc	3	43.08	2.58	16.72	14.43
08:00-09:00	Hx	1	43.97	0.94	46.87	7.68
08:00-09:00	Hx	2	36.07	0.76	47.32	7.61
08:00-09:00	l1	1	27.90	0.59	47.45	7.59
08:00-09:00	lc	1	57.69	2.08	27.73	8.44
08:00-09:00	lc	2	83.97	3.86	21.76	10.75
08:00-09:00	lc	3	1.50	0.05	32.14	7.28
08:00-09:00	lx	1	28.65	0.66	43.51	3.72
08:00-09:00	lx	2	25.52	0.58	44.30	3.66
08:00-09:00	lx1	1	18.06	2.63	6.86	7.87



### Traffic Stream Results: Flare

Time Segment	Arm	Traffic Stream	Flare Present	Flare Components	Degree Of Saturation (%)	Mean Max Queue (PCU)	Calculated Capacity (PCU/hr)	Practical Reserve Capacity (%)
08:00-09:00	C	1	✓	Quick Flare	53	11.03	981	68
08:00-09:00	C	2	✓	Quick Flare	82	19.63	981	10
08:00-09:00	G	2	✓	Quick Flare	64	12.72	1001	40
08:00-09:00	I	2	✓	Quick Flare	50	3.53	289	80

### Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree Of Saturation Penalty (£ per hr)	Phase Min Max Penalty (£ per hr)	Intergr een Broken Penalty (£ per hr)	Stage Constr aint Broken Penalty (£ per hr)	Ped Gap Accep ting Penalty (£ per hr)	War med Up	War med Up Error	Mea n Max Queue EoT S (PC U)	Max End Of Gre en Queue Eo TS (PC U)	Max End Of Red Queue Eo TS (PC U)	Cost Of Penalties (£ per hr)	Unweig hted Perform ance Index (£ per hr)	Perform ance Index (£ per hr)
08:00 - 09:00	1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.15			0.00	2.12	2.12
08:00 - 09:00	1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	8.15			0.00	4.57	4.57
08:00 - 09:00	A	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	5.84	0.19	4.93	0.00	42.70	15.59
08:00 - 09:00	A	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	71.44	52.74	64.52	0.00	571.34	218.10
08:00 - 09:00	A	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	9.89	0.60	8.23	0.00	74.93	27.44
08:00 - 09:00	A	4	0.00	0.00	0.00	0.00	0.00	✓	0.00	25.26	7.99	19.25	0.00	219.31	81.75
08:00 - 09:00	Ax 1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.21			0.00	1.79	1.79
08:00 - 09:00	Ax 1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	19.73			0.00	74.36	74.36

08:00 - 09:00	Ax 2	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.10			0.00	1.39	1.39
08:00 - 09:00	Ax 2	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	15.5 7			0.00	29.36	29.36
08:00 - 09:00	B	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.45			0.00	2.28	2.28
08:00 - 09:00	B	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.43			0.00	19.90	19.90
08:00 - 09:00	Bc 1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.10			0.00	1.42	1.42
08:00 - 09:00	Bc 1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.63			0.00	8.95	8.95
08:00 - 09:00	Bc 1	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.25			0.00	3.61	3.61
08:00 - 09:00	Bc 1	4	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.55			0.00	7.80	7.80
08:00 - 09:00	C	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	11.0 3	0.31	10.7 3	0.00	81.38	26.74
08:00 - 09:00	C	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	19.6 5	1.85	17.8 9	0.00	155.76	52.18
08:00 - 09:00	C3 -1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00
08:00 - 09:00	Cx 2	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	8.14	0.37	5.93	0.00	41.79	41.79
08:00 - 09:00	Cx 2	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	15.8 8	1.92	9.93	0.00	92.00	92.00
08:00 - 09:00	Cx 3	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00
08:00 - 09:00	Cx 4- 2	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	6.30			0.00	4.02	4.02
08:00 - 09:00	Cx 4- 2	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.06			0.00	0.83	0.83

08:00 - 09:00	Cx 5	1	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.03			0.00	0.48	0.48
08:00 - 09:00	D	1	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	12.9 8	0.90	9.76	0.00	95.44	26.58
08:00 - 09:00	D	2	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	13.8 5	0.90	10.4 0	0.00	101.23	28.12
08:00 - 09:00	D	3	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	13.8 8	0.90	10.4 2	0.00	101.54	28.20
08:00 - 09:00	Dx 1	1	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.12			0.00	1.71	1.71
08:00 - 09:00	Dx 1	2	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	45.0 0			0.00	205.11	205.11
08:00 - 09:00	E	1	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	89.5 9			0.00	646.55	284.64
08:00 - 09:00	E	2	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	19.1 7			0.00	96.60	53.02
08:00 - 09:00	F	1	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	12.0 3	0.58	7.97	0.00	64.11	64.11
08:00 - 09:00	F	2	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	16.9 7	1.40	10.9 2	0.00	96.52	96.52
08:00 - 09:00	F	3	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	6.19	0.19	5.32	0.00	34.42	34.42
08:00 - 09:00	G	1	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	13.5 5	1.00	10.0 3	0.00	86.36	37.99
08:00 - 09:00	G	2	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	12.7 2	0.57	10.2 2	0.00	75.70	32.98
08:00 - 09:00	H	1	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	33.0 4	18.3 9	29.0 0	0.00	286.33	286.33
08:00 - 09:00	H	2	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	36.0 3	20.3 4	31.7 0	0.00	309.64	309.64
08:00 - 09:00	H	3	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.40	0.00	0.40	0.00	2.61	2.61

08:00 - 09:00	I	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.98	0.79	3.79	0.00	36.79	12.68
08:00 - 09:00	I	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.53	0.25	3.45	0.00	29.48	9.96
08:00 - 09:00	Ac	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.77	0.06	2.75	1.93	13.00	14.93
08:00 - 09:00	Ac	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	5.27	0.07	3.91	0.00	16.41	16.41
08:00 - 09:00	Ac	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	11.4 5	0.52	11.4 0	0.00	75.96	75.96
08:00 - 09:00	Ax	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.14	0.15	2.60	0.00	13.96	13.96
08:00 - 09:00	Ax	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	9.80	0.35	6.31	0.00	44.68	44.68
08:00 - 09:00	Ax	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.92	0.04	1.88	0.00	9.67	9.67
08:00 - 09:00	Bc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.79			0.00	2.69	2.69
08:00 - 09:00	Bc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	24.9 5			0.00	43.93	43.93
08:00 - 09:00	Bc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	9.39			0.00	10.51	10.51
08:00 - 09:00	Bc	4	0.00	0.00	0.00	0.00	0.00	✓	0.00	18.6 9			0.00	31.07	31.07
08:00 - 09:00	Bx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00
08:00 - 09:00	C2	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	25.8 3			0.00	69.70	69.70
08:00 - 09:00	C4	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	9.47	0.38	6.94	0.00	49.89	49.89
08:00 - 09:00	C4	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	10.3 6	0.38	7.58	0.00	54.43	54.43

08:00 - 09:00	C5	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	9.99	2.27	8.70	0.00	87.42	87.42
08:00 - 09:00	Cc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.39	0.13	0.39	0.00	3.42	3.42
08:00 - 09:00	Cc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	11.3 4	0.77	8.19	47.86	55.96	103.82
08:00 - 09:00	Cc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	24.4 8	5.06	13.5 8	334.5 3	134.27	468.79
08:00 - 09:00	Cx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.45	0.15	1.09	0.00	6.29	6.29
08:00 - 09:00	Cx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.41	0.15	1.26	0.00	7.05	7.05
08:00 - 09:00	Dc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	4.08	0.07	3.65	0.00	18.76	187.60
08:00 - 09:00	Dc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.96	0.22	3.72	0.00	22.34	22.34
08:00 - 09:00	Dc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.10	0.10	0.10	0.00	1.51	1.51
08:00 - 09:00	Dx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	7.06	1.09	2.43	0.00	22.61	22.61
08:00 - 09:00	Dx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	14.1 0	0.38	0.38	0.00	14.20	14.20
08:00 - 09:00	Dx	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.09	0.34	0.34	0.00	5.76	5.76
08:00 - 09:00	Ec	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.07			0.00	1.02	1.02
08:00 - 09:00	Ec	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	13.7 4			61.45	18.77	80.22
08:00 - 09:00	Ec	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	13.7 6			61.56	18.83	80.39
08:00 - 09:00	Ex	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.59			0.00	1.32	1.32

08:00 - 09:00	Ex	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.53			0.00	0.29	0.29
08:00 - 09:00	Fc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00 - 09:00	Fc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.56	0.00	0.56	0.00	4.00	4.00
08:00 - 09:00	Fc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00 - 09:00	Fx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.23			0.00	3.22	3.22
08:00 - 09:00	Fx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.00			0.00	7.96	7.96
08:00 - 09:00	Fx 1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	10.0 8			0.00	11.83	11.83
08:00 - 09:00	Fx 1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	15.9 7			0.00	24.02	24.02
08:00 - 09:00	G1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.42			0.00	6.00	6.00
08:00 - 09:00	Gc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.58	0.07	1.58	0.00	10.23	10.23
08:00 - 09:00	Gc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	4.75	0.79	4.75	120.6 2	38.04	158.67
08:00 - 09:00	Gc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.31	0.13	2.31	11.19	16.37	27.56
08:00 - 09:00	Gx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.01			0.00	0.18	0.18
08:00 - 09:00	Gx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00
08:00 - 09:00	Gx 1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.02			0.00	0.28	0.28
08:00 - 09:00	H1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.44			0.00	6.30	6.30

08:00 - 09:00	H1	2	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00
08:00 - 09:00	Hc	1	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.98	0.15	2.87	57.96	11.85	69.81
08:00 - 09:00	Hc	2	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	11.6 2	0.55	5.01	2722. 47	34.49	2756.96
08:00 - 09:00	Hc	3	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	11.9 2	0.18	2.75	1917. 66	23.52	1941.17
08:00 - 09:00	Hx	1	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.03			0.00	0.39	0.39
08:00 - 09:00	Hx	2	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.02			0.00	0.21	0.21
08:00 - 09:00	I1	1	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.01			0.00	0.14	0.14
08:00 - 09:00	Ic	1	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.72	0.25	1.16	0.00	4.82	4.82
08:00 - 09:00	Ic	2	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	13.6 9	0.73	3.12	171.1 9	24.54	195.73
08:00 - 09:00	Ic	3	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00	0.00	0.00	0.00	0.00	0.00
08:00 - 09:00	Ix	1	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.66			0.00	1.02	1.02
08:00 - 09:00	Ix	2	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	5.81			0.00	1.03	1.03
08:00 - 09:00	Ix1	1	0.00	0.00	0.00	0.00	0.00	0.00	✓	0.00	25.2 9			0.00	59.21	59.21

## Network Results

### Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:m)	Network Cycle Time (s)	Total Network Delay (PCU)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised	Item with worst unsignalised	Item with worst over	Network Within Capa
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			m)		- hr/hr)						PRC	PRC	all PRC	city
A1 - 2031 AM Scenario 3	27/06/2 014 11:30:1 0	27/06/2 014 11:39:0 2	08:00	88	218.4 2	115.6 1	E/1	6	6	A/2	C3-1/1	C3- 1/1		

### Network Results: Vehicle Summary

Time Segment	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Calculated Flow Entering (PCU/hr)	Actual Green (s (per cycle))	Mean Delay Per PCU (s)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Performance Index (£ per hr)
08:00-09:00	116!	-100	62188	6373	12.20	2428.15	730.10	6749.02

### Network Results: Pedestrian Summary

Time Segment	Degree Of Saturation (%)	Calculated Flow Entering (Ped/hr)	Actual Green (s (per cycle))	Mean Delay Per Ped (s)	Weighted Cost Of Delay (£ per hr)	Performance Index (£ per hr)
08:00-09:00	116!	500	6	0.34	84.93	84.93

### Network Results: Flows And Signals

Time Segment	Calculated Flow Entering (PCU/hr)	Calculated Flow Out (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))
08:00-09:00	62688	62605	749	✓	116!	✓	-100	6379	6426

### Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
08:00-09:00	7.93	12.54	110.14	108.28	3101.58	2513.08	38.05	20272.67	3358.11	842.87	730.10

### Network Results: Queues And Blocking

Time Segment	Max Queue Storage (PCU)	Excess Queue Penalty (£ per hr)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))
08:00-09:00	1610.79	3590.76	1245.00	673.00	1918.00

### Network Results: Journey Times



<b>Time Segment</b>	<b>Distance Travelled (PCU-km/hr)</b>	<b>Time Spent (PCU-hr/hr)</b>	<b>Mean Journey Speed (kph)</b>
<b>08:00-09:00</b>	6857.78	356.52	19.24

# TRANSYT 15

Version: 15.0.1.2976 []  
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**Last run:** 27/06/2014 10:53:50

**Analysis Set used for last run:** A1 - 2031 PM Scenario C

**Filename:** Scenario C Proposed Rev 3- PM.t15

**Path:** F:\TEM\Project\BCC - Peddimore Access Modelling\3.

EXECUTION\Modelling\With Water Orton Lane\Scenario C\Proposed Water Orton Lane

**Report generation date:** 27/06/2014 14:30:06

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## File summary

### File Description

<b>Title</b>	A38 Peddimore Lane Junction - Minworth roundabout
<b>Location</b>	Birmingham
<b>Site Number</b>	
<b>UTCRegion</b>	
<b>Driving Side</b>	Left
<b>Date</b>	02/03/2014
<b>Version</b>	
<b>Status</b>	Proposed Option
<b>Identifier</b>	
<b>Client</b>	Birmingham City Council
<b>Jobnumber</b>	60316941
<b>Enumerator</b>	EU\vuppalas
<b>Description</b>	2031 SC3 - Peddimore Lane junction flows tested in preferred Option Model for Minworth roundabout

## Units

Cost Units	Speed Units	Distance Units	Fuel Economy Units	Fuel Rate Units	Mass Units	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
£	kph	m	mpg	l/h	kg	perHour	s	-Hour	perHour

## Sorting

Show Names Instead of IDs (For Aimsun)	Sorting Direction	Sorting Type	Ignore Prefixes When Sorting	Link Grouping	Source Grouping
	Ascending	Numerical		Normal	Normal

## Network Diagrams



A38 Peddimore Lane Junction - Mirworth roundabout  
 Cycletime 0s / 88s , Timesteps 87 / 88  
 Diagram produced using TRANSYT 15.0.1.2976

# A1 - 2031 PM Scenario C \*: D1 - 2031 PM Scenario C\*

## Summary

### Data Errors and Warnings

No errors or warnings

### Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:mm)	Network Cycle Time (s)	Total Network Delay (PCU - hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst over all PRC	Network Within Capacity
A1 - 2031 PM Scenario C	27/06/2014 10:44:01	27/06/2014 10:53:50	17:00	88	188.27	123.43	E/1	5	5	I/1	C3-1/1	C3-1/1	

### Analysis Set Details

Name	Description	Demand Set	Include In Report	Locked
2031 PM Scenario C		D1	✓	

### Demand Set Details

Demand Set	Name	Description	Composite	Demand Sets	Start Time (HH:mm)	Locked
D1	2031 PM Scenario C				17:00	

## Network Options

### Network Timings

Network Cycle Time (s)	Restrict To SCOOT Cycle Times	Time Segment Length (min)	Number Of Time Segments	Modelled Time Period (min)
88		60	1	60

### Signals Options

Start Displacement (s)	End Displacement (s)
2	3

### Advanced

Phase Minimum Broken Penalty (£)	Phase Maximum Broken Penalty (£)	Intergreen Broken Penalty (£)
10000.00	10000.00	10000.00

## Traffic Options

Traffic Model	Vehicle Flow Scaling Factor (%)	Pedestrian Flow Scaling Factor (%)	Cruise Times Or Speeds
Force To PDM	100	100	Cruise Speeds

## Advanced

Resolution	DOS Threshold (%)	Cruise Scaling Factor (%)	Use Link Stop Weightings	Use Link Delay Weightings	Exclude Pedestrian Links	Random Delay Mode	Type of Vehicle-in-Service	Type Of Random Parameter	PCU Length (m)	Calculate results for Path Segments
1	90	100	✓	✓		Complex	Uniform (TRANSYT)	Uniform (TRANSYT)	5.75	

## Normal Parameters

Dispersal Type	Dispersal Coefficient	Travel Time Coefficient
Default	35	80

## Bus Parameters

Dispersion Coefficient1	Dispersion Coefficient2	Acceleration (ms <sup>-2</sup> )	Travel Time Coefficient1	Travel Time Coefficient2
70	15	0.47	30	85

## Tram Parameters

Dispersion Coefficient1	Dispersion Coefficient2	Acceleration (ms <sup>-2</sup> )	Travel Time Coefficient1	Travel Time Coefficient2
0	0	0.47	100	100

## Pedestrian Parameters

Dispersal Type	Dispersal Coefficient	Travel Time Coefficient
Default	35	80

## Optimisation Options

Enable Optimisation	Auto Redistribute	Optimisation Level	Enable Out Profile Accuracy
✓		Offsets Only	✓

## Advanced

Optimisation Type	Hill Climb Increments	OUTProfile Accuracy	Use Enhanced Optimisation	Auto Optimisation	Optimisation Order
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				<b>Order</b>	
Hill Climb (Fast)	15,40,15,40,15,1,1	50,50,5,5,0.5,0.05,0.05		✓	2,1,3,5,6,7,8,9,10,11,4

## Economics

Vehicle Monetary Value Of Delay (£ per PCU-hr)	Vehicle Monetary Value Of Stops (£ per 100 stops)	Pedestrian Monetary Value Of Delay (£ per Ped-hr)
14.20	2.60	14.20

# Traffic Nodes

## Traffic Nodes

ID	Name	Description
1	A38 N	
2	Lindridge Drive	
3	A4097 Kingsbury Road	
4	A38 S	
5	Wamley Ash Road	
6	Lindridge Drive Circulatory	
7	A38 South Exit	
8	A38 North Exit	
9	A4097 Kingsbury Road Exit	
10	A38 NB	
11	Dev Access	
12	A38 South bound	
13	Peddimore	
14	Dev Access	
15	A38 Southbound	
16	Peddimore	
17	A38 North Exit	
18	Dev Access Exit	
19	Peddimore	
20	A30 Southbound Exit	
21	(untitled)	
22	(untitled)	

23	(untitled)	
24	(untitled)	

## Links

### Links

Link	Name	Description	Traffic Node	Length (m)	Has Restricted Flow	Use RR67	Saturation Flow (PCU/hr)	Is Signal Controlled	Is Give Way	Traffic Type	Is Minor Shared
1	(untitled)		23	12.00	✓		10000	✓		Pedestrian	

### Modelling

Link	Traffic Model	Stop Weighting (%)	Delay Weighting (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Has Degree Of Saturation Limit
1	[Forced to PDM]	100	100		0.00		

### Modelling - Advanced

Link	Initial Queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter	Auto Cycle Time	Cycle Time
1	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

### Flows

Link	Flows	Total Flow (17:00-18:00) (PCU/hr)
1	1	500

### Flows - Advanced

Link	Detectors	Link Sensitivity Multiplier (%)	Cruise Sensitivity Multiplier (%)
1		100	100

### Signals

Link	Controller Stream	Phase	Phase2 Enabled
1	4	E	

### Entry Sources

Link	Cruise Time (seconds)	Cruise Speed (kph)
1	1.44	30.00

# Arms and Traffic Streams

## Arms

Arm	Name	Description	Traffic Node
1	A4097 Kingsbury Road WB		24
A	A38 North		1
Ax1	(untitled)		21
Ax2	A38 North Exit		17
B	Lindridge Drive		2
Bc1	Lindridge Drive Circulatory 2		2
C	A4097 Kingsbury Road		3
C3-1	Cottage Lane Entry		23
Cx 2	A4097 Kingsbury Road EB		23
Cx3	Cottage Lane Exit		
Cx4-2	(untitled)		
Cx5	Water Orton Lane Exit		
D	A38 South		4
Dx1	A38 South Exit		
E	Wamley Ash Road		5
F	A38 South Entry		10
Fx1	(untitled)		22
G	Dev Access Entry		11
Gx1	Dev Access Exit 1		
H	A38 North Entry		12
I	Peddimore Entry		13
Ac	A38 North Circulatory		1
Ax	A38 North Exit		8
Bc	Lindridge Drive Circulatory		6
Bx	Lindridge drive Exit		
C2	A4097 Kingsbury Road WB		9
C4	A4097 Kingsbury Road Entry		23
C5	Water Orton Lane Entry		23
Cc	A4097 Kingsbury Road Circulatory		3



<b>Cx</b>	A4097 Kinsbury Road Exit		24
<b>Dc</b>	A38 South Circulatory		4
<b>Dx</b>	A38 South Exit		7
<b>Ec</b>	Wamley Ash Road Circulatory		5
<b>Ex</b>	Wamley Ash Road Exit		
<b>Fc</b>	A38 South Circulatory		10
<b>Fx</b>	A38 South Exit		20
<b>G1</b>	Dev Access Entry 1		14
<b>Gc</b>	Dev access Circulatory		11
<b>Gx</b>	Dev Access exit		18
<b>H1</b>	A38 North Entry		15
<b>Hc</b>	A38 North Circulatory		12
<b>Hx</b>	A38 North Exit		
<b>I1</b>	Peddimore Entry 1		16
<b>Ic</b>	Peddimore Circulatory		13
<b>Ix</b>	Peddimore Exit		19
<b>Ix1</b>	Peddimore Exit		

## Traffic Streams

Arm	Traffic Stream	Name	Description	Auto Length	Length (m)	Has Restricted Flow	Saturation Flow Source	Saturation Flow (PCU/hr)	Is Signal Controlled	Is Give Way	Traffic Type
1	1	(untitled )			100.00	✓	SumOfLanes	1800			Normal
1	2	(untitled )			100.00	✓	SumOfLanes	1800			Normal
A	1	(untitled )			100.00	✓	SumOfLanes	2128	✓		Normal
A	2	(untitled )			150.00	✓	SumOfLanes	2279	✓		Normal
A	3	A38 North Entry			150.00	✓	SumOfLanes	2279	✓		Normal
A	4	(untitled )			150.00	✓	SumOfLanes	2279	✓		Normal
Ax1	1	(untitled )			20.00	✓	SumOfLanes	1800			Normal
Ax1	2	(untitled )			20.00	✓	SumOfLane	1800			Normal

		)					s				
<b>Ax2</b>	<b>1</b>	A38 North Exit			150.00	✓	SumOfLanes	1800			Normal
<b>Ax2</b>	<b>2</b>	A38 North Exit			150.00	✓	SumOfLanes	1800			Normal
<b>B</b>	<b>1</b>	(untitled)			30.00					✓	Normal
<b>B</b>	<b>2</b>	(untitled)			30.00					✓	Normal
<b>Bc1</b>	<b>1</b>	(untitled)			30.00	✓	SumOfLanes	1800			Normal
<b>Bc1</b>	<b>2</b>	(untitled)			30.00	✓	SumOfLanes	1800			Normal
<b>Bc1</b>	<b>3</b>	(untitled)			30.00	✓	SumOfLanes	1800			Normal
<b>Bc1</b>	<b>4</b>	(untitled)			30.00	✓	SumOfLanes	1800			Normal
<b>C</b>	<b>1</b>	(untitled)			200.00	✓	SumOfLanes	2263	✓		Normal
<b>C</b>	<b>2</b>	(untitled)			200.00	✓	SumOfLanes	2263	✓		Normal
<b>C3-1</b>	<b>1</b>	(untitled)			55.60					✓	Normal
<b>Cx 2</b>	<b>1</b>	(untitled)			413.96	✓	SumOfLanes	2083	✓		Normal
<b>Cx 2</b>	<b>2</b>	(untitled)			413.96	✓	SumOfLanes	2083	✓		Normal
<b>Cx3</b>	<b>1</b>	(untitled)			59.35	✓	SumOfLanes	1800			Normal
<b>Cx4-2</b>	<b>1</b>	(untitled)			77.43	✓	SumOfLanes	1800			Normal
<b>Cx4-2</b>	<b>2</b>	(untitled)			77.43	✓	SumOfLanes	1800			Normal
<b>Cx5</b>	<b>1</b>	(untitled)			62.61	✓	SumOfLanes	1800			Normal
<b>D</b>	<b>1</b>	(untitled)			300.00	✓	SumOfLanes	2159	✓		Normal
<b>D</b>	<b>2</b>	(untitled)			300.00	✓	SumOfLanes	2317	✓		Normal
<b>D</b>	<b>3</b>	(untitled)			300.00	✓	SumOfLanes	2317	✓		Normal
<b>Dx1</b>	<b>1</b>	A38			250.00	✓	SumOfLane	2155			Normal

		South Exit					s				
<b>Dx1</b>	<b>2</b>	A38 South Exit			250.00	✓	SumOfLanes	2155			Normal
<b>E</b>	<b>1</b>	(untitled)			200.00					✓	Normal
<b>E</b>	<b>2</b>	(untitled)			200.00					✓	Normal
<b>F</b>	<b>1</b>	(untitled)			210.00	✓	SumOfLanes	2134	✓		Normal
<b>F</b>	<b>2</b>	(untitled)			210.00	✓	SumOfLanes	2284	✓		Normal
<b>F</b>	<b>3</b>	(untitled)			210.00	✓	SumOfLanes	2284	✓		Normal
<b>G</b>	<b>1</b>	(untitled)			76.00	✓	SumOfLanes	2123	✓		Normal
<b>G</b>	<b>2</b>	(untitled)			76.00	✓	SumOfLanes	2274	✓		Normal
<b>H</b>	<b>1</b>	(untitled)			96.00	✓	SumOfLanes	2134	✓		Normal
<b>H</b>	<b>2</b>	(untitled)			96.00	✓	SumOfLanes	2284	✓		Normal
<b>H</b>	<b>3</b>	(untitled)			96.00	✓	SumOfLanes	2284	✓		Normal
<b>I</b>	<b>1</b>	(untitled)			60.00	✓	SumOfLanes	2123	✓		Normal
<b>I</b>	<b>2</b>	(untitled)			60.00	✓	SumOfLanes	2274	✓		Normal
<b>Ac</b>	<b>1</b>	(untitled)			54.00	✓	SumOfLanes	2112	✓		Normal
<b>Ac</b>	<b>2</b>	(untitled)			54.00	✓	SumOfLanes	2263	✓		Normal
<b>Ac</b>	<b>3</b>	(untitled)			54.00	✓	SumOfLanes	2263	✓		Normal
<b>Ax</b>	<b>1</b>	(untitled)			20.00	✓	SumOfLanes	1965	✓		Normal
<b>Ax</b>	<b>2</b>	(untitled)			20.00	✓	SumOfLanes	2105	✓		Normal
<b>Ax</b>	<b>3</b>	(untitled)			20.00	✓	SumOfLanes	2105	✓		Normal
<b>Bc</b>	<b>1</b>	(untitled)			100.00	✓	SumOfLanes	1800			Normal
<b>Bc</b>	<b>2</b>	(untitled)			100.00	✓	SumOfLane	1800			Normal

		)					s				
<b>Bc</b>	<b>3</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Bc</b>	<b>4</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Bx</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>C2</b>	<b>1</b>	(untitled )			213.96	✓	SumOfLanes	1800			Normal
<b>C4</b>	<b>1</b>	(untitled )			86.62	✓	SumOfLanes	1887	✓		Normal
<b>C4</b>	<b>2</b>	(untitled )			86.62	✓	SumOfLanes	2055	✓		Normal
<b>C5</b>	<b>1</b>	(untitled )			55.00	✓	SumOfLanes	1906	✓		Normal
<b>Cc</b>	<b>1</b>	(untitled )			65.00	✓	SumOfLanes	2059	✓		Normal
<b>Cc</b>	<b>2</b>	(untitled )			65.00	✓	SumOfLanes	2209	✓		Normal
<b>Cc</b>	<b>3</b>	(untitled )			65.00	✓	SumOfLanes	2181	✓		Normal
<b>Cx</b>	<b>1</b>	A4097 Kinsbury Road Exit			100.00	✓	SumOfLanes	2120	✓		Normal
<b>Cx</b>	<b>2</b>	A4097 Kinsbury Road Exit			100.00	✓	SumOfLanes	2120	✓		Normal
<b>Dc</b>	<b>1</b>	(untitled )			90.00	✓	SumOfLanes	2059	✓		Normal
<b>Dc</b>	<b>2</b>	(untitled )			90.00	✓	SumOfLanes	2172	✓		Normal
<b>Dc</b>	<b>3</b>	(untitled )			90.00	✓	SumOfLanes	2185	✓		Normal
<b>Dx</b>	<b>1</b>	(untitled )			56.00	✓	SumOfLanes	1915	✓		Normal
<b>Dx</b>	<b>2</b>	(untitled )			56.00	✓	SumOfLanes	2055	✓		Normal
<b>Dx</b>	<b>3</b>	(untitled )			56.00	✓	SumOfLanes	2055	✓		Normal
<b>Ec</b>	<b>1</b>	(untitled )			50.00	✓	SumOfLanes	1800			Normal
<b>Ec</b>	<b>2</b>	(untitled )			50.00	✓	SumOfLanes	1800			Normal

