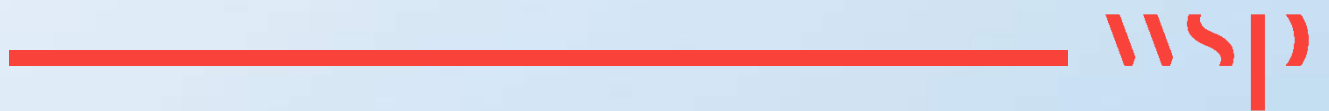


Appendix I

PROPOSED ACCESS ARRANGEMENT



\\uk.wspgroup.com\central_data\Projects\700198xx\70019827 - Chestnut Sports Village\E Models and Drawings\Development\AUTOCAD\GA General Arrangement\19827-GA-01.dwg 09 August 2016 11:35:16 Papworth, Petrea



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A	25.07.2016	JEY	FIRST ISSUE	MSB	ID
REV	DATE	BY	DESCRIPTION	CHK	APD
DRAWING STATUS:					
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Unit 9, The Chase, John Tate Road
Foxholes Business Park, Hertford SG13 7NN
Tel: +44 (0)1992 526000 Fax: +44 (0)1992 526001
www.wspgroup.com www.pbworld.com

CLIENT:	L W DEVELOPMENTS LTD
ARCHITECT:	---

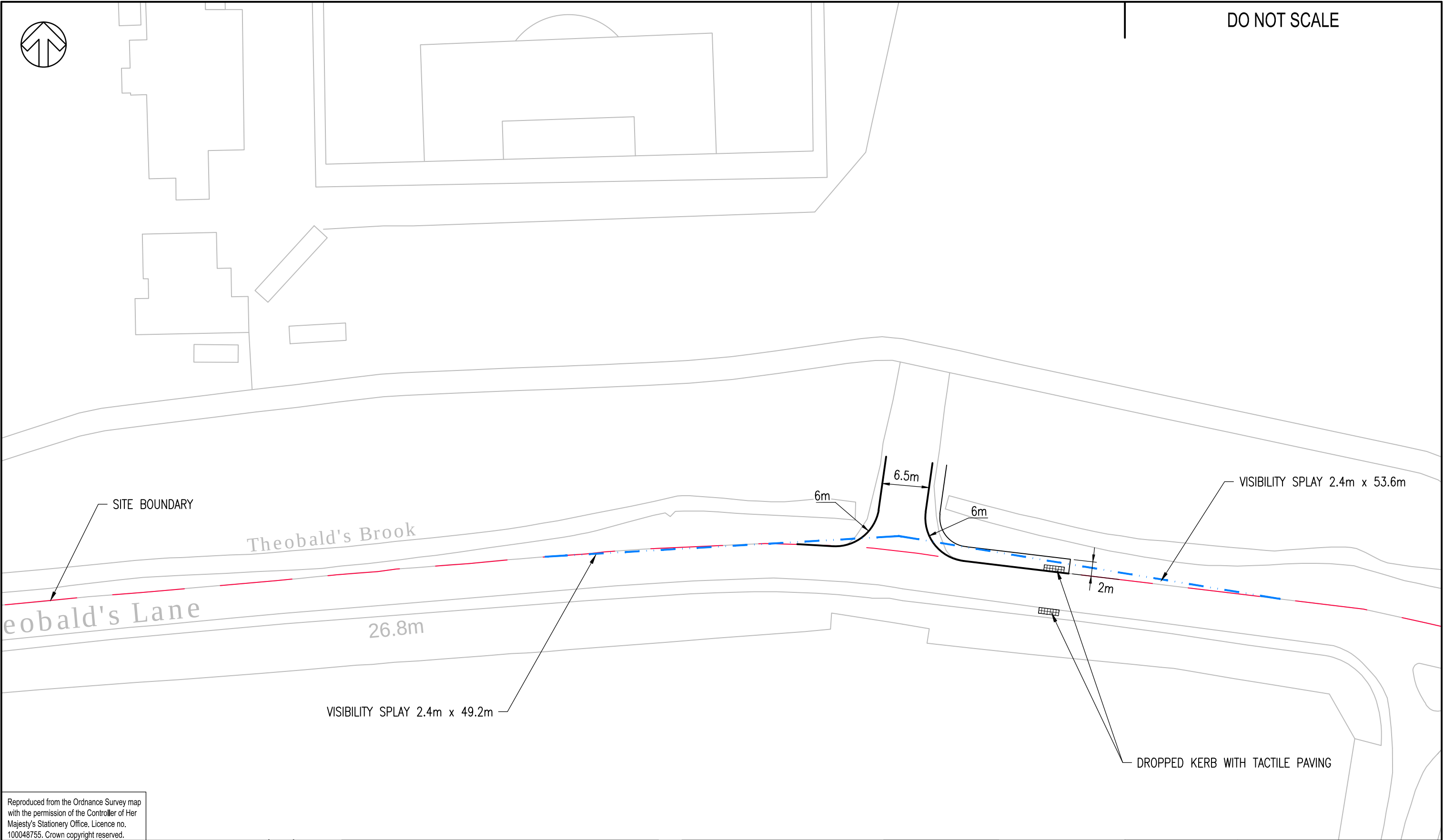
PROJECT:	CHESTNUT SPORTS VILLAGE
TITLE:	ACCESS ARRANGEMENT WITH VISIBILITY SPLAY

SCALE @ A3:	1 : 1000	CHECKED:	MSB	APPROVED:	ID
CAD FILE:	19827-GA-01.DWG	DESIGN-DRAWN:	JEY	DATE:	August 16
PROJECT No:	70019827	DRAWING No:	19827-GA-01	REV:	A
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\\\\uk.wspgroup.com\\central_data\\Projects\\700198xx\\70019827 - Cheshunt Sports Village\\E Models and Drawings\\Development\\AUTOCAD\\GA General Arrangement\\19827-GA-02.dwg 05 August 2016 14:05:27 Yates, Jo



DO NOT SCALE



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A	05.08.2016	JEY	FIRST ISSUE	SB	MSB
REV	DATE	BY	DESCRIPTION	CHK	APD
DRAWING STATUS:			FOR INFORMATION ONLY		

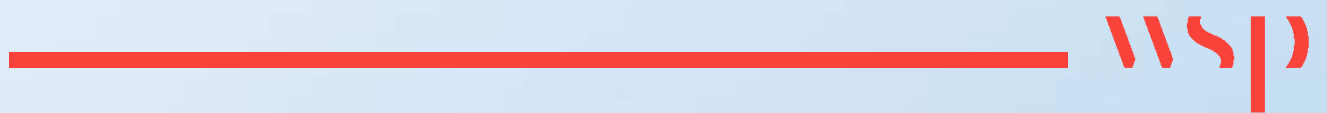


Unit 9, The Chase, John Tate Road
Foxholes Business Park, Hertford SG13 7NN
Tel: +44 (0)1992 526000 Fax: +44 (0)1992 526001
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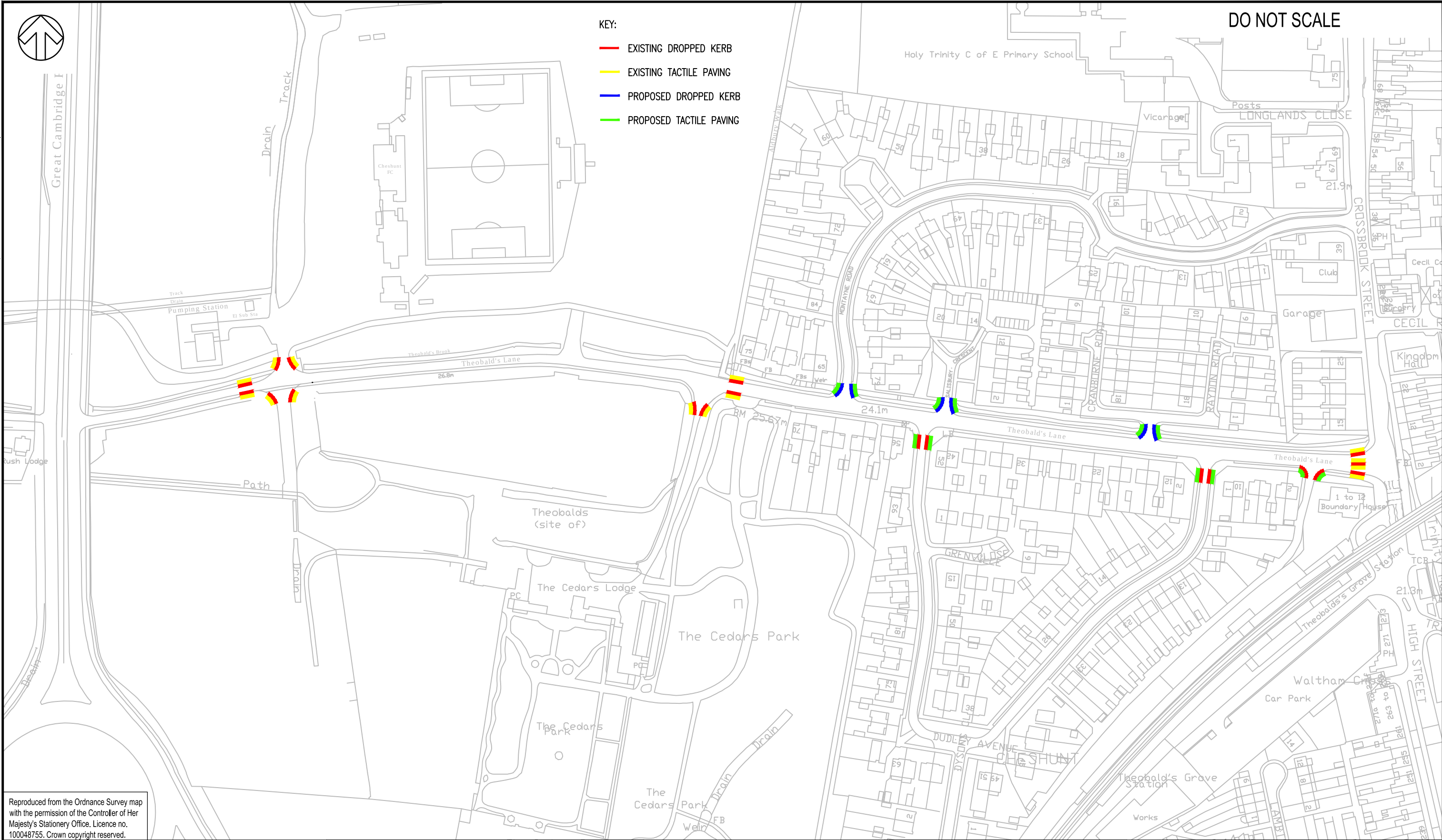
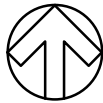
CLIENT:	L W DEVELOPMENTS LTD	PROJECT:	CHESHUNT SPORTS VILLAGE		SCALE @ A3:	1:500	CHECKED:	SB	APPROVED:	MSB
ARCHITECT:	---	TITLE:	ACCESS ARRANGEMENT WITH VISIBILITY SPLAY		CAD FILE:	19827-GA-02.DWG	DESIGN-DRAWN:	JEY	DATE:	August 16
					PROJECT No:	70019827	DRAWING No:	19827-GA-02	REV:	A
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Appendix J

OFF-SITE HIGHWAY WORKS



File name \\UK.WSPGROUP.COM\CENTRAL DATA\PROJECTS\700198XX\70019827 - CHESHUNT SPORTS VILLAGE\MODELS AND DRAWINGS\DEVELOPMENT\AUTOCAD\SKETCHES\19827-SK-01.B.DWG, printed on 27 June 2017 16:42:30, by Yates, Jo



DO NOT SCALE

- KEY:
- EXISTING DROPPED KERB
 - EXISTING TACTILE PAVING
 - PROPOSED DROPPED KERB
 - PROPOSED TACTILE PAVING

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B	05/06/2014	JEY	ADDITIONAL PROPOSED DROPPED KERBS ADDED	MSB	MSB
A	14/03/2017	PP	FIRST ISSUE	MSB	MSB
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS:
S0 - WORK IN PROGRESS



Unit 9 The Chase
John Tate Road
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CLIENT:

L W DEVELOPMENTS LTD

ARCHITECT:

BRYANT AND MOORE ARCHITECTS

PROJECT:

CHESHUNT SPORTS VILLAGE

TITLE:

DROPPED KERBS
AND TACTILE PAVING

SCALE @ A3:

1 : 2000

PROJECT No:

70019827

CHECKED:

MSB

DESIGNED:

MSB

DRAWN:

PP

APPROVED:

MSB

DATE:

March 17

DRAWING No:

19827-SK-01

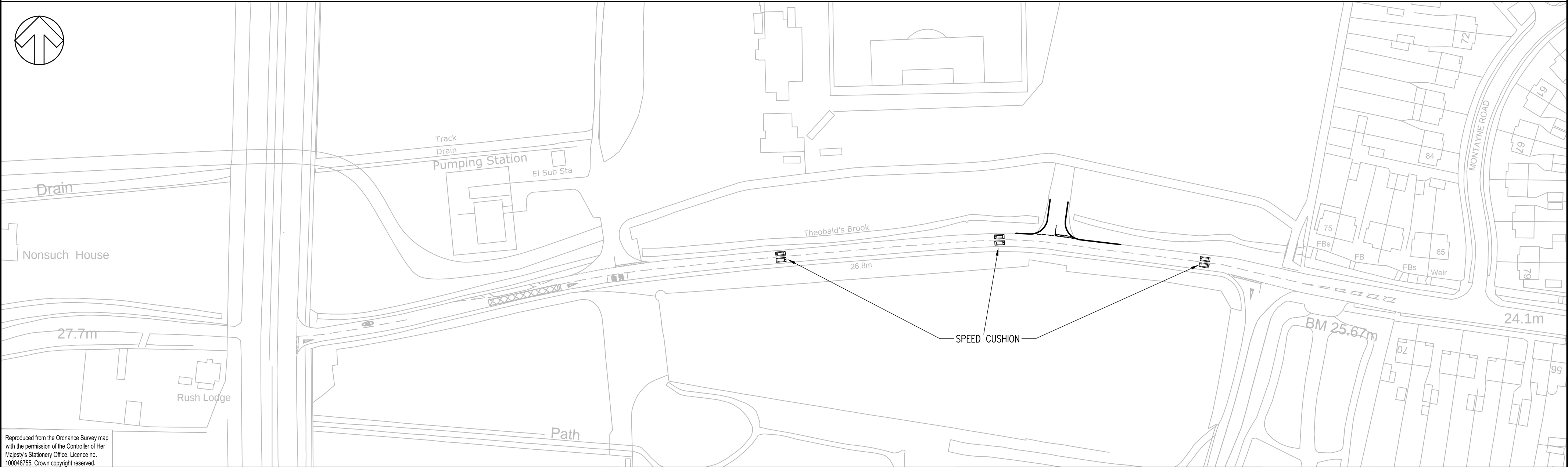
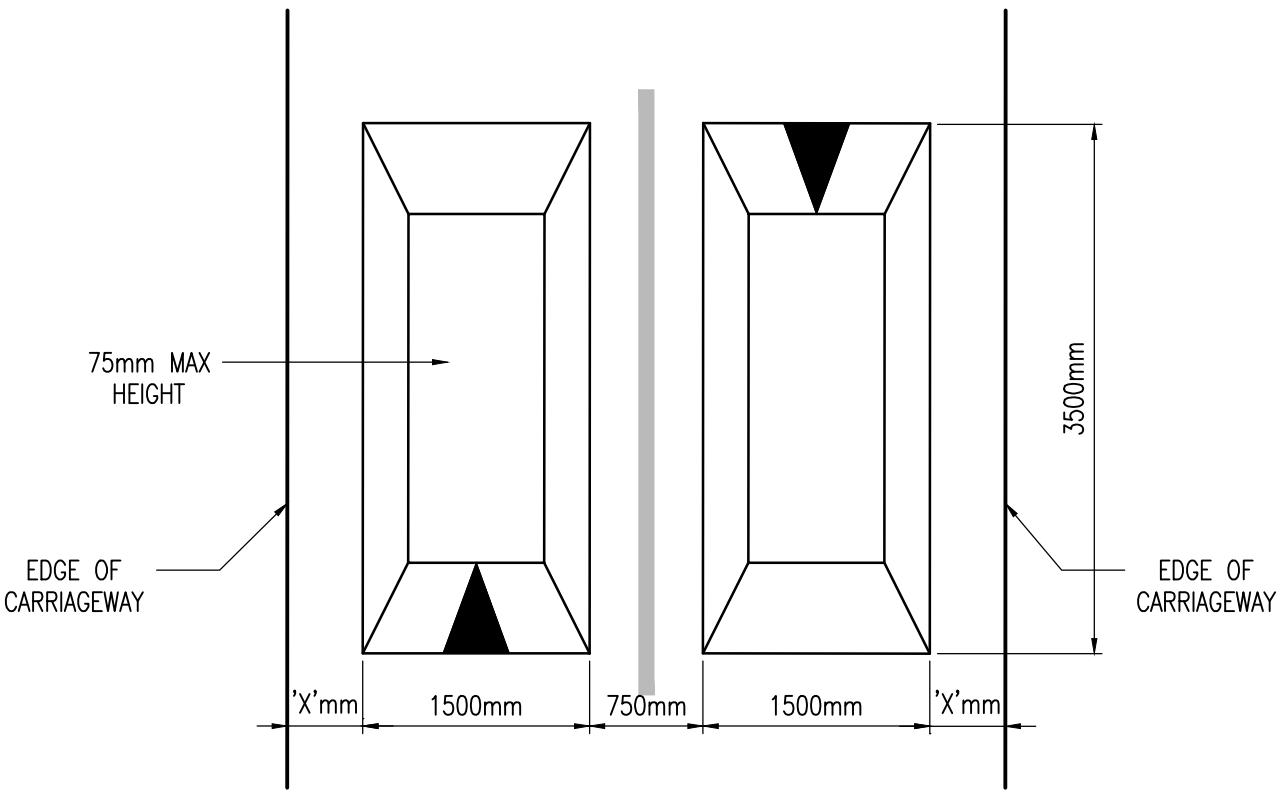
REV:

B

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ILLUSTRATIVE SPEED CUSHION DESIGN
SCALE 1:50



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REV	DATE	BY	DESCRIPTION	CHK	APP
B	14/06/2017	JEY	TRAFFIC CALMING MEASURES AMENDED TO SUIT ROAD WIDTH	MSB	MSB
A	05/06/2017	JEY	FIRST ISSUE	MSB	MSB
S0 - WORK IN PROGRESS					



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John Tate Road
Foxholes Business Park
Hertford
SG13 7NN, UK

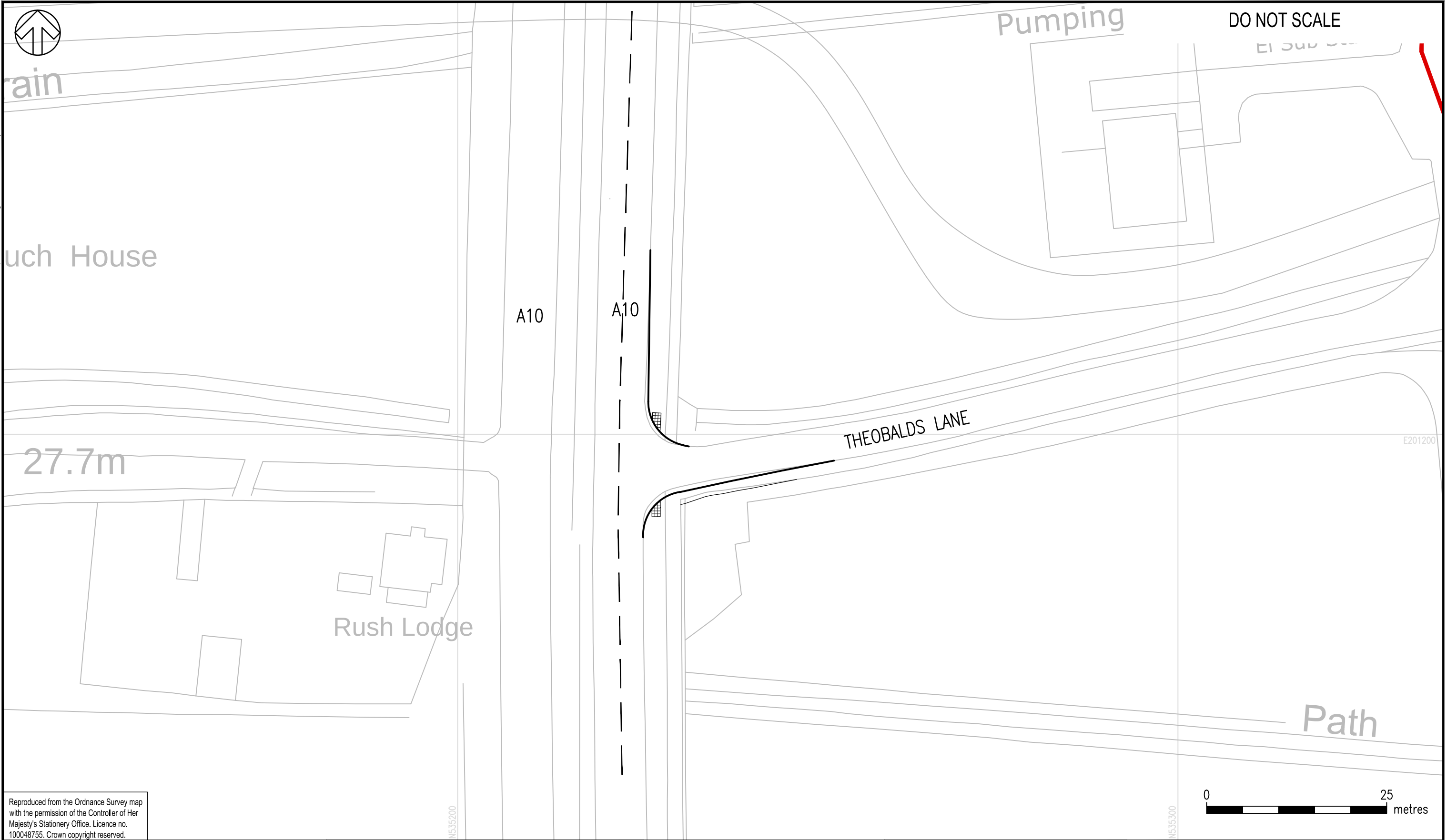
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CLIENT:	L W DEVELOPMENTS LTD
ARCHITECT:	BRYANT AND MOORE ARCHITECTS

PROJECT:	CHESHUNT SPORTS VILLAGE
TITLE:	TRAFFIC CALMING MEASURES

SCALE @ A2:	1 : 1000	CHECKED:	MSB	APPROVED:	MSB
PROJECT No:	70019827	DESIGNED:	MSB	DRAWN:	JEY
DATE:	June 17	DRAWING No:	19827-SK-02	REV:	B
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File name \\UK.WSPGROUP.COM\CENTRAL DATA\PROJECTS\700198XX\70019827 - CHESHUNT SPORTS VILLAGE\E1 SUB STATION\AUTOCAD\SKETCHES\19827-SK-03.DWG, printed on 15 August 2017 12:03:18, by Yates, Jo



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A	15/08/2017	JEY	FIRST ISSUE	MSB	WSP
REV	DATE	BY	DESCRIPTION	CHK	APP
DRAWING STATUS:					
S0 - WORK IN PROGRESS					



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CLIENT:	L W DEVELOPMENTS LTD
ARCHITECT:	BRYANT AND MOORE ARCHITECTS

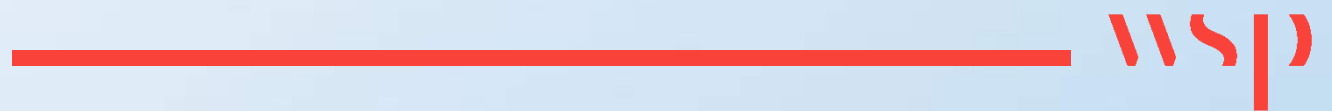
PROJECT:	CHESHUNT SPORTS VILLAGE
TITLE:	A10 / THEOBALDS LANE PROPOSED JUNCTION IMPROVEMENT

SCALE @ A3:	CHECKED:		APPROVED:
1 : 500	MSB		MSB
PROJECT No:	DESIGNED:	DRAWN:	DATE:
70019827	--	JEY	August 17
DRAWING No:			REV:
19827-SK-03			A
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								Unit 9 The Chase John Tate Road Foxholes Business Park Hertford SG13 7NN, UK T+ 44 (0) 1992 526 000 F+ 44 (0) 1992 526 001 wsp.com		CLIENT: L W DEVELOPMENTS LTD		PROJECT: CHESHUNT SPORTS VILLAGE		SCALE @ A3: 1 : 500		CHECKED: MSB		APPROVED: MSB			
A		07/06/2017		JEY		FIRST ISSUE		MSB		MSB		PROJECT No: 70019827		DESIGNED: —		DRAWN: JEY		DATE: June 17			
REV		DATE		BY		DESCRIPTION		CHK		APP		ARCHITECT: BRYANT AND MOORE ARCHITECTS		TITLE: VEHICLE TRACKING A10 TO THEOBALDS LANE		DRAWING No: 19827-ATR-06				REV: A	
DRAWING STATUS: S0 - WORK IN PROGRESS										© WSP UK Ltd											

Appendix K

JUNCTION ASSESSMENT



Junctions 8				
ARCADY 8 - Roundabout Module				
Version: 8.0.6.541 [19821,26/11/2015] © Copyright TRL Limited, 2016				
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk				
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Filename: Theobalds Ln_Crossbrook St.arc8

Path: \\uk.wspgroup.com\central data\Projects\700198xx\70019827 - Cheshunt Sports Village\

Design and Analysis\Development\ARCADY

Report generation date: 04/08/2016 11:31:05

- » (Default Analysis Set) - 2029 BASE, AM
- » (Default Analysis Set) - 2029 BASE + DEV, AM
- » (Default Analysis Set) - 2029 BASE, PM
- » (Default Analysis Set) - 2029 BASE + DEV, PM

Summary of junction performance

	AM			
	Queue (Veh)	Delay (s)	RFC	LOS
A1 - 2029 BASE				
Arm A	26.60	103.18	0.99	F
Arm B	0.49	6.84	0.33	A
Arm C	197.10	583.66	1.18	F

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

"D1 - 2029 BASE, AM" model duration: 08:00 - 09:00

"D2 - 2029 BASE + DEV, AM" model duration: 08:00 - 09:00

"D3 - 2029 BASE, PM" model duration: 17:00 - 18:00

"D4 - 2029 BASE + DEV, PM" model duration: 17:00 - 18:00

Run using Junctions 8.0.6.541 at 04/08/2016 11:31:03

File summary

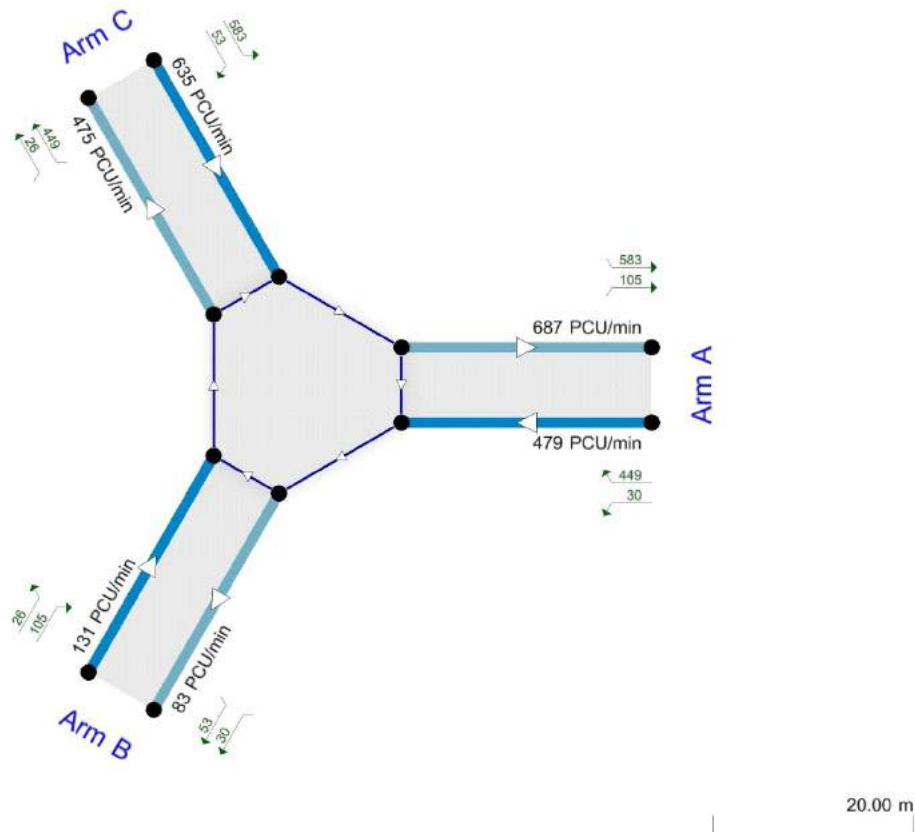
Title	THEOBALDS LN CROSSBROOK ST
Location	Cheshunt
Site Number	
Date	10/03/2016
Version	
Status	
Identifier	
Client	
Jobnumber	70019827
Enumerator	UKCJG003 [W13UK0101]
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	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	perMin	s	-Min	perMin



Showing original traffic demand (PCU/min)
Time Segment: (08:00-08:15)
Showing Analysis Set "A1". Demand Set "D1 - 2029 BASE AM"

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - 2029 BASE, 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)	ARCADY		✓				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	Relati
2029 BASE, AM	2029 BASE	AM		DIRECT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C				338.24	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	B176 S	
B	B	Theobalds Lane	
C	C	B176 N	

Capacity Options

Arm	Minimum Capacity (PCU/min)	Maximum Capacity (PCU/min)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	1666.65		0.00
B	0.00	1666.65		0.00
C	0.00	1666.65		0.00

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
A	3.20	4.50	1.10	8.80	18.20	23.00	
B	4.10	5.10	1.20	11.00	18.20	24.50	
C	3.00	4.50	3.30	78.00	18.20	12.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/min)	Percentage Intercept Adjustment (%)
A	Direct	(ARCADY 6 CT10 Import)	0.00	
B	Direct	(ARCADY 6 CT10 Import)	0.00	
C	Direct	(ARCADY 6 CT10 Import)	0.00	

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/min)	Final Slope	Final Intercept (PCU/min)
A		(calculated)	(calculated)	0.511	16.868
B		(calculated)	(calculated)	0.575	21.620
C		(calculated)	(calculated)	0.593	20.038

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/min)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	30.000	449.000
	B	104.500	0.000	26.000
	C	582.500	52.500	0.000

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

	To			
		A	B	C
From	A	0.00	0.06	0.94
	B	0.80	0.00	0.20
	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	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	0.99	103.18	26.60	F	15.97	958.20	1089.88	68.25	18.16	1111.85	69.62
B	0.33	6.84	0.49	A	4.35	261.00	28.75	6.61	0.48	28.76	6.61
C	1.18	583.66	197.10	F	21.17	1270.20	6047.58	285.67	100.79	7128.33	336.72

Main Results for each time segment

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	15.97	239.55	15.04	19.65	1.46	0.00	16.12	16.28	0.991	0.00	13.92	40.663	E
B	4.35	65.25	4.32	2.40	14.10	0.00	13.51	12.84	0.322	0.00	0.47	6.506	A
C	21.17	317.55	17.65	14.96	3.46	0.00	17.99	13.94	1.177	0.00	52.76	98.256	F

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	15.97	239.55	15.61	19.95	1.48	0.00	16.11	16.28	0.991	13.92	19.40	74.265	F
B	4.35	65.25	4.35	2.46	14.63	0.00	13.21	12.84	0.329	0.47	0.49	6.774	A
C	21.17	317.55	17.95	15.49	3.48	0.00	17.97	13.94	1.178	52.76	101.00	265.198	F

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	15.97	239.55	15.70	19.96	1.49	0.00	16.11	16.28	0.991	19.40	23.38	90.591	F
B	4.35	65.25	4.35	2.47	14.72	0.00	13.15	12.84	0.331	0.49	0.49	6.815	A
C	21.17	317.55	17.97	15.59	3.48	0.00	17.97	13.94	1.178	101.00	149.07	424.139	F

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	15.97	239.55	15.76	19.97	1.49	0.00	16.11	16.28	0.991	23.38	26.60	103.178	F
B	4.35	65.25	4.35	2.47	14.77	0.00	13.13	12.84	0.331	0.49	0.49	6.836	A
C	21.17	317.55	17.97	15.64	3.48	0.00	17.97	13.94	1.178	149.07	197.10	583.661	F

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	139.58	9.31	40.663	E	D
B	6.79	0.45	6.506	A	A
C	421.94	28.13	98.256	F	F

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	252.66	16.84	74.265	F	E
B	7.24	0.48	6.774	A	A
C	1153.65	76.91	265.198	F	F

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	322.05	21.47	90.591	F	F
B	7.34	0.49	6.815	A	A
C	1875.67	125.04	424.139	F	F

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	375.59	25.04	103.178	F	F
B	7.38	0.49	6.836	A	A
C	2596.32	173.09	583.661	F	F

(Default Analysis Set) - 2029 BASE + 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)	ARCADY		✓				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	Relatio
2029 BASE + DEV, AM	2029 BASE + DEV	AM		DIRECT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C				376.21	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	B176 S	
B	B	Theobalds Lane	
C	C	B176 N	

Capacity Options

Arm	Minimum Capacity (PCU/min)	Maximum Capacity (PCU/min)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	1666.65		0.00
B	0.00	1666.65		0.00
C	0.00	1666.65		0.00

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
A	3.20	4.50	1.10	8.80	18.20	23.00	
B	4.10	5.10	1.20	11.00	18.20	24.50	
C	3.00	4.50	3.30	78.00	18.20	12.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/min)	Percentage Intercept Adjustment (%)
A	Direct	(ARCADY 6 CT10 Import)	0.00	
B	Direct	(ARCADY 6 CT10 Import)	0.00	
C	Direct	(ARCADY 6 CT10 Import)	0.00	

