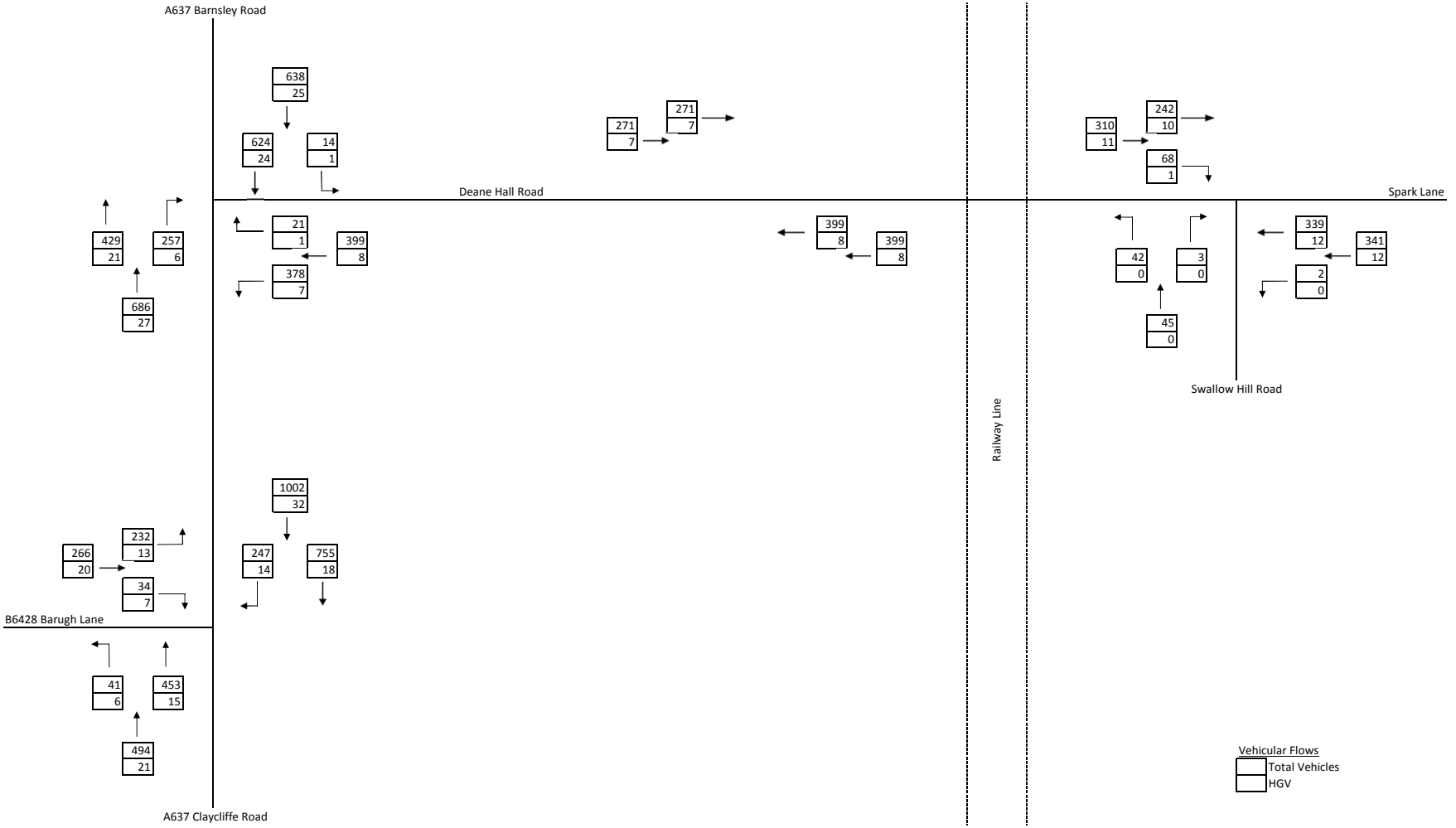
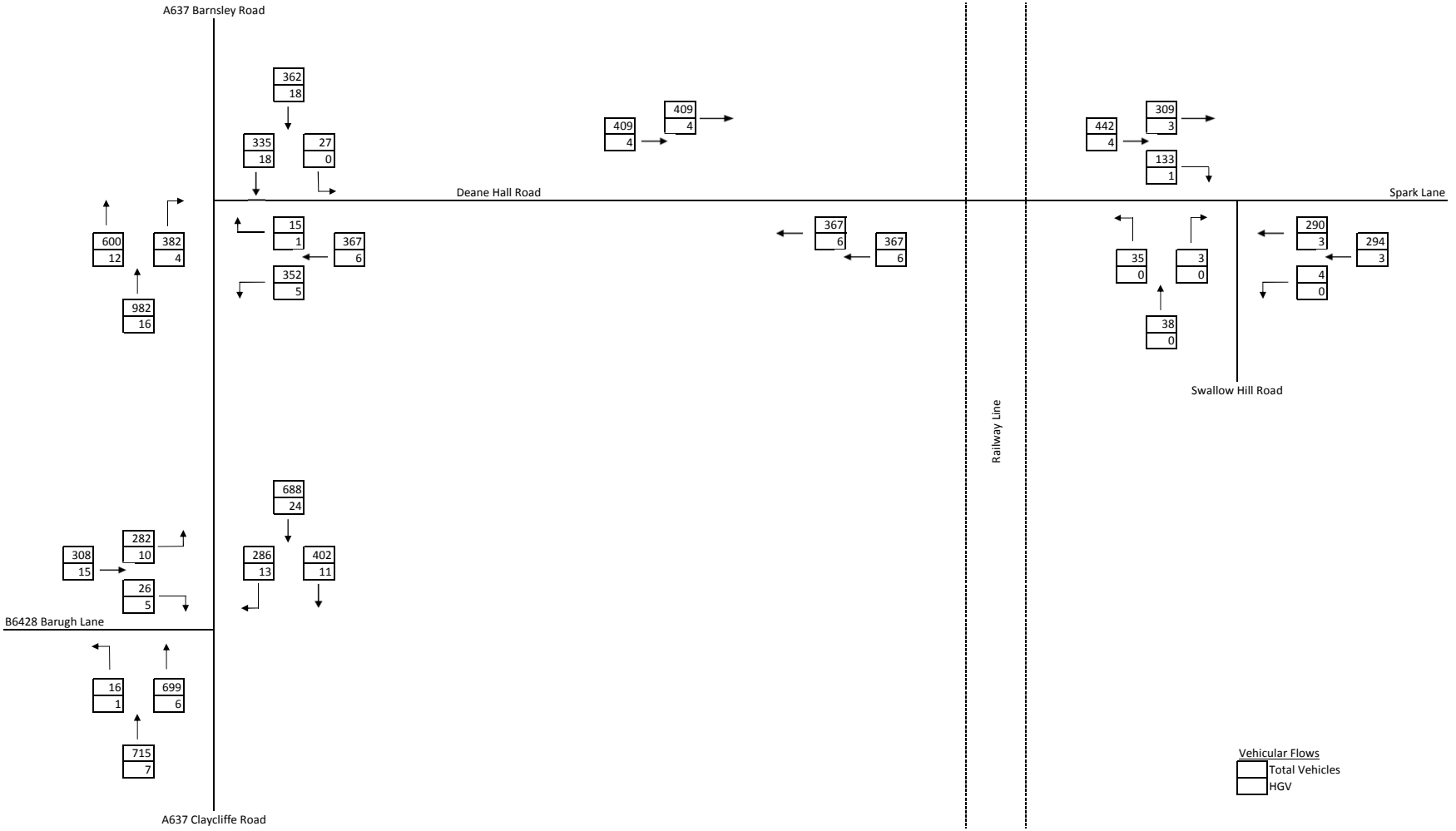
APPENDIX BGH 13

2018 GROWTHED VEHICULAR FLOWS
BARNSLEY
8:00 am to 9:00 am



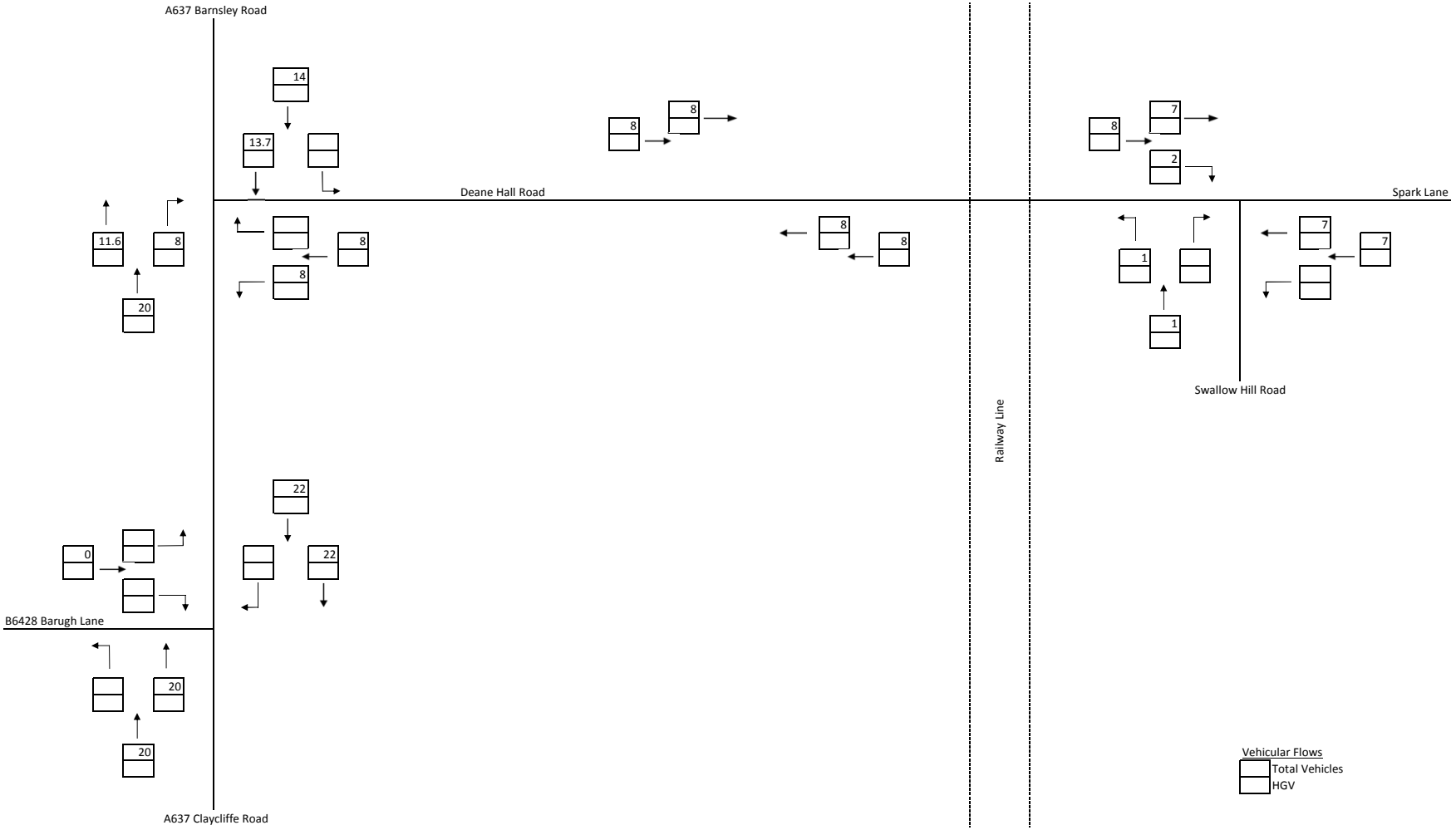
2018 GROWTHED VEHICULAR FLOWS
BARNSLEY
5:00 pm to 6:00 pm