<b>Ec</b>	<b>3</b>	(untitled )			50.00	✓	SumOfLanes	1800			Normal
<b>Ex</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Ex</b>	<b>2</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Fc</b>	<b>1</b>	(untitled )			74.00	✓	SumOfLanes	2166	✓		Normal
<b>Fc</b>	<b>2</b>	(untitled )			74.00	✓	SumOfLanes	2317	✓		Normal
<b>Fc</b>	<b>3</b>	(untitled )			74.00	✓	SumOfLanes	2317	✓		Normal
<b>Fx</b>	<b>1</b>	(untitled )			200.00	✓	SumOfLanes	2112			Normal
<b>Fx</b>	<b>2</b>	(untitled )			200.00	✓	SumOfLanes	2263			Normal
<b>Fx1</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>Fx1</b>	<b>2</b>	(untitled )			100.00	✓	SumOfLanes	1800			Normal
<b>G1</b>	<b>1</b>	(untitled )			60.00	✓	SumOfLanes	2112			Normal
<b>Gc</b>	<b>1</b>	(untitled )			70.00	✓	SumOfLanes	2166	✓		Normal
<b>Gc</b>	<b>2</b>	(untitled )			70.00	✓	SumOfLanes	2317	✓		Normal
<b>Gc</b>	<b>3</b>	(untitled )			70.00	✓	SumOfLanes	2317	✓		Normal
<b>Gx</b>	<b>1</b>	(untitled )			56.00	✓	SumOfLanes	2112			Normal , Bus, Tram
<b>Gx</b>	<b>2</b>	(untitled )			56.00	✓	SumOfLanes	2263			Normal , Bus, Tram
<b>Gx1</b>	<b>1</b>	(untitled )			20.00	✓	SumOfLanes	1965			Normal , Bus, Tram
<b>H1</b>	<b>1</b>	(untitled )			100.00	✓	SumOfLanes	2112			Normal
<b>H1</b>	<b>2</b>	(untitled )			100.00	✓	SumOfLanes	2263			Normal
<b>Hc</b>	<b>1</b>	(untitled )			67.00	✓	SumOfLanes	2166	✓		Normal
<b>Hc</b>	<b>2</b>	(untitled )			67.00	✓	SumOfLanes	2317	✓		Normal





4-2			)											
Cx 5	1	1	(untitled )											1800
D	1	2	A38 South Entry		✓	N/A	Clear ly Good	0	4.00		10	42.00	✓	2159
D	2	1	A38 South Entry		✓	N/A	Clear ly Good	0	4.00		0	10.00		2317
D	3	3	A38 South Entry		✓	N/A	Clear ly Good	0	4.00		0	10.00		2317
Dx 1	1	1	(untitled )		✓	N/A	N/A	0	4.00		0	10.00		2155
Dx 1	2	1	(untitled )		✓	N/A	N/A	0	4.00		0	10.00		2155
E	1	3	(untitled )											
E	2	3	(untitled )											
F	1	2	A38 North Exit		✓	N/A	Clear ly Good	0	3.70		0	10.00	✓	2134
F	2	1	A38 North Exit		✓	N/A	Clear ly Good	0	3.70		0	10.00		2284
F	3	1	A38 North Exit		✓	N/A	Clear ly Good	0	3.70		0	10.00		2284
G	1	2	A38 North Exit		✓	N/A	Clear ly Good	0	3.60		0	10.00	✓	2123
G	2	1	A38 North Exit		✓	N/A	Clear ly Good	0	3.60		0	10.00		2274
H	1	2	A38 North Exit		✓	N/A	Clear ly Good	0	3.70		0	10.00	✓	2134
H	2	1	A38 North Exit		✓	N/A	Clear ly Good	0	3.70		0	10.00		2284
H	3	1	A38 North Exit		✓	N/A	Clear ly Good	0	3.70		0	10.00		2284
I	1	2	A38 North Exit		✓	N/A	Clear ly Good	0	3.60		0	10.00	✓	2123



I	2	1	A38 North Exit		✓	N/A	Clearly Good	0	3.60		0	10.00		2274
Ac	1	1	A38 North Circulatory		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
Ac	2	2	A38 North Circulatory		✓	N/A	Clearly Good	0	3.50		0	10.00		2263
Ac	3	1	A38 North Circulatory		✓	N/A	Clearly Good	0	3.50		0	10.00		2263
Ax	1	2	A38 North Exit		✓	N/A	N/A	0	3.50		0	10.00	✓	1965
Ax	2	1	A38 North Exit		✓	N/A	N/A	0	3.50		0	10.00		2105
Ax	3	1	A38 North Exit		✓	N/A	N/A	0	3.50		0	10.00		2105
Bc	1	2	Lindridge Drive Circulatory											1800
Bc	2	1	Lindridge Drive Circulatory											1800
Bc	3	3	Lindridge Drive Circulatory											1800
Bc	4	3	Lindridge Drive Circulatory											1800
Bx	1	2	Lindridge drive Exit											1800
C2	1	1	(untitled )											1800
C4	1	1	(untitled )		✓	N/A	N/A	0	3.00		7	7.20	✓	1887
C4	2	1	(untitled )		✓	N/A	N/A	0	3.00		0	10.00		2055



			Ash Road Circulatory											
<b>Ec</b>	<b>3</b>	<b>3</b>	(untitled)											1800
<b>Ex</b>	<b>1</b>	<b>1</b>	Wamley Ash Road Exit											1800
<b>Ex</b>	<b>2</b>	<b>2</b>	Wamley Ash Road Exit											1800
<b>Fc</b>	<b>1</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00	✓	2166
<b>Fc</b>	<b>2</b>	<b>2</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
<b>Fc</b>	<b>3</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
<b>Fx</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
<b>Fx</b>	<b>2</b>	<b>1</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00		2263
<b>Fx<sub>1</sub></b>	<b>1</b>	<b>1</b>	(untitled)											1800
<b>Fx<sub>1</sub></b>	<b>2</b>	<b>1</b>	(untitled)											1800
<b>G1</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112
<b>Gc</b>	<b>1</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00	✓	2166
<b>Gc</b>	<b>2</b>	<b>2</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317
<b>Gc</b>	<b>3</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clearly Good	0	4.00		0	10.00		2317

<b>Gx</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clear ly Good	0	3.50		0	10.00	✓	2112
<b>Gx</b>	<b>2</b>	<b>1</b>	A38 North Exit		✓	N/A	Clear ly Good	0	3.50		0	10.00		2263
<b>Gx 1</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	N/A	0	3.50		0	10.00	✓	1965
<b>H1</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clear ly Good	0	3.50		0	10.00	✓	2112
<b>H1</b>	<b>2</b>	<b>1</b>	A38 North Exit		✓	N/A	Clear ly Good	0	3.50		0	10.00		2263
<b>Hc</b>	<b>1</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clear ly Good	0	4.00		0	10.00	✓	2166
<b>Hc</b>	<b>2</b>	<b>2</b>	A38 North Circulatory		✓	N/A	Clear ly Good	0	4.00		0	10.00		2317
<b>Hc</b>	<b>3</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clear ly Good	0	4.00		0	10.00		2317
<b>Hx</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clear ly Good	0	3.50		0	10.00	✓	2112
<b>Hx</b>	<b>2</b>	<b>1</b>	A38 North Exit		✓	N/A	Clear ly Good	0	3.50		0	10.00		2263
<b>I1</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clear ly Good	0	3.50		0	10.00	✓	2112
<b>Ic</b>	<b>1</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clear ly Good	0	4.00		0	10.00	✓	2166
<b>Ic</b>	<b>2</b>	<b>2</b>	A38 North Circulatory		✓	N/A	Clear ly Good	0	4.00		0	10.00		2317
<b>Ic</b>	<b>3</b>	<b>1</b>	A38 North Circulatory		✓	N/A	Clear ly Good	0	4.00		0	10.00		2317
<b>Ix</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clear ly Good	0	3.50		0	10.00	✓	2112

<b>lx</b>	<b>2</b>	<b>1</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00		2263
<b>lx1</b>	<b>1</b>	<b>2</b>	A38 North Exit		✓	N/A	Clearly Good	0	3.50		0	10.00	✓	2112

## Modelling

Arm	Traffic Stream	Traffic Model	Stop Weighting Multiplier (%)	Delay Weighting Multiplier (%)	Exclude From Results Calculation	Max Queue Storage (PCU)	Has Queue Limit	Queue Limit (PCU)	Excess Queue Penalty (£)	Has Degree Of Saturation Limit
<b>1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>1</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>A</b>	<b>1</b>	[Forced to PDM]	20	40	✓	0.00				
<b>A</b>	<b>2</b>	[Forced to PDM]	20	40	✓	0.00				
<b>A</b>	<b>3</b>	[Forced to PDM]	20	40	✓	0.00				
<b>A</b>	<b>4</b>	[Forced to PDM]	20	40	✓	0.00				
<b>Ax1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Ax1</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Ax2</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Ax2</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>B</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>B</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Bc1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00	✓	5	0.00	
<b>Bc1</b>	<b>2</b>	[Forced to PDM]	100	100		0.00	✓	5	0.00	
<b>Bc1</b>	<b>3</b>	[Forced to PDM]	100	100		0.00	✓	5	0.00	
<b>Bc1</b>	<b>4</b>	[Forced to PDM]	100	100		0.00	✓	5	0.00	
<b>C</b>	<b>1</b>	[Forced	0	40		0.00				

		to PDM]								
<b>C</b>	<b>2</b>	[Forced to PDM]	0	40		0.00				
<b>C3-1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx 2</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx 2</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Cx3</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx4-2</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx4-2</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Cx5</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>D</b>	<b>1</b>	[Forced to PDM]	0	40		0.00				
<b>D</b>	<b>2</b>	[Forced to PDM]	0	40		0.00				
<b>D</b>	<b>3</b>	[Forced to PDM]	0	40		0.00				
<b>Dx1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Dx1</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>E</b>	<b>1</b>	[Forced to PDM]	100	40		0.00				
<b>E</b>	<b>2</b>	[Forced to PDM]	100	40		0.00				
<b>F</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>F</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>F</b>	<b>3</b>	[Forced to PDM]	100	100		0.00				
<b>G</b>	<b>1</b>	[Forced to PDM]	20	50		0.00				
<b>G</b>	<b>2</b>	[Forced to PDM]	20	50		0.00				
<b>H</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				

H	2	[Forced to PDM]	100	100		0.00				
H	3	[Forced to PDM]	100	100		0.00				
I	1	[Forced to PDM]	0	40	✓	0.00				
I	2	[Forced to PDM]	0	40	✓	0.00				
Ac	1	[Forced to PDM]	100	100		7.00	✓	3	80.00	
Ac	2	[Forced to PDM]	100	100		7.00	✓	5	0.00	
Ac	3	[Forced to PDM]	100	100		7.00	✓	5	0.00	
Ax	1	[Forced to PDM]	100	100		0.00	✓	3	0.00	
Ax	2	[Forced to PDM]	100	100		0.00	✓	3	0.00	
Ax	3	[Forced to PDM]	100	100		0.00	✓	3	0.00	
Bc	1	[Forced to PDM]	100	100		0.00	✓	15	0.00	
Bc	2	[Forced to PDM]	100	100		0.00	✓	15	0.00	
Bc	3	[Forced to PDM]	100	100		0.00	✓	15	0.00	
Bc	4	[Forced to PDM]	100	100		0.00	✓	15	0.00	
Bx	1	[Forced to PDM]	100	100		0.00				
C2	1	[Forced to PDM]	100	100		0.00				
C4	1	[Forced to PDM]	100	100		0.00				
C4	2	[Forced to PDM]	100	100		0.00				
C5	1	[Forced to PDM]	100	100		0.00				
Cc	1	[Forced to PDM]	100	100		6.00	✓	6	60.00	
Cc	2	[Forced to PDM]	100	100		6.00	✓	6	60.00	
Cc	3	[Forced to PDM]	100	100		6.00	✓	6	60.00	

<b>Cx</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Cx</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Dc</b>	<b>1</b>	[Forced to PDM]	1000	1000		0.00	✓	13	60.00	
<b>Dc</b>	<b>2</b>	[Forced to PDM]	100	100		0.00	✓	13	30.00	
<b>Dc</b>	<b>3</b>	[Forced to PDM]	100	100		0.00	✓	13	0.00	
<b>Dx</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Dx</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Dx</b>	<b>3</b>	[Forced to PDM]	100	100		0.00				
<b>Ec</b>	<b>1</b>	[Forced to PDM]	100	100		0.00	✓	6	0.00	
<b>Ec</b>	<b>2</b>	[Forced to PDM]	100	100		0.00	✓	6	60.00	
<b>Ec</b>	<b>3</b>	[Forced to PDM]	100	100		0.00	✓	6	60.00	
<b>Ex</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Ex</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Fc</b>	<b>1</b>	[Forced to PDM]	100	100		7.00	✓	3	0.00	
<b>Fc</b>	<b>2</b>	[Forced to PDM]	100	100		7.00	✓	3	0.00	
<b>Fc</b>	<b>3</b>	[Forced to PDM]	100	100		7.00	✓	3	0.00	
<b>Fx</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Fx</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>Fx1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Fx1</b>	<b>2</b>	[Forced to PDM]	100	100		0.00				
<b>G1</b>	<b>1</b>	[Forced to PDM]	100	100		0.00				
<b>Gc</b>	<b>1</b>	[Forced to PDM]	100	100		7.00	✓	2	100.00	



Gc	2	[Forced to PDM]	100	100		7.00	✓	2	100.00	
Gc	3	[Forced to PDM]	100	100		7.00	✓	2	100.00	
Gx	1	[Forced to PDM]	100	100		0.00				
Gx	2	[Forced to PDM]	100	100		0.00				
Gx1	1	[Forced to PDM]	100	100		0.00				
H1	1	[Forced to PDM]	100	100		0.00				
H1	2	[Forced to PDM]	100	100		0.00				
Hc	1	[Forced to PDM]	100	100		7.00	✓	3	2000.00	
Hc	2	[Forced to PDM]	100	100		7.00	✓	3	2000.00	
Hc	3	[Forced to PDM]	100	100	✓	7.00	✓	3	2000.00	
Hx	1	[Forced to PDM]	100	100		0.00				
Hx	2	[Forced to PDM]	100	100		0.00				
I1	1	[Forced to PDM]	100	100		0.00				
Ic	1	[Forced to PDM]	100	100		7.00	✓	2	80.00	
Ic	2	[Forced to PDM]	100	100		7.00	✓	2	100.00	
Ic	3	[Forced to PDM]	100	100		7.00	✓	2	0.00	
Ix	1	[Forced to PDM]	100	100		0.00				
Ix	2	[Forced to PDM]	100	100		0.00				
Ix1	1	[Forced to PDM]	100	100		0.00				

## Modelling - Advanced

Arm	Traffic Stream	Cruise Sensitivity Multiplier (%)	Initial Queue (PCU)	Type of Vehicle-in-Service	Vehicle-in-Service	Type Of Random Parameter	Random Parameter	Auto Cycle Time	Cycle Time
1	1	100	0.00	NetworkDefault	Not-	NetworkDefault	0.50	✓	88

					Included				
<b>1</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>A</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>A</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>A</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>A</b>	<b>4</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax1</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax2</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax2</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>B</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>B</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc1</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc1</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc1</b>	<b>4</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C3-1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx 2</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx 2</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx3</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

<b>Cx4-2</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx4-2</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx5</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>D</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>D</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>D</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dx1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dx1</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>E</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>E</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>F</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>F</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>F</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>G</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>G</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>H</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>H</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>H</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>I</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>I</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ac</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ac</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

<b>Ac</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ax</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bc</b>	<b>4</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Bx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C2</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C4</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C4</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>C5</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Cx</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

<b>Dx</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Dx</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ec</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ec</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ec</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ex</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Ex</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fx</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fx1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Fx1</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>G1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gc</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gc</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gc</b>	<b>3</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gx</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gx</b>	<b>2</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>Gx1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
<b>H1</b>	<b>1</b>	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

H1	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Hc	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Hc	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Hc	3	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Hx	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Hx	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
I1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ic	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ic	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ic	3	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ix	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ix	2	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88
Ix1	1	100	0.00	NetworkDefault	Not-Included	NetworkDefault	0.50	✓	88

## Normal - Modelling

Arm	Traffic Stream	Stop Weighting (%)	Delay Weighting (%)
1	1	100	100
1	2	100	100
A	1	100	100
A	2	100	100
A	3	100	100
A	4	100	100
Ax1	1	100	100
Ax1	2	100	100
Ax2	1	100	100
Ax2	2	100	100
B	1	100	100

<b>B</b>	<b>2</b>	100	100
<b>Bc1</b>	<b>1</b>	100	100
<b>Bc1</b>	<b>2</b>	100	100
<b>Bc1</b>	<b>3</b>	100	100
<b>Bc1</b>	<b>4</b>	100	100
<b>C</b>	<b>1</b>	100	100
<b>C</b>	<b>2</b>	100	100
<b>C3-1</b>	<b>1</b>	100	100
<b>Cx 2</b>	<b>1</b>	100	100
<b>Cx 2</b>	<b>2</b>	100	100
<b>Cx3</b>	<b>1</b>	100	100
<b>Cx4-2</b>	<b>1</b>	100	100
<b>Cx4-2</b>	<b>2</b>	100	100
<b>Cx5</b>	<b>1</b>	100	100
<b>D</b>	<b>1</b>	100	100
<b>D</b>	<b>2</b>	100	100
<b>D</b>	<b>3</b>	100	100
<b>Dx1</b>	<b>1</b>	100	100
<b>Dx1</b>	<b>2</b>	100	100
<b>E</b>	<b>1</b>	100	100
<b>E</b>	<b>2</b>	100	100
<b>F</b>	<b>1</b>	100	100
<b>F</b>	<b>2</b>	100	100
<b>F</b>	<b>3</b>	100	100
<b>G</b>	<b>1</b>	100	100
<b>G</b>	<b>2</b>	100	100
<b>H</b>	<b>1</b>	100	100
<b>H</b>	<b>2</b>	100	100
<b>H</b>	<b>3</b>	100	100
<b>I</b>	<b>1</b>	100	100
<b>I</b>	<b>2</b>	100	100
<b>Ac</b>	<b>1</b>	100	100
<b>Ac</b>	<b>2</b>	100	100

<b>Ac</b>	<b>3</b>	100	100
<b>Ax</b>	<b>1</b>	100	100
<b>Ax</b>	<b>2</b>	100	100
<b>Ax</b>	<b>3</b>	100	100
<b>Bc</b>	<b>1</b>	100	100
<b>Bc</b>	<b>2</b>	100	100
<b>Bc</b>	<b>3</b>	100	100
<b>Bc</b>	<b>4</b>	100	100
<b>Bx</b>	<b>1</b>	100	100
<b>C2</b>	<b>1</b>	100	100
<b>C4</b>	<b>1</b>	100	100
<b>C4</b>	<b>2</b>	100	100
<b>C5</b>	<b>1</b>	100	100
<b>Cc</b>	<b>1</b>	100	100
<b>Cc</b>	<b>2</b>	100	100
<b>Cc</b>	<b>3</b>	100	100
<b>Cx</b>	<b>1</b>	100	100
<b>Cx</b>	<b>2</b>	100	100
<b>Dc</b>	<b>1</b>	100	100
<b>Dc</b>	<b>2</b>	100	100
<b>Dc</b>	<b>3</b>	100	100
<b>Dx</b>	<b>1</b>	100	100
<b>Dx</b>	<b>2</b>	100	100
<b>Dx</b>	<b>3</b>	100	100
<b>Ec</b>	<b>1</b>	100	100
<b>Ec</b>	<b>2</b>	100	100
<b>Ec</b>	<b>3</b>	100	100
<b>Ex</b>	<b>1</b>	100	100
<b>Ex</b>	<b>2</b>	100	100
<b>Fc</b>	<b>1</b>	100	100
<b>Fc</b>	<b>2</b>	100	100
<b>Fc</b>	<b>3</b>	100	100
<b>Fx</b>	<b>1</b>	100	100



<b>Fx</b>	<b>2</b>	100	100
<b>Fx1</b>	<b>1</b>	100	100
<b>Fx1</b>	<b>2</b>	100	100
<b>G1</b>	<b>1</b>	100	100
<b>Gc</b>	<b>1</b>	100	100
<b>Gc</b>	<b>2</b>	100	100
<b>Gc</b>	<b>3</b>	100	100
<b>Gx</b>	<b>1</b>	100	100
<b>Gx</b>	<b>2</b>	100	100
<b>Gx1</b>	<b>1</b>	100	100
<b>H1</b>	<b>1</b>	100	100
<b>H1</b>	<b>2</b>	100	100
<b>Hc</b>	<b>1</b>	100	100
<b>Hc</b>	<b>2</b>	100	100
<b>Hc</b>	<b>3</b>	100	100
<b>Hx</b>	<b>1</b>	100	100
<b>Hx</b>	<b>2</b>	100	100
<b>I1</b>	<b>1</b>	100	100
<b>lc</b>	<b>1</b>	100	100
<b>lc</b>	<b>2</b>	100	100
<b>lc</b>	<b>3</b>	100	100
<b>lx</b>	<b>1</b>	100	100
<b>lx</b>	<b>2</b>	100	100
<b>lx1</b>	<b>1</b>	100	100

## Bus - Modelling

Arm	Traffic Stream	Stationary Time (seconds)	Stop Weighting (%)	Delay Weighting (%)
<b>Gx</b>	<b>1</b>	0.00	100	100
<b>Gx</b>	<b>2</b>	0.00	100	100
<b>Gx1</b>	<b>1</b>	0.00	100	100
<b>lx</b>	<b>1</b>	0.00	100	100
<b>lx</b>	<b>2</b>	0.00	100	100
<b>lx1</b>	<b>1</b>	0.00	100	100

## Tram - Modelling

Arm	Traffic Stream	Stationary Time (seconds)	Stop Weighting (%)	Delay Weighting (%)
Gx	1	0.00	100	100
Gx	2	0.00	100	100
Gx1	1	0.00	100	100
Ix	1	0.00	100	100
Ix	2	0.00	100	100
Ix1	1	0.00	100	100

## Flows

Arm	Traffic Stream	Total Flow (PCU/hr)	Normal Flow (PCU/hr)	Bus Flow (PCU/hr)	Tram Flow (PCU/hr)
1	1	896	896	0	0
1	2	681	681	0	0
A	1	324	324	0	0
A	2	777	777	0	0
A	3	483	483	0	0
A	4	775	775	0	0
Ax1	1	590	590	0	0
Ax1	2	1640	1640	0	0
Ax2	1	1409	1409	0	0
Ax2	2	822	822	0	0
B	1	26	26	0	0
B	2	26	26	0	0
Bc1	1	665	665	0	0
Bc1	2	1216	1216	0	0
Bc1	3	796	796	0	0
Bc1	4	1088	1088	0	0
C	1	666	666	0	0
C	2	912	912	0	0
C3-1	1	0	0	0	0
Cx 2	1	607	607	0	0
Cx 2	2	809	809	0	0
Cx3	1	68	68	0	0

<b>Cx4-2</b>	<b>1</b>	600	600	0	0
<b>Cx4-2</b>	<b>2</b>	574	574	0	0
<b>Cx5</b>	<b>1</b>	308	308	0	0
<b>D</b>	<b>1</b>	813	813	0	0
<b>D</b>	<b>2</b>	872	872	0	0
<b>D</b>	<b>3</b>	872	872	0	0
<b>Dx1</b>	<b>1</b>	838	838	0	0
<b>Dx1</b>	<b>2</b>	1515	1515	0	0
<b>E</b>	<b>1</b>	468	468	0	0
<b>E</b>	<b>2</b>	625	625	0	0
<b>F</b>	<b>1</b>	1409	1409	0	0
<b>F</b>	<b>2</b>	729	729	0	0
<b>F</b>	<b>3</b>	93	93	0	0
<b>G</b>	<b>1</b>	292	292	0	0
<b>G</b>	<b>2</b>	313	313	0	0
<b>H</b>	<b>1</b>	468	468	0	0
<b>H</b>	<b>2</b>	501	501	0	0
<b>H</b>	<b>3</b>	63	63	0	0
<b>I</b>	<b>1</b>	529	529	0	0
<b>I</b>	<b>2</b>	566	566	0	0
<b>Ac</b>	<b>1</b>	425	425	0	0
<b>Ac</b>	<b>2</b>	440	440	0	0
<b>Ac</b>	<b>3</b>	625	625	0	0
<b>Ax</b>	<b>1</b>	590	590	0	0
<b>Ax</b>	<b>2</b>	1173	1173	0	0
<b>Ax</b>	<b>3</b>	468	468	0	0
<b>Bc</b>	<b>1</b>	749	749	0	0
<b>Bc</b>	<b>2</b>	1216	1216	0	0
<b>Bc</b>	<b>3</b>	796	796	0	0
<b>Bc</b>	<b>4</b>	1088	1088	0	0
<b>Bx</b>	<b>1</b>	84	84	0	0
<b>C2</b>	<b>1</b>	1577	1577	0	0
<b>C4</b>	<b>1</b>	660	660	0	0

<b>C4</b>	<b>2</b>	718	718	0	0
<b>C5</b>	<b>1</b>	333	333	0	0
<b>Cc</b>	<b>1</b>	491	491	0	0
<b>Cc</b>	<b>2</b>	797	797	0	0
<b>Cc</b>	<b>3</b>	1112	1112	0	0
<b>Cx</b>	<b>1</b>	683	683	0	0
<b>Cx</b>	<b>2</b>	733	733	0	0
<b>Dc</b>	<b>1</b>	581	581	0	0
<b>Dc</b>	<b>2</b>	648	648	0	0
<b>Dc</b>	<b>3</b>	395	395	0	0
<b>Dx</b>	<b>1</b>	838	838	0	0
<b>Dx</b>	<b>2</b>	797	797	0	0
<b>Dx</b>	<b>3</b>	718	718	0	0
<b>Ec</b>	<b>1</b>	487	487	0	0
<b>Ec</b>	<b>2</b>	1070	1070	0	0
<b>Ec</b>	<b>3</b>	1070	1070	0	0
<b>Ex</b>	<b>1</b>	1115	1115	0	0
<b>Ex</b>	<b>2</b>	440	440	0	0
<b>Fc</b>	<b>1</b>	71	71	0	0
<b>Fc</b>	<b>2</b>	166	166	0	0
<b>Fc</b>	<b>3</b>	32	32	0	0
<b>Fx</b>	<b>1</b>	1181	1181	0	0
<b>Fx</b>	<b>2</b>	1178	1178	0	0
<b>Fx1</b>	<b>1</b>	1101	1101	0	0
<b>Fx1</b>	<b>2</b>	1259	1259	0	0
<b>G1</b>	<b>1</b>	605	605	0	0
<b>Gc</b>	<b>1</b>	673	673	0	0
<b>Gc</b>	<b>2</b>	761	761	0	0
<b>Gc</b>	<b>3</b>	93	93	0	0
<b>Gx</b>	<b>1</b>	839	839	0	0
<b>Gx</b>	<b>2</b>	134	134	0	0
<b>Gx1</b>	<b>1</b>	972	972	0	0
<b>H1</b>	<b>1</b>	969	969	0	0

H1	2	63	63	0	0
Hc	1	116	116	0	0
Hc	2	314	314	0	0
Hc	3	315	315	0	0
Hx	1	714	714	0	0
Hx	2	673	673	0	0
I1	1	1095	1095	0	0
Ic	1	653	653	0	0
Ic	2	816	816	0	0
Ic	3	63	63	0	0
Ix	1	129	129	0	0
Ix	2	116	116	0	0
Ix1	1	245	245	0	0

## Signals

Arm	Traffic Stream	Controller Stream	Phase	Phase2 Enabled
A	1	1	A	
A	2	1	A	
A	3	1	A	
A	4	1	A	
C	1	3	A	
C	2	3	A	
Cx 2	1	4	A	
Cx 2	2	4	A	
D	1	2	A	
D	2	2	A	
D	3	2	A	
F	1	8	A	
F	2	8	A	
F	3	8	A	
G	1	9	A	
G	2	9	A	
H	1	10	A	

H	2	10	A	
H	3	10	A	
I	1	11	A	
I	2	11	A	
Ac	1	1	B	
Ac	2	1	B	
Ac	3	1	B	
Ax	1	5	A	
Ax	2	5	A	
Ax	3	5	A	
C4	1	4	D	
C4	2	4	D	
C5	1	4	C	
Cc	1	3	B	
Cc	2	3	B	
Cc	3	3	B	
Cx	1	6	A	
Cx	2	6	A	
Dc	1	2	B	
Dc	2	2	B	
Dc	3	2	B	
Dx	1	7	A	
Dx	2	7	A	
Dx	3	7	A	
Fc	1	8	B	
Fc	2	8	B	
Fc	3	8	B	
Gc	1	9	B	
Gc	2	9	B	
Gc	3	9	B	
Hc	1	10	B	
Hc	2	10	B	
Hc	3	10	B	

lc	1	11	B	
lc	2	11	B	
lc	3	11	B	

## Entry Sources

Arm	Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)
B	1	2.24	48.28
B	2	2.24	48.28
C3-1	1	4.15	48.28
D	1	16.78	64.37
D	2	16.78	64.37
D	3	16.78	64.37
E	1	14.91	48.28
E	2	14.91	48.28
C4	1	6.46	48.28
C4	2	6.46	48.28
C5	1	4.10	48.28
G1	1	4.47	48.28
H1	1	7.46	48.28
H1	2	7.46	48.28
I1	1	7.46	48.28

## Sources

Arm	Traffic Stream	Source	Source Type	Source Traffic Stream	Destination Traffic Stream	Normal Cruise Time (seconds)	Normal Cruise Speed (kph)	Bus Free Running Speed (kph)	Tram Free Running Speed (kph)	Auto Turning Radius	Traffic Turn Style	Turning Radius (m)
1	1	1	TrafficStream	C5/1	1/1	7.46	48.28			✓	Straight	Straight Movement
1	2	1	TrafficStream	C4/2	1/2	7.46	48.28			✓	Straight	Straight Movement
A	1	1	TrafficStream	Fx1/1	A/1	7.46	48.28			✓	Straight	Straight Movement
A	2	1	TrafficStream	Fx1/1	A/2	11.18	48.28			✓	Straight	Straight Movement