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/min)	Final Slope	Final Intercept (PCU/min)
A		(calculated)	(calculated)	0.511	16.868
B		(calculated)	(calculated)	0.575	21.620
C		(calculated)	(calculated)	0.593	20.038

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/min)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	90.000	898.000
	B	216.000	0.000	67.000
	C	1165.000	114.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.09	0.91
	B	0.76	0.00	0.24
	C	0.91	0.09	0.00

Vehicle Mix

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

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	1.03	164.21	45.18	F	16.46	987.60	1637.05	99.46	27.28	1700.62	103.32
B	0.36	7.00	0.55	A	4.72	283.20	31.93	6.76	0.53	31.94	6.77
C	1.19	621.73	209.39	F	21.31	1278.60	6408.88	300.75	106.81	7633.43	358.21

Main Results for each time segment

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	16.46	246.90	15.24	19.61	1.57	0.00	16.07	16.23	1.025	0.00	18.36	49.039	E
B	4.72	70.80	4.69	2.96	13.85	0.00	13.65	13.14	0.346	0.00	0.52	6.664	A
C	21.31	319.65	17.60	14.96	3.58	0.00	17.92	14.09	1.189	0.00	55.64	103.180	F

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	16.46	246.90	15.79	19.89	1.59	0.00	16.05	16.23	1.025	18.36	28.43	100.495	F
B	4.72	70.80	4.72	3.03	14.35	0.00	13.37	13.14	0.353	0.52	0.54	6.939	A
C	21.31	319.65	17.89	15.47	3.60	0.00	17.90	14.09	1.190	55.64	107.00	280.857	F

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	16.46	246.90	15.88	19.90	1.60	0.00	16.05	16.23	1.025	28.43	37.14	133.970	F
B	4.72	70.80	4.72	3.04	14.43	0.00	13.32	13.14	0.354	0.54	0.55	6.977	A
C	21.31	319.65	17.90	15.55	3.60	0.00	17.90	14.09	1.190	107.00	158.21	450.990	F

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	16.46	246.90	15.92	19.91	1.60	0.00	16.05	16.23	1.025	37.14	45.18	164.210	F
B	4.72	70.80	4.72	3.05	14.47	0.00	13.29	13.14	0.355	0.55	0.55	6.996	A
C	21.31	319.65	17.90	15.59	3.60	0.00	17.90	14.09	1.190	158.21	209.39	621.731	F

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	172.74	11.52	49.039	E	D
B	7.53	0.50	6.664	A	A
C	442.60	29.51	103.180	F	F

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	353.49	23.57	100.495	F	F
B	8.04	0.54	6.939	A	A
C	1220.11	81.34	280.857	F	F

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	492.84	32.86	133.970	F	F
B	8.16	0.54	6.977	A	A
C	1989.15	132.61	450.990	F	F

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	617.98	41.20	164.210	F	F
B	8.20	0.55	6.996	A	A
C	2757.02	183.80	621.731	F	F

(Default Analysis Set) - 2029 BASE, 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)	ARCADY		✓				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	Relati
2029 BASE, PM	2029 BASE	PM		DIRECT	17:00	18:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C				62.20	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	B176 S	
B	B	Theobalds Lane	
C	C	B176 N	

Capacity Options

Arm	Minimum Capacity (PCU/min)	Maximum Capacity (PCU/min)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	1666.65		0.00
B	0.00	1666.65		0.00
C	0.00	1666.65		0.00

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
A	3.20	4.50	1.10	8.80	18.20	23.00	
B	4.10	5.10	1.20	11.00	18.20	24.50	
C	3.00	4.50	3.30	78.00	18.20	12.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/min)	Percentage Intercept Adjustment (%)
A	Direct	(ARCADY 6 CT10 Import)	0.00	
B	Direct	(ARCADY 6 CT10 Import)	0.00	
C	Direct	(ARCADY 6 CT10 Import)	0.00	

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/min)	Final Slope	Final Intercept (PCU/min)
A		(calculated)	(calculated)	0.511	16.868
B		(calculated)	(calculated)	0.575	21.620
C		(calculated)	(calculated)	0.593	20.038

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/min)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	30.000	449.000
	B	104.500	0.000	26.000
	C	582.500	52.500	0.000

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

	To			
		A	B	C
From	A	0.00	0.06	0.94
	B	0.80	0.00	0.20
	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	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	0.99	106.31	27.71	F	16.10	966.00	1123.65	69.79	18.73	1147.35	71.26
B	0.43	8.02	0.74	A	5.58	334.80	42.91	7.69	0.72	42.93	7.69
C	0.91	36.43	9.15	E	15.83	949.80	471.79	29.80	7.86	474.20	29.96

Main Results for each time segment

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	16.10	241.50	15.15	18.50	1.27	0.00	16.22	16.28	0.993	0.00	14.20	40.988	E
B	5.58	83.70	5.53	2.22	14.20	0.00	13.45	12.84	0.415	0.00	0.70	7.536	A
C	15.83	237.45	15.34	15.31	4.43	0.00	17.41	13.94	0.909	0.00	7.40	24.896	C

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	16.10	241.50	15.72	18.93	1.30	0.00	16.20	16.28	0.994	14.20	19.96	75.540	F
B	5.58	83.70	5.58	2.29	14.73	0.00	13.15	12.84	0.424	0.70	0.73	7.925	A
C	15.83	237.45	15.76	15.84	4.47	0.00	17.39	13.94	0.910	7.40	8.42	34.128	D

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	16.10	241.50	15.82	18.96	1.31	0.00	16.20	16.28	0.994	19.96	24.22	92.802	F
B	5.58	83.70	5.58	2.30	14.83	0.00	13.09	12.84	0.426	0.73	0.74	7.985	A
C	15.83	237.45	15.80	15.94	4.47	0.00	17.39	13.94	0.910	8.42	8.89	35.695	E

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	16.10	241.50	15.87	18.97	1.31	0.00	16.20	16.28	0.994	24.22	27.71	106.312	F
B	5.58	83.70	5.58	2.30	14.87	0.00	13.06	12.84	0.427	0.74	0.74	8.016	A
C	15.83	237.45	15.81	15.99	4.47	0.00	17.39	13.94	0.910	8.89	9.15	36.425	E

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	141.85	9.46	40.988	E	D
B	10.01	0.67	7.536	A	A
C	86.19	5.75	24.896	C	C

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	259.03	17.27	75.540	F	E
B	10.81	0.72	7.925	A	A
C	119.91	7.99	34.128	D	C

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	332.59	22.17	92.802	F	F
B	11.00	0.73	7.985	A	A
C	130.21	8.68	35.695	E	D

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	390.18	26.01	106.312	F	F
B	11.08	0.74	8.016	A	A
C	135.48	9.03	36.425	E	D

(Default Analysis Set) - 2029 BASE + 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)	ARCADY		✓				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	Relatio
2029 BASE + DEV, PM	2029 BASE + DEV	PM		DIRECT	17:00	18:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C				94.50	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	B176 S	
B	B	Theobalds Lane	
C	C	B176 N	

Capacity Options

Arm	Minimum Capacity (PCU/min)	Maximum Capacity (PCU/min)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	1666.65		0.00
B	0.00	1666.65		0.00
C	0.00	1666.65		0.00

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
A	3.20	4.50	1.10	8.80	18.20	23.00	
B	4.10	5.10	1.20	11.00	18.20	24.50	
C	3.00	4.50	3.30	78.00	18.20	12.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/min)	Percentage Intercept Adjustment (%)
A	Direct	(ARCADY 6 CT10 Import)	0.00	
B	Direct	(ARCADY 6 CT10 Import)	0.00	
C	Direct	(ARCADY 6 CT10 Import)	0.00	

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/min)	Final Slope	Final Intercept (PCU/min)
A		(calculated)	(calculated)	0.511	16.868
B		(calculated)	(calculated)	0.575	21.620
C		(calculated)	(calculated)	0.593	20.038

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/min)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	104.000	910.000
	B	269.000	0.000	92.000
	C	912.000	54.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.10	0.90
	B	0.75	0.00	0.25
	C	0.94	0.06	0.00

Vehicle Mix

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

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	1.03	174.14	49.44	F	16.91	1014.60	1762.45	104.23	29.37	1836.94	108.63
B	0.46	8.35	0.83	A	6.02	361.20	48.20	8.01	0.80	48.23	8.01
C	0.93	43.09	10.97	E	16.11	966.60	548.77	34.06	9.15	552.23	34.28

Main Results for each time segment

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	16.91	253.65	15.62	19.13	0.87	0.00	16.42	16.46	1.030	0.00	19.38	49.919	E
B	6.02	90.30	5.97	2.47	14.02	0.00	13.56	13.12	0.444	0.00	0.79	7.852	A
C	16.11	241.65	15.55	15.54	4.45	0.00	17.40	14.24	0.926	0.00	8.40	27.172	D

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	16.91	253.65	16.17	19.60	0.90	0.00	16.41	16.46	1.030	19.38	30.48	104.046	F
B	6.02	90.30	6.02	2.55	14.51	0.00	13.27	13.12	0.454	0.79	0.82	8.269	A
C	16.11	241.65	16.01	16.05	4.48	0.00	17.38	14.24	0.927	8.40	9.84	39.222	E

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	16.91	253.65	16.26	19.65	0.90	0.00	16.41	16.46	1.031	30.48	40.28	140.568	F
B	6.02	90.30	6.02	2.57	14.59	0.00	13.23	13.12	0.455	0.82	0.83	8.322	A
C	16.11	241.65	16.06	16.12	4.49	0.00	17.38	14.24	0.927	9.84	10.55	41.790	E

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	16.91	253.65	16.30	19.67	0.90	0.00	16.41	16.46	1.031	40.28	49.44	174.142	F
B	6.02	90.30	6.02	2.57	14.63	0.00	13.21	13.12	0.456	0.83	0.83	8.348	A
C	16.11	241.65	16.08	16.16	4.49	0.00	17.38	14.24	0.927	10.55	10.97	43.091	E

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	180.71	12.05	49.919	E	D
B	11.23	0.75	7.852	A	A
C	95.35	6.36	27.172	D	C

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	376.52	25.10	104.046	F	F
B	12.15	0.81	8.269	A	A
C	138.43	9.23	39.222	E	D

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	531.74	35.45	140.568	F	F
B	12.37	0.82	8.322	A	A
C	153.43	10.23	41.790	E	D

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	673.48	44.90	174.142	F	F
B	12.45	0.83	8.348	A	A
C	161.56	10.77	43.091	E	D

Junctions 8				
PICADY 8 - Priority Intersection Module				
Version: 8.0.6.541 [19821,26/11/2015] © Copyright TRL Limited, 2016				
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Filename: Theobalds Lane_A10.arc8

Path: \\uk.wspgroup.com\central data\Projects\700198xx\70019827 - Cheshunt Sports Village\Design and Analysis\Development\PICADY

Report generation date: 04/08/2016 12:00:21

- » (Default Analysis Set) - 2029 BASE, AM
- » (Default Analysis Set) - 2029 BASE, PM
- » (Default Analysis Set) - 2029 BASE + DEV, AM
- » (Default Analysis Set) - 2029 BASE + DEV, PM

Summary of junction performance

	AM			
	Queue (Veh)	Delay (s)	RFC	LOS
A1 - 2029 BASE				
Stream B-AC	0.47	16.17	0.32	C
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	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 - 2029 BASE, AM" model duration: 08:00 - 09:00

"D2 - 2029 BASE, PM" model duration: 17:00 - 18:00

"D3 - 2029 BASE + DEV, AM" model duration: 08:00 - 09:00

"D4 - 2029 BASE + DEV, PM" model duration: 17:00 - 18:00

Run using Junctions 8.0.6.541 at 04/08/2016 12:00:20

File summary

Title	Theobalds Lane and A10
Location	Cheshunt
Site Number	
Date	10/03/2016
Version	
Status	
Identifier	
Client	
Jobnumber	70019827
Enumerator	UKCJG003 [W13UK0101]
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	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	perMin	s	-Min	perMin

(Default Analysis Set) - 2029 BASE, 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	Relati
2029 BASE, AM	2029 BASE	AM	2029 BASE AM	DIRECT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	A,B,C		16.17	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A10 (N)		Major
B	B	Theobalds Lane		Minor
C	C	A10 (S)		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	14.30	✓	6.10		2.20	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	2.45										0	26

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream	Use Adjustment	Reason	Direct Intercept Adjustment (PCU/min)
B-AC	✓	(PICADY 5 CT16 Import)	2.00
C-B	✓	(PICADY 5 CT16 Import)	0.00

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/min)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	8.775	0.054	0.136	0.086	0.195
1	B-C	10.084	0.059	0.150	-	-
1	C-B	9.566	0.142	0.142	-	-

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/min)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000

Turning Proportions

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

	To			
		A	B	C
	A	0.000	194.000	2137.000
	B	0.000	0.000	105.000
From	C	2080.000	0.000	0.000

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

	To			
		A	B	C
	A	0.00	0.08	0.92
	B	0.00	0.00	1.00
From	C	1.00	0.00	0.00

Vehicle Mix

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

	To			
		A	B	C
	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
From	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	10.0	10.0	10.0
	B	10.0	10.0	10.0
From	C	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-AC	0.32	16.17	0.47	C	1.75	105.00	27.39	15.65	0.46	27.41	15.66
C-A	-	-	-	-	34.67	2080.20	-	-	-	-	-
C-B	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A-B	-	-	-	-	3.23	194.00	-	-	-	-	-
A-C	-	-	-	-	35.62	2137.00	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-AC	1.75	26.25	1.72	0.00	5.46	0.321	0.00	0.46	15.918	C
C-A	34.67	520.05	34.67	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	3.18	0.000	0.00	0.00	0.000	A
A-B	3.23	48.50	3.23	0.00	-	-	-	-	-	-
A-C	35.62	534.25	35.62	0.00	-	-	-	-	-	-

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

Stream	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-AC	1.75	26.25	1.75	0.00	5.46	0.321	0.46	0.47	16.168	C
C-A	34.67	520.05	34.67	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	3.18	0.000	0.00	0.00	0.000	A
A-B	3.23	48.50	3.23	0.00	-	-	-	-	-	-
A-C	35.62	534.25	35.62	0.00	-	-	-	-	-	-

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

Stream	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-AC	1.75	26.25	1.75	0.00	5.46	0.321	0.47	0.47	16.171	C
C-A	34.67	520.05	34.67	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	3.18	0.000	0.00	0.00	0.000	A
A-B	3.23	48.50	3.23	0.00	-	-	-	-	-	-
A-C	35.62	534.25	35.62	0.00	-	-	-	-	-	-

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

Stream	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-AC	1.75	26.25	1.75	0.00	5.46	0.321	0.47	0.47	16.173	C
C-A	34.67	520.05	34.67	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	3.18	0.000	0.00	0.00	0.000	A
A-B	3.23	48.50	3.23	0.00	-	-	-	-	-	-
A-C	35.62	534.25	35.62	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	6.42	0.43	15.918	C	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	6.95	0.46	16.168	C	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	7.00	0.47	16.171	C	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	7.02	0.47	16.173	C	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2029 BASE, 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	Relati
2029 BASE, PM	2029 BASE	PM	2029 BASE PM	DIRECT	17:00	18:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	A,B,C		64.99	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A10 (N)		Major
B	B	Theobalds Lane		Minor
C	C	A10 (S)		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	14.30	✓	6.10		2.20	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	2.45										0	26

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream	Use Adjustment	Reason	Direct Intercept Adjustment (PCU/min)
B-AC	✓	(PICADY 5 CT16 Import)	2.00
C-B	✓	(PICADY 5 CT16 Import)	0.00

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/min)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	8.775	0.054	0.136	0.086	0.195
1	B-C	10.084	0.059	0.150	-	-
1	C-B	9.566	0.142	0.142	-	-

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/min)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	187.000	1848.000
	B	0.000	0.000	319.000
	C	2226.000	0.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.09	0.91
	B	0.00	0.00	1.00
	C	1.00	0.00	0.00

Vehicle Mix

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

	To			
		A	B	C
From	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	10.0	10.0	10.0
	B	10.0	10.0	10.0
From	C	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-AC	0.86	64.99	5.46	F	5.32	319.20	278.27	52.31	4.64	280.67	52.76
C-A	-	-	-	-	37.10	2226.00	-	-	-	-	-
C-B	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A-B	-	-	-	-	3.12	187.02	-	-	-	-	-
A-C	-	-	-	-	30.80	1848.18	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-AC	5.32	79.80	5.03	0.00	6.19	0.860	0.00	4.35	44.557	E
C-A	37.10	556.50	37.10	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	3.88	0.000	0.00	0.00	0.000	A
A-B	3.12	46.75	3.12	0.00	-	-	-	-	-	-
A-C	30.80	462.05	30.80	0.00	-	-	-	-	-	-

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

Stream	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-AC	5.32	79.80	5.28	0.00	6.19	0.860	4.35	4.99	60.683	F
C-A	37.10	556.50	37.10	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	3.88	0.000	0.00	0.00	0.000	A
A-B	3.12	46.75	3.12	0.00	-	-	-	-	-	-
A-C	30.80	462.05	30.80	0.00	-	-	-	-	-	-

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

Stream	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-AC	5.32	79.80	5.30	0.00	6.19	0.860	4.99	5.28	63.593	F
C-A	37.10	556.50	37.10	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	3.88	0.000	0.00	0.00	0.000	A
A-B	3.12	46.75	3.12	0.00	-	-	-	-	-	-
A-C	30.80	462.05	30.80	0.00	-	-	-	-	-	-

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

Stream	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-AC	5.32	79.80	5.31	0.00	6.19	0.860	5.28	5.46	64.993	F
C-A	37.10	556.50	37.10	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	3.88	0.000	0.00	0.00	0.000	A
A-B	3.12	46.75	3.12	0.00	-	-	-	-	-	-
A-C	30.80	462.05	30.80	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	49.63	3.31	44.557	E	D
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	70.74	4.72	60.683	F	E
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	77.25	5.15	63.593	F	E
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	80.65	5.38	64.993	F	E
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2029 BASE + 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	Relatio
2029 BASE + DEV, AM	2029 BASE + DEV	AM	2029 BASE + DEV AM	DIRECT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	A,B,C		19.46	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A10 (N)		Major
B	B	Theobalds Lane		Minor
C	C	A10 (S)		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	14.30	✓	6.10		2.20	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	2.45										0	26

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream	Use Adjustment	Reason	Direct Intercept Adjustment (PCU/min)
B-AC	✓	(PICADY 5 CT16 Import)	2.00
C-B	✓	(PICADY 5 CT16 Import)	0.00

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/min)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	8.775	0.054	0.136	0.086	0.195
1	B-C	10.084	0.059	0.150	-	-
1	C-B	9.566	0.142	0.142	-	-

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/min)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	212.000	2137.000
	B	0.000	0.000	142.000
	C	2089.000	0.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.09	0.91
	B	0.00	0.00	1.00
	C	1.00	0.00	0.00

Vehicle Mix

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

	To			
		A	B	C
From	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	10.0	10.0	10.0
	B	10.0	10.0	10.0
	C	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-AC	0.43	19.46	0.76	C	2.36	141.60	43.98	18.63	0.73	44.03	18.66
C-A	-	-	-	-	34.82	2089.20	-	-	-	-	-
C-B	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A-B	-	-	-	-	3.53	211.95	-	-	-	-	-
A-C	-	-	-	-	35.61	2136.45	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-AC	2.36	35.40	2.31	0.00	5.44	0.434	0.00	0.74	18.878	C
C-A	34.82	522.30	34.82	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	3.14	0.000	0.00	0.00	0.000	A
A-B	3.53	52.99	3.53	0.00	-	-	-	-	-	-
A-C	35.61	534.11	35.61	0.00	-	-	-	-	-	-

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

Stream	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-AC	2.36	35.40	2.36	0.00	5.44	0.434	0.74	0.75	19.439	C
C-A	34.82	522.30	34.82	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	3.14	0.000	0.00	0.00	0.000	A
A-B	3.53	52.99	3.53	0.00	-	-	-	-	-	-
A-C	35.61	534.11	35.61	0.00	-	-	-	-	-	-

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

Stream	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-AC	2.36	35.40	2.36	0.00	5.44	0.434	0.75	0.76	19.451	C
C-A	34.82	522.30	34.82	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	3.14	0.000	0.00	0.00	0.000	A
A-B	3.53	52.99	3.53	0.00	-	-	-	-	-	-
A-C	35.61	534.11	35.61	0.00	-	-	-	-	-	-

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

Stream	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-AC	2.36	35.40	2.36	0.00	5.44	0.434	0.76	0.76	19.457	C
C-A	34.82	522.30	34.82	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	3.14	0.000	0.00	0.00	0.000	A
A-B	3.53	52.99	3.53	0.00	-	-	-	-	-	-
A-C	35.61	534.11	35.61	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	10.12	0.67	18.878	C	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	11.19	0.75	19.439	C	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	11.31	0.75	19.451	C	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	11.36	0.76	19.457	C	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2029 BASE + 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	Relatio
2029 BASE + DEV, PM	2029 BASE + DEV	PM	2029 BASE + DEV PM	DIRECT	17:00	18:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	A,B,C		226.49	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A10 (N)		Major
B	B	Theobalds Lane		Minor
C	C	A10 (S)		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	14.30	✓	6.10		2.20	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	2.45										0	26

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream	Use Adjustment	Reason	Direct Intercept Adjustment (PCU/min)
B-AC	✓	(PICADY 5 CT16 Import)	2.00
C-B	✓	(PICADY 5 CT16 Import)	0.00

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/min)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	8.775	0.054	0.136	0.086	0.195
1	B-C	10.084	0.059	0.150	-	-
1	C-B	9.566	0.142	0.142	-	-

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/min)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	212.000	1848.000
	B	0.000	0.000	377.000
	C	2247.000	0.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.10	0.90
	B	0.00	0.00	1.00
	C	1.00	0.00	0.00

Vehicle Mix

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

	To			
		A	B	C
From	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	10.0	10.0	10.0
	B	10.0	10.0	10.0
From	C	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-AC	1.02	226.49	23.00	F	6.29	377.40	866.57	137.77	14.44	909.47	144.59
C-A	-	-	-	-	37.44	2246.40	-	-	-	-	-
C-B	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A-B	-	-	-	-	3.53	211.98	-	-	-	-	-
A-C	-	-	-	-	30.80	1847.82	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-AC	6.29	94.35	5.61	0.00	6.16	1.021	0.00	10.17	76.344	F
C-A	37.44	561.60	37.44	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	3.82	0.000	0.00	0.00	0.000	A
A-B	3.53	52.99	3.53	0.00	-	-	-	-	-	-
A-C	30.80	461.96	30.80	0.00	-	-	-	-	-	-

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

Stream	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-AC	6.29	94.35	5.95	0.00	6.16	1.021	10.17	15.20	147.654	F
C-A	37.44	561.60	37.44	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	3.82	0.000	0.00	0.00	0.000	A
A-B	3.53	52.99	3.53	0.00	-	-	-	-	-	-
A-C	30.80	461.96	30.80	0.00	-	-	-	-	-	-

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

Stream	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-AC	6.29	94.35	6.01	0.00	6.16	1.021	15.20	19.33	190.025	F
C-A	37.44	561.60	37.44	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	3.82	0.000	0.00	0.00	0.000	A
A-B	3.53	52.99	3.53	0.00	-	-	-	-	-	-
A-C	30.80	461.96	30.80	0.00	-	-	-	-	-	-

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

Stream	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-AC	6.29	94.35	6.05	0.00	6.16	1.021	19.33	23.00	226.491	F
C-A	37.44	561.60	37.44	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	3.82	0.000	0.00	0.00	0.000	A
A-B	3.53	52.99	3.53	0.00	-	-	-	-	-	-
A-C	30.80	461.96	30.80	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	96.91	6.46	76.344	F	E
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	192.00	12.80	147.654	F	F
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	259.76	17.32	190.025	F	F
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	317.90	21.19	226.491	F	F
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Junctions 8				
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-
- » (Default Analysis Set) - 2029 Base, PM
 - » (Default Analysis Set) - 2029 Base + DEV, PM
 - » (Default Analysis Set) - 2029 Base, AM
 - » (Default Analysis Set) - 2029 Base + DEV, AM

Summary of junction performance

	PM			
	Queue (Veh)	Delay (s)	RFC	LOS
A1 - 2029 Base				
Arm A	71.47	163.23	1.03	F
Arm B	88.64	104.12	1.02	F
Arm C	0.57	3.59	0.36	A
Arm D	2.51	4.21	0.72	A

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

"D1 - 2029 Base, PM " model duration: 17:00 - 18:00

"D2 - 2029 Base + DEV, PM" model duration: 17:00 - 18:00

"D3 - 2029 Base, AM" model duration: 08:00 - 09:00

"D4 - 2029 Base + DEV, AM" model duration: 08:00 - 09:00

Run using Junctions 8.0.6.541 at 04/08/2016 11:39:05

File summary

Title	A10 / A121
Location	Cheshunt Sports Village
Site Number	
Date	23/03/2016
Version	
Status	
Identifier	
Client	
Jobnumber	70019827
Enumerator	
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	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	perMin	s	-Min	perMin

(Default Analysis Set) - 2029 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm D - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

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)	ARCADY		✓				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	Relatio
2029 Base, PM	2029 Base	PM		DIRECT	17:00	18:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C,D				79.00	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	A121 Winston Churchill Way E	
B	B	A10 S	
C	C	A121 Winston Churchill Way W	
D	D	A10 N	

Capacity Options

Arm	Minimum Capacity (PCU/min)	Maximum Capacity (PCU/min)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	1666.65		0.00
B	0.00	1666.65		0.00
C	0.00	1666.65		0.00
D	0.00	1666.65		0.00

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
A	7.30	11.20	5.90	42.90	124.00	10.00	
B	11.30	11.30	0.00	95.90	124.00	10.00	
C	8.60	10.00	23.40	27.20	124.00	6.00	
D	7.20	11.90	38.50	63.30	124.00	10.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/min)	Final Slope	Final Intercept (PCU/min)
A		(calculated)	(calculated)	0.624	47.312
B		(calculated)	(calculated)	0.759	63.234
C		(calculated)	(calculated)	0.681	54.114
D		(calculated)	(calculated)	0.722	58.923

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/min)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000
D	DIRECT		N/A	100.000

Turning Proportions

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

		To			
From		A	B	C	D
	A	0.000	420.000	519.000	598.000
	B	186.000	0.000	1026.000	1746.000
	C	201.000	353.000	0.000	16.000
	D	334.000	1709.000	107.000	0.000

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

		To			
From		A	B	C	D
	A	0.00	0.27	0.34	0.39
	B	0.06	0.00	0.35	0.59
	C	0.35	0.62	0.00	0.03
	D	0.16	0.79	0.05	0.00

Vehicle Mix

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

		To			
From		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
From		A	B	C	D
	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	1.03	163.23	71.47	F	25.62	1537.20	2454.70	95.81	40.91	2557.88	99.84
B	1.02	104.12	88.64	F	49.30	2958.00	3051.76	61.90	50.86	3133.15	63.55
C	0.36	3.59	0.57	A	9.50	570.00	33.35	3.51	0.56	33.36	3.51
D	0.72	4.21	2.51	A	35.83	2149.80	147.48	4.12	2.46	147.54	4.12

Main Results for each time segment

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	25.62	384.30	23.92	11.85	35.99	0.00	24.85	17.07	1.031	0.00	25.54	42.098	E
B	49.30	739.50	47.19	40.75	19.16	0.00	48.69	52.37	1.013	0.00	31.58	27.244	D
C	9.50	142.50	9.46	26.22	40.13	0.00	26.79	26.30	0.355	0.00	0.55	3.455	A
D	35.83	537.45	35.67	37.43	12.17	0.00	50.14	38.08	0.715	0.00	2.46	4.101	A

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	25.62	384.30	24.52	11.93	36.14	0.00	24.75	17.07	1.035	25.54	42.05	91.908	F
B	49.30	739.50	47.94	41.06	19.60	0.00	48.35	52.37	1.020	31.58	52.05	58.766	F
C	9.50	142.50	9.50	26.69	40.85	0.00	26.30	26.30	0.361	0.55	0.56	3.569	A
D	35.83	537.45	35.83	38.10	12.25	0.00	50.08	38.08	0.715	2.46	2.49	4.209	A

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	25.62	384.30	24.62	11.94	36.15	0.00	24.75	17.07	1.035	42.05	57.09	128.580	F
B	49.30	739.50	48.05	41.09	19.67	0.00	48.30	52.37	1.021	52.05	70.74	82.066	F
C	9.50	142.50	9.50	26.76	40.96	0.00	26.22	26.30	0.362	0.56	0.57	3.586	A
D	35.83	537.45	35.83	38.21	12.25	0.00	50.07	38.08	0.716	2.49	2.50	4.212	A

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	25.62	384.30	24.66	11.94	36.15	0.00	24.75	17.07	1.035	57.09	71.47	163.235	F
B	49.30	739.50	48.11	41.10	19.71	0.00	48.27	52.37	1.021	70.74	88.64	104.119	F
C	9.50	142.50	9.50	26.80	41.02	0.00	26.19	26.30	0.363	0.57	0.57	3.594	A
D	35.83	537.45	35.83	38.26	12.26	0.00	50.07	38.08	0.716	2.50	2.51	4.213	A

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	235.33	15.69	42.098	E	D
B	300.40	20.03	27.244	D	C
C	8.00	0.53	3.455	A	A
D	35.25	2.35	4.101	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	509.86	33.99	91.908	F	F
B	632.12	42.14	58.766	F	E
C	8.38	0.56	3.569	A	A
D	37.23	2.48	4.209	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	744.70	49.65	128.580	F	F
B	922.85	61.52	82.066	F	F
C	8.47	0.56	3.586	A	A
D	37.46	2.50	4.212	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	964.81	64.32	163.235	F	F
B	1196.39	79.76	104.119	F	F
C	8.50	0.57	3.594	A	A
D	37.55	2.50	4.213	A	A

(Default Analysis Set) - 2029 Base + DEV, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm D - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

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)	ARCADY		✓				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	Relation
2029 Base + DEV, PM	2029 Base + DEV	PM		DIRECT	17:00	18:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C,D				105.26	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	A121 Winston Churchill Way E	
B	B	A10 S	
C	C	A121 Winston Churchill Way W	
D	D	A10 N	

Capacity Options

Arm	Minimum Capacity (PCU/min)	Maximum Capacity (PCU/min)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	1666.65		0.00
B	0.00	1666.65		0.00
C	0.00	1666.65		0.00
D	0.00	1666.65		0.00

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
A	7.30	11.20	5.90	42.90	124.00	10.00	
B	11.30	11.30	0.00	95.90	124.00	10.00	
C	8.60	10.00	23.40	27.20	124.00	6.00	
D	7.20	11.90	38.50	63.30	124.00	10.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/min)	Final Slope	Final Intercept (PCU/min)
A		(calculated)	(calculated)	0.624	47.312
B		(calculated)	(calculated)	0.759	63.234
C		(calculated)	(calculated)	0.681	54.114
D		(calculated)	(calculated)	0.722	58.923

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/min)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000
D	DIRECT		N/A	100.000

Turning Proportions

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

	To				
From		A	B	C	D
	A	0.000	420.000	519.000	598.000
	B	220.000	0.000	1026.000	1746.000
	C	203.000	353.000	0.000	16.000
	D	334.000	1742.000	112.000	21.000

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

	To				
From		A	B	C	D
	A	0.00	0.27	0.34	0.39
	B	0.07	0.00	0.34	0.58
	C	0.35	0.62	0.00	0.03
	D	0.15	0.79	0.05	0.01

Vehicle Mix

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

	To				
		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	1.06	230.99	101.65	F	25.62	1537.20	3300.89	128.84	55.01	3514.93	137.19
B	1.03	134.37	117.14	F	49.87	2992.20	3870.83	77.62	64.51	4013.01	80.47
C	0.37	3.66	0.58	A	9.54	572.40	34.13	3.58	0.57	34.14	3.58
D	0.74	4.67	2.85	A	36.81	2208.60	167.15	4.54	2.79	167.23	4.54

Main Results for each time segment

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	25.62	384.30	23.51	12.39	36.95	0.00	24.25	17.22	1.056	0.00	31.66	50.099	F
B	49.87	748.05	47.34	41.17	19.29	0.00	48.59	52.00	1.026	0.00	37.95	31.029	D
C	9.54	143.10	9.50	26.03	40.60	0.00	26.47	26.04	0.360	0.00	0.56	3.529	A
D	36.81	552.15	36.62	37.39	12.72	0.00	49.74	37.88	0.740	0.00	2.79	4.514	A

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	25.62	384.30	24.01	12.48	37.13	0.00	24.14	17.22	1.061	31.66	55.75	118.202	F
B	49.87	748.05	48.04	41.47	19.67	0.00	48.30	52.00	1.032	37.95	65.45	70.885	F
C	9.54	143.10	9.54	26.45	41.26	0.00	26.02	26.04	0.367	0.56	0.58	3.638	A
D	36.81	552.15	36.81	37.99	12.80	0.00	49.67	37.88	0.741	2.79	2.83	4.661	A

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	25.62	384.30	24.08	12.49	37.13	0.00	24.14	17.22	1.061	55.75	78.88	175.035	F
B	49.87	748.05	48.13	41.49	19.71	0.00	48.27	52.00	1.033	65.45	91.58	102.994	F
C	9.54	143.10	9.54	26.50	41.34	0.00	25.97	26.04	0.367	0.58	0.58	3.651	A
D	36.81	552.15	36.81	38.07	12.81	0.00	49.67	37.88	0.741	2.83	2.84	4.665	A

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	25.62	384.30	24.10	12.49	37.13	0.00	24.14	17.22	1.061	78.88	101.65	230.994	F
B	49.87	748.05	48.17	41.50	19.73	0.00	48.25	52.00	1.034	91.58	117.14	134.365	F
C	9.54	143.10	9.54	26.52	41.38	0.00	25.94	26.04	0.368	0.58	0.58	3.656	A
D	36.81	552.15	36.81	38.10	12.81	0.00	49.67	37.88	0.741	2.84	2.85	4.666	A