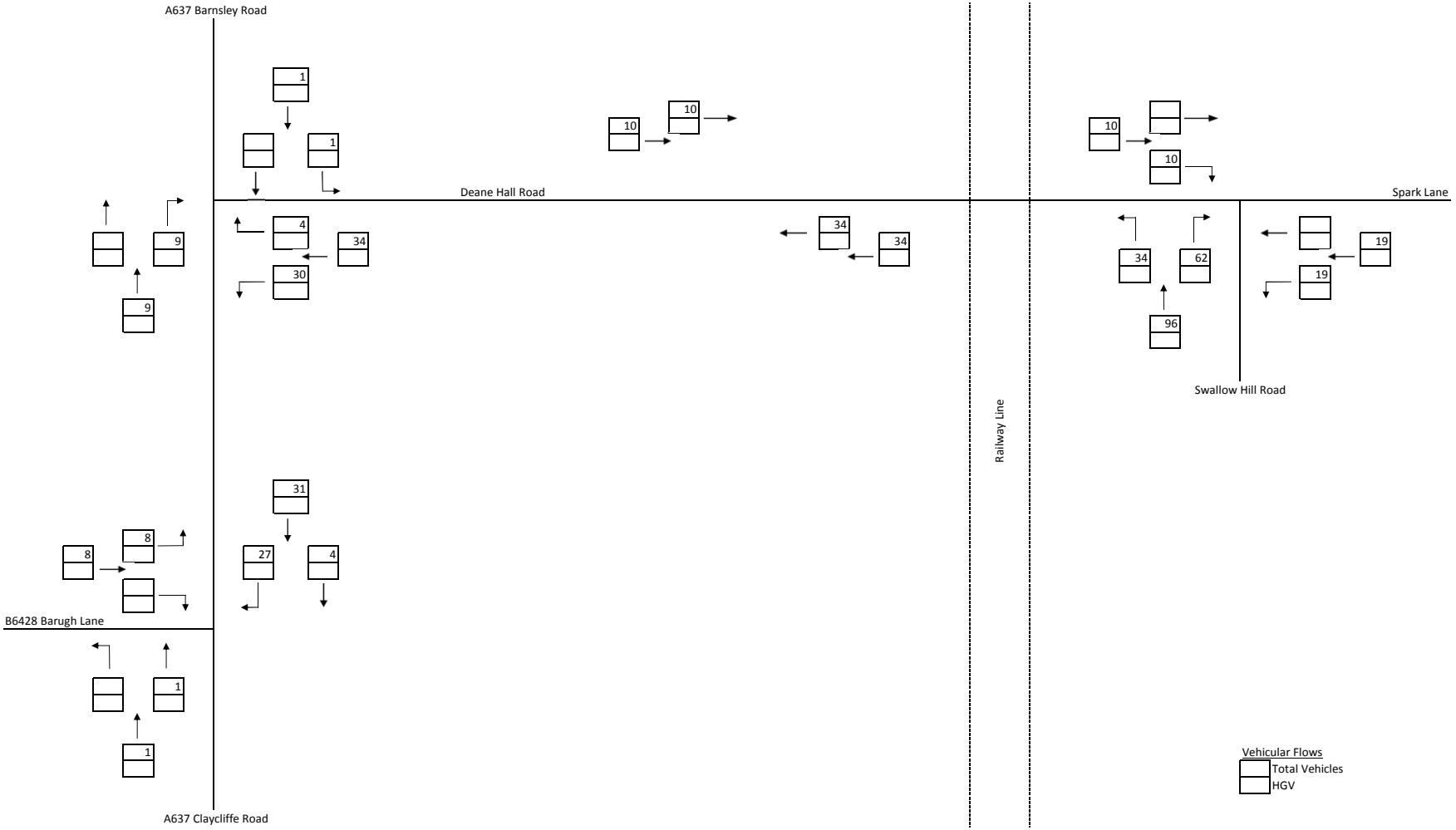
APPENDIX BGH 14

Committed Development (Aldi)
BARNSLEY
8:00 am to 9:00 am

IN	22
OUT	20

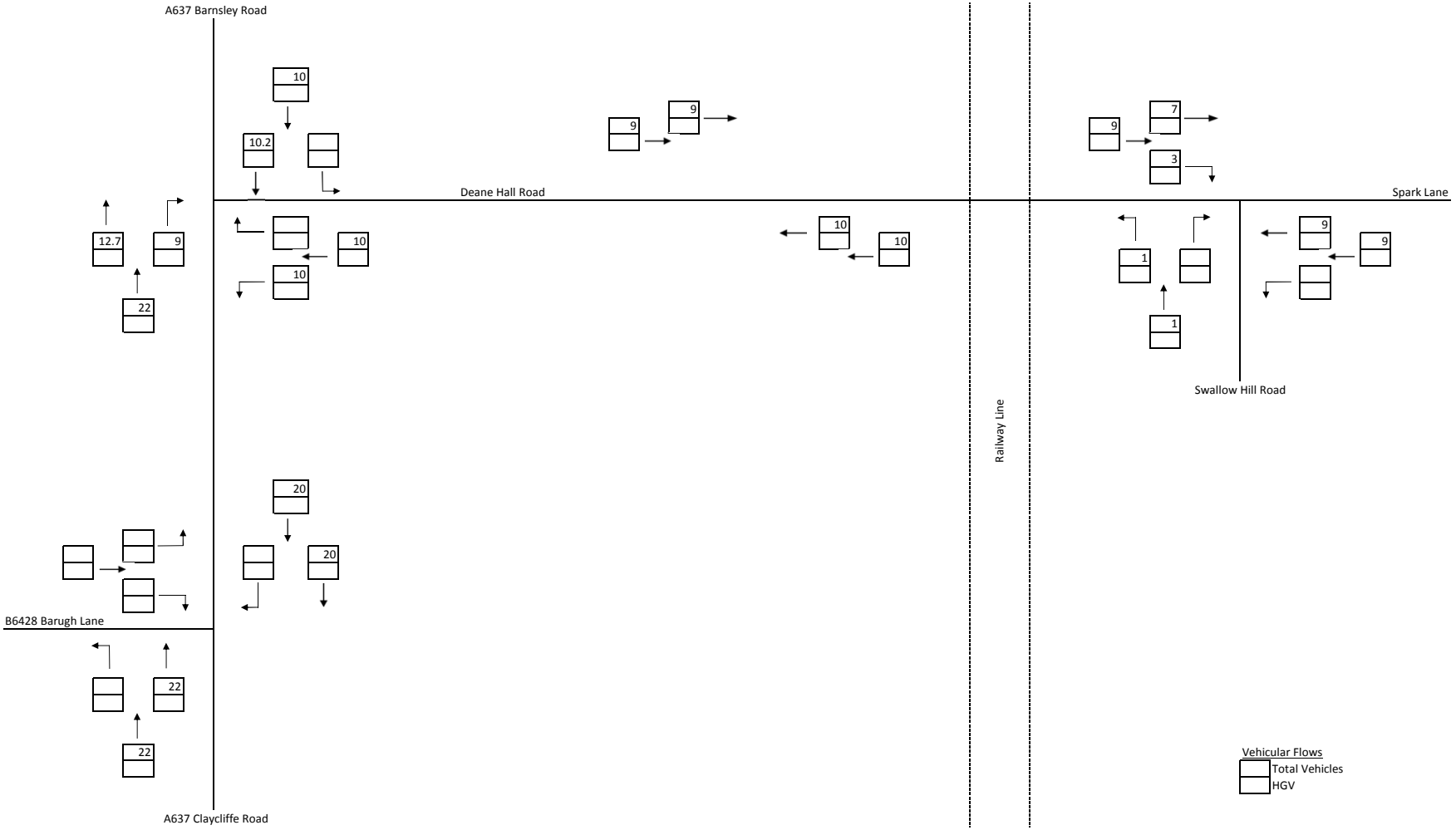


Committed Development (North Gawber)
BARNSLEY
8:00 am to 9:00 am

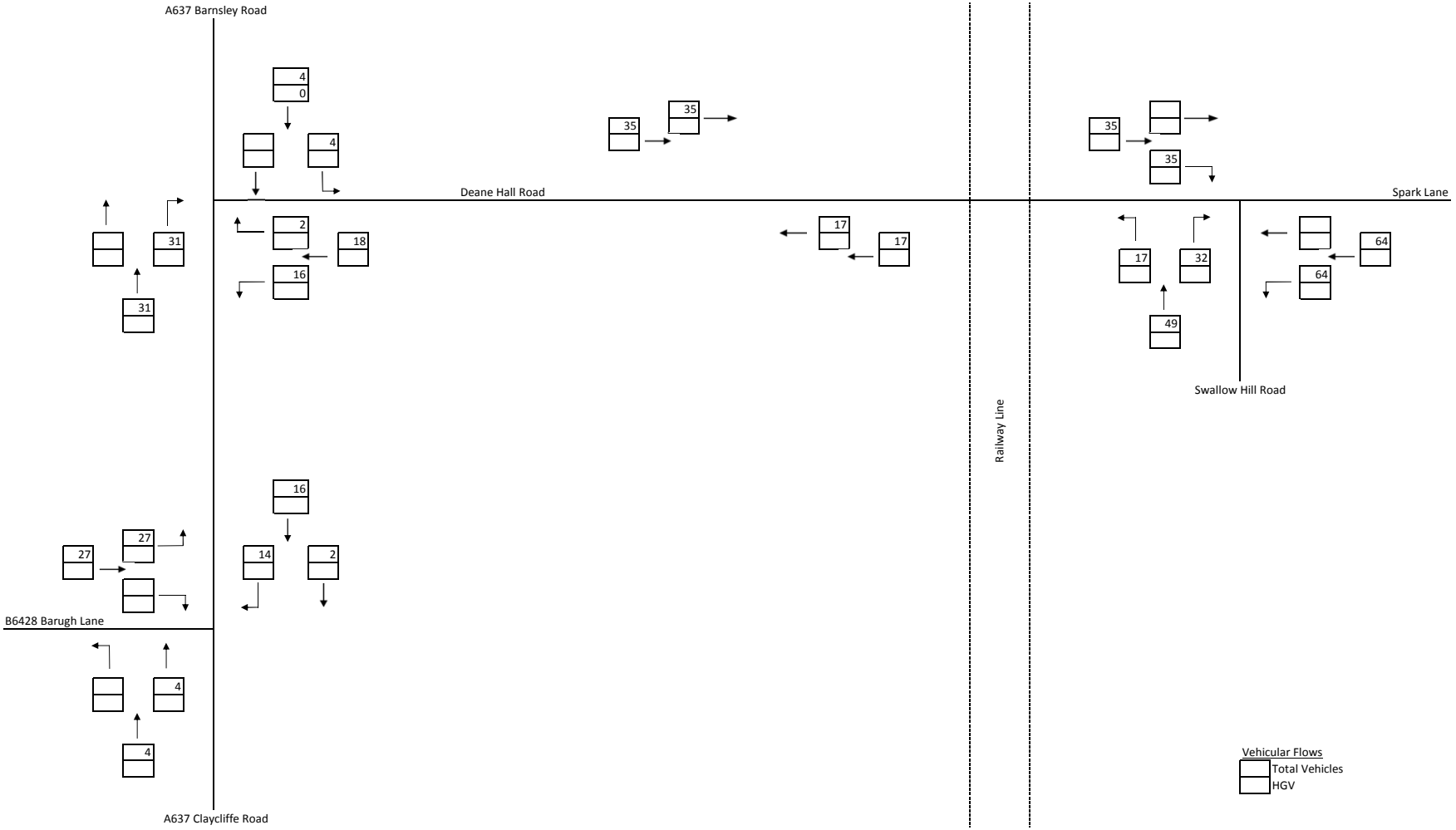


Committed Development (Aldi)
BARNSLEY
17:00 pm to 18:00 pm

IN	20
OUT	22

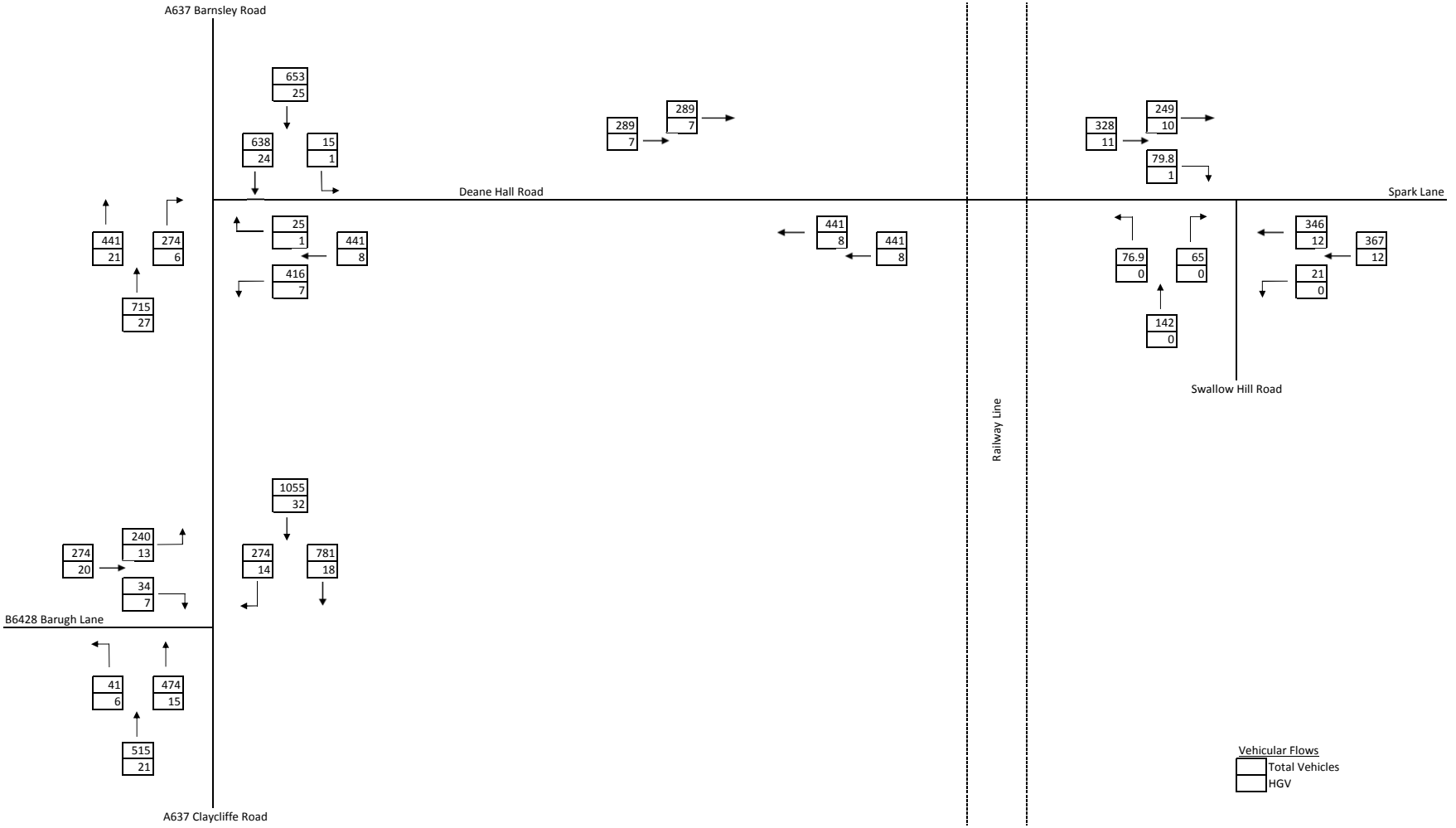


Committed Development (North Gawber)
BARNSLEY
17:00 pm to 18:00 pm

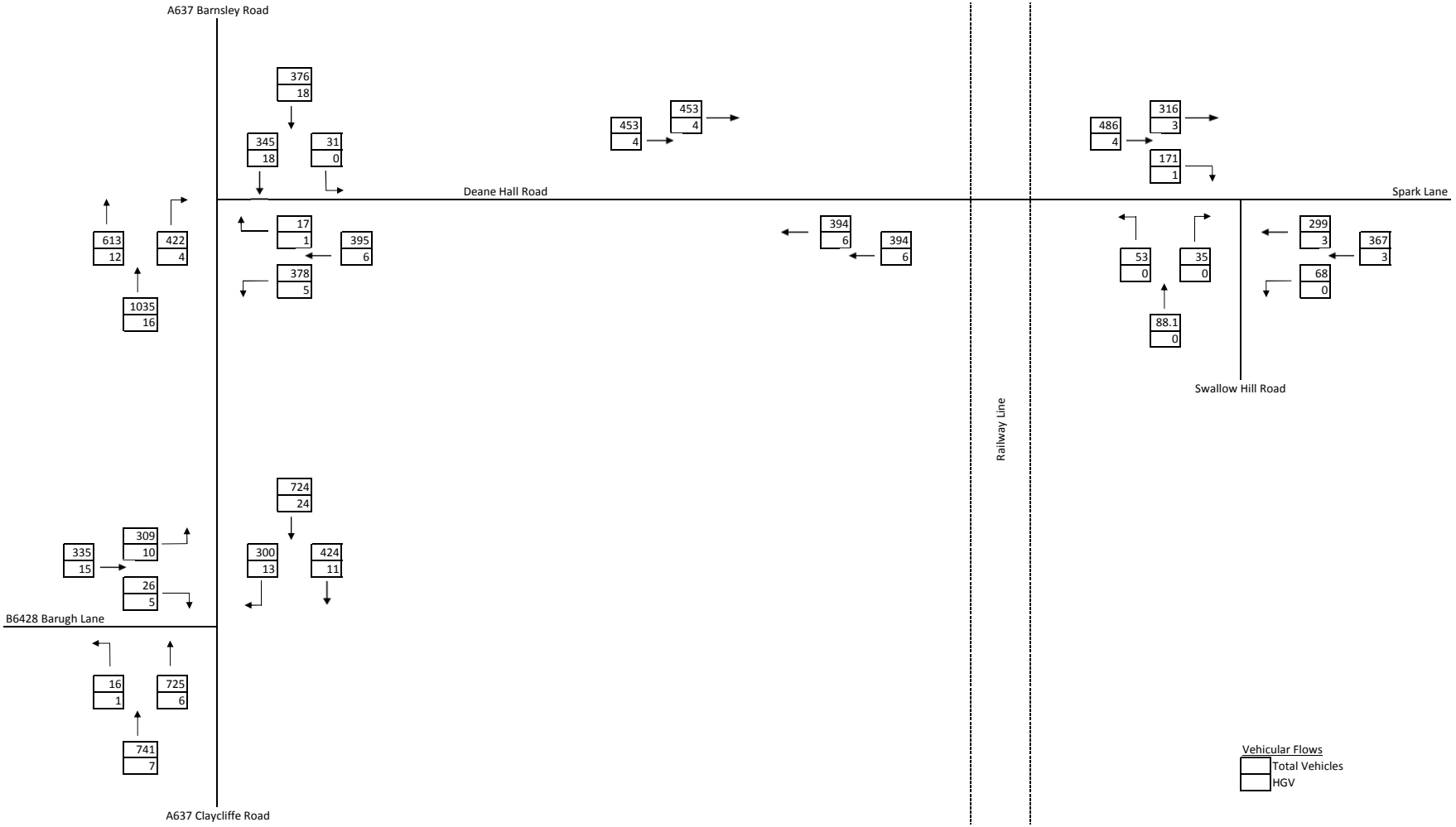


APPENDIX BGH 15

2018 GROWTHED VEHICULAR FLOWS PLUS COMMITTED DEVELOPMENT
BARNSLEY
8:00 am to 9:00 am



2018 GROWTHED VEHICULAR FLOWS PLUS COMMITTED DEVELOPMENT
BARNSLEY
17:00 pm to 18:00 pm



APPENDIX BGH 16

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: Swallow Hill Junction.arc8
Path: Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Swallow Hill - Dearne Hall
Report generation date: 05/03/2013 16:19:55

Summary of junction performance

	AM			
	Queue (Veh)	Delay (min)	RFC	LOS
	A1 - 2018 Base + CD + Dev			
Stream B-AC	0.65	0.25	0.40	C
Stream C-AB	0.40	0.10	0.20	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2013 Base, AM" model duration: 07:45 - 09:15
"D2 - 2013 Base, PM" model duration: 16:45 - 18:15
"D3 - 2018 Base + CD, AM" model duration: 07:45 - 09:15
"D4 - 2018 Base + CD, PM" model duration: 16:45 - 18:15
"D5 - 2018 Base + CD + Dev, AM " model duration: 07:45 - 09:15
"D6 - 2018 Base + CD + Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 05/03/2013 16:19:54

File summary

File Description

Title	Barugh Green, Barnsley
Location	Swallow Hill Road
Site Number	
Date	04/03/2013
Version	
Status	
Identifier	
Client	CEG
Jobnumber	08-241
Enumerator	mcrabtree
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75			N/A	0.85	0.60	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Hour	perMin

(Default Analysis Set) - 2018 Base + CD + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 Base + CD + Dev, AM	2018 Base + CD + Dev	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (min)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	0.18	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Spark Lane		Major
B	Swallow Hill Road		Minor
C	Dearne Hall Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.90		0.00		2.20	90.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	2.20										50	25

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	465.524	0.081	0.206	0.130	0.294
1	B-C	588.441	0.087	0.219	-	-
1	C-B	626.083	0.233	0.233	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	373.00	100.000
B	ONE HOUR	✓	142.00	100.000
C	ONE HOUR	✓	344.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	21.000	352.000
	B	65.000	0.000	77.000
	C	264.000	80.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.06	0.94
	B	0.46	0.00	0.54
	C	0.77	0.23	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.033
	B	1.000	1.000	1.000
	C	1.038	1.015	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	3.300
	B	0.000	0.000	0.000
	C	3.800	1.500	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS
B-AC	0.40	0.25	0.65	C

C-AB	0.20	0.10	0.40	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	106.91	105.63	0.00	436.83	0.245	0.32	0.180	B
C-AB	84.65	83.85	0.00	685.85	0.123	0.20	0.100	A
C-A	174.33	174.33	0.00	-	-	-	-	-
A-B	15.81	15.81	0.00	-	-	-	-	-
A-C	265.00	265.00	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	127.66	127.21	0.00	418.98	0.305	0.43	0.205	B
C-AB	108.67	108.40	0.00	701.01	0.155	0.27	0.101	A
C-A	200.57	200.57	0.00	-	-	-	-	-
A-B	18.88	18.88	0.00	-	-	-	-	-
A-C	316.44	316.44	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	156.34	155.50	0.00	394.03	0.397	0.64	0.251	C
C-AB	146.92	146.42	0.00	722.64	0.203	0.39	0.104	A
C-A	231.84	231.84	0.00	-	-	-	-	-
A-B	23.12	23.12	0.00	-	-	-	-	-
A-C	387.56	387.56	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	156.34	156.31	0.00	393.96	0.397	0.65	0.252	C
C-AB	147.08	147.06	0.00	722.80	0.203	0.40	0.104	A
C-A	231.68	231.68	0.00	-	-	-	-	-
A-B	23.12	23.12	0.00	-	-	-	-	-
A-C	387.56	387.56	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	127.66	128.46	0.00	418.87	0.305	0.45	0.207	B
C-AB	108.88	109.35	0.00	701.25	0.155	0.28	0.102	A
C-A	200.37	200.37	0.00	-	-	-	-	-
A-B	18.88	18.88	0.00	-	-	-	-	-
A-C	316.44	316.44	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	106.91	107.37	0.00	436.65	0.245	0.33	0.182	B
C-AB	84.95	85.24	0.00	686.06	0.124	0.21	0.100	A
C-A	174.03	174.03	0.00	-	-	-	-	-
A-B	15.81	15.81	0.00	-	-	-	-	-
A-C	265.00	265.00	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: Swallow Hill Junction.arc8
Path: Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Swallow Hill - Dearne Hall
Report generation date: 05/03/2013 16:20:26

Summary of junction performance

	PM			
	Queue (Veh)	Delay (min)	RFC	LOS
	A1 - 2018 Base + CD + Dev			
Stream B-AC	0.33	0.21	0.25	B
Stream C-AB	1.22	0.14	0.45	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2013 Base, AM" model duration: 07:45 - 09:15
"D2 - 2013 Base, PM" model duration: 16:45 - 18:15
"D3 - 2018 Base + CD, AM" model duration: 07:45 - 09:15
"D4 - 2018 Base + CD, PM" model duration: 16:45 - 18:15
"D5 - 2018 Base + CD + Dev, AM" model duration: 07:45 - 09:15
"D6 - 2018 Base + CD + Dev, PM " model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 05/03/2013 16:20:26

File summary

File Description

Title	Barugh Green, Barnsley
Location	Swallow Hill Road
Site Number	
Date	04/03/2013
Version	
Status	
Identifier	
Client	CEG
Jobnumber	08-241
Enumerator	mcrabtree
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75			N/A	0.85	0.60	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Hour	perMin

(Default Analysis Set) - 2018 Base + CD + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 Base + CD + Dev, PM	2018 Base + CD + Dev	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (min)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	0.16	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Spark Lane		Major
B	Swallow Hill Road		Minor
C	Dearne Hall Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.90		0.00		2.20	90.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	2.20										50	25

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	465.524	0.081	0.206	0.130	0.294
1	B-C	588.441	0.087	0.219	-	-
1	C-B	626.083	0.233	0.233	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	385.00	100.000
B	ONE HOUR	✓	88.00	100.000
C	ONE HOUR	✓	498.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	68.000	317.000
	B	35.000	0.000	53.000
	C	327.000	171.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.18	0.82
	B	0.40	0.00	0.60
	C	0.66	0.34	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.011
	B	1.000	1.000	1.000
	C	1.010	1.008	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	1.100
	B	0.000	0.000	0.000
	C	1.000	0.800	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS
B-AC	0.25	0.21	0.33	B