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<b>A</b>	<b>3</b>	<b>1</b>	TrafficStream	Fx1/2	A/3	11.18	48.28			✓	Straight	Straight Movement
<b>A</b>	<b>4</b>	<b>1</b>	TrafficStream	Fx1/2	A/4	11.18	48.28			✓	Straight	Straight Movement
<b>Ax1</b>	<b>1</b>	<b>1</b>	TrafficStream	Ax/1	Ax1/1	1.49	48.28			✓	Straight	Straight Movement
<b>Ax1</b>	<b>2</b>	<b>1</b>	TrafficStream	Ax/2	Ax1/2	1.49	48.28			✓	Straight	Straight Movement
<b>Ax2</b>	<b>1</b>	<b>1</b>	TrafficStream	Ax1/1	Ax2/1	11.18	48.28			✓	Straight	Straight Movement
<b>Ax2</b>	<b>2</b>	<b>1</b>	TrafficStream	Ax1/1	Ax2/2	11.18	48.28			✓	Straight	Straight Movement
<b>Bc1</b>	<b>1</b>	<b>1</b>	TrafficStream	Bc/1	Bc1/1	2.24	48.28			✓	Straight	Straight Movement
<b>Bc1</b>	<b>2</b>	<b>1</b>	TrafficStream	Bc/2	Bc1/2	2.24	48.28			✓	Straight	Straight Movement
<b>Bc1</b>	<b>3</b>	<b>1</b>	TrafficStream	Bc/3	Bc1/3	2.24	48.28			✓	Straight	Straight Movement
<b>Bc1</b>	<b>4</b>	<b>1</b>	TrafficStream	Bc/4	Bc1/4	2.24	48.28			✓	Straight	Straight Movement
<b>C</b>	<b>1</b>	<b>1</b>	TrafficStream	C2/1	C/1	14.91	48.28			✓	Straight	Straight Movement
<b>C</b>	<b>2</b>	<b>1</b>	TrafficStream	C2/1	C/2	14.91	48.28			✓	Straight	Straight Movement
<b>Cx2</b>	<b>1</b>	<b>1</b>	TrafficStream	Cx/1	Cx 2/1	30.87	48.28			✓	Straight	Straight Movement
<b>Cx2</b>	<b>2</b>	<b>1</b>	TrafficStream	Cx/2	Cx 2/2	30.87	48.28			✓	Straight	Straight Movement
<b>Cx3</b>	<b>1</b>	<b>1</b>	TrafficStream	Cx 2/1	Cx3/1	4.43	48.28			✓	Straight	Straight Movement
<b>Cx4-2</b>	<b>1</b>	<b>1</b>	TrafficStream	Cx 2/1	Cx4-2/1	5.77	48.28			✓	Straight	Straight Movement



<b>Cx4-2</b>	<b>2</b>	<b>1</b>	TrafficStream	Cx 2/2	Cx4-2/2	5.77	48.28			✓	Straight	Straight Movement
<b>Cx5</b>	<b>1</b>	<b>1</b>	TrafficStream	C3-1/1	Cx5/1	4.67	48.28			✓	Straight	Straight Movement
<b>Dx1</b>	<b>1</b>	<b>1</b>	TrafficStream	Dx/1	Dx1/1	13.98	64.37			✓	Straight	Straight Movement
<b>Dx1</b>	<b>2</b>	<b>1</b>	TrafficStream	Dx/2	Dx1/2	13.98	64.37			✓	Straight	Straight Movement
<b>F</b>	<b>1</b>	<b>1</b>	TrafficStream	Ax2/1	F/1	15.66	48.28			✓	Straight	Straight Movement
<b>F</b>	<b>2</b>	<b>1</b>	TrafficStream	Ax2/2	F/2	15.66	48.28			✓	Straight	Straight Movement
<b>F</b>	<b>3</b>	<b>1</b>	TrafficStream	Ax2/2	F/3	15.66	48.28			✓	Straight	Straight Movement
<b>Fx1</b>	<b>1</b>	<b>1</b>	TrafficStream	Fx/1	Fx1/1	7.46	48.28			✓	Straight	Straight Movement
<b>Fx1</b>	<b>2</b>	<b>1</b>	TrafficStream	Fx/1	Fx1/2	7.46	48.28			✓	Straight	Straight Movement
<b>G</b>	<b>1</b>	<b>1</b>	TrafficStream	G1/1	G/1	5.67	48.28			✓	Straight	Straight Movement
<b>G</b>	<b>2</b>	<b>1</b>	TrafficStream	G1/1	G/2	5.67	48.28			✓	Straight	Straight Movement
<b>Gx1</b>	<b>1</b>	<b>1</b>	TrafficStream	Gx/1	Gx1/1	1.49	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>H</b>	<b>1</b>	<b>1</b>	TrafficStream	H1/1	H/1	7.16	48.28			✓	Straight	Straight Movement
<b>H</b>	<b>2</b>	<b>1</b>	TrafficStream	H1/1	H/2	7.16	48.28			✓	Straight	Straight Movement
<b>H</b>	<b>3</b>	<b>1</b>	TrafficStream	H1/2	H/3	7.16	48.28			✓	Straight	Straight Movement
<b>I</b>	<b>1</b>	<b>1</b>	TrafficStream	I1/1	I/1	4.47	48.28			✓	Straight	Straight Movement

I	2	1	TrafficStream	I1/1	I/2	4.47	48.28			✓	Straight	Straight Movement
Ac	1	1	TrafficStream	E/1	Ac/1	4.03	48.28			✓	Straight	Straight Movement
Ac	2	1	TrafficStream	Ec/3	Ac/2	4.03	48.28			✓	Straight	Straight Movement
Ac	3	1	TrafficStream	E/2	Ac/3	4.03	48.28			✓	Straight	Straight Movement
Ax	1	1	TrafficStream	Ec/1	Ax/1	1.12	64.37			✓	Straight	Straight Movement
Ax	2	1	TrafficStream	Ec/2	Ax/2	1.12	64.37			✓	Straight	Straight Movement
Ax	3	1	TrafficStream	Ec/3	Ax/3	1.12	64.37			✓	Straight	Straight Movement
Bc	1	1	TrafficStream	Ac/1	Bc/1	7.46	48.28			✓	Straight	Straight Movement
Bc	2	1	TrafficStream	A/2	Bc/2	7.46	48.28			✓	Straight	Straight Movement
Bc	3	1	TrafficStream	Ac/3	Bc/3	7.46	48.28			✓	Straight	Straight Movement
Bc	4	1	TrafficStream	Ac/3	Bc/4	7.46	48.28			✓	Straight	Straight Movement
Bx	1	1	TrafficStream	Bc/1	Bx/1	7.46	48.28			✓	Nearside	76.24
C2	1	1	TrafficStream	1/1	C2/1	15.95	48.28			✓	Straight	Straight Movement
Cc	1	1	TrafficStream	B/1	Cc/1	4.85	48.28			✓	Straight	Straight Movement
Cc	2	1	TrafficStream	B/2	Cc/2	4.85	48.28			✓	Straight	Straight Movement
Cc	3	1	TrafficStream	B/2	Cc/3	4.85	48.28			✓	Straight	Straight Movement
Cx	1	1	TrafficStream	Bc1/1	Cx/1	5.59	64.37			✓	Straight	Straight Movement

												nt
<b>Cx</b>	<b>2</b>	<b>1</b>	TrafficStream	Bc1/2	Cx/2	5.59	64.37			✓	Straight	Straight Movement
<b>Dc</b>	<b>1</b>	<b>1</b>	TrafficStream	C/1	Dc/1	6.71	48.28			✓	Straight	Straight Movement
<b>Dc</b>	<b>2</b>	<b>1</b>	TrafficStream	C/2	Dc/2	6.71	48.28			✓	Straight	Straight Movement
<b>Dc</b>	<b>3</b>	<b>1</b>	TrafficStream	C/2	Dc/3	6.71	48.28			✓	Straight	Straight Movement
<b>Dx</b>	<b>1</b>	<b>1</b>	TrafficStream	Cc/1	Dx/1	3.13	64.37			✓	Straight	Straight Movement
<b>Dx</b>	<b>2</b>	<b>1</b>	TrafficStream	Cc/2	Dx/2	3.13	64.37			✓	Straight	Straight Movement
<b>Dx</b>	<b>3</b>	<b>1</b>	TrafficStream	Cc/3	Dx/3	3.13	64.37			✓	Straight	Straight Movement
<b>Ec</b>	<b>1</b>	<b>1</b>	TrafficStream	D/1	Ec/1	3.73	48.28			✓	Straight	Straight Movement
<b>Ec</b>	<b>2</b>	<b>1</b>	TrafficStream	D/2	Ec/2	3.73	48.28			✓	Straight	Straight Movement
<b>Ec</b>	<b>3</b>	<b>1</b>	TrafficStream	D/3	Ec/3	3.73	48.28			✓	Straight	Straight Movement
<b>Ex</b>	<b>1</b>	<b>1</b>	TrafficStream	Dc/1	Ex/1	7.46	48.28			✓	Straight	Straight Movement
<b>Ex</b>	<b>2</b>	<b>1</b>	TrafficStream	Dc/2	Ex/2	7.46	48.28			✓	Straight	Straight Movement
<b>Fc</b>	<b>1</b>	<b>1</b>	TrafficStream	lc/2	Fc/1	8.28	32.19			✓	Straight	Straight Movement
<b>Fc</b>	<b>2</b>	<b>1</b>	TrafficStream	l/2	Fc/2	8.28	32.19			✓	Straight	Straight Movement
<b>Fc</b>	<b>3</b>	<b>1</b>	TrafficStream	lc/3	Fc/3	8.28	32.19			✓	Offside	91.25
<b>Fx</b>	<b>1</b>	<b>1</b>	TrafficStream	l/1	Fx/1	14.91	48.28			✓	Straight	Straight Movement

<b>Fx</b>	<b>2</b>	<b>1</b>	TrafficStream	I/2	Fx/2	14.91	48.28			✓	Straight	Straight Movement
<b>Gc</b>	<b>1</b>	<b>1</b>	TrafficStream	F/1	Gc/1	7.83	32.19			✓	Straight	Straight Movement
<b>Gc</b>	<b>2</b>	<b>1</b>	TrafficStream	F/2	Gc/2	7.83	32.19			✓	Straight	Straight Movement
<b>Gc</b>	<b>3</b>	<b>1</b>	TrafficStream	Fc/3	Gc/3	7.83	32.19			✓	Offside	52.91
<b>Gx</b>	<b>1</b>	<b>1</b>	TrafficStream	F/1	Gx/1	4.18	48.28	15.00	15.00	✓	Nearside	63.89
<b>Gx</b>	<b>2</b>	<b>1</b>	TrafficStream	Fc/2	Gx/2	4.18	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>Hc</b>	<b>1</b>	<b>1</b>	TrafficStream	G/1	Hc/1	7.49	32.19			✓	Straight	Straight Movement
<b>Hc</b>	<b>2</b>	<b>1</b>	TrafficStream	Gc/3	Hc/2	7.49	32.19			✓	Straight	Straight Movement
<b>Hc</b>	<b>3</b>	<b>1</b>	TrafficStream	Gc/3	Hc/3	7.49	32.19			✓	Straight	Straight Movement
<b>Hx</b>	<b>1</b>	<b>1</b>	TrafficStream	G/1	Hx/1	7.46	48.28			✓	Nearside	100.00
<b>Hx</b>	<b>2</b>	<b>1</b>	TrafficStream	Gc/2	Hx/2	7.46	48.28			✓	Straight	Straight Movement
<b>lc</b>	<b>1</b>	<b>1</b>	TrafficStream	H/1	lc/1	7.27	32.19			✓	Straight	Straight Movement
<b>lc</b>	<b>2</b>	<b>1</b>	TrafficStream	H/2	lc/2	7.27	32.19			✓	Straight	Straight Movement
<b>lc</b>	<b>3</b>	<b>1</b>	TrafficStream	Hc/3	lc/3	7.27	32.19			✓	Offside	49.48
<b>lx</b>	<b>1</b>	<b>1</b>	TrafficStream	Hc/1	lx/1	3.36	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>lx</b>	<b>2</b>	<b>1</b>	TrafficStream	Hc/2	lx/2	3.36	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>lx1</b>	<b>1</b>	<b>1</b>	TrafficStream	lx/2	lx1/1	1.12	48.28	15.00	15.00	✓	Straight	Straight Movement

<b>1</b>	<b>1</b>	<b>2</b>	TrafficStream	C4/1	1/1	7.46	48.28			✓	Straight	Straight Movement
<b>Ac</b>	<b>1</b>	<b>2</b>	TrafficStream	Ec/3	Ac/1	4.03	48.28			✓	Straight	Straight Movement
<b>Ac</b>	<b>2</b>	<b>2</b>	TrafficStream	E/1	Ac/2	6.48	30.00			✓	Straight	Straight Movement
<b>Ax</b>	<b>1</b>	<b>2</b>	TrafficStream	E/1	Ax/1	1.12	64.37			✓	Straight	Straight Movement
<b>Ax</b>	<b>2</b>	<b>2</b>	TrafficStream	E/1	Ax/2	1.12	64.37			✓	Straight	Straight Movement
<b>Ax1</b>	<b>2</b>	<b>2</b>	TrafficStream	Ax/3	Ax1/2	1.49	48.28			✓	Straight	Straight Movement
<b>Ax2</b>	<b>1</b>	<b>2</b>	TrafficStream	Ax1/2	Ax2/1	11.18	48.28			✓	Straight	Straight Movement
<b>Ax2</b>	<b>2</b>	<b>2</b>	TrafficStream	Ax1/2	Ax2/2	11.18	48.28			✓	Straight	Straight Movement
<b>Bc</b>	<b>1</b>	<b>2</b>	TrafficStream	A/1	Bc/1	7.46	48.28			✓	Nearside	83.93
<b>Bc</b>	<b>2</b>	<b>2</b>	TrafficStream	Ac/2	Bc/2	7.46	48.28			✓	Straight	Straight Movement
<b>Bc</b>	<b>3</b>	<b>2</b>	TrafficStream	A/3	Bc/3	7.46	48.28			✓	Straight	Straight Movement
<b>Bc</b>	<b>4</b>	<b>2</b>	TrafficStream	A/4	Bc/4	7.46	48.28			✓	Straight	Straight Movement
<b>C2</b>	<b>1</b>	<b>2</b>	TrafficStream	1/2	C2/1	15.95	48.28			✓	Straight	Straight Movement
<b>Cc</b>	<b>1</b>	<b>2</b>	TrafficStream	Bc1/2	Cc/1	4.85	48.28			✓	Straight	Straight Movement
<b>Cc</b>	<b>2</b>	<b>2</b>	TrafficStream	Bc1/3	Cc/2	4.85	48.28			✓	Straight	Straight Movement
<b>Cc</b>	<b>3</b>	<b>2</b>	TrafficStream	Bc1/4	Cc/3	4.85	48.28			✓	Straight	Straight Movement
<b>Cx</b>	<b>1</b>	<b>2</b>	TrafficStream	B/1	Cx/1	5.59	64.37			✓	Nearside	73.56

<b>Cx 2</b>	<b>1</b>	<b>2</b>	TrafficStream	Cx/2	Cx 2/1	30.87	48.28			✓	Straight	Straight Movement
<b>Cx 2</b>	<b>2</b>	<b>2</b>	TrafficStream	Cx/1	Cx 2/2	30.87	48.28			✓	Straight	Straight Movement
<b>Cx3</b>	<b>1</b>	<b>2</b>	TrafficStream	C5/1	Cx3/1	4.43	48.28			✓	Straight	Straight Movement
<b>Cx4-2</b>	<b>2</b>	<b>2</b>	TrafficStream	C5/1	Cx4-2/2	5.77	48.28			✓	Straight	Straight Movement
<b>Cx5</b>	<b>1</b>	<b>2</b>	TrafficStream	C4/1	Cx5/1	4.67	48.28			✓	Straight	Straight Movement
<b>Dc</b>	<b>1</b>	<b>2</b>	TrafficStream	Cc/3	Dc/1	6.71	48.28			✓	Straight	Straight Movement
<b>Dc</b>	<b>2</b>	<b>2</b>	TrafficStream	Cc/3	Dc/2	6.71	48.28			✓	Straight	Straight Movement
<b>Dx</b>	<b>1</b>	<b>2</b>	TrafficStream	C/1	Dx/1	3.13	64.37			✓	Straight	Straight Movement
<b>Dx1</b>	<b>2</b>	<b>2</b>	TrafficStream	Dx/3	Dx1/2	13.98	64.37			✓	Straight	Straight Movement
<b>Ec</b>	<b>1</b>	<b>2</b>	TrafficStream	Dc/2	Ec/1	3.73	48.28			✓	Straight	Straight Movement
<b>Ec</b>	<b>2</b>	<b>2</b>	TrafficStream	Dc/3	Ec/2	3.73	48.28			✓	Straight	Straight Movement
<b>Ec</b>	<b>3</b>	<b>2</b>	TrafficStream	Dc/3	Ec/3	3.73	48.28			✓	Straight	Straight Movement
<b>Ex</b>	<b>1</b>	<b>2</b>	TrafficStream	D/1	Ex/1	7.46	48.28			✓	Straight	Straight Movement
<b>Fc</b>	<b>1</b>	<b>2</b>	TrafficStream	I/2	Fc/1	8.28	32.19			✓	Straight	Straight Movement
<b>Fc</b>	<b>2</b>	<b>2</b>	TrafficStream	Ic/3	Fc/2	8.28	32.19			✓	Straight	Straight Movement
<b>Fc</b>	<b>3</b>	<b>2</b>	TrafficStream	I/2	Fc/3	8.28	32.19			✓	Straight	Straight Movement

<b>Fx</b>	<b>1</b>	<b>2</b>	TrafficStream	lc/1	Fx/1	14.91	48.28			✓	Straight	Straight Movement
<b>Fx</b>	<b>2</b>	<b>2</b>	TrafficStream	lc/2	Fx/2	14.91	48.28			✓	Straight	Straight Movement
<b>Fx1</b>	<b>1</b>	<b>2</b>	TrafficStream	Fx/2	Fx1/1	7.46	48.28			✓	Straight	Straight Movement
<b>Fx1</b>	<b>2</b>	<b>2</b>	TrafficStream	Fx/2	Fx1/2	7.46	48.28			✓	Straight	Straight Movement
<b>Gc</b>	<b>1</b>	<b>2</b>	TrafficStream	Fc/2	Gc/1	7.83	32.19			✓	Offside	72.91
<b>Gc</b>	<b>2</b>	<b>2</b>	TrafficStream	Fc/3	Gc/2	7.83	32.19			✓	Offside	52.91
<b>Gc</b>	<b>3</b>	<b>2</b>	TrafficStream	F/3	Gc/3	7.83	32.19			✓	Straight	Straight Movement
<b>Gx</b>	<b>1</b>	<b>2</b>	TrafficStream	Fc/1	Gx/1	4.18	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>Gx1</b>	<b>1</b>	<b>2</b>	TrafficStream	Gx/2	Gx1/1	1.49	48.28	15.00	15.00	✓	Straight	Straight Movement
<b>Hc</b>	<b>1</b>	<b>2</b>	TrafficStream	Gc/2	Hc/1	7.49	32.19			✓	Straight	Straight Movement
<b>Hc</b>	<b>2</b>	<b>2</b>	TrafficStream	G/1	Hc/2	7.49	32.19			✓	Straight	Straight Movement
<b>Hc</b>	<b>3</b>	<b>2</b>	TrafficStream	G/2	Hc/3	7.49	32.19			✓	Straight	Straight Movement
<b>Hx</b>	<b>1</b>	<b>2</b>	TrafficStream	Gc/1	Hx/1	7.46	48.28			✓	Straight	Straight Movement
<b>lc</b>	<b>1</b>	<b>2</b>	TrafficStream	Hc/2	lc/1	7.27	32.19			✓	Offside	69.48
<b>lc</b>	<b>2</b>	<b>2</b>	TrafficStream	Hc/3	lc/2	7.27	32.19			✓	Offside	49.48
<b>lc</b>	<b>3</b>	<b>2</b>	TrafficStream	H/3	lc/3	7.27	32.19			✓	Straight	Straight Movement
<b>lx</b>	<b>1</b>	<b>2</b>	TrafficStream	H/1	lx/1	3.36	48.28	15.00	15.00	✓	Straight	Straight Movement

Ix1	1	2	TrafficStream	Ix/1	Ix1/1	1.12	48.28	15.00	15.00	✓	Straight	Straight Movement
Cx3	1	3	TrafficStream	C4/2	Cx3/1	4.43	48.28			✓	Straight	Straight Movement
Cx5	1	3	TrafficStream	Cx 2/2	Cx5/1	4.67	48.28			✓	Straight	Straight Movement

### Give Way Data

Arm	Traffic Stream	Opposed Traffic	Use Step-wise Opposed Turn Model	Visibility Restricted
B	1	AllTraffic		
B	2	AllTraffic		
C3-1	1	AllTraffic		
E	1	AllTraffic		
E	2	AllTraffic		

### Give Way Data - All Movements - Conflicts

Traffic Stream	Description	Controlling Type	Controlling Traffic Stream	Percentage Opposing (%)	Slope Coefficient	Upstream Signals Visible	Conflict Shift	Conflict Duration
1		TrafficStream	Bc1/1	100	0.18		0	0
1		TrafficStream	Bc1/2	100	0.18		0	0
2		TrafficStream	Bc1/1	100	0.18		0	0
2		TrafficStream	Bc1/2	100	0.18		0	0
2		TrafficStream	Bc1/3	100	0.18		0	0
2		TrafficStream	Bc1/4	100	0.44		0	0
1		TrafficStream	Cx 2/1	100	0.22		0	0
1		TrafficStream	Cx 2/2	100	0.22		0	0
1	Roundabout Circulating	TrafficStream	Ec/1	100	0.21		0	0
1		TrafficStream	Ec/2	100	0.21		0	0
1		TrafficStream	Ec/3	100	0.21		0	0
2	Roundabout Circulating	TrafficStream	Ec/1	100	0.42		0	0
2		TrafficStream	Ec/2	100	0.42		0	0
2		TrafficStream	Ec/3	100	0.42		0	0



## Quick Flares

Arm	Traffic Stream	Description	Saturation Flow (PCU/hr)	Use Que Prob	Effective Storage (Vehs)
C	1		1800		7.00
C	2		1800		7.00
G	2		1800		3.00
I	2		1800		2.00

## Local OD Matrix - Local Matrix: 2031 PM SC

### Normal Input Flows (PCU/hr)

		To								
		1	2	3	4	5	6	7	8	9
From	1	0	13	12	1	195	45	554	149	63
	2	64	0	11	1	175	42	520	141	141
	3	6	1	0	0	14	4	10	12	4
	4	0	0	0	0	0	0	0	0	0
	5	276	41	2	37	0	33	295	524	170
	6	60	7	0	24	40	0	52	113	37
	7	821	112	38	3	452	111	0	534	486
	8	118	16	14	1	200	48	625	0	71
	9	41	55	7	1	98	25	297	81	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

## Locations

OD Matrix	Location	Name	Entries	Exits
2031 PM SC	1	(untitled)	H1/1,H1/2	Hx/2,Hx/1
2031 PM SC	2	(untitled)	I1/1	Ix1/1
2031 PM SC	3	(untitled)	B/1,B/2	Bx/1
2031 PM SC	4	(untitled)	C3-1/1	Cx3/1
2031 PM SC	5	(untitled)	C4/1,C4/2	Cx4-2/1,Cx4-2/2

2031 PM SC	6	(untitled)	C5/1	Cx5/1
2031 PM SC	7	(untitled)	D/1,D/2,D/3	Dx1/2,Dx1/1
2031 PM SC	8	(untitled)	E/1,E/2	Ex/1,Ex/2
2031 PM SC	9	(untitled)	G1/1	Gx1/1

## Paths

OD Matrix	Path	Description	From Location	To Location	Path Items
2031 PM SC	1		7	9	D/1,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	2		7	1	D/1,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	3		7	1	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	4		7	2	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	5		7	2	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 PM SC	6		7	3	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	7		7	4	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx2/1,Cx3/1
2031 PM SC	8		7	5	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx2/1,Cx4-2/1
2031 PM SC	9		7	6	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx2/2,Cx5/1
2031 PM SC	10		7	5	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx2/2,Cx4-2/2
2031 PM SC	11		7	7	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 PM SC	12		7	4	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx2/1,Cx3/1
2031 PM	13		7	5	D/1,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx2/1,Cx4-2/1

SC					
2031 PM SC	14		7	6	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx2/2, Cx5/1
2031 PM SC	15		7	5	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx2/2, Cx4-2/2
2031 PM SC	16		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx/2, Dx1/2
2031 PM SC	17		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, Ic/1, Fx/1, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dx/3, Dx1/2
2031 PM SC	18		7	3	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bx/1
2031 PM SC	19		7	4	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx2/1, Cx3/1
2031 PM SC	20		7	5	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx2/1, Cx4-2/1
2031 PM SC	21		7	6	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx2/2, Cx5/1
2031 PM SC	22		7	5	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx2/2, Cx4-2/2
2031 PM SC	23		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx/1, Dx1/1
2031 PM SC	24		7	4	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx2/1, Cx3/1
2031 PM SC	25		7	5	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx2/1, Cx4-2/1
2031 PM SC	26		7	6	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx2/2, Cx5/1
2031 PM SC	27		7	5	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx2/2, Cx4-2/2
2031 PM SC	28		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx/2, Dx1/2
2031 PM SC	29		7	7	D/1, Ec/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dx/3, Dx1/2

2031 PM SC	30		7	8	D/1,Ex/1
2031 PM SC	31		7	9	D/2,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	32		7	1	D/2,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	33		7	1	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	34		7	2	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,Ix/1,Ix1/1
2031 PM SC	35		7	2	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ix/2,Ix1/1
2031 PM SC	36		7	3	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	37		7	4	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
2031 PM SC	38		7	5	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
2031 PM SC	39		7	6	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 PM SC	40		7	5	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ic/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 PM SC	41		7	7	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ic/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx /1,Dx1/1
2031 PM SC	42		7	4	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ic/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
2031 PM SC	43		7	5	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ic/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
2031 PM SC	44		7	6	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ic/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
2031 PM SC	45		7	5	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ic/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
2031	46		7	7	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ic/1,Fx/1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx

PM SC					/2,Dx1/2
2031 PM SC	47		7	7	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx /3,Dx1/2
2031 PM SC	48		7	3	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	49		7	4	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
2031 PM SC	50		7	5	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
2031 PM SC	51		7	6	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 PM SC	52		7	5	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 PM SC	53		7	7	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx /1,Dx1/1
2031 PM SC	54		7	4	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
2031 PM SC	55		7	5	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
2031 PM SC	56		7	6	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
2031 PM SC	57		7	5	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
2031 PM SC	58		7	7	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx /2,Dx1/2
2031 PM SC	59		7	7	D/2,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx /3,Dx1/2
2031 PM SC	60		7	9	D/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	61		7	1	D/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 PM	62		7	1	D/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2

SC					
2031 PM SC	63		7	2	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/2, Gc/2, Hc/1, lx1, lx1/1
2031 PM SC	64		7	2	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lx2, lx1/1
2031 PM SC	65		7	3	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx1, Fx1/1, A/1, Bc1, Bx1
2031 PM SC	66		7	4	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx1, Fx1/1, A/1, Bc1, Bc1/1, Cx1, Cx2/1, Cx3/1
2031 PM SC	67		7	5	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx1, Fx1/1, A/1, Bc1, Bc1/1, Cx1, Cx2/1, Cx4-2/1
2031 PM SC	68		7	6	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx1, Fx1/1, A/1, Bc1, Bc1/1, Cx1, Cx2/2, Cx5/1
2031 PM SC	69		7	5	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx1, Fx1/1, A/1, Bc1, Bc1/1, Cx1, Cx2/2, Cx4-2/2
2031 PM SC	70		7	7	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx1, Fx1/1, A/2, Bc2, Bc1/2, Cc1, Dx1, Dx1/1
2031 PM SC	71		7	4	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx1, Fx1/1, A/2, Bc2, Bc1/2, Cx2, Cx2/1, Cx3/1
2031 PM SC	72		7	5	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx1, Fx1/1, A/2, Bc2, Bc1/2, Cx2, Cx2/1, Cx4-2/1
2031 PM SC	73		7	6	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx1, Fx1/1, A/2, Bc2, Bc1/2, Cx2, Cx2/2, Cx5/1
2031 PM SC	74		7	5	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx1, Fx1/1, A/2, Bc2, Bc1/2, Cx2, Cx2/2, Cx4-2/2
2031 PM SC	75		7	7	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx1, Fx1/2, A/3, Bc3, Bc1/3, Cc2, Dx1/2, Dx1/2
2031 PM SC	76		7	7	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx1, Fx1/2, A/4, Bc4, Bc1/4, Cc3, Dx1/3, Dx1/2
2031 PM SC	77		7	3	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, lc/2, Fx2, Fx1/1, A/1, Bc1, Bx1
2031 PM SC	78		7	4	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, lc/2, Fx2, Fx1/1, A/1, Bc1, Bc1/1, Cx1, Cx2/1, Cx3/1

2031 PM SC	79		7	5	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx2/1, Cx4-2/1
2031 PM SC	80		7	6	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx2/2, Cx5/1
2031 PM SC	81		7	5	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx2/2, Cx4-2/2
2031 PM SC	82		7	7	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx1/1, Dx1/1
2031 PM SC	83		7	4	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx2/1, Cx3/1
2031 PM SC	84		7	5	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx2/1, Cx4-2/1
2031 PM SC	85		7	6	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx2/2, Cx5/1
2031 PM SC	86		7	5	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx2/2, Cx4-2/2
2031 PM SC	87		7	7	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/2, A/3, Bc/3, Bc1/3, Cc/2, Dx1/2, Dx1/2
2031 PM SC	88		7	7	D/3, Ec/3, Ax/3, Ax1/2, Ax2/2, F/3, Gc/3, Hc/3, Ic/2, Fx/2, Fx1/2, A/4, Bc/4, Bc1/4, Cc/3, Dx1/3, Dx1/2
2031 PM SC	89		7	3	D/3, Ec/3, Ac/1, Bc/1, Bx/1
2031 PM SC	90		7	4	D/3, Ec/3, Ac/1, Bc/1, Bc1/1, Cx/1, Cx2/1, Cx3/1
2031 PM SC	91		7	5	D/3, Ec/3, Ac/1, Bc/1, Bc1/1, Cx/1, Cx2/1, Cx4-2/1
2031 PM SC	92		7	6	D/3, Ec/3, Ac/1, Bc/1, Bc1/1, Cx/1, Cx2/2, Cx5/1
2031 PM SC	93		7	5	D/3, Ec/3, Ac/1, Bc/1, Bc1/1, Cx/1, Cx2/2, Cx4-2/2
2031 PM SC	94		7	7	D/3, Ec/3, Ac/2, Bc/2, Bc1/2, Cc/1, Dx/1, Dx1/1
2031	95		7	4	D/3, Ec/3, Ac/2, Bc/2, Bc1/2, Cx/2, Cx2/1, Cx3/1