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	278.61	18.57	50.099	F	D
B	346.49	23.10	31.029	D	C
C	8.20	0.55	3.529	A	A
D	39.68	2.65	4.514	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	657.59	43.84	118.202	F	F
B	779.31	51.95	70.885	F	E
C	8.58	0.57	3.638	A	A
D	42.24	2.82	4.661	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	1010.38	67.36	175.035	F	F
B	1179.03	78.60	102.994	F	F
C	8.66	0.58	3.651	A	A
D	42.55	2.84	4.665	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	1354.31	90.29	230.994	F	F
B	1566.00	104.40	134.365	F	F
C	8.69	0.58	3.656	A	A
D	42.67	2.84	4.666	A	A

(Default Analysis Set) - 2029 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm D - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

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)	ARCADY		✓				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	Relatio
2029 Base, AM	2029 Base	AM		DIRECT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C,D				44.16	E

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	A121 Winston Churchill Way E	
B	B	A10 S	
C	C	A121 Winston Churchill Way W	
D	D	A10 N	

Capacity Options

Arm	Minimum Capacity (PCU/min)	Maximum Capacity (PCU/min)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	1666.65		0.00
B	0.00	1666.65		0.00
C	0.00	1666.65		0.00
D	0.00	1666.65		0.00

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
A	7.30	11.20	5.90	42.90	124.00	10.00	
B	11.30	11.30	0.00	95.90	124.00	10.00	
C	8.60	10.00	23.40	27.20	124.00	6.00	
D	7.20	11.90	38.50	63.30	124.00	10.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/min)	Final Slope	Final Intercept (PCU/min)
A		(calculated)	(calculated)	0.624	47.312
B		(calculated)	(calculated)	0.759	63.234
C		(calculated)	(calculated)	0.681	54.114
D		(calculated)	(calculated)	0.722	58.923

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/min)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000
D	DIRECT		N/A	100.000

Turning Proportions

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

		To			
From		A	B	C	D
	A	0.000	240.000	219.000	466.000
	B	795.000	0.000	520.000	1614.000
	C	248.000	825.000	0.000	0.000
	D	194.000	1772.000	276.000	0.000

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

		To			
From		A	B	C	D
	A	0.00	0.26	0.24	0.50
	B	0.27	0.00	0.18	0.55
	C	0.23	0.77	0.00	0.00
	D	0.09	0.79	0.12	0.00

Vehicle Mix

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

		To			
From		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
From		A	B	C	D
	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	0.85	22.08	5.41	C	15.42	925.20	285.10	18.49	4.75	285.77	18.53
B	0.95	22.96	17.85	C	48.82	2929.20	903.44	18.51	15.06	906.55	18.57
C	0.83	16.45	4.76	C	17.88	1072.80	256.09	14.32	4.27	256.62	14.35
D	1.02	96.27	62.68	F	35.89	2153.40	2094.83	58.37	34.91	2095.66	58.39

Main Results for each time segment

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	15.42	231.30	15.13	20.15	46.00	0.00	18.61	17.94	0.829	0.00	4.35	16.121	C
B	48.82	732.30	47.91	45.55	15.58	0.00	51.41	49.91	0.950	0.00	13.69	14.570	B
C	17.88	268.20	17.62	16.46	47.02	0.00	22.10	20.02	0.809	0.00	3.93	12.739	B
D	37.37	560.55	35.52	34.02	30.62	0.00	36.81	34.68	1.015	0.00	27.69	31.687	D

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	15.42	231.30	15.37	20.46	46.74	0.00	18.14	17.94	0.850	4.35	5.13	21.003	C
B	48.82	732.30	48.65	46.28	15.83	0.00	51.21	49.91	0.953	13.69	16.18	21.127	C
C	17.88	268.20	17.84	16.73	47.76	0.00	21.60	20.02	0.828	3.93	4.49	15.726	C
D	37.37	560.55	36.15	34.55	31.05	0.00	36.50	34.68	1.024	27.69	46.02	68.698	F

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	15.42	231.30	15.40	20.50	46.86	0.00	18.07	17.94	0.853	5.13	5.41	22.079	C
B	48.82	732.30	48.74	46.39	15.87	0.00	51.19	49.91	0.954	16.18	17.37	22.636	C
C	17.88	268.20	17.87	16.76	47.85	0.00	21.54	20.02	0.830	4.49	4.66	16.205	C
D	37.37	560.55	36.26	34.62	31.10	0.00	36.46	34.68	1.025	46.02	62.68	96.269	F

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	15.42	231.30	15.45	20.41	45.81	0.00	18.72	17.94	0.824	5.41	4.98	18.628	C
B	48.82	732.30	48.79	45.50	15.76	0.00	51.27	49.91	0.952	17.37	17.85	22.964	C
C	17.88	268.20	17.87	16.64	47.91	0.00	21.50	20.02	0.832	4.66	4.76	16.451	C
D	31.45	471.75	35.11	34.67	31.12	0.00	36.45	34.68	0.863	62.68	7.80	56.268	F

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	55.86	3.72	16.121	C	B
B	159.37	10.62	14.570	B	B
C	51.87	3.46	12.739	B	B
D	262.48	17.50	31.687	D	C

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	72.80	4.85	21.003	C	C
B	227.05	15.14	21.127	C	C
C	64.57	4.30	15.726	C	B
D	557.07	37.14	68.698	F	E

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	79.43	5.30	22.079	C	C
B	252.57	16.84	22.636	C	C
C	68.89	4.59	16.205	C	B
D	816.86	54.46	96.269	F	F

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	77.02	5.13	18.628	C	B
B	264.45	17.63	22.964	C	C
C	70.76	4.72	16.451	C	B
D	458.42	30.56	56.268	F	E

(Default Analysis Set) - 2029 Base + DEV, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm D - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

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)	ARCADY		✓				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	Relation
2029 Base + DEV, AM	2029 Base + DEV	AM		DIRECT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C,D				73.68	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	A121 Winston Churchill Way E	
B	B	A10 S	
C	C	A121 Winston Churchill Way W	
D	D	A10 N	

Capacity Options

Arm	Minimum Capacity (PCU/min)	Maximum Capacity (PCU/min)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	1666.65		0.00
B	0.00	1666.65		0.00
C	0.00	1666.65		0.00
D	0.00	1666.65		0.00

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
A	7.30	11.20	5.90	42.90	124.00	10.00	
B	11.30	11.30	0.00	95.90	124.00	10.00	
C	8.60	10.00	23.40	27.20	124.00	6.00	
D	7.20	11.90	38.50	63.30	124.00	10.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/min)	Final Slope	Final Intercept (PCU/min)
A		(calculated)	(calculated)	0.624	47.312
B		(calculated)	(calculated)	0.759	63.234
C		(calculated)	(calculated)	0.681	54.114
D		(calculated)	(calculated)	0.722	58.923

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/min)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000
D	DIRECT		N/A	100.000

Turning Proportions

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

	To				
From		A	B	C	D
	A	0.000	240.000	219.000	466.000
	B	816.000	0.000	520.000	1614.000
	C	249.000	825.000	0.000	0.000
	D	194.000	1797.000	279.000	9.000

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

	To				
From		A	B	C	D
	A	0.00	0.26	0.24	0.50
	B	0.28	0.00	0.18	0.55
	C	0.23	0.77	0.00	0.00
	D	0.09	0.79	0.12	0.00

Vehicle Mix

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

	To				
		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/min)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	0.85	22.06	5.47	C	15.42	925.20	289.78	18.79	4.83	290.61	18.85
B	0.96	27.13	21.08	D	49.16	2949.60	1027.74	20.91	17.13	1032.09	20.99
C	0.84	18.00	5.20	C	17.90	1074.00	276.63	15.45	4.61	277.27	15.49
D	1.05	181.14	119.93	F	37.98	2278.80	3847.61	101.31	64.13	4046.31	106.54

Main Results for each time segment

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	15.42	231.30	15.13	20.43	46.09	0.00	18.55	18.02	0.831	0.00	4.42	16.358	C
B	49.16	737.40	48.15	45.52	15.70	0.00	51.32	49.79	0.958	0.00	15.20	15.726	C
C	17.90	268.50	17.62	16.42	47.42	0.00	21.83	19.92	0.820	0.00	4.19	13.484	B
D	37.98	569.70	35.59	34.10	30.94	0.00	36.58	34.59	1.038	0.00	35.91	38.234	E

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	15.42	231.30	15.37	20.75	46.72	0.00	18.16	18.02	0.849	4.42	5.12	20.977	C
B	49.16	737.40	48.94	46.15	15.94	0.00	51.13	49.79	0.961	15.20	18.43	23.833	C
C	17.90	268.50	17.85	16.68	48.20	0.00	21.29	19.92	0.841	4.19	4.87	17.086	C
D	37.98	569.70	36.07	34.67	31.39	0.00	36.25	34.59	1.048	35.91	64.50	90.795	F

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	15.42	231.30	15.40	20.79	46.79	0.00	18.11	18.02	0.851	5.12	5.35	21.778	C
B	49.16	737.40	49.05	46.22	15.97	0.00	51.11	49.79	0.962	18.43	20.07	25.991	D
C	17.90	268.50	17.89	16.72	48.31	0.00	21.22	19.92	0.843	4.87	5.09	17.754	C
D	37.98	569.70	36.12	34.74	31.45	0.00	36.21	34.59	1.049	64.50	92.36	136.092	F

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

Arm	Total Demand (Veh/min)	Junction Arrivals (Veh)	Entry Flow (Veh/min)	Exit Flow (Veh/min)	Circulating Flow (Veh/min)	Pedestrian Demand (Ped/min)	Capacity (Veh/min)	Saturation Capacity (Veh/min)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	15.42	231.30	15.41	20.80	46.81	0.00	18.10	18.02	0.852	5.35	5.47	22.064	C
B	49.16	737.40	49.09	46.24	15.98	0.00	51.10	49.79	0.962	20.07	21.08	27.127	D
C	17.90	268.50	17.89	16.73	48.35	0.00	21.20	19.92	0.844	5.09	5.20	17.996	C
D	37.98	569.70	36.14	34.77	31.47	0.00	36.19	34.59	1.049	92.36	119.93	181.138	F

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	56.61	3.77	16.358	C	B
B	172.89	11.53	15.726	C	B
C	54.77	3.65	13.484	B	B
D	321.62	21.44	38.234	E	D

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	73.03	4.87	20.977	C	C
B	255.74	17.05	23.833	C	C
C	69.59	4.64	17.086	C	B
D	755.98	50.40	90.795	F	F

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	78.84	5.26	21.778	C	C
B	289.92	19.33	25.991	D	C
C	75.00	5.00	17.754	C	B
D	1177.42	78.49	136.092	F	F

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	81.30	5.42	22.064	C	C
B	309.19	20.61	27.127	D	C
C	77.27	5.15	17.996	C	B
D	1592.60	106.17	181.138	F	F



Junctions 8				
PICADY 8 - Priority Intersection Module				
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Report generation date: 04/08/2016 11:57:18

-
- » (Default Analysis Set) - 2029 Base, AM
 - » (Default Analysis Set) - 2029 Base + DEV, AM
 - » (Default Analysis Set) - 2029 Base, PM
 - » (Default Analysis Set) - 2029 Base + DEV, PM

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
A1 - 2029 Base				
Stream B-ACD	0.01	6.42	0.01	A
Stream A-BCD	0.00	5.25	0.00	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream D-ABC	0.03	8.91	0.03	A
Stream C-ABD	0.02	4.82	0.01	A
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-

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

"D1 - 2029 Base, AM" model duration: 08:00 - 09:00

"D2 - 2029 Base + DEV, AM" model duration: 08:00 - 09:00

"D3 - 2029 Base, PM" model duration: 17:00 - 18:00

"D4 - 2029 Base + DEV, PM" model duration: 17:00 - 18:00

Run using Junctions 8.0.6.541 at 04/08/2016 11:57:16

File summary

Title	(untitled)
Location	
Site Number	
Date	26/07/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	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	perMin	s	-Min	perMin

(Default Analysis Set) - 2029 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
2029 Base, AM	2029 Base	AM		DIRECT	08:00	09:00	60	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	6.69	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Theobalds Lane W		Major
B	B	Existing Football Club Access		Minor
C	C	Theobalds Lane E		Major
D	D	Cedars Park		Minor

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)
A	6.00		0.00		2.20	155.00	✓	0.00
C	6.00		0.00		2.20	120.00	✓	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	2.90										19	19
D	One lane	2.30										33	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/min)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	11.062	-	-	-	-	-	-	0.257	0.367	0.257	-	-	-
1	B-A	8.132	0.089	0.225	0.225	-	-	-	0.141	0.321	-	0.225	0.225	0.112
1	B-C	10.489	0.096	0.244	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	8.132	0.089	0.225	0.225	-	-	-	0.141	0.321	0.141	-	-	-
1	B-D, offside lane	8.132	0.089	0.225	0.225	-	-	-	0.141	0.321	0.141	-	-	-
1	C-B	10.724	0.249	0.249	0.356	-	-	-	-	-	-	-	-	-
1	D-A	9.902	-	-	-	-	-	-	0.230	-	0.091	-	-	-
1	D-B, nearside lane	7.749	0.135	0.135	0.306	-	-	-	0.214	0.214	0.085	-	-	-
1	D-B, offside lane	7.749	0.135	0.135	0.306	-	-	-	0.214	0.214	0.085	-	-	-
1	D-C	7.749	-	0.135	0.306	0.107	0.214	0.214	0.214	0.214	0.085	-	-	-

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 (PCU/min)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000
D	DIRECT		N/A	100.000

Turning Proportions

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

		To			
From		A	B	C	D
	A	0.000	0.000	128.000	2.000
	B	1.000	0.000	7.000	0.000
	C	209.000	8.000	0.000	17.000
	D	2.000	0.000	10.000	0.000

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

		To			
From		A	B	C	D
	A	0.00	0.00	0.98	0.02
	B	0.13	0.00	0.88	0.00
	C	0.89	0.03	0.00	0.07
	D	0.17	0.00	0.83	0.00

Vehicle Mix

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

		To			
From		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.01	6.42	0.01	A
A-BCD	0.00	5.25	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-
D-ABC	0.03	8.91	0.03	A
C-ABD	0.01	4.82	0.02	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.14	0.14	0.00	9.48	0.015	0.01	6.421	A
A-BCD	0.04	0.04	0.00	11.47	0.004	0.00	5.251	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	2.14	2.14	0.00	-	-	-	-	-
D-ABC	0.20	0.20	0.00	6.94	0.029	0.03	8.903	A
C-ABD	0.19	0.19	0.00	12.63	0.015	0.02	4.820	A
C-D	0.28	0.28	0.00	-	-	-	-	-
C-A	3.43	3.43	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.14	0.14	0.00	9.48	0.015	0.01	6.421	A
A-BCD	0.04	0.04	0.00	11.47	0.004	0.00	5.253	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	2.14	2.14	0.00	-	-	-	-	-
D-ABC	0.20	0.20	0.00	6.94	0.029	0.03	8.908	A
C-ABD	0.19	0.19	0.00	12.63	0.015	0.02	4.822	A
C-D	0.28	0.28	0.00	-	-	-	-	-
C-A	3.43	3.43	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.14	0.14	0.00	9.48	0.015	0.01	6.421	A
A-BCD	0.04	0.04	0.00	11.47	0.004	0.00	5.251	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	2.14	2.14	0.00	-	-	-	-	-
D-ABC	0.20	0.20	0.00	6.94	0.029	0.03	8.908	A
C-ABD	0.19	0.19	0.00	12.63	0.015	0.02	4.822	A
C-D	0.28	0.28	0.00	-	-	-	-	-
C-A	3.43	3.43	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.14	0.14	0.00	9.48	0.015	0.01	6.421	A
A-BCD	0.04	0.04	0.00	11.47	0.004	0.00	5.251	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	2.14	2.14	0.00	-	-	-	-	-
D-ABC	0.20	0.20	0.00	6.94	0.029	0.03	8.908	A
C-ABD	0.19	0.19	0.00	12.63	0.015	0.02	4.822	A
C-D	0.28	0.28	0.00	-	-	-	-	-
C-A	3.43	3.43	0.00	-	-	-	-	-

(Default Analysis Set) - 2029 Base + DEV, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
2029 Base + DEV, AM	2029 Base + DEV	AM		DIRECT	08:00	09:00	60	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	6.85	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Theobalds Lane W		Major
B	B	Existing Football Club Access		Minor
C	C	Theobalds Lane E		Major
D	D	Cedars Park		Minor

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)
A	6.00		0.00		2.20	155.00	✓	0.00
C	6.00		0.00		2.20	120.00	✓	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	2.90										19	19
D	One lane	2.30										33	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/min)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	11.062	-	-	-	-	-	-	0.257	0.367	0.257	-	-	-
1	B-A	8.132	0.089	0.225	0.225	-	-	-	0.141	0.321	-	0.225	0.225	0.112
1	B-C	10.489	0.096	0.244	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	8.132	0.089	0.225	0.225	-	-	-	0.141	0.321	0.141	-	-	-
1	B-D, offside lane	8.132	0.089	0.225	0.225	-	-	-	0.141	0.321	0.141	-	-	-
1	C-B	10.724	0.249	0.249	0.356	-	-	-	-	-	-	-	-	-
1	D-A	9.902	-	-	-	-	-	-	0.230	-	0.091	-	-	-
1	D-B, nearside lane	7.749	0.135	0.135	0.306	-	-	-	0.214	0.214	0.085	-	-	-
1	D-B, offside lane	7.749	0.135	0.135	0.306	-	-	-	0.214	0.214	0.085	-	-	-
1	D-C	7.749	-	0.135	0.306	0.107	0.214	0.214	0.214	0.214	0.085	-	-	-

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 (PCU/min)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000
D	DIRECT		N/A	100.000

Turning Proportions

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

		To			
From		A	B	C	D
	A	0.000	17.000	129.000	2.000
	B	27.000	0.000	22.000	0.000
	C	221.000	40.000	0.000	17.000
	D	2.000	0.000	10.000	0.000

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

		To			
From		A	B	C	D
	A	0.00	0.11	0.87	0.01
	B	0.55	0.00	0.45	0.00
	C	0.79	0.14	0.00	0.06
	D	0.17	0.00	0.83	0.00

Vehicle Mix

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

		To			
From		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.10	8.39	0.11	A
A-BCD	0.00	5.27	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-
D-ABC	0.03	9.24	0.03	A
C-ABD	0.07	5.11	0.13	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.81	0.80	0.00	7.96	0.102	0.11	8.369	A
A-BCD	0.04	0.04	0.00	11.43	0.004	0.00	5.268	A
A-B	0.28	0.28	0.00	-	-	-	-	-
A-C	2.15	2.15	0.00	-	-	-	-	-
D-ABC	0.20	0.20	0.00	6.70	0.030	0.03	9.228	A
C-ABD	0.95	0.94	0.00	12.69	0.075	0.12	5.103	A
C-D	0.26	0.26	0.00	-	-	-	-	-
C-A	3.42	3.42	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.81	0.81	0.00	7.96	0.102	0.11	8.388	A
A-BCD	0.04	0.04	0.00	11.43	0.004	0.00	5.269	A
A-B	0.28	0.28	0.00	-	-	-	-	-
A-C	2.15	2.15	0.00	-	-	-	-	-
D-ABC	0.20	0.20	0.00	6.69	0.030	0.03	9.237	A
C-ABD	0.95	0.95	0.00	12.70	0.075	0.13	5.110	A
C-D	0.26	0.26	0.00	-	-	-	-	-
C-A	3.42	3.42	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.81	0.81	0.00	7.96	0.102	0.11	8.388	A
A-BCD	0.04	0.04	0.00	11.43	0.004	0.00	5.272	A
A-B	0.28	0.28	0.00	-	-	-	-	-
A-C	2.15	2.15	0.00	-	-	-	-	-
D-ABC	0.20	0.20	0.00	6.69	0.030	0.03	9.237	A
C-ABD	0.95	0.95	0.00	12.70	0.075	0.13	5.112	A
C-D	0.26	0.26	0.00	-	-	-	-	-
C-A	3.42	3.42	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.81	0.81	0.00	7.96	0.102	0.11	8.388	A
A-BCD	0.04	0.04	0.00	11.43	0.004	0.00	5.272	A
A-B	0.28	0.28	0.00	-	-	-	-	-
A-C	2.15	2.15	0.00	-	-	-	-	-
D-ABC	0.20	0.20	0.00	6.69	0.030	0.03	9.237	A
C-ABD	0.95	0.95	0.00	12.70	0.075	0.13	5.112	A
C-D	0.26	0.26	0.00	-	-	-	-	-
C-A	3.42	3.42	0.00	-	-	-	-	-

(Default Analysis Set) - 2029 Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
2029 Base, PM	2029 Base	PM		DIRECT	17:00	18:00	60	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	6.91	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Theobalds Lane W		Major
B	B	Existing Football Club Access		Minor
C	C	Theobalds Lane E		Major
D	D	Cedars Park		Minor

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)
A	6.00		0.00		2.20	155.00	✓	0.00
C	6.00		0.00		2.20	120.00	✓	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	2.90										19	19
D	One lane	2.30										33	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/min)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	11.062	-	-	-	-	-	-	0.257	0.367	0.257	-	-	-
1	B-A	8.132	0.089	0.225	0.225	-	-	-	0.141	0.321	-	0.225	0.225	0.112
1	B-C	10.489	0.096	0.244	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	8.132	0.089	0.225	0.225	-	-	-	0.141	0.321	0.141	-	-	-
1	B-D, offside lane	8.132	0.089	0.225	0.225	-	-	-	0.141	0.321	0.141	-	-	-
1	C-B	10.724	0.249	0.249	0.356	-	-	-	-	-	-	-	-	-
1	D-A	9.902	-	-	-	-	-	-	0.230	-	0.091	-	-	-
1	D-B, nearside lane	7.749	0.135	0.135	0.306	-	-	-	0.214	0.214	0.085	-	-	-
1	D-B, offside lane	7.749	0.135	0.135	0.306	-	-	-	0.214	0.214	0.085	-	-	-
1	D-C	7.749	-	0.135	0.306	0.107	0.214	0.214	0.214	0.214	0.085	-	-	-

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 (PCU/min)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000
D	DIRECT		N/A	100.000

Turning Proportions

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

		To			
From		A	B	C	D
	A	0.000	25.000	99.000	2.000
	B	9.000	0.000	7.000	0.000
	C	166.000	16.000	0.000	10.000
	D	9.000	0.000	14.000	0.000

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

		To			
From		A	B	C	D
	A	0.00	0.20	0.79	0.02
	B	0.56	0.00	0.44	0.00
	C	0.86	0.08	0.00	0.05
	D	0.39	0.00	0.61	0.00

Vehicle Mix

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

		To			
From		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
	A	B	C	D	
From	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.03	7.55	0.03	A
A-BCD	0.00	5.21	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-
D-ABC	0.05	8.31	0.05	A
C-ABD	0.03	5.10	0.04	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.26	0.26	0.00	8.21	0.032	0.03	7.546	A
A-BCD	0.04	0.04	0.00	11.57	0.003	0.00	5.203	A
A-B	0.42	0.42	0.00	-	-	-	-	-
A-C	1.64	1.64	0.00	-	-	-	-	-
D-ABC	0.38	0.38	0.00	7.60	0.050	0.05	8.305	A
C-ABD	0.35	0.34	0.00	12.11	0.029	0.04	5.099	A
C-D	0.16	0.16	0.00	-	-	-	-	-
C-A	2.68	2.68	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.26	0.26	0.00	8.21	0.032	0.03	7.550	A
A-BCD	0.04	0.04	0.00	11.57	0.003	0.00	5.206	A
A-B	0.42	0.42	0.00	-	-	-	-	-
A-C	1.64	1.64	0.00	-	-	-	-	-
D-ABC	0.38	0.38	0.00	7.60	0.050	0.05	8.312	A
C-ABD	0.35	0.35	0.00	12.11	0.029	0.04	5.100	A
C-D	0.16	0.16	0.00	-	-	-	-	-
C-A	2.68	2.68	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.26	0.26	0.00	8.21	0.032	0.03	7.550	A
A-BCD	0.04	0.04	0.00	11.57	0.003	0.00	5.206	A
A-B	0.42	0.42	0.00	-	-	-	-	-
A-C	1.64	1.64	0.00	-	-	-	-	-
D-ABC	0.38	0.38	0.00	7.60	0.050	0.05	8.312	A
C-ABD	0.35	0.35	0.00	12.11	0.029	0.04	5.102	A
C-D	0.16	0.16	0.00	-	-	-	-	-
C-A	2.68	2.68	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.26	0.26	0.00	8.21	0.032	0.03	7.550	A
A-BCD	0.04	0.04	0.00	11.57	0.003	0.00	5.204	A
A-B	0.42	0.42	0.00	-	-	-	-	-
A-C	1.64	1.64	0.00	-	-	-	-	-
D-ABC	0.38	0.38	0.00	7.60	0.050	0.05	8.312	A
C-ABD	0.35	0.35	0.00	12.11	0.029	0.04	5.100	A
C-D	0.16	0.16	0.00	-	-	-	-	-
C-A	2.68	2.68	0.00	-	-	-	-	-

(Default Analysis Set) - 2029 Base + DEV, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
2029 Base + DEV, PM	2029 Base + DEV	PM		DIRECT	17:00	18:00	60	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	7.86	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Theobalds Lane W		Major
B	B	Existing Football Club Access		Minor
C	C	Theobalds Lane E		Major
D	D	Cedars Park		Minor

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)
A	6.00		0.00		2.20	155.00	✓	0.00
C	6.00		0.00		2.20	120.00	✓	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	2.90										19	19
D	One lane	2.30										33	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/min)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	11.062	-	-	-	-	-	-	0.257	0.367	0.257	-	-	-
1	B-A	8.132	0.089	0.225	0.225	-	-	-	0.141	0.321	-	0.225	0.225	0.112
1	B-C	10.489	0.096	0.244	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	8.132	0.089	0.225	0.225	-	-	-	0.141	0.321	0.141	-	-	-
1	B-D, offside lane	8.132	0.089	0.225	0.225	-	-	-	0.141	0.321	0.141	-	-	-
1	C-B	10.724	0.249	0.249	0.356	-	-	-	-	-	-	-	-	-
1	D-A	9.902	-	-	-	-	-	-	0.230	-	0.091	-	-	-
1	D-B, nearside lane	7.749	0.135	0.135	0.306	-	-	-	0.214	0.214	0.085	-	-	-
1	D-B, offside lane	7.749	0.135	0.135	0.306	-	-	-	0.214	0.214	0.085	-	-	-
1	D-C	7.749	-	0.135	0.306	0.107	0.214	0.214	0.214	0.214	0.085	-	-	-

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 (PCU/min)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000
D	DIRECT		N/A	100.000

Turning Proportions

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

		To			
From		A	B	C	D
	A	0.000	48.000	101.000	2.000
	B	63.000	0.000	30.000	0.000
	C	170.000	68.000	0.000	10.000
	D	9.000	0.000	14.000	0.000

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

		To			
From		A	B	C	D
	A	0.00	0.32	0.67	0.01
	B	0.68	0.00	0.32	0.00
	C	0.69	0.27	0.00	0.04
	D	0.39	0.00	0.61	0.00

Vehicle Mix

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

		To			
From		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.20	9.86	0.25	A
A-BCD	0.00	5.23	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-
D-ABC	0.05	8.69	0.06	A
C-ABD	0.13	5.68	0.19	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	1.54	1.52	0.00	7.63	0.202	0.25	9.807	A
A-BCD	0.04	0.04	0.00	11.52	0.004	0.00	5.226	A
A-B	0.80	0.80	0.00	-	-	-	-	-
A-C	1.67	1.67	0.00	-	-	-	-	-
D-ABC	0.38	0.38	0.00	7.30	0.052	0.05	8.667	A
C-ABD	1.51	1.50	0.00	12.09	0.125	0.19	5.662	A
C-D	0.15	0.15	0.00	-	-	-	-	-
C-A	2.49	2.49	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	1.54	1.54	0.00	7.62	0.202	0.25	9.865	A
A-BCD	0.04	0.04	0.00	11.52	0.004	0.00	5.228	A
A-B	0.80	0.80	0.00	-	-	-	-	-
A-C	1.67	1.67	0.00	-	-	-	-	-
D-ABC	0.38	0.38	0.00	7.29	0.053	0.06	8.685	A
C-ABD	1.52	1.52	0.00	12.09	0.125	0.19	5.677	A
C-D	0.15	0.15	0.00	-	-	-	-	-
C-A	2.49	2.49	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	1.54	1.54	0.00	7.62	0.202	0.25	9.865	A
A-BCD	0.04	0.04	0.00	11.52	0.004	0.00	5.228	A
A-B	0.80	0.80	0.00	-	-	-	-	-
A-C	1.67	1.67	0.00	-	-	-	-	-
D-ABC	0.38	0.38	0.00	7.29	0.053	0.06	8.685	A
C-ABD	1.52	1.52	0.00	12.09	0.125	0.19	5.675	A
C-D	0.15	0.15	0.00	-	-	-	-	-
C-A	2.49	2.49	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	1.54	1.54	0.00	7.62	0.202	0.25	9.864	A
A-BCD	0.04	0.04	0.00	11.52	0.004	0.00	5.228	A
A-B	0.80	0.80	0.00	-	-	-	-	-
A-C	1.67	1.67	0.00	-	-	-	-	-
D-ABC	0.38	0.38	0.00	7.29	0.052	0.06	8.681	A
C-ABD	1.52	1.52	0.00	12.09	0.125	0.19	5.677	A
C-D	0.15	0.15	0.00	-	-	-	-	-
C-A	2.49	2.49	0.00	-	-	-	-	-

Junctions 8				
PICADY 8 - Priority Intersection Module				
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Report generation date: 04/08/2016 11:59:05

» (Default Analysis Set) - 2029 Base + Dev, AM

» (Default Analysis Set) - 2029 Base + Dev, PM

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
A1 - 2029 Base + Dev				
Stream B-AC	0.04	6.71	0.03	A
Stream C-AB	0.01	6.05	0.01	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 - 2029 Base + Dev, AM" model duration: 08:00 - 09:00

"D2 - 2029 Base + Dev, PM" model duration: 17:00 - 18:00

Run using Junctions 8.0.6.541 at 04/08/2016 11:59:04

File summary

Title	(untitled)
Location	
Site Number	
Date	26/07/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	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	perMin	s	-Min	perMin

(Default Analysis Set) - 2029 Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
2029 Base + Dev, AM	2029 Base + Dev	AM		DIRECT	08:00	09:00	60	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.55	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Theobalds Lane W		Major
B	B	Eastern Site Access		Minor
C	C	Theobalds Lane E		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	✓	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	4.00										37	17

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/min)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	9.129	0.100	0.252	0.159	0.360
1	B-C	11.636	0.107	0.271	-	-
1	C-B	10.290	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 (PCU/min)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	1.000	160.000
	B	11.000	0.000	8.000
	C	32.000	6.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.01	0.99
	B	0.58	0.00	0.42
	C	0.84	0.16	0.00

Vehicle Mix

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

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.03	6.71	0.04	A
C-AB	0.01	6.05	0.01	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.32	0.32	0.00	9.26	0.035	0.04	6.709	A
C-AB	0.11	0.11	0.00	10.02	0.011	0.01	6.053	A
C-A	0.53	0.53	0.00	-	-	-	-	-
A-B	0.02	0.02	0.00	-	-	-	-	-
A-C	2.65	2.65	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.32	0.32	0.00	9.26	0.035	0.04	6.712	A
C-AB	0.11	0.11	0.00	10.02	0.011	0.01	6.053	A
C-A	0.53	0.53	0.00	-	-	-	-	-
A-B	0.02	0.02	0.00	-	-	-	-	-
A-C	2.65	2.65	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.32	0.32	0.00	9.26	0.035	0.04	6.712	A
C-AB	0.11	0.11	0.00	10.02	0.011	0.01	6.053	A
C-A	0.53	0.53	0.00	-	-	-	-	-
A-B	0.02	0.02	0.00	-	-	-	-	-
A-C	2.65	2.65	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.32	0.32	0.00	9.26	0.035	0.04	6.712	A
C-AB	0.11	0.11	0.00	10.02	0.011	0.01	6.053	A
C-A	0.53	0.53	0.00	-	-	-	-	-
A-B	0.02	0.02	0.00	-	-	-	-	-
A-C	2.65	2.65	0.00	-	-	-	-	-

(Default Analysis Set) - 2029 Base + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
2029 Base + Dev, PM	2029 Base + Dev	PM		DIRECT	17:00	18:00	60	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.22	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Theobalds Lane W		Major
B	B	Eastern Site Access		Minor
C	C	Theobalds Lane E		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	✓	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	4.00										37	17

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/min)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	9.129	0.100	0.252	0.159	0.360
1	B-C	11.636	0.107	0.271	-	-
1	C-B	10.290	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 (PCU/min)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	2.000	142.000
	B	5.000	0.000	3.000
	C	53.000	12.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.01	0.99
	B	0.63	0.00	0.38
	C	0.82	0.18	0.00

Vehicle Mix

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

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
From	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.02	6.66	0.02	A
C-AB	0.02	5.95	0.03	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.14	0.14	0.00	9.15	0.015	0.02	6.656	A
C-AB	0.22	0.22	0.00	10.31	0.021	0.03	5.944	A
C-A	0.86	0.86	0.00	-	-	-	-	-
A-B	0.03	0.03	0.00	-	-	-	-	-
A-C	2.37	2.37	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.14	0.14	0.00	9.15	0.015	0.02	6.656	A
C-AB	0.22	0.22	0.00	10.31	0.021	0.03	5.946	A
C-A	0.86	0.86	0.00	-	-	-	-	-
A-B	0.03	0.03	0.00	-	-	-	-	-
A-C	2.37	2.37	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.14	0.14	0.00	9.15	0.015	0.02	6.656	A
C-AB	0.22	0.22	0.00	10.31	0.021	0.03	5.946	A
C-A	0.86	0.86	0.00	-	-	-	-	-
A-B	0.03	0.03	0.00	-	-	-	-	-
A-C	2.37	2.37	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/min)	Entry Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	0.14	0.14	0.00	9.15	0.015	0.02	6.656	A
C-AB	0.22	0.22	0.00	10.31	0.021	0.03	5.944	A
C-A	0.86	0.86	0.00	-	-	-	-	-
A-B	0.03	0.03	0.00	-	-	-	-	-
A-C	2.37	2.37	0.00	-	-	-	-	-