C-AB	0.45	0.14	1.22	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	66.25	65.54	0.00	434.92	0.152	0.18	0.162	A
C-AB	194.56	192.55	0.00	722.83	0.269	0.50	0.113	A
C-A	180.36	180.36	0.00	-	-	-	-	-
A-B	51.19	51.19	0.00	-	-	-	-	-
A-C	238.65	238.65	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	79.11	78.89	0.00	414.24	0.191	0.23	0.179	B
C-AB	253.37	252.48	0.00	744.89	0.340	0.72	0.122	A
C-A	194.32	194.32	0.00	-	-	-	-	-
A-B	61.13	61.13	0.00	-	-	-	-	-
A-C	284.98	284.98	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	96.89	96.50	0.00	384.90	0.252	0.33	0.208	B
C-AB	351.84	349.92	0.00	777.21	0.453	1.20	0.141	A
C-A	196.47	196.47	0.00	-	-	-	-	-
A-B	74.87	74.87	0.00	-	-	-	-	-
A-C	349.02	349.02	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	96.89	96.88	0.00	384.62	0.252	0.33	0.209	B
C-AB	352.66	352.59	0.00	777.98	0.453	1.22	0.142	A
C-A	195.65	195.65	0.00	-	-	-	-	-
A-B	74.87	74.87	0.00	-	-	-	-	-
A-C	349.02	349.02	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	79.11	79.49	0.00	413.84	0.191	0.24	0.180	B
C-AB	254.28	256.14	0.00	745.99	0.341	0.76	0.123	A
C-A	193.41	193.41	0.00	-	-	-	-	-
A-B	61.13	61.13	0.00	-	-	-	-	-
A-C	284.98	284.98	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	66.25	66.48	0.00	434.46	0.152	0.18	0.163	A
C-AB	195.54	196.48	0.00	723.64	0.270	0.52	0.114	A
C-A	179.38	179.38	0.00	-	-	-	-	-
A-B	51.19	51.19	0.00	-	-	-	-	-
A-C	238.65	238.65	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: Barnsley Road-Dearne Hall Road.arc8
Path: Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Barnsley Road-Dearne Hall Road
Report generation date: 05/03/2013 16:03:55

Summary of junction performance

	AM				
	Queue (Veh)	**Delay (min)**	**RFC**	**LOS**	**Network Residual Capacity**
	A1 - 2018 Base + CD + Dev				
Stream B-C	0.21	0.16	0.17	A	28 % [Stream B-A]
Stream B-A	0.24	0.32	0.19	C	
Stream C-AB	0.11	0.15	0.10	A	
Stream C-A	-	-	-	-	
Stream A-B	-	-	-	-	
Stream A-C	-	-	-	-	

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

"D1 - 2013 Base, AM" model duration: 07:45 - 09:15
"D2 - 2013 Base, PM" model duration: 16:45 - 18:15
"D3 - 2018 Base + CD, AM" model duration: 07:45 - 09:15
"D4 - 2018 Base + CD, PM" model duration: 16:45 - 18:15
"D5 - 2018 Base + CD + Dev, AM " model duration: 07:45 - 09:15
"D6 - 2018 Base + CD + Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 05/03/2013 16:03:53

File summary

File Description

Title	Dearne Hall Road/Barnsley Road
Location	Barnsley
Site Number	
Date	01/03/2013
Version	
Status	
Identifier	
Client	CEG
Jobnumber	08-241
Enumerator	mcrabtree
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75		✓	Delay	0.85	0.60	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Hour	perMin

(Default Analysis Set) - 2018 Base + CD + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2018 Base + CD + Dev, AM	2018 Base + CD + Dev	AM		ONE HOUR	07:45	09:15	90	15						

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (min)	Junction LOS
untitled	T-Junction	Two-way	A,B,C		0.20	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	28	Stream B-A

Arms

Arms

Arm	Name	Description	Arm Type
A	Barnsley Road North		Major
B	Dearne Hall Road		Minor
C	Barnsley Road South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.10		0.00		2.20	110.00	✓	6.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.40	3.30	3.00	3.00		1.00	19	12

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	505.020	0.092	0.231	0.146	0.331

1	B-C	687.598	0.105	0.265	-	-
1	C-B	637.665	0.246	0.246	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	659.00	100.000
B	ONE HOUR	✓	113.00	100.000
C	ONE HOUR	✓	481.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	21.000	638.000
	B	41.000	0.000	72.000
	C	441.000	40.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.03	0.97
	B	0.36	0.00	0.64
	C	0.92	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.071	1.037
	B	1.048	1.000	1.019
	C	1.047	1.024	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	7.100	3.700
	B	4.800	0.000	1.900
	C	4.700	2.400	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-hr)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-hr/min)	Inclusive Total Queueing Delay (Veh-hr)	Inclusive Average Queueing Delay (min)
B-C	0.17	0.16	0.21	A	66.07	99.10	0.23	0.14	0.00	0.23	0.14
B-A	0.19	0.32	0.24	C	37.62	56.43	0.25	0.26	0.00	0.25	0.26
C-AB	0.10	0.15	0.11	A	36.70	55.06	0.13	0.14	0.00	0.13	0.14
C-A	-	-	-	-	404.67	607.00	-	-	-	-	-
A-B	-	-	-	-	19.27	28.90	-	-	-	-	-
A-C	-	-	-	-	585.44	878.16	-	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	54.21	13.55	53.75	0.00	529.34	0.102	0.00	0.11	0.126	A
B-A	30.87	7.72	30.43	0.00	311.97	0.099	0.00	0.11	0.213	B
C-AB	30.11	7.53	29.86	0.00	499.00	0.060	0.00	0.06	0.128	A
C-A	332.01	83.00	332.01	0.00	-	-	-	-	-	-
A-B	15.81	3.95	15.81	0.00	-	-	-	-	-	-
A-C	480.32	120.08	480.32	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	64.73	16.18	64.59	0.00	499.10	0.130	0.11	0.15	0.138	A
B-A	36.86	9.21	36.69	0.00	278.70	0.132	0.11	0.15	0.248	B
C-AB	35.96	8.99	35.89	0.00	474.98	0.076	0.06	0.08	0.137	A
C-A	396.45	99.11	396.45	0.00	-	-	-	-	-	-
A-B	18.88	4.72	18.88	0.00	-	-	-	-	-	-
A-C	573.55	143.39	573.55	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	79.27	19.82	79.03	0.00	455.09	0.174	0.15	0.21	0.159	A
B-A	45.14	11.29	44.80	0.00	232.38	0.194	0.15	0.24	0.319	C
C-AB	44.04	11.01	43.93	0.00	441.78	0.100	0.08	0.11	0.151	A
C-A	485.55	121.39	485.55	0.00	-	-	-	-	-	-
A-B	23.12	5.78	23.12	0.00	-	-	-	-	-	-
A-C	702.45	175.61	702.45	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	79.27	19.82	79.27	0.00	454.75	0.174	0.21	0.21	0.160	A
B-A	45.14	11.29	45.13	0.00	232.37	0.194	0.24	0.24	0.320	C
C-AB	44.04	11.01	44.04	0.00	441.78	0.100	0.11	0.11	0.151	A
C-A	485.55	121.39	485.55	0.00	-	-	-	-	-	-
A-B	23.12	5.78	23.12	0.00	-	-	-	-	-	-
A-C	702.45	175.61	702.45	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	64.73	16.18	64.96	0.00	498.62	0.130	0.21	0.15	0.138	A
B-A	36.86	9.21	37.19	0.00	278.73	0.132	0.24	0.16	0.249	B
C-AB	35.96	8.99	36.07	0.00	474.98	0.076	0.11	0.08	0.137	A
C-A	396.45	99.11	396.45	0.00	-	-	-	-	-	-
A-B	18.88	4.72	18.88	0.00	-	-	-	-	-	-
A-C	573.55	143.39	573.55	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	54.21	13.55	54.35	0.00	528.81	0.103	0.15	0.12	0.126	A
B-A	30.87	7.72	31.04	0.00	311.98	0.099	0.16	0.11	0.214	B
C-AB	30.11	7.53	30.19	0.00	499.00	0.060	0.08	0.06	0.128	A
C-A	332.01	83.00	332.01	0.00	-	-	-	-	-	-
A-B	15.81	3.95	15.81	0.00	-	-	-	-	-	-
A-C	480.32	120.08	480.32	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.03	0.00	0.126	A	A
B-A	0.03	0.00	0.213	B	B
C-AB	0.02	0.00	0.128	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.04	0.00	0.138	A	A
B-A	0.04	0.00	0.248	B	B
C-AB	0.02	0.00	0.137	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.05	0.00	0.159	A	A
B-A	0.06	0.00	0.319	C	B
C-AB	0.03	0.00	0.151	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.05	0.00	0.160	A	A
B-A	0.06	0.00	0.320	C	B
C-AB	0.03	0.00	0.151	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.04	0.00	0.138	A	A
B-A	0.04	0.00	0.249	B	B
C-AB	0.02	0.00	0.137	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.03	0.00	0.126	A	A
B-A	0.03	0.00	0.214	B	B
C-AB	0.02	0.00	0.128	A	A
C-A	-	-	-	-	-

A-B	-	-	-	-	-
A-C	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: Barnsley Road-Dearne Hall Road.arc8
Path: Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Barnsley Road-Dearne Hall Road
Report generation date: 05/03/2013 16:05:45

Summary of junction performance

	PM				
	Queue (Veh)	**Delay (min)**	**RFC**	**LOS**	**Network Residual Capacity**
	A1 - 2018 Base + CD + Dev				
Stream B-C	0.13	0.12	0.11	A	59 % [Stream B-A]
Stream B-A	0.11	0.25	0.10	C	
Stream C-AB	0.17	0.13	0.15	A	
Stream C-A	-	-	-	-	
Stream A-B	-	-	-	-	
Stream A-C	-	-	-	-	

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

"D1 - 2013 Base, AM" model duration: 07:45 - 09:15
"D2 - 2013 Base, PM" model duration: 16:45 - 18:15
"D3 - 2018 Base + CD, AM" model duration: 07:45 - 09:15
"D4 - 2018 Base + CD, PM" model duration: 16:45 - 18:15
"D5 - 2018 Base + CD + Dev, AM" model duration: 07:45 - 09:15
"D6 - 2018 Base + CD + Dev, PM " model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 05/03/2013 16:05:42

File summary

File Description

Title	Dearne Hall Road/Barnsley Road
Location	Barnsley
Site Number	
Date	01/03/2013
Version	
Status	
Identifier	
Client	CEG
Jobnumber	08-241
Enumerator	mcrabtree
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75		✓	Delay	0.85	0.60	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Hour	perMin

(Default Analysis Set) - 2018 Base + CD + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2018 Base + CD + Dev, PM	2018 Base + CD + Dev	PM		ONE HOUR	16:45	18:15	90	15						

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (min)	Junction LOS
untitled	T-Junction	Two-way	A,B,C		0.15	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	59	Stream B-A

Arms

Arms

Arm	Name	Description	Arm Type
A	Barnsley Road North		Major
B	Dearne Hall Road		Minor
C	Barnsley Road South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.10		0.00		2.20	110.00	✓	6.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.40	3.30	3.00	3.00		1.00	19	12

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	497.878	0.090	0.228	0.144	0.326

1	B-C	696.807	0.106	0.269	-	-
1	C-B	637.665	0.246	0.246	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	388.00	100.000
B	ONE HOUR	✓	82.00	100.000
C	ONE HOUR	✓	684.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	43.000	345.000
	B	24.000	0.000	58.000
	C	613.000	71.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.11	0.89
	B	0.29	0.00	0.71
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.051	1.000
	B	1.067	1.000	1.015
	C	1.019	1.011	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	5.100	0.000
	B	6.700	0.000	1.500
	C	1.900	1.100	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-hr)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-hr/min)	Inclusive Total Queueing Delay (Veh-hr)	Inclusive Average Queueing Delay (min)
B-C	0.11	0.12	0.13	A	53.22	79.83	0.15	0.11	0.00	0.15	0.11
B-A	0.10	0.25	0.11	C	22.02	33.03	0.12	0.22	0.00	0.12	0.22
C-AB	0.15	0.13	0.17	A	65.15	97.73	0.21	0.13	0.00	0.21	0.13
C-A	-	-	-	-	562.50	843.75	-	-	-	-	-
A-B	-	-	-	-	39.46	59.19	-	-	-	-	-
A-C	-	-	-	-	316.58	474.87	-	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	43.67	10.92	43.36	0.00	605.57	0.072	0.00	0.08	0.107	A
B-A	18.07	4.52	17.84	0.00	328.27	0.055	0.00	0.06	0.193	B
C-AB	53.45	13.36	53.03	0.00	559.25	0.096	0.00	0.10	0.118	A
C-A	461.50	115.37	461.50	0.00	-	-	-	-	-	-
A-B	32.37	8.09	32.37	0.00	-	-	-	-	-	-
A-C	259.73	64.93	259.73	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	52.14	13.04	52.06	0.00	588.85	0.089	0.08	0.10	0.112	A
B-A	21.58	5.39	21.50	0.00	301.27	0.072	0.06	0.08	0.214	B
C-AB	63.83	15.96	63.72	0.00	545.38	0.117	0.10	0.13	0.125	A
C-A	551.07	137.77	551.07	0.00	-	-	-	-	-	-
A-B	38.66	9.66	38.66	0.00	-	-	-	-	-	-
A-C	310.15	77.54	310.15	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	63.86	15.96	63.74	0.00	565.16	0.113	0.10	0.13	0.120	A
B-A	26.42	6.61	26.29	0.00	263.95	0.100	0.08	0.11	0.252	C
C-AB	78.17	19.54	78.01	0.00	526.20	0.149	0.13	0.17	0.134	A
C-A	674.92	168.73	674.92	0.00	-	-	-	-	-	-
A-B	47.34	11.84	47.34	0.00	-	-	-	-	-	-
A-C	379.85	94.96	379.85	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	63.86	15.96	63.86	0.00	565.01	0.113	0.13	0.13	0.120	A
B-A	26.42	6.61	26.42	0.00	263.93	0.100	0.11	0.11	0.253	C
C-AB	78.17	19.54	78.17	0.00	526.20	0.149	0.17	0.17	0.134	A
C-A	674.92	168.73	674.92	0.00	-	-	-	-	-	-
A-B	47.34	11.84	47.34	0.00	-	-	-	-	-	-
A-C	379.85	94.96	379.85	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	52.14	13.04	52.26	0.00	588.60	0.089	0.13	0.10	0.112	A
B-A	21.58	5.39	21.70	0.00	301.27	0.072	0.11	0.08	0.215	B
C-AB	63.83	15.96	63.99	0.00	545.38	0.117	0.17	0.13	0.125	A
C-A	551.07	137.77	551.07	0.00	-	-	-	-	-	-
A-B	38.66	9.66	38.66	0.00	-	-	-	-	-	-
A-C	310.15	77.54	310.15	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	43.67	10.92	43.74	0.00	605.21	0.072	0.10	0.08	0.107	A
B-A	18.07	4.52	18.15	0.00	328.22	0.055	0.08	0.06	0.194	B
C-AB	53.45	13.36	53.56	0.00	559.25	0.096	0.13	0.11	0.119	A
C-A	461.50	115.37	461.50	0.00	-	-	-	-	-	-
A-B	32.37	8.09	32.37	0.00	-	-	-	-	-	-
A-C	259.73	64.93	259.73	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.02	0.00	0.107	A	A
B-A	0.01	0.00	0.193	B	B
C-AB	0.03	0.00	0.118	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.02	0.00	0.112	A	A
B-A	0.02	0.00	0.214	B	B
C-AB	0.03	0.00	0.125	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.03	0.00	0.120	A	A
B-A	0.03	0.00	0.252	C	B
C-AB	0.04	0.00	0.134	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.03	0.00	0.120	A	A
B-A	0.03	0.00	0.253	C	B
C-AB	0.04	0.00	0.134	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.03	0.00	0.112	A	A
B-A	0.02	0.00	0.215	B	B
C-AB	0.03	0.00	0.125	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.02	0.00	0.107	A	A
B-A	0.02	0.00	0.194	B	B
C-AB	0.03	0.00	0.119	A	A
C-A	-	-	-	-	-

A-B	-	-	-	-	-
A-C	-	-	-	-	-

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: Exist.arc8
Path: Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Rbt
Report generation date: 05/03/2013 16:26:31

Summary of junction performance

	AM			
	Queue (Veh)	Delay (min)	RFC	LOS
	A1 - 2018 Base + CD			
Arm 1	189.19	12.40	1.33	F
Arm 2	19.70	2.10	1.02	F
Arm 3	7.74	1.64	0.94	F

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

"D1 - 2013 Base, AM" model duration: 07:45 - 09:15
"D2 - 2013 Base, PM" model duration: 16:45 - 18:15
"D3 - 2018 Base + CD, AM " model duration: 07:45 - 09:15
"D4 - 2018 Base + CD, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 05/03/2013 16:26:31

File summary

File Description

Title	Barnsley Road/Claycliffe Road/Barugh Green
Location	
Site Number	
Date	04/03/2013
Version	
Status	
Identifier	
Client	CEG
Jobnumber	08-241
Enumerator	mcrabtree
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75			N/A	0.85	0.60	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Hour	perMin

(Default Analysis Set) - 2018 Base + CD, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors

(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 Base + CD, AM	2018 Base + CD	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	7.87	F

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Barnsley Road (N)	
2	Claycliffe Road	
3	Barugh Lane	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.00	3.00	3.60	4.60	19.50	17.40	0.00	
2	3.20	3.20	3.80	3.00	13.50	7.50	0.00	
3	2.80	2.80	3.20	2.80	16.90	15.20	0.00	

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.682	931.576
2		(calculated)	(calculated)	0.533	707.292
3		(calculated)	(calculated)	0.560	633.883

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1055.00	100.000
2	ONE HOUR	✓	515.00	100.000
3	ONE HOUR	✓	274.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	781.000	274.000
	2	474.000	0.000	41.000
	3	240.000	34.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.74	0.26
	2	0.92	0.00	0.08
	3	0.88	0.12	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.023	1.051
	2	1.032	1.000	1.146
	3	1.054	1.205	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	2.300	5.100
	2	3.200	0.000	14.600
	3	5.400	20.500	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS
1	1.33	12.40	189.19	F
2	1.02	2.10	19.70	F
3	0.94	1.64	7.74	F

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS

1	794.26	767.86	25.10	0.00	884.18	0.898	6.60	0.446	D
2	387.72	379.81	199.42	0.00	572.00	0.678	1.98	0.301	C
3	206.28	202.24	349.58	0.00	402.55	0.512	1.01	0.294	C

Main results: (08:00-08:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
1	948.43	862.24	30.13	0.00	880.16	1.078	28.15	1.453	F
2	462.97	454.69	223.94	0.00	558.79	0.829	4.05	0.536	D
3	246.32	242.78	418.49	0.00	365.42	0.674	1.90	0.475	D

Main results: (08:15-08:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
1	1161.58	874.80	35.50	0.00	875.87	1.326	99.84	4.557	F
2	567.02	528.69	227.20	0.00	557.04	1.018	13.63	1.300	F
3	301.68	286.07	486.60	0.00	328.72	0.918	5.80	1.127	F

Main results: (08:30-08:45)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
1	1161.58	874.90	36.47	0.00	875.10	1.327	171.51	9.412	F
2	567.02	542.76	227.23	0.00	557.02	1.018	19.70	2.096	F
3	301.68	293.90	499.56	0.00	321.74	0.938	7.74	1.645	F