PM SC					
2031 PM SC	96		7	5	D/3, Ec/3, Ac/2, Bc/2, Bc1/2, Cx/2, Cx 2/1, Cx4-2/1
2031 PM SC	97		7	6	D/3, Ec/3, Ac/2, Bc/2, Bc1/2, Cx/2, Cx 2/2, Cx5/1
2031 PM SC	98		7	5	D/3, Ec/3, Ac/2, Bc/2, Bc1/2, Cx/2, Cx 2/2, Cx4-2/2
2031 PM SC	99		8	9	E/1, Ax/1, Ax1/1, Ax2/1, F/1, Gx/1, Gx1/1
2031 PM SC	100		8	1	E/1, Ax/1, Ax1/1, Ax2/1, F/1, Gc/1, Hx/1
2031 PM SC	101		8	1	E/1, Ax/1, Ax1/1, Ax2/2, F/2, Gc/2, Hx/2
2031 PM SC	102		8	2	E/1, Ax/1, Ax1/1, Ax2/2, F/2, Gc/2, Hc/1, lx/1, lx1/1
2031 PM SC	103		8	2	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lx/2, lx1/1
2031 PM SC	104		8	3	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bx/1
2031 PM SC	105		8	4	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/1, Cx3/1
2031 PM SC	106		8	5	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/1, Cx4-2/1
2031 PM SC	107		8	6	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/2, Cx5/1
2031 PM SC	108		8	5	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/1, Bc/1, Bc1/1, Cx/1, Cx 2/2, Cx4-2/2
2031 PM SC	109		8	7	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cc/1, Dx/1, Dx 1/1
2031 PM SC	110		8	4	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx 2/1, Cx3/1
2031 PM	111		8	5	E/1, Ax/1, Ax1/1, Ax2/2, F/3, Gc/3, Hc/2, lc/1, Fx/1, Fx1/1, A/2, Bc/2, Bc1/2, Cx/2, Cx 2/1, Cx4-2/1



SC					
2031 PM SC	112		8	6	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx2/2,Cx5/1
2031 PM SC	113		8	5	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx2/2,Cx4-2/2
2031 PM SC	114		8	7	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 PM SC	115		8	8	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 PM SC	116		8	8	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 PM SC	117		8	7	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 PM SC	118		8	3	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	119		8	4	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx2/1,Cx3/1
2031 PM SC	120		8	5	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx2/1,Cx4-2/1
2031 PM SC	121		8	6	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx2/2,Cx5/1
2031 PM SC	122		8	5	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx2/2,Cx4-2/2
2031 PM SC	123		8	7	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 PM SC	124		8	4	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx2/1,Cx3/1
2031 PM SC	125		8	5	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx2/1,Cx4-2/1
2031 PM SC	126		8	6	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx2/2,Cx5/1
2031 PM SC	127		8	5	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx2/2,Cx4-2/2

2031 PM SC	128		8	7	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx 1/2
2031 PM SC	129		8	8	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex /1
2031 PM SC	130		8	8	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex /2
2031 PM SC	131		8	7	E/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx 1/2
2031 PM SC	132		8	9	E/1,Ax/2,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	133		8	1	E/1,Ax/2,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	134		8	1	E/1,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	135		8	2	E/1,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	136		8	2	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 PM SC	137		8	3	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	138		8	4	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
2031 PM SC	139		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
2031 PM SC	140		8	6	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 PM SC	141		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 PM SC	142		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx 1/1
2031 PM SC	143		8	4	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
2031	144		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx

PM SC					2/1,Cx4-2/1
2031 PM SC	145		8	6	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
2031 PM SC	146		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
2031 PM SC	147		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx 1/2
2031 PM SC	148		8	8	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex /1
2031 PM SC	149		8	8	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex /2
2031 PM SC	150		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx 1/2
2031 PM SC	151		8	3	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	152		8	4	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
2031 PM SC	153		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
2031 PM SC	154		8	6	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 PM SC	155		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 PM SC	156		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx 1/1
2031 PM SC	157		8	4	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
2031 PM SC	158		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
2031 PM SC	159		8	6	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
2031 PM	160		8	5	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2

SC					
2031 PM SC	161		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx 1/2
2031 PM SC	162		8	8	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex /1
2031 PM SC	163		8	8	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex /2
2031 PM SC	164		8	7	E/1,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx 1/2
2031 PM SC	165		8	3	E/1,Ac/1,Bc/1,Bx/1
2031 PM SC	166		8	4	E/1,Ac/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
2031 PM SC	167		8	5	E/1,Ac/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
2031 PM SC	168		8	6	E/1,Ac/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 PM SC	169		8	5	E/1,Ac/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 PM SC	170		8	7	E/1,Ac/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 PM SC	171		8	4	E/1,Ac/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
2031 PM SC	172		8	5	E/1,Ac/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
2031 PM SC	173		8	6	E/1,Ac/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
2031 PM SC	174		8	5	E/1,Ac/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
2031 PM SC	175		8	7	E/2,Ac/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 PM SC	176		8	8	E/2,Ac/3,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1

2031 PM SC	177		8	8	E/2,Ac/3,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 PM SC	178		8	7	E/2,Ac/3,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 PM SC	179		3	7	B/1,Cc/1,Dx/1,Dx1/1
2031 PM SC	180		3	4	B/1,Cx/1,Cx 2/1,Cx3/1
2031 PM SC	181		3	5	B/1,Cx/1,Cx 2/1,Cx4-2/1
2031 PM SC	182		3	6	B/1,Cx/1,Cx 2/2,Cx5/1
2031 PM SC	183		3	5	B/1,Cx/1,Cx 2/2,Cx4-2/2
2031 PM SC	184		3	7	B/2,Cc/2,Dx/2,Dx1/2
2031 PM SC	185		3	8	B/2,Cc/3,Dc/1,Ex/1
2031 PM SC	186		3	9	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	187		3	1	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	188		3	1	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	189		3	2	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	190		3	2	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 PM SC	191		3	3	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/ 1
2031 PM SC	192		3	3	B/2,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/ 1
2031	193		3	8	B/2,Cc/3,Dc/2,Ex/2

PM SC					
2031 PM SC	194		3	7	B/2,Cc/3,Dx/3,Dx1/2
2031 PM SC	195		4	6	C3-1/1,Cx5/1
2031 PM SC	196		2	3	I1/1,I/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	197		2	4	I1/1,I/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
2031 PM SC	198		2	5	I1/1,I/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
2031 PM SC	199		2	6	I1/1,I/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 PM SC	200		2	5	I1/1,I/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 PM SC	201		2	7	I1/1,I/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 PM SC	202		2	4	I1/1,I/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
2031 PM SC	203		2	5	I1/1,I/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
2031 PM SC	204		2	6	I1/1,I/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
2031 PM SC	205		2	5	I1/1,I/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
2031 PM SC	206		2	7	I1/1,I/1,Fx/1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 PM SC	207		2	8	I1/1,I/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 PM SC	208		2	9	I1/1,I/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx 1/1
2031 PM	209		2	1	I1/1,I/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/ 1

SC					
2031 PM SC	210		2	1	I1/1,I/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	211		2	2	I1/1,I/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	212		2	2	I1/1,I/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 PM SC	213		2	8	I1/1,I/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 PM SC	214		2	7	I1/1,I/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 PM SC	215		2	3	I1/1,I/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	216		2	4	I1/1,I/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
2031 PM SC	217		2	5	I1/1,I/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
2031 PM SC	218		2	6	I1/1,I/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 PM SC	219		2	5	I1/1,I/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 PM SC	220		2	7	I1/1,I/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 PM SC	221		2	4	I1/1,I/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
2031 PM SC	222		2	5	I1/1,I/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
2031 PM SC	223		2	6	I1/1,I/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
2031 PM SC	224		2	5	I1/1,I/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
2031 PM SC	225		2	7	I1/1,I/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2

2031 PM SC	226		2	8	I1/1,I/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 PM SC	227		2	9	I1/1,I/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx 1/1
2031 PM SC	228		2	1	I1/1,I/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/ 1
2031 PM SC	229		2	1	I1/1,I/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/ 2
2031 PM SC	230		2	2	I1/1,I/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/ 1,lx/1,lx1/1
2031 PM SC	231		2	2	I1/1,I/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/ 2,lx/2,lx1/1
2031 PM SC	232		2	8	I1/1,I/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 PM SC	233		2	7	I1/1,I/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 PM SC	234		2	9	I1/1,I/2,Fc/1,Gx/1,Gx1/1
2031 PM SC	235		2	9	I1/1,I/2,Fc/2,Gx/2,Gx1/1
2031 PM SC	236		2	1	I1/1,I/2,Fc/2,Gc/1,Hx/1
2031 PM SC	237		2	1	I1/1,I/2,Fc/3,Gc/2,Hx/2
2031 PM SC	238		2	2	I1/1,I/2,Fc/3,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	239		2	2	I1/1,I/2,Fc/3,Gc/3,Hc/2,lx/2,lx1/1
2031 PM SC	240		9	1	G1/1,G/1,Hx/1
2031 PM SC	241		9	2	G1/1,G/1,Hc/1,lx/1,lx1/1
2031	242		9	2	G1/1,G/1,Hc/2,lx/2,lx1/1



PM SC					
2031 PM SC	243		9	3	G1/1,G/1,Hc/2,lc/1,Fx1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	244		9	4	G1/1,G/1,Hc/2,lc/1,Fx1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
2031 PM SC	245		9	5	G1/1,G/1,Hc/2,lc/1,Fx1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
2031 PM SC	246		9	6	G1/1,G/1,Hc/2,lc/1,Fx1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 PM SC	247		9	5	G1/1,G/1,Hc/2,lc/1,Fx1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 PM SC	248		9	7	G1/1,G/1,Hc/2,lc/1,Fx1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 PM SC	249		9	4	G1/1,G/1,Hc/2,lc/1,Fx1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
2031 PM SC	250		9	5	G1/1,G/1,Hc/2,lc/1,Fx1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
2031 PM SC	251		9	6	G1/1,G/1,Hc/2,lc/1,Fx1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
2031 PM SC	252		9	5	G1/1,G/1,Hc/2,lc/1,Fx1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
2031 PM SC	253		9	7	G1/1,G/1,Hc/2,lc/1,Fx1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 PM SC	254		9	8	G1/1,G/1,Hc/2,lc/1,Fx1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 PM SC	255		9	9	G1/1,G/1,Hc/2,lc/1,Fx1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1, F/1,Gx/1,Gx1/1
2031 PM SC	256		9	8	G1/1,G/1,Hc/2,lc/1,Fx1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 PM SC	257		9	7	G1/1,G/1,Hc/2,lc/1,Fx1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 PM	258		9	3	G1/1,G/2,Hc/3,lc/2,Fx2,Fx1/1,A/1,Bc/1,Bx/1

SC					
2031 PM SC	259		9	4	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
2031 PM SC	260		9	5	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
2031 PM SC	261		9	6	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 PM SC	262		9	5	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 PM SC	263		9	7	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 PM SC	264		9	4	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
2031 PM SC	265		9	5	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
2031 PM SC	266		9	6	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
2031 PM SC	267		9	5	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
2031 PM SC	268		9	7	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 PM SC	269		9	8	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 PM SC	270		9	9	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1, F/1,Gx/1,Gx1/1
2031 PM SC	271		9	8	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 PM SC	272		9	7	G1/1,G/2,Hc/3,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 PM SC	273		9	9	G1/1,G/2,Hc/3,lc/2,Fc/1,Gx/1,Gx1/1
2031 PM SC	274		9	9	G1/1,G/2,Hc/3,lc/3,Fc/2,Gx/2,Gx1/1

2031 PM SC	275		1	2	H1/1,H/1,lx/1,lx1/1
2031 PM SC	276		1	3	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	277		1	4	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
2031 PM SC	278		1	5	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
2031 PM SC	279		1	6	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 PM SC	280		1	5	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 PM SC	281		1	7	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 PM SC	282		1	4	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
2031 PM SC	283		1	5	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
2031 PM SC	284		1	6	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
2031 PM SC	285		1	5	H1/1,H/1,lc/1,Fx/1,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
2031 PM SC	286		1	7	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 PM SC	287		1	8	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 PM SC	288		1	9	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	289		1	1	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	290		1	1	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031	291		1	8	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2

PM SC					
2031 PM SC	292		1	7	H1/1,H/1,lc/1,Fx/1,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 PM SC	293		1	3	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	294		1	4	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx3/1
2031 PM SC	295		1	5	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/1,Cx4-2/1
2031 PM SC	296		1	6	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx5/1
2031 PM SC	297		1	5	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bc1/1,Cx/1,Cx 2/2,Cx4-2/2
2031 PM SC	298		1	7	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cc/1,Dx/1,Dx1/1
2031 PM SC	299		1	4	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx3/1
2031 PM SC	300		1	5	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/1,Cx4-2/1
2031 PM SC	301		1	6	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx5/1
2031 PM SC	302		1	5	H1/1,H/2,lc/2,Fx/2,Fx1/1,A/2,Bc/2,Bc1/2,Cx/2,Cx 2/2,Cx4-2/2
2031 PM SC	303		1	7	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/3,Bc/3,Bc1/3,Cc/2,Dx/2,Dx1/2
2031 PM SC	304		1	8	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/1,Ex/1
2031 PM SC	305		1	9	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	306		1	1	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 PM	307		1	1	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2

SC					
2031 PM SC	308		1	8	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dc/2,Ex/2
2031 PM SC	309		1	7	H1/1,H/2,lc/2,Fx/2,Fx1/2,A/4,Bc/4,Bc1/4,Cc/3,Dx/3,Dx1/2
2031 PM SC	310		1	9	H1/1,H/2,lc/2,Fc/1,Gx/1,Gx1/1
2031 PM SC	311		1	9	H1/2,H/3,lc/3,Fc/2,Gx/2,Gx1/1
2031 PM SC	312		1	1	H1/2,H/3,lc/3,Fc/2,Gc/1,Hx/1
2031 PM SC	313		1	1	H1/2,H/3,lc/3,Fc/3,Gc/2,Hx/2
2031 PM SC	314		5	6	C4/1,Cx5/1
2031 PM SC	315		5	8	C4/1,1/1,C2/1,C/1,Dc/1,Ex/1
2031 PM SC	316		5	7	C4/1,1/1,C2/1,C/1,Dx/1,Dx1/1
2031 PM SC	317		5	9	C4/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	318		5	1	C4/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	319		5	1	C4/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	320		5	2	C4/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	321		5	2	C4/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 PM SC	322		5	3	C4/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	323		5	3	C4/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1,Bc/1,Bx/1

2031 PM SC	324		5	8	C4/1,1/1,C2/1,C/2,Dc/2,Ex/2
2031 PM SC	325		5	9	C4/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	326		5	1	C4/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	327		5	1	C4/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	328		5	2	C4/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	329		5	2	C4/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 PM SC	330		5	3	C4/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1 ,Bc/1,Bx/1
2031 PM SC	331		5	3	C4/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1 ,Bc/1,Bx/1
2031 PM SC	332		5	9	C4/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	333		5	1	C4/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	334		5	1	C4/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	335		5	2	C4/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	336		5	2	C4/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 PM SC	337		5	3	C4/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1 ,Bc/1,Bx/1
2031 PM SC	338		5	3	C4/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1 ,Bc/1,Bx/1
2031 PM SC	339		5	3	C4/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ac/1,Bc/1,Bx/1
2031	340		5	4	C4/2,Cx3/1

PM SC					
2031 PM SC	341		5	8	C4/2,1/2,C2/1,C/1,Dc/1,Ex/1
2031 PM SC	342		5	7	C4/2,1/2,C2/1,C/1,Dx/1,Dx1/1
2031 PM SC	343		5	9	C4/2,1/2,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	344		5	1	C4/2,1/2,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	345		5	1	C4/2,1/2,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	346		5	2	C4/2,1/2,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	347		5	2	C4/2,1/2,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 PM SC	348		5	3	C4/2,1/2,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1 ,Bc/1,Bx/1
2031 PM SC	349		5	3	C4/2,1/2,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1 ,Bc/1,Bx/1
2031 PM SC	350		5	8	C4/2,1/2,C2/1,C/2,Dc/2,Ex/2
2031 PM SC	351		5	9	C4/2,1/2,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	352		5	1	C4/2,1/2,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	353		5	1	C4/2,1/2,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	354		5	2	C4/2,1/2,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	355		5	2	C4/2,1/2,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 PM	356		5	3	C4/2,1/2,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1 ,Bc/1,Bx/1

SC					
2031 PM SC	357		5	3	C4/2,1/2,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1 ,Bc/1,Bx/1
2031 PM SC	358		5	9	C4/2,1/2,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	359		5	1	C4/2,1/2,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	360		5	1	C4/2,1/2,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	361		5	2	C4/2,1/2,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,lx/1,lx1/1
2031 PM SC	362		5	2	C4/2,1/2,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lx/2,lx1/1
2031 PM SC	363		5	3	C4/2,1/2,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx/1,Fx1/1,A/1 ,Bc/1,Bx/1
2031 PM SC	364		5	3	C4/2,1/2,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx/2,Fx1/1,A/1 ,Bc/1,Bx/1
2031 PM SC	365		5	3	C4/2,1/2,C2/1,C/2,Dc/3,Ec/3,Ac/1,Bc/1,Bx/1
2031 PM SC	366		6	4	C5/1,Cx3/1
2031 PM SC	367		6	5	C5/1,Cx4-2/2
2031 PM SC	368		6	8	C5/1,1/1,C2/1,C/1,Dc/1,Ex/1
2031 PM SC	369		6	7	C5/1,1/1,C2/1,C/1,Dx/1,Dx1/1
2031 PM SC	370		6	9	C5/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	371		6	1	C5/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	372		6	1	C5/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hx/2



2031 PM SC	373		6	2	C5/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/2,Gc/2,Hc/1,Ix/1,Ix1/1
2031 PM SC	374		6	2	C5/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,Ix/2,Ix1/1
2031 PM SC	375		6	3	C5/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/2,Ic/1,Fx/1,Fx1/1,A/1 ,Bc/1,Bx/1
2031 PM SC	376		6	3	C5/1,1/1,C2/1,C/2,Dc/2,Ec/1,Ax/1,Ax1/1,Ax2/2,F/3,Gc/3,Hc/3,Ic/2,Fx/2,Fx1/1,A/1 ,Bc/1,Bx/1
2031 PM SC	377		6	8	C5/1,1/1,C2/1,C/2,Dc/2,Ex/2
2031 PM SC	378		6	9	C5/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	379		6	1	C5/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	380		6	1	C5/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	381		6	2	C5/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,Ix/1,Ix1/1
2031 PM SC	382		6	2	C5/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ix/2,Ix1/1
2031 PM SC	383		6	3	C5/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ic/1,Fx/1,Fx1/1,A/1 ,Bc/1,Bx/1
2031 PM SC	384		6	3	C5/1,1/1,C2/1,C/2,Dc/3,Ec/2,Ax/2,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,Ic/2,Fx/2,Fx1/1,A/1 ,Bc/1,Bx/1
2031 PM SC	385		6	9	C5/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gx/1,Gx1/1
2031 PM SC	386		6	1	C5/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/1,F/1,Gc/1,Hx/1
2031 PM SC	387		6	1	C5/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hx/2
2031 PM SC	388		6	2	C5/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/2,Gc/2,Hc/1,Ix/1,Ix1/1
2031	389		6	2	C5/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,Ix/2,Ix1/1

PM SC					
2031 PM SC	390		6	3	C5/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/2,lc/1,Fx1,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	391		6	3	C5/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ax/3,Ax1/2,Ax2/2,F/3,Gc/3,Hc/3,lc/2,Fx2,Fx1/1,A/1,Bc/1,Bx/1
2031 PM SC	392		6	3	C5/1,1/1,C2/1,C/2,Dc/3,Ec/3,Ac/1,Bc/1,Bx/1

### Normal Path Flows

OD Matrix	Path	Permitted Flow Type	Allocation Type	Fixed Flow (PCU/hr)
2031 PM SC	1	✓	Normal	
2031 PM SC	2	✓	Normal	
2031 PM SC	3	✓	Normal	
2031 PM SC	4	✓	Normal	
2031 PM SC	5	✓	Normal	
2031 PM SC	6	✓	Normal	
2031 PM SC	7	✓	Normal	
2031 PM SC	8	✓	Disabled	
2031 PM SC	9	✓	Disabled	
2031 PM SC	10	✓	Disabled	
2031 PM SC	11	✓	Disabled	
2031 PM SC	12	✓	Disabled	
2031 PM SC	13	✓	Disabled	
2031 PM SC	14	✓	Disabled	
2031 PM SC	15	✓	Disabled	
2031 PM SC	16	✓	Disabled	
2031 PM SC	17	✓	Disabled	
2031 PM SC	18	✓	Disabled	
2031 PM SC	19	✓	Disabled	
2031 PM SC	20	✓	Disabled	
2031 PM SC	21	✓	Disabled	

2031 PM SC	22	✓	Disabled	
2031 PM SC	23	✓	Disabled	
2031 PM SC	24	✓	Disabled	
2031 PM SC	25	✓	Disabled	
2031 PM SC	26	✓	Disabled	
2031 PM SC	27	✓	Disabled	
2031 PM SC	28	✓	Disabled	
2031 PM SC	29	✓	Disabled	
2031 PM SC	30	✓	Normal	
2031 PM SC	31	✓	Normal	
2031 PM SC	32	✓	Normal	
2031 PM SC	33	✓	Normal	
2031 PM SC	34	✓	Normal	
2031 PM SC	35	✓	Normal	
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2031 PM SC	37	✓	Disabled	
2031 PM SC	38	✓	Disabled	
2031 PM SC	39	✓	Disabled	
2031 PM SC	40	✓	Disabled	
2031 PM SC	41	✓	Normal	
2031 PM SC	42	✓	Disabled	
2031 PM SC	43	✓	Disabled	
2031 PM SC	44	✓	Disabled	
2031 PM SC	45	✓	Disabled	
2031 PM SC	46	✓	Disabled	
2031 PM SC	47	✓	Disabled	
2031 PM SC	48	✓	Disabled	
2031 PM SC	49	✓	Disabled	
2031 PM SC	50	✓	Disabled	
2031 PM SC	51	✓	Disabled	

2031 PM SC	52	✓	Disabled	
2031 PM SC	53	✓	Disabled	
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2031 PM SC	55	✓	Disabled	
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2031 PM SC	67	✓	Disabled	
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2031 PM SC	78	✓	Normal	
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2031 PM SC	80	✓	Disabled	
2031 PM SC	81	✓	Disabled	

2031 PM SC	82	✓	Normal	
2031 PM SC	83	✓	Normal	
2031 PM SC	84	✓	Disabled	
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2031 PM SC	109	✓	Disabled	
2031 PM SC	110	✓	Normal	
2031 PM SC	111	✓	Disabled	

2031 PM SC	112	✓	Disabled	
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2031 PM SC	139	✓	Disabled	
2031 PM SC	140	✓	Disabled	
2031 PM SC	141	✓	Disabled	

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2031 PM SC	167	✓	Normal	
2031 PM SC	168	✓	Normal	
2031 PM SC	169	✓	Fixed	0
2031 PM SC	170	✓	Normal	
2031 PM SC	171	✓	Normal	

2031 PM SC	172	✓	Normal	
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2031 PM SC	199	✓	Normal	
2031 PM SC	200	✓	Normal	
2031 PM SC	201	✓	Normal	



2031 PM SC	202	✓	Normal	
2031 PM SC	203	✓	Normal	
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2031 PM SC	229	✓	Disabled	
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2031 PM SC	231	✓	Normal	

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2031 PM SC	291	✓	Normal	

2031 PM SC	292	✓	Normal	
2031 PM SC	293	✓	Normal	
2031 PM SC	294	✓	Normal	
2031 PM SC	295	✓	Normal	
2031 PM SC	296	✓	Normal	
2031 PM SC	297	✓	Normal	
2031 PM SC	298	✓	Normal	
2031 PM SC	299	✓	Normal	
2031 PM SC	300	✓	Normal	
2031 PM SC	301	✓	Normal	
2031 PM SC	302	✓	Normal	
2031 PM SC	303	✓	Normal	
2031 PM SC	304	✓	Normal	
2031 PM SC	305	✓	Normal	
2031 PM SC	306	✓	Normal	
2031 PM SC	307	✓	Normal	
2031 PM SC	308	✓	Normal	
2031 PM SC	309	✓	Normal	
2031 PM SC	310	✓	Normal	
2031 PM SC	311	✓	Normal	
2031 PM SC	312	✓	Normal	
2031 PM SC	313	✓	Normal	
2031 PM SC	314	✓	Normal	
2031 PM SC	315	✓	Normal	
2031 PM SC	316	✓	Normal	
2031 PM SC	317	✓	Normal	
2031 PM SC	318	✓	Normal	
2031 PM SC	319	✓	Normal	
2031 PM SC	320	✓	Normal	
2031 PM SC	321	✓	Normal	

2031 PM SC	322	✓	Normal	
2031 PM SC	323	✓	Normal	
2031 PM SC	324	✓	Normal	
2031 PM SC	325	✓	Normal	
2031 PM SC	326	✓	Normal	
2031 PM SC	327	✓	Normal	
2031 PM SC	328	✓	Normal	
2031 PM SC	329	✓	Normal	
2031 PM SC	330	✓	Normal	
2031 PM SC	331	✓	Normal	
2031 PM SC	332	✓	Normal	
2031 PM SC	333	✓	Normal	
2031 PM SC	334	✓	Normal	
2031 PM SC	335	✓	Normal	
2031 PM SC	336	✓	Normal	
2031 PM SC	337	✓	Normal	
2031 PM SC	338	✓	Normal	
2031 PM SC	339	✓	Normal	
2031 PM SC	340	✓	Normal	
2031 PM SC	341	✓	Normal	
2031 PM SC	342	✓	Normal	
2031 PM SC	343	✓	Normal	
2031 PM SC	344	✓	Normal	
2031 PM SC	345	✓	Normal	
2031 PM SC	346	✓	Normal	
2031 PM SC	347	✓	Normal	
2031 PM SC	348	✓	Disabled	
2031 PM SC	349	✓	Disabled	
2031 PM SC	350	✓	Normal	
2031 PM SC	351	✓	Normal	

2031 PM SC	352	✓	Normal	
2031 PM SC	353	✓	Normal	
2031 PM SC	354	✓	Normal	
2031 PM SC	355	✓	Normal	
2031 PM SC	356	✓	Disabled	
2031 PM SC	357	✓	Disabled	
2031 PM SC	358	✓	Normal	
2031 PM SC	359	✓	Normal	
2031 PM SC	360	✓	Normal	
2031 PM SC	361	✓	Disabled	
2031 PM SC	362	✓	Disabled	
2031 PM SC	363	✓	Disabled	
2031 PM SC	364	✓	Disabled	
2031 PM SC	365	✓	Normal	
2031 PM SC	366	✓	Normal	
2031 PM SC	367	✓	Normal	
2031 PM SC	368	✓	Normal	
2031 PM SC	369	✓	Normal	
2031 PM SC	370	✓	Normal	
2031 PM SC	371	✓	Normal	
2031 PM SC	372	✓	Normal	
2031 PM SC	373	✓	Normal	
2031 PM SC	374	✓	Normal	
2031 PM SC	375	✓	Normal	
2031 PM SC	376	✓	Normal	
2031 PM SC	377	✓	Normal	
2031 PM SC	378	✓	Normal	
2031 PM SC	379	✓	Normal	
2031 PM SC	380	✓	Normal	
2031 PM SC	381	✓	Normal	

2031 PM SC	382	✓	Normal	
2031 PM SC	383	✓	Normal	
2031 PM SC	384	✓	Normal	
2031 PM SC	385	✓	Normal	
2031 PM SC	386	✓	Normal	
2031 PM SC	387	✓	Normal	
2031 PM SC	388	✓	Normal	
2031 PM SC	389	✓	Normal	
2031 PM SC	390	✓	Normal	
2031 PM SC	391	✓	Normal	
2031 PM SC	392	✓	Normal	

## Signal Timings

Network Default: 88s cycle time; 88 steps

### Controller Stream 1

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
1	(untitled)		1	NetworkDefault	88

### Controller Stream 1 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
1	Unspecified						Absolute

### Controller Stream 1 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
1	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
1	A	(untitled)	7	300	0	0	Not Specified
1	B	(untitled)	7	300	0	0	Not Specified

1	C	(untitled)	7	300	0	0	Not Specified
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### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
1	1	A	1
1	2	B,C	1

### Losing/ Gaining delays at each Controller Stream

Controller Stream	Delay	Type	Phase	From Stage	To Stage	Relative Delay	Absolute Delay
1	1	Losing	B	2	1	9	
1	2	Gaining	A	2	1	0	10
1	3	Losing	A	1	2	2	

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
1	1	(untitled)	Single	1,2	72,30

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
1	1	✓	1	A	44	72	28	1	5
1	2	✓	2	B,C	79	30	39	1	7

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
1	A	1	✓	44	74	30
1	B	1	✓	79	39	48
1	C	1	✓	79	30	39

### Intergreen Matrix for Controller Stream 1

		To		
		A	B	C
From	A		5	5
	B	5		
	C	14		





2	Unspecified						Absolute
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### Controller Stream 2 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
2	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
2	A	(untitled)	7	300	0	0	Not Specified
2	B	(untitled)	7	300	0	0	Not Specified
2	C	(untitled)	5	300	0	0	Not Specified

### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
2	1	A	1
2	2	B,C	1

### Losing/ Gaining delays at each Controller Stream

Controller Stream	Delay	Type	Phase	From Stage	To Stage	Relative Delay
2	1	Losing	B	2	1	5

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
2	1	(untitled)	Single	1,2	5,35

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
2	1	✓	1	A	45	5	48	1	7
2	2	✓	2	B,C	10	35	25	1	5

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
2	A	1	✓	45	5	48

2	B	1	✓	10	40	30
2	C	1	✓	10	35	25

**Intergreen Matrix for Controller Stream 2**

		To		
		A	B	C
From	A		5	5
	B	5		
	C	10		

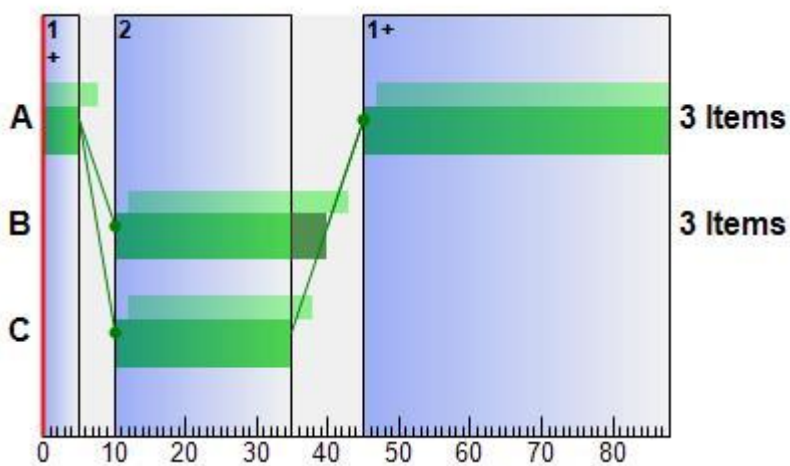
**Interstage Matrix for Controller Stream 2**

		To	
		1	2
From	1	0	5
	2	10	0

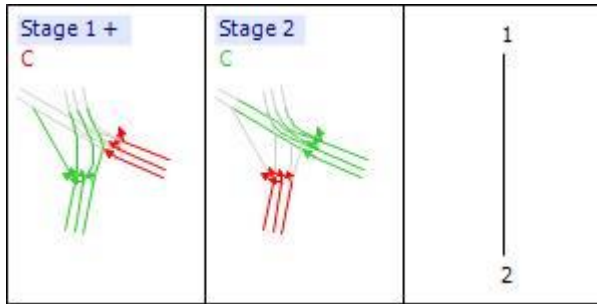
**Banned Stage transitions for Controller Stream 2**

		To	
		1	2
From	1		
	2		

**Phase Timings Diagram for Controller Stream 2**



**Stage Sequence Diagram for Controller Stream 2**



### Controller Stream 3

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
3	(untitled)		1	NetworkDefault	88

### Controller Stream 3 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
3	Unspecified						Absolute

### Controller Stream 3 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
3	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
3	A	(untitled)	7	300	0	0	Not Specified
3	B	(untitled)	7	300	0	0	Not Specified
3	C	(untitled)	5	300	0	0	Not Specified

### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
3	1	A	1
3	2	B,C	1

### Losing/ Gaining delays at each Controller Stream

Controller Stream	Delay	Type	Phase	From Stage	To Stage	Relative Delay	Absolute Delay
3	1	Losing	B	2	1	9	
3	2	Gaining	A	2	1	0	10

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
3	1	(untitled)	Single	1,2	43,2

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
3	1	✓	1	A	16	43	27	1	7
3	2	✓	2	B,C	48	2	42	1	5

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
3	A	1	✓	16	43	27
3	B	1	✓	48	11	51
3	C	1	✓	48	2	42

## Intergreen Matrix for Controller Stream 3

		To		
		A	B	C
From	A		5	5
	B	5		
	C	14		

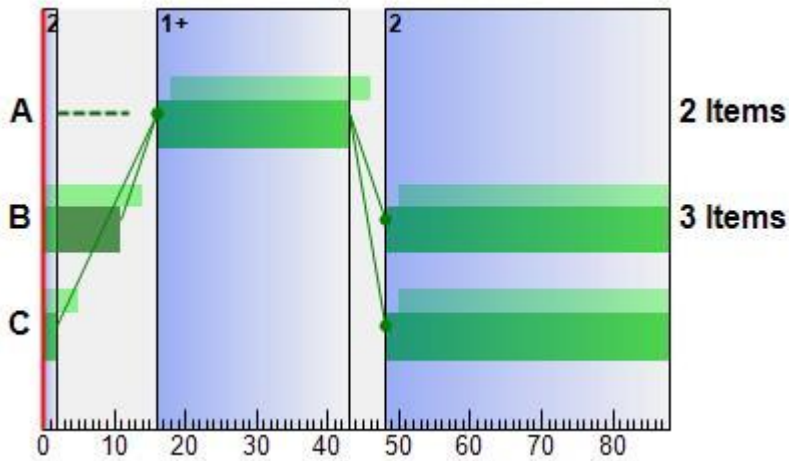
## Interstage Matrix for Controller Stream 3

		To	
		1	2
From	1	0	5
	2	14	0

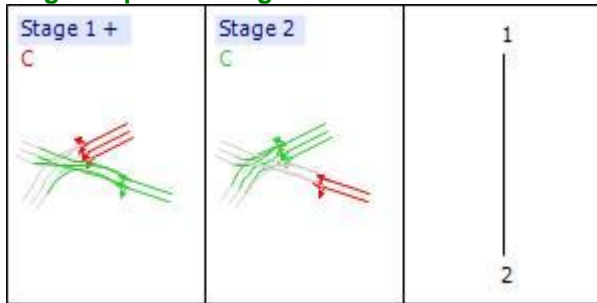
## Banned Stage transitions for Controller Stream 3

		To	
		1	2
From	1		
	2		

## Phase Timings Diagram for Controller Stream 3



### Stage Sequence Diagram for Controller Stream 3



### Controller Stream 4

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
4	(untitled)		1	NetworkDefault	88

### Controller Stream 4 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
4	Unspecified						Absolute

### Controller Stream 4 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
4	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
4	A	(untitled)	7	300	0	0	Not Specified
4	B	(untitled)	7	300	0	0	Not Specified

4	C	(untitled)	7	300	0	0	Not Specified
4	D	(untitled)	7	300	0	0	Not Specified
4	E	(untitled)	5	300	0	0	Not Specified

### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
4	1	A,B,D	1
4	2	C	1
4	3	E	1

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
4	1	(untitled)	Single	1,3,2	51,62,7
4	2	(untitled)	Single	1,2,3	0,29,53

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
4	1	✓	1	A,B,D	13	51	38	1	7
4	2	✓	3	E	56	62	6	1	5
4	3	✓	2	C	74	7	21	1	7

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
4	A	1	✓	13	51	38
4	B	1	✓	13	51	38
4	C	1	✓	74	7	21
4	D	1	✓	12	51	39
4	E	1	✓	56	62	6

### Intergreen Matrix for Controller Stream 4

From	To				
	A	B	C	D	E
A			8		5

	<b>B</b>			7		5
	<b>C</b>	6	6		5	5
	<b>D</b>			8		5
	<b>E</b>	12	12	12	12	

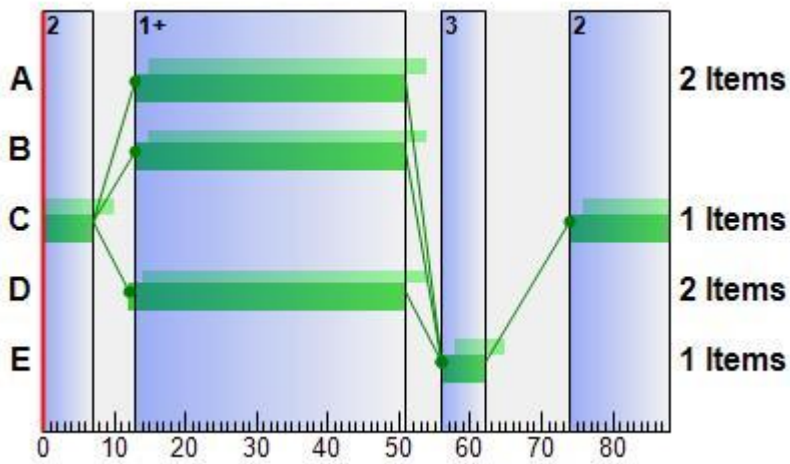
**Interstage Matrix for Controller Stream 4**

		To		
		1	2	3
From	1	0	8	5
	2	6	0	5
	3	12	12	0

**Banned Stage transitions for Controller Stream 4**

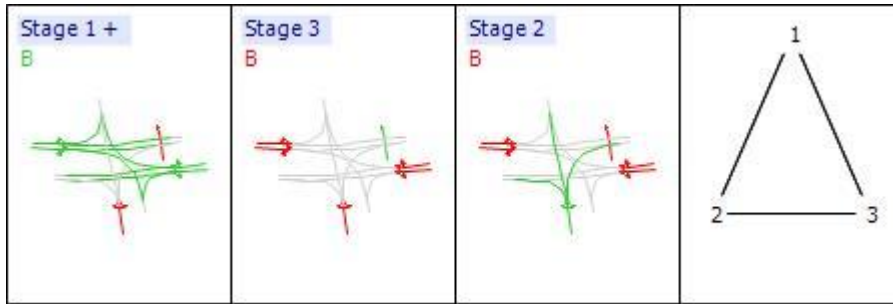
		To		
		1	2	3
From	1			
	2			
	3			

**Phase Timings Diagram for Controller Stream 4**



**Stage Sequence Diagram for Controller Stream 4**





## Controller Stream 5

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
5	(untitled)		1	NetworkDefault	88

## Controller Stream 5 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
5	Unspecified						Absolute

## Controller Stream 5 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
5	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
5	A	(untitled)	7	300	0	0	Not Specified
5	B	(untitled)	5	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
5	1	A	1
5	2	B	1

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
5	1	(untitled)	Single	1,2	86,8

## Resultant Stages

Controller	Stage	Is Base	Library	Phases In	Stage	Stage	Stage	User Stage	Stage
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Stream		Stage	Stage ID	This Stage	Start (s)	End (s)	Duration (s)	Minimum (s)	Minimum (s)
5	1	✓	1	A	19	86	67	1	7
5	2	✓	2	B	3	8	5	1	5

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
5	A	1	✓	19	86	67
5	B	1	✓	3	8	5

### Intergreen Matrix for Controller Stream 5

		To	
		A	B
From	A		5
	B	11	

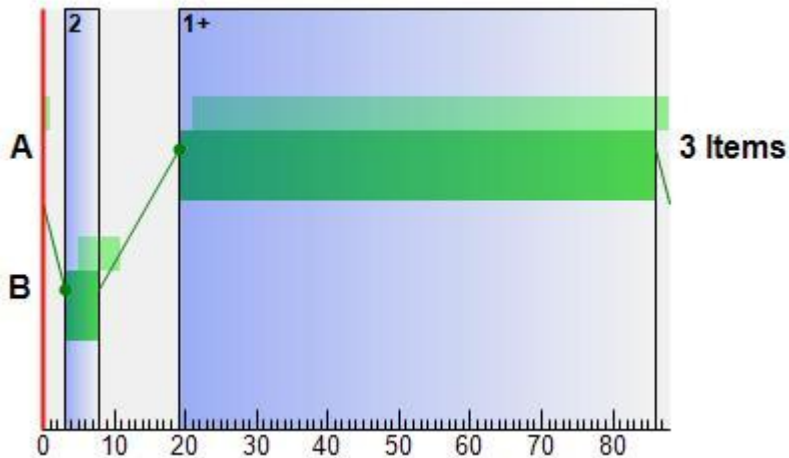
### Interstage Matrix for Controller Stream 5

		To	
		1	2
From	1	0	5
	2	11	0

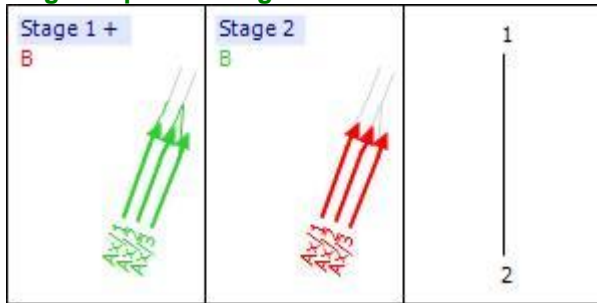
### Banned Stage transitions for Controller Stream 5

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 5



### Stage Sequence Diagram for Controller Stream 5



### Controller Stream 6

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
6	(untitled)		1	NetworkDefault	88

### Controller Stream 6 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
6	Unspecified						Absolute

### Controller Stream 6 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
6	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
6	A	(untitled)	7	300	0	0	Not Specified
6	B	(untitled)	5	300	0	0	Not Specified

### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
6	1	A	1
6	2	B	1

### Losing/ Gaining delays at each Controller Stream

Controller Stream	Delay	Type	Phase	From Stage	To Stage	Relative Delay	Absolute Delay
6	1	Gaining	A	2	1	0	8

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
6	1	(untitled)	Single	1,2	39,49

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
6	1	✓	1	A	57	39	70	1	7
6	2	✓	2	B	44	49	5	1	5

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
6	A	1	✓	57	39	70
6	B	1	✓	44	49	5

### Intergreen Matrix for Controller Stream 6

		To	
		A	B
From	A		5
	B	8	

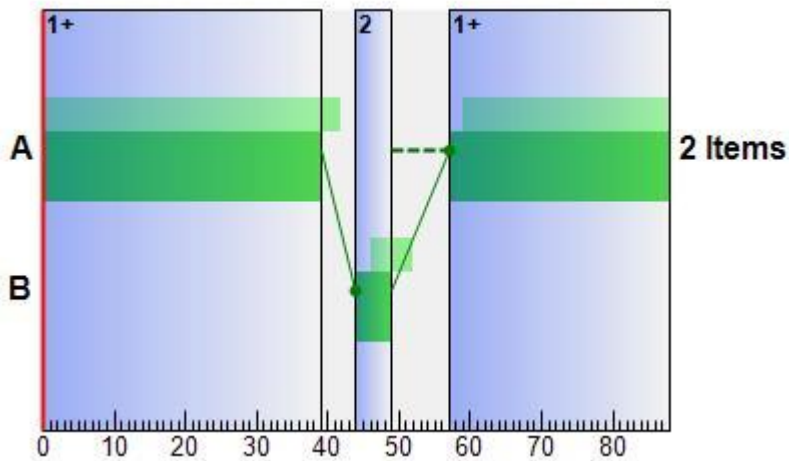
### Interstage Matrix for Controller Stream 6

		To	
		1	2
From	1	0	5
	2	8	0

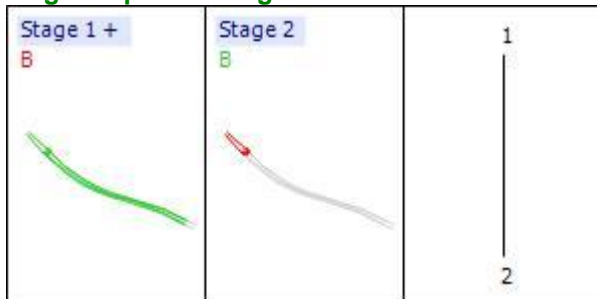
### Banned Stage transitions for Controller Stream 6

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 6



### Stage Sequence Diagram for Controller Stream 6



### Controller Stream 7

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
7	(untitled)		1	NetworkDefault	88

### Controller Stream 7 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
7	Unspecified						Absolute

### Controller Stream 7 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
7	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
7	A	(untitled)	7	300	0	0	Not Specified
7	B	(untitled)	5	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
7	1	A	1
7	2	B	1

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
7	1	(untitled)	Single	1,2	31,41

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
7	1	✓	1	A	51	31	68	1	7
7	2	✓	2	B	36	41	5	1	5

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
7	A	1	✓	51	31	68
7	B	1	✓	36	41	5

## Intergreen Matrix for Controller Stream 7

		To	
		A	B
From	A		5
	B	10	

## Interstage Matrix for Controller Stream 7

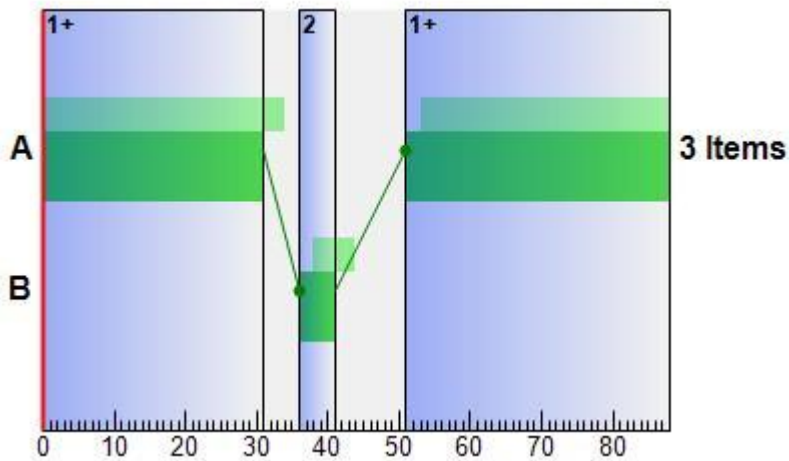
		To	
		1	2
From	1	0	5

	2	10	0
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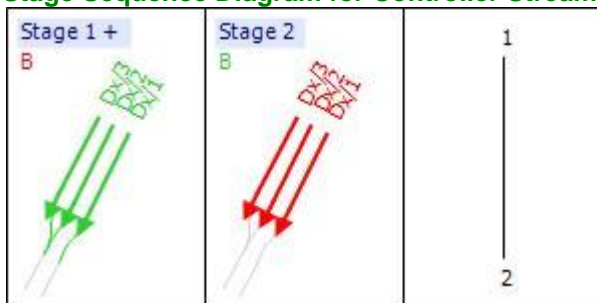
### Banned Stage transitions for Controller Stream 7

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 7



### Stage Sequence Diagram for Controller Stream 7



### Controller Stream 8

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
8	(untitled)		1	NetworkDefault	88

### Controller Stream 8 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
8	Unspecified						Absolute

### Controller Stream 8 - Optimisation

Controller	Allow Offset	Allow Green Split	Optimisation	Auto	Enable Stage

Stream	Optimisation	Optimisation	Level	Redistribute	Constraint
8	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
8	A	(untitled)	7	300	0	0	Not Specified
8	B	(untitled)	7	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
8	1	A	1
8	2	B	1

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
8	1	(untitled)	Single	1,2	80,12

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
8	1	✓	1	A	17	80	63	1	7
8	2	✓	2	B	85	12	15	1	7

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
8	A	1	✓	17	80	63
8	B	1	✓	85	12	15

## Intergreen Matrix for Controller Stream 8

		To	
		A	B
From	A		5
	B	5	

## Interstage Matrix for Controller Stream 8





9	Unspecified						Absolute
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### Controller Stream 9 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
9	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
9	A	(untitled)	7	300	0	0	Not Specified
9	B	(untitled)	7	300	0	0	Not Specified

### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
9	1	A	1
9	2	B	1

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
9	1	(untitled)	Single	1,2	17,85

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
9	1	✓	1	A	2	17	15	1	7
9	2	✓	2	B	22	85	63	1	7

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
9	A	1	✓	2	17	15
9	B	1	✓	22	85	63

### Intergreen Matrix for Controller Stream 9

		To	
		A	B
From	A		5

	B	5	
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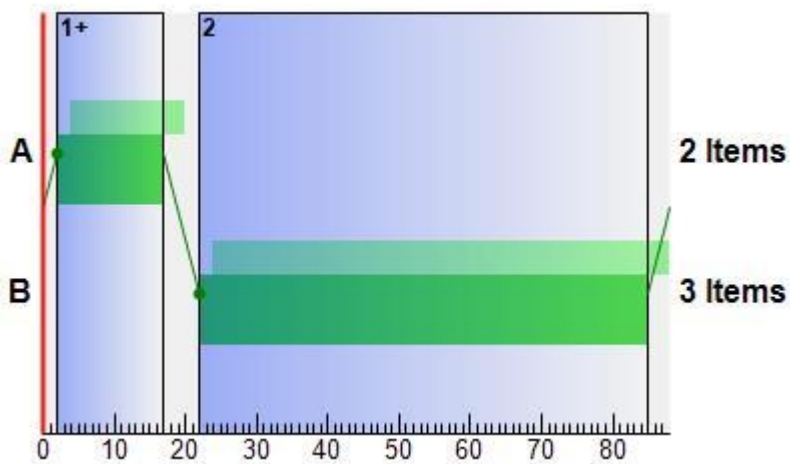
### Interstage Matrix for Controller Stream 9

		To	
		1	2
From	1	0	5
	2	5	0

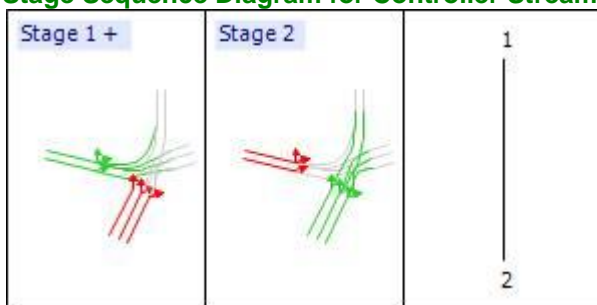
### Banned Stage transitions for Controller Stream 9

		To	
		1	2
From	1		
	2		

### Phase Timings Diagram for Controller Stream 9



### Stage Sequence Diagram for Controller Stream 9



### Controller Stream 10

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
10	(untitled)		1	NetworkDefault	88

## Controller Stream 10 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
10	Unspecified						Absolute

## Controller Stream 10 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
10	✓	✓	Offsets Only		

## Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
10	A	(untitled)	7	300	0	0	Not Specified
10	B	(untitled)	7	300	0	0	Not Specified

## Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
10	1	A	1
10	2	B	1

## Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
10	1	(untitled)	Single	1,2	73,19

## Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
10	1	✓	1	A	24	73	49	1	7
10	2	✓	2	B	78	19	29	1	7

## Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
10	A	1	✓	24	73	49
10	B	1	✓	78	19	29

## Intergreen Matrix for Controller Stream 10

		To	
		A	B
From	A		5
	B	5	

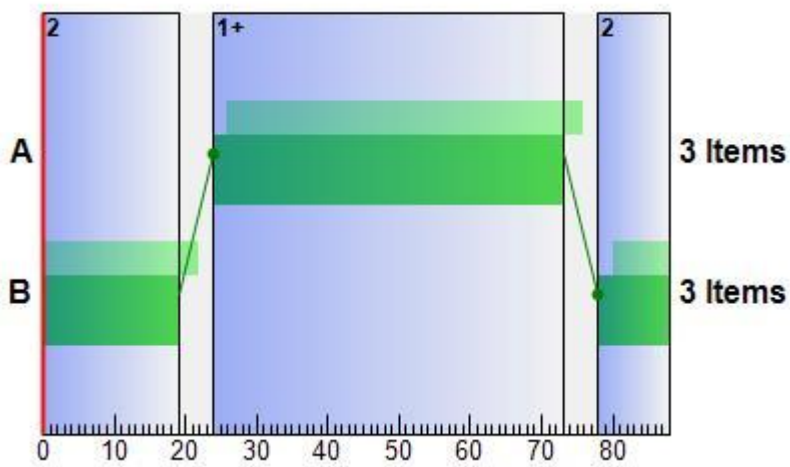
**Interstage Matrix for Controller Stream 10**

		To	
		1	2
From	1	0	5
	2	5	0

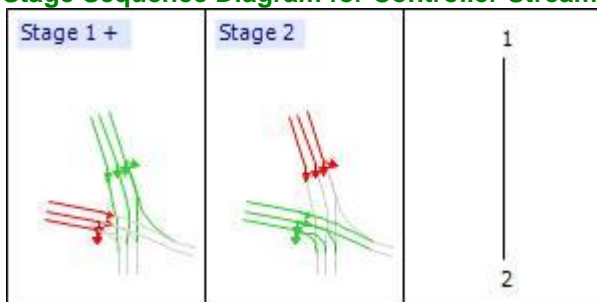
**Banned Stage transitions for Controller Stream 10**

		To	
		1	2
From	1		
	2		

**Phase Timings Diagram for Controller Stream 10**



**Stage Sequence Diagram for Controller Stream 10**



**Controller Stream 11**

Controller Stream	Name	Description	Use Sequence	Cycle Time Source	Cycle Time (s)
11	(untitled)		1	NetworkDefault	88

### Controller Stream 11 - Properties

Controller Stream	Manufacturer Name	Type	Model Number	(Telephone) Line Number	Site Number	Grid Reference	Gaining Delay Type
11	Unspecified						Absolute

### Controller Stream 11 - Optimisation

Controller Stream	Allow Offset Optimisation	Allow Green Split Optimisation	Optimisation Level	Auto Redistribute	Enable Stage Constraint
11	✓	✓	Offsets Only		

### Phases

Controller Stream	Phase	Name	Minimum Green (s)	Maximum Green (s)	Relative Start Displacement (s)	Relative End Displacement (s)	Type
11	A	(untitled)	7	300	0	0	Not Specified
11	B	(untitled)	7	300	0	0	Not Specified

### Library Stages

Controller Stream	Library Stage	Phases In Stage	User Stage Minimum (s)
11	1	A	1
11	2	B	1

### Stage Sequences

Controller Stream	Sequence	Name	Multiple Cycling	Stage IDs	Stage Ends
11	1	(untitled)	Single	1,2	12,74

### Resultant Stages

Controller Stream	Stage	Is Base Stage	Library Stage ID	Phases In This Stage	Stage Start (s)	Stage End (s)	Stage Duration (s)	User Stage Minimum (s)	Stage Minimum (s)
11	1	✓	1	A	79	12	21	1	7
11	2	✓	2	B	17	74	57	1	7

### Resultant Phase Green Periods

Controller Stream	Phase	Green Period	Is Base Green Period	Start Time (s)	End Time (s)	Duration (s)
11	A	1	✓	79	12	21

11	B	1	✓	17	74	57
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**Intergreen Matrix for Controller Stream 11**

		To	
		A	B
From	A		5
	B	5	

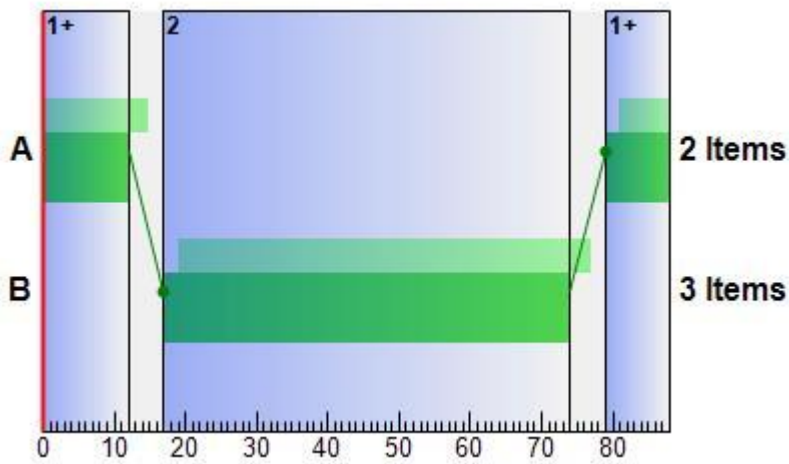
**Interstage Matrix for Controller Stream 11**

		To	
		1	2
From	1	0	5
	2	5	0

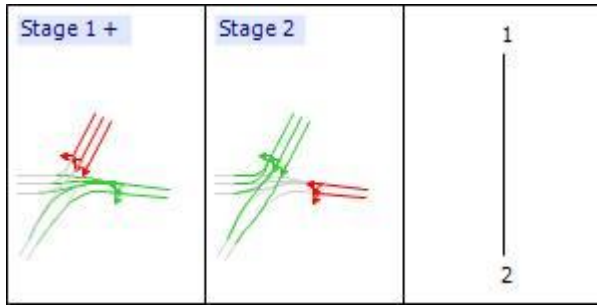
**Banned Stage transitions for Controller Stream 11**

		To	
		1	2
From	1		
	2		

**Phase Timings Diagram for Controller Stream 11**



**Stage Sequence Diagram for Controller Stream 11**



## Final Prediction Table

### Link Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUE S		WEIGHTS		PENALTIES	P. I.
Link	Name	Traffic No de	Cont roller Stream	Phase	Calculate d Flow Entering (PCU /hr)	Calculate d Sat Flow (PCU /hr)	Actual Green (s (per cycle))	Waste d Time Total (s (per cycle))	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Journey Time Per PCU (s)	Mean Delay Per PCU (s)	Mean Stops Per PCU (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Delay Weighting (%)	Stop Weighting (%)	Cost Of Penalties (£ per hr)	P. I.
1 P	(untitled)	23	4	E	0 <	0	0	0.00	0	0	44.50	43.06	0.00	11.78+	11.78	100	100	0.00	0.00