Junctions 8				
ARCADY 8 - Roundabout Module				
Version: 8.0.6.541 [19821,26/11/2015] © Copyright TRL Limited, 2016				
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Filename: Trinity Lane.arc8

Path: \\uk.wspgroup.com\central data\Projects\700198xx\70019827 - Cheshunt Sports Village\Design and Analysis\Development\ARCADY

Report generation date: 04/08/2016 11:44:49

- » (Default Analysis Set) - 2029 AM, AM
- » (Default Analysis Set) - 2029 PM, PM
- » (Default Analysis Set) - 2029 AM + Development, AM
- » (Default Analysis Set) - 2029 PM + Development, PM

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2029 AM			
Junction 1 - Arm A	154.21	606.27	1.19	F
Junction 1 - Arm B	0.00	42.40	0.99	E
Junction 1 - Arm C	1.13	84.61	0.55	F
Junction 2 - Arm A	0.00	46.78	1.00	E
Junction 2 - Arm B	26.80	317.52	1.05	F
Junction 2 - Arm C	3.75	19.41	0.79	C

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

"D4 - 2029 AM, AM" model duration: 08:00 - 09:00

"D5 - 2029 PM, PM" model duration: 17:00 - 18:00

"D6 - 2029 AM + Development, AM" model duration: 08:00 - 09:00

"D7 - 2029 PM + Development, PM" model duration: 17:00 - 18:00

Run using Junctions 8.0.6.541 at 04/08/2016 11:44:46

File summary

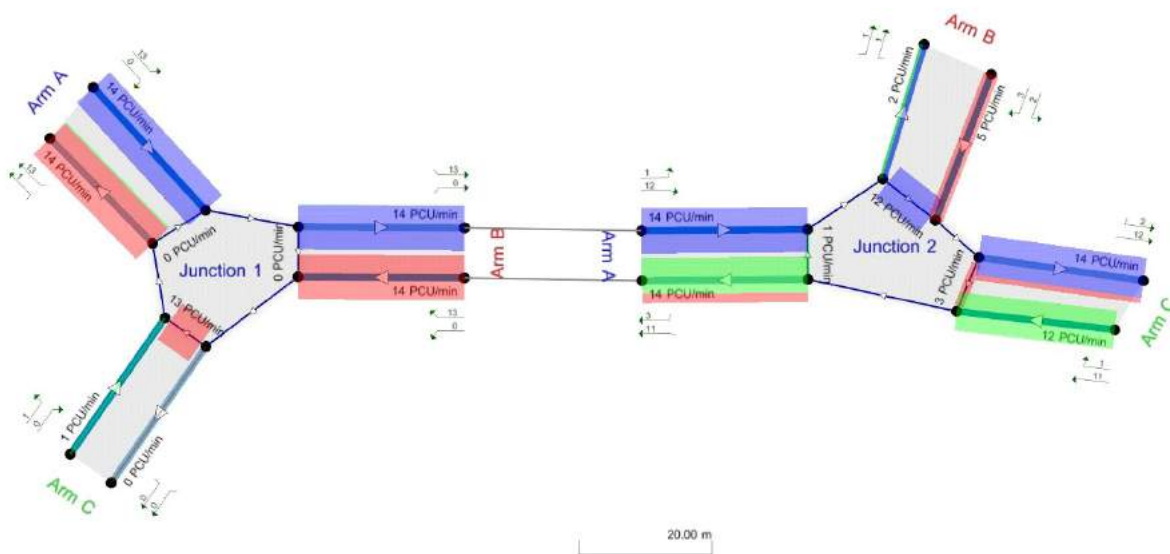
Title	A1184 London Road / West Road / Station Road
Location	West Road, Sawbridgeworth
Site Number	
Date	29/09/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	70002185
Enumerator	
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	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	perMin	s	-Min	perMin



Flow Overlay by Entry
 Showing modelled flow through junction (PCU/min)
 Time Segment: (08:00-08:15)
 Showing Analysis Set "A1", Demand Set "D4 - 2029 AM, AM"

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - 2029 AM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	Junction 1 - Arm B	Internal storage space between linked junctions is small (1 PCU). Linked junction results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm A	Internal storage space between linked junctions is small (1 PCU). Linked junction results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	DemandSets	D4 - 2029 AM, AM	Demand Set 4: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2029 PM, PM	Demand Set 5: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2029 AM + Development, AM	Demand Set 6: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D7 - 2029 PM + Development, PM	Demand Set 7: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			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
2029 AM, AM	2029 AM	AM	4	Varies by Arm	08:00	09:00	60	15		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	1	Northern Roundabout	Mini-roundabout	B,C,A	337.49	F
2	2	Southern Roundabout	Mini-roundabout	B,C,A	82.29	F

Junction Network Options

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

Arms

Arms

Junction	Arm	Arm	Name	Description
1	A	A	High St (N)	
1	B	B	High St (S)	
1	C	C	Theobalds Station	
2	A	A	High St (N)	
2	B	B	Trinity Lane	
2	C	C	High St (S)	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/min)	Maximum Capacity (PCU/min)
1	A	0.00	1666.65
1	B	0.00	1666.65
1	C	0.00	1666.65
2	A	0.00	1666.65
2	B	0.00	1666.65
2	C	0.00	1666.65

Mini Roundabout Geometry

Junction	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	A	4.00	3.90	5.47	2.10	15.70	12.70	0.00	
1	B	3.70	3.60	4.65	1.00	13.69	7.40	0.00	✓
1	C	2.80	2.70	5.80	4.77	10.70	2.80	0.00	
2	A	3.95	3.60	4.35	0.70	13.68	7.20	0.00	✓
2	B	2.60	2.34	4.35	1.50	9.88	4.00	0.00	
2	C	4.72	4.50	5.86	5.10	13.13	11.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/min)	Final Slope	Final Intercept (PCU/min)
1	A		(calculated)	(calculated)	0.587	14.942
1	B		(calculated)	(calculated)	0.415	14.309
1	C		(calculated)	(calculated)	0.539	13.209
2	A		(calculated)	(calculated)	0.411	14.023
2	B		(calculated)	(calculated)	0.490	10.912
2	C		(calculated)	(calculated)	0.622	16.925

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/min)	Flow Scaling Factor (%)
1	A	DIRECT		N/A	100.000
1	B	Linked Arm		N/A	
1	C	DIRECT		N/A	100.000
2	A	Linked Arm		N/A	
2	B	DIRECT		N/A	100.000
2	C	DIRECT		N/A	100.000

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/min)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	B	2	A	Closely spaced	Normal	0.00	100.00	1.00
2	A	1	B	Closely spaced	Normal	0.00	100.00	1.00

Turning Proportions

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

		To		
From		B	C	A
	B	0.000	24.000	832.000
	C	13.000	0.000	38.000
	A	957.000	8.000	0.000

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

		To		
From		B	C	A
	B	0.00	0.03	0.97
	C	0.25	0.00	0.75
	A	0.99	0.01	0.00

Turning Counts / Proportions (PCU/min) - Junction 2 (for whole period)

		To		
From		B	C	A
	B	0.000	112.000	202.000
	C	59.000	0.000	654.000
	A	106.000	864.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

		To		
From		B	C	A
	B	0.00	0.36	0.64
	C	0.08	0.00	0.92
	A	0.11	0.89	0.00

Vehicle Mix

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

	To			
		B	C	A
From	B	1.000	1.000	1.000
	C	1.000	1.000	1.000
	A	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		B	C	A
From	B	0.0	0.0	0.0
	C	0.0	0.0	0.0
	A	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

	To			
		B	C	A
From	B	1.000	1.000	1.000
	C	1.000	1.000	1.000
	A	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

	To			
		B	C	A
From	B	0.0	0.0	0.0
	C	0.0	0.0	0.0
	A	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	A	1.19	606.27	154.21	F
1	B	0.99	42.40	0.00	E
1	C	0.55	84.61	1.13	F
2	A	1.00	46.78	0.00	E
2	B	1.05	317.52	26.80	F
2	C	0.79	19.41	3.75	C

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/min)	Entry Flow (PCU/min)	Circulating Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
1	A	16.09	13.53	0.20	0.00	13.89	1.159	38.35	96.329	F
1	B	13.61	13.61	0.11	0.00	14.26	0.955	0.00	36.149	E
1	C	0.85	0.80	13.23	0.00	1.88	0.453	0.74	53.762	F
2	A	13.63	13.63	0.97	0.00	13.63	1.000	0.00	46.771	E
2	B	5.23	4.53	12.14	0.00	4.96	1.055	10.52	94.329	F
2	C	11.89	11.66	2.92	0.00	15.11	0.787	3.38	16.478	C

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

Junction	Arm	Total Demand (PCU/min)	Entry Flow (PCU/min)	Circulating Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
1	A	16.09	13.52	0.21	0.00	13.54	1.188	76.92	266.568	F
1	B	14.00	14.00	0.11	0.00	14.26	0.982	0.00	41.519	E
1	C	0.85	0.83	13.61	0.00	1.54	0.552	1.06	81.444	F
2	A	13.62	13.62	0.98	0.00	13.62	1.000	0.00	46.784	E
2	B	5.23	4.83	12.13	0.00	4.97	1.054	16.55	191.850	F
2	C	11.89	11.87	3.11	0.00	14.99	0.793	3.62	19.039	C

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

Junction	Arm	Total Demand (PCU/min)	Entry Flow (PCU/min)	Circulating Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
1	A	16.09	13.52	0.22	0.00	13.52	1.190	115.56	435.777	F
1	B	14.04	14.04	0.11	0.00	14.26	0.984	0.00	42.135	E
1	C	0.85	0.85	13.65	0.00	1.54	0.551	1.13	84.611	F
2	A	13.62	13.62	0.98	0.00	13.62	1.000	0.00	46.785	E
2	B	5.23	4.88	12.13	0.00	4.97	1.054	21.85	257.474	F
2	C	11.89	11.88	3.14	0.00	14.97	0.794	3.71	19.304	C

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

Junction	Arm	Total Demand (PCU/min)	Entry Flow (PCU/min)	Circulating Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
1	A	16.09	13.51	0.22	0.00	13.52	1.190	154.21	606.274	F
1	B	14.06	14.06	0.11	0.00	14.26	0.986	0.00	42.405	E
1	C	0.85	0.85	13.66	0.00	1.58	0.539	1.13	82.189	F
2	A	13.62	13.62	0.98	0.00	13.62	1.000	0.00	46.785	E
2	B	5.23	4.90	12.13	0.00	4.97	1.054	26.80	317.524	F
2	C	11.89	11.89	3.15	0.00	14.96	0.795	3.75	19.414	C

(Default Analysis Set) - 2029 PM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	Junction 1 - Arm B	Internal storage space between linked junctions is small (1 PCU). Linked junction results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm A	Internal storage space between linked junctions is small (1 PCU). Linked junction results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	DemandSets	D4 - 2029 AM, AM	Demand Set 4: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2029 PM, PM	Demand Set 5: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2029 AM + Development, AM	Demand Set 6: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D7 - 2029 PM + Development, PM	Demand Set 7: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			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
2029 PM, PM	2029 PM	PM	4	Varies by Arm	17:00	18:00	60	15		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	1	Northern Roundabout	Mini-roundabout	B,C,A	225.81	F
2	2	Southern Roundabout	Mini-roundabout	B,C,A	167.69	F

Junction Network Options

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

Arms

Arms

Junction	Arm	Arm	Name	Description
1	A	A	High St (N)	
1	B	B	High St (S)	
1	C	C	Theobalds Station	
2	A	A	High St (N)	
2	B	B	Trinity Lane	
2	C	C	High St (S)	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/min)	Maximum Capacity (PCU/min)
1	A	0.00	1666.65
1	B	0.00	1666.65
1	C	0.00	1666.65
2	A	0.00	1666.65
2	B	0.00	1666.65
2	C	0.00	1666.65

Mini Roundabout Geometry

Junction	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	A	4.00	3.90	5.47	2.10	15.70	12.70	0.00	
1	B	3.70	3.60	4.65	1.00	13.69	7.40	0.00	✓
1	C	2.80	2.70	5.80	4.77	10.70	2.80	0.00	
2	A	3.95	3.60	4.35	0.70	13.68	7.20	0.00	✓
2	B	2.60	2.34	4.35	1.50	9.88	4.00	0.00	
2	C	4.72	4.50	5.86	5.10	13.13	11.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/min)	Final Slope	Final Intercept (PCU/min)
1	A		(calculated)	(calculated)	0.587	14.942
1	B		(calculated)	(calculated)	0.415	14.309
1	C		(calculated)	(calculated)	0.539	13.209
2	A		(calculated)	(calculated)	0.411	14.023
2	B		(calculated)	(calculated)	0.490	10.912
2	C		(calculated)	(calculated)	0.622	16.925

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/min)	Flow Scaling Factor (%)
1	A	DIRECT		N/A	100.000
1	B	Linked Arm		N/A	
1	C	DIRECT		N/A	100.000
2	A	Linked Arm		N/A	
2	B	DIRECT		N/A	100.000
2	C	DIRECT		N/A	100.000

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/min)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	B	2	A	Closely spaced	Normal	0.00	100.00	1.00
2	A	1	B	Closely spaced	Normal	0.00	100.00	1.00

Turning Proportions

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

		To		
From		B	C	A
	B	0.000	10.000	911.000
	C	27.000	0.000	34.000
	A	891.000	18.000	0.000

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

		To		
From		B	C	A
	B	0.00	0.01	0.99
	C	0.44	0.00	0.56
	A	0.98	0.02	0.00

Turning Counts / Proportions (PCU/min) - Junction 2 (for whole period)

		To		
From		B	C	A
	B	0.000	45.000	115.000
	C	64.000	0.000	806.000
	A	108.000	810.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

		To		
From		B	C	A
	B	0.00	0.28	0.72
	C	0.07	0.00	0.93
	A	0.12	0.88	0.00

Vehicle Mix

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

	To			
		B	C	A
From	B	1.000	1.000	1.000
	C	1.000	1.000	1.000
	A	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		B	C	A
From	B	0.0	0.0	0.0
	C	0.0	0.0	0.0
	A	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

	To			
		B	C	A
From	B	1.000	1.000	1.000
	C	1.000	1.000	1.000
	A	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

	To			
		B	C	A
From	B	0.0	0.0	0.0
	C	0.0	0.0	0.0
	A	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	A	1.13	404.38	101.40	F
1	B	1.00	45.77	0.00	E
1	C	0.58	79.86	1.26	F
2	A	1.00	46.78	0.00	E
2	B	0.76	53.45	2.48	F
2	C	1.09	302.14	74.01	F

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/min)	Entry Flow (PCU/min)	Circulating Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
1	A	15.14	13.46	0.43	0.00	13.99	1.082	25.22	69.332	F
1	B	14.20	14.20	0.27	0.00	14.20	1.000	0.00	45.771	E
1	C	1.01	0.96	14.04	0.00	2.29	0.440	0.72	43.709	E
2	A	13.62	13.62	0.99	0.00	13.62	1.000	0.00	46.784	E
2	B	2.66	2.49	12.02	0.00	3.50	0.760	2.48	53.448	F
2	C	14.51	13.39	1.79	0.00	14.19	1.023	16.80	51.645	F

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

Junction	Arm	Total Demand (PCU/min)	Entry Flow (PCU/min)	Circulating Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
1	A	15.14	13.46	0.43	0.00	13.52	1.120	50.48	181.435	F
1	B	14.20	14.20	0.27	0.00	14.20	1.000	0.00	45.771	E
1	C	1.01	0.98	14.04	0.00	1.77	0.570	1.14	73.099	F
2	A	13.62	13.62	0.97	0.00	13.62	1.000	0.00	46.775	E
2	B	2.66	2.75	12.02	0.00	5.02	0.530	1.19	27.281	D
2	C	14.51	13.19	1.97	0.00	13.32	1.089	36.53	135.290	F

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

Junction	Arm	Total Demand (PCU/min)	Entry Flow (PCU/min)	Circulating Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
1	A	15.14	13.44	0.44	0.00	13.47	1.124	75.92	292.120	F
1	B	14.20	14.20	0.27	0.00	14.20	1.000	0.00	45.771	E
1	C	1.01	1.00	14.04	0.00	1.74	0.581	1.25	79.857	F
2	A	13.62	13.62	0.98	0.00	13.62	1.000	0.00	46.779	E
2	B	2.66	2.66	12.02	0.00	5.02	0.530	1.16	25.503	D
2	C	14.51	13.26	1.91	0.00	13.31	1.090	55.27	218.990	F

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

Junction	Arm	Total Demand (PCU/min)	Entry Flow (PCU/min)	Circulating Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
1	A	15.14	13.44	0.45	0.00	13.45	1.125	101.40	404.379	F
1	B	14.20	14.20	0.27	0.00	14.20	1.000	0.00	45.771	E
1	C	1.01	1.01	14.04	0.00	1.78	0.567	1.26	77.117	F
2	A	13.62	13.62	0.98	0.00	13.62	1.000	0.00	46.777	E
2	B	2.66	2.66	12.02	0.00	5.02	0.530	1.15	25.463	D
2	C	14.51	13.26	1.91	0.00	13.29	1.092	74.01	302.138	F

(Default Analysis Set) - 2029 AM + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	Junction 1 - Arm B	Internal storage space between linked junctions is small (1 PCU). Linked junction results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm A	Internal storage space between linked junctions is small (1 PCU). Linked junction results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	DemandSets	D4 - 2029 AM, AM	Demand Set 4: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2029 PM, PM	Demand Set 5: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2029 AM + Development, AM	Demand Set 6: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D7 - 2029 PM + Development, PM	Demand Set 7: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			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
2029 AM + Development, AM	2029 AM + Development	AM	4	Varies by Arm	08:00	09:00	60	15		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	1	Northern Roundabout	Mini-roundabout	B,C,A	350.78	F
2	2	Southern Roundabout	Mini-roundabout	B,C,A	109.24	F

Junction Network Options

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

Arms

Arms

Junction	Arm	Arm	Name	Description
1	A	A	High St (N)	
1	B	B	High St (S)	
1	C	C	Theobalds Station	
2	A	A	High St (N)	
2	B	B	Trinity Lane	
2	C	C	High St (S)	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/min)	Maximum Capacity (PCU/min)
1	A	0.00	1666.65
1	B	0.00	1666.65
1	C	0.00	1666.65
2	A	0.00	1666.65
2	B	0.00	1666.65
2	C	0.00	1666.65

Mini Roundabout Geometry

Junction	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	A	4.00	3.90	5.47	2.10	15.70	12.70	0.00	
1	B	3.70	3.60	4.65	1.00	13.69	7.40	0.00	✓
1	C	2.80	2.70	5.80	4.77	10.70	2.80	0.00	
2	A	3.95	3.60	4.35	0.70	13.68	7.20	0.00	✓
2	B	2.60	2.34	4.35	1.50	9.88	4.00	0.00	
2	C	4.72	4.50	5.86	5.10	13.13	11.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/min)	Final Slope	Final Intercept (PCU/min)
1	A		(calculated)	(calculated)	0.587	14.942
1	B		(calculated)	(calculated)	0.415	14.309
1	C		(calculated)	(calculated)	0.539	13.209
2	A		(calculated)	(calculated)	0.411	14.023
2	B		(calculated)	(calculated)	0.490	10.912
2	C		(calculated)	(calculated)	0.622	16.925

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/min)	Flow Scaling Factor (%)
1	A	DIRECT		N/A	100.000
1	B	Linked Arm		N/A	
1	C	DIRECT		N/A	100.000
2	A	Linked Arm		N/A	
2	B	DIRECT		N/A	100.000
2	C	DIRECT		N/A	100.000

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/min)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	B	2	A	Closely spaced	Normal	0.00	100.00	1.00
2	A	1	B	Closely spaced	Normal	0.00	100.00	1.00

Turning Proportions

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

	To			
		B	C	A
From	B	0.000	24.000	862.000
	C	13.000	0.000	38.000
	A	964.000	8.000	0.000

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

	To			
		B	C	A
From	B	0.00	0.03	0.97
	C	0.25	0.00	0.75
	A	0.99	0.01	0.00

Turning Counts / Proportions (PCU/min) - Junction 2 (for whole period)

	To			
		B	C	A
From	B	0.000	112.000	202.000
	C	59.000	0.000	684.000
	A	106.000	871.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

	To			
		B	C	A
From	B	0.00	0.36	0.64
	C	0.08	0.00	0.92
	A	0.11	0.89	0.00

Vehicle Mix

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

	To			
		B	C	A
From	B	1.000	1.000	1.000
	C	1.000	1.000	1.000
	A	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		B	C	A
From	B	0.0	0.0	0.0
	C	0.0	0.0	0.0
	A	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

	To			
		B	C	A
From	B	1.000	1.000	1.000
	C	1.000	1.000	1.000
	A	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

	To			
		B	C	A
From	B	0.0	0.0	0.0
	C	0.0	0.0	0.0
	A	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	A	1.20	632.21	161.00	F
1	B	1.00	45.67	0.00	E
1	C	0.56	85.25	1.15	F
2	A	1.00	46.77	0.00	E
2	B	1.07	347.53	29.33	F
2	C	0.98	77.28	15.43	F

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/min)	Entry Flow (PCU/min)	Circulating Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
1	A	16.21	13.54	0.20	0.00	13.87	1.168	40.12	100.016	F
1	B	14.06	14.06	0.11	0.00	14.26	0.986	0.00	42.474	E
1	C	0.85	0.80	13.68	0.00	1.83	0.465	0.78	56.052	F
2	A	13.63	13.63	0.96	0.00	13.63	1.000	0.00	46.767	E
2	B	5.23	4.53	12.15	0.00	4.96	1.056	10.57	94.872	F
2	C	12.38	12.11	2.91	0.00	15.11	0.819	4.03	18.607	C

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

Junction	Arm	Total Demand (PCU/min)	Entry Flow (PCU/min)	Circulating Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
1	A	16.21	13.53	0.21	0.00	13.55	1.197	80.38	277.839	F
1	B	14.26	14.26	0.11	0.00	14.26	1.000	0.00	45.663	E
1	C	0.85	0.83	13.88	0.00	1.52	0.561	1.10	84.125	F
2	A	13.63	13.63	0.97	0.00	13.63	1.000	0.00	46.769	E
2	B	5.23	4.77	12.15	0.00	4.88	1.072	17.58	201.732	F
2	C	12.38	12.16	3.07	0.00	13.61	0.910	7.31	36.307	E

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

Junction	Arm	Total Demand (PCU/min)	Entry Flow (PCU/min)	Circulating Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
1	A	16.21	13.52	0.22	0.00	13.53	1.198	120.69	454.437	F
1	B	14.26	14.26	0.11	0.00	14.26	1.000	0.00	45.665	E
1	C	0.85	0.85	13.88	0.00	1.54	0.552	1.14	85.255	F
2	A	13.63	13.63	0.96	0.00	13.63	1.000	0.00	46.767	E
2	B	5.23	4.83	12.15	0.00	4.90	1.069	23.69	278.280	F
2	C	12.38	12.12	3.10	0.00	12.94	0.957	11.20	56.225	F

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

Junction	Arm	Total Demand (PCU/min)	Entry Flow (PCU/min)	Circulating Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
1	A	16.21	13.52	0.22	0.00	13.53	1.198	161.00	632.210	F
1	B	14.26	14.26	0.11	0.00	14.26	1.000	0.00	45.665	E
1	C	0.85	0.85	13.88	0.00	1.56	0.543	1.15	83.404	F
2	A	13.63	13.63	0.96	0.00	13.63	1.000	0.00	46.768	E
2	B	5.23	4.86	12.15	0.00	4.91	1.066	29.33	347.529	F
2	C	12.38	12.10	3.12	0.00	12.62	0.981	15.43	77.275	F

(Default Analysis Set) - 2029 PM + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	Junction 1 - Arm B	Internal storage space between linked junctions is small (1 PCU). Linked junction results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm A	Internal storage space between linked junctions is small (1 PCU). Linked junction results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	DemandSets	D4 - 2029 AM, AM	Demand Set 4: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2029 PM, PM	Demand Set 5: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2029 AM + Development, AM	Demand Set 6: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D7 - 2029 PM + Development, PM	Demand Set 7: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			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
2029 PM + Development, PM	2029 PM + Development	PM	4	Varies by Arm	17:00	18:00	60	15		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	1	Northern Roundabout	Mini-roundabout	B,C,A	243.93	F
2	2	Southern Roundabout	Mini-roundabout	B,C,A	271.22	F

Junction Network Options

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

Arms

Arms

Junction	Arm	Arm	Name	Description
1	A	A	High St (N)	
1	B	B	High St (S)	
1	C	C	Theobalds Station	
2	A	A	High St (N)	
2	B	B	Trinity Lane	
2	C	C	High St (S)	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/min)	Maximum Capacity (PCU/min)
1	A	0.00	1666.65
1	B	0.00	1666.65
1	C	0.00	1666.65
2	A	0.00	1666.65
2	B	0.00	1666.65
2	C	0.00	1666.65

Mini Roundabout Geometry

Junction	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	A	4.00	3.90	5.47	2.10	15.70	12.70	0.00	
1	B	3.70	3.60	4.65	1.00	13.69	7.40	0.00	✓
1	C	2.80	2.70	5.80	4.77	10.70	2.80	0.00	
2	A	3.95	3.60	4.35	0.70	13.68	7.20	0.00	✓
2	B	2.60	2.34	4.35	1.50	9.88	4.00	0.00	
2	C	4.72	4.50	5.86	5.10	13.13	11.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/min)	Final Slope	Final Intercept (PCU/min)
1	A		(calculated)	(calculated)	0.587	14.942
1	B		(calculated)	(calculated)	0.415	14.309
1	C		(calculated)	(calculated)	0.539	13.209
2	A		(calculated)	(calculated)	0.411	14.023
2	B		(calculated)	(calculated)	0.490	10.912
2	C		(calculated)	(calculated)	0.622	16.925

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/min)	Flow Scaling Factor (%)
1	A	DIRECT		N/A	100.000
1	B	Linked Arm		N/A	
1	C	DIRECT		N/A	100.000
2	A	Linked Arm		N/A	
2	B	DIRECT		N/A	100.000
2	C	DIRECT		N/A	100.000

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/min)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	B	2	A	Closely spaced	Normal	0.00	100.00	1.00
2	A	1	B	Closely spaced	Normal	0.00	100.00	1.00

Turning Proportions

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

		To		
From		B	C	A
	B	0.000	10.000	959.000
	C	27.000	0.000	34.000
	A	901.000	18.000	0.000

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

		To		
From		B	C	A
	B	0.00	0.01	0.99
	C	0.44	0.00	0.56
	A	0.98	0.02	0.00

Turning Counts / Proportions (PCU/min) - Junction 2 (for whole period)

		To		
From		B	C	A
	B	0.000	45.000	115.000
	C	64.000	0.000	855.000
	A	108.000	820.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

		To		
From		B	C	A
	B	0.00	0.28	0.72
	C	0.07	0.00	0.93
	A	0.12	0.88	0.00

Vehicle Mix

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

	To			
		B	C	A
From	B	1.000	1.000	1.000
	C	1.000	1.000	1.000
	A	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		B	C	A
From	B	0.0	0.0	0.0
	C	0.0	0.0	0.0
	A	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

	To			
		B	C	A
From	B	1.000	1.000	1.000
	C	1.000	1.000	1.000
	A	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

	To			
		B	C	A
From	B	0.0	0.0	0.0
	C	0.0	0.0	0.0
	A	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	A	1.14	438.48	110.37	F
1	B	1.00	45.77	0.00	E
1	C	0.58	80.47	1.27	F
2	A	1.00	46.74	0.00	E
2	B	0.86	73.62	3.57	F
2	C	1.17	505.61	125.29	F

Main Results for each time segment

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

Junction	Arm	Total Demand (PCU/min)	Entry Flow (PCU/min)	Circulating Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
1	A	15.31	13.48	0.42	0.00	13.97	1.096	27.47	73.944	F
1	B	14.20	14.20	0.26	0.00	14.20	1.000	0.00	45.770	E
1	C	1.01	0.96	14.05	0.00	2.24	0.451	0.75	45.420	E
2	A	13.64	13.64	0.93	0.00	13.64	1.000	0.00	46.743	E
2	B	2.66	2.42	12.05	0.00	3.10	0.858	3.57	73.619	F
2	C	15.31	13.39	1.74	0.00	13.86	1.105	28.79	77.350	F

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

Junction	Arm	Total Demand (PCU/min)	Entry Flow (PCU/min)	Circulating Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
1	A	15.31	13.48	0.44	0.00	13.53	1.132	54.96	195.787	F
1	B	14.20	14.20	0.26	0.00	14.20	1.000	0.00	45.770	E
1	C	1.01	0.98	14.05	0.00	1.76	0.573	1.16	74.205	F
2	A	13.65	13.65	0.91	0.00	13.65	1.000	0.00	46.731	E
2	B	2.66	2.82	12.06	0.00	5.00	0.532	1.20	29.191	D
2	C	15.31	13.09	2.03	0.00	13.12	1.167	62.16	220.236	F

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

Junction	Arm	Total Demand (PCU/min)	Entry Flow (PCU/min)	Circulating Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
1	A	15.31	13.46	0.44	0.00	13.48	1.135	82.64	316.328	F
1	B	14.20	14.20	0.26	0.00	14.20	1.000	0.00	45.769	E
1	C	1.01	1.00	14.05	0.00	1.73	0.583	1.26	80.468	F
2	A	13.64	13.64	0.92	0.00	13.64	1.000	0.00	46.737	E
2	B	2.66	2.66	12.06	0.00	5.00	0.532	1.17	25.710	D
2	C	15.31	13.21	1.91	0.00	13.22	1.158	93.74	363.531	F

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

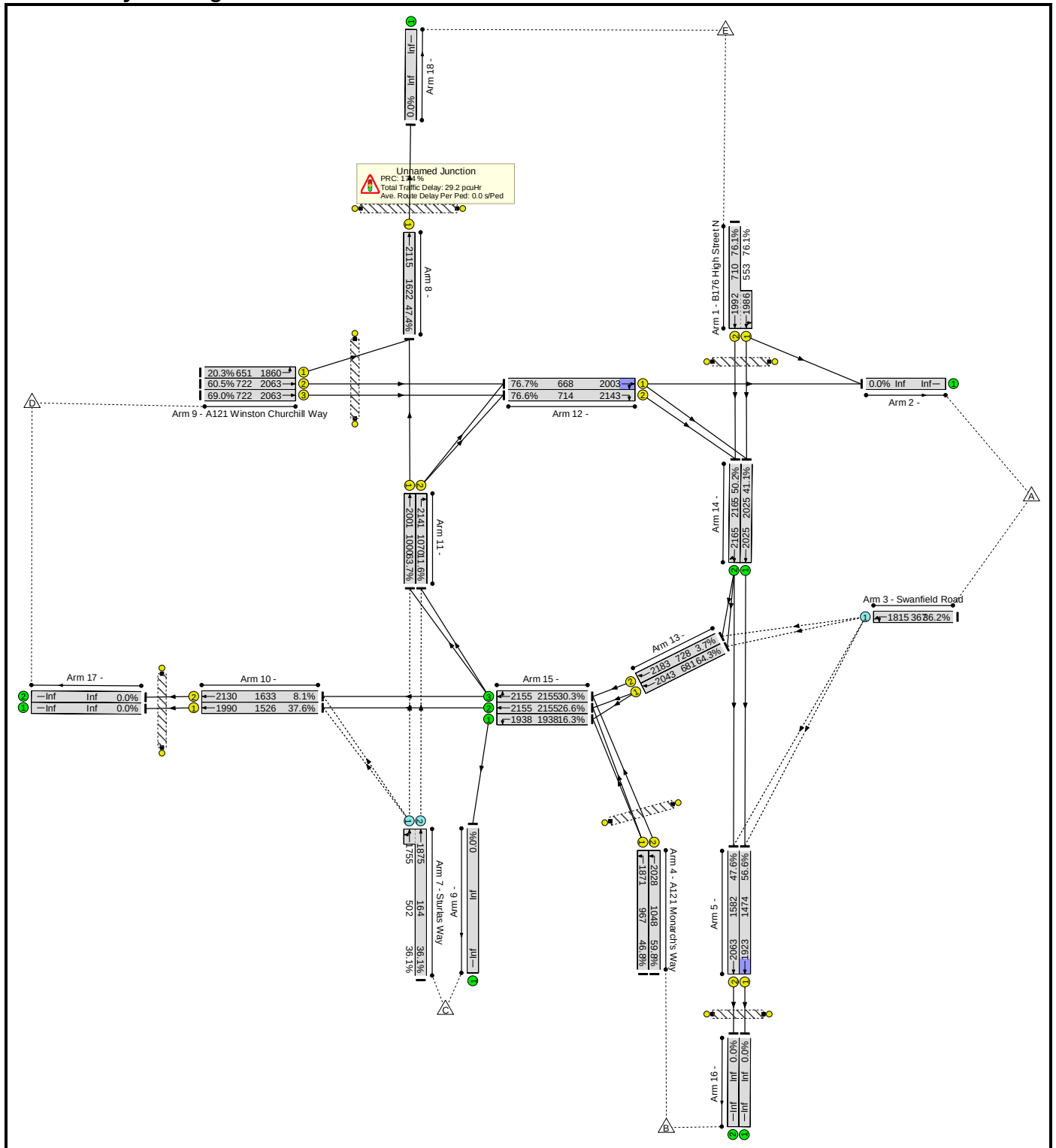
Junction	Arm	Total Demand (PCU/min)	Entry Flow (PCU/min)	Circulating Flow (PCU/min)	Pedestrian Demand (Ped/min)	Capacity (PCU/min)	RFC	End Queue (PCU)	Delay (s)	LOS
1	A	15.31	13.46	0.45	0.00	13.47	1.136	110.37	438.484	F
1	B	14.20	14.20	0.26	0.00	14.20	1.000	0.00	45.772	E
1	C	1.01	1.01	14.05	0.00	1.78	0.566	1.27	77.164	F
2	A	13.64	13.64	0.92	0.00	13.64	1.000	0.00	46.738	E
2	B	2.66	2.66	12.06	0.00	5.00	0.532	1.16	25.668	D
2	C	15.31	13.21	1.91	0.00	13.21	1.159	125.29	505.610	F