Main results: (08:45-09:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
1	948.43	877.69	32.82	0.00	878.01	1.080	189.19	12.402	F
2	462.97	515.80	227.95	0.00	556.63	0.832	6.49	1.506	F
3	246.32	264.48	474.73	0.00	335.11	0.735	3.20	0.967	F

Main results: (09:00-09:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
1	794.26	878.33	26.61	0.00	882.97	0.900	168.18	12.212	F
2	387.72	403.81	228.11	0.00	556.55	0.697	2.47	0.427	D
3	206.28	214.41	371.66	0.00	390.65	0.528	1.17	0.355	C

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: Exist.arc8
Path: Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Rbt
Report generation date: 05/03/2013 16:28:00

Summary of junction performance

	PM			
	Queue (Veh)	Delay (min)	RFC	LOS
	A1 - 2018 Base + CD			
Arm 1	7.83	0.63	0.90	E
Arm 2	216.33	22.51	1.57	F
Arm 3	28.70	5.55	1.12	F

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

"D1 - 2013 Base, AM" model duration: 07:45 - 09:15
"D2 - 2013 Base, PM" model duration: 16:45 - 18:15
"D3 - 2018 Base + CD, AM" model duration: 07:45 - 09:15
"D4 - 2018 Base + CD, PM " model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 05/03/2013 16:28:00

File summary

File Description

Title	Barnsley Road/Claycliffe Road/Barugh Green
Location	
Site Number	
Date	04/03/2013
Version	
Status	
Identifier	
Client	CEG
Jobnumber	08-241
Enumerator	mcrabtree
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75			N/A	0.85	0.60	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Hour	perMin

(Default Analysis Set) - 2018 Base + CD, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors

(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 Base + CD, PM	2018 Base + CD	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Junction Delay (min)	Junction LOS
(untitled)	Mini-roundabout	1,2,3	10.43	F

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Barnsley Road (N)	
2	Claycliffe Road	
3	Barugh Lane	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.00	3.00	3.60	4.60	19.50	17.40	0.00	
2	3.20	3.20	3.80	3.00	13.50	7.50	0.00	
3	2.80	2.80	3.20	2.80	16.90	15.20	0.00	

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.682	931.576
2		(calculated)	(calculated)	0.533	707.292
3		(calculated)	(calculated)	0.560	633.883

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	724.00	100.000
2	ONE HOUR	✓	741.00	100.000
3	ONE HOUR	✓	335.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	424.000	300.000
	2	725.000	0.000	16.000
	3	309.000	26.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.59	0.41
	2	0.98	0.00	0.02
	3	0.92	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.026	1.043
	2	1.009	1.000	1.063
	3	1.033	1.192	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	2.600	4.300
	2	0.900	0.000	6.300
	3	3.300	19.200	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS
1	0.90	0.63	7.83	E
2	1.57	22.51	216.33	F
3	1.12	5.55	28.70	F

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS

1	545.07	538.88	18.74	0.00	887.03	0.614	1.55	0.169	B
2	557.86	520.87	223.29	0.00	577.20	0.967	9.25	0.812	E
3	252.21	241.41	509.63	0.00	330.89	0.762	2.70	0.614	E

Main results: (17:00-17:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
1	650.86	646.53	22.05	0.00	884.42	0.736	2.63	0.248	B
2	666.14	547.62	267.90	0.00	552.63	1.205	38.88	2.963	F
3	301.16	284.07	535.80	0.00	316.74	0.951	6.97	1.369	F

Main results: (17:15-17:30)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
1	797.14	779.88	25.00	0.00	882.09	0.904	6.95	0.515	D
2	815.85	521.89	323.15	0.00	522.20	1.562	112.37	8.918	F
3	368.84	322.13	510.63	0.00	330.34	1.117	18.65	2.805	F

Main results: (17:30-17:45)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
1	797.14	793.60	25.50	0.00	881.70	0.904	7.83	0.631	E
2	815.85	519.00	328.84	0.00	519.07	1.572	186.58	16.895	F
3	368.84	328.62	507.80	0.00	331.87	1.111	28.70	4.721	F

Main results: (17:45-18:00)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
1	650.86	670.28	23.72	0.00	883.11	0.737	2.98	0.304	C
2	666.14	547.14	277.74	0.00	547.21	1.217	216.33	21.891	F
3	301.16	305.58	535.32	0.00	316.99	0.950	27.60	5.546	F

Main results: (18:00-18:15)

Arm	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
1	545.07	550.36	22.76	0.00	883.86	0.617	1.66	0.183	B
2	557.86	571.93	228.05	0.00	574.58	0.971	212.81	22.511	F
3	252.21	293.25	559.58	0.00	303.88	0.830	17.34	4.687	F

APPENDIX BGH 17

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLES

Selected regions and areas:

03	SOUTH WEST		
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	SF	SUFFOLK	2 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	2 days
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
	WM	WEST MIDLANDS	2 days
	WO	WORCESTERSHIRE	2 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	1 days
	LC	LANCASHIRE	2 days
09	NORTH		
	CB	CUMBRIA	1 days
	TV	TEES VALLEY	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
Actual Range: 77 to 232 (units:)
Range Selected by User: 75 to 300 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/04 to 22/09/12

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	3 days
Tuesday	3 days
Wednesday	2 days
Thursday	5 days
Friday	4 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	17 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	8
Edge of Town	9

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

C3	17 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	2 days
10,001 to 15,000	2 days
15,001 to 20,000	7 days
20,001 to 25,000	3 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	1 days
75,001 to 100,000	4 days
100,001 to 125,000	4 days
125,001 to 250,000	5 days
250,001 to 500,000	2 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	7 days
1.1 to 1.5	9 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	17 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 CB-03-A-04 SEMI DETACHED, WORKINGTON CUMBRIA
MOORCLOSE ROAD
SALTERBACK
WORKINGTON
Edge of Town
No Sub Category
Total Number of dwellings: 82
Survey date: FRIDAY 24/04/09 Survey Type: MANUAL

2 CH-03-A-06 SEMI-DET./BUNGALOWS,CREWE CHESHIRE
CREWE ROAD

CREWE
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 129
Survey date: TUESDAY 14/10/08 Survey Type: MANUAL

3 LC-03-A-22 BUNGALOWS, BLACKPOOL LANCASHIRE
CLIFTON DRIVE NORTH

BLACKPOOL
Edge of Town
Residential Zone
Total Number of dwellings: 98
Survey date: TUESDAY 18/10/05 Survey Type: MANUAL

4 LC-03-A-29 DETACHED/SEMI D., BLACKBURN LANCASHIRE
REVIDGE ROAD
FOUR LANE ENDS
BLACKBURN
Edge of Town
Residential Zone
Total Number of dwellings: 185
Survey date: THURSDAY 10/06/04 Survey Type: MANUAL

5 LN-03-A-01 MIXED HOUSES, LINCOLN LINCOLNSHIRE
BRANT ROAD
BRACEBRIDGE
LINCOLN
Edge of Town
Residential Zone
Total Number of dwellings: 150
Survey date: TUESDAY 15/05/07 Survey Type: MANUAL

6 LN-03-A-02 MIXED HOUSES, LINCOLN LINCOLNSHIRE
HYKEHAM ROAD

LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 186
Survey date: MONDAY 14/05/07 Survey Type: MANUAL

7 NT-03-A-03 SEMI DETACHED,KIRKBY-IN-ASHFD NOTTINGHAMSHIRE
B6018 SUTTON ROAD

KIRKBY-IN-ASHFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 166
Survey date: WEDNESDAY 28/06/06 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 NY-03-A-06 BUNGALOWS/SEMI DET., BBDGE NORTH YORKSHIRE
HORSEFAIR

BOROUGHBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 115
Survey date: FRIDAY 14/10/11 Survey Type: MANUAL

9 SF-03-A-01 SEMI DETACHED, IPSWICH SUFFOLK
A1156 FELIXSTOWE ROAD
RACECOURSE
IPSWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 77
Survey date: WEDNESDAY 23/05/07 Survey Type: MANUAL

10 SF-03-A-02 SEMI DET./TERRACED, IPSWICH SUFFOLK
STOKE PARK DRIVE
MAIDENHALL
IPSWICH
Edge of Town
Residential Zone
Total Number of dwellings: 230
Survey date: THURSDAY 24/05/07 Survey Type: MANUAL

11 SH-03-A-04 TERRACED, SHREWSBURY SHROPSHIRE
ST MICHAEL'S STREET

SHREWSBURY
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 108
Survey date: THURSDAY 11/06/09 Survey Type: MANUAL

12 TV-03-A-01 MIXED HOUSES/FLATS, HARTLEPL TEES VALLEY
POWLETT ROAD

HARTLEPOOL
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 225
Survey date: THURSDAY 14/04/05 Survey Type: MANUAL

13 WL-03-A-01 SEMI D./TERRACED W. BASSETT WILTSHIRE
MAPLE DRIVE

WOOTTON BASSETT
Edge of Town
Residential Zone
Total Number of dwellings: 99
Survey date: MONDAY 02/10/06 Survey Type: MANUAL

14 WM-03-A-01 TERRACED, COVENTRY WEST MIDLANDS
FOLESHILL ROAD
FOLESHILL
COVENTRY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 79
Survey date: FRIDAY 03/02/06 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 WM-03-A-03 MIXED HOUSING, COVENTRY WEST MIDLANDS
BASELEY WAY
ROWLEYS GREEN
COVENTRY
Edge of Town
Residential Zone
Total Number of dwellings: 84
Survey date: MONDAY 24/09/07 Survey Type: MANUAL

16 WO-03-A-03 DETACHED, KIDDERMINSTER WORCESTERSHIRE
BLAKEBROOK
BLAKEBROOK
KIDDERMINSTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 138
Survey date: FRIDAY 05/05/06 Survey Type: MANUAL

17 WO-03-A-06 DET./TERRACED, BROMSGROVE WORCESTERSHIRE
ST GODWALDS ROAD
ASTON FIELDS
BROMSGROVE
Edge of Town
No Sub Category
Total Number of dwellings: 232
Survey date: THURSDAY 30/06/05 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	17	140	0.078	17	140	0.292	17	140	0.370
08:00 - 09:00	17	140	0.164	17	140	0.424	17	140	0.588
09:00 - 10:00	17	140	0.186	17	140	0.229	17	140	0.415
10:00 - 11:00	17	140	0.168	17	140	0.204	17	140	0.372
11:00 - 12:00	17	140	0.208	17	140	0.195	17	140	0.403
12:00 - 13:00	17	140	0.215	17	140	0.205	17	140	0.420
13:00 - 14:00	17	140	0.194	17	140	0.176	17	140	0.370
14:00 - 15:00	17	140	0.189	17	140	0.191	17	140	0.380
15:00 - 16:00	17	140	0.288	17	140	0.222	17	140	0.510
16:00 - 17:00	17	140	0.326	17	140	0.191	17	140	0.517
17:00 - 18:00	17	140	0.410	17	140	0.244	17	140	0.654
18:00 - 19:00	17	140	0.295	17	140	0.241	17	140	0.536
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.721			2.814			5.535

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	77 - 232 (units:)
Survey date date range:	01/01/04 - 22/09/12
Number of weekdays (Monday-Friday):	17
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	17	140	0.003	17	140	0.003	17	140	0.006
08:00 - 09:00	17	140	0.002	17	140	0.003	17	140	0.005
09:00 - 10:00	17	140	0.006	17	140	0.003	17	140	0.009
10:00 - 11:00	17	140	0.003	17	140	0.005	17	140	0.008
11:00 - 12:00	17	140	0.001	17	140	0.002	17	140	0.003
12:00 - 13:00	17	140	0.006	17	140	0.004	17	140	0.010
13:00 - 14:00	17	140	0.003	17	140	0.005	17	140	0.008
14:00 - 15:00	17	140	0.002	17	140	0.003	17	140	0.005
15:00 - 16:00	17	140	0.002	17	140	0.001	17	140	0.003
16:00 - 17:00	17	140	0.000	17	140	0.000	17	140	0.000
17:00 - 18:00	17	140	0.001	17	140	0.001	17	140	0.002
18:00 - 19:00	17	140	0.000	17	140	0.000	17	140	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.029			0.030			0.059

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	77 - 232 (units:)
Survey date date range:	01/01/04 - 22/09/12
Number of weekdays (Monday-Friday):	17
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	17	140	0.000	17	140	0.000	17	140	0.000
08:00 - 09:00	17	140	0.001	17	140	0.001	17	140	0.002
09:00 - 10:00	17	140	0.000	17	140	0.000	17	140	0.000
10:00 - 11:00	17	140	0.000	17	140	0.000	17	140	0.000
11:00 - 12:00	17	140	0.000	17	140	0.000	17	140	0.000
12:00 - 13:00	17	140	0.000	17	140	0.000	17	140	0.000
13:00 - 14:00	17	140	0.000	17	140	0.000	17	140	0.000
14:00 - 15:00	17	140	0.000	17	140	0.000	17	140	0.000
15:00 - 16:00	17	140	0.001	17	140	0.000	17	140	0.001
16:00 - 17:00	17	140	0.000	17	140	0.000	17	140	0.000
17:00 - 18:00	17	140	0.000	17	140	0.000	17	140	0.000
18:00 - 19:00	17	140	0.000	17	140	0.000	17	140	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.001			0.003

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	77 - 232 (units:)
Survey date date range:	01/01/04 - 22/09/12
Number of weekdays (Monday-Friday):	17
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	17	140	0.007	17	140	0.010	17	140	0.017
08:00 - 09:00	17	140	0.005	17	140	0.016	17	140	0.021
09:00 - 10:00	17	140	0.005	17	140	0.003	17	140	0.008
10:00 - 11:00	17	140	0.001	17	140	0.005	17	140	0.006
11:00 - 12:00	17	140	0.005	17	140	0.003	17	140	0.008
12:00 - 13:00	17	140	0.005	17	140	0.005	17	140	0.010
13:00 - 14:00	17	140	0.005	17	140	0.004	17	140	0.009
14:00 - 15:00	17	140	0.003	17	140	0.003	17	140	0.006
15:00 - 16:00	17	140	0.016	17	140	0.010	17	140	0.026
16:00 - 17:00	17	140	0.012	17	140	0.009	17	140	0.021
17:00 - 18:00	17	140	0.013	17	140	0.011	17	140	0.024
18:00 - 19:00	17	140	0.009	17	140	0.007	17	140	0.016
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.086			0.086			0.172

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	77 - 232 (units:)
Survey date date range:	01/01/04 - 22/09/12
Number of weekdays (Monday-Friday):	17
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	17	140	0.088	17	140	0.346	17	140	0.434
08:00 - 09:00	17	140	0.201	17	140	0.621	17	140	0.822
09:00 - 10:00	17	140	0.221	17	140	0.294	17	140	0.515
10:00 - 11:00	17	140	0.212	17	140	0.265	17	140	0.477
11:00 - 12:00	17	140	0.259	17	140	0.244	17	140	0.503
12:00 - 13:00	17	140	0.262	17	140	0.261	17	140	0.523
13:00 - 14:00	17	140	0.249	17	140	0.219	17	140	0.468
14:00 - 15:00	17	140	0.243	17	140	0.248	17	140	0.491
15:00 - 16:00	17	140	0.449	17	140	0.290	17	140	0.739
16:00 - 17:00	17	140	0.441	17	140	0.264	17	140	0.705
17:00 - 18:00	17	140	0.548	17	140	0.327	17	140	0.875
18:00 - 19:00	17	140	0.399	17	140	0.351	17	140	0.750
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.572			3.730			7.302

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	77 - 232 (units:)
Survey date date range:	01/01/04 - 22/09/12
Number of weekdays (Monday-Friday):	17
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	17	140	0.026	17	140	0.044	17	140	0.070
08:00 - 09:00	17	140	0.034	17	140	0.160	17	140	0.194
09:00 - 10:00	17	140	0.031	17	140	0.049	17	140	0.080
10:00 - 11:00	17	140	0.035	17	140	0.041	17	140	0.076
11:00 - 12:00	17	140	0.046	17	140	0.044	17	140	0.090
12:00 - 13:00	17	140	0.042	17	140	0.034	17	140	0.076
13:00 - 14:00	17	140	0.037	17	140	0.039	17	140	0.076
14:00 - 15:00	17	140	0.049	17	140	0.041	17	140	0.090
15:00 - 16:00	17	140	0.162	17	140	0.070	17	140	0.232
16:00 - 17:00	17	140	0.076	17	140	0.050	17	140	0.126
17:00 - 18:00	17	140	0.068	17	140	0.049	17	140	0.117
18:00 - 19:00	17	140	0.050	17	140	0.051	17	140	0.101
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.656			0.672			1.328

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	77 - 232 (units:)
Survey date date range:	01/01/04 - 22/09/12
Number of weekdays (Monday-Friday):	17
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	17	140	0.001	17	140	0.011	17	140	0.012
08:00 - 09:00	17	140	0.010	17	140	0.022	17	140	0.032
09:00 - 10:00	17	140	0.006	17	140	0.008	17	140	0.014
10:00 - 11:00	17	140	0.005	17	140	0.007	17	140	0.012
11:00 - 12:00	17	140	0.007	17	140	0.008	17	140	0.015
12:00 - 13:00	17	140	0.005	17	140	0.009	17	140	0.014
13:00 - 14:00	17	140	0.005	17	140	0.003	17	140	0.008
14:00 - 15:00	17	140	0.005	17	140	0.005	17	140	0.010
15:00 - 16:00	17	140	0.016	17	140	0.013	17	140	0.029
16:00 - 17:00	17	140	0.017	17	140	0.004	17	140	0.021
17:00 - 18:00	17	140	0.018	17	140	0.005	17	140	0.023
18:00 - 19:00	17	140	0.010	17	140	0.004	17	140	0.014
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.105			0.099			0.204

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	77 - 232 (units:)
Survey date date range:	01/01/04 - 22/09/12
Number of weekdays (Monday-Friday):	17
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	17	140	0.122	17	140	0.411	17	140	0.533
08:00 - 09:00	17	140	0.249	17	140	0.820	17	140	1.069
09:00 - 10:00	17	140	0.262	17	140	0.354	17	140	0.616
10:00 - 11:00	17	140	0.253	17	140	0.317	17	140	0.570
11:00 - 12:00	17	140	0.317	17	140	0.299	17	140	0.616
12:00 - 13:00	17	140	0.314	17	140	0.309	17	140	0.623
13:00 - 14:00	17	140	0.295	17	140	0.265	17	140	0.560
14:00 - 15:00	17	140	0.300	17	140	0.296	17	140	0.596
15:00 - 16:00	17	140	0.644	17	140	0.382	17	140	1.026
16:00 - 17:00	17	140	0.546	17	140	0.328	17	140	0.874
17:00 - 18:00	17	140	0.645	17	140	0.392	17	140	1.037
18:00 - 19:00	17	140	0.467	17	140	0.413	17	140	0.880
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.414			4.586			9.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