### Traffic Stream Results

			SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUE S		WEIGHTS		PENALTI ES	P.I .	
Arm	Traffic Stream	Name	Traffic No de	Cont roller Stream	Phase	Calculate d Flow Entering (PCU /hr)	Calculate d Sat Flow (PCU /hr)	Actual Green (s (per cycle))	Waste d Time Total (s (per cycle))	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Journey Time Per PCU (s)	Mean Delay Per PCU (s)	Mean Stops Per PCU (%)	Mean Max Queue (PCU)	Max End Of Red Queue (PCU)	Delay Weighting Multiplier (%)	Stop Weighting Multiplier (%)	Cost Of Penalties (£ per hr)	P. I .
1	1	(untitled)	24			895	1800	88	16.00	50	81	8.44	0.99	0.00	0.25		100	100	0.00	3.49
1	2	(untitled)	24			681	1800	88	42.	38	138	8.5	1.0	21.	11.		100	100	0.00	7.6



		itled )						00			5	9	28	85					3	
A	1	(untitled )	1	1	A	323	2128	30	0.00	43	109	23.41	15.95	62.79	5.28	4.25	40	20	0.00	9.45
A	2	(untitled )	1	1	A	776 <	2279	30	0.00	97!	-7	70.14	58.95	128.82	26.69+	18.58	40	20	0.00	78.67
A	3	A38 North Entry	1	1	A	483	2279	30	0.00	60	50	31.82	20.64	72.87	9.02	7.12	40	20	0.00	18.01
A	4	(untitled )	1	1	A	775 <	2279	30	0.00	97!	-7	69.98	58.80	126.60	26.12+	18.14	40	20	0.00	78.27
Ax1	1	(untitled )	21			569	1800	88	19.00	32	185	1.97	0.48	1.32	2.09		100	100	0.00	1.32
Ax1	2	(untitled )	21			1618 <	1800	88	8.00	90	0	14.69	13.20	83.71	43.36+		100	100	0.00	128.27
Ax2	1	A38 North Exit	17			1385	1800	88	0.00	77	17	14.49	3.30	3.73	2.28		100	100	0.00	19.73
Ax2	2	A38 North Exit	17			803	1800	88	1.00	45	102	11.99	0.80	0.00	0.18		100	100	0.00	2.54
B	1	(untitled )	2			26	260	88	61.00	10	802	4.58	2.34	23.89	0.12		100	100	0.00	0.44
B	2	(untitled )	2			24	65	88	31.00	37	144	42.10	39.86	101.04	0.61		100	100	0.00	4.56
Bc1	1	(untitled )	2			649	1800	88	3.00	36	150	2.80	0.56	0.00	0.10		100	100	0.00	1.44
Bc1	2	(untitled )	2			1186	1800	88	1.00	66	37	4.16	1.92	0.00	0.63		100	100	0.00	9.00
Bc1	3	(untitled )	2			796	1800	88	13.00	44	104	3.03	0.79	0.00	0.18		100	100	0.00	2.49
Bc1	4	(untitled )	2			1088	1800	88	31.00	60	49	3.76	1.52	0.00	0.46		100	100	0.00	6.54
C	1	(untitled )	3	3	A	666	3163 f	27	0.00	66	36	43.62	28.71	89.22	14.95	12.54	40	0	0.00	30.17

		)																		
C	2	(untitled)	3	3	A	910	3163	27	0.00	90!	0	58.31	43.40	111.24	25.51	20.08	40	0	0.00	62.31
C3-1	1	(untitled)	23			0	0	88	88.00	0	-100	0.00	0.00	0.00	0.00		100	100	0.00	0.00
Cx2	1	(untitled)	23	4	A	578	2083	38	0.00	63	44	47.91	17.04	58.79	8.72	6.68	100	100	0.00	49.86
Cx2	2	(untitled)	23	4	A	792	2083	38	0.00	86	5	56.77	25.90	73.35	14.91	10.55	100	100	0.00	99.80
Cx3	1	(untitled)				61	1800	88	47.00	3	2556	4.46	0.04	0.00	0.00		100	100	0.00	0.01
Cx4-2	1	(untitled)				578	1800	88	44.00	32	180	6.55	0.78	13.98	6.74		100	100	0.00	4.40
Cx4-2	2	(untitled)				563	1800	88	26.00	31	188	6.23	0.46	0.00	0.07		100	100	0.00	1.01
Cx5	1	(untitled)				302	1800	88	46.00	17	437	4.87	0.20	0.00	0.02		100	100	0.00	0.24
D	1	(untitled)	4	2	A	812	2159	48	0.00	68	33	33.73	16.95	68.67	14.68	9.49	40	0	0.00	21.71
D	2	(untitled)	4	2	A	872	2317	48	21.00	68	33	33.53	16.75	68.48	15.72	10.15	40	0	0.00	23.05
D	3	(untitled)	4	2	A	870	2317	48	21.00	67	33	33.49	16.71	68.35	15.68	10.12	40	0	0.00	22.94
Dx1	1	A38 South Exit				838	2155	88	5.00	39	131	14.51	0.53	0.00	0.12		100	100	0.00	1.76
Dx1	2	A38 South Exit				1515	2155	88	21.00	70	28	23.11	9.13	78.32	36.22		100	100	0.00	123.04
E	1	(untitled)	5			471<	382	88	24.00	123!	-27	384.46	369.55	312.97	55.93+		40	100	0.00	313.41
E	2	(untitled)	5			626	735	88	0.00	85	6	40.99	26.08	82.98	13.44		40	100	0.00	42.62

F	1	(untitled)	10	8	A	1385	2134	63	0.00	89	1	34.36	18.70	67.76	24.42	13.82	100	100	0.00	132.64
F	2	(untitled)	10	8	A	716	2284	63	0.00	43	109	22.34	6.68	42.70	8.02	5.72	100	100	0.00	28.81
F	3	(untitled)	10	8	A	86	2284	63	8.00	5	1629	19.26	3.60	25.94	0.60	0.60	100	100	0.00	1.96
G	1	(untitled)	11	9	A	296	2123	15	0.00	77	17	54.59	48.93	107.78	8.03	7.13	50	20	0.00	30.63
G	2	(untitled)	11	9	A	313	2949f	15	0.00	58	54	42.24	36.57	90.44	7.10	6.67	50	20	0.00	24.42
H	1	(untitled)	12	10	A	469	2134	49	0.00	39	133	18.61	11.45	52.75	6.38	5.07	100	100	0.00	29.23
H	2	(untitled)	12	10	A	501	2284	49	6.00	39	133	18.54	11.39	52.66	6.80	5.41	100	100	0.00	31.07
H	3	(untitled)	12	10	A	63	2284	49	0.00	5	1754	15.68	8.52	41.76	0.68	0.67	100	100	0.00	2.97
I	1	(untitled)	13	11	A	528<	2123	21	0.00	99!	-10	107.95	103.47	162.00	23.10+	20.02	40	0	0.00	86.20
I	2	(untitled)	13	11	A	566<	2601f	21	0.00	87	3	51.99	47.52	109.86	15.74+	13.07	40	0	0.00	42.44
A c	1	(untitled)	1	1	B	405<	2112	48	0.00	34	161	16.59	12.56	72.50	7.59+	5.49	100	100	56.46	86.06
A c	2	(untitled)	1	1	B	410	2263	48	24.00	33	177	16.57	11.78	65.01	6.89	5.25	100	100	0.00	26.90
A c	3	(untitled)	1	1	B	626	2263	48	11.00	50	81	10.84	6.81	19.21	3.04	2.82	100	100	0.00	20.73
A x	1	(untitled)	8	5	A	569	1965	67	0.00	37	140	3.91	2.79	19.29	3.12	2.60	100	100	0.00	12.60
A x	2	(untitled)	8	5	A	1153<	2105	67	68.00	71	27	6.27	5.15	19.94	5.94+	5.33	100	100	0.00	36.69
A x	3	(untitled)	8	5	A	465	2105	67	68.00	29	215	3.08	1.96	13.66	1.80	1.73	100	100	0.00	7.26
B	1	(untitled)	6			728	1800	88	3.0	40	123	8.3	0.8	10.	6.2		100	100	0.00	5.1

<b>c</b>		itled )						0			4	9	96	1					4	
<b>B c</b>	<b>2</b>	(unt itled )	6			1186 <	1800	88	2.0 0	66	37	12. 15	4.6 9	59. 17	26. 21 +		100	100	0.00	44. 75
<b>B c</b>	<b>3</b>	(unt itled )	6			796	1800	88	0.0 0	44	104	8.6 7	1.2 2	16. 35	8.3 4		100	100	0.00	8.0 5
<b>B c</b>	<b>4</b>	(unt itled )	6			1088 <	1800	88	0.0 0	60	49	11. 13	3.6 8	45. 63	19. 53 +		100	100	0.00	31. 90
<b>B x</b>	<b>1</b>	(unt itled )				79	1800	88	50. 00	4	194 2	7.5 0	0.0 5	0.0 0	0.0 0		100	100	0.00	0.0 1
<b>C 2</b>	<b>1</b>	(unt itled )	9			1576	1800	88	0.0 0	88	3	32. 56	16. 60	78. 66	34. 59		100	100	0.00	14 3.4 6
<b>C 4</b>	<b>1</b>	(unt itled )	23	4	D	660	1887	39	0.0 0	77	17	33. 46	27. 00	87. 13	14. 64	10. 06	100	100	0.00	88. 96
<b>C 4</b>	<b>2</b>	(unt itled )	23	4	D	718 <	2055	39	0.0 0	77	17	32. 87	26. 41	86. 47	15. 81 +	10. 83	100	100	0.00	94. 95
<b>C 5</b>	<b>1</b>	(unt itled )	23	4	C	332	1906	21	0.0 0	70	29	42. 58	38. 48	96. 65	8.0 7	6.8 7	100	100	0.00	60. 81
<b>C c</b>	<b>1</b>	(unt itled )	3	3	B	491	2059	51	7.0 0	40	123	6.1 8	1.3 4	2.4 3	0.3 0	0.3 0	100	100	0.00	2.9 7
<b>C c</b>	<b>2</b>	(unt itled )	3	3	B	797 <	2209	51	0.0 0	61	47	13. 35	8.5 1	35. 68	7.3 7+	6.1 7	100	100	5.81	41. 79
<b>C c</b>	<b>3</b>	(unt itled )	3	3	B	1111 <	2181	51	0.0 0	86	4	18. 58	13. 74	38. 38	12. 31 +	8.9 2	100	100	60.71	13 4.7 5
<b>C x</b>	<b>1</b>	A40 97 Kin sbury Road Exit	24	6	A	667	2120	70	0.0 0	39	131	6.6 6	1.0 7	4.4 5	0.8 8	0.7 6	100	100	0.00	4.5 3
<b>C x</b>	<b>2</b>	A40 97 Kin sbury Road Exit	24	6	A	703	2120	70	0.0 0	41	119	6.9 4	1.3 5	6.1 5	1.1 9	1.1 2	100	100	0.00	6.2 4

Dc	1	(untitled)	4	2	B	581	2059	30	0.00	80	12	27.98	21.27	60.22	9.04	7.89	1000	1000	0.00	60.099
Dc	2	(untitled)	4	2	B	647	2172	30	2.00	85	6	31.18	24.47	61.35	7.61	7.06	100	100	0.00	75.34
Dc	3	(untitled)	4	2	B	394	2185	30	8.00	51	76	18.68	11.97	20.19	1.95	1.95	100	100	0.00	21.19
Dx	1	(untitled)	7	7	A	838	1915	68	7.00	56	61	6.33	3.20	15.83	6.19	2.21	100	100	0.00	18.24
Dx	2	(untitled)	7	7	A	797	2055	68	15.00	49	82	4.31	1.17	4.57	6.56	0.24	100	100	0.00	5.79
Dx	3	(untitled)	7	7	A	718	2055	68	14.00	45	102	4.03	0.90	1.02	0.75	0.18	100	100	0.00	2.96
Ec	1	(untitled)	5			485	1800	88	6.00	27	234	4.10	0.37	0.00	0.05		100	100	0.00	0.71
Ec	2	(untitled)	5			1069<	1800	88	20.00	59	52	7.13	3.40	42.64	17.56+		100	100	123.82	15.297
Ec	3	(untitled)	5			1067<	1800	88	12.00	59	52	7.11	3.38	42.45	17.52+		100	100	123.46	15.240
Ex	1	(untitled)				1115	1800	88	0.00	62	45	9.36	1.90	14.64	11.70		100	100	0.00	13.67
Ex	2	(untitled)				440	1800	88	50.00	24	268	7.79	0.33	0.75	1.11		100	100	0.00	0.68
Fc	1	(untitled)	10	8	B	71	2166	15	0.00	18	399	28.27	20.00	28.85	0.50	0.50	100	100	0.00	5.90
Fc	2	(untitled)	10	8	B	166	2317	15	0.00	39	128	36.73	28.45	60.47	2.53	2.35	100	100	0.00	20.08
Fc	3	(untitled)	10	8	B	32	2317	15	0.00	8	1085	27.62	19.35	28.11	0.22	0.22	100	100	0.00	2.57
Fx	1	(untitled)	20			1183	2112	88	0.00	56	61	16.00	1.08	0.00	0.36		100	100	0.00	5.05
Fx	2	(untitled)	20			1174	2263	88	0.00	52	73	15.77	0.86	0.00	0.28		100	100	0.00	3.97
F	1	(untitled)	22			1099	1800	88	2.00	61	47	9.00	1.50	0.00	0.40		100	100	0.00	6.7

x 1		itled )					0			2	6	0	8					8		
F x 1	2	(unt itled )	22			1258	1800	88	1.0 0	70	29	9.8 9	2.4 3	10. 71	12. 46		100	100	0.00	16. 43
G 1	1	(unt itled )	14			609	2112	88	0.0 0	29	212	4.8 2	0.3 5	0.0 0	0.0 6		100	100	0.00	0.8 3
G c	1	(unt itled )	11	9	B	662	2166	63	0.0 0	42	114	10. 09	2.2 7	9.7 6	1.6 4	1.5 3	100	100	0.00	6.8 5
G c	2	(unt itled )	11	9	B	748	2317	63	0.0 0	44	103	10. 07	2.2 4	9.8 0	2.1 9	1.6 4	100	100	0.22	7.9 0
G c	3	(unt itled )	11	9	B	86	2317	63	7.0 0	5	165 4	8.7 5	0.9 2	4.0 2	0.0 8	0.0 8	100	100	0.00	0.3 6
G x	1 NB T	(unt itled )	18			826	2112	88	2.0 0	39	130	4.7 2	0.5 5	0.0 0	0.1 3		100	100	0.00	1.7 8
G x	2 NB T	(unt itled )	18			134	2263	88	70. 00	6	142 0	4.2 3	0.0 5	0.0 0	0.0 0		100	100	0.00	0.0 3
G x 1	1 NB T	(unt itled )				960	1965	88	0.0 0	49	84	2.3 7	0.8 8	1.3 0	1.9 0		100	100	0.00	3.7 4
H 1	1	(unt itled )	15			970	2112	88	0.0 0	46	96	8.1 8	0.7 2	0.0 0	0.1 9		100	100	0.00	2.7 7
H 1	2	(unt itled )	15			63	2263	88	0.0 0	3	313 3	7.4 8	0.0 2	0.0 0	0.0 0		100	100	0.00	0.0 1
H c	1	(unt itled )	12	10	B	114	2166	29	3.0 0	16	481	29. 07	21. 58	66. 23	1.9 0	1.8 1	100	100	0.00	10. 84
H c	2	(unt itled )	12	10	B	313	2317	29	3.0 0	40	127	24. 60	17. 11	38. 78	3.0 1	2.8 9	100	100	0.19	23. 09
H c	3	(unt itled )	12	10	B	313	2317	29	16. 00	40	127	14. 93	7.4 3	45. 00	5.6 9	0.8 5	100	100	214.2 0	22 5.4 1
H x	1	(unt itled )				703	2112	88	4.0 0	33	171	7.8 8	0.4 2	0.0 0	0.0 8		100	100	0.00	1.1 8
H x	2	(unt itled )				662	2263	88	18. 00	29	208	7.7 8	0.3 3	0.0 0	0.0 6		100	100	0.00	0.8 6
I1	1	(unt itled )	16			1094	2112	88	87. 00	52	74	8.3 7	0.9 1	0.0 0	0.2 8		100	100	0.00	3.9 5

		)																		
lc	1	(untitled)	13	11	B	655	2166	57	0.00	46	96	11.34	4.07	21.53	4.46	2.35	100	100	10.23	22.78
lc	2	(untitled)	13	11	B	814<	2317	57	0.00	53	69	11.78	4.51	37.38	8.74+	2.81	100	100	68.26	87.15
lc	3	(untitled)	13	11	B	63	2317	57	12.00	4	2082	9.44	2.17	8.05	0.12	0.12	100	100	0.00	0.61
lx	1	(untitled)	19			127	2112	88	62.00	6	1391	3.41	0.05	0.00	0.00		100	100	0.00	0.03
lx	2	(untitled)	19			114	2263	88	62.00	5	1679	3.40	0.04	0.00	0.00		100	100	0.00	0.02
lx	1	(untitled)				242<	2112	88	55.00	11	686	1.52	0.40	13.24	2.96+		100	100	0.00	1.42

## Network Results

	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Excess Queue Penalty (£ per hr)	Performance Index (£ per hr)
<b>TOTAL</b>	7094.79	329.38	21.54	92.36	95.91	2370.16	671.54	449.16	3490.85
<b>BUSES</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TRAMS</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>PEDESTRIANS</b>									
<b>OTHER (NORMAL)</b>	7518.80	391.23	19.22	115.03	126.10	2675.90	690.04	663.36	4029.30

- B = at least one source for this link carries buses
- T = at least one source for this link carries trams
- P = this link is a pedestrian link
- < = adjusted flow warning (upstream links are over-saturated)
- ! = DoS threshold exceeded
- f = average saturation flow for flared link
- \* = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%
- ^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%
- + = average link excess queue is greater than 0
- P.I. = PERFORMANCE INDEX

## Link Results

### Link Results: Flows And Signals

Time Segment	Link	Calculated Flow Entering (PCU/hr)	Calculated Flow Out (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/hr)	Calculated Capacity (PCU/hr)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Mean Modulus Of Error	Actual Green (s (per cycle))	Effective Green (s (per cycle))
17:00-18:00	1	500	500	0		10000	795	63		43	0.00	6	7

### Link Results: Stops And Delays

Time Segment	Link	Mean Cruise Time Per PCU (s)	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-18:00	1	1.44	43.06	5.45	0.53	84.93	84.93	0.00	0.00	0.00	0.00	0.00

### Link Results: Queues And Blocking

Time Segment	Link	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Utilised Storage (%)	Average Link Excess Queues (PCU)	Average Limit Excess Queues (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
17:00-18:00	1	0.00	11.78	10.00	117.78	0.14	0.00	0.00	0.53	11.78	0.00	0.00	0.00	

### Link Results: Journey Times

Time Segment	Link	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
17:00-18:00	1	6.00	6.18	0.97	44.50

### Link Results: Advanced

Time Segment	Link	Degree Of Saturation Penalty (£ per hr)	Phase Min Max Penalty (£ per hr)	Intergreen Broken Penalty (£ per hr)	Stage Constraint Broken Penalty (£ per hr)	Ped Gap Accepting Penalty (£ per hr)	Warmed Up	Warmed Up Error	Mean Max Queue EoTS (PCU)	Max End Of Green Queue EoTS (PCU)	Max End Of Red Queue EoTS (PCU)	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)	Performance Index (£ per hr)
17:00-	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	11.7	0.53	11.7	0.00	84.93	84.93



18:00								8		8			
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# Traffic Stream Results

## Traffic Stream Results: Vehicle Summary

Time Segment	Arm	Traffic Stream	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Calculated Flow Entering (PCU/hr)	Calculated Sat Flow (PCU/hr)	Actual Green (s (per cycle))	Mean Delay Per PCU (s)	Mean Max Queue (PCU)	Utilised Storage (%)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	1	1	50	81	895	1800	88	0.99	0.25	1.41	3.49	0.00	3.49
17:00-18:00	1	2	38	138	681	1800	88	1.09	11.85	68.13	2.93	4.71	7.63
17:00-18:00	A	1	43	109	323	2128	30	15.95	5.28	30.38	8.13	1.32	9.45
17:00-18:00	A	2	97!	-7	776	2279	30	58.95	26.69	102.30	72.18	6.49	78.67
17:00-18:00	A	3	60	50	483	2279	30	20.64	9.02	34.56	15.73	2.29	18.01
17:00-18:00	A	4	97!	-7	775	2279	30	58.80	26.12	100.11	71.90	6.37	78.27
17:00-18:00	Ax 1	1	32	185	569	1800	88	0.48	2.09	60.13	1.08	0.24	1.32
17:00-18:00	Ax 1	2	90	0	1618	1800	88	13.20	43.36	1246.69	84.28	43.99	128.27
17:00-18:00	Ax 2	1	77	17	1385	1800	88	3.30	2.28	8.73	18.05	1.68	19.73
17:00-18:00	Ax 2	2	45	102	803	1800	88	0.80	0.18	0.69	2.54	0.00	2.54
17:00-18:00	B	1	10	802	26	260	88	2.34	0.12	2.32	0.24	0.20	0.44
17:00-18:00	B	2	37	144	24	65	88	39.86	0.61	11.73	3.77	0.79	4.56
17:00-18:00	Bc 1	1	36	150	649	1800	88	0.56	0.10	1.94	1.44	0.00	1.44
17:00-18:00	Bc 1	2	66	37	1186	1800	88	1.92	0.63	12.15	9.00	0.00	9.00
17:00-18:00	Bc 1	3	44	104	796	1800	88	0.79	0.18	3.36	2.49	0.00	2.49
17:00-18:00	Bc 1	4	60	49	1088	1800	88	1.52	0.46	8.83	6.54	0.00	6.54

17:00-18:00	C	1	66	36	666	3163	27	28.7 1	14.9 5	42.98	30.17	0.00	30.17
17:00-18:00	C	2	90!	0	910	3163	27	43.4 0	25.5 1	73.35	62.31	0.00	62.31
17:00-18:00	C3-1	1	0	-100	0	0	88	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Cx 2	1	63	44	578	2083	38	17.0 4	8.72	12.12	38.83	11.03	49.86
17:00-18:00	Cx 2	2	86	5	792	2083	38	25.9 0	14.9 1	20.71	80.93	18.87	99.80
17:00-18:00	Cx 3	1	3	2556	61	1800	88	0.04	0.00	0.01	0.01	0.00	0.01
17:00-18:00	Cx 4-2	1	32	180	578	1800	88	0.78	6.74	50.09	1.78	2.62	4.40
17:00-18:00	Cx 4-2	2	31	188	563	1800	88	0.46	0.07	0.53	1.01	0.00	1.01
17:00-18:00	Cx 5	1	17	437	302	1800	88	0.20	0.02	0.16	0.24	0.00	0.24
17:00-18:00	D	1	68	33	812	2159	48	16.9 5	14.6 8	28.14	21.71	0.00	21.71
17:00-18:00	D	2	68	33	872	2317	48	16.7 5	15.7 2	30.13	23.05	0.00	23.05
17:00-18:00	D	3	67	33	870	2317	48	16.7 1	15.6 8	30.05	22.94	0.00	22.94
17:00-18:00	Dx 1	1	39	131	838	2155	88	0.53	0.12	0.28	1.76	0.00	1.76
17:00-18:00	Dx 1	2	70	28	1515	2155	88	9.13	36.2 2	83.30	54.55	68.49	123.04
17:00-18:00	E	1	123!	-27	471	382	88	369. 55	55.9 3	160.7 9	274.62	38.78	313.41
17:00-18:00	E	2	85	6	626	735	88	26.0 8	13.4 4	38.63	25.76	16.87	42.62
17:00-18:00	F	1	89	1	1385	2134	63	18.7 0	24.4 2	66.86	102.17	30.47	132.64
17:00-18:00	F	2	43	109	716	2284	63	6.68	8.02	21.96	18.88	9.93	28.81
17:00-18:00	F	3	5	1629	86	2284	63	3.60	0.60	1.64	1.23	0.73	1.96
17:00-18:00	G	1	77	17	296	2123	15	48.9 3	8.03	60.77	28.56	2.07	30.63
17:00-18:00	G	2	58	54	313	2949	15	36.5 7	7.10	53.72	22.58	1.84	24.42
17:00-18:00	H	1	39	133	469	2134	49	11.4 5	6.38	38.18	21.19	8.03	29.23

17:00-18:00	H	2	39	133	501	2284	49	11.39	6.80	40.74	22.50	8.57	31.07
17:00-18:00	H	3	5	1754	63	2284	49	8.52	0.68	4.10	2.12	0.85	2.97
17:00-18:00	I	1	99!	-10	528	2123	21	103.47	23.10	221.42	86.20	0.00	86.20
17:00-18:00	I	2	87	3	566	2601	21	47.52	15.74	150.87	42.44	0.00	42.44
17:00-18:00	Ac	1	34	161	405	2112	48	12.56	7.59	108.41	20.07	9.54	86.06
17:00-18:00	Ac	2	33	177	410	2263	48	11.78	6.89	98.36	19.05	7.85	26.90
17:00-18:00	Ac	3	50	81	626	2263	48	6.81	3.04	43.48	16.83	3.91	20.73
17:00-18:00	Ax	1	37	140	569	1965	67	2.79	3.12	89.70	6.26	6.34	12.60
17:00-18:00	Ax	2	71	27	1153	2105	67	5.15	5.94	170.91	23.42	13.27	36.69
17:00-18:00	Ax	3	29	215	465	2105	67	1.96	1.80	51.65	3.59	3.67	7.26
17:00-18:00	Bc	1	40	123	728	1800	88	0.89	6.21	35.68	2.54	2.59	5.14
17:00-18:00	Bc	2	66	37	1186	1800	88	4.69	26.21	150.71	21.96	22.79	44.75
17:00-18:00	Bc	3	44	104	796	1800	88	1.22	8.34	47.94	3.82	4.23	8.05
17:00-18:00	Bc	4	60	49	1088	1800	88	3.68	19.53	112.32	15.77	16.12	31.90
17:00-18:00	Bx	1	4	1942	79	1800	88	0.05	0.00	0.01	0.01	0.00	0.01
17:00-18:00	C2	1	88	3	1576	1800	88	16.60	34.59	92.95	103.20	40.26	143.46
17:00-18:00	C4	1	77	17	660	1887	39	27.00	14.64	97.19	70.29	18.68	88.96
17:00-18:00	C4	2	77	17	718	2055	39	26.41	15.81	104.97	74.79	20.16	94.95
17:00-18:00	C5	1	70	29	332	1906	21	38.48	8.07	84.37	50.39	10.42	60.81
17:00-18:00	Cc	1	40	123	491	2059	51	1.34	0.30	4.95	2.59	0.39	2.97
17:00-18:00	Cc	2	61	47	797	2209	51	8.51	7.37	122.77	26.74	9.24	41.79
17:00-18:00	Cc	3	86	4	1111	2181	51	13.74	12.31	205.13	60.19	13.85	134.75

17:00-18:00	Cx	1	39	131	667	2120	70	1.07	0.88	5.07	2.81	1.71	4.53
17:00-18:00	Cx	2	41	119	703	2120	70	1.35	1.19	6.83	3.75	2.49	6.24
17:00-18:00	Dc	1	80	12	581	2059	30	21.2 7	9.04	57.77	487.37	113.61	600.99
17:00-18:00	Dc	2	85	6	647	2172	30	24.4 7	7.61	48.60	62.45	12.89	75.34
17:00-18:00	Dc	3	51	76	394	2185	30	11.9 7	1.95	12.44	18.61	2.58	21.19
17:00-18:00	Dx	1	56	61	838	1915	68	3.20	6.19	63.60	10.59	7.66	18.24
17:00-18:00	Dx	2	49	82	797	2055	68	1.17	6.56	67.31	3.69	2.10	5.79
17:00-18:00	Dx	3	45	102	718	2055	68	0.90	0.75	7.71	2.54	0.42	2.96
17:00-18:00	Ec	1	27	234	485	1800	88	0.37	0.05	0.57	0.71	0.00	0.71
17:00-18:00	Ec	2	59	52	1069	1800	88	3.40	17.5 6	201.9 3	14.35	14.80	152.97
17:00-18:00	Ec	3	59	52	1067	1800	88	3.38	17.5 2	201.4 2	14.24	14.71	152.40
17:00-18:00	Ex	1	62	45	1115	1800	88	1.90	11.7 0	67.26	8.37	5.30	13.67
17:00-18:00	Ex	2	24	268	440	1800	88	0.33	1.11	6.36	0.58	0.11	0.68
17:00-18:00	Fc	1	18	399	71	2166	15	20.0 0	0.50	7.15	5.60	0.30	5.90
17:00-18:00	Fc	2	39	128	166	2317	15	28.4 5	2.53	36.12	18.63	1.45	20.08
17:00-18:00	Fc	3	8	1085	32	2317	15	19.3 5	0.22	3.14	2.44	0.13	2.57
17:00-18:00	Fx	1	56	61	1183	2112	88	1.08	0.36	1.02	5.05	0.00	5.05
17:00-18:00	Fx	2	52	73	1174	2263	88	0.86	0.28	0.80	3.97	0.00	3.97
17:00-18:00	Fx 1	1	61	47	1099	1800	88	1.56	0.48	2.74	6.78	0.00	6.78
17:00-18:00	Fx 1	2	70	29	1258	1800	88	2.43	12.4 6	71.65	12.05	4.37	16.43
17:00-18:00	G1	1	29	212	609	2112	88	0.35	0.06	0.56	0.83	0.00	0.83
17:00-18:00	Gc	1	42	114	662	2166	63	2.27	1.64	23.36	5.91	0.93	6.85

17:00-18:00	Gc	2	44	103	748	2317	63	2.24	2.19	31.35	6.62	1.06	7.90
17:00-18:00	Gc	3	5	1654	86	2317	63	0.92	0.08	1.21	0.31	0.05	0.36
17:00-18:00	Gx	1	39	130	826	2112	88	0.55	0.13	1.29	1.78	0.00	1.78
17:00-18:00	Gx	2	6	1420	134	2263	88	0.05	0.00	0.02	0.03	0.00	0.03
17:00-18:00	Gx1	1	49	84	960	1965	88	0.88	1.90	54.67	3.34	0.41	3.74
17:00-18:00	H1	1	46	96	970	2112	88	0.72	0.19	1.12	2.77	0.00	2.77
17:00-18:00	H1	2	3	3133	63	2263	88	0.02	0.00	0.00	0.01	0.00	0.01
17:00-18:00	Hc	1	16	481	114	2166	29	21.58	1.90	27.08	9.74	1.09	10.84
17:00-18:00	Hc	2	40	127	313	2317	29	17.11	3.01	42.97	21.15	1.75	23.09
17:00-18:00	Hc	3	40	127	313	2317	29	7.43	5.69	81.25	9.18	2.03	225.41
17:00-18:00	Hx	1	33	171	703	2112	88	0.42	0.08	0.48	1.18	0.00	1.18
17:00-18:00	Hx	2	29	208	662	2263	88	0.33	0.06	0.35	0.86	0.00	0.86
17:00-18:00	I1	1	52	74	1094	2112	88	0.91	0.28	1.60	3.95	0.00	3.95
17:00-18:00	Ic	1	46	96	655	2166	57	4.07	4.46	63.75	10.51	2.04	22.78
17:00-18:00	Ic	2	53	69	814	2317	57	4.51	8.74	124.80	14.49	4.39	87.15
17:00-18:00	Ic	3	4	2082	63	2317	57	2.17	0.12	1.77	0.54	0.07	0.61
17:00-18:00	Ix	1	6	1391	127	2112	88	0.05	0.00	0.02	0.03	0.00	0.03
17:00-18:00	Ix	2	5	1679	114	2263	88	0.04	0.00	0.02	0.02	0.00	0.02
17:00-18:00	Ix1	1	11	686	242	2112	88	0.40	2.96	113.42	0.38	1.04	1.42