Basic Results Summary
Basic Results Summary

User and Project Details

Project:	Cheshunt Sports Village
Title:	A121 / B176 High Street / Sturlas Way / Monarch's Way / Swanfield Road
Location:	Cheshunt
File name:	A121_B176 High Street_Sturlas Way.lsg3x
Author:	UKSXB076
Company:	
Address:	
Notes:	

Scenario 1: '2029 BASE AM' (FG1: '2029 BASE AM', Plan 1: 'Network Control Plan 1')



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A121 / B176 High Street / Sturlas Way / Monarch's Way / Swanfield Road	-	-	-		-	-	-	-	-	-	76.7%	613	0	0	29.2	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	76.7%	613	0	0	29.2	-	-
1/2+1/1	B176 High Street N Left Ahead	U	E		1	30	-	961	1992:1986	710+553	76.1 : 76.1%	-	-	-	4.1	15.4	9.0
3/1	Swanfield Road Left Ahead	O	-		-	-	-	133	1815	367	36.2%	133	0	0	0.4	9.5	0.8
4/1	A121 Monarch's Way Left	U	H		1	30	-	452	1871	967	46.8%	-	-	-	1.6	12.7	5.2
4/2	A121 Monarch's Way Left	U	H		1	30	-	627	2028	1048	59.8%	-	-	-	2.5	14.4	7.9
5/1	Ahead	U	N		1	45	-	835	1923	1474	56.6%	-	-	-	0.9	3.7	2.0
5/2	Ahead	U	N		1	45	-	753	2063	1582	47.6%	-	-	-	0.6	3.0	1.6
7/2+7/1	Sturlas Way Left Ahead	O	-		-	-	-	240	1875:1755	164+502	36.1 : 36.1%	480	0	0	0.3	5.0	1.0
8/1	Ahead	U	L		1	45	-	769	2115	1622	47.4%	-	-	-	0.5	2.4	0.8
9/1	A121 Winston Churchill Way Left	U	B		1	20	-	132	1860	651	20.3%	-	-	-	0.6	17.1	1.6
9/2	A121 Winston Churchill Way Ahead	U	B		1	20	-	437	2063	722	60.5%	-	-	-	2.7	22.4	6.7
9/3	A121 Winston Churchill Way Ahead	U	B		1	20	-	498	2063	722	69.0%	-	-	-	3.4	24.7	8.2
10/1	Ahead	U	J		1	45	-	574	1990	1526	37.6%	-	-	-	0.4	2.3	0.6
10/2	Ahead	U	J		1	45	-	133	2130	1633	8.1%	-	-	-	0.1	2.9	0.6

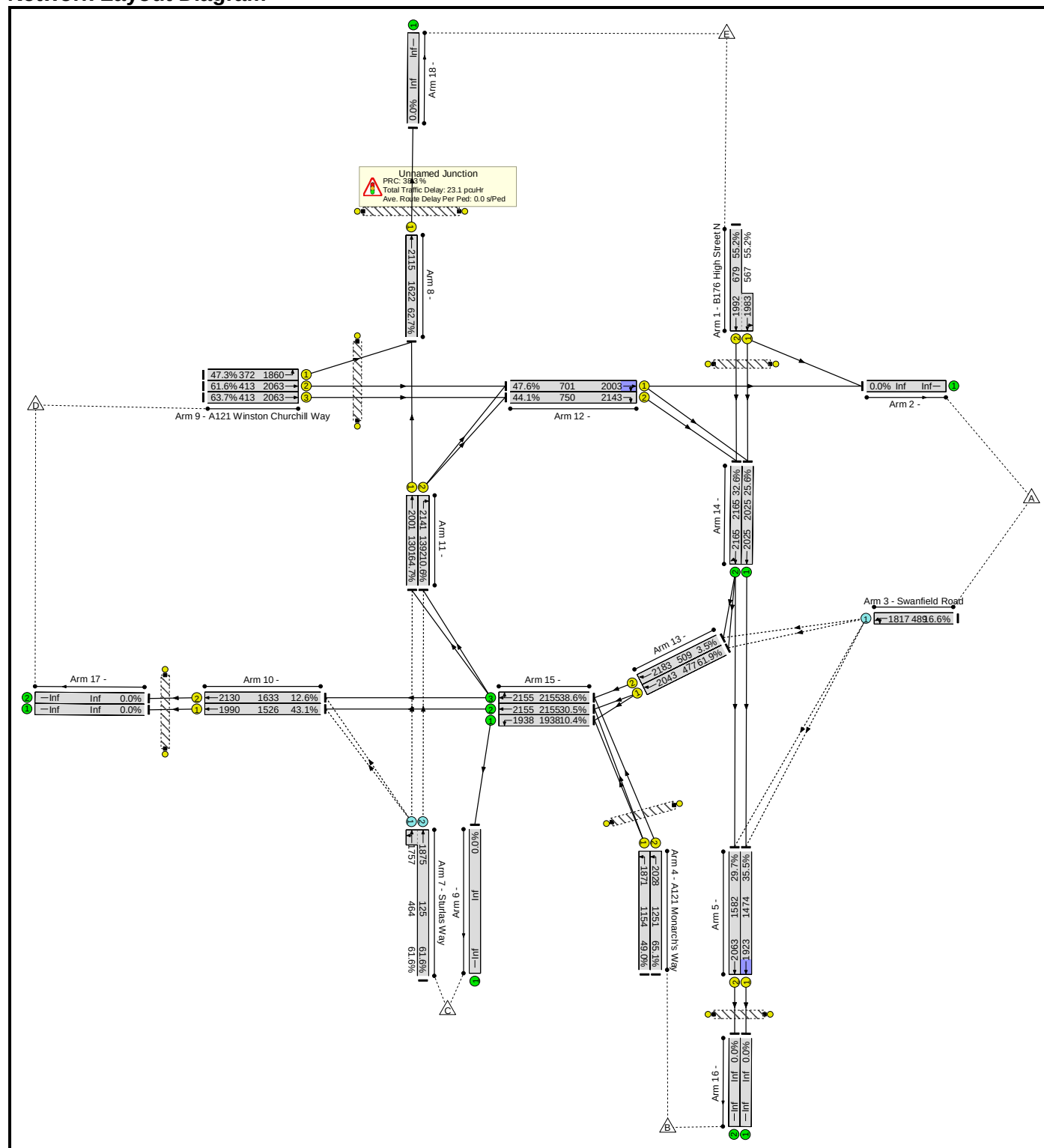
Basic Results Summary

11/1	Ahead	U	A		1	29	-	637	2001	1000	63.7%	-	-	-	1.3	7.1	2.1
11/2	Right	U	A		1	29	-	124	2141	1070	11.6%	-	-	-	0.2	6.4	0.6
12/1	Ahead Right	U	D		1	19	-	512	2003	668	76.7%	-	-	-	2.4	17.0	3.4
12/2	Right	U	D		1	19	-	547	2143	714	76.6%	-	-	-	2.4	15.5	3.1
13/1	Ahead	U	G		1	19	-	438	2043	681	64.3%	-	-	-	3.3	26.9	6.8
13/2	Ahead	U	G		1	19	-	27	2183	728	3.7%	-	-	-	0.2	21.4	0.4
14/1	Ahead	U	-		-	-	-	833	2025	2025	41.1%	-	-	-	0.3	1.5	0.3
14/2	Ahead Right	U	-		-	-	-	1087	2165	2165	50.2%	-	-	-	0.5	1.7	0.5
15/1	Left	U	-		-	-	-	316	1938	1938	16.3%	-	-	-	0.1	1.1	0.1
15/2	Ahead	U	-		-	-	-	574	2155	2155	26.6%	-	-	-	0.2	1.1	0.2
15/3	Ahead Right	U	-		-	-	-	654	2155	2155	30.3%	-	-	-	0.2	1.2	0.2
Ped Link: P1	Unnamed Ped Link	-	C		1	30	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	F		1	20	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	I		1	19	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P4	Unnamed Ped Link	-	K		1	5	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P5	Unnamed Ped Link	-	M		1	5	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P6	Unnamed Ped Link	-	O		1	5	-	0	-	0	0.0%	-	-	-	-	-	-
C1 Stream: 1 PRC for Signalled Lanes (%): 30.5 Total Delay for Signalled Lanes (pcuHr): 8.24 Cycle Time (s): 60 C1 Stream: 2 PRC for Signalled Lanes (%): 17.4 Total Delay for Signalled Lanes (pcuHr): 8.88 Cycle Time (s): 60 C1 Stream: 3 PRC for Signalled Lanes (%): 39.9 Total Delay for Signalled Lanes (pcuHr): 7.54 Cycle Time (s): 60 C1 Stream: 4 PRC for Signalled Lanes (%): 139.2 Total Delay for Signalled Lanes (pcuHr): 0.48 Cycle Time (s): 60 C1 Stream: 5 PRC for Signalled Lanes (%): 89.8 Total Delay for Signalled Lanes (pcuHr): 0.51 Cycle Time (s): 60 C1 Stream: 6 PRC for Signalled Lanes (%): 58.9 Total Delay for Signalled Lanes (pcuHr): 1.48 Cycle Time (s): 60 PRC Over All Lanes (%): 17.4 Total Delay Over All Lanes(pcuHr): 29.17																	

Basic Results Summary

Scenario 2: '2029 BASE PM' (FG2: '2029 BASE PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A121 / B176 High Street / Sturlas Way / Monarch's Way / Swanfield Road	-	-	-		-	-	-	-	-	-	65.1%	807	0	0	23.1	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	65.1%	807	0	0	23.1	-	-
1/2+1/1	B176 High Street N Left Ahead	U	E		1	29	-	688	1992:1983	679+567	55.2 : 55.2%	-	-	-	2.4	12.3	4.4
3/1	Swanfield Road Left Ahead	O	-		-	-	-	81	1817	489	16.6%	81	0	0	0.1	5.0	0.2
4/1	A121 Monarch's Way Left	U	H		1	36	-	565	1871	1154	49.0%	-	-	-	1.5	9.4	5.5
4/2	A121 Monarch's Way Left	U	H		1	36	-	814	2028	1251	65.1%	-	-	-	2.6	11.5	9.5
5/1	Ahead	U	N		1	45	-	523	1923	1474	35.5%	-	-	-	0.4	2.9	1.2
5/2	Ahead	U	N		1	45	-	469	2063	1582	29.7%	-	-	-	0.3	2.4	0.9
7/2+7/1	Sturlas Way Left Ahead	O	-		-	-	-	363	1875:1757	125+464	61.6 : 61.6%	726	0	0	1.0	9.7	2.8
8/1	Ahead	U	L		1	45	-	1017	2115	1622	62.7%	-	-	-	1.0	3.6	3.2
9/1	A121 Winston Churchill Way Left	U	B		1	11	-	176	1860	372	47.3%	-	-	-	1.5	30.3	3.0
9/2	A121 Winston Churchill Way Ahead	U	B		1	11	-	254	2063	413	61.6%	-	-	-	2.3	33.1	4.6
9/3	A121 Winston Churchill Way Ahead	U	B		1	11	-	263	2063	413	63.7%	-	-	-	2.5	33.9	4.9
10/1	Ahead	U	J		1	45	-	658	1990	1526	43.1%	-	-	-	0.6	3.5	2.3
10/2	Ahead	U	J		1	45	-	206	2130	1633	12.6%	-	-	-	0.2	3.3	1.0

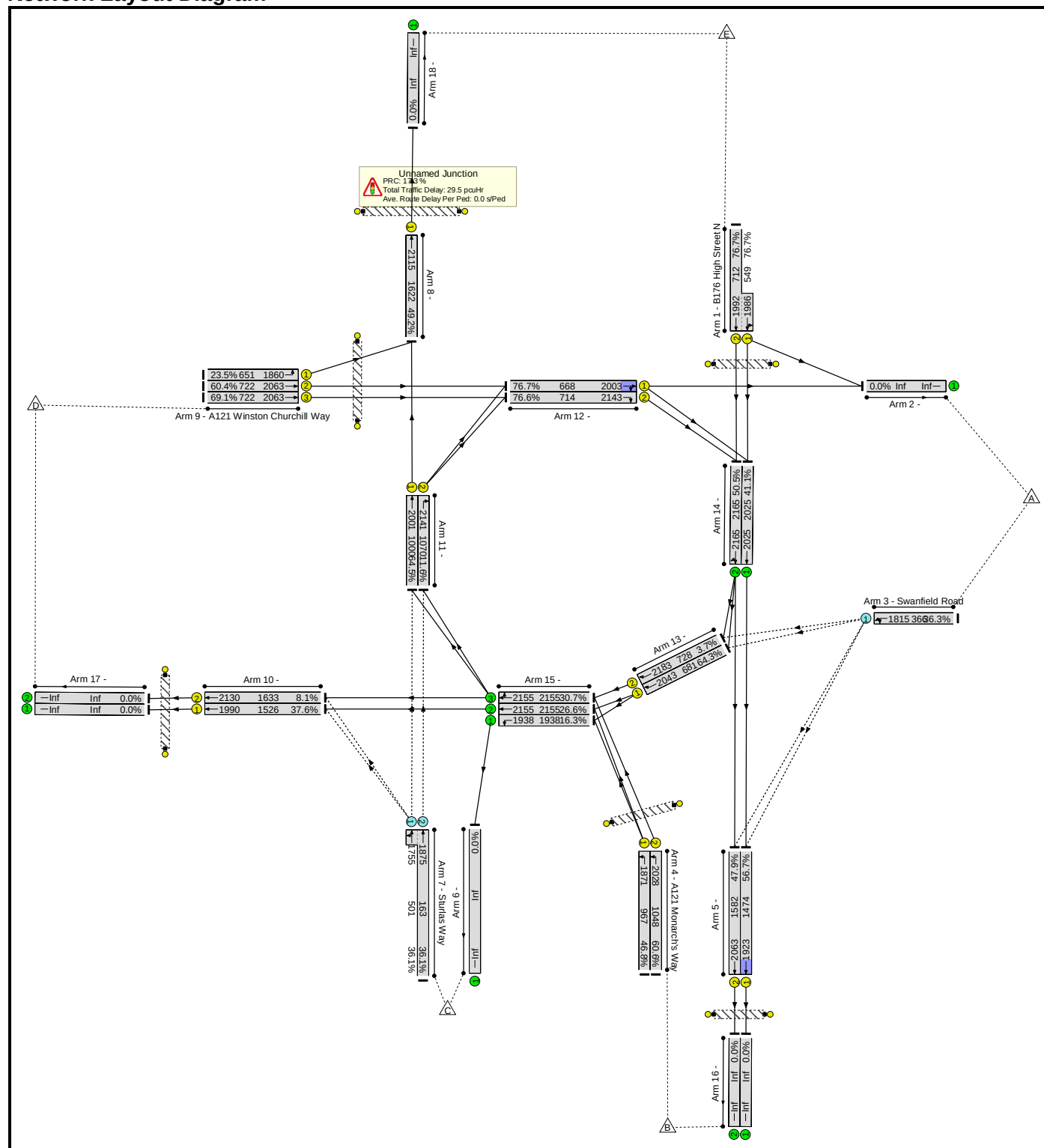
Basic Results Summary

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Basic Results Summary

Scenario 3: '2029 BASE + PROPOSED AM' (FG3: '2029 BASE + PROPOSED AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A121 / B176 High Street / Sturlas Way / Monarch's Way / Swanfield Road	-	-	-		-	-	-	-	-	-	76.7%	613	0	0	29.5	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	76.7%	613	0	0	29.5	-	-
1/2+1/1	B176 High Street N Left Ahead	U	E		1	30	-	967	1992:1986	712+549	76.7 : 76.7%	-	-	-	4.2	15.6	9.1
3/1	Swanfield Road Left Ahead	O	-		-	-	-	133	1815	366	36.3%	133	0	0	0.4	9.6	0.8
4/1	A121 Monarch's Way Left	U	H		1	30	-	452	1871	967	46.8%	-	-	-	1.6	12.7	5.2
4/2	A121 Monarch's Way Left	U	H		1	30	-	635	2028	1048	60.6%	-	-	-	2.6	14.6	8.2
5/1	Ahead	U	N		1	45	-	836	1923	1474	56.7%	-	-	-	0.9	3.7	2.0
5/2	Ahead	U	N		1	45	-	758	2063	1582	47.9%	-	-	-	0.6	3.0	1.7
7/2+7/1	Sturlas Way Left Ahead	O	-		-	-	-	240	1875:1755	163+501	36.1 : 36.1%	480	0	0	0.3	5.1	1.0
8/1	Ahead	U	L		1	45	-	798	2115	1622	49.2%	-	-	-	0.6	2.5	0.9
9/1	A121 Winston Churchill Way Left	U	B		1	20	-	153	1860	651	23.5%	-	-	-	0.7	17.4	1.9
9/2	A121 Winston Churchill Way Ahead	U	B		1	20	-	436	2063	722	60.4%	-	-	-	2.7	22.3	6.7
9/3	A121 Winston Churchill Way Ahead	U	B		1	20	-	499	2063	722	69.1%	-	-	-	3.4	24.7	8.2
10/1	Ahead	U	J		1	45	-	574	1990	1526	37.6%	-	-	-	0.4	2.3	0.6
10/2	Ahead	U	J		1	45	-	133	2130	1633	8.1%	-	-	-	0.1	2.9	0.6

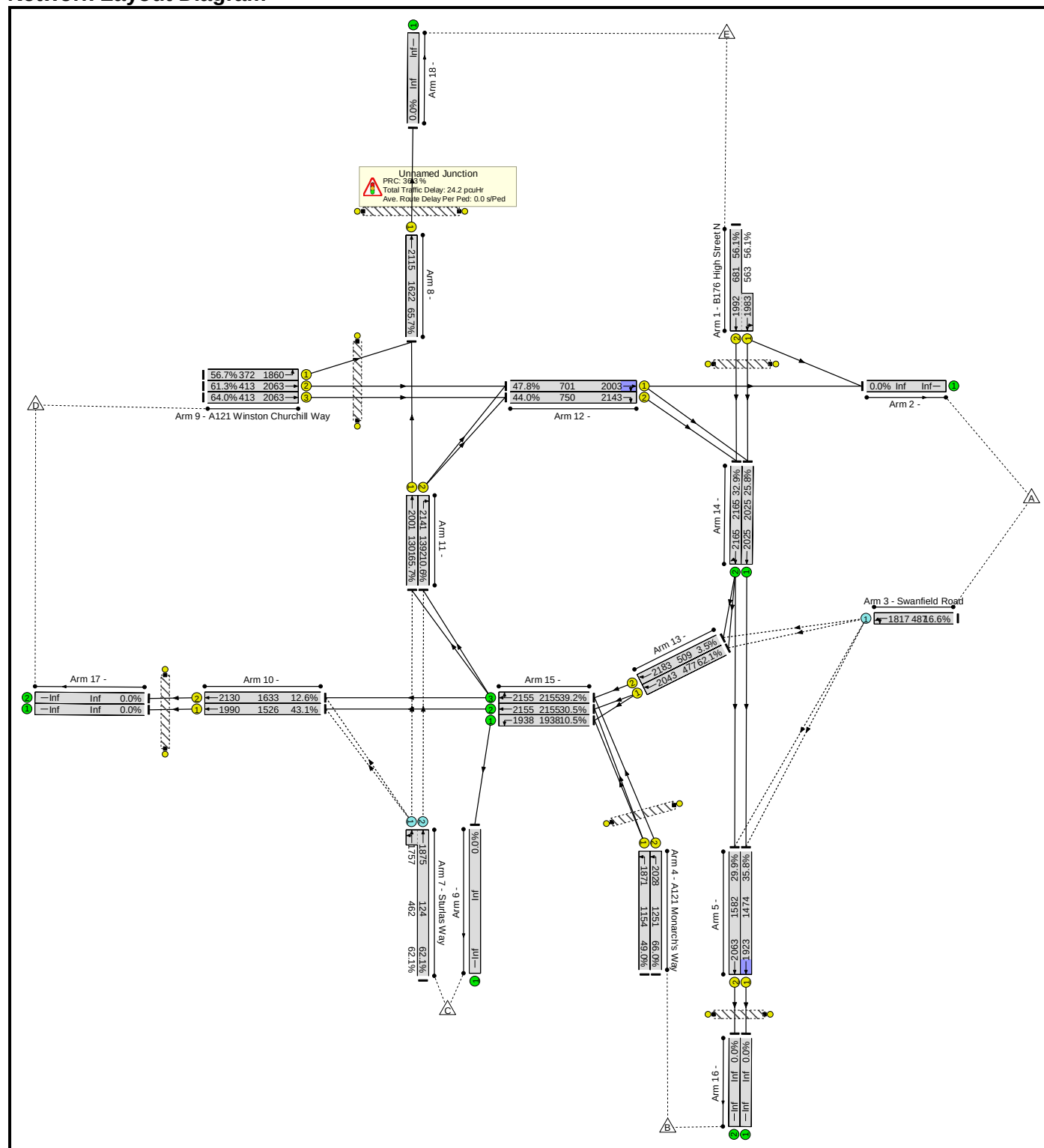
Basic Results Summary

11/1	Ahead	U	A		1	29	-	645	2001	1000	64.5%	-	-	-	1.3	7.2	2.2
11/2	Right	U	A		1	29	-	124	2141	1070	11.6%	-	-	-	0.2	6.4	0.6
12/1	Ahead Right	U	D		1	19	-	512	2003	668	76.7%	-	-	-	2.4	17.1	3.4
12/2	Right	U	D		1	19	-	547	2143	714	76.6%	-	-	-	2.3	15.4	3.1
13/1	Ahead	U	G		1	19	-	438	2043	681	64.3%	-	-	-	3.3	26.9	6.8
13/2	Ahead	U	G		1	19	-	27	2183	728	3.7%	-	-	-	0.2	21.4	0.4
14/1	Ahead	U	-		-	-	-	833	2025	2025	41.1%	-	-	-	0.3	1.5	0.3
14/2	Ahead Right	U	-		-	-	-	1093	2165	2165	50.5%	-	-	-	0.5	1.7	0.5
15/1	Left	U	-		-	-	-	316	1938	1938	16.3%	-	-	-	0.1	1.1	0.1
15/2	Ahead	U	-		-	-	-	574	2155	2155	26.6%	-	-	-	0.2	1.1	0.2
15/3	Ahead Right	U	-		-	-	-	662	2155	2155	30.7%	-	-	-	0.2	1.2	0.2
Ped Link: P1	Unnamed Ped Link	-	C		1	30	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	F		1	20	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P3	Unnamed Ped Link	-	I		1	19	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P4	Unnamed Ped Link	-	K		1	5	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P5	Unnamed Ped Link	-	M		1	5	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P6	Unnamed Ped Link	-	O		1	5	-	0	-	0	0.0%	-	-	-	-	-	-
C1Stream: 1 PRC for Signalled Lanes (%)30.2C1Stream: 2 PRC for Signalled Lanes (%)17.3C1Stream: 3 PRC for Signalled Lanes (%)39.9C1Stream: 4 PRC for Signalled Lanes (%)139.2C1Stream: 5 PRC for Signalled Lanes (%)82.9C1Stream: 6 PRC for Signalled Lanes (%)58.7PRC Over All Lanes (%)17.3Total Delay for Signalled Lanes (pcuHr)8.39Cycle Time (s)60Total Delay for Signalled Lanes (pcuHr)8.96Cycle Time (s)60Total Delay for Signalled Lanes (pcuHr)7.59Cycle Time (s)60Total Delay for Signalled Lanes (pcuHr)0.48Cycle Time (s)60Total Delay for Signalled Lanes (pcuHr)0.55Cycle Time (s)60Total Delay for Signalled Lanes (pcuHr)1.49Cycle Time (s)60Total Delay Over All Lanes(pcuHr)29.52																	

Basic Results Summary

Scenario 4: '2029 BASE + PROPOSED PM' (FG4: '2029 BASE + PROPOSED PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A121 / B176 High Street / Sturlas Way / Monarch's Way / Swanfield Road	-	-	-		-	-	-	-	-	-	66.0%	809	0	0	24.2	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	66.0%	809	0	0	24.2	-	-
1/2+1/1	B176 High Street N Left Ahead	U	E		1	29	-	698	1992:1983	681+563	56.1 : 56.1%	-	-	-	2.4	12.4	4.6
3/1	Swanfield Road Left Ahead	O	-		-	-	-	81	1817	487	16.6%	81	0	0	0.1	5.0	0.2
4/1	A121 Monarch's Way Left	U	H		1	36	-	565	1871	1154	49.0%	-	-	-	1.5	9.4	5.5
4/2	A121 Monarch's Way Left	U	H		1	36	-	826	2028	1251	66.0%	-	-	-	2.7	11.7	9.7
5/1	Ahead	U	N		1	45	-	528	1923	1474	35.8%	-	-	-	0.4	2.9	1.2
5/2	Ahead	U	N		1	45	-	473	2063	1582	29.9%	-	-	-	0.3	2.4	0.9
7/2+7/1	Sturlas Way Left Ahead	O	-		-	-	-	364	1875:1757	124+462	62.1 : 62.1%	728	0	0	1.0	9.9	2.9
8/1	Ahead	U	L		1	45	-	1065	2115	1622	65.7%	-	-	-	1.5	5.1	4.6
9/1	A121 Winston Churchill Way Left	U	B		1	11	-	211	1860	372	56.7%	-	-	-	1.9	32.8	3.8
9/2	A121 Winston Churchill Way Ahead	U	B		1	11	-	253	2063	413	61.3%	-	-	-	2.3	33.1	4.6
9/3	A121 Winston Churchill Way Ahead	U	B		1	11	-	264	2063	413	64.0%	-	-	-	2.5	34.0	4.9
10/1	Ahead	U	J		1	45	-	658	1990	1526	43.1%	-	-	-	0.6	3.4	2.2
10/2	Ahead	U	J		1	45	-	206	2130	1633	12.6%	-	-	-	0.2	3.2	1.0

Basic Results Summary

[illegible]

Junctions 8				
ARCADY 8 - Roundabout Module				
Version: 8.0.6.541 [19821,26/11/2015] © Copyright TRL Limited, 2017				
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Filename: 170306 Theobalds Ln_Crossbrook St.arc8

Path: \\uk.wspgroup.com\central data\Projects\700198xx\70019827 - Cheshunt Sports Village\D Design and Analysis\Development\ARCADY

Report generation date: 16/03/2017 11:43:31

- » (Default Analysis Set) - 2016 Base, AM
- » (Default Analysis Set) - 2016 Base, PM
- » (Default Analysis Set) - 2016 Base + Dev, AM
- » (Default Analysis Set) - 2016 Base + Dev, PM

Summary of junction performance

AM				
	Queue (Veh)	Delay (s)	RFC	LOS
A1 - 2016 Base				
Arm A	3.88	18.95	0.80	C
Arm B	0.12	4.49	0.11	A
Arm C	3.22	13.13	0.77	B

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

"D1 - 2016 Base, AM" model duration: 08:00 - 09:00

"D2 - 2016 Base, PM" model duration: 17:00 - 18:00

"D3 - 2016 Base + Dev, AM" model duration: 08:00 - 09:00

"D4 - 2016 Base + Dev, PM" model duration: 17:00 - 18:00

Run using Junctions 8.0.6.541 at 16/03/2017 11:43:27

File summary

Title	THEOBALDS LN CROSSBROOK ST
Location	Cheshunt
Site Number	
Date	10/03/2016
Version	
Status	
Identifier	
Client	
Jobnumber	70019827
Enumerator	UKCJG003 [W13UK0101]
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	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	s	-Min	perMin

(Default Analysis Set) - 2016 Base, 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)	ARCADY		✓				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
2016 Base, AM	2016 Base	AM		DIRECT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C				15.17	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	B176 S	
B	B	Theobalds Lane	
C	C	B176 N	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

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
A	3.20	4.50	1.10	8.80	18.20	23.00	
B	4.10	5.10	1.20	11.00	18.20	24.50	
C	3.00	4.50	3.30	78.00	18.20	12.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
A	Direct	(ARCADY 6 CT10 Import)	0.00	
B	Direct	(ARCADY 6 CT10 Import)	0.00	
C	Direct	(ARCADY 6 CT10 Import)	0.00	

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)
A		(calculated)	(calculated)	0.511	1012.056
B		(calculated)	(calculated)	0.575	1297.213
C		(calculated)	(calculated)	0.593	1202.294

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 (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	56.000	696.000
	B	55.000	0.000	41.000
	C	757.000	139.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.07	0.93
	B	0.57	0.00	0.43
	C	0.84	0.16	0.00

Vehicle Mix

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

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	0.80	18.95	3.88	C	752.00	752.00	217.66	17.37	3.63	218.13	17.40
B	0.11	4.49	0.12	A	96.00	96.00	7.10	4.44	0.12	7.10	4.44
C	0.77	13.13	3.22	B	896.00	896.00	184.73	12.37	3.08	185.00	12.39

Main Results for each time segment

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	752.00	188.00	737.57	801.29	137.08	0.00	942.02	938.25	0.798	0.00	3.61	16.606	C
B	96.00	24.00	95.53	192.01	682.64	0.00	904.54	797.70	0.106	0.00	0.12	4.448	A
C	896.00	224.00	883.65	723.44	54.73	0.00	1169.83	931.23	0.766	0.00	3.09	12.108	B

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	752.00	188.00	751.31	811.70	138.94	0.00	941.07	938.25	0.799	3.61	3.78	18.798	C
B	96.00	24.00	95.99	194.89	695.36	0.00	897.23	797.70	0.107	0.12	0.12	4.492	A
C	896.00	224.00	895.64	736.35	55.00	0.00	1169.67	931.23	0.766	3.09	3.18	13.091	B

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	752.00	188.00	751.75	811.89	138.98	0.00	941.05	938.25	0.799	3.78	3.84	18.913	C
B	96.00	24.00	96.00	194.96	695.77	0.00	896.99	797.70	0.107	0.12	0.12	4.494	A
C	896.00	224.00	895.87	736.77	55.00	0.00	1169.67	931.23	0.766	3.18	3.21	13.122	B

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	752.00	188.00	751.87	811.95	138.99	0.00	941.05	938.25	0.799	3.84	3.88	18.955	C
B	96.00	24.00	96.00	194.98	695.88	0.00	896.93	797.70	0.107	0.12	0.12	4.494	A
C	896.00	224.00	895.94	736.88	55.00	0.00	1169.67	931.23	0.766	3.21	3.22	13.133	B

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	46.79	3.12	16.606	C	B
B	1.73	0.12	4.448	A	A
C	41.44	2.76	12.108	B	B

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	55.69	3.71	18.798	C	B
B	1.78	0.12	4.492	A	A
C	47.12	3.14	13.091	B	B

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	57.25	3.82	18.913	C	B
B	1.79	0.12	4.494	A	A
C	47.91	3.19	13.122	B	B

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	57.93	3.86	18.955	C	B
B	1.79	0.12	4.494	A	A
C	48.25	3.22	13.133	B	B

(Default Analysis Set) - 2016 Base, 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)	ARCADY		✓				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
2016 Base, PM	2016 Base	PM		DIRECT	17:00	18:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C				15.91	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	B176 S	
B	B	Theobalds Lane	
C	C	B176 N	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

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
A	3.20	4.50	1.10	8.80	18.20	23.00	
B	4.10	5.10	1.20	11.00	18.20	24.50	
C	3.00	4.50	3.30	78.00	18.20	12.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
A	Direct	(ARCADY 6 CT10 Import)	0.00	
B	Direct	(ARCADY 6 CT10 Import)	0.00	
C	Direct	(ARCADY 6 CT10 Import)	0.00	

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)
A		(calculated)	(calculated)	0.511	1012.056
B		(calculated)	(calculated)	0.575	1297.213
C		(calculated)	(calculated)	0.593	1202.294

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 (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	51.000	797.000
	B	105.000	0.000	60.000
	C	702.000	32.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.06	0.94
	B	0.64	0.00	0.36
	C	0.96	0.04	0.00

Vehicle Mix

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

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	0.85	24.07	5.50	C	848.00	848.00	301.27	21.32	5.02	302.18	21.38
B	0.20	5.34	0.24	A	165.00	165.00	14.44	5.25	0.24	14.44	5.25
C	0.64	8.86	1.80	A	734.00	734.00	104.93	8.58	1.75	105.02	8.58

Main Results for each time segment

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	848.00	212.00	828.24	799.66	31.69	0.00	995.86	991.67	0.852	0.00	4.94	19.638	C
B	165.00	41.25	164.04	81.50	778.42	0.00	849.45	761.09	0.194	0.00	0.24	5.244	A
C	734.00	183.50	726.97	838.08	104.39	0.00	1140.38	915.03	0.644	0.00	1.76	8.569	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	848.00	212.00	846.61	806.90	32.00	0.00	995.71	991.67	0.852	4.94	5.29	23.617	C
B	165.00	41.25	164.98	82.91	795.69	0.00	839.52	761.09	0.197	0.24	0.24	5.336	A
C	734.00	183.50	733.90	855.69	104.99	0.00	1140.02	915.03	0.644	1.76	1.78	8.859	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	848.00	212.00	847.45	806.97	32.00	0.00	995.71	991.67	0.852	5.29	5.43	23.940	C
B	165.00	41.25	165.00	82.97	796.49	0.00	839.06	761.09	0.197	0.24	0.24	5.340	A
C	734.00	183.50	733.97	856.49	105.00	0.00	1140.02	915.03	0.644	1.78	1.79	8.862	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	848.00	212.00	847.71	806.98	32.00	0.00	995.71	991.67	0.852	5.43	5.50	24.071	C
B	165.00	41.25	165.00	82.98	796.73	0.00	838.92	761.09	0.197	0.24	0.24	5.341	A
C	734.00	183.50	733.98	856.72	105.00	0.00	1140.02	915.03	0.644	1.79	1.80	8.864	A