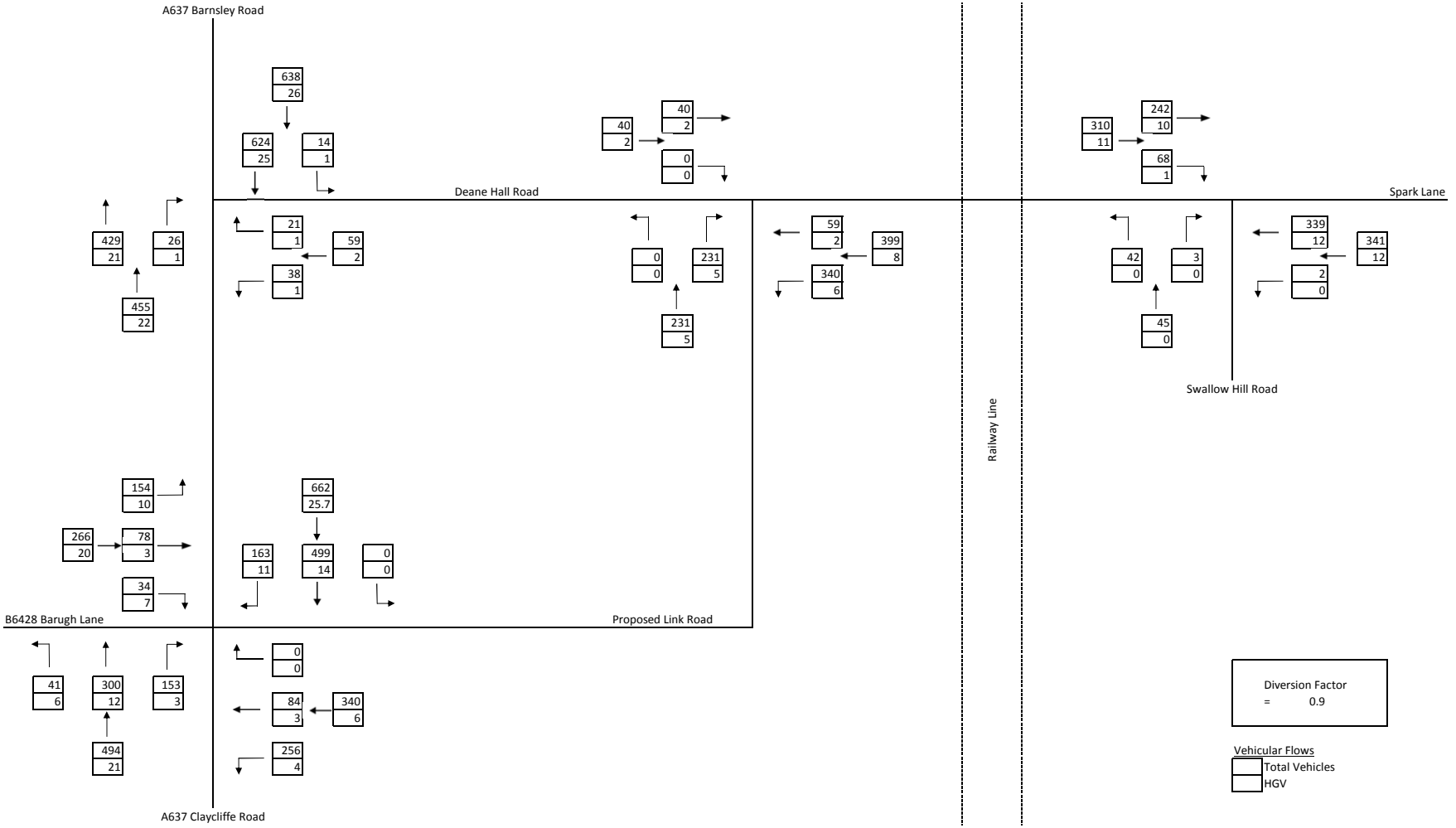
Parameter summary

Trip rate parameter range selected:	77 - 232 (units:)
Survey date date range:	01/01/04 - 22/09/12
Number of weekdays (Monday-Friday):	17
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

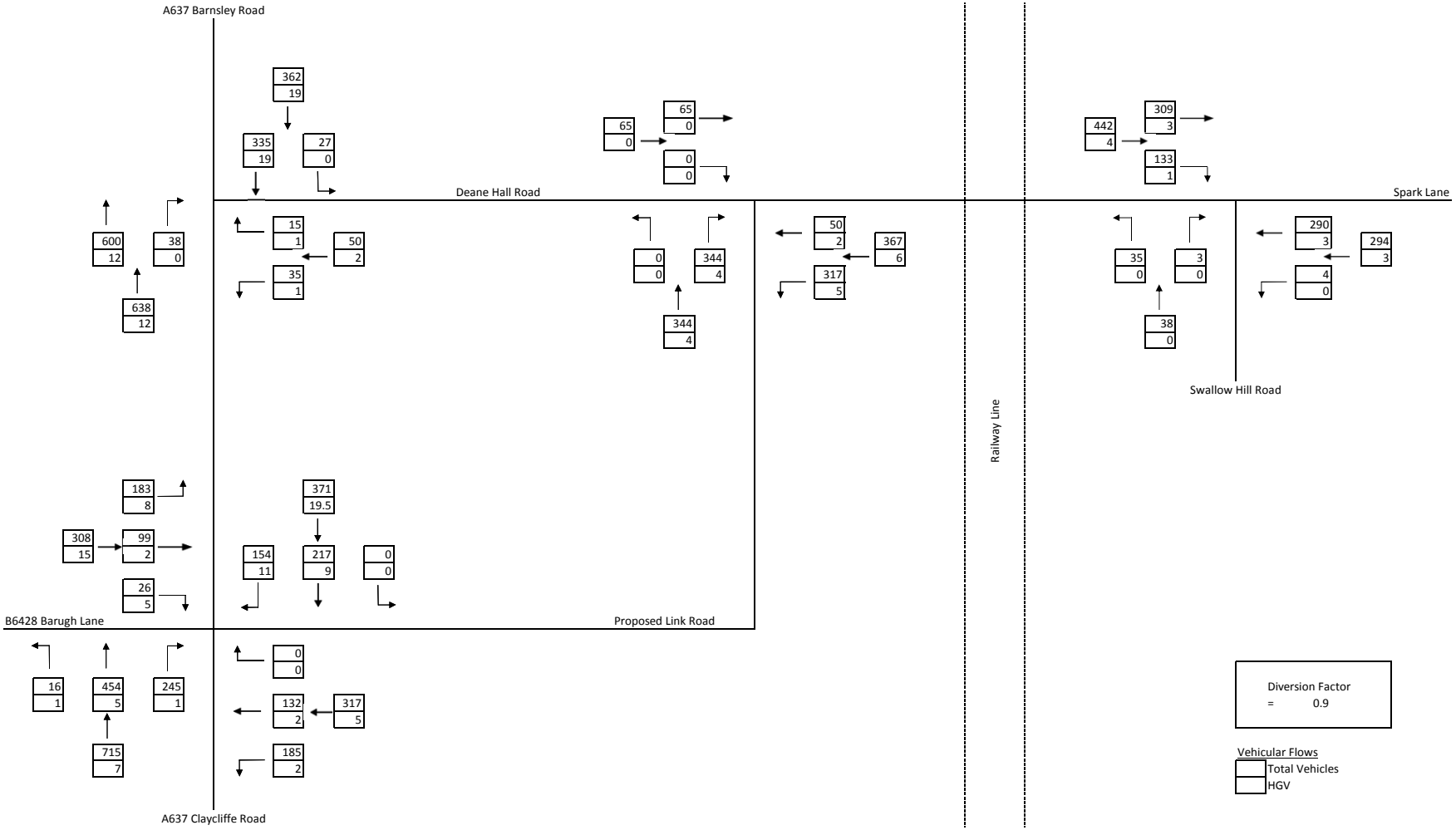
This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