### Traffic Stream Results: Flows And Signals

Time Segment	Arm	Traffic Stream	Calculated Flow Entering	Calculated Flow Out (PCU/h)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Calculated Sat Flow (PCU/h)	Calculated Capacity (PCU/h)	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capa	Mean Modulus Of Error	Actual Green (s)	Effective Green (s per
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			(PCU/h r)	r)			r)	r)			city (%)		(per cycl e))	cycle )
17:00 - 18:00	1	1	895	895	-1	✓	1800	1800	50		81	0.69	88	88
17:00 - 18:00	1	2	681	681	0		1800	1800	38		138	1.04	88	88
17:00 - 18:00	A	1	323	323	-3	✓	2128	750	43		109	0.38	30	31
17:00 - 18:00	A	2	776	776	-3	✓	2279	803	97!	✓	-7	0.36	30	31
17:00 - 18:00	A	3	483	483	0		2279	803	60		50	0.36	30	31
17:00 - 18:00	A	4	775	775	0		2279	803	97!	✓	-7	0.35	30	31
17:00 - 18:00	Ax 1	1	569	569	18	✓	1800	1800	32		185	0.61	88	88
17:00 - 18:00	Ax 1	2	1618	1618	18	✓	1800	1800	90		0	0.53	88	88
17:00 - 18:00	Ax 2	1	1385	1385	23	✓	1800	1800	77		17	0.20	88	88
17:00 - 18:00	Ax 2	2	803	803	13	✓	1800	1800	45		102	0.21	88	88
17:00 - 18:00	B	1	26	26	-1		260	260	10		802	0.00	88	88
17:00 - 18:00	B	2	24	24	1		65	65	37		144	0.00	88	88
17:00 - 18:00	Bc 1	1	649	649	13	✓	1800	1800	36		150	0.76	88	88
17:00 - 18:00	Bc 1	2	1186	1186	26	✓	1800	1800	66		37	0.60	88	88
17:00 - 18:00	Bc 1	3	796	796	0	✓	1800	1800	44		104	0.51	88	88
17:00	Bc	4	1088	1088	0	✓	1800	1800	60		49	0.57	88	88

- 18:00	1													
17:00 - 18:00	C	1	666	666	-1	✓	3163	1006	66		36	0.18	27	28
17:00 - 18:00	C	2	910	910	-1	✓	3163	1006	90!	✓	0	0.17	27	28
17:00 - 18:00	C3 -1	1	0	0	0		0	0	0		-100	0.00	88	88
17:00 - 18:00	Cx 2	1	578	578	23	✓	2083	923	63		44	0.37	38	39
17:00 - 18:00	Cx 2	2	792	792	16	✓	2083	923	86		5	0.39	38	39
17:00 - 18:00	Cx 3	1	61	61	0		1800	1800	3		2556	0.74	88	88
17:00 - 18:00	Cx 4-2	1	578	578	23	✓	1800	1800	32		180	1.05	88	88
17:00 - 18:00	Cx 4-2	2	563	563	10	✓	1800	1800	31		188	0.91	88	88
17:00 - 18:00	Cx 5	1	302	302	6	✓	1800	1800	17		437	1.06	88	88
17:00 - 18:00	D	1	812	812	0		2159	1202	68		33	0.00	48	49
17:00 - 18:00	D	2	872	872	0		2317	1290	68		33	0.00	48	49
17:00 - 18:00	D	3	870	870	-1		2317	1290	67		33	0.00	48	49
17:00 - 18:00	Dx 1	1	838	838	0		2155	2155	39		131	0.45	88	88
17:00 - 18:00	Dx 1	2	1515	1515	0	✓	2155	2155	70		28	0.72	88	88
17:00 - 18:00	E	1	471	382	-4		382	382	123!	✓	-27	0.00	88	88
17:00 -	E	2	626	626	-1	✓	735	735	85		6	0.00	88	88

18:00														
17:00 - 18:00	F	1	1385	1385	23	✓	2134	1552	89		1	0.17	63	64
17:00 - 18:00	F	2	716	716	12	✓	2284	1661	43		109	0.18	63	64
17:00 - 18:00	F	3	86	86	1	✓	2284	1661	5		1629	0.11	63	64
17:00 - 18:00	G	1	296	296	-5	✓	2123	386	77		17	0.00	15	16
17:00 - 18:00	G	2	313	313	0		2949	536	58		54	0.00	15	16
17:00 - 18:00	H	1	469	469	-2	✓	2134	1213	39		133	0.00	49	50
17:00 - 18:00	H	2	501	501	0		2284	1298	39		133	0.00	49	50
17:00 - 18:00	H	3	63	63	0		2284	1298	5		1754	0.00	49	50
17:00 - 18:00	I	1	528	528	0		2123	531	99!	✓	-10	0.00	21	22
17:00 - 18:00	I	2	566	566	0	✓	2601	650	87		3	0.00	21	22
17:00 - 18:00	Ac	1	405	405	19	✓	2112	1176	34		161	0.55	48	49
17:00 - 18:00	Ac	2	410	410	29	✓	2263	1260	33		177	0.41	48	49
17:00 - 18:00	Ac	3	626	626	-1	✓	2263	1260	50		81	0.68	48	49
17:00 - 18:00	Ax	1	569	569	18	✓	1965	1518	37		140	0.37	67	68
17:00 - 18:00	Ax	2	1153	1153	18	✓	2105	1627	71		27	0.45	67	68
17:00 - 18:00	Ax	3	465	465	0		2105	1627	29		215	0.42	67	68



17:00 - 18:00	Bc	1	728	728	16	✓	1800	1800	40		123	0.78	88	88
17:00 - 18:00	Bc	2	1186	1186	26	✓	1800	1800	66		37	0.71	88	88
17:00 - 18:00	Bc	3	796	796	0	✓	1800	1800	44		104	0.52	88	88
17:00 - 18:00	Bc	4	1088	1088	0	✓	1800	1800	60		49	0.66	88	88
17:00 - 18:00	Bx	1	79	79	3	✓	1800	1800	4		1942	0.70	88	88
17:00 - 18:00	C2	1	1576	1576	-1	✓	1800	1800	88		3	0.67	88	88
17:00 - 18:00	C4	1	660	660	-2		1887	858	77		17	0.00	39	40
17:00 - 18:00	C4	2	718	718	0		2055	934	77		17	0.00	39	40
17:00 - 18:00	C5	1	332	332	1	✓	1906	477	70		29	0.00	21	22
17:00 - 18:00	Cc	1	491	491	0		2059	1217	40		123	1.03	51	52
17:00 - 18:00	Cc	2	797	797	0	✓	2209	1305	61		47	0.48	51	52
17:00 - 18:00	Cc	3	1111	1111	0	✓	2181	1289	86		4	0.51	51	52
17:00 - 18:00	Cx	1	667	667	13	✓	2120	1710	39		131	0.69	70	71
17:00 - 18:00	Cx	2	703	703	26	✓	2120	1710	41		119	0.52	70	71
17:00 - 18:00	Dc	1	581	581	-1	✓	2059	725	80		12	0.71	30	31
17:00 - 18:00	Dc	2	647	647	-1	✓	2172	765	85		6	0.95	30	31
17:00	Dc	3	394	394	0		2185	770	51		76	1.34	30	31

- 18:00														
17:00 - 18:00	Dx	1	838	838	0		1915	1502	56		61	0.66	68	69
17:00 - 18:00	Dx	2	797	797	0	✓	2055	1611	49		82	0.91	68	69
17:00 - 18:00	Dx	3	718	718	0	✓	2055	1611	45		102	0.79	68	69
17:00 - 18:00	Ec	1	485	485	0		1800	1800	27		234	0.50	88	88
17:00 - 18:00	Ec	2	1069	1069	0		1800	1800	59		52	0.59	88	88
17:00 - 18:00	Ec	3	1067	1067	-1		1800	1800	59		52	0.59	88	88
17:00 - 18:00	Ex	1	1115	1115	-1	✓	1800	1800	62		45	0.46	88	88
17:00 - 18:00	Ex	2	440	440	-1	✓	1800	1800	24		268	1.20	88	88
17:00 - 18:00	Fc	1	71	71	-1	✓	2166	394	18		399	1.42	15	16
17:00 - 18:00	Fc	2	166	166	-1	✓	2317	421	39		128	0.82	15	16
17:00 - 18:00	Fc	3	32	32	0		2317	421	8		1085	1.42	15	16
17:00 - 18:00	Fx	1	1183	1183	-6	✓	2112	2112	56		61	0.45	88	88
17:00 - 18:00	Fx	2	1174	1174	1		2263	2263	52		73	0.46	88	88
17:00 - 18:00	Fx 1	1	1099	1099	-6	✓	1800	1800	61		47	0.40	88	88
17:00 - 18:00	Fx 1	2	1258	1258	1		1800	1800	70		29	0.40	88	88
17:00 -	G1	1	609	609	-5	✓	2112	2112	29		212	0.00	88	88

18:00														
17:00 - 18:00	Gc	1	662	662	11	✓	2166	1575	42		114	0.41	63	64
17:00 - 18:00	Gc	2	748	748	12	✓	2317	1685	44		103	0.56	63	64
17:00 - 18:00	Gc	3	86	86	1	✓	2317	1685	5		1654	0.60	63	64
17:00 - 18:00	Gx	1	826	826	12	✓	2112	2112	39		130	0.36	88	88
17:00 - 18:00	Gx	2	134	134	-1	✓	2263	2263	6		1420	1.58	88	88
17:00 - 18:00	Gx 1	1	960	960	11	✓	1965	1965	49		84	0.25	88	88
17:00 - 18:00	H1	1	970	970	-2	✓	2112	2112	46		96	0.00	88	88
17:00 - 18:00	H1	2	63	63	0		2263	2263	3		3133	0.00	88	88
17:00 - 18:00	Hc	1	114	114	1	✓	2166	738	16		481	0.42	29	30
17:00 - 18:00	Hc	2	313	313	-3	✓	2317	790	40		127	1.03	29	30
17:00 - 18:00	Hc	3	313	313	0		2317	790	40		127	1.58	29	30
17:00 - 18:00	Hx	1	703	703	11	✓	2112	2112	33		171	0.38	88	88
17:00 - 18:00	Hx	2	662	662	11	✓	2263	2263	29		208	0.63	88	88
17:00 - 18:00	I1	1	1094	1094	0	✓	2112	2112	52		74	0.00	88	88
17:00 - 18:00	Ic	1	655	655	-6	✓	2166	1428	46		96	0.64	57	58
17:00 - 18:00	Ic	2	814	814	0		2317	1527	53		69	0.72	57	58

17:00 - 18:00	lc	3	63	63	0		2317	1527	4		2082	0.82	57	58
17:00 - 18:00	lx	1	127	127	1	✓	2112	2112	6		1391	1.17	88	88
17:00 - 18:00	lx	2	114	114	1	✓	2263	2263	5		1679	1.35	88	88
17:00 - 18:00	lx1	1	242	242	2	✓	2112	2112	11		686	1.24	88	88

### Traffic Stream Results: Stops And Delays

Time Segment	Arm	Traffic Stream	Mean Cruise Time Per PCU (s)	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Overs at Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-18:00	1	1	7.46	0.99	0.00	0.25	3.49	3.49	0.00	0.00	0.00	0.00	0.00
17:00-18:00	1	2	7.46	1.09	0.09	0.12	2.93	2.93	21.28	140.22	4.70	4.71	4.71
17:00-18:00	A	1	7.46	15.95	1.27	0.16	20.33	8.13	62.79	196.19	6.62	6.59	1.32
17:00-18:00	A	2	11.18	58.95	4.43	8.28	180.45	72.18	128.82	695.35	304.28	32.46	6.49
17:00-18:00	A	3	11.18	20.64	2.32	0.45	39.31	15.73	72.87	333.67	18.29	11.43	2.29
17:00-18:00	A	4	11.18	58.80	4.53	8.13	179.74	71.90	126.60	681.77	299.38	31.86	6.37
17:00-18:00	Ax 1	1	1.49	0.48	0.00	0.07	1.08	1.08	1.32	4.53	2.99	0.24	0.24
17:00-18:00	Ax 1	2	1.49	13.20	2.13	3.81	84.28	84.28	83.71	1202.64	152.00	43.99	43.99
17:00-18:00	Ax 2	1	11.18	3.30	0.00	1.27	18.05	18.05	3.73	0.20	51.52	1.68	1.68
17:00-18:00	Ax 2	2	11.18	0.80	0.00	0.18	2.54	2.54	0.00	0.00	0.00	0.00	0.00
17:00-18:00	B	1	2.24	2.34	0.01	0.01	0.24	0.24	23.89	5.76	0.45	0.20	0.20
17:00-18:00	B	2	2.24	39.86	0.16	0.11	3.77	3.77	101.04	20.12	4.13	0.79	0.79
17:00-18:00	Bc 1	1	2.24	0.56	0.00	0.10	1.44	1.44	0.00	0.00	0.00	0.00	0.00

17:00-18:00	Bc 1	2	2.24	1.92	0.00	0.63	9.00	9.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Bc 1	3	2.24	0.79	0.00	0.18	2.49	2.49	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Bc 1	4	2.24	1.52	0.00	0.46	6.54	6.54	0.00	0.00	0.00	0.00	0.00
17:00-18:00	C	1	14.91	28.71	4.67	0.64	75.42	30.17	89.22	568.17	26.02	19.30	0.00
17:00-18:00	C	2	14.91	43.40	7.09	3.88	155.78	62.31	111.24	860.22	152.09	32.87	0.00
17:00-18:00	C3-1	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Cx 2	1	30.87	17.04	2.22	0.52	38.83	38.83	58.79	318.48	21.05	11.03	11.03
17:00-18:00	Cx 2	2	30.87	25.90	3.23	2.47	80.93	80.93	73.35	483.19	97.88	18.87	18.87
17:00-18:00	Cx 3	1	4.43	0.04	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Cx 4-2	1	5.77	0.78	0.05	0.08	1.78	1.78	13.98	77.63	3.09	2.62	2.62
17:00-18:00	Cx 4-2	2	5.77	0.46	0.00	0.07	1.01	1.01	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Cx 5	1	4.67	0.20	0.00	0.02	0.24	0.24	0.00	0.00	0.00	0.00	0.00
17:00-18:00	D	1	16.78	16.95	3.12	0.70	54.28	21.71	68.67	529.32	28.30	32.19	0.00
17:00-18:00	D	2	16.78	16.75	3.36	0.70	57.61	23.05	68.48	568.69	28.41	34.47	0.00
17:00-18:00	D	3	16.78	16.71	3.34	0.69	57.35	22.94	68.35	566.47	28.15	34.33	0.00
17:00-18:00	Dx 1	1	13.98	0.53	0.00	0.12	1.76	1.76	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Dx 1	2	13.98	9.13	3.01	0.83	54.55	54.55	78.32	1152.83	33.69	68.49	68.49
17:00-18:00	E	1	14.91	369.55	1.64	46.70	686.56	274.62	312.97	376.19	818.07	38.78	38.78
17:00-18:00	E	2	14.91	26.08	2.23	2.31	64.39	25.76	82.98	428.51	90.93	16.87	16.87
17:00-18:00	F	1	15.66	18.70	3.68	3.51	102.17	102.17	67.76	798.33	140.08	30.47	30.47
17:00-18:00	F	2	15.66	6.68	1.17	0.16	18.88	18.88	42.70	299.09	6.66	9.93	9.93
17:00-18:00	F	3	15.66	3.60	0.09	0.00	1.23	1.23	25.94	22.38	0.06	0.73	0.73

17:00-18:00	G	1	5.67	48.93	2.81	1.21	57.13	28.56	107.78	271.62	47.42	10.36	2.07
17:00-18:00	G	2	5.67	36.57	2.77	0.41	45.15	22.58	90.44	266.71	16.38	9.19	1.84
17:00-18:00	H	1	7.16	11.45	1.37	0.12	21.19	21.19	52.75	242.44	4.97	8.03	8.03
17:00-18:00	H	2	7.16	11.39	1.46	0.12	22.50	22.50	52.66	258.90	4.95	8.57	8.57
17:00-18:00	H	3	7.16	8.52	0.15	0.00	2.12	2.12	41.76	26.26	0.05	0.85	0.85
17:00-18:00	I	1	4.47	103.47	4.83	10.34	215.50	86.20	162.00	506.69	348.66	27.78	0.00
17:00-18:00	I	2	4.47	47.52	4.78	2.69	106.09	42.44	109.86	516.78	105.00	20.19	0.00
17:00-18:00	Ac	1	4.03	12.56	1.32	0.09	20.07	20.07	72.50	289.98	3.69	9.54	9.54
17:00-18:00	Ac	2	4.79	11.78	1.26	0.08	19.05	19.05	65.01	263.35	3.20	7.85	7.85
17:00-18:00	Ac	3	4.03	6.81	0.94	0.24	16.83	16.83	19.21	110.31	9.97	3.91	3.91
17:00-18:00	Ax	1	1.12	2.79	0.33	0.11	6.26	6.26	19.29	105.22	4.59	6.34	6.34
17:00-18:00	Ax	2	1.12	5.15	0.79	0.86	23.42	23.42	19.94	195.10	34.84	13.27	13.27
17:00-18:00	Ax	3	1.12	1.96	0.20	0.06	3.59	3.59	13.66	61.16	2.34	3.67	3.67
17:00-18:00	Bc	1	7.46	0.89	0.04	0.14	2.54	2.54	10.96	68.59	11.18	2.59	2.59
17:00-18:00	Bc	2	7.46	4.69	0.91	0.63	21.96	21.96	59.17	676.03	25.78	22.79	22.79
17:00-18:00	Bc	3	7.46	1.22	0.09	0.18	3.82	3.82	16.35	122.96	7.15	4.23	4.23
17:00-18:00	Bc	4	7.46	3.68	0.65	0.46	15.77	15.77	45.63	477.65	18.76	16.12	16.12
17:00-18:00	Bx	1	7.46	0.05	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
17:00-18:00	C2	1	15.95	16.60	4.29	2.98	103.20	103.20	78.66	1120.25	119.49	40.26	40.26
17:00-18:00	C4	1	6.46	27.00	3.69	1.26	70.29	70.29	87.13	524.60	50.49	18.68	18.68
17:00-18:00	C4	2	6.46	26.41	4.01	1.25	74.79	74.79	86.47	570.51	50.38	20.16	20.16
17:00-18:00	C5	1	4.10	38.48	2.76	0.78	50.39	50.39	96.65	289.55	31.32	10.42	10.42

17:00-18:00	Cc	1	4.85	1.34	0.05	0.14	2.59	2.59	2.43	6.38	5.56	0.39	0.39
17:00-18:00	Cc	2	4.85	8.51	1.41	0.48	26.74	26.74	35.68	265.01	19.38	9.24	9.24
17:00-18:00	Cc	3	4.85	13.74	1.65	2.59	60.19	60.19	38.38	322.78	103.59	13.85	13.85
17:00-18:00	Cx	1	5.59	1.07	0.07	0.12	2.81	2.81	4.45	24.60	5.08	1.71	1.71
17:00-18:00	Cx	2	5.59	1.35	0.12	0.14	3.75	3.75	6.15	37.37	5.85	2.49	2.49
17:00-18:00	Dc	1	6.71	21.27	1.87	1.56	48.74	487.37	60.22	287.71	62.14	11.36	113.61
17:00-18:00	Dc	2	6.71	24.47	2.20	2.20	62.45	62.45	61.35	228.74	168.19	12.89	12.89
17:00-18:00	Dc	3	6.71	11.97	1.04	0.27	18.61	18.61	20.19	68.69	10.86	2.58	2.58
17:00-18:00	Dx	1	3.13	3.20	0.39	0.35	10.59	10.59	15.83	118.31	14.32	7.66	7.66
17:00-18:00	Dx	2	3.13	1.17	0.02	0.24	3.69	3.69	4.57	26.59	9.85	2.10	2.10
17:00-18:00	Dx	3	3.13	0.90	0.00	0.18	2.54	2.54	1.02	0.02	7.30	0.42	0.42
17:00-18:00	Ec	1	3.73	0.37	0.00	0.05	0.71	0.71	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Ec	2	3.73	3.40	0.58	0.43	14.35	14.35	42.64	438.19	17.64	14.80	14.80
17:00-18:00	Ec	3	3.73	3.38	0.57	0.43	14.24	14.24	42.45	435.37	17.53	14.71	14.71
17:00-18:00	Ex	1	7.46	1.90	0.09	0.50	8.37	8.37	14.64	142.72	20.46	5.30	5.30
17:00-18:00	Ex	2	7.46	0.33	0.00	0.04	0.58	0.58	0.75	1.67	1.62	0.11	0.11
17:00-18:00	Fc	1	8.28	20.00	0.37	0.02	5.60	5.60	28.85	19.68	0.81	0.30	0.30
17:00-18:00	Fc	2	8.28	28.45	1.18	0.13	18.63	18.63	60.47	95.20	5.18	1.45	1.45
17:00-18:00	Fc	3	8.28	19.35	0.17	0.00	2.44	2.44	28.11	8.87	0.13	0.13	0.13
17:00-18:00	Fx	1	14.91	1.08	0.00	0.36	5.05	5.05	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Fx	2	14.91	0.86	0.00	0.28	3.97	3.97	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Fx1	1	7.46	1.56	0.00	0.48	6.78	6.78	0.00	0.00	0.00	0.00	0.00

17:00-18:00	Fx1	2	7.46	2.43	0.04	0.81	12.05	12.05	10.71	69.57	65.14	4.37	4.37
17:00-18:00	G1	1	4.47	0.35	0.00	0.06	0.83	0.83	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Gc	1	7.83	2.27	0.26	0.15	5.91	5.91	9.76	58.38	6.20	0.93	0.93
17:00-18:00	Gc	2	7.83	2.24	0.29	0.18	6.62	6.62	9.80	66.11	7.22	1.06	1.06
17:00-18:00	Gc	3	7.83	0.92	0.02	0.00	0.31	0.31	4.02	3.42	0.06	0.05	0.05
17:00-18:00	Gx	1	4.18	0.55	0.00	0.13	1.78	1.78	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Gx	2	4.18	0.05	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Gx 1	1	1.49	0.88	0.00	0.23	3.34	3.34	1.30	2.98	9.52	0.41	0.41
17:00-18:00	H1	1	7.46	0.72	0.00	0.19	2.77	2.77	0.00	0.00	0.00	0.00	0.00
17:00-18:00	H1	2	7.46	0.02	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Hc	1	7.49	21.58	0.67	0.01	9.74	9.74	66.23	75.24	0.58	1.09	1.09
17:00-18:00	Hc	2	7.49	17.11	1.36	0.13	21.15	21.15	38.78	116.25	5.31	1.75	1.75
17:00-18:00	Hc	3	7.49	7.43	0.52	0.13	9.18	9.18	45.00	130.33	10.53	2.03	2.03
17:00-18:00	Hx	1	7.46	0.42	0.00	0.08	1.18	1.18	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Hx	2	7.46	0.33	0.00	0.06	0.86	0.86	0.00	0.00	0.00	0.00	0.00
17:00-18:00	I1	1	7.46	0.91	0.00	0.28	3.95	3.95	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Ic	1	7.27	4.07	0.55	0.19	10.51	10.51	21.53	133.13	7.92	2.04	2.04
17:00-18:00	Ic	2	7.27	4.51	0.72	0.30	14.49	14.49	37.38	291.92	12.37	4.39	4.39
17:00-18:00	Ic	3	7.27	2.17	0.04	0.00	0.54	0.54	8.05	5.04	0.04	0.07	0.07
17:00-18:00	Ix	1	3.36	0.05	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Ix	2	3.36	0.04	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00
17:00-18:00	Ix1	1	1.12	0.40	0.02	0.01	0.38	0.38	13.24	31.74	0.30	1.04	1.04



## Traffic Stream Results: Queues And Blocking

Time Segment	Arm	Traffic Stream	Initial Queue (PCU)	Mean Max Queue (PCU)	Max Queue Storage (PCU)	Utilised Storage (%)	Average Link Excess Queue (PCU)	Average Limit Excess Queue (PCU)	Excess Queue Penalty (£ per hr)	Max End Of Green Queue (PCU)	Max End Of Red Queue (PCU)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))	Estimated Blocking
17:00-18:00	1	1	0.00	0.25	17.39	1.41	0.00	0.00	0.00			16.00	0.00	16.00	
17:00-18:00	1	2	0.00	11.85	17.39	68.13	0.00	0.00	0.00			42.00	0.00	42.00	
17:00-18:00	A	1	0.00	5.28	17.39	30.38	0.00	0.00	0.00	0.16	4.25	0.00	0.00	0.00	
17:00-18:00	A	2	0.00	26.69	26.09	102.30	0.01	0.00	0.00	8.28	18.58	0.00	0.00	0.00	
17:00-18:00	A	3	0.00	9.02	26.09	34.56	0.00	0.00	0.00	0.45	7.12	0.00	0.00	0.00	
17:00-18:00	A	4	0.00	26.12	26.09	100.11	0.00	0.00	0.00	8.13	18.14	0.00	0.00	0.00	
17:00-18:00	Ax 1	1	0.00	2.09	3.48	60.13	0.00	0.00	0.00			19.00	0.00	19.00	
17:00-18:00	Ax 1	2	0.00	43.36	3.48	1246.69	20.41	0.00	0.00			8.00	0.00	8.00	
17:00-18:00	Ax 2	1	0.00	2.28	26.09	8.73	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	Ax 2	2	0.00	0.18	26.09	0.69	0.00	0.00	0.00			1.00	0.00	1.00	
17:00-18:00	B	1	0.00	0.12	5.22	2.32	0.00	0.00	0.00			61.00	0.00	61.00	
17:00-18:00	B	2	0.00	0.61	5.22	11.73	0.00	0.00	0.00			11.00	20.00	31.00	
17:00-18:00	Bc 1	1	0.00	0.10	5.22	1.94	0.00	0.00	0.00			3.00	0.00	3.00	
17:00-18:00	Bc 1	2	0.00	0.63	5.22	12.15	0.00	0.00	0.00			1.00	0.00	1.00	
17:00-18:00	Bc 1	3	0.00	0.18	5.22	3.36	0.00	0.00	0.00			0.00	13.00	13.00	
17:00-18:00	Bc 1	4	0.00	0.46	5.22	8.83	0.00	0.00	0.00			0.00	31.00	31.00	
17:00-18:00	C	1	0.00	14.95	34.78	42.98	0.00	0.00	0.00	0.64	12.54	0.00	0.00	0.00	
17:00-18:00	C	2	0.00	25.51	34.78	73.35	0.00	0.00	0.00	3.88	20.08	0.00	0.00	0.00	

17:00-18:00	C3-1	1	0.00	0.00	9.67	0.00	0.00	0.00	0.00			88.00	0.00	88.00	
17:00-18:00	Cx 2	1	0.00	8.72	71.99	12.12	0.00	0.00	0.00	0.52	6.68	0.00	0.00	0.00	
17:00-18:00	Cx 2	2	0.00	14.9 1	71.99	20.71	0.00	0.00	0.00	2.47	10.5 5	0.00	0.00	0.00	
17:00-18:00	Cx 3	1	0.00	0.00	10.32	0.01	0.00	0.00	0.00			47.00	0.00	47.00	
17:00-18:00	Cx 4-2	1	0.00	6.74	13.47	50.09	0.00	0.00	0.00			44.00	0.00	44.00	
17:00-18:00	Cx 4-2	2	0.00	0.07	13.47	0.53	0.00	0.00	0.00			26.00	0.00	26.00	
17:00-18:00	Cx 5	1	0.00	0.02	10.89	0.16	0.00	0.00	0.00			46.00	0.00	46.00	
17:00-18:00	D	1	0.00	14.6 8	52.17	28.14	0.00	0.00	0.00	0.70	9.49	0.00	0.00	0.00	
17:00-18:00	D	2	0.00	15.7 2	52.17	30.13	0.00	0.00	0.00	0.70	10.1 5	0.00	21.00	21.00	
17:00-18:00	D	3	0.00	15.6 8	52.17	30.05	0.00	0.00	0.00	0.69	10.1 2	0.00	21.00	21.00	
17:00-18:00	Dx 1	1	0.00	0.12	43.48	0.28	0.00	0.00	0.00			5.00	0.00	5.00	
17:00-18:00	Dx 1	2	0.00	36.2 2	43.48	83.30	0.00	0.00	0.00			21.00	0.00	21.00	
17:00-18:00	E	1	0.00	55.9 3	34.78	160.7 9	16.53	0.00	0.00			0.00	24.00	24.00	
17:00-18:00	E	2	0.00	13.4 4	34.78	38.63	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	F	1	0.00	24.4 2	36.52	66.86	0.00	0.00	0.00	3.51	13.8 2	0.00	0.00	0.00	
17:00-18:00	F	2	0.00	8.02	36.52	21.96	0.00	0.00	0.00	0.16	5.72	0.00	0.00	0.00	
17:00-18:00	F	3	0.00	0.60	36.52	1.64	0.00	0.00	0.00	0.00	0.60	8.00	0.00	8.00	
17:00-18:00	G	1	0.00	8.03	13.22	60.77	0.00	0.00	0.00	1.21	7.13	0.00	0.00	0.00	
17:00-18:00	G	2	0.00	7.10	13.22	53.72	0.00	0.00	0.00	0.41	6.67	0.00	0.00	0.00	
17:00-18:00	H	1	0.00	6.38	16.70	38.18	0.00	0.00	0.00	0.12	5.07	0.00	0.00	0.00	
17:00-18:00	H	2	0.00	6.80	16.70	40.74	0.00	0.00	0.00	0.12	5.41	0.00	6.00	6.00	
17:00-18:00	H	3	0.00	0.68	16.70	4.10	0.00	0.00	0.00	0.00	0.67	0.00	0.00	0.00	