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	61.58	4.11	19.638	C	B
B	3.49	0.23	5.244	A	A
C	24.61	1.64	8.569	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	77.22	5.15	23.617	C	C
B	3.63	0.24	5.336	A	A
C	26.60	1.77	8.859	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	80.48	5.37	23.940	C	C
B	3.66	0.24	5.340	A	A
C	26.81	1.79	8.862	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	81.98	5.47	24.071	C	C
B	3.66	0.24	5.341	A	A
C	26.90	1.79	8.864	A	A

(Default Analysis Set) - 2016 Base + 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)	ARCADY		✓				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
2016 Base + Dev, AM	2016 Base + Dev	AM		DIRECT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C				17.21	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	B176 S	
B	B	Theobalds Lane	
C	C	B176 N	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

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
A	3.20	4.50	1.10	8.80	18.20	23.00	
B	4.10	5.10	1.20	11.00	18.20	24.50	
C	3.00	4.50	3.30	78.00	18.20	12.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
A	Direct	(ARCADY 6 CT10 Import)	0.00	
B	Direct	(ARCADY 6 CT10 Import)	0.00	
C	Direct	(ARCADY 6 CT10 Import)	0.00	

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)
A		(calculated)	(calculated)	0.511	1012.056
B		(calculated)	(calculated)	0.575	1297.213
C		(calculated)	(calculated)	0.593	1202.294

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 (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	86.000	696.000
	B	63.000	0.000	58.000
	C	757.000	148.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.11	0.89
	B	0.52	0.00	0.48
	C	0.84	0.16	0.00

Vehicle Mix

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

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	0.84	23.08	4.88	C	782.00	782.00	268.74	20.62	4.48	269.50	20.68
B	0.13	4.64	0.16	A	121.00	121.00	9.23	4.58	0.15	9.23	4.58
C	0.78	13.82	3.42	B	905.00	905.00	195.52	12.96	3.26	195.82	12.98

Main Results for each time segment

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	782.00	195.50	764.35	808.76	145.86	0.00	937.53	932.75	0.834	0.00	4.41	19.196	C
B	121.00	30.25	120.39	229.92	680.29	0.00	905.90	819.68	0.134	0.00	0.15	4.583	A
C	905.00	226.25	891.94	737.99	62.68	0.00	1165.12	949.16	0.777	0.00	3.27	12.638	B

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	782.00	195.50	780.83	819.65	147.93	0.00	936.48	932.75	0.835	4.41	4.71	22.721	C
B	121.00	30.25	120.99	233.80	694.96	0.00	897.46	819.68	0.135	0.15	0.16	4.636	A
C	905.00	226.25	904.59	752.95	63.00	0.00	1164.93	949.16	0.777	3.27	3.37	13.770	B

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	782.00	195.50	781.56	819.88	147.98	0.00	936.45	932.75	0.835	4.71	4.82	22.983	C
B	121.00	30.25	121.00	233.93	695.61	0.00	897.09	819.68	0.135	0.16	0.16	4.638	A
C	905.00	226.25	904.85	753.61	63.00	0.00	1164.93	949.16	0.777	3.37	3.40	13.808	B

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	782.00	195.50	781.77	819.94	147.99	0.00	936.45	932.75	0.835	4.82	4.88	23.084	C
B	121.00	30.25	121.00	233.96	695.79	0.00	896.98	819.68	0.135	0.16	0.16	4.638	A
C	905.00	226.25	904.92	753.79	63.00	0.00	1164.93	949.16	0.777	3.40	3.42	13.822	B

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	55.64	3.71	19.196	C	B
B	2.24	0.15	4.583	A	A
C	43.56	2.90	12.638	B	B

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	68.84	4.59	22.721	C	C
B	2.32	0.15	4.636	A	A
C	49.91	3.33	13.770	B	B

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	71.53	4.77	22.983	C	C
B	2.33	0.16	4.638	A	A
C	50.83	3.39	13.808	B	B

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	72.73	4.85	23.084	C	C
B	2.33	0.16	4.638	A	A
C	51.22	3.41	13.822	B	B

(Default Analysis Set) - 2016 Base + 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)	ARCADY		✓				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
2016 Base + Dev, PM	2016 Base + Dev	PM		DIRECT	17:00	18:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C				23.49	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	B176 S	
B	B	Theobalds Lane	
C	C	B176 N	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

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
A	3.20	4.50	1.10	8.80	18.20	23.00	
B	4.10	5.10	1.20	11.00	18.20	24.50	
C	3.00	4.50	3.30	78.00	18.20	12.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
A	Direct	(ARCADY 6 CT10 Import)	0.00	
B	Direct	(ARCADY 6 CT10 Import)	0.00	
C	Direct	(ARCADY 6 CT10 Import)	0.00	

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)
A		(calculated)	(calculated)	0.511	1012.056
B		(calculated)	(calculated)	0.575	1297.213
C		(calculated)	(calculated)	0.593	1202.294

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 (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	103.000	797.000
	B	115.000	0.000	77.000
	C	702.000	50.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.11	0.89
	B	0.60	0.00	0.40
	C	0.93	0.07	0.00

Vehicle Mix

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

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	0.91	39.08	9.29	E	900.00	900.00	476.60	31.77	7.94	479.23	31.95
B	0.23	5.56	0.30	A	192.00	192.00	17.43	5.45	0.29	17.43	5.45
C	0.66	9.42	1.95	A	752.00	752.00	113.88	9.09	1.90	113.98	9.09

Main Results for each time segment

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	900.00	225.00	870.15	809.19	49.49	0.00	986.77	980.84	0.912	0.00	7.46	26.359	D
B	192.00	48.00	190.85	149.08	770.57	0.00	853.97	797.59	0.225	0.00	0.29	5.420	A
C	752.00	188.00	744.37	847.11	114.31	0.00	1134.49	918.95	0.663	0.00	1.91	9.060	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	900.00	225.00	895.76	816.87	49.99	0.00	986.51	980.84	0.912	7.46	8.52	36.458	E
B	192.00	48.00	191.98	152.51	793.25	0.00	840.92	797.59	0.228	0.29	0.29	5.547	A
C	752.00	188.00	751.88	870.24	114.99	0.00	1134.09	918.95	0.663	1.91	1.94	9.410	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	900.00	225.00	898.04	816.96	50.00	0.00	986.51	980.84	0.912	8.52	9.01	38.233	E
B	192.00	48.00	192.00	152.77	795.27	0.00	839.76	797.59	0.229	0.29	0.30	5.557	A
C	752.00	188.00	751.96	872.27	115.00	0.00	1134.09	918.95	0.663	1.94	1.95	9.416	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	900.00	225.00	898.86	816.98	50.00	0.00	986.51	980.84	0.912	9.01	9.29	39.082	E
B	192.00	48.00	192.00	152.87	795.99	0.00	839.34	797.59	0.229	0.30	0.30	5.560	A
C	752.00	188.00	751.98	872.99	115.00	0.00	1134.09	918.95	0.663	1.95	1.95	9.417	A

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	86.20	5.75	26.359	D	C
B	4.19	0.28	5.420	A	A
C	26.57	1.77	9.060	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	121.10	8.07	36.458	E	D
B	4.39	0.29	5.547	A	A
C	28.89	1.93	9.410	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	131.85	8.79	38.233	E	D
B	4.42	0.29	5.557	A	A
C	29.15	1.94	9.416	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	137.45	9.16	39.082	E	D
B	4.43	0.30	5.560	A	A
C	29.26	1.95	9.417	A	A



Junctions 8				
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- » (Default Analysis Set) - 2016 Base, AM
- » (Default Analysis Set) - 2016 Base, PM
- » (Default Analysis Set) - 2016 + Dev, AM
- » (Default Analysis Set) - 2016 + Dev, PM

Summary of junction performance

	AM			
	Queue (Veh)	Delay (s)	RFC	LOS
A1 - 2016 Base				
Stream B-AC	0.83	16.93	0.46	C
Stream C-A	-	-	-	-
Stream C-B	0.00	0.00	0.00	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 - 2016 Base, AM" model duration: 08:00 - 09:00

"D2 - 2016 Base, PM" model duration: 17:00 - 18:30

"D3 - 2016 + Dev, AM" model duration: 08:00 - 09:00

"D4 - 2016 + Dev, PM" model duration: 17:00 - 18:00

Run using Junctions 8.0.6.541 at 16/03/2017 11:55:23

File summary

Title	Theobalds Lane and A10
Location	Cheshunt
Site Number	
Date	10/03/2016
Version	
Status	
Identifier	
Client	
Jobnumber	70019827
Enumerator	UKCJG003 [W13UK0101]
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	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	s	-Min	perMin

(Default Analysis Set) - 2016 Base, 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
2016 Base, AM	2016 Base	AM		DIRECT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	A,B,C		16.93	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A10 (N)		Major
B	B	Theobalds Lane		Minor
C	C	A10 (S)		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	14.30	✓	6.10		2.20	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	2.45										0	26

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream	Use Adjustment	Reason	Direct Intercept Adjustment (PCU/hr)
B-AC	✓	(PICADY 5 CT16 Import)	120.00
C-B	✓	(PICADY 5 CT16 Import)	0.00

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	526.499	0.054	0.136	0.086	0.195
1	B-C	605.046	0.059	0.150	-	-
1	C-B	573.963	0.142	0.142	-	-

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	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	110.000	1743.000
	B	0.000	0.000	179.000
	C	1793.000	0.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.06	0.94
	B	0.00	0.00	1.00
	C	1.00	0.00	0.00

Vehicle Mix

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

	To			
		A	B	C
From	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	10.0	10.0	10.0
	B	10.0	10.0	10.0
	C	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-AC	0.46	16.93	0.83	C	179.00	179.00	48.54	16.27	0.81	48.59	16.29
C-A	-	-	-	-	1793.00	1793.00	-	-	-	-	-
C-B	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A-B	-	-	-	-	110.00	110.00	-	-	-	-	-
A-C	-	-	-	-	1743.00	1743.00	-	-	-	-	-

Main Results for each time segment

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 (s)	LOS
B-AC	179.00	44.75	175.74	0.00	391.56	0.457	0.00	0.81	16.448	C
C-A	1793.00	448.25	1793.00	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	258.51	0.000	0.00	0.00	0.000	A
A-B	110.00	27.50	110.00	0.00	-	-	-	-	-	-
A-C	1743.00	435.75	1743.00	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 (s)	LOS
B-AC	179.00	44.75	178.95	0.00	391.56	0.457	0.81	0.83	16.919	C
C-A	1793.00	448.25	1793.00	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	258.51	0.000	0.00	0.00	0.000	A
A-B	110.00	27.50	110.00	0.00	-	-	-	-	-	-
A-C	1743.00	435.75	1743.00	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 (s)	LOS
B-AC	179.00	44.75	178.98	0.00	391.56	0.457	0.83	0.83	16.928	C
C-A	1793.00	448.25	1793.00	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	258.51	0.000	0.00	0.00	0.000	A
A-B	110.00	27.50	110.00	0.00	-	-	-	-	-	-
A-C	1743.00	435.75	1743.00	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 (s)	LOS
B-AC	179.00	44.75	178.99	0.00	391.56	0.457	0.83	0.83	16.931	C
C-A	1793.00	448.25	1793.00	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	258.51	0.000	0.00	0.00	0.000	A
A-B	110.00	27.50	110.00	0.00	-	-	-	-	-	-
A-C	1743.00	435.75	1743.00	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	11.24	0.75	16.448	C	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	12.34	0.82	16.919	C	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	12.46	0.83	16.928	C	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	12.51	0.83	16.931	C	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2016 Base, 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
2016 Base, PM	2016 Base	PM		DIRECT	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	A,B,C		14.56	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A10 (N)		Major
B	B	Theobalds Lane		Minor
C	C	A10 (S)		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	14.30	✓	6.10		2.20	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	2.45										0	26

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream	Use Adjustment	Reason	Direct Intercept Adjustment (PCU/hr)
B-AC	✓	(PICADY 5 CT16 Import)	120.00
C-B	✓	(PICADY 5 CT16 Import)	0.00

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	526.499	0.054	0.136	0.086	0.195
1	B-C	605.046	0.059	0.150	-	-
1	C-B	573.963	0.142	0.142	-	-

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	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	112.000	1617.000
	B	0.000	0.000	163.000
	C	1943.000	0.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.06	0.94
	B	0.00	0.00	1.00
	C	1.00	0.00	0.00

Vehicle Mix

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

	To			
		A	B	C
From	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	10.0	10.0	10.0
	B	10.0	10.0	10.0
From	C	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-AC	0.40	14.56	0.66	B	163.00	244.50	57.93	14.22	0.64	57.96	14.22
C-A	-	-	-	-	1943.00	2914.50	-	-	-	-	-
C-B	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A-B	-	-	-	-	112.00	168.00	-	-	-	-	-
A-C	-	-	-	-	1617.00	2425.50	-	-	-	-	-

Main Results for each time segment

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 (s)	LOS
B-AC	163.00	40.75	160.43	0.00	410.31	0.397	0.00	0.64	14.268	B
C-A	1943.00	485.75	1943.00	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	276.13	0.000	0.00	0.00	0.000	A
A-B	112.00	28.00	112.00	0.00	-	-	-	-	-	-
A-C	1617.00	404.25	1617.00	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 (s)	LOS
B-AC	163.00	40.75	162.97	0.00	410.31	0.397	0.64	0.65	14.550	B
C-A	1943.00	485.75	1943.00	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	276.13	0.000	0.00	0.00	0.000	A
A-B	112.00	28.00	112.00	0.00	-	-	-	-	-	-
A-C	1617.00	404.25	1617.00	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 (s)	LOS
B-AC	163.00	40.75	162.99	0.00	410.31	0.397	0.65	0.65	14.552	B
C-A	1943.00	485.75	1943.00	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	276.13	0.000	0.00	0.00	0.000	A
A-B	112.00	28.00	112.00	0.00	-	-	-	-	-	-
A-C	1617.00	404.25	1617.00	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 (s)	LOS
B-AC	163.00	40.75	162.99	0.00	410.31	0.397	0.65	0.65	14.555	B
C-A	1943.00	485.75	1943.00	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	276.13	0.000	0.00	0.00	0.000	A
A-B	112.00	28.00	112.00	0.00	-	-	-	-	-	-
A-C	1617.00	404.25	1617.00	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 (s)	LOS
B-AC	163.00	40.75	163.00	0.00	410.31	0.397	0.65	0.66	14.555	B
C-A	1943.00	485.75	1943.00	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	276.13	0.000	0.00	0.00	0.000	A
A-B	112.00	28.00	112.00	0.00	-	-	-	-	-	-
A-C	1617.00	404.25	1617.00	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

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 (s)	LOS
B-AC	163.00	40.75	163.00	0.00	410.31	0.397	0.66	0.66	14.555	B
C-A	1943.00	485.75	1943.00	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	276.13	0.000	0.00	0.00	0.000	A
A-B	112.00	28.00	112.00	0.00	-	-	-	-	-	-
A-C	1617.00	404.25	1617.00	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	8.97	0.60	14.268	B	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	9.71	0.65	14.550	B	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	9.78	0.65	14.552	B	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	9.81	0.65	14.555	B	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	9.83	0.66	14.555	B	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	9.84	0.66	14.555	B	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2016 + 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
2016 + Dev, AM	2016 + Dev	AM		DIRECT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	A,B,C		20.97	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A10 (N)		Major
B	B	Theobalds Lane		Minor
C	C	A10 (S)		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	14.30	✓	6.10		2.20	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	2.45										0	26

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream	Use Adjustment	Reason	Direct Intercept Adjustment (PCU/hr)
B-AC	✓	(PICADY 5 CT16 Import)	120.00
C-B	✓	(PICADY 5 CT16 Import)	0.00

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	526.499	0.054	0.136	0.086	0.195
1	B-C	605.046	0.059	0.150	-	-
1	C-B	573.963	0.142	0.142	-	-

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

Am	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000

Turning Proportions

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

	To			
From		A	B	C
	A	0.000	128.000	1743.000
	B	0.000	0.000	219.000
	C	1802.000	0.000	0.000

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

	To			
From		A	B	C
	A	0.00	0.07	0.93
	B	0.00	0.00	1.00
	C	1.00	0.00	0.00

Vehicle Mix

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

	To			
		A	B	C
	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	10.0	10.0	10.0
	B	10.0	10.0	10.0
	C	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-AC	0.56	20.97	1.26	C	219.00	219.00	72.49	19.86	1.21	72.61	19.89
C-A	-	-	-	-	1802.00	1802.00	-	-	-	-	-
C-B	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A-B	-	-	-	-	128.00	128.00	-	-	-	-	-
A-C	-	-	-	-	1743.00	1743.00	-	-	-	-	-

Main Results for each time segment

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 (s)	LOS
B-AC	219.00	54.75	214.14	0.00	390.49	0.561	0.00	1.21	19.915	C
C-A	1802.00	450.50	1802.00	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	255.95	0.000	0.00	0.00	0.000	A
A-B	128.00	32.00	128.00	0.00	-	-	-	-	-	-
A-C	1743.00	435.75	1743.00	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 (s)	LOS
B-AC	219.00	54.75	218.88	0.00	390.49	0.561	1.21	1.24	20.936	C
C-A	1802.00	450.50	1802.00	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	255.95	0.000	0.00	0.00	0.000	A
A-B	128.00	32.00	128.00	0.00	-	-	-	-	-	-
A-C	1743.00	435.75	1743.00	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 (s)	LOS
B-AC	219.00	54.75	218.96	0.00	390.49	0.561	1.24	1.26	20.962	C
C-A	1802.00	450.50	1802.00	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	255.95	0.000	0.00	0.00	0.000	A
A-B	128.00	32.00	128.00	0.00	-	-	-	-	-	-
A-C	1743.00	435.75	1743.00	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 (s)	LOS
B-AC	219.00	54.75	218.98	0.00	390.49	0.561	1.25	1.26	20.973	C
C-A	1802.00	450.50	1802.00	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	255.95	0.000	0.00	0.00	0.000	A
A-B	128.00	32.00	128.00	0.00	-	-	-	-	-	-
A-C	1743.00	435.75	1743.00	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	16.37	1.09	19.915	C	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	18.49	1.23	20.936	C	C
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-A-C	18.76	1.25	20.962	C	C
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-A-C	18.87	1.26	20.973	C	C
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2016 + 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
2016 + Dev, PM	2016 + Dev	PM		DIRECT	17:00	18:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	A,B,C		19.36	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A10 (N)		Major
B	B	Theobalds Lane		Minor
C	C	A10 (S)		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	14.30	✓	6.10		2.20	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	2.45										0	26

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream	Use Adjustment	Reason	Direct Intercept Adjustment (PCU/hr)
B-A-C	✓	(PICADY 5 CT16 Import)	120.00
C-B	✓	(PICADY 5 CT16 Import)	0.00

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	526.499	0.054	0.136	0.086	0.195
1	B-C	605.046	0.059	0.150	-	-
1	C-B	573.963	0.142	0.142	-	-

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	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	137.000	1617.000
	B	0.000	0.000	223.000
	C	1964.000	0.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.08	0.92
	B	0.00	0.00	1.00
	C	1.00	0.00	0.00

Vehicle Mix

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

	To			
		A	B	C
From	A	1.100	1.100	1.100
	B	1.100	1.100	1.100
	C	1.100	1.100	1.100

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	10.0	10.0	10.0
	B	10.0	10.0	10.0
	C	10.0	10.0	10.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-AC	0.55	19.36	1.19	C	223.00	223.00	68.44	18.41	1.14	68.54	18.44
C-A	-	-	-	-	1964.00	1964.00	-	-	-	-	-
C-B	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A-B	-	-	-	-	137.00	137.00	-	-	-	-	-
A-C	-	-	-	-	1617.00	1617.00	-	-	-	-	-

Main Results for each time segment

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 (s)	LOS
B-AC	223.00	55.75	218.41	0.00	408.83	0.545	0.00	1.15	18.496	C
C-A	1964.00	491.00	1964.00	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	272.57	0.000	0.00	0.00	0.000	A
A-B	137.00	34.25	137.00	0.00	-	-	-	-	-	-
A-C	1617.00	404.25	1617.00	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 (s)	LOS
B-AC	223.00	55.75	222.90	0.00	408.83	0.545	1.15	1.17	19.332	C
C-A	1964.00	491.00	1964.00	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	272.57	0.000	0.00	0.00	0.000	A
A-B	137.00	34.25	137.00	0.00	-	-	-	-	-	-
A-C	1617.00	404.25	1617.00	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 (s)	LOS
B-AC	223.00	55.75	222.96	0.00	408.83	0.545	1.17	1.18	19.351	C
C-A	1964.00	491.00	1964.00	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	272.57	0.000	0.00	0.00	0.000	A
A-B	137.00	34.25	137.00	0.00	-	-	-	-	-	-
A-C	1617.00	404.25	1617.00	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 (s)	LOS
B-AC	223.00	55.75	222.98	0.00	408.83	0.545	1.18	1.19	19.359	C
C-A	1964.00	491.00	1964.00	0.00	-	-	-	-	-	-
C-B	0.00	0.00	0.00	0.00	272.57	0.000	0.00	0.00	0.000	A
A-B	137.00	34.25	137.00	0.00	-	-	-	-	-	-
A-C	1617.00	404.25	1617.00	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	15.57	1.04	18.496	C	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	17.44	1.16	19.332	C	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	17.66	1.18	19.351	C	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-AC	17.76	1.18	19.359	C	B
C-A	-	-	-	-	-
C-B	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Junctions 8				
ARCADY 8 - Roundabout Module				
Version: 8.0.6.541 [19821,26/11/2015] © Copyright TRL Limited, 2017				
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Path: \\uk.wspgroup.com\central data\Projects\700198xx\70019827 - Cheshunt Sports Village\D Design and Analysis\Development\ARCADY

Report generation date: 16/03/2017 11:30:48

- » (Default Analysis Set) - 2016 Base, AM
- » (Default Analysis Set) - 2016 Base, PM
- » (Default Analysis Set) - 2016 Base + Dev, AM
- » (Default Analysis Set) - 2016 Base + Dev, PM

Summary of junction performance

AM				
	Queue (Veh)	Delay (s)	RFC	LOS
A1 - 2016 Base				
Arm A	0.84	4.19	0.46	A
Arm B	2.03	3.21	0.67	A
Arm C	0.66	3.59	0.40	A
Arm D	2.38	4.57	0.71	A

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

"D1 - 2016 Base, AM" model duration: 08:00 - 09:00

"D2 - 2016 Base, PM" model duration: 17:00 - 18:00

"D4 - 2016 Base + Dev, AM" model duration: 08:00 - 09:00

"D5 - 2016 Base + Dev, PM" model duration: 17:00 - 18:00

Run using Junctions 8.0.6.541 at 16/03/2017 11:30:44

File summary

Title	A10 / A121
Location	Cheshunt Sports Village
Site Number	
Date	23/03/2016
Version	
Status	
Identifier	
Client	
Jobnumber	70019827
Enumerator	
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	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	s	-Min	perMin

(Default Analysis Set) - 2016 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm D - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

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)	ARCADY		✓				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
2016 Base, AM	2016 Base	AM		DIRECT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C,D				3.84	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	A121 Winston Churchill Way E	
B	B	A10 S	
C	C	A121 Winston Churchill Way W	
D	D	A10 N	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

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
A	7.30	11.20	5.90	42.90	124.00	10.00	
B	11.30	11.30	0.00	95.90	124.00	10.00	
C	8.60	10.00	23.40	27.20	124.00	6.00	
D	7.20	11.90	38.50	63.30	124.00	10.00	

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)
A		(calculated)	(calculated)	0.624	2838.696
B		(calculated)	(calculated)	0.759	3794.030
C		(calculated)	(calculated)	0.681	3246.836
D		(calculated)	(calculated)	0.722	3535.355

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 (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000
D	DIRECT	✓	N/A	100.000

Turning Proportions

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

		To			
From		A	B	C	D
	A	0.000	244.000	127.000	355.000
	B	528.000	0.000	321.000	1438.000
	C	180.000	483.000	0.000	0.000
	D	360.000	1501.000	26.000	0.000

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

		To			
From		A	B	C	D
	A	0.00	0.34	0.17	0.49
	B	0.23	0.00	0.14	0.63
	C	0.27	0.73	0.00	0.00
	D	0.19	0.80	0.01	0.00

Vehicle Mix

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

		To			
From		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
From		A	B	C	D
	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	0.46	4.19	0.84	A	726.00	726.00	49.97	4.13	0.83	49.99	4.13
B	0.67	3.21	2.03	A	2287.00	2287.00	120.44	3.16	2.01	120.48	3.16
C	0.40	3.59	0.66	A	663.00	663.00	39.14	3.54	0.65	39.15	3.54
D	0.71	4.57	2.38	A	1887.00	1887.00	140.27	4.46	2.34	140.33	4.46

Main Results for each time segment

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	726.00	181.50	722.67	1063.64	2000.51	0.00	1590.26	1229.35	0.457	0.00	0.83	4.134	A
B	2287.00	571.75	2278.94	2217.52	505.66	0.00	3410.11	3150.37	0.671	0.00	2.01	3.162	A
C	663.00	165.75	660.39	472.16	2312.44	0.00	1672.46	993.75	0.396	0.00	0.65	3.548	A
D	1887.00	471.75	1877.62	1786.30	1186.53	0.00	2678.38	2292.31	0.705	0.00	2.34	4.445	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	726.00	181.50	725.97	1067.96	2009.90	0.00	1584.40	1229.35	0.458	0.83	0.84	4.193	A
B	2287.00	571.75	2286.95	2227.89	507.98	0.00	3408.35	3150.37	0.671	2.01	2.03	3.209	A
C	663.00	165.75	662.98	473.99	2320.94	0.00	1666.67	993.75	0.398	0.65	0.66	3.585	A
D	1887.00	471.75	1886.89	1792.95	1190.97	0.00	2675.18	2292.31	0.705	2.34	2.37	4.565	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	726.00	181.50	725.99	1067.99	2009.97	0.00	1584.35	1229.35	0.458	0.84	0.84	4.193	A
B	2287.00	571.75	2286.98	2227.97	507.99	0.00	3408.34	3150.37	0.671	2.03	2.03	3.209	A
C	663.00	165.75	663.00	474.00	2320.98	0.00	1666.64	993.75	0.398	0.66	0.66	3.586	A
D	1887.00	471.75	1886.97	1792.99	1190.99	0.00	2675.16	2292.31	0.705	2.37	2.38	4.567	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	726.00	181.50	726.00	1067.99	2009.99	0.00	1584.34	1229.35	0.458	0.84	0.84	4.193	A
B	2287.00	571.75	2286.99	2227.99	508.00	0.00	3408.34	3150.37	0.671	2.03	2.03	3.209	A
C	663.00	165.75	663.00	474.00	2320.99	0.00	1666.64	993.75	0.398	0.66	0.66	3.586	A
D	1887.00	471.75	1886.98	1792.99	1191.00	0.00	2675.16	2292.31	0.705	2.38	2.38	4.567	A

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	12.11	0.81	4.134	A	A
B	29.15	1.94	3.162	A	A
C	9.54	0.64	3.548	A	A
D	33.48	2.23	4.445	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	12.58	0.84	4.193	A	A
B	30.34	2.02	3.209	A	A
C	9.84	0.66	3.585	A	A
D	35.43	2.36	4.565	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	12.63	0.84	4.193	A	A
B	30.45	2.03	3.209	A	A
C	9.88	0.66	3.586	A	A
D	35.64	2.38	4.567	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	12.65	0.84	4.193	A	A
B	30.49	2.03	3.209	A	A
C	9.89	0.66	3.586	A	A
D	35.73	2.38	4.567	A	A

(Default Analysis Set) - 2016 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm D - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

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)	ARCADY		✓				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
2016 Base, PM	2016 Base	PM		DIRECT	17:00	18:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C,D				5.45	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	A121 Winston Churchill Way E	
B	B	A10 S	
C	C	A121 Winston Churchill Way W	
D	D	A10 N	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

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
A	7.30	11.20	5.90	42.90	124.00	10.00	
B	11.30	11.30	0.00	95.90	124.00	10.00	
C	8.60	10.00	23.40	27.20	124.00	6.00	
D	7.20	11.90	38.50	63.30	124.00	10.00	

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)
A		(calculated)	(calculated)	0.624	2838.696
B		(calculated)	(calculated)	0.759	3794.030
C		(calculated)	(calculated)	0.681	3246.836
D		(calculated)	(calculated)	0.722	3535.355

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 (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000
D	DIRECT	✓	N/A	100.000

Turning Proportions

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

		To			
From		A	B	C	D
	A	0.000	464.000	418.000	329.000
	B	356.000	0.000	614.000	1613.000
	C	131.000	273.000	0.000	0.000
	D	311.000	1675.000	10.000	0.000

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

		To			
From		A	B	C	D
	A	0.00	0.38	0.35	0.27
	B	0.14	0.00	0.24	0.62
	C	0.32	0.68	0.00	0.00
	D	0.16	0.84	0.01	0.00

Vehicle Mix

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

	To				
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	0.75	8.87	2.95	A	1211.00	1211.00	170.83	8.46	2.85	171.00	8.47
B	0.80	5.65	4.03	A	2583.00	2583.00	234.20	5.44	3.90	234.36	5.44
C	0.24	2.82	0.32	A	404.00	404.00	18.78	2.79	0.31	18.78	2.79
D	0.67	3.63	2.01	A	1996.00	1996.00	118.78	3.57	1.98	118.82	3.57

Main Results for each time segment

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	1211.00	302.75	1199.63	794.20	1950.45	0.00	1621.50	1092.50	0.747	0.00	2.84	8.324	A
B	2583.00	645.75	2567.38	2400.13	749.94	0.00	3224.64	3273.87	0.801	0.00	3.91	5.357	A
C	404.00	101.00	402.75	1034.32	2283.00	0.00	1692.50	1345.66	0.239	0.00	0.31	2.788	A
D	1996.00	499.00	1988.05	1929.15	756.60	0.00	2988.90	2237.56	0.668	0.00	1.99	3.571	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	1211.00	302.75	1210.69	797.94	1957.94	0.00	1616.82	1092.50	0.749	2.84	2.92	8.847	A
B	2583.00	645.75	2582.67	2411.82	756.81	0.00	3219.43	3273.87	0.802	3.91	3.99	5.647	A
C	404.00	101.00	403.99	1041.82	2297.66	0.00	1682.52	1345.66	0.240	0.31	0.32	2.815	A
D	1996.00	499.00	1995.94	1941.71	759.94	0.00	2986.49	2237.56	0.668	1.99	2.00	3.633	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	1211.00	302.75	1210.91	797.98	1957.98	0.00	1616.80	1092.50	0.749	2.92	2.94	8.863	A
B	2583.00	645.75	2582.90	2411.95	756.94	0.00	3219.33	3273.87	0.802	3.99	4.01	5.652	A
C	404.00	101.00	404.00	1041.94	2297.90	0.00	1682.36	1345.66	0.240	0.32	0.32	2.815	A
D	1996.00	499.00	1995.98	1941.91	759.98	0.00	2986.46	2237.56	0.668	2.00	2.01	3.633	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	1211.00	302.75	1210.96	797.99	1957.99	0.00	1616.79	1092.50	0.749	2.94	2.95	8.865	A
B	2583.00	645.75	2582.95	2411.98	756.97	0.00	3219.31	3273.87	0.802	4.01	4.03	5.654	A
C	404.00	101.00	404.00	1041.97	2297.95	0.00	1682.32	1345.66	0.240	0.32	0.32	2.815	A
D	1996.00	499.00	1995.99	1941.96	759.99	0.00	2986.45	2237.56	0.668	2.01	2.01	3.633	A

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	39.23	2.62	8.324	A	A
B	54.49	3.63	5.357	A	A
C	4.60	0.31	2.788	A	A
D	28.66	1.91	3.571	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	43.38	2.89	8.847	A	A
B	59.37	3.96	5.647	A	A
C	4.71	0.31	2.815	A	A
D	29.94	2.00	3.633	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	44.00	2.93	8.863	A	A
B	60.04	4.00	5.652	A	A
C	4.73	0.32	2.815	A	A
D	30.07	2.00	3.633	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	44.23	2.95	8.865	A	A
B	60.30	4.02	5.654	A	A
C	4.73	0.32	2.815	A	A
D	30.12	2.01	3.633	A	A

(Default Analysis Set) - 2016 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm D - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

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)	ARCADY		✓				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
2016 Base + Dev, AM	2016 Base + Dev	AM		DIRECT	08:00	09:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C,D				4.02	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	A121 Winston Churchill Way E	
B	B	A10 S	
C	C	A121 Winston Churchill Way W	
D	D	A10 N	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

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
A	7.30	11.20	5.90	42.90	124.00	10.00	
B	11.30	11.30	0.00	95.90	124.00	10.00	
C	8.60	10.00	23.40	27.20	124.00	6.00	
D	7.20	11.90	38.50	63.30	124.00	10.00	

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)
A		(calculated)	(calculated)	0.624	2838.696
B		(calculated)	(calculated)	0.759	3794.030
C		(calculated)	(calculated)	0.681	3246.836
D		(calculated)	(calculated)	0.722	3535.355

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 (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000
D	DIRECT	✓	N/A	100.000

Turning Proportions

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

		To			
From		A	B	C	D
	A	0.000	244.000	127.000	355.000
	B	549.000	0.000	321.000	1438.000
	C	181.000	483.000	0.000	0.000
	D	360.000	1528.000	29.000	9.000

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

		To			
From		A	B	C	D
	A	0.00	0.34	0.17	0.49
	B	0.24	0.00	0.14	0.62
	C	0.27	0.73	0.00	0.00
	D	0.19	0.79	0.02	0.00

Vehicle Mix

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

		To			
From		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
From		A	B	C	D
	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	0.47	4.32	0.87	A	726.00	726.00	51.39	4.25	0.86	51.41	4.25
B	0.68	3.30	2.11	A	2308.00	2308.00	124.81	3.24	2.08	124.85	3.25
C	0.40	3.66	0.67	A	664.00	664.00	40.04	3.62	0.67	40.05	3.62
D	0.72	4.91	2.61	A	1926.00	1926.00	153.46	4.78	2.56	153.54	4.78