APPENDIX BGH 18

2018 GROWTHED VEHICULAR FLOWS WITH LINK ROAD
BARNSLEY
8:00 am to 9:00 am

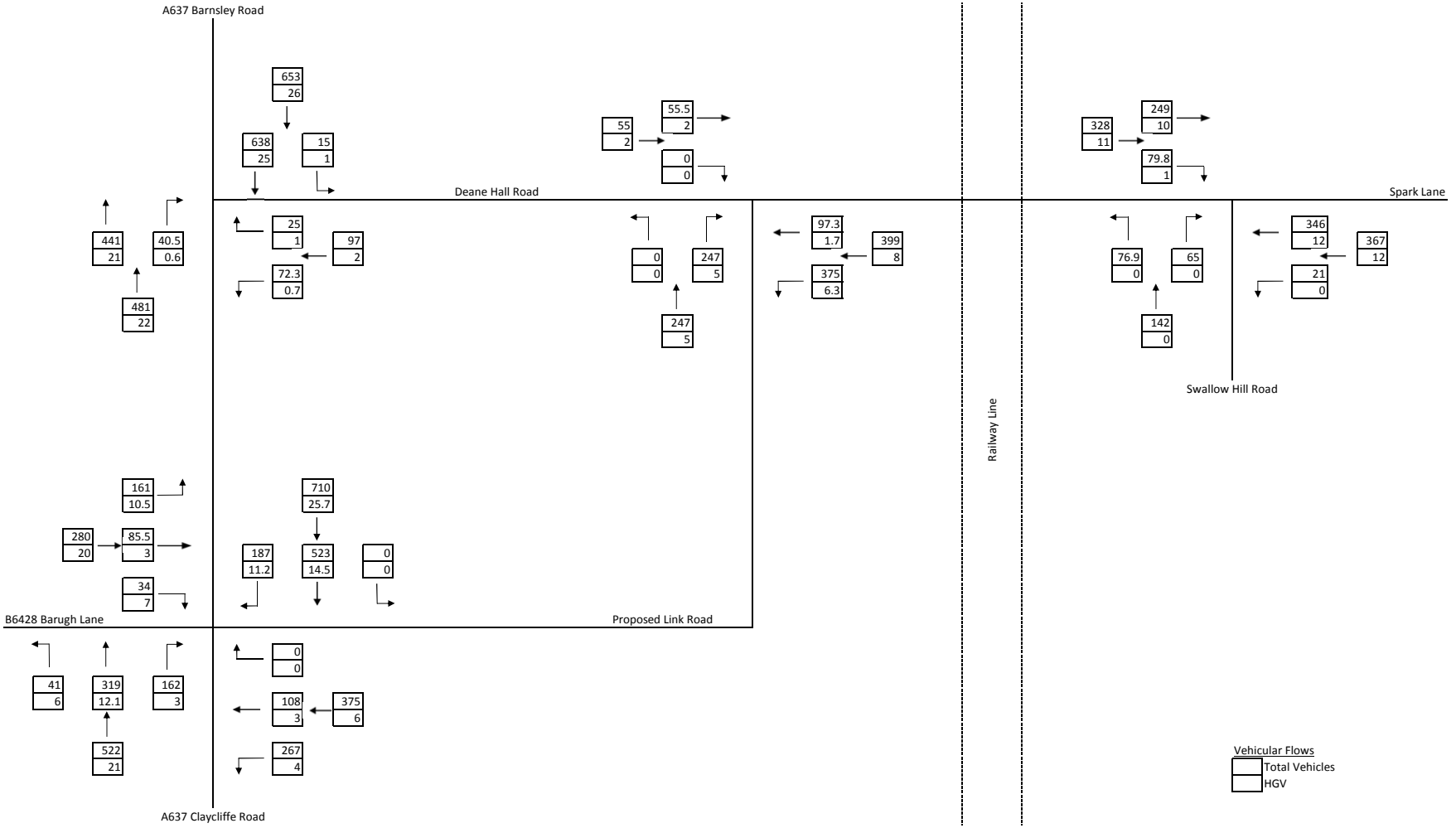


2018 GROWTHED VEHICULAR FLOWS WITH LINK ROAD
BARNSLEY
5:00 pm to 6:00 pm

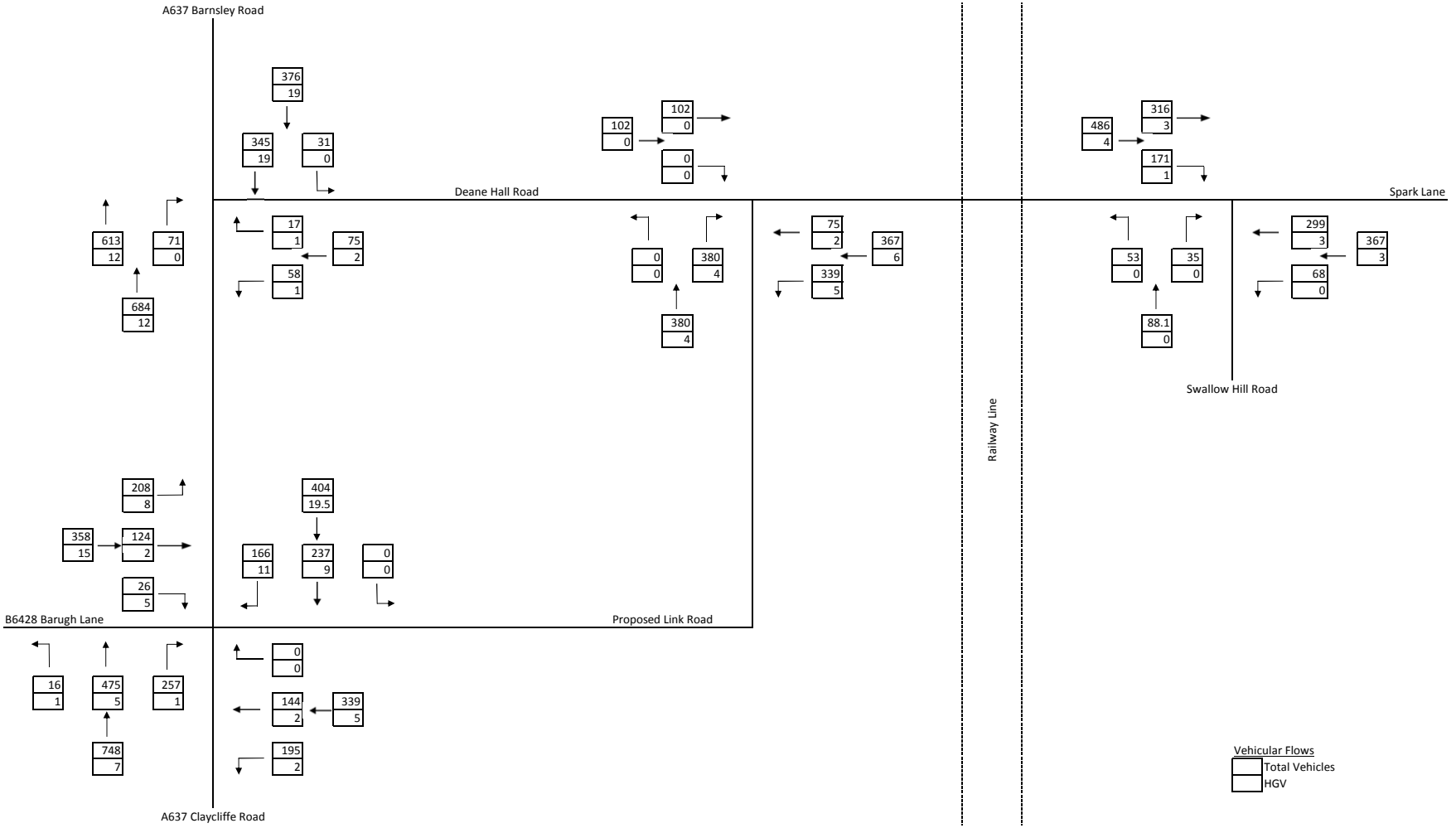


APPENDIX BGH 19

2018 GROWTHED VEHICULAR FLOWS WITH LINK ROAD AND COMMITTED DEVELOPMENT
BARNSLEY
8:00 am to 9:00 am

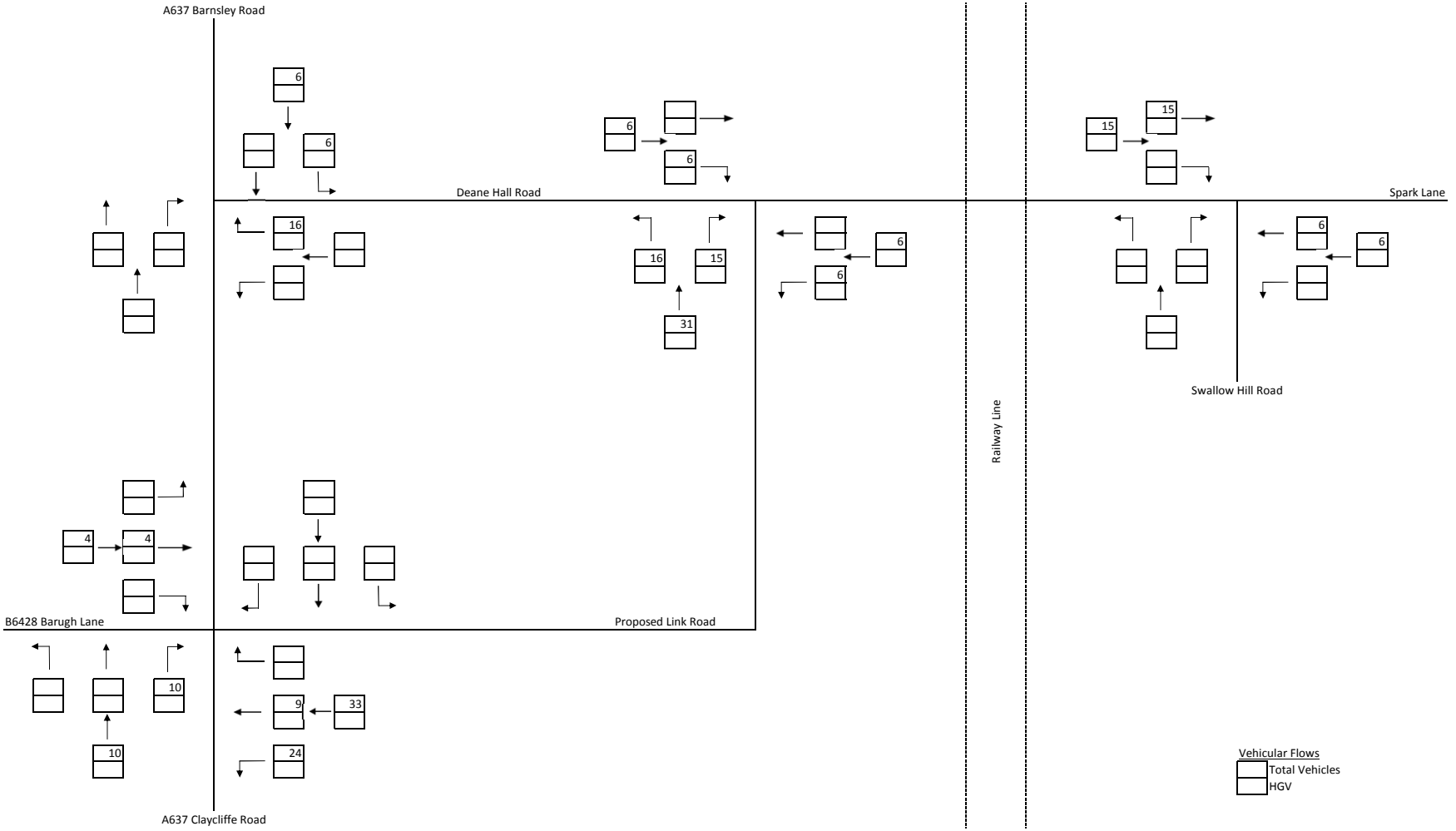


2018 GROWTHED VEHICULAR FLOWS WITH LINK ROAD AND COMMITTED DEVELOPMENT
BARNSLEY
17:00 pm to 18:00 pm

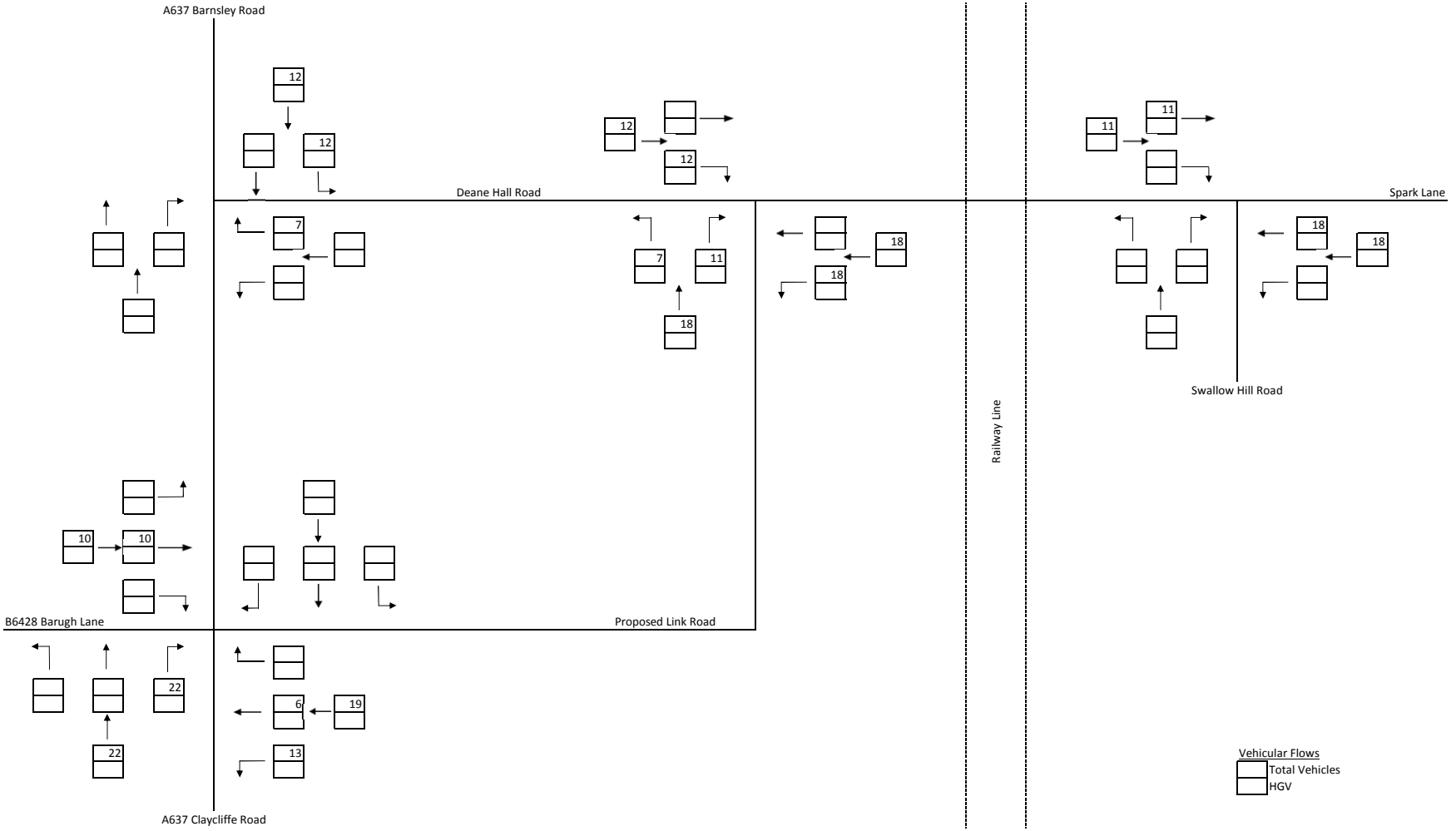


APPENDIX BGH 20

GENERATED FLOWS - 150 DWELLINGS
BARNSLEY
8:00 am to 9:00 am

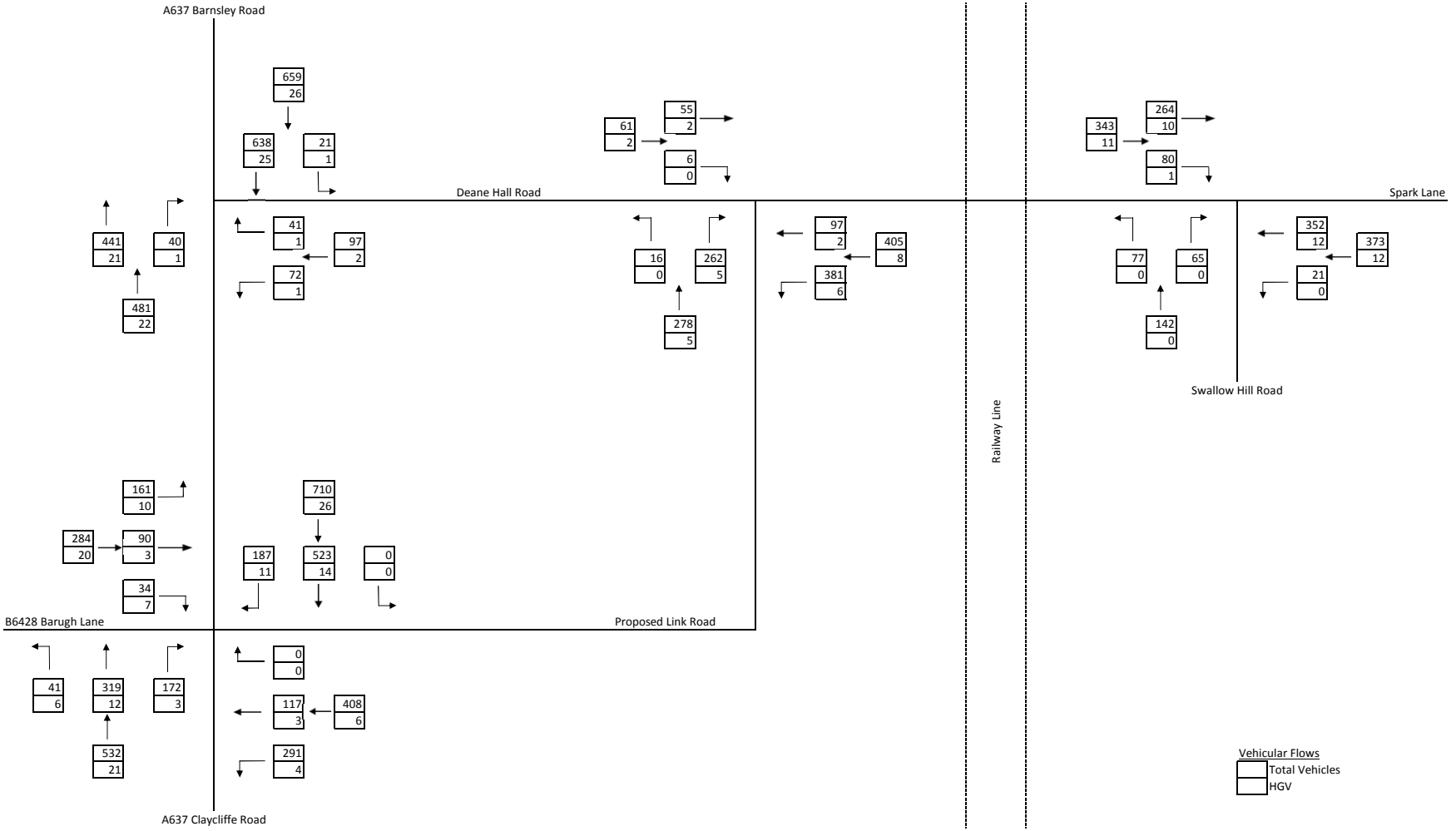


GENERATED FLOWS - 150 DWELLINGS
BARNSLEY
5:00 pm to 6:00 pm

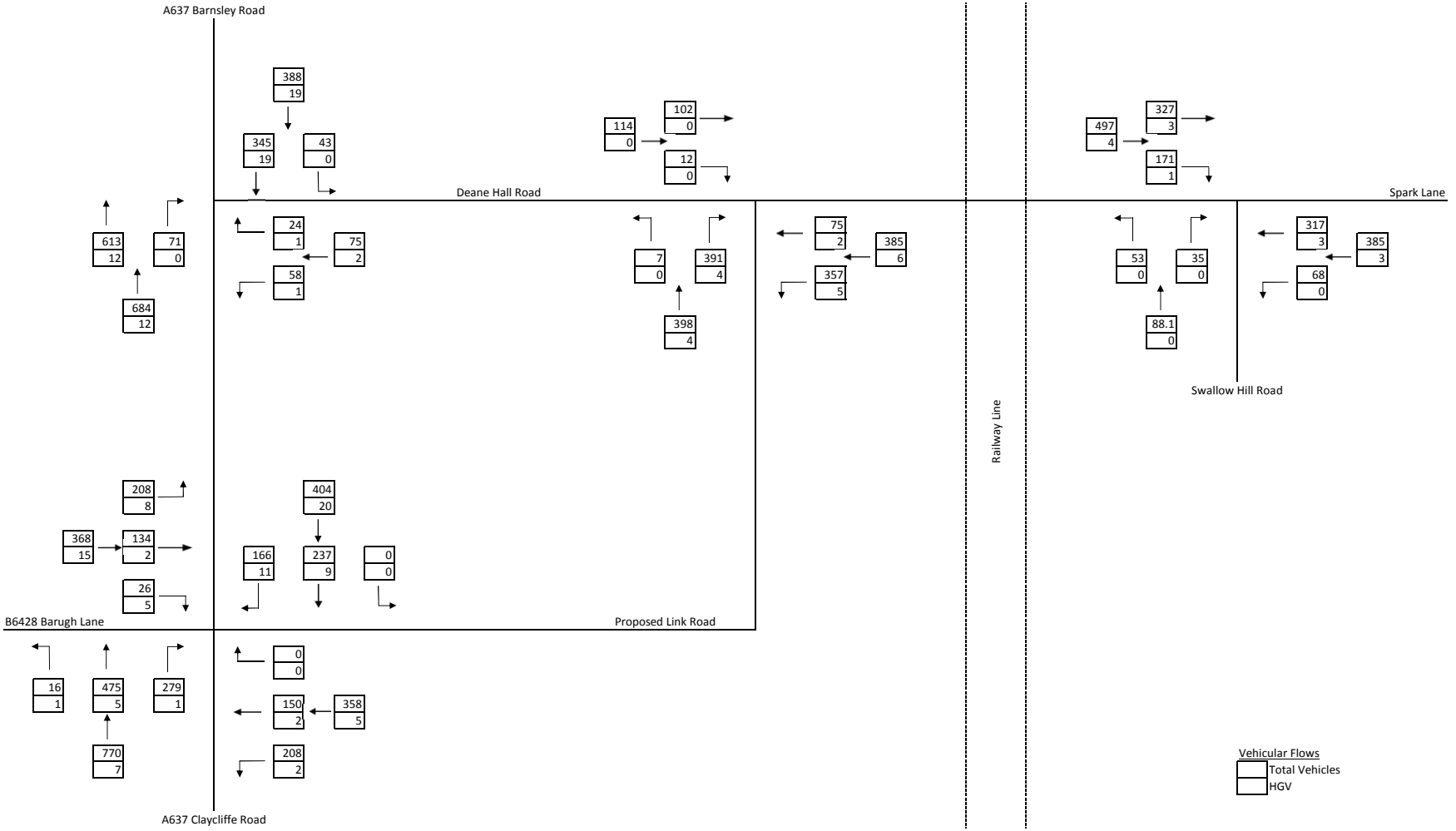


APPENDIX BGH 21

2018 PREDICTED VEHICULAR FLOWS WITH LINK ROAD AND COMMITTED DEVELOPMENT
BARNSLEY
8:00 am to 9:00 am



2018 PREDICTED VEHICULAR FLOWS WITH LINK ROAD AND COMMITTED DEVELOPMENT
BARNSLEY
5:00 pm to 6:00 pm



APPENDIX BGH 22

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.2.316 [14 Feb 2013]
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: 08-241 28m ICD Rdbt - PredOp (RS Flows).arc8
Path: Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Rbt
Report generation date: 05/03/2013 16:32:03

Summary of junction performance

	AM			
	Queue (PCU)	Delay (min)	RFC	LOS
	PredOp - PredOp			
Arm 1	5.29	0.43	0.85	D
Arm 2	4.59	0.66	0.84	E
Arm 3	1.31	0.14	0.56	A
Arm 4	0.92	0.18	0.47	B

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

"D1 - PredOp, AM " model duration: 07:45 - 09:15
"D2 - PredOp, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 05/03/2013 16:32:02

File summary

File Description

Title	08-241-TR-025 PredOp (RIS Flows)
Location	Barnsley
Site Number	
Date	03/09/2012
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	BRYANGHALL\acooper
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75			N/A	0.85	0.60	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	PCU	PCU	perHour	min	-Min	perMin

PredOp - PredOp, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
PredOp			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
PredOp, AM	PredOp	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (min)	Junction LOS
(untitled)	Roundabout	1,2,3,4			0.36	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Barnsley Road (N)	
2	Site Access	
3	Barnsley Road (S)	
4	B6428	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.20	4.50	2.30	10.00	32.00	20.00	
2	3.00	3.00	0.00	20.00	32.00	12.00	
3	3.20	4.50	6.00	15.00	32.00	17.00	
4	2.80	3.00	4.50	20.00	32.00	13.00	

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.528	1094.083
2		(calculated)	(calculated)	0.525	965.776
3		(calculated)	(calculated)	0.570	1236.854
4		(calculated)	(calculated)	0.522	954.631

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	710.00	100.000
2	ONE HOUR	✓	408.00	100.000
3	ONE HOUR	✓	532.00	100.000
4	ONE HOUR	✓	285.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	0.000	523.000	187.000
	2	0.000	0.000	291.000	117.000
	3	319.000	172.000	0.000	41.000
	4	161.000	90.000	34.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.00	0.74	0.26
	2	0.00	0.00	0.71	0.29
	3	0.60	0.32	0.00	0.08
	4	0.56	0.32	0.12	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.027	1.059
	2	1.000	1.000	1.013	1.026
	3	1.038	1.017	1.000	1.146
	4	1.062	1.021	1.205	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	0.000	2.700	5.900
	2	0.000	0.000	1.300	2.600
	3	3.800	1.700	0.000	14.600
	4	6.200	2.100	20.500	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS
1	0.85	0.43	5.29	D
2	0.84	0.66	4.59	E
3	0.56	0.14	1.31	A
4	0.47	0.18	0.92	B

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
1	534.53	529.63	221.37	0.00	977.26	0.547	1.22	0.137	A
2	307.16	303.83	555.03	0.00	674.25	0.456	0.83	0.163	A
3	400.52	398.19	226.62	0.00	1107.65	0.362	0.58	0.088	A
4	214.56	212.92	367.50	0.00	762.83	0.281	0.41	0.116	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
1	638.28	635.10	265.52	0.00	953.96	0.669	2.02	0.193	B
2	366.78	364.36	665.59	0.00	616.17	0.595	1.44	0.240	B
3	478.26	477.34	271.76	0.00	1081.91	0.442	0.81	0.103	A
4	256.21	255.56	440.55	0.00	724.71	0.354	0.57	0.136	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
1	781.72	770.04	324.71	0.00	922.73	0.847	4.94	0.380	C
2	449.22	438.67	807.31	0.00	541.74	0.829	4.08	0.544	D
3	585.74	583.85	328.61	0.00	1049.50	0.558	1.29	0.133	A
4	313.79	312.45	538.85	0.00	673.40	0.466	0.91	0.176	B

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
1	781.72	780.32	325.86	0.00	922.12	0.848	5.29	0.428	D
2	449.22	447.14	817.74	0.00	536.26	0.838	4.59	0.655	E
3	585.74	585.67	333.74	0.00	1046.57	0.560	1.31	0.135	A
4	313.79	313.75	540.53	0.00	672.53	0.467	0.92	0.178	B

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
1	638.28	650.72	267.27	0.00	953.04	0.670	2.18	0.213	B
2	366.78	378.72	681.45	0.00	607.85	0.603	1.61	0.279	C
3	478.26	480.12	279.99	0.00	1077.22	0.444	0.84	0.105	A
4	256.21	257.52	443.12	0.00	723.37	0.354	0.59	0.137	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
1	534.53	538.13	223.45	0.00	976.16	0.548	1.28	0.143	A
2	307.16	310.09	563.81	0.00	669.63	0.459	0.88	0.171	B
3	400.52	401.49	230.66	0.00	1105.35	0.362	0.60	0.089	A
4	214.56	215.24	370.55	0.00	761.24	0.282	0.42	0.117	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: 08-241 28m ICD Rdbt - PredOp (RS Flows).arc8
Path: Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Rbt
Report generation date: 05/03/2013 16:34:16

Summary of junction performance

	PM			
	Queue (PCU)	Delay (min)	RFC	LOS
	PredOp - PredOp			
Arm 1	1.16	0.16	0.53	A
Arm 2	1.21	0.19	0.55	B
Arm 3	4.24	0.31	0.82	C
Arm 4	3.34	0.52	0.78	D

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

"D1 - PredOp, AM" model duration: 07:45 - 09:15
"D2 - PredOp, PM " model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 05/03/2013 16:34:16

File summary

File Description

Title	08-241-TR-025 PredOp (RIS Flows)
Location	Barnsley
Site Number	
Date	03/09/2012
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	BRYANGHALL\acooper
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75			N/A	0.85	0.60	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	PCU	PCU	perHour	min	-Min	perMin

PredOp - PredOp, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
PredOp			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
PredOp, PM	PredOp	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (min)	Junction LOS
(untitled)	Roundabout	1,2,3,4			0.30	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Barnsley Road (N)	
2	Site Access	
3	Barnsley Road (S)	
4	B6428	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.20	4.50	2.30	10.00	32.00	20.00	
2	3.00	3.00	0.00	20.00	32.00	12.00	
3	3.20	4.50	6.00	15.00	32.00	17.00	
4	2.80	3.00	4.50	20.00	32.00	13.00	