17:00-18:00	I	1	0.00	23.10	10.43	221.42	6.29	0.00	0.00	10.34	20.02	0.00	0.00	0.00	
17:00-18:00	I	2	0.00	15.74	10.43	150.87	1.05	0.00	0.00	2.69	13.07	0.00	0.00	0.00	
17:00-18:00	Ac	1	0.00	7.59	7.00	108.41	0.02	0.71	56.46	0.09	5.49	0.00	0.00	0.00	
17:00-18:00	Ac	2	0.00	6.89	7.00	98.36	0.00	0.14	0.00	0.08	5.25	0.00	24.00	24.00	
17:00-18:00	Ac	3	0.00	3.04	7.00	43.48	0.00	0.00	0.00	0.24	2.82	0.00	11.00	11.00	
17:00-18:00	Ax	1	0.00	3.12	3.48	89.70	0.00	0.00	0.00	0.11	2.60	0.00	0.00	0.00	
17:00-18:00	Ax	2	0.00	5.94	3.48	170.91	0.32	0.43	0.00	0.86	5.33	0.00	68.00	68.00	
17:00-18:00	Ax	3	0.00	1.80	3.48	51.65	0.00	0.00	0.00	0.06	1.73	4.00	64.00	68.00	
17:00-18:00	Bc	1	0.00	6.21	17.39	35.68	0.00	0.00	0.00			3.00	0.00	3.00	
17:00-18:00	Bc	2	0.00	26.21	17.39	150.71	1.27	1.99	0.00			2.00	0.00	2.00	
17:00-18:00	Bc	3	0.00	8.34	17.39	47.94	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	Bc	4	0.00	19.53	17.39	112.32	0.14	0.49	0.00			0.00	0.00	0.00	
17:00-18:00	Bx	1	0.00	0.00	17.39	0.01	0.00	0.00	0.00			50.00	0.00	50.00	
17:00-18:00	C2	1	0.00	34.59	37.21	92.95	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	C4	1	0.00	14.64	15.06	97.19	0.00	0.00	0.00	1.26	10.06	0.00	0.00	0.00	
17:00-18:00	C4	2	0.00	15.81	15.06	104.97	0.02	0.00	0.00	1.25	10.83	0.00	0.00	0.00	
17:00-18:00	C5	1	0.00	8.07	9.57	84.37	0.00	0.00	0.00	0.78	6.87	0.00	0.00	0.00	
17:00-18:00	Cc	1	0.00	0.30	6.00	4.95	0.00	0.00	0.00	0.14	0.30	7.00	0.00	7.00	
17:00-18:00	Cc	2	0.00	7.37	6.00	122.77	0.10	0.10	5.81	0.48	6.17	0.00	0.00	0.00	
17:00-18:00	Cc	3	0.00	12.31	6.00	205.13	1.01	1.01	60.71	2.59	8.92	0.00	0.00	0.00	
17:00-18:00	Cx	1	0.00	0.88	17.39	5.07	0.00	0.00	0.00	0.12	0.76	0.00	0.00	0.00	
17:00-18:00	Cx	2	0.00	1.19	17.39	6.83	0.00	0.00	0.00	0.14	1.12	0.00	0.00	0.00	

17:00-18:00	Dc	1	0.00	9.04	15.65	57.77	0.00	0.00	0.00	1.56	7.89	0.00	0.00	0.00	
17:00-18:00	Dc	2	0.00	7.61	15.65	48.60	0.00	0.00	0.00	2.20	7.06	2.00	0.00	2.00	
17:00-18:00	Dc	3	0.00	1.95	15.65	12.44	0.00	0.00	0.00	0.27	1.95	8.00	0.00	8.00	
17:00-18:00	Dx	1	0.00	6.19	9.74	63.60	0.00	0.00	0.00	0.87	2.21	7.00	0.00	7.00	
17:00-18:00	Dx	2	0.00	6.56	9.74	67.31	0.00	0.00	0.00	0.24	0.24	15.00	0.00	15.00	
17:00-18:00	Dx	3	0.00	0.75	9.74	7.71	0.00	0.00	0.00	0.18	0.18	14.00	0.00	14.00	
17:00-18:00	Ec	1	0.00	0.05	8.70	0.57	0.00	0.00	0.00			6.00	0.00	6.00	
17:00-18:00	Ec	2	0.00	17.56	8.70	201.93	1.34	2.06	123.82			7.00	13.00	20.00	
17:00-18:00	Ec	3	0.00	17.52	8.70	201.42	1.34	2.06	123.46			7.00	5.00	12.00	
17:00-18:00	Ex	1	0.00	11.70	17.39	67.26	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	Ex	2	0.00	1.11	17.39	6.36	0.00	0.00	0.00			50.00	0.00	50.00	
17:00-18:00	Fc	1	0.00	0.50	7.00	7.15	0.00	0.00	0.00	0.02	0.50	0.00	0.00	0.00	
17:00-18:00	Fc	2	0.00	2.53	7.00	36.12	0.00	0.00	0.00	0.13	2.35	0.00	0.00	0.00	
17:00-18:00	Fc	3	0.00	0.22	7.00	3.14	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	
17:00-18:00	Fx	1	0.00	0.36	34.78	1.02	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	Fx	2	0.00	0.28	34.78	0.80	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	Fx <sub>1</sub>	1	0.00	0.48	17.39	2.74	0.00	0.00	0.00			0.00	2.00	2.00	
17:00-18:00	Fx <sub>1</sub>	2	0.00	12.46	17.39	71.65	0.00	0.00	0.00			0.00	1.00	1.00	
17:00-18:00	G1	1	0.00	0.06	10.43	0.56	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	Gc	1	0.00	1.64	7.00	23.36	0.00	0.00	0.00	0.15	1.53	0.00	0.00	0.00	
17:00-18:00	Gc	2	0.00	2.19	7.00	31.35	0.00	0.00	0.22	0.18	1.64	0.00	0.00	0.00	
17:00-18:00	Gc	3	0.00	0.08	7.00	1.21	0.00	0.00	0.00	0.00	0.08	7.00	0.00	7.00	

17:00-18:00	Gx	1	0.00	0.13	9.74	1.29	0.00	0.00	0.00			2.00	0.00	2.00	
17:00-18:00	Gx	2	0.00	0.00	9.74	0.02	0.00	0.00	0.00			70.00	0.00	70.00	
17:00-18:00	Gx 1	1	0.00	1.90	3.48	54.67	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	H1	1	0.00	0.19	17.39	1.12	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	H1	2	0.00	0.00	17.39	0.00	0.00	0.00	0.00			0.00	0.00	0.00	
17:00-18:00	Hc	1	0.00	1.90	7.00	27.08	0.00	0.00	0.00	0.01	1.81	3.00	0.00	3.00	
17:00-18:00	Hc	2	0.00	3.01	7.00	42.97	0.00	0.00	0.19	0.13	2.89	3.00	0.00	3.00	
17:00-18:00	Hc	3	0.00	5.69	7.00	81.25	0.00	0.11	214.20	0.13	0.85	16.00	0.00	16.00	
17:00-18:00	Hx	1	0.00	0.08	17.39	0.48	0.00	0.00	0.00			4.00	0.00	4.00	
17:00-18:00	Hx	2	0.00	0.06	17.39	0.35	0.00	0.00	0.00			18.00	0.00	18.00	
17:00-18:00	l1	1	0.00	0.28	17.39	1.60	0.00	0.00	0.00			0.00	87.00	87.00	
17:00-18:00	lc	1	0.00	4.46	7.00	63.75	0.00	0.13	10.23	0.19	2.35	0.00	0.00	0.00	
17:00-18:00	lc	2	0.00	8.74	7.00	124.80	0.09	0.68	68.26	0.30	2.81	0.00	0.00	0.00	
17:00-18:00	lc	3	0.00	0.12	7.00	1.77	0.00	0.00	0.00	0.00	0.12	12.00	0.00	12.00	
17:00-18:00	lx	1	0.00	0.00	7.83	0.02	0.00	0.00	0.00			60.00	2.00	62.00	
17:00-18:00	lx	2	0.00	0.00	7.83	0.02	0.00	0.00	0.00			60.00	2.00	62.00	
17:00-18:00	lx1	1	0.00	2.96	2.61	113.42	0.01	0.00	0.00			55.00	0.00	55.00	

### Traffic Stream Results: Journey Times

Time Segment	Arm	Traffic Stream	Distance Travelled (PCU-km/hr)	Time Spent (PCU-hr/hr)	Mean Journey Speed (kph)	Journey Time Per PCU (s)
17:00-18:00	1	1	89.50	2.10	42.63	8.44
17:00-18:00	1	2	68.10	1.62	42.12	8.55
17:00-18:00	A	1	32.30	2.10	15.38	23.41
17:00-18:00	A	2	116.40	15.12	7.70	70.14

17:00-18:00	A	3	72.45	4.27	16.97	31.82
17:00-18:00	A	4	116.25	15.07	7.72	69.98
17:00-18:00	Ax1	1	11.39	0.31	36.53	1.97
17:00-18:00	Ax1	2	32.37	6.61	4.90	14.69
17:00-18:00	Ax2	1	207.74	5.57	37.27	14.49
17:00-18:00	Ax2	2	120.39	2.67	45.04	11.99
17:00-18:00	B	1	0.78	0.03	23.58	4.58
17:00-18:00	B	2	0.72	0.28	2.57	42.10
17:00-18:00	Bc1	1	19.46	0.50	38.57	2.80
17:00-18:00	Bc1	2	35.58	1.37	25.96	4.16
17:00-18:00	Bc1	3	23.88	0.67	35.66	3.03
17:00-18:00	Bc1	4	32.64	1.14	28.72	3.76
17:00-18:00	C	1	133.20	8.07	16.50	43.62
17:00-18:00	C	2	182.00	14.74	12.35	58.31
17:00-18:00	C3-1	1	0.00	0.00	0.00	0.00
17:00-18:00	Cx 2	1	239.09	7.69	31.10	47.91
17:00-18:00	Cx 2	2	327.93	12.49	26.25	56.77
17:00-18:00	Cx3	1	3.62	0.08	47.90	4.46
17:00-18:00	Cx4-2	1	44.72	1.05	42.53	6.55
17:00-18:00	Cx4-2	2	43.61	0.97	44.75	6.23
17:00-18:00	Cx5	1	18.90	0.41	46.28	4.87
17:00-18:00	D	1	243.60	7.61	32.02	33.73
17:00-18:00	D	2	261.60	8.12	32.21	33.53
17:00-18:00	D	3	261.00	8.09	32.25	33.49
17:00-18:00	Dx1	1	209.50	3.38	62.01	14.51
17:00-18:00	Dx1	2	378.75	9.73	38.95	23.11
17:00-18:00	E	1	94.20	50.30	1.87	384.46
17:00-18:00	E	2	125.20	7.13	17.57	40.99
17:00-18:00	F	1	290.84	13.22	22.00	34.36
17:00-18:00	F	2	150.38	4.44	33.84	22.34
17:00-18:00	F	3	18.16	0.46	39.25	19.26
17:00-18:00	G	1	22.50	4.49	5.01	54.59

17:00-18:00	G	2	23.79	3.67	6.48	42.24
17:00-18:00	H	1	45.02	2.42	18.57	18.61
17:00-18:00	H	2	48.10	2.58	18.64	18.54
17:00-18:00	H	3	6.05	0.27	22.04	15.68
17:00-18:00	I	1	31.68	15.83	2.00	107.95
17:00-18:00	I	2	33.96	8.17	4.15	51.99
17:00-18:00	Ac	1	21.87	1.87	11.72	16.59
17:00-18:00	Ac	2	22.14	1.89	11.73	16.57
17:00-18:00	Ac	3	33.80	1.89	17.93	10.84
17:00-18:00	Ax	1	11.39	0.62	18.43	3.91
17:00-18:00	Ax	2	23.07	2.01	11.49	6.27
17:00-18:00	Ax	3	9.30	0.40	23.40	3.08
17:00-18:00	Bc	1	72.81	1.69	43.15	8.34
17:00-18:00	Bc	2	118.60	4.00	29.63	12.15
17:00-18:00	Bc	3	79.60	1.92	41.50	8.67
17:00-18:00	Bc	4	108.80	3.36	32.34	11.13
17:00-18:00	Bx	1	7.93	0.17	47.98	7.50
17:00-18:00	C2	1	337.20	14.25	23.66	32.56
17:00-18:00	C4	1	57.17	6.13	9.32	33.46
17:00-18:00	C4	2	62.19	6.56	9.49	32.87
17:00-18:00	C5	1	18.26	3.93	4.65	42.58
17:00-18:00	Cc	1	31.92	0.84	37.85	6.18
17:00-18:00	Cc	2	51.81	2.96	17.52	13.35
17:00-18:00	Cc	3	72.22	5.73	12.59	18.58
17:00-18:00	Cx	1	66.67	1.23	54.04	6.66
17:00-18:00	Cx	2	70.30	1.36	51.85	6.94
17:00-18:00	Dc	1	52.29	4.52	11.58	27.98
17:00-18:00	Dc	2	58.23	5.60	10.39	31.18
17:00-18:00	Dc	3	35.46	2.04	17.34	18.68
17:00-18:00	Dx	1	46.93	1.47	31.83	6.33
17:00-18:00	Dx	2	44.63	0.95	46.83	4.31
17:00-18:00	Dx	3	40.21	0.80	50.04	4.03
17:00-18:00	Ec	1	24.25	0.55	43.94	4.10

17:00-18:00	Ec	2	53.45	2.12	25.24	7.13
17:00-18:00	Ec	3	53.35	2.11	25.31	7.11
17:00-18:00	Ex	1	111.50	2.90	38.47	9.36
17:00-18:00	Ex	2	44.00	0.95	46.22	7.79
17:00-18:00	Fc	1	5.25	0.56	9.42	28.27
17:00-18:00	Fc	2	12.28	1.69	7.25	36.73
17:00-18:00	Fc	3	2.37	0.25	9.64	27.62
17:00-18:00	Fx	1	236.60	5.26	45.01	16.00
17:00-18:00	Fx	2	234.80	5.14	45.66	15.77
17:00-18:00	Fx1	1	109.90	2.75	39.91	9.02
17:00-18:00	Fx1	2	125.80	3.45	36.42	9.89
17:00-18:00	G1	1	36.54	0.82	44.82	4.82
17:00-18:00	Gc	1	46.31	1.86	24.96	10.09
17:00-18:00	Gc	2	52.37	2.09	25.02	10.07
17:00-18:00	Gc	3	6.05	0.21	28.81	8.75
17:00-18:00	Gx	1	46.27	1.08	42.68	4.72
17:00-18:00	Gx	2	7.50	0.16	47.71	4.23
17:00-18:00	Gx1	1	19.21	0.63	30.35	2.37
17:00-18:00	H1	1	97.00	2.20	44.01	8.18
17:00-18:00	H1	2	6.30	0.13	48.13	7.48
17:00-18:00	Hc	1	7.67	0.92	8.30	29.07
17:00-18:00	Hc	2	21.00	2.14	9.81	24.60
17:00-18:00	Hc	3	20.97	1.30	16.16	14.93
17:00-18:00	Hx	1	70.26	1.54	45.68	7.88
17:00-18:00	Hx	2	66.16	1.43	46.24	7.78
17:00-18:00	l1	1	109.40	2.54	43.01	8.37
17:00-18:00	lc	1	42.58	2.06	20.64	11.34
17:00-18:00	lc	2	52.91	2.66	19.86	11.78
17:00-18:00	lc	3	4.10	0.17	24.78	9.44
17:00-18:00	lx	1	5.74	0.12	47.50	3.41
17:00-18:00	lx	2	5.15	0.11	47.68	3.40
17:00-18:00	lx1	1	3.63	0.10	35.63	1.52



### Traffic Stream Results: Flare

Time Segment	Arm	Traffic Stream	Flare Present	Flare Components	Degree Of Saturation (%)	Mean Max Queue (PCU)	Calculated Capacity (PCU/hr)	Practical Reserve Capacity (%)
17:00-18:00	C	1	✓	Quick Flare	66	14.95	1006	36
17:00-18:00	C	2	✓	Quick Flare	90	25.51	1006	0
17:00-18:00	G	2	✓	Quick Flare	58	7.10	536	54
17:00-18:00	I	2	✓	Quick Flare	87	15.74	650	3

### Traffic Stream Results: Advanced

Time Segment	Arm	Traffic Stream	Degree Of Saturation Penalty (£ per hr)	Phase Min Max Penalty (£ per hr)	Intergreen Broken Penalty (£ per hr)	Stage Constraint Broken Penalty (£ per hr)	Ped Gap Accepting Penalty (£ per hr)	Warmed Up	Warmed Up Error	Mean Max Queue EoS (PCU)	Max End Of Green Queue EoS (PCU)	Max End Of Red Queue EoS (PCU)	Cost Of Penalties (£ per hr)	Unweighted Performance Index (£ per hr)	Performance Index (£ per hr)
17:00 - 18:00	1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.25			0.00	3.49	3.49
17:00 - 18:00	1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	11.85			0.00	7.63	7.63
17:00 - 18:00	A	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	5.28	0.16	4.25	0.00	26.91	9.45
17:00 - 18:00	A	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	28.35	9.94	20.24	0.00	212.91	78.67
17:00 - 18:00	A	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	9.02	0.45	7.12	0.00	50.74	18.01
17:00 - 18:00	A	4	0.00	0.00	0.00	0.00	0.00	✓	0.00	27.70	9.72	19.72	0.00	211.60	78.27
17:00 - 18:00	Ax 1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.09			0.00	1.32	1.32
17:00 - 18:00	Ax 1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	43.46			0.00	128.27	128.27

17:00 - 18:00	Ax 2	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.28			0.00	19.73	19.73
17:00 - 18:00	Ax 2	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.18			0.00	2.54	2.54
17:00 - 18:00	B	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.12			0.00	0.44	0.44
17:00 - 18:00	B	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.61			0.00	4.56	4.56
17:00 - 18:00	Bc 1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.10			0.00	1.44	1.44
17:00 - 18:00	Bc 1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.64			0.00	9.00	9.00
17:00 - 18:00	Bc 1	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.18			0.00	2.49	2.49
17:00 - 18:00	Bc 1	4	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.46			0.00	6.54	6.54
17:00 - 18:00	C	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	14.9 5	0.64	12.5 5	0.00	94.72	30.17
17:00 - 18:00	C	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	25.6 9	4.06	20.2 5	0.00	188.65	62.31
17:00 - 18:00	C3 -1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.00	0.00
17:00 - 18:00	Cx 2	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	8.72	0.52	6.69	0.00	49.86	49.86
17:00 - 18:00	Cx 2	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	14.9 7	2.53	10.6 1	0.00	99.80	99.80
17:00 - 18:00	Cx 3	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.01	0.01
17:00 - 18:00	Cx 4- 2	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	6.74			0.00	4.40	4.40
17:00 - 18:00	Cx 4- 2	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.07			0.00	1.01	1.01

17:00 - 18:00	Cx 5	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.02			0.00	0.24	0.24
17:00 - 18:00	D	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	14.6 8	0.70	9.50	0.00	86.47	21.71
17:00 - 18:00	D	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	15.7 2	0.70	10.1 5	0.00	92.08	23.05
17:00 - 18:00	D	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	15.6 8	0.70	10.1 2	0.00	91.67	22.94
17:00 - 18:00	Dx 1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.12			0.00	1.76	1.76
17:00 - 18:00	Dx 1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	36.2 2			0.00	123.04	123.04
17:00 - 18:00	E	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	100. 70			0.00	725.34	313.41
17:00 - 18:00	E	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	13.5 0			0.00	81.26	42.62
17:00 - 18:00	F	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	24.5 1	3.60	13.9 1	0.00	132.64	132.64
17:00 - 18:00	F	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	8.02	0.16	5.72	0.00	28.81	28.81
17:00 - 18:00	F	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.60	0.00	0.60	0.00	1.96	1.96
17:00 - 18:00	G	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	8.06	1.23	7.15	0.00	67.49	30.63
17:00 - 18:00	G	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	7.10	0.41	6.67	0.00	54.35	24.42
17:00 - 18:00	H	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	6.38	0.12	5.07	0.00	29.23	29.23
17:00 - 18:00	H	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	6.80	0.12	5.41	0.00	31.07	31.07
17:00 - 18:00	H	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.68	0.00	0.67	0.00	2.97	2.97

17:00 - 18:00	I	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	27.2 1	14.4 5	24.1 3	0.00	243.28	86.20
17:00 - 18:00	I	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	15.8 5	2.80	13.1 8	0.00	126.29	42.44
17:00 - 18:00	Ac	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	7.59	0.09	5.49	56.46	29.61	86.06
17:00 - 18:00	Ac	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	6.89	0.08	5.25	0.00	26.90	26.90
17:00 - 18:00	Ac	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.04	0.24	2.83	0.00	20.73	20.73
17:00 - 18:00	Ax	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.12	0.11	2.60	0.00	12.60	12.60
17:00 - 18:00	Ax	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	5.95	0.86	5.33	0.00	36.69	36.69
17:00 - 18:00	Ax	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.80	0.06	1.73	0.00	7.26	7.26
17:00 - 18:00	Bc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	6.21			0.00	5.14	5.14
17:00 - 18:00	Bc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	26.2 1			0.00	44.75	44.75
17:00 - 18:00	Bc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	8.34			0.00	8.05	8.05
17:00 - 18:00	Bc	4	0.00	0.00	0.00	0.00	0.00	✓	0.00	19.5 3			0.00	31.90	31.90
17:00 - 18:00	Bx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.01	0.01
17:00 - 18:00	C2	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	34.6 4			0.00	143.46	143.46
17:00 - 18:00	C4	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	14.6 5	1.27	10.0 7	0.00	88.96	88.96
17:00 - 18:00	C4	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	15.8 2	1.27	10.8 4	0.00	94.95	94.95

17:00 - 18:00	C5	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	8.08	0.79	6.88	0.00	60.81	60.81
17:00 - 18:00	Cc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.30	0.14	0.30	0.00	2.97	2.97
17:00 - 18:00	Cc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	7.37	0.48	6.17	5.81	35.98	41.79
17:00 - 18:00	Cc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	12.36	2.64	8.96	60.71	74.04	134.75
17:00 - 18:00	Cx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.88	0.12	0.76	0.00	4.53	4.53
17:00 - 18:00	Cx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.19	0.14	1.12	0.00	6.24	6.24
17:00 - 18:00	Dc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	9.07	1.59	7.92	0.00	60.10	600.99
17:00 - 18:00	Dc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	7.66	2.26	7.12	0.00	75.34	75.34
17:00 - 18:00	Dc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.95	0.27	1.95	0.00	21.19	21.19
17:00 - 18:00	Dx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	6.19	0.88	2.21	0.00	18.24	18.24
17:00 - 18:00	Dx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	6.56	0.24	0.24	0.00	5.79	5.79
17:00 - 18:00	Dx	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.75	0.18	0.18	0.00	2.96	2.96
17:00 - 18:00	Ec	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.05			0.00	0.71	0.71
17:00 - 18:00	Ec	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	17.56			123.82	29.15	152.97
17:00 - 18:00	Ec	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	17.52			123.46	28.94	152.40
17:00 - 18:00	Ex	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	11.70			0.00	13.67	13.67

17:00 - 18:00	Ex	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.11			0.00	0.68	0.68
17:00 - 18:00	Fc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.50	0.02	0.50	0.00	5.90	5.90
17:00 - 18:00	Fc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.53	0.13	2.35	0.00	20.08	20.08
17:00 - 18:00	Fc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.22	0.00	0.22	0.00	2.57	2.57
17:00 - 18:00	Fx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.36			0.00	5.05	5.05
17:00 - 18:00	Fx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.28			0.00	3.97	3.97
17:00 - 18:00	Fx 1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.48			0.00	6.78	6.78
17:00 - 18:00	Fx 1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	12.4 6			0.00	16.43	16.43
17:00 - 18:00	G1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.06			0.00	0.83	0.83
17:00 - 18:00	Gc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.64	0.15	1.53	0.00	6.85	6.85
17:00 - 18:00	Gc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.19	0.18	1.64	0.22	7.68	7.90
17:00 - 18:00	Gc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.08	0.00	0.08	0.00	0.36	0.36
17:00 - 18:00	Gx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.13			0.00	1.78	1.78
17:00 - 18:00	Gx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.03	0.03
17:00 - 18:00	Gx 1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.90			0.00	3.74	3.74
17:00 - 18:00	H1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.19			0.00	2.77	2.77

17:00 - 18:00	H1	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.01	0.01
17:00 - 18:00	Hc	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	1.90	0.01	1.81	0.00	10.84	10.84
17:00 - 18:00	Hc	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	3.01	0.13	2.89	0.19	22.91	23.09
17:00 - 18:00	Hc	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	5.69	0.13	0.85	214.20	11.21	225.41
17:00 - 18:00	Hx	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.08			0.00	1.18	1.18
17:00 - 18:00	Hx	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.06			0.00	0.86	0.86
17:00 - 18:00	I1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.28			0.00	3.95	3.95
17:00 - 18:00	Ic	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	4.46	0.19	2.35	10.23	12.55	22.78
17:00 - 18:00	Ic	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	8.74	0.30	2.81	68.26	18.88	87.15
17:00 - 18:00	Ic	3	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.12	0.00	0.12	0.00	0.61	0.61
17:00 - 18:00	Ix	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.03	0.03
17:00 - 18:00	Ix	2	0.00	0.00	0.00	0.00	0.00	✓	0.00	0.00			0.00	0.02	0.02
17:00 - 18:00	Ix1	1	0.00	0.00	0.00	0.00	0.00	✓	0.00	2.96			0.00	1.42	1.42

## Network Results

### Run Summary

Analysis Set Used	Run Start Time	Run Finish Time	Modelling Start Time (HH:m)	Network Cycle Time (s)	Total Network Delay (PCU)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised	Item with worst unsignalised	Item with worst over	Network Within Capa
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			m)		- hr/hr)					PRC	PRC	all PRC	city
A1 - 2031 PM Scenario C	27/06/2 014 10:44:0 1	27/06/2 014 10:53:5 0	17:00	88	188.2 7	123.4 3	E/1	5	5	I/1	C3-1/1	C3- 1/1	

### Network Results: Vehicle Summary

Time Segment	Degree Of Saturation (%)	Practical Reserve Capacity (%)	Calculated Flow Entering (PCU/hr)	Actual Green (s (per cycle))	Mean Delay Per PCU (s)	Weighted Cost Of Delay (£ per hr)	Weighted Cost Of Stops (£ per hr)	Performance Index (£ per hr)
17:00-18:00	123!	-100	61658	6358	10.56	2285.23	671.54	3405.93

### Network Results: Pedestrian Summary

Time Segment	Degree Of Saturation (%)	Calculated Flow Entering (Ped/hr)	Actual Green (s (per cycle))	Mean Delay Per Ped (s)	Weighted Cost Of Delay (£ per hr)	Performance Index (£ per hr)
17:00-18:00	123!	500	6	0.35	84.93	84.93

### Network Results: Flows And Signals

Time Segment	Calculated Flow Entering (PCU/hr)	Calculated Flow Out (PCU/hr)	Flow Discrepancy (PCU/hr)	Adjusted Flow Warning	Degree Of Saturation (%)	DOS Threshold Exceeded	Practical Reserve Capacity (%)	Actual Green (s (per cycle))	Effective Green (s (per cycle))
17:00-18:00	62158	62069	423	✓	123!	✓	-100	6364	6411

### Network Results: Stops And Delays

Time Segment	Mean Cruise Time Per PCU (s)	Mean Delay Per PCU (s)	Uniform Delay (PCU-hr/hr)	Random Plus Oversat Delay (PCU-hr/hr)	Unweighted Cost Of Delay (£ per hr)	Weighted Cost Of Delay (£ per hr)	Mean Stops Per PCU (%)	Uniform Stops (Stops per hr)	Random Stops (Stops per hr)	Unweighted Cost Of Stops (£ per hr)	Weighted Cost Of Stops (£ per hr)
17:00-18:00	8.17	10.90	92.36	95.91	2673.50	2370.16	33.39	17745.83	2727.31	738.08	671.54

### Network Results: Queues And Blocking

Time Segment	Max Queue Storage (PCU)	Excess Queue Penalty (£ per hr)	Wasted Time Starvation (s (per cycle))	Wasted Time Blocking Back (s (per cycle))	Wasted Time Total (s (per cycle))
17:00-18:00	1610.79	449.16	923.00	415.00	1338.00

### Network Results: Journey Times



<b>Time Segment</b>	<b>Distance Travelled (PCU-km/hr)</b>	<b>Time Spent (PCU-hr/hr)</b>	<b>Mean Journey Speed (kph)</b>
17:00-18:00	7094.79	329.38	21.54

## About AECOM

AECOM is a global provider of professional technical and management support services to a broad range of markets, including transportation, facilities, environmental, energy, water and government. With approximately 45,000 employees around the world, AECOM is a leader in all of the key markets that it serves. AECOM provides a blend of global reach, local knowledge, innovation and technical excellence in delivering solutions that create, enhance and sustain the world's built, natural and social environments. A *Fortune 500* company, AECOM serves clients in more than 130 countries and has annual revenue in excess of \$8.0 billion.

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