Main Results for each time segment

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	726.00	181.50	722.57	1085.37	2038.72	0.00	1566.42	1231.94	0.463	0.00	0.86	4.249	A
B	2308.00	577.00	2299.65	2243.77	517.52	0.00	3401.11	3138.88	0.679	0.00	2.09	3.243	A
C	664.00	166.00	661.33	475.08	2342.09	0.00	1652.27	989.63	0.402	0.00	0.67	3.624	A
D	1926.00	481.50	1915.74	1795.07	1208.34	0.00	2662.63	2281.33	0.723	0.00	2.56	4.756	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	726.00	181.50	725.96	1089.96	2048.88	0.00	1560.08	1231.94	0.465	0.86	0.87	4.315	A
B	2308.00	577.00	2307.94	2254.87	519.97	0.00	3399.25	3138.88	0.679	2.09	2.10	3.298	A
C	664.00	166.00	663.98	476.98	2350.93	0.00	1646.25	989.63	0.403	0.67	0.67	3.664	A
D	1926.00	481.50	1925.87	1801.95	1212.96	0.00	2659.29	2281.33	0.724	2.56	2.60	4.906	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	726.00	181.50	725.99	1089.99	2048.96	0.00	1560.02	1231.94	0.465	0.87	0.87	4.316	A
B	2308.00	577.00	2307.98	2254.96	519.99	0.00	3399.23	3138.88	0.679	2.10	2.11	3.298	A
C	664.00	166.00	664.00	477.00	2350.98	0.00	1646.22	989.63	0.403	0.67	0.67	3.664	A
D	1926.00	481.50	1925.96	1801.98	1212.99	0.00	2659.27	2281.33	0.724	2.60	2.61	4.909	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	726.00	181.50	726.00	1089.99	2048.98	0.00	1560.01	1231.94	0.465	0.87	0.87	4.316	A
B	2308.00	577.00	2307.99	2254.98	520.00	0.00	3399.23	3138.88	0.679	2.11	2.11	3.298	A
C	664.00	166.00	664.00	477.00	2350.99	0.00	1646.21	989.63	0.403	0.67	0.67	3.664	A
D	1926.00	481.50	1925.98	1801.99	1213.00	0.00	2659.27	2281.33	0.724	2.61	2.61	4.909	A

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	12.44	0.83	4.249	A	A
B	30.17	2.01	3.243	A	A
C	9.75	0.65	3.624	A	A
D	36.45	2.43	4.756	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	12.94	0.86	4.315	A	A
B	31.45	2.10	3.298	A	A
C	10.07	0.67	3.664	A	A
D	38.79	2.59	4.906	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	13.00	0.87	4.316	A	A
B	31.57	2.10	3.298	A	A
C	10.11	0.67	3.664	A	A
D	39.06	2.60	4.909	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	13.02	0.87	4.316	A	A
B	31.62	2.11	3.298	A	A
C	10.12	0.67	3.664	A	A
D	39.16	2.61	4.909	A	A

(Default Analysis Set) - 2016 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm D - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

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)	ARCADY		✓				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
2016 Base + Dev, FM	2016 Base + Dev	FM		DIRECT	17:00	18:00	60	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C,D				5.96	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	A121 Winston Churchill Way E	
B	B	A10 S	
C	C	A121 Winston Churchill Way W	
D	D	A10 N	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

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
A	7.30	11.20	5.90	42.90	124.00	10.00	
B	11.30	11.30	0.00	95.90	124.00	10.00	
C	8.60	10.00	23.40	27.20	124.00	6.00	
D	7.20	11.90	38.50	63.30	124.00	10.00	

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)
A		(calculated)	(calculated)	0.624	2838.696
B		(calculated)	(calculated)	0.759	3794.030
C		(calculated)	(calculated)	0.681	3246.836
D		(calculated)	(calculated)	0.722	3535.355

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 (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000
D	DIRECT	✓	N/A	100.000

Turning Proportions

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

		To			
From		A	B	C	D
	A	0.000	464.000	418.000	329.000
	B	393.000	0.000	614.000	1613.000
	C	134.000	273.000	0.000	0.000
	D	311.000	1709.000	15.000	21.000

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

		To			
From		A	B	C	D
	A	0.00	0.38	0.35	0.27
	B	0.15	0.00	0.23	0.62
	C	0.33	0.67	0.00	0.00
	D	0.15	0.83	0.01	0.01

Vehicle Mix

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

	To				
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	0.77	9.76	3.25	A	1211.00	1211.00	186.91	9.26	3.12	187.11	9.27
B	0.82	6.21	4.48	A	2620.00	2620.00	259.24	5.94	4.32	259.42	5.94
C	0.25	2.91	0.33	A	407.00	407.00	19.55	2.88	0.33	19.55	2.88
D	0.70	3.99	2.27	A	2056.00	2056.00	134.04	3.91	2.23	134.09	3.91

Main Results for each time segment

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	1211.00	302.75	1198.58	833.63	2009.52	0.00	1584.64	1104.45	0.764	0.00	3.10	9.056	A
B	2620.00	655.00	2602.73	2432.92	775.18	0.00	3205.48	3247.27	0.817	0.00	4.32	5.816	A
C	407.00	101.75	405.70	1038.60	2339.31	0.00	1654.16	1334.39	0.246	0.00	0.32	2.881	A
D	2056.00	514.00	2047.03	1948.90	796.11	0.00	2960.36	2219.79	0.695	0.00	2.24	3.904	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	1211.00	302.75	1210.60	837.92	2017.92	0.00	1579.39	1104.45	0.767	3.10	3.20	9.737	A
B	2620.00	655.00	2619.57	2445.77	782.75	0.00	3199.73	3247.27	0.819	4.32	4.43	6.194	A
C	407.00	101.75	406.99	1046.76	2355.56	0.00	1643.10	1334.39	0.248	0.32	0.33	2.911	A
D	2056.00	514.00	2055.92	1962.62	799.92	0.00	2957.61	2219.79	0.695	2.24	2.26	3.992	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	1211.00	302.75	1210.88	837.98	2017.98	0.00	1579.36	1104.45	0.767	3.20	3.23	9.757	A
B	2620.00	655.00	2619.87	2445.93	782.93	0.00	3199.60	3247.27	0.819	4.43	4.46	6.203	A
C	407.00	101.75	407.00	1046.93	2355.87	0.00	1642.89	1334.39	0.248	0.33	0.33	2.912	A
D	2056.00	514.00	2055.97	1962.89	799.98	0.00	2957.57	2219.79	0.695	2.26	2.27	3.992	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	1211.00	302.75	1210.94	837.99	2017.99	0.00	1579.35	1104.45	0.767	3.23	3.25	9.763	A
B	2620.00	655.00	2619.94	2445.97	782.96	0.00	3199.57	3247.27	0.819	4.46	4.48	6.209	A
C	407.00	101.75	407.00	1046.97	2355.94	0.00	1642.84	1334.39	0.248	0.33	0.33	2.912	A
D	2056.00	514.00	2055.99	1962.95	799.99	0.00	2957.56	2219.79	0.695	2.27	2.27	3.992	A

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	42.47	2.83	9.056	A	A
B	59.74	3.98	5.816	A	A
C	4.78	0.32	2.881	A	A
D	32.17	2.14	3.904	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	47.51	3.17	9.737	A	A
B	65.79	4.39	6.194	A	A
C	4.91	0.33	2.911	A	A
D	33.82	2.25	3.992	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	48.31	3.22	9.757	A	A
B	66.68	4.45	6.203	A	A
C	4.93	0.33	2.912	A	A
D	33.99	2.27	3.992	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	48.62	3.24	9.763	A	A
B	67.03	4.47	6.209	A	A
C	4.93	0.33	2.912	A	A
D	34.06	2.27	3.992	A	A



Junctions 8				
PICADY 8 - Priority Intersection Module				
Version: 8.0.6.541 [19821,26/11/2015] © Copyright TRL Limited, 2017				
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Filename: 170306 Theobalds Lane_Cedar Park_Western Site Access.arc8

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Report generation date: 16/03/2017 12:40:36

- » (Default Analysis Set) - 2016 Base, AM
- » (Default Analysis Set) - 2016 Base, PM
- » (Default Analysis Set) - 2016 Base + Dev, AM
- » (Default Analysis Set) - 2016 Base + Dev, PM

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
A1 - 2016 Base				
Stream B-ACD	0.01	6.38	0.01	A
Stream A-BCD	0.00	5.29	0.00	A
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-
Stream D-ABC	0.02	8.56	0.02	A
Stream C-ABD	0.01	4.93	0.01	A
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-

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

"D1 - 2016 Base, AM " model duration: 08:00 - 09:00

"D2 - 2016 Base, PM" model duration: 17:00 - 18:00

"D3 - 2016 Base + Dev, AM" model duration: 08:00 - 09:00

"D4 - 2016 Base + Dev, PM" model duration: 17:00 - 18:00

Run using Junctions 8.0.6.541 at 16/03/2017 12:40:30

File summary

Title	(untitled)
Location	
Site Number	
Date	26/07/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	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	s	-Min	perMin

(Default Analysis Set) - 2016 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
2016 Base, AM	2016 Base	AM		DIRECT	08:00	09:00	60	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	6.58	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Theobalds Lane W		Major
B	B	Existing Football Club Access		Minor
C	C	Theobalds Lane E		Major
D	D	Cedars Park		Minor

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)
A	6.00		0.00		2.20	155.00	✓	0.00
C	6.00		0.00		2.20	120.00	✓	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	2.90										19	19
D	One lane	2.30										33	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	663.725	-	-	-	-	-	-	0.257	0.367	0.257	-	-	-
1	B-A	487.936	0.089	0.225	0.225	-	-	-	0.141	0.321	-	0.225	0.225	0.112
1	B-C	629.344	0.096	0.244	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	487.936	0.089	0.225	0.225	-	-	-	0.141	0.321	0.141	-	-	-
1	B-D, offside lane	487.936	0.089	0.225	0.225	-	-	-	0.141	0.321	0.141	-	-	-
1	C-B	643.457	0.249	0.249	0.356	-	-	-	-	-	-	-	-	-
1	D-A	594.143	-	-	-	-	-	-	0.230	-	0.091	-	-	-
1	D-B, nearside lane	464.934	0.135	0.135	0.306	-	-	-	0.214	0.214	0.085	-	-	-
1	D-B, offside lane	464.934	0.135	0.135	0.306	-	-	-	0.214	0.214	0.085	-	-	-
1	D-C	464.934	-	0.135	0.306	0.107	0.214	0.214	0.214	0.214	0.085	-	-	-

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 (PCU/hr)	Flow Scaling Factor (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000
D	DIRECT	✓	N/A	100.000

Turning Proportions

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

		To			
From		A	B	C	D
	A	0.000	0.000	108.000	2.000
	B	1.000	0.000	6.000	0.000
	C	176.000	7.000	0.000	14.000
	D	2.000	0.000	8.000	0.000

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

		To			
From		A	B	C	D
	A	0.00	0.00	0.98	0.02
	B	0.14	0.00	0.86	0.00
	C	0.89	0.04	0.00	0.07
	D	0.20	0.00	0.80	0.00

Vehicle Mix

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

		To			
From		A	B	C	D
	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.01	6.38	0.01	A
A-BCD	0.00	5.29	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-
D-ABC	0.02	8.56	0.02	A
C-ABD	0.01	4.93	0.01	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.00	6.95	0.00	571.42	0.012	0.01	6.377	A
A-BCD	2.37	2.35	0.00	683.31	0.003	0.00	5.286	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	107.63	107.63	0.00	-	-	-	-	-
D-ABC	10.00	9.91	0.00	430.53	0.023	0.02	8.556	A
C-ABD	9.29	9.24	0.00	739.57	0.013	0.01	4.929	A
C-D	13.83	13.83	0.00	-	-	-	-	-
C-A	173.88	173.88	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.00	7.00	0.00	571.41	0.012	0.01	6.377	A
A-BCD	2.37	2.37	0.00	683.30	0.003	0.00	5.288	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	107.63	107.63	0.00	-	-	-	-	-
D-ABC	10.00	10.00	0.00	430.51	0.023	0.02	8.560	A
C-ABD	9.31	9.31	0.00	739.57	0.013	0.01	4.931	A
C-D	13.83	13.83	0.00	-	-	-	-	-
C-A	173.86	173.86	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.00	7.00	0.00	571.41	0.012	0.01	6.377	A
A-BCD	2.37	2.37	0.00	683.30	0.003	0.00	5.288	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	107.63	107.63	0.00	-	-	-	-	-
D-ABC	10.00	10.00	0.00	430.51	0.023	0.02	8.560	A
C-ABD	9.31	9.31	0.00	739.57	0.013	0.01	4.929	A
C-D	13.83	13.83	0.00	-	-	-	-	-
C-A	173.86	173.86	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.00	7.00	0.00	571.41	0.012	0.01	6.377	A
A-BCD	2.37	2.37	0.00	683.30	0.003	0.00	5.286	A
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	107.63	107.63	0.00	-	-	-	-	-
D-ABC	10.00	10.00	0.00	430.51	0.023	0.02	8.560	A
C-ABD	9.31	9.31	0.00	739.57	0.013	0.01	4.929	A
C-D	13.83	13.83	0.00	-	-	-	-	-
C-A	173.86	173.86	0.00	-	-	-	-	-

(Default Analysis Set) - 2016 Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
2016 Base, PM	2016 Base	PM		DIRECT	17:00	18:00	60	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	6.85	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Theobalds Lane W		Major
B	B	Existing Football Club Access		Minor
C	C	Theobalds Lane E		Major
D	D	Cedars Park		Minor

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)
A	6.00		0.00		2.20	155.00	✓	0.00
C	6.00		0.00		2.20	120.00	✓	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	2.90										19	19
D	One lane	2.30										33	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	663.725	-	-	-	-	-	-	0.257	0.367	0.257	-	-	-
1	B-A	487.936	0.089	0.225	0.225	-	-	-	0.141	0.321	-	0.225	0.225	0.112
1	B-C	629.344	0.096	0.244	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	487.936	0.089	0.225	0.225	-	-	-	0.141	0.321	0.141	-	-	-
1	B-D, offside lane	487.936	0.089	0.225	0.225	-	-	-	0.141	0.321	0.141	-	-	-
1	C-B	643.457	0.249	0.249	0.356	-	-	-	-	-	-	-	-	-
1	D-A	594.143	-	-	-	-	-	-	0.230	-	0.091	-	-	-
1	D-B, nearside lane	464.934	0.135	0.135	0.306	-	-	-	0.214	0.214	0.085	-	-	-
1	D-B, offside lane	464.934	0.135	0.135	0.306	-	-	-	0.214	0.214	0.085	-	-	-
1	D-C	464.934	-	0.135	0.306	0.107	0.214	0.214	0.214	0.214	0.085	-	-	-

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 (PCU/hr)	Flow Scaling Factor (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000
D	DIRECT	✓	N/A	100.000

Turning Proportions

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

	To				
		A	B	C	D
From	A	0.000	22.000	88.000	2.000
	B	8.000	0.000	6.000	0.000
	C	147.000	14.000	0.000	9.000
	D	8.000	0.000	12.000	0.000

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

	To				
		A	B	C	D
From	A	0.00	0.20	0.79	0.02
	B	0.57	0.00	0.43	0.00
	C	0.86	0.08	0.00	0.05
	D	0.40	0.00	0.60	0.00

Vehicle Mix

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

	To				
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.03	7.46	0.03	A
A-BCD	0.00	5.23	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-
D-ABC	0.04	8.13	0.05	A
C-ABD	0.02	5.15	0.03	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	14.00	13.88	0.00	496.51	0.028	0.03	7.457	A
A-BCD	2.37	2.36	0.00	690.42	0.003	0.00	5.231	A
A-B	21.93	21.93	0.00	-	-	-	-	-
A-C	87.70	87.70	0.00	-	-	-	-	-
D-ABC	20.00	19.82	0.00	462.89	0.043	0.04	8.119	A
C-ABD	17.73	17.61	0.00	717.29	0.025	0.03	5.145	A
C-D	8.78	8.78	0.00	-	-	-	-	-
C-A	143.48	143.48	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	14.00	14.00	0.00	496.46	0.028	0.03	7.460	A
A-BCD	2.37	2.37	0.00	690.38	0.003	0.00	5.234	A
A-B	21.93	21.93	0.00	-	-	-	-	-
A-C	87.70	87.70	0.00	-	-	-	-	-
D-ABC	20.00	20.00	0.00	462.85	0.043	0.04	8.128	A
C-ABD	17.76	17.76	0.00	717.30	0.025	0.03	5.146	A
C-D	8.78	8.78	0.00	-	-	-	-	-
C-A	143.46	143.46	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	14.00	14.00	0.00	496.46	0.028	0.03	7.460	A
A-BCD	2.37	2.37	0.00	690.38	0.003	0.00	5.234	A
A-B	21.93	21.93	0.00	-	-	-	-	-
A-C	87.70	87.70	0.00	-	-	-	-	-
D-ABC	20.00	20.00	0.00	462.85	0.043	0.05	8.128	A
C-ABD	17.76	17.76	0.00	717.30	0.025	0.03	5.146	A
C-D	8.78	8.78	0.00	-	-	-	-	-
C-A	143.46	143.46	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	14.00	14.00	0.00	496.46	0.028	0.03	7.460	A
A-BCD	2.37	2.37	0.00	690.38	0.003	0.00	5.234	A
A-B	21.93	21.93	0.00	-	-	-	-	-
A-C	87.70	87.70	0.00	-	-	-	-	-
D-ABC	20.00	20.00	0.00	462.85	0.043	0.05	8.128	A
C-ABD	17.76	17.76	0.00	717.30	0.025	0.03	5.148	A
C-D	8.78	8.78	0.00	-	-	-	-	-
C-A	143.46	143.46	0.00	-	-	-	-	-

(Default Analysis Set) - 2016 Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
2016 Base + Dev, AM	2016 Base + Dev	AM		DIRECT	08:00	09:00	60	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	6.89	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Theobalds Lane W		Major
B	B	Existing Football Club Access		Minor
C	C	Theobalds Lane E		Major
D	D	Cedars Park		Minor

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)
A	6.00		0.00		2.20	155.00	✓	0.00
C	6.00		0.00		2.20	120.00	✓	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	2.90										19	19
D	One lane	2.30										33	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	663.725	-	-	-	-	-	-	0.257	0.367	0.257	-	-	-
1	B-A	487.936	0.089	0.225	0.225	-	-	-	0.141	0.321	-	0.225	0.225	0.112
1	B-C	629.344	0.096	0.244	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	487.936	0.089	0.225	0.225	-	-	-	0.141	0.321	0.141	-	-	-
1	B-D, offside lane	487.936	0.089	0.225	0.225	-	-	-	0.141	0.321	0.141	-	-	-
1	C-B	643.457	0.249	0.249	0.356	-	-	-	-	-	-	-	-	-
1	D-A	594.143	-	-	-	-	-	-	0.230	-	0.091	-	-	-
1	D-B, nearside lane	464.934	0.135	0.135	0.306	-	-	-	0.214	0.214	0.085	-	-	-
1	D-B, offside lane	464.934	0.135	0.135	0.306	-	-	-	0.214	0.214	0.085	-	-	-
1	D-C	464.934	-	0.135	0.306	0.107	0.214	0.214	0.214	0.214	0.085	-	-	-

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 (PCU/hr)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000
D	DIRECT		N/A	100.000

Turning Proportions

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

	To				
		A	B	C	D
From	A	0.000	17.000	109.000	2.000
	B	29.000	0.000	23.000	0.000
	C	187.000	40.000	0.000	14.000
	D	2.000	0.000	8.000	0.000

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

	To				
		A	B	C	D
From	A	0.00	0.13	0.85	0.02
	B	0.56	0.00	0.44	0.00
	C	0.78	0.17	0.00	0.06
	D	0.20	0.00	0.80	0.00

Vehicle Mix

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

	To				
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.11	8.31	0.12	A
A-BCD	0.00	5.31	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-
D-ABC	0.02	8.88	0.02	A
C-ABD	0.07	5.23	0.12	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	52.00	51.52	0.00	485.23	0.107	0.12	8.291	A
A-BCD	2.44	2.43	0.00	681.14	0.004	0.00	5.303	A
A-B	16.94	16.94	0.00	-	-	-	-	-
A-C	108.62	108.62	0.00	-	-	-	-	-
D-ABC	10.00	9.90	0.00	415.74	0.024	0.02	8.868	A
C-ABD	54.01	53.56	0.00	742.59	0.073	0.11	5.223	A
C-D	13.02	13.02	0.00	-	-	-	-	-
C-A	173.96	173.96	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	52.00	52.00	0.00	485.13	0.107	0.12	8.311	A
A-BCD	2.44	2.44	0.00	681.00	0.004	0.00	5.306	A
A-B	16.94	16.94	0.00	-	-	-	-	-
A-C	108.62	108.62	0.00	-	-	-	-	-
D-ABC	10.00	10.00	0.00	415.58	0.024	0.02	8.875	A
C-ABD	54.13	54.13	0.00	742.67	0.073	0.11	5.232	A
C-D	13.02	13.02	0.00	-	-	-	-	-
C-A	173.85	173.85	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	52.00	52.00	0.00	485.13	0.107	0.12	8.311	A
A-BCD	2.44	2.44	0.00	681.00	0.004	0.00	5.304	A
A-B	16.94	16.94	0.00	-	-	-	-	-
A-C	108.62	108.62	0.00	-	-	-	-	-
D-ABC	10.00	10.00	0.00	415.57	0.024	0.02	8.875	A
C-ABD	54.13	54.13	0.00	742.67	0.073	0.12	5.232	A
C-D	13.02	13.02	0.00	-	-	-	-	-
C-A	173.85	173.85	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	52.00	52.00	0.00	485.13	0.107	0.12	8.311	A
A-BCD	2.44	2.44	0.00	681.00	0.004	0.00	5.304	A
A-B	16.94	16.94	0.00	-	-	-	-	-
A-C	108.62	108.62	0.00	-	-	-	-	-
D-ABC	10.00	10.00	0.00	415.57	0.024	0.02	8.875	A
C-ABD	54.13	54.13	0.00	742.67	0.073	0.12	5.232	A
C-D	13.02	13.02	0.00	-	-	-	-	-
C-A	173.85	173.85	0.00	-	-	-	-	-

(Default Analysis Set) - 2016 Base + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
2016 Base + Dev, PM	2016 Base + Dev	PM		DIRECT	17:00	18:00	60	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	7.83	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Theobalds Lane W		Major
B	B	Existing Football Club Access		Minor
C	C	Theobalds Lane E		Major
D	D	Cedars Park		Minor

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)
A	6.00		0.00		2.20	155.00	✓	0.00
C	6.00		0.00		2.20	120.00	✓	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	2.90										19	19
D	One lane	2.30										33	24

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	663.725	-	-	-	-	-	-	0.257	0.367	0.257	-	-	-
1	B-A	487.936	0.089	0.225	0.225	-	-	-	0.141	0.321	-	0.225	0.225	0.112
1	B-C	629.344	0.096	0.244	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	487.936	0.089	0.225	0.225	-	-	-	0.141	0.321	0.141	-	-	-
1	B-D, offside lane	487.936	0.089	0.225	0.225	-	-	-	0.141	0.321	0.141	-	-	-
1	C-B	643.457	0.249	0.249	0.356	-	-	-	-	-	-	-	-	-
1	D-A	594.143	-	-	-	-	-	-	0.230	-	0.091	-	-	-
1	D-B, nearside lane	464.934	0.135	0.135	0.306	-	-	-	0.214	0.214	0.085	-	-	-
1	D-B, offside lane	464.934	0.135	0.135	0.306	-	-	-	0.214	0.214	0.085	-	-	-
1	D-C	464.934	-	0.135	0.306	0.107	0.214	0.214	0.214	0.214	0.085	-	-	-

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 (PCU/hr)	Flow Scaling Factor (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000
D	DIRECT	✓	N/A	100.000

Turning Proportions

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

	To				
		A	B	C	D
From	A	0.000	45.000	90.000	2.000
	B	63.000	0.000	30.000	0.000
	C	152.000	69.000	0.000	9.000
	D	8.000	0.000	12.000	0.000

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

	To				
		A	B	C	D
From	A	0.00	0.33	0.66	0.01
	B	0.68	0.00	0.32	0.00
	C	0.66	0.30	0.00	0.04
	D	0.40	0.00	0.60	0.00

Vehicle Mix

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

	To				
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To				
		A	B	C	D
From	A	0.0	0.0	0.0	0.0
	B	0.0	0.0	0.0	0.0
	C	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.20	9.74	0.25	A
A-BCD	0.00	5.26	0.00	A
A-B	-	-	-	-
A-C	-	-	-	-
D-ABC	0.05	8.49	0.05	A
C-ABD	0.12	5.75	0.18	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	93.00	92.01	0.00	462.67	0.201	0.25	9.686	A
A-BCD	2.47	2.46	0.00	686.73	0.004	0.00	5.260	A
A-B	44.84	44.84	0.00	-	-	-	-	-
A-C	89.68	89.68	0.00	-	-	-	-	-
D-ABC	20.00	19.81	0.00	444.24	0.045	0.05	8.478	A
C-ABD	88.96	88.23	0.00	715.54	0.124	0.18	5.735	A
C-D	7.88	7.88	0.00	-	-	-	-	-
C-A	133.16	133.16	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	93.00	92.99	0.00	462.48	0.201	0.25	9.743	A
A-BCD	2.48	2.48	0.00	686.50	0.004	0.00	5.264	A
A-B	44.84	44.84	0.00	-	-	-	-	-
A-C	89.68	89.68	0.00	-	-	-	-	-
D-ABC	20.00	20.00	0.00	444.00	0.045	0.05	8.490	A
C-ABD	89.12	89.12	0.00	715.64	0.125	0.18	5.750	A
C-D	7.88	7.88	0.00	-	-	-	-	-
C-A	133.00	133.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	93.00	93.00	0.00	462.47	0.201	0.25	9.743	A
A-BCD	2.48	2.48	0.00	686.50	0.004	0.00	5.262	A
A-B	44.84	44.84	0.00	-	-	-	-	-
A-C	89.68	89.68	0.00	-	-	-	-	-
D-ABC	20.00	20.00	0.00	443.99	0.045	0.05	8.490	A
C-ABD	89.12	89.12	0.00	715.64	0.125	0.18	5.750	A
C-D	7.88	7.88	0.00	-	-	-	-	-
C-A	133.00	133.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	93.00	93.00	0.00	462.47	0.201	0.25	9.743	A
A-BCD	2.48	2.48	0.00	686.50	0.004	0.00	5.262	A
A-B	44.84	44.84	0.00	-	-	-	-	-
A-C	89.68	89.68	0.00	-	-	-	-	-
D-ABC	20.00	20.00	0.00	443.99	0.045	0.05	8.490	A
C-ABD	89.13	89.12	0.00	715.64	0.125	0.18	5.750	A
C-D	7.88	7.88	0.00	-	-	-	-	-
C-A	133.00	133.00	0.00	-	-	-	-	-

Junctions 8			
PICADY 8 - Priority Intersection Module			
Version: 8.0.6.541 [19821,26/11/2015] © Copyright TRL Limited, 2017			
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Filename: 170306 Theobalds Lane_Eastern Site Access.arc8

Path: \\uk.wspgroup.com\central data\Projects\700198xx\70019827 - Cheshunt Sports Village\D Design and Analysis\Development\PICADY

Report generation date: 07/03/2017 17:17:05

- » (Default Analysis Set) - 2016 Base + Dev, AM
- » (Default Analysis Set) - 2016 Base + Dev, PM
- » (Default Analysis Set) - 2029 Base + Dev, AM
- » (Default Analysis Set) - 2029 Base + Dev, PM

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2016 Base + Dev			
Stream B-AC	0.04	6.94	0.04	A
Stream C-AB	0.01	4.94	0.01	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 - 2016 Base + Dev, AM" model duration: 08:00 - 09:00

"D2 - 2016 Base + Dev, PM" model duration: 17:00 - 18:00

"D3 - 2029 Base + Dev, AM" model duration: 08:00 - 09:00

"D4 - 2029 Base + Dev, PM" model duration: 17:00 - 18:00

Run using Junctions 8.0.6.541 at 07/03/2017 17:17:01

File summary

Title	(untitled)
Location	
Site Number	
Date	26/07/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	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	s	-Min	perMin

(Default Analysis Set) - 2016 Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
2016 Base + Dev, AM	2016 Base + Dev	AM		DIRECT	08:00	09:00	60	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.32	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Theobalds Lane W		Major
B	B	Eastern Site Access		Minor
C	C	Theobalds Lane E		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	✓	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	4.00										37	17

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.754	0.100	0.252	0.159	0.360
1	B-C	698.177	0.107	0.271	-	-
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 (PCU/hr)	Flow Scaling Factor (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	1.000	139.000
	B	11.000	0.000	8.000
	C	230.000	6.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.01	0.99
	B	0.58	0.00	0.42
	C	0.97	0.03	0.00

Vehicle Mix

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

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.04	6.94	0.04	A
C-AB	0.01	4.94	0.01	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	19.00	18.85	0.00	537.91	0.035	0.04	6.934	A
C-AB	8.54	8.49	0.00	737.08	0.012	0.01	4.940	A
C-A	227.46	227.46	0.00	-	-	-	-	-
A-B	1.00	1.00	0.00	-	-	-	-	-
A-C	139.00	139.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	19.00	19.00	0.00	537.90	0.035	0.04	6.936	A
C-AB	8.56	8.56	0.00	737.09	0.012	0.01	4.942	A
C-A	227.44	227.44	0.00	-	-	-	-	-
A-B	1.00	1.00	0.00	-	-	-	-	-
A-C	139.00	139.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	19.00	19.00	0.00	537.90	0.035	0.04	6.936	A
C-AB	8.56	8.56	0.00	737.09	0.012	0.01	4.941	A
C-A	227.44	227.44	0.00	-	-	-	-	-
A-B	1.00	1.00	0.00	-	-	-	-	-
A-C	139.00	139.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	19.00	19.00	0.00	537.90	0.035	0.04	6.936	A
C-AB	8.56	8.56	0.00	737.09	0.012	0.01	4.941	A
C-A	227.44	227.44	0.00	-	-	-	-	-
A-B	1.00	1.00	0.00	-	-	-	-	-
A-C	139.00	139.00	0.00	-	-	-	-	-

(Default Analysis Set) - 2016 Base + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
2016 Base + Dev, PM	2016 Base + Dev	PM		DIRECT	17:00	18:00	60	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	5.53	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Theobalds Lane W		Major
B	B	Eastern Site Access		Minor
C	C	Theobalds Lane E		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	✓	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	4.00										37	17

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.754	0.100	0.252	0.159	0.360
1	B-C	698.177	0.107	0.271	-	-
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 (PCU/hr)	Flow Scaling Factor (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000

Turning Proportions

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

	To			
		A	B	C
	A	0.000	2.000	130.000
	B	5.000	0.000	3.000
	C	225.000	16.000	0.000

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

	To			
		A	B	C
	A	0.00	0.02	0.98
	B	0.63	0.00	0.38
	C	0.93	0.07	0.00

Vehicle Mix

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

	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.02	6.89	0.02	A
C-AB	0.03	5.05	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	8.00	7.94	0.00	530.15	0.015	0.02	6.893	A
C-AB	22.60	22.44	0.00	735.51	0.031	0.04	5.049	A
C-A	218.40	218.40	0.00	-	-	-	-	-
A-B	2.00	2.00	0.00	-	-	-	-	-
A-C	130.00	130.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	8.00	8.00	0.00	530.11	0.015	0.02	6.894	A
C-AB	22.65	22.65	0.00	735.54	0.031	0.04	5.049	A
C-A	218.35	218.35	0.00	-	-	-	-	-
A-B	2.00	2.00	0.00	-	-	-	-	-
A-C	130.00	130.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	8.00	8.00	0.00	530.11	0.015	0.02	6.894	A
C-AB	22.65	22.65	0.00	735.54	0.031	0.04	5.051	A
C-A	218.35	218.35	0.00	-	-	-	-	-
A-B	2.00	2.00	0.00	-	-	-	-	-
A-C	130.00	130.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	8.00	8.00	0.00	530.11	0.015	0.02	6.894	A
C-AB	22.65	22.65	0.00	735.54	0.031	0.04	5.051	A
C-A	218.35	218.35	0.00	-	-	-	-	-
A-B	2.00	2.00	0.00	-	-	-	-	-
A-C	130.00	130.00	0.00	-	-	-	-	-

(Default Analysis Set) - 2029 Base + Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
2029 Base + Dev, AM	2029 Base + Dev	AM		DIRECT	08:00	09:00	60	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	6.35	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Theobalds Lane W		Major
B	B	Eastern Site Access		Minor
C	C	Theobalds Lane E		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	✓	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	4.00										37	17

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.754	0.100	0.252	0.159	0.360
1	B-C	698.177	0.107	0.271	-	-
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 (PCU/hr)	Flow Scaling Factor (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	1.000	162.000
	B	11.000	0.000	8.000
	C	267.000	6.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.01	0.99
	B	0.58	0.00	0.42
	C	0.98	0.02	0.00

Vehicle Mix

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

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.04	7.08	0.04	A
C-AB	0.01	4.82	0.01	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	19.00	18.85	0.00	527.44	0.036	0.04	7.076	A
C-AB	9.01	8.95	0.00	756.20	0.012	0.01	4.817	A
C-A	263.99	263.99	0.00	-	-	-	-	-
A-B	1.00	1.00	0.00	-	-	-	-	-
A-C	162.00	162.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	19.00	19.00	0.00	527.43	0.036	0.04	7.079	A
C-AB	9.03	9.03	0.00	756.21	0.012	0.01	4.819	A
C-A	263.97	263.97	0.00	-	-	-	-	-
A-B	1.00	1.00	0.00	-	-	-	-	-
A-C	162.00	162.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	19.00	19.00	0.00	527.43	0.036	0.04	7.079	A
C-AB	9.03	9.03	0.00	756.21	0.012	0.01	4.817	A
C-A	263.97	263.97	0.00	-	-	-	-	-
A-B	1.00	1.00	0.00	-	-	-	-	-
A-C	162.00	162.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	19.00	19.00	0.00	527.43	0.036	0.04	7.079	A
C-AB	9.03	9.03	0.00	756.21	0.012	0.01	4.817	A
C-A	263.97	263.97	0.00	-	-	-	-	-
A-B	1.00	1.00	0.00	-	-	-	-	-
A-C	162.00	162.00	0.00	-	-	-	-	-