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.528	1094.083
2		(calculated)	(calculated)	0.525	965.776
3		(calculated)	(calculated)	0.570	1236.854
4		(calculated)	(calculated)	0.522	954.631

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	403.00	100.000
2	ONE HOUR	✓	358.00	100.000
3	ONE HOUR	✓	770.00	100.000
4	ONE HOUR	✓	368.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	0.000	237.000	166.000
	2	0.000	0.000	208.000	150.000
	3	475.000	279.000	0.000	16.000
	4	208.000	134.000	26.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.00	0.59	0.41
	2	0.00	0.00	0.58	0.42
	3	0.62	0.36	0.00	0.02
	4	0.57	0.36	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.038	1.066
	2	1.000	1.000	1.010	1.013
	3	1.010	1.000	1.000	1.063
	4	1.038	1.015	1.192	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	0.000	3.800	6.600
	2	0.000	0.000	1.000	1.300
	3	1.000	0.000	0.000	6.300
	4	3.800	1.500	19.200	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (min)	Max Queue (PCU)	Max LOS
1	0.53	0.16	1.16	A
2	0.55	0.19	1.21	B
3	0.82	0.31	4.24	C
4	0.78	0.52	3.34	D

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
1	303.40	301.36	327.63	0.00	921.18	0.329	0.51	0.101	A
2	269.52	267.48	320.72	0.00	797.32	0.338	0.51	0.114	A
3	579.70	575.30	236.21	0.00	1102.18	0.526	1.10	0.114	A
4	277.05	274.10	563.34	0.00	660.62	0.419	0.74	0.160	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
1	362.29	361.47	392.83	0.00	886.78	0.409	0.72	0.120	A
2	321.83	320.97	384.70	0.00	763.71	0.421	0.73	0.137	A
3	692.21	689.53	283.38	0.00	1075.29	0.644	1.77	0.156	A
4	330.82	328.86	675.20	0.00	602.24	0.549	1.23	0.226	B

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
1	443.71	442.00	476.83	0.00	842.45	0.527	1.14	0.157	A
2	394.17	392.28	470.10	0.00	718.85	0.548	1.20	0.185	B
3	847.79	838.68	346.43	0.00	1039.34	0.816	4.05	0.289	C
4	405.18	397.76	821.25	0.00	526.02	0.770	3.08	0.461	D

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
1	443.71	443.64	482.62	0.00	839.39	0.529	1.16	0.159	A
2	394.17	394.09	472.19	0.00	717.76	0.549	1.21	0.187	B
3	847.79	847.00	347.86	0.00	1038.52	0.816	4.24	0.312	C
4	405.18	404.15	829.40	0.00	521.77	0.777	3.34	0.520	D

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
1	362.29	363.97	401.55	0.00	882.17	0.411	0.74	0.122	A
2	321.83	323.69	387.91	0.00	762.03	0.422	0.75	0.139	A
3	692.21	701.67	285.55	0.00	1074.05	0.644	1.88	0.166	A
4	330.82	338.81	687.09	0.00	596.04	0.555	1.34	0.249	B

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (min)	LOS
1	303.40	304.27	332.56	0.00	918.58	0.330	0.52	0.103	A
2	269.52	270.43	324.01	0.00	795.59	0.339	0.52	0.116	A
3	579.70	582.66	238.64	0.00	1100.80	0.527	1.14	0.117	A
4	277.05	279.32	570.55	0.00	656.86	0.422	0.77	0.166	A

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: Junction.arc8
Path: Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Dearne Hall Road - Link Road
Report generation date: 05/03/2013 16:36:04

Summary of junction performance

	AM				
	Queue (Veh)	**Delay (min)**	**RFC**	**LOS**	**Network Residual Capacity**
	A1 - 2018 Base + CD + Dev				
Stream B-AC	0.13	0.11	0.11	A	169 % [Stream B-AC]
Stream C-AB	0.25	0.14	0.20	A	
Stream C-A	-	-	-	-	
Stream A-B	-	-	-	-	
Stream A-C	-	-	-	-	

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

"D1 - 2018 Base + CD + Dev, AM " model duration: 07:45 - 09:15
"D2 - 2018 Base + CD + Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 05/03/2013 16:36:01

File summary

File Description

Title	Dearne Hall Road/Barnsley Road - 2011 Existing, 2016 Base and 2016 Predicted
Location	Barnsley
Site Number	
Date	21/06/2011
Version	
Status	
Identifier	
Client	CEG
Jobnumber	08-241
Enumerator	rspencer
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75		✓	Delay	0.85	0.60	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Min	perMin

(Default Analysis Set) - 2018 Base + CD + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2018 Base + CD + Dev, AM	2018 Base + CD + Dev	AM		Varies by Arm	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (min)	Junction LOS
untitled	T-Junction	Two-way	A,B,C		0.13	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	169	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Link Road		Major
B	Old Dearne Hall Road		Minor
C	Dearne Hall Road (Southbound)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00	✓	2.20	75.00	✓	5.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.50										90	90

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	579.816	0.106	0.267	0.168	0.381
1	B-C	714.664	0.110	0.277	-	-
1	C-B	617.397	0.239	0.239	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	278.00	100.000
B	ONE HOUR	✓	61.00	100.000
C	ONE HOUR	✓	478.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	16.000	262.000
	B	6.000	0.000	55.000
	C	381.000	97.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.06	0.94
	B	0.10	0.00	0.90
	C	0.80	0.20	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.010
	B	1.000	1.000	1.000
	C	1.014	1.026	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	1.000
	B	0.000	0.000	0.000
	C	1.400	2.600	0.000

Results

Results Summary for whole modelled period

Stream	Max	Max Delay	Max Queue	Max	Average Demand	Total Junction	Total Queueing	Average Queueing	Rate Of Queueing Delay (Veh-	Inclusive Total Queueing Delay	Inclusive Average Queueing Delay

	RFC	(min)	(Veh)	LOS	(Veh/hr)	Arrivals (Veh)	Delay (Veh-min)	Delay (min)	min/min)	(Veh-min)	(min)
B-AC	0.11	0.11	0.13	A	55.97	83.96	9.04	0.11	0.10	9.04	0.11
C-AB	0.20	0.14	0.25	A	89.02	133.54	17.83	0.13	0.20	17.83	0.13
C-A	-	-	-	-	349.60	524.40	-	-	-	-	-
A-B	-	-	-	-	14.68	22.02	-	-	-	-	-
A-C	-	-	-	-	240.42	360.62	-	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-AC	45.92	11.48	45.61	0.00	629.14	0.073	0.00	0.08	0.103	A
C-AB	73.03	18.26	72.43	0.00	552.50	0.132	0.00	0.15	0.125	A
C-A	286.83	71.71	286.83	0.00	-	-	-	-	-	-
A-B	12.05	3.01	12.05	0.00	-	-	-	-	-	-
A-C	197.25	49.31	197.25	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-AC	54.84	13.71	54.76	0.00	614.96	0.089	0.08	0.10	0.107	A
C-AB	87.21	21.80	87.05	0.00	542.97	0.161	0.15	0.19	0.132	A
C-A	342.50	85.63	342.50	0.00	-	-	-	-	-	-
A-B	14.38	3.60	14.38	0.00	-	-	-	-	-	-
A-C	235.53	58.88	235.53	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-AC	67.16	16.79	67.05	0.00	594.92	0.113	0.10	0.13	0.114	A
C-AB	106.83	26.71	106.59	0.00	529.83	0.202	0.19	0.25	0.142	A
C-A	419.45	104.86	419.45	0.00	-	-	-	-	-	-
A-B	17.62	4.40	17.62	0.00	-	-	-	-	-	-
A-C	288.47	72.12	288.47	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-AC	67.16	16.79	67.16	0.00	594.90	0.113	0.13	0.13	0.114	A
C-AB	106.83	26.71	106.83	0.00	529.83	0.202	0.25	0.25	0.142	A
C-A	419.45	104.86	419.45	0.00	-	-	-	-	-	-
A-B	17.62	4.40	17.62	0.00	-	-	-	-	-	-
A-C	288.47	72.12	288.47	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-AC	54.84	13.71	54.95	0.00	614.93	0.089	0.13	0.10	0.107	A
C-AB	87.21	21.80	87.44	0.00	542.96	0.161	0.25	0.19	0.132	A
C-A	342.50	85.63	342.50	0.00	-	-	-	-	-	-
A-B	14.38	3.60	14.38	0.00	-	-	-	-	-	-
A-C	235.53	58.88	235.53	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-AC	45.92	11.48	46.00	0.00	629.08	0.073	0.10	0.08	0.103	A
C-AB	73.03	18.26	73.19	0.00	552.50	0.132	0.19	0.15	0.125	A
C-A	286.83	71.71	286.83	0.00	-	-	-	-	-	-
A-B	12.05	3.01	12.05	0.00	-	-	-	-	-	-
A-C	197.25	49.31	197.25	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.14	0.08	0.103	A	A
C-AB	2.24	0.15	0.125	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.43	0.10	0.107	A	A
C-AB	2.85	0.19	0.132	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.85	0.12	0.114	A	A
C-AB	3.75	0.25	0.142	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.90	0.13	0.114	A	A
C-AB	3.79	0.25	0.142	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.51	0.10	0.107	A	A
C-AB	2.90	0.19	0.132	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	1.21	0.08	0.103	A	A
C-AB	2.30	0.15	0.125	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: Junction.arc8
Path: Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Dearne Hall Road - Link Road
Report generation date: 05/03/2013 16:37:41

Summary of junction performance

	PM				
	Queue (Veh)	**Delay (min)**	**RFC**	**LOS**	**Network Residual Capacity**
	A1 - 2018 Base + CD + Dev				
Stream B-AC	0.30	0.14	0.23	A	106 % [Stream B-AC]
Stream C-AB	0.20	0.14	0.16	A	
Stream C-A	-	-	-	-	
Stream A-B	-	-	-	-	
Stream A-C	-	-	-	-	

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

"D1 - 2018 Base + CD + Dev, AM" model duration: 07:45 - 09:15
"D2 - 2018 Base + CD + Dev, PM " model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 05/03/2013 16:37:39

File summary

File Description

Title	Dearne Hall Road/Barnsley Road - 2011 Existing, 2016 Base and 2016 Predicted
Location	Barnsley
Site Number	
Date	21/06/2011
Version	
Status	
Identifier	
Client	CEG
Jobnumber	08-241
Enumerator	rspencer
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75		✓	Delay	0.85	0.60	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Min	perMin

(Default Analysis Set) - 2018 Base + CD + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2018 Base + CD + Dev, PM	2018 Base + CD + Dev	PM		Varies by Arm	16:45	18:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (min)	Junction LOS
untitled	T-Junction	Two-way	A,B,C		0.14	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	106	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Link Road		Major
B	Old Dearne Hall Road		Minor
C	Dearne Hall Road (Southbound)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00	✓	2.20	75.00	✓	5.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.50										90	90

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	579.816	0.106	0.267	0.168	0.381
1	B-C	714.664	0.110	0.277	-	-
1	C-B	617.397	0.239	0.239	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	398.00	100.000
B	ONE HOUR	✓	114.00	100.000
C	ONE HOUR	✓	432.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	7.000	391.000
	B	12.000	0.000	102.000
	C	357.000	75.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.02	0.98
	B	0.11	0.00	0.89
	C	0.83	0.17	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.018
	B	1.000	1.000	1.035
	C	1.016	1.020	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	1.800
	B	0.000	0.000	3.500
	C	1.600	2.000	0.000

Results

Results Summary for whole modelled period

Stream	Max	Max Delay	Max Queue	Max	Average Demand	Total Junction	Total Queueing	Average Queueing	Rate Of Queueing Delay (Veh-	Inclusive Total Queueing Delay	Inclusive Average Queueing Delay

	RFC	(min)	(Veh)	LOS	(Veh/hr)	Arrivals (Veh)	Delay (Veh-min)	Delay (min)	min/min)	(Veh-min)	(min)
B-AC	0.23	0.14	0.30	A	104.61	156.91	20.67	0.13	0.23	20.67	0.13
C-AB	0.16	0.14	0.20	A	68.83	103.24	13.90	0.13	0.15	13.90	0.13
C-A	-	-	-	-	327.59	491.38	-	-	-	-	-
A-B	-	-	-	-	6.42	9.64	-	-	-	-	-
A-C	-	-	-	-	358.79	538.18	-	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-AC	85.82	21.46	85.14	0.00	584.34	0.147	0.00	0.17	0.120	A
C-AB	56.46	14.12	56.00	0.00	533.78	0.106	0.00	0.12	0.125	A
C-A	268.77	67.19	268.77	0.00	-	-	-	-	-	-
A-B	5.27	1.32	5.27	0.00	-	-	-	-	-	-
A-C	294.37	73.59	294.37	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-AC	102.48	25.62	102.29	0.00	565.74	0.181	0.17	0.22	0.129	A
C-AB	67.43	16.86	67.30	0.00	519.91	0.130	0.12	0.15	0.133	A
C-A	320.93	80.23	320.93	0.00	-	-	-	-	-	-
A-B	6.29	1.57	6.29	0.00	-	-	-	-	-	-
A-C	351.50	87.88	351.50	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-AC	125.52	31.38	125.19	0.00	539.57	0.233	0.22	0.30	0.145	A
C-AB	82.59	20.65	82.39	0.00	500.75	0.165	0.15	0.20	0.143	A
C-A	393.05	98.26	393.05	0.00	-	-	-	-	-	-
A-B	7.71	1.93	7.71	0.00	-	-	-	-	-	-
A-C	430.50	107.62	430.50	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-AC	125.52	31.38	125.51	0.00	539.55	0.233	0.30	0.30	0.145	A
C-AB	82.59	20.65	82.58	0.00	500.75	0.165	0.20	0.20	0.143	A
C-A	393.05	98.26	393.05	0.00	-	-	-	-	-	-
A-B	7.71	1.93	7.71	0.00	-	-	-	-	-	-
A-C	430.50	107.62	430.50	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-AC	102.48	25.62	102.79	0.00	565.72	0.181	0.30	0.22	0.130	A
C-AB	67.43	16.86	67.61	0.00	519.91	0.130	0.20	0.15	0.133	A
C-A	320.93	80.23	320.93	0.00	-	-	-	-	-	-
A-B	6.29	1.57	6.29	0.00	-	-	-	-	-	-
A-C	351.50	87.88	351.50	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-AC	85.82	21.46	86.02	0.00	584.30	0.147	0.22	0.17	0.120	A
C-AB	56.46	14.12	56.59	0.00	533.78	0.106	0.15	0.12	0.126	A
C-A	268.77	67.19	268.77	0.00	-	-	-	-	-	-
A-B	5.27	1.32	5.27	0.00	-	-	-	-	-	-
A-C	294.37	73.59	294.37	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	2.47	0.16	0.120	A	A
C-AB	1.74	0.12	0.125	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	3.21	0.21	0.129	A	A
C-AB	2.22	0.15	0.133	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	4.37	0.29	0.145	A	A
C-AB	2.93	0.20	0.143	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	4.51	0.30	0.145	A	A
C-AB	2.96	0.20	0.143	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	3.44	0.23	0.130	A	A
C-AB	2.26	0.15	0.133	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	2.67	0.18	0.120	A	A
C-AB	1.79	0.12	0.126	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: Swallow Hill Junction.arc8
Path: Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Swallow Hill - Dearne Hall
Report generation date: 05/03/2013 16:19:55

Summary of junction performance

	AM			
	Queue (Veh)	Delay (min)	RFC	LOS
	A1 - 2018 Base + CD + Dev			
Stream B-AC	0.65	0.25	0.40	C
Stream C-AB	0.40	0.10	0.20	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2013 Base, AM" model duration: 07:45 - 09:15
"D2 - 2013 Base, PM" model duration: 16:45 - 18:15
"D3 - 2018 Base + CD, AM" model duration: 07:45 - 09:15
"D4 - 2018 Base + CD, PM" model duration: 16:45 - 18:15
"D5 - 2018 Base + CD + Dev, AM " model duration: 07:45 - 09:15
"D6 - 2018 Base + CD + Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 05/03/2013 16:19:54

File summary

File Description

Title	Barugh Green, Barnsley
Location	Swallow Hill Road
Site Number	
Date	04/03/2013
Version	
Status	
Identifier	
Client	CEG
Jobnumber	08-241
Enumerator	mcrabtree
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75			N/A	0.85	0.60	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Hour	perMin

(Default Analysis Set) - 2018 Base + CD + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 Base + CD + Dev, AM	2018 Base + CD + Dev	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (min)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	0.18	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Spark Lane		Major
B	Swallow Hill Road		Minor
C	Dearne Hall Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.90		0.00		2.20	90.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	2.20										50	25

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	465.524	0.081	0.206	0.130	0.294
1	B-C	588.441	0.087	0.219	-	-
1	C-B	626.083	0.233	0.233	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	373.00	100.000
B	ONE HOUR	✓	142.00	100.000
C	ONE HOUR	✓	344.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	21.000	352.000
	B	65.000	0.000	77.000
	C	264.000	80.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.06	0.94
	B	0.46	0.00	0.54
	C	0.77	0.23	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.033
	B	1.000	1.000	1.000
	C	1.038	1.015	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	3.300
	B	0.000	0.000	0.000
	C	3.800	1.500	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS
B-AC	0.40	0.25	0.65	C

C-AB	0.20	0.10	0.40	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	106.91	105.63	0.00	436.83	0.245	0.32	0.180	B
C-AB	84.65	83.85	0.00	685.85	0.123	0.20	0.100	A
C-A	174.33	174.33	0.00	-	-	-	-	-
A-B	15.81	15.81	0.00	-	-	-	-	-
A-C	265.00	265.00	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	127.66	127.21	0.00	418.98	0.305	0.43	0.205	B
C-AB	108.67	108.40	0.00	701.01	0.155	0.27	0.101	A
C-A	200.57	200.57	0.00	-	-	-	-	-
A-B	18.88	18.88	0.00	-	-	-	-	-
A-C	316.44	316.44	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	156.34	155.50	0.00	394.03	0.397	0.64	0.251	C
C-AB	146.92	146.42	0.00	722.64	0.203	0.39	0.104	A
C-A	231.84	231.84	0.00	-	-	-	-	-
A-B	23.12	23.12	0.00	-	-	-	-	-
A-C	387.56	387.56	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	156.34	156.31	0.00	393.96	0.397	0.65	0.252	C
C-AB	147.08	147.06	0.00	722.80	0.203	0.40	0.104	A
C-A	231.68	231.68	0.00	-	-	-	-	-
A-B	23.12	23.12	0.00	-	-	-	-	-
A-C	387.56	387.56	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	127.66	128.46	0.00	418.87	0.305	0.45	0.207	B
C-AB	108.88	109.35	0.00	701.25	0.155	0.28	0.102	A
C-A	200.37	200.37	0.00	-	-	-	-	-
A-B	18.88	18.88	0.00	-	-	-	-	-
A-C	316.44	316.44	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	106.91	107.37	0.00	436.65	0.245	0.33	0.182	B
C-AB	84.95	85.24	0.00	686.06	0.124	0.21	0.100	A
C-A	174.03	174.03	0.00	-	-	-	-	-
A-B	15.81	15.81	0.00	-	-	-	-	-
A-C	265.00	265.00	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: Swallow Hill Junction.arc8
Path: Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Swallow Hill - Dearne Hall
Report generation date: 05/03/2013 16:20:26

Summary of junction performance

	PM			
	Queue (Veh)	Delay (min)	RFC	LOS
	A1 - 2018 Base + CD + Dev			
Stream B-AC	0.33	0.21	0.25	B
Stream C-AB	1.22	0.14	0.45	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2013 Base, AM" model duration: 07:45 - 09:15
"D2 - 2013 Base, PM" model duration: 16:45 - 18:15
"D3 - 2018 Base + CD, AM" model duration: 07:45 - 09:15
"D4 - 2018 Base + CD, PM" model duration: 16:45 - 18:15
"D5 - 2018 Base + CD + Dev, AM" model duration: 07:45 - 09:15
"D6 - 2018 Base + CD + Dev, PM " model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 05/03/2013 16:20:26

File summary

File Description

Title	Barugh Green, Barnsley
Location	Swallow Hill Road
Site Number	
Date	04/03/2013
Version	
Status	
Identifier	
Client	CEG
Jobnumber	08-241
Enumerator	mcrabtree
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75			N/A	0.85	0.60	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Hour	perMin

(Default Analysis Set) - 2018 Base + CD + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 Base + CD + Dev, PM	2018 Base + CD + Dev	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (min)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	0.16	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Spark Lane		Major
B	Swallow Hill Road		Minor
C	Dearne Hall Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.90		0.00		2.20	90.00	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	2.20										50	25

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	465.524	0.081	0.206	0.130	0.294
1	B-C	588.441	0.087	0.219	-	-
1	C-B	626.083	0.233	0.233	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	385.00	100.000
B	ONE HOUR	✓	88.00	100.000
C	ONE HOUR	✓	498.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	68.000	317.000
	B	35.000	0.000	53.000
	C	327.000	171.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.18	0.82
	B	0.40	0.00	0.60
	C	0.66	0.34	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.011
	B	1.000	1.000	1.000
	C	1.010	1.008	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	1.100
	B	0.000	0.000	0.000
	C	1.000	0.800	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS
B-AC	0.25	0.21	0.33	B

C-AB	0.45	0.14	1.22	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	66.25	65.54	0.00	434.92	0.152	0.18	0.162	A
C-AB	194.56	192.55	0.00	722.83	0.269	0.50	0.113	A
C-A	180.36	180.36	0.00	-	-	-	-	-
A-B	51.19	51.19	0.00	-	-	-	-	-
A-C	238.65	238.65	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	79.11	78.89	0.00	414.24	0.191	0.23	0.179	B
C-AB	253.37	252.48	0.00	744.89	0.340	0.72	0.122	A
C-A	194.32	194.32	0.00	-	-	-	-	-
A-B	61.13	61.13	0.00	-	-	-	-	-
A-C	284.98	284.98	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	96.89	96.50	0.00	384.90	0.252	0.33	0.208	B
C-AB	351.84	349.92	0.00	777.21	0.453	1.20	0.141	A
C-A	196.47	196.47	0.00	-	-	-	-	-
A-B	74.87	74.87	0.00	-	-	-	-	-
A-C	349.02	349.02	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	96.89	96.88	0.00	384.62	0.252	0.33	0.209	B
C-AB	352.66	352.59	0.00	777.98	0.453	1.22	0.142	A
C-A	195.65	195.65	0.00	-	-	-	-	-
A-B	74.87	74.87	0.00	-	-	-	-	-
A-C	349.02	349.02	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	79.11	79.49	0.00	413.84	0.191	0.24	0.180	B
C-AB	254.28	256.14	0.00	745.99	0.341	0.76	0.123	A
C-A	193.41	193.41	0.00	-	-	-	-	-
A-B	61.13	61.13	0.00	-	-	-	-	-
A-C	284.98	284.98	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	End Queue (Veh)	Delay (min)	LOS
B-AC	66.25	66.48	0.00	434.46	0.152	0.18	0.163	A
C-AB	195.54	196.48	0.00	723.64	0.270	0.52	0.114	A
C-A	179.38	179.38	0.00	-	-	-	-	-
A-B	51.19	51.19	0.00	-	-	-	-	-
A-C	238.65	238.65	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: Barnsley Road-Dearne Hall Road.arc8
Path: Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Barnsley Road-Dearne Hall Road
Report generation date: 05/03/2013 16:03:55

Summary of junction performance

	AM				
	Queue (Veh)	**Delay (min)**	**RFC**	**LOS**	**Network Residual Capacity**
	A1 - 2018 Base + CD + Dev				
Stream B-C	0.21	0.16	0.17	A	28 % [Stream B-A]
Stream B-A	0.24	0.32	0.19	C	
Stream C-AB	0.11	0.15	0.10	A	
Stream C-A	-	-	-	-	
Stream A-B	-	-	-	-	
Stream A-C	-	-	-	-	

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

"D1 - 2013 Base, AM" model duration: 07:45 - 09:15
"D2 - 2013 Base, PM" model duration: 16:45 - 18:15
"D3 - 2018 Base + CD, AM" model duration: 07:45 - 09:15
"D4 - 2018 Base + CD, PM" model duration: 16:45 - 18:15
"D5 - 2018 Base + CD + Dev, AM " model duration: 07:45 - 09:15
"D6 - 2018 Base + CD + Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 05/03/2013 16:03:53

File summary

File Description

Title	Dearne Hall Road/Barnsley Road
Location	Barnsley
Site Number	
Date	01/03/2013
Version	
Status	
Identifier	
Client	CEG
Jobnumber	08-241
Enumerator	mcrabtree
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75		✓	Delay	0.85	0.60	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Hour	perMin

(Default Analysis Set) - 2018 Base + CD + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2018 Base + CD + Dev, AM	2018 Base + CD + Dev	AM		ONE HOUR	07:45	09:15	90	15						

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (min)	Junction LOS
untitled	T-Junction	Two-way	A,B,C		0.20	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	28	Stream B-A

Arms

Arms

Arm	Name	Description	Arm Type
A	Barnsley Road North		Major
B	Dearne Hall Road		Minor
C	Barnsley Road South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.10		0.00		2.20	110.00	✓	6.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.40	3.30	3.00	3.00		1.00	19	12

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	505.020	0.092	0.231	0.146	0.331

1	B-C	687.598	0.105	0.265	-	-
1	C-B	637.665	0.246	0.246	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	659.00	100.000
B	ONE HOUR	✓	113.00	100.000
C	ONE HOUR	✓	481.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	21.000	638.000
	B	41.000	0.000	72.000
	C	441.000	40.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.03	0.97
	B	0.36	0.00	0.64
	C	0.92	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.071	1.037
	B	1.048	1.000	1.019
	C	1.047	1.024	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	7.100	3.700
	B	4.800	0.000	1.900
	C	4.700	2.400	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-hr)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-hr/min)	Inclusive Total Queueing Delay (Veh-hr)	Inclusive Average Queueing Delay (min)
B-C	0.17	0.16	0.21	A	66.07	99.10	0.23	0.14	0.00	0.23	0.14
B-A	0.19	0.32	0.24	C	37.62	56.43	0.25	0.26	0.00	0.25	0.26
C-AB	0.10	0.15	0.11	A	36.70	55.06	0.13	0.14	0.00	0.13	0.14
C-A	-	-	-	-	404.67	607.00	-	-	-	-	-
A-B	-	-	-	-	19.27	28.90	-	-	-	-	-
A-C	-	-	-	-	585.44	878.16	-	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	54.21	13.55	53.75	0.00	529.34	0.102	0.00	0.11	0.126	A
B-A	30.87	7.72	30.43	0.00	311.97	0.099	0.00	0.11	0.213	B
C-AB	30.11	7.53	29.86	0.00	499.00	0.060	0.00	0.06	0.128	A
C-A	332.01	83.00	332.01	0.00	-	-	-	-	-	-
A-B	15.81	3.95	15.81	0.00	-	-	-	-	-	-
A-C	480.32	120.08	480.32	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	64.73	16.18	64.59	0.00	499.10	0.130	0.11	0.15	0.138	A
B-A	36.86	9.21	36.69	0.00	278.70	0.132	0.11	0.15	0.248	B
C-AB	35.96	8.99	35.89	0.00	474.98	0.076	0.06	0.08	0.137	A
C-A	396.45	99.11	396.45	0.00	-	-	-	-	-	-
A-B	18.88	4.72	18.88	0.00	-	-	-	-	-	-
A-C	573.55	143.39	573.55	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	79.27	19.82	79.03	0.00	455.09	0.174	0.15	0.21	0.159	A
B-A	45.14	11.29	44.80	0.00	232.38	0.194	0.15	0.24	0.319	C
C-AB	44.04	11.01	43.93	0.00	441.78	0.100	0.08	0.11	0.151	A
C-A	485.55	121.39	485.55	0.00	-	-	-	-	-	-
A-B	23.12	5.78	23.12	0.00	-	-	-	-	-	-
A-C	702.45	175.61	702.45	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	79.27	19.82	79.27	0.00	454.75	0.174	0.21	0.21	0.160	A
B-A	45.14	11.29	45.13	0.00	232.37	0.194	0.24	0.24	0.320	C
C-AB	44.04	11.01	44.04	0.00	441.78	0.100	0.11	0.11	0.151	A
C-A	485.55	121.39	485.55	0.00	-	-	-	-	-	-
A-B	23.12	5.78	23.12	0.00	-	-	-	-	-	-
A-C	702.45	175.61	702.45	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	64.73	16.18	64.96	0.00	498.62	0.130	0.21	0.15	0.138	A
B-A	36.86	9.21	37.19	0.00	278.73	0.132	0.24	0.16	0.249	B
C-AB	35.96	8.99	36.07	0.00	474.98	0.076	0.11	0.08	0.137	A
C-A	396.45	99.11	396.45	0.00	-	-	-	-	-	-
A-B	18.88	4.72	18.88	0.00	-	-	-	-	-	-
A-C	573.55	143.39	573.55	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	54.21	13.55	54.35	0.00	528.81	0.103	0.15	0.12	0.126	A
B-A	30.87	7.72	31.04	0.00	311.98	0.099	0.16	0.11	0.214	B
C-AB	30.11	7.53	30.19	0.00	499.00	0.060	0.08	0.06	0.128	A
C-A	332.01	83.00	332.01	0.00	-	-	-	-	-	-
A-B	15.81	3.95	15.81	0.00	-	-	-	-	-	-
A-C	480.32	120.08	480.32	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.03	0.00	0.126	A	A
B-A	0.03	0.00	0.213	B	B
C-AB	0.02	0.00	0.128	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.04	0.00	0.138	A	A
B-A	0.04	0.00	0.248	B	B
C-AB	0.02	0.00	0.137	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.05	0.00	0.159	A	A
B-A	0.06	0.00	0.319	C	B
C-AB	0.03	0.00	0.151	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.05	0.00	0.160	A	A
B-A	0.06	0.00	0.320	C	B
C-AB	0.03	0.00	0.151	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.04	0.00	0.138	A	A
B-A	0.04	0.00	0.249	B	B
C-AB	0.02	0.00	0.137	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.03	0.00	0.126	A	A
B-A	0.03	0.00	0.214	B	B
C-AB	0.02	0.00	0.128	A	A
C-A	-	-	-	-	-

A-B	-	-	-	-	-
A-C	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: Barnsley Road-Dearne Hall Road.arc8
Path: Y:\2008\08-226 to 08-250\08-241 Barnsley, CEG\Technical\Barnsley Road-Dearne Hall Road
Report generation date: 05/03/2013 16:05:45

Summary of junction performance

	PM				
	Queue (Veh)	**Delay (min)**	**RFC**	**LOS**	**Network Residual Capacity**
	A1 - 2018 Base + CD + Dev				
Stream B-C	0.13	0.12	0.11	A	59 % [Stream B-A]
Stream B-A	0.11	0.25	0.10	C	
Stream C-AB	0.17	0.13	0.15	A	
Stream C-A	-	-	-	-	
Stream A-B	-	-	-	-	
Stream A-C	-	-	-	-	

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

"D1 - 2013 Base, AM" model duration: 07:45 - 09:15
"D2 - 2013 Base, PM" model duration: 16:45 - 18:15
"D3 - 2018 Base + CD, AM" model duration: 07:45 - 09:15
"D4 - 2018 Base + CD, PM" model duration: 16:45 - 18:15
"D5 - 2018 Base + CD + Dev, AM" model duration: 07:45 - 09:15
"D6 - 2018 Base + CD + Dev, PM " model duration: 16:45 - 18:15

Run using Junctions 8.0.2.316 at 05/03/2013 16:05:42

File summary

File Description

Title	Dearne Hall Road/Barnsley Road
Location	Barnsley
Site Number	
Date	01/03/2013
Version	
Status	
Identifier	
Client	CEG
Jobnumber	08-241
Enumerator	mcrabtree
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (min)	Queue Threshold (PCU)
5.75		✓	Delay	0.85	0.60	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Hour	perMin

(Default Analysis Set) - 2018 Base + CD + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2018 Base + CD + Dev, PM	2018 Base + CD + Dev	PM		ONE HOUR	16:45	18:15	90	15						

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (min)	Junction LOS
untitled	T-Junction	Two-way	A,B,C		0.15	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	59	Stream B-A

Arms

Arms

Arm	Name	Description	Arm Type
A	Barnsley Road North		Major
B	Dearne Hall Road		Minor
C	Barnsley Road South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.10		0.00		2.20	110.00	✓	6.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				10.00	4.40	3.30	3.00	3.00		1.00	19	12

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	497.878	0.090	0.228	0.144	0.326

1	B-C	696.807	0.106	0.269	-	-
1	C-B	637.665	0.246	0.246	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	388.00	100.000
B	ONE HOUR	✓	82.00	100.000
C	ONE HOUR	✓	684.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	43.000	345.000
	B	24.000	0.000	58.000
	C	613.000	71.000	0.000

Turning Proportions (Veh) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.11	0.89
	B	0.29	0.00	0.71
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.051	1.000
	B	1.067	1.000	1.015
	C	1.019	1.011	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	5.100	0.000
	B	6.700	0.000	1.500
	C	1.900	1.100	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-hr)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-hr/min)	Inclusive Total Queueing Delay (Veh-hr)	Inclusive Average Queueing Delay (min)
B-C	0.11	0.12	0.13	A	53.22	79.83	0.15	0.11	0.00	0.15	0.11
B-A	0.10	0.25	0.11	C	22.02	33.03	0.12	0.22	0.00	0.12	0.22
C-AB	0.15	0.13	0.17	A	65.15	97.73	0.21	0.13	0.00	0.21	0.13
C-A	-	-	-	-	562.50	843.75	-	-	-	-	-
A-B	-	-	-	-	39.46	59.19	-	-	-	-	-
A-C	-	-	-	-	316.58	474.87	-	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	43.67	10.92	43.36	0.00	605.57	0.072	0.00	0.08	0.107	A
B-A	18.07	4.52	17.84	0.00	328.27	0.055	0.00	0.06	0.193	B
C-AB	53.45	13.36	53.03	0.00	559.25	0.096	0.00	0.10	0.118	A
C-A	461.50	115.37	461.50	0.00	-	-	-	-	-	-
A-B	32.37	8.09	32.37	0.00	-	-	-	-	-	-
A-C	259.73	64.93	259.73	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	52.14	13.04	52.06	0.00	588.85	0.089	0.08	0.10	0.112	A
B-A	21.58	5.39	21.50	0.00	301.27	0.072	0.06	0.08	0.214	B
C-AB	63.83	15.96	63.72	0.00	545.38	0.117	0.10	0.13	0.125	A
C-A	551.07	137.77	551.07	0.00	-	-	-	-	-	-
A-B	38.66	9.66	38.66	0.00	-	-	-	-	-	-
A-C	310.15	77.54	310.15	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	63.86	15.96	63.74	0.00	565.16	0.113	0.10	0.13	0.120	A
B-A	26.42	6.61	26.29	0.00	263.95	0.100	0.08	0.11	0.252	C
C-AB	78.17	19.54	78.01	0.00	526.20	0.149	0.13	0.17	0.134	A
C-A	674.92	168.73	674.92	0.00	-	-	-	-	-	-
A-B	47.34	11.84	47.34	0.00	-	-	-	-	-	-
A-C	379.85	94.96	379.85	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	63.86	15.96	63.86	0.00	565.01	0.113	0.13	0.13	0.120	A
B-A	26.42	6.61	26.42	0.00	263.93	0.100	0.11	0.11	0.253	C
C-AB	78.17	19.54	78.17	0.00	526.20	0.149	0.17	0.17	0.134	A
C-A	674.92	168.73	674.92	0.00	-	-	-	-	-	-
A-B	47.34	11.84	47.34	0.00	-	-	-	-	-	-
A-C	379.85	94.96	379.85	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	52.14	13.04	52.26	0.00	588.60	0.089	0.13	0.10	0.112	A
B-A	21.58	5.39	21.70	0.00	301.27	0.072	0.11	0.08	0.215	B
C-AB	63.83	15.96	63.99	0.00	545.38	0.117	0.17	0.13	0.125	A
C-A	551.07	137.77	551.07	0.00	-	-	-	-	-	-
A-B	38.66	9.66	38.66	0.00	-	-	-	-	-	-
A-C	310.15	77.54	310.15	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (min)	LOS
B-C	43.67	10.92	43.74	0.00	605.21	0.072	0.10	0.08	0.107	A
B-A	18.07	4.52	18.15	0.00	328.22	0.055	0.08	0.06	0.194	B
C-AB	53.45	13.36	53.56	0.00	559.25	0.096	0.13	0.11	0.119	A
C-A	461.50	115.37	461.50	0.00	-	-	-	-	-	-
A-B	32.37	8.09	32.37	0.00	-	-	-	-	-	-
A-C	259.73	64.93	259.73	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.02	0.00	0.107	A	A
B-A	0.01	0.00	0.193	B	B
C-AB	0.03	0.00	0.118	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.02	0.00	0.112	A	A
B-A	0.02	0.00	0.214	B	B
C-AB	0.03	0.00	0.125	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.03	0.00	0.120	A	A
B-A	0.03	0.00	0.252	C	B
C-AB	0.04	0.00	0.134	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.03	0.00	0.120	A	A
B-A	0.03	0.00	0.253	C	B
C-AB	0.04	0.00	0.134	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.03	0.00	0.112	A	A
B-A	0.02	0.00	0.215	B	B
C-AB	0.03	0.00	0.125	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (Veh-hr)	Queueing Rate Of Delay (Veh-hr/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.02	0.00	0.107	A	A
B-A	0.02	0.00	0.194	B	B
C-AB	0.03	0.00	0.119	A	A
C-A	-	-	-	-	-

A-B	-	-	-	-	-
A-C	-	-	-	-	-