(Default Analysis Set) - 2029 Base + Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			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
2029 Base + Dev, PM	2029 Base + Dev	PM		DIRECT	17:00	18:00	60	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	5.49	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Theobalds Lane W		Major
B	B	Eastern Site Access		Minor
C	C	Theobalds Lane E		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	✓	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	4.00										37	17

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.754	0.100	0.252	0.159	0.360
1	B-C	698.177	0.107	0.271	-	-
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 (PCU/hr)	Flow Scaling Factor (%)
A	DIRECT	✓	N/A	100.000
B	DIRECT	✓	N/A	100.000
C	DIRECT	✓	N/A	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	2.000	143.000
	B	5.000	0.000	3.000
	C	246.000	16.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.01	0.99
	B	0.63	0.00	0.38
	C	0.94	0.06	0.00

Vehicle Mix

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

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.02	6.97	0.02	A
C-AB	0.03	4.98	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	8.00	7.94	0.00	524.11	0.015	0.02	6.974	A
C-AB	23.29	23.13	0.00	746.38	0.031	0.04	4.978	A
C-A	238.71	238.71	0.00	-	-	-	-	-
A-B	2.00	2.00	0.00	-	-	-	-	-
A-C	143.00	143.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	8.00	8.00	0.00	524.08	0.015	0.02	6.974	A
C-AB	23.35	23.35	0.00	746.42	0.031	0.04	4.978	A
C-A	238.65	238.65	0.00	-	-	-	-	-
A-B	2.00	2.00	0.00	-	-	-	-	-
A-C	143.00	143.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	8.00	8.00	0.00	524.08	0.015	0.02	6.974	A
C-AB	23.35	23.35	0.00	746.42	0.031	0.04	4.978	A
C-A	238.65	238.65	0.00	-	-	-	-	-
A-B	2.00	2.00	0.00	-	-	-	-	-
A-C	143.00	143.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	8.00	8.00	0.00	524.08	0.015	0.02	6.974	A
C-AB	23.35	23.35	0.00	746.42	0.031	0.04	4.980	A
C-A	238.65	238.65	0.00	-	-	-	-	-
A-B	2.00	2.00	0.00	-	-	-	-	-
A-C	143.00	143.00	0.00	-	-	-	-	-

Junctions 8				
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- » (Default Analysis Set) - 2016 Base, AM
- » (Default Analysis Set) - 2016 Base, PM
- » (Default Analysis Set) - 2016 Base + Dev, AM
- » (Default Analysis Set) - 2016 Base + Dev, PM

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2016 Base			
Junction 1 - Arm A	9.20	42.94	0.91	E
Junction 1 - Arm B	0.00	21.29	0.84	C
Junction 1 - Arm C	0.11	9.67	0.10	A
Junction 2 - Arm A	0.00	44.97	0.99	E
Junction 2 - Arm B	6.12	89.47	0.88	F
Junction 2 - Arm C	1.91	11.59	0.66	B

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

"D4 - 2016 Base, AM " model duration: 08:00 - 09:00

"D5 - 2016 Base, PM" model duration: 17:00 - 18:00

"D6 - 2016 Base + Dev, AM" model duration: 08:00 - 09:00

"D7 - 2016 Base + Dev, PM" model duration: 17:00 - 18:00

Run using Junctions 8.0.6.541 at 16/03/2017 11:46:49

File summary

Title	A1184 London Road / West Road / Station Road
Location	West Road, Sawbridgeworth
Site Number	
Date	29/09/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	70002185
Enumerator	
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	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	s	-Min	perMin

(Default Analysis Set) - 2016 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	Junction 1 - Arm B	Internal storage space between linked junctions is small (1 PCU). Linked junction results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm A	Internal storage space between linked junctions is small (1 PCU). Linked junction results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			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
2016 Base, AM	2016 Base	AM		Varies by Arm	08:00	09:00	60	15		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	1	Northern Roundabout	Mini-roundabout	B,C,A	32.17	D
2	2	Southern Roundabout	Mini-roundabout	B,C,A	40.02	E

Junction Network Options

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

Arms

Arms

Junction	Arm	Arm	Name	Description
1	A	A	High St (N)	
1	B	B	High St (S)	
1	C	C	Theobalds Station	
2	A	A	High St (N)	
2	B	B	Trinity Lane	
2	C	C	High St (S)	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	A	0.00	99999.00
1	B	0.00	99999.00
1	C	0.00	99999.00
2	A	0.00	99999.00
2	B	0.00	99999.00
2	C	0.00	99999.00

Mini Roundabout Geometry

Junction	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	A	4.00	3.90	5.47	2.10	15.70	12.70	0.00	
1	B	3.70	3.60	4.65	1.00	13.69	7.40	0.00	✓
1	C	2.80	2.70	5.80	4.77	10.70	2.80	0.00	
2	A	3.95	3.60	4.35	0.70	13.68	7.20	0.00	✓
2	B	2.60	2.34	4.35	1.50	9.88	4.00	0.00	
2	C	4.72	4.50	5.86	5.10	13.13	11.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	A		(calculated)	(calculated)	0.587	896.539
1	B		(calculated)	(calculated)	0.415	858.514
1	C		(calculated)	(calculated)	0.539	792.516
2	A		(calculated)	(calculated)	0.411	841.392
2	B		(calculated)	(calculated)	0.490	654.720
2	C		(calculated)	(calculated)	0.622	1015.511

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	A	DIRECT	✓	N/A	100.000
1	B	Linked Arm		N/A	
1	C	DIRECT	✓	N/A	100.000
2	A	Linked Arm		N/A	
2	B	DIRECT	✓	N/A	100.000
2	C	DIRECT	✓	N/A	100.000

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	B	2	A	Closely spaced	Normal	0.00	100.00	1.00
2	A	1	B	Closely spaced	Normal	0.00	100.00	1.00

Turning Proportions

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

		To		
From		B	C	A
	B	0.000	20.000	700.000
	C	11.000	0.000	32.000
	A	805.000	7.000	0.000

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

		To		
From		B	C	A
	B	0.00	0.03	0.97
	C	0.26	0.00	0.74
	A	0.99	0.01	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

		To		
From		B	C	A
	B	0.000	94.000	170.000
	C	50.000	0.000	550.000
	A	89.000	727.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

		To		
From		B	C	A
	B	0.00	0.36	0.64
	C	0.08	0.00	0.92
	A	0.11	0.89	0.00

Vehicle Mix

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

	To			
		B	C	A
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000
	A	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		B	C	A
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0
	A	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

	To			
		B	C	A
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000
	A	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

	To			
		B	C	A
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0
	A	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	A	0.91	42.94	9.20	E
1	B	0.84	21.29	0.00	C
1	C	0.10	9.67	0.11	A
2	A	0.99	44.97	0.00	E
2	B	0.88	89.47	6.12	F
2	C	0.66	11.59	1.91	B

Main Results for each time segment

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

Junction	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 (s)	LOS
1	A	812.00	782.82	10.89	0.00	890.15	0.912	7.29	28.467	D
1	B	703.11	703.11	6.75	0.00	855.71	0.822	0.00	19.760	C
1	C	43.00	42.55	683.57	0.00	423.77	0.101	0.11	9.433	A
2	A	786.96	786.96	49.39	0.00	821.07	0.958	0.00	37.837	E
2	B	264.00	248.20	701.13	0.00	311.03	0.849	3.95	49.263	E
2	C	600.00	592.67	159.82	0.00	916.08	0.655	1.83	10.904	B

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

Junction	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 (s)	LOS
1	A	812.00	807.65	11.00	0.00	890.08	0.912	8.38	39.801	E
1	B	716.70	716.70	6.96	0.00	855.62	0.838	0.00	21.059	C
1	C	43.00	42.99	696.79	0.00	416.64	0.103	0.11	9.634	A
2	A	811.68	811.68	49.98	0.00	820.83	0.989	0.00	44.112	E
2	B	264.00	259.17	723.15	0.00	300.23	0.879	5.16	76.028	F
2	C	600.00	599.79	166.89	0.00	911.69	0.658	1.88	11.524	B

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

Junction	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 (s)	LOS
1	A	812.00	809.95	11.00	0.00	890.08	0.912	8.90	41.906	E
1	B	718.39	718.39	6.98	0.00	855.62	0.840	0.00	21.227	C
1	C	43.00	43.00	698.43	0.00	415.75	0.103	0.11	9.657	A
2	A	813.97	813.97	49.99	0.00	820.82	0.992	0.00	44.740	E
2	B	264.00	261.60	725.19	0.00	299.23	0.882	5.76	84.881	F
2	C	600.00	599.93	168.46	0.00	910.71	0.659	1.90	11.574	B

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

Junction	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 (s)	LOS
1	A	812.00	810.79	11.00	0.00	890.08	0.912	9.20	42.936	E
1	B	719.02	719.02	6.99	0.00	855.61	0.840	0.00	21.292	C
1	C	43.00	43.00	699.05	0.00	415.42	0.104	0.11	9.666	A
2	A	814.80	814.80	50.00	0.00	820.82	0.993	0.00	44.972	E
2	B	264.00	262.53	725.93	0.00	298.87	0.883	6.12	89.473	F
2	C	600.00	599.96	169.05	0.00	910.34	0.659	1.91	11.592	B

(Default Analysis Set) - 2016 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	Junction 1 - Arm B	Internal storage space between linked junctions is small (1 PCU). Linked junction results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm A	Internal storage space between linked junctions is small (1 PCU). Linked junction results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			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
2016 Base, FM	2016 Base	FM		Varies by Arm	17:00	18:00	60	15		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	1	Northern Roundabout	Mini-roundabout	B,C,A	39.78	E
2	2	Southern Roundabout	Mini-roundabout	B,C,A	32.16	D

Junction Network Options

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

Arms

Arms

Junction	Arm	Arm	Name	Description
1	A	A	High St (N)	
1	B	B	High St (S)	
1	C	C	Theobalds Station	
2	A	A	High St (N)	
2	B	B	Trinity Lane	
2	C	C	High St (S)	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	A	0.00	99999.00
1	B	0.00	99999.00
1	C	0.00	99999.00
2	A	0.00	99999.00
2	B	0.00	99999.00
2	C	0.00	99999.00

Mini Roundabout Geometry

Junction	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	A	4.00	3.90	5.47	2.10	15.70	12.70	0.00	
1	B	3.70	3.60	4.65	1.00	13.69	7.40	0.00	✓
1	C	2.80	2.70	5.80	4.77	10.70	2.80	0.00	
2	A	3.95	3.60	4.35	0.70	13.68	7.20	0.00	✓
2	B	2.60	2.34	4.35	1.50	9.88	4.00	0.00	
2	C	4.72	4.50	5.86	5.10	13.13	11.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	A		(calculated)	(calculated)	0.587	896.539
1	B		(calculated)	(calculated)	0.415	858.514
1	C		(calculated)	(calculated)	0.539	792.516
2	A		(calculated)	(calculated)	0.411	841.392
2	B		(calculated)	(calculated)	0.490	654.720
2	C		(calculated)	(calculated)	0.622	1015.511

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	A	DIRECT	✓	N/A	100.000
1	B	Linked Arm		N/A	
1	C	DIRECT	✓	N/A	100.000
2	A	Linked Arm		N/A	
2	B	DIRECT	✓	N/A	100.000
2	C	DIRECT	✓	N/A	100.000

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	B	2	A	Closely spaced	Normal	0.00	100.00	1.00
2	A	1	B	Closely spaced	Normal	0.00	100.00	1.00

Turning Proportions

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

	To			
		B	C	A
From	B	0.000	9.000	809.000
	C	24.000	0.000	30.000
	A	791.000	16.000	0.000

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

	To			
		B	C	A
From	B	0.00	0.01	0.99
	C	0.44	0.00	0.56
	A	0.98	0.02	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

	To			
		B	C	A
From	B	0.000	40.000	102.000
	C	57.000	0.000	716.000
	A	96.000	719.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

	To			
		B	C	A
From	B	0.00	0.28	0.72
	C	0.07	0.00	0.93
	A	0.12	0.88	0.00

Vehicle Mix

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

	To			
		B	C	A
From	B	1.000	1.000	1.000
	C	1.000	1.000	1.000
	A	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		B	C	A
From	B	0.0	0.0	0.0
	C	0.0	0.0	0.0
	A	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

From	To			
		B	C	A
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000
	A	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

From	To			
		B	C	A
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0
	A	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	A	0.91	44.18	9.40	E
1	B	0.96	37.27	0.00	E
1	C	0.15	11.91	0.18	B
2	A	0.99	45.56	0.00	E
2	B	0.47	22.37	0.87	C
2	C	0.81	19.99	4.19	C

Main Results for each time segment

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

Junction	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 (s)	LOS
1	A	807.00	777.44	23.70	0.00	882.63	0.914	7.39	28.942	D
1	B	801.41	801.41	15.41	0.00	852.12	0.940	0.00	33.759	D
1	C	54.00	53.32	792.59	0.00	364.96	0.148	0.17	11.526	B
2	A	785.72	785.72	55.86	0.00	818.41	0.960	0.00	38.219	E
2	B	142.00	138.85	693.17	0.00	314.93	0.451	0.79	20.111	C
2	C	773.00	757.53	99.73	0.00	953.47	0.811	3.87	17.228	C

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

Junction	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 (s)	LOS
1	A	807.00	802.43	23.99	0.00	882.45	0.915	8.53	40.775	E
1	B	817.05	817.05	15.91	0.00	851.91	0.959	0.00	37.087	E
1	C	54.00	53.98	808.06	0.00	356.62	0.151	0.18	11.895	B
2	A	810.51	810.51	56.94	0.00	817.97	0.991	0.00	44.653	E
2	B	142.00	141.76	715.04	0.00	304.21	0.467	0.85	22.098	C
2	C	773.00	772.16	101.83	0.00	952.16	0.812	4.08	19.773	C

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

Junction	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 (s)	LOS
1	A	807.00	804.83	24.00	0.00	882.45	0.915	9.08	43.057	E
1	B	817.67	817.67	15.96	0.00	851.89	0.960	0.00	37.231	E
1	C	54.00	54.00	808.68	0.00	356.28	0.152	0.18	11.908	B
2	A	812.87	812.87	56.98	0.00	817.95	0.994	0.00	45.313	E
2	B	142.00	141.94	717.12	0.00	303.19	0.468	0.86	22.300	C
2	C	773.00	772.69	101.96	0.00	952.08	0.812	4.15	19.929	C

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

Junction	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 (s)	LOS
1	A	807.00	805.71	24.00	0.00	882.45	0.915	9.40	44.183	E
1	B	817.83	817.83	15.97	0.00	851.88	0.960	0.00	37.267	E
1	C	54.00	54.00	808.84	0.00	356.20	0.152	0.18	11.912	B
2	A	813.74	813.74	56.99	0.00	817.95	0.995	0.00	45.558	E
2	B	142.00	141.97	717.89	0.00	302.81	0.469	0.87	22.366	C
2	C	773.00	772.84	101.98	0.00	952.07	0.812	4.19	19.985	C

(Default Analysis Set) - 2016 Base + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	Junction 1 - Arm B	Internal storage space between linked junctions is small (1 PCU). Linked junction results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm A	Internal storage space between linked junctions is small (1 PCU). Linked junction results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			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
2016 Base + Dev, AM	2016 Base + Dev	AM		Varies by Arm	08:00	09:00	60	15		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	1	Northern Roundabout	Mini-roundabout	B,C,A	37.23	E
2	2	Southern Roundabout	Mini-roundabout	B,C,A	41.77	E

Junction Network Options

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

Arms

Arms

Junction	Arm	Arm	Name	Description
1	A	A	High St (N)	
1	B	B	High St (S)	
1	C	C	Theobalds Station	
2	A	A	High St (N)	
2	B	B	Trinity Lane	
2	C	C	High St (S)	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	A	0.00	99999.00
1	B	0.00	99999.00
1	C	0.00	99999.00
2	A	0.00	99999.00
2	B	0.00	99999.00
2	C	0.00	99999.00

Mini Roundabout Geometry

Junction	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	A	4.00	3.90	5.47	2.10	15.70	12.70	0.00	
1	B	3.70	3.60	4.65	1.00	13.69	7.40	0.00	✓
1	C	2.80	2.70	5.80	4.77	10.70	2.80	0.00	
2	A	3.95	3.60	4.35	0.70	13.68	7.20	0.00	✓
2	B	2.60	2.34	4.35	1.50	9.88	4.00	0.00	
2	C	4.72	4.50	5.86	5.10	13.13	11.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	A		(calculated)	(calculated)	0.587	896.539
1	B		(calculated)	(calculated)	0.415	858.514
1	C		(calculated)	(calculated)	0.539	792.516
2	A		(calculated)	(calculated)	0.411	841.392
2	B		(calculated)	(calculated)	0.490	654.720
2	C		(calculated)	(calculated)	0.622	1015.511

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	A	DIRECT	✓	N/A	100.000
1	B	Linked Arm		N/A	
1	C	DIRECT	✓	N/A	100.000
2	A	Linked Arm		N/A	
2	B	DIRECT	✓	N/A	100.000
2	C	DIRECT	✓	N/A	100.000

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	B	2	A	Closely spaced	Normal	0.00	100.00	1.00
2	A	1	B	Closely spaced	Normal	0.00	100.00	1.00

Turning Proportions

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

	To			
		B	C	A
	From B	0.000	20.000	730.000
	From C	11.000	0.000	32.000
	From A	813.000	7.000	0.000

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

	To			
		B	C	A
	From B	0.00	0.03	0.97
	From C	0.26	0.00	0.74
	From A	0.99	0.01	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

	To			
		B	C	A
	From B	0.000	94.000	170.000
	From C	50.000	0.000	580.000
	From A	89.000	735.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

	To			
		B	C	A
From	B	0.00	0.36	0.64
	C	0.08	0.00	0.92
	A	0.11	0.89	0.00

Vehicle Mix

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

	To			
		B	C	A
From	B	1.000	1.000	1.000
	C	1.000	1.000	1.000
	A	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		B	C	A
From	B	0.0	0.0	0.0
	C	0.0	0.0	0.0
	A	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

	To			
		B	C	A
From	B	1.000	1.000	1.000
	C	1.000	1.000	1.000
	A	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

	To			
		B	C	A
From	B	0.0	0.0	0.0
	C	0.0	0.0	0.0
	A	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	A	0.93	49.98	10.68	E
1	B	0.88	24.71	0.00	C
1	C	0.11	10.67	0.13	B
2	A	1.00	46.67	0.00	E
2	B	0.89	95.73	6.55	F
2	C	0.69	12.82	2.22	B

Main Results for each time segment

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

Junction	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 (s)	LOS
1	A	820.00	788.85	10.88	0.00	890.15	0.921	7.79	29.753	D
1	B	731.67	731.67	6.73	0.00	855.72	0.855	0.00	22.629	C
1	C	43.00	42.53	712.16	0.00	408.35	0.105	0.12	9.830	A
2	A	793.00	793.00	49.33	0.00	821.10	0.966	0.00	39.251	E
2	B	264.00	247.60	707.35	0.00	307.98	0.857	4.10	50.859	F
2	C	630.00	621.57	159.44	0.00	916.32	0.688	2.11	11.899	B

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

Junction	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 (s)	LOS
1	A	820.00	814.81	11.00	0.00	890.08	0.921	9.08	42.717	E
1	B	746.25	746.25	6.96	0.00	855.63	0.872	0.00	24.372	C
1	C	43.00	42.99	726.35	0.00	400.69	0.107	0.12	10.064	B
2	A	818.85	818.85	49.98	0.00	820.83	0.998	0.00	46.108	E
2	B	264.00	258.58	730.41	0.00	296.67	0.890	5.46	80.320	F
2	C	630.00	629.72	166.51	0.00	911.93	0.691	2.18	12.728	B

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

Junction	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 (s)	LOS
1	A	820.00	816.80	11.00	0.00	887.05	0.924	9.88	46.328	E
1	B	748.14	748.14	6.97	0.00	855.62	0.874	0.00	24.612	C
1	C	43.00	43.00	728.19	0.00	398.18	0.108	0.12	10.135	B
2	A	820.82	820.82	49.99	0.00	820.82	1.000	0.00	46.674	E
2	B	264.00	261.25	732.17	0.00	295.81	0.892	6.14	90.615	F
2	C	630.00	629.90	168.23	0.00	910.85	0.692	2.20	12.797	B

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

Junction	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 (s)	LOS
1	A	820.00	816.80	10.99	0.00	881.15	0.931	10.68	49.985	E
1	B	748.90	748.90	6.97	0.00	855.62	0.875	0.00	24.708	C
1	C	43.00	42.98	728.93	0.00	380.52	0.113	0.13	10.665	B
2	A	820.82	820.82	50.00	0.00	820.82	1.000	0.00	46.674	E
2	B	264.00	262.37	732.17	0.00	295.81	0.892	6.55	95.733	F
2	C	630.00	629.95	168.95	0.00	910.41	0.692	2.22	12.825	B

(Default Analysis Set) - 2016 Base + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Linked Roundabout	Junction 1 - Arm B	Internal storage space between linked junctions is small (1 PCU). Linked junction results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm A	Internal storage space between linked junctions is small (1 PCU). Linked junction results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			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
2016 Base + Dev, PM	2016 Base + Dev	PM		Varies by Arm	17:00	18:00	60	15		

Junction Network

Junctions

Junction	Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	1	Northern Roundabout	Mini-roundabout	B,C,A	52.08	F
2	2	Southern Roundabout	Mini-roundabout	B,C,A	64.31	F

Junction Network Options

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

Arms

Arms

Junction	Arm	Arm	Name	Description
1	A	A	High St (N)	
1	B	B	High St (S)	
1	C	C	Theobalds Station	
2	A	A	High St (N)	
2	B	B	Trinity Lane	
2	C	C	High St (S)	

Capacity Options

Junction	Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	A	0.00	99999.00
1	B	0.00	99999.00
1	C	0.00	99999.00
2	A	0.00	99999.00
2	B	0.00	99999.00
2	C	0.00	99999.00

Mini Roundabout Geometry

Junction	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	A	4.00	3.90	5.47	2.10	15.70	12.70	0.00	
1	B	3.70	3.60	4.65	1.00	13.69	7.40	0.00	✓
1	C	2.80	2.70	5.80	4.77	10.70	2.80	0.00	
2	A	3.95	3.60	4.35	0.70	13.68	7.20	0.00	✓
2	B	2.60	2.34	4.35	1.50	9.88	4.00	0.00	
2	C	4.72	4.50	5.86	5.10	13.13	11.00	0.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1	A		(calculated)	(calculated)	0.587	896.539
1	B		(calculated)	(calculated)	0.415	858.514
1	C		(calculated)	(calculated)	0.539	792.516
2	A		(calculated)	(calculated)	0.411	841.392
2	B		(calculated)	(calculated)	0.490	654.720
2	C		(calculated)	(calculated)	0.622	1015.511

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

Junction	Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	A	DIRECT	✓	N/A	100.000
1	B	Linked Arm		N/A	
1	C	DIRECT	✓	N/A	100.000
2	A	Linked Arm		N/A	
2	B	DIRECT	✓	N/A	100.000
2	C	DIRECT	✓	N/A	100.000

Linked Arm Data

Junction	Arm	From Junction ID	From Arm ID	Link Type	Flow Source	Uniform Flow (PCU/hr)	Flow Multiplier (%)	Internal Storage Space (PCU)
1	B	2	A	Closely spaced	Normal	0.00	100.00	1.00
2	A	1	B	Closely spaced	Normal	0.00	100.00	1.00

Turning Proportions

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

	To			
		B	C	A
	From B	0.000	9.000	861.000
	From C	24.000	0.000	30.000
	From A	801.000	16.000	0.000

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

	To			
		B	C	A
	From B	0.00	0.01	0.99
	From C	0.44	0.00	0.56
	From A	0.98	0.02	0.00

Turning Counts / Proportions (PCU/hr) - Junction 2 (for whole period)

	To			
		B	C	A
	From B	0.000	40.000	102.000
	From C	57.000	0.000	768.000
	From A	96.000	729.000	0.000

Turning Proportions (PCU) - Junction 2 (for whole period)

	To			
		B	C	A
	From B	0.00	0.28	0.72
	From C	0.07	0.00	0.93
	From A	0.12	0.88	0.00

Vehicle Mix

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

	To			
		B	C	A
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000
	A	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		B	C	A
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0
	A	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 2 (for whole period)

	To			
		B	C	A
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000
	A	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 2 (for whole period)

	To			
		B	C	A
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0
	A	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	A	0.95	60.85	12.97	F
1	B	1.00	45.77	0.00	E
1	C	0.22	18.71	0.27	C
2	A	1.00	46.74	0.00	E
2	B	0.47	22.74	0.89	C
2	C	0.99	88.75	19.86	F

Main Results for each time segment

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

Junction	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 (s)	LOS
1	A	817.00	784.88	23.67	0.00	882.64	0.926	8.03	30.596	D
1	B	847.73	847.73	15.37	0.00	852.13	0.995	0.00	44.563	E
1	C	54.00	53.26	838.96	0.00	339.95	0.159	0.19	12.523	B
2	A	793.18	793.18	55.52	0.00	818.55	0.969	0.00	39.969	E
2	B	142.00	138.78	700.89	0.00	311.15	0.456	0.81	20.532	C
2	C	825.00	803.56	99.69	0.00	953.50	0.865	5.36	21.640	C

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

Junction	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 (s)	LOS
1	A	817.00	810.37	23.99	0.00	878.92	0.930	9.69	45.654	E
1	B	851.93	851.93	15.87	0.00	851.93	1.000	0.00	45.772	E
1	C	54.00	53.98	843.11	0.00	331.85	0.163	0.19	12.953	B
2	A	818.49	818.49	55.67	0.00	818.49	1.000	0.00	46.741	E
2	B	142.00	141.75	723.24	0.00	300.19	0.473	0.87	22.661	C
2	C	825.00	805.78	101.82	0.00	869.96	0.948	10.16	44.711	E

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

Junction	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 (s)	LOS
1	A	817.00	810.43	23.93	0.00	867.23	0.942	11.33	53.328	F
1	B	851.93	851.93	15.87	0.00	851.93	1.000	0.00	45.772	E
1	C	54.00	53.84	843.11	0.00	282.75	0.191	0.23	15.714	C
2	A	818.49	818.49	55.66	0.00	818.49	1.000	0.00	46.741	E
2	B	142.00	141.95	723.25	0.00	300.18	0.473	0.88	22.728	C
2	C	825.00	805.62	101.97	0.00	842.27	0.979	15.01	67.179	F

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

Junction	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 (s)	LOS
1	A	817.00	810.44	23.92	0.00	858.67	0.951	12.97	60.854	F
1	B	851.93	851.93	15.87	0.00	851.93	1.000	0.00	45.770	E
1	C	54.00	53.83	843.11	0.00	246.00	0.220	0.27	18.710	C
2	A	818.49	818.49	55.66	0.00	818.49	1.000	0.00	46.743	E
2	B	142.00	141.98	723.25	0.00	300.18	0.473	0.89	22.740	C
2	C	825.00	805.60	101.99	0.00	829.95	0.994	19.86	88.750	F

User and Project Details

Project:	Cheshunt Sports Village
Title:	A121 / B176 High Street / Sturlas Way / Monarch's Way / Swanfield Road
Location:	Cheshunt
File name:	A121_B176 High Street_Sturlas Way.lsg3x
Author:	UKSXB076
Company:	
Address:	
Notes:	

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Pedestrian	1		5	5
D	Traffic	2		7	7
E	Traffic	2		7	7
F	Pedestrian	2		5	5
G	Traffic	3		7	7
H	Traffic	3		7	7
I	Pedestrian	3		5	5
J	Traffic	4		7	7
K	Pedestrian	4		5	5
L	Traffic	5		7	7
M	Pedestrian	5		5	5
N	Traffic	6		7	7
O	Pedestrian	6		5	5

Phase Intergreens Matrix

		Starting Phase															
Terminating Phase		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
	A		5	-	-	-	-	-	-	-	-	-	-	-	-	-	
	B	6		5	-	-	-	-	-	-	-	-	-	-	-	-	
	C	-	5		-	-	-	-	-	-	-	-	-	-	-	-	
	D	-	-	-		5	-	-	-	-	-	-	-	-	-	-	
	E	-	-	-	6		5	-	-	-	-	-	-	-	-	-	
	F	-	-	-	-	5		-	-	-	-	-	-	-	-	-	
	G	-	-	-	-	-	-		5	-	-	-	-	-	-	-	
	H	-	-	-	-	-	-	6		6	-	-	-	-	-	-	
	I	-	-	-	-	-	-	-	5		-	-	-	-	-	-	
	J	-	-	-	-	-	-	-	-	-		5	-	-	-	-	
	K	-	-	-	-	-	-	-	-	-	5		-	-	-	-	
	L	-	-	-	-	-	-	-	-	-	-	-		5	-	-	
	M	-	-	-	-	-	-	-	-	-	-	-	5		-	-	
	N	-	-	-	-	-	-	-	-	-	-	-	-	-		5	
	O	-	-	-	-	-	-	-	-	-	-	-	-	-	5		

Phase Delays**Stage Stream: 1**

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 3

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 4

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 5

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Stage Stream: 6

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

Stage Stream: 1

From Stage	To Stage	
	1	2
	1	5
	2	6

Stage Stream: 2

From Stage	To Stage	
	1	2
	1	5
	2	6

Stage Stream: 3

From Stage	To Stage	
	1	2
	1	5
	2	6

Stage Stream: 4

From Stage	To Stage	
	1	2
	1	5
	2	5

Stage Stream: 5

From Stage	To Stage	
	1	2
	1	5
	2	5

Stage Stream: 6

From Stage	To Stage	
	1	2
	1	5
	2	5

Phases in Stage

Stream	Stage No.	Phases in Stage
1	1	A C
1	2	B
2	1	D F
2	2	E
3	1	G I
3	2	H
4	1	J
4	2	K
5	1	L
5	2	M
6	1	N
6	2	O

Give-Way Lane Input Data

Junction: Unnamed Junction											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
3/1 (Swanfield Road)	5/1 (Left)	715	0	14/1	0.22	All	-	-	-	-	-
				14/2	0.22	None					
	5/2 (Left)	715	0	14/1	0.22	All					
				14/2	0.22	None					
	13/1 (Ahead)	715	0	14/1	0.22	All					
				14/2	0.22	All					
	13/2 (Ahead)	715	0	14/1	0.22	All					
				14/2	0.22	All					
7/1 (Sturlas Way)	10/1 (Left)	715	0	15/2	0.22	All	-	-	-	-	-
	10/2 (Left)	715	0	15/2	0.22	All					
	11/1 (Ahead)	715	0	15/2	0.22	All					
				15/3	0.22	All					
	11/2 (Ahead)	715	0	15/2	0.22	All	-	-	-	-	-
				15/3	0.22	None					

Lane Input Data

Junction: Unnamed Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (B176 High Street N)	U	E	2	3	5.0	Geom	-	3.77	0.00	Y	Arm 2 Left	23.06
1/2 (B176 High Street N)	U	E	2	3	60.0	Geom	-	3.77	0.00	Y	Arm 14 Ahead	Inf
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (Swanfield Road)	O		2	3	60.0	Geom	-	3.71	0.00	Y	Arm 5 Left	14.31
											Arm 13 Ahead	18.07
4/1 (A121 Monarch's Way)	U	H	2	3	60.0	Geom	-	3.58	0.00	Y	Arm 15 Left	27.50
4/2 (A121 Monarch's Way)	U	H	2	3	60.0	Geom	-	3.58	0.00	N	Arm 15 Left	36.00
5/1	U	N	2	3	6.1	Geom	-	3.08	0.00	Y	Arm 16 Ahead	Inf
5/2	U	N	2	3	6.1	Geom	-	3.08	0.00	N	Arm 16 Ahead	Inf
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Sturlas Way)	O		2	3	2.0	Geom	-	2.60	0.00	Y	Arm 10 Left	16.10
											Arm 11 Ahead	Inf
7/2 (Sturlas Way)	O		2	3	60.0	Geom	-	2.60	0.00	Y	Arm 11 Ahead	Inf
8/1	U	L	2	3	7.3	Geom	-	5.00	0.00	Y	Arm 18 Ahead	Inf
9/1 (A121 Winston Churchill Way)	U	B	2	3	60.0	Geom	-	3.08	0.00	Y	Arm 8 Left	44.60
9/2 (A121 Winston Churchill Way)	U	B	2	3	60.0	Geom	-	3.08	0.00	N	Arm 12 Ahead	Inf
9/3 (A121 Winston Churchill Way)	U	B	2	3	15.7	Geom	-	3.08	0.00	N	Arm 12 Ahead	Inf

LinSig V1 style report

10/1	U	J	2	3	7.3	Geom	-	3.75	0.00	Y	Arm 17 Ahead	Inf
10/2	U	J	2	3	7.3	Geom	-	3.75	0.00	N	Arm 17 Ahead	Inf
11/1	U	A	2	3	5.0	Geom	-	3.86	0.00	Y	Arm 8 Ahead	Inf
11/2	U	A	2	3	4.5	Geom	-	3.86	0.00	N	Arm 12 Right	Inf
12/1	U	D	2	3	7.3	Geom	-	3.88	0.00	Y	Arm 2 Ahead	Inf
											Arm 14 Right	Inf
12/2	U	D	2	3	5.9	Geom	-	3.88	0.00	N	Arm 14 Right	Inf
13/1	U	G	2	3	4.7	Geom	-	4.28	0.00	Y	Arm 15 Ahead	Inf
13/2	U	G	2	3	3.8	Geom	-	4.28	0.00	N	Arm 15 Ahead	Inf
14/1	U		2	3	5.2	Geom	-	4.10	0.00	Y	Arm 5 Ahead	Inf
14/2	U		2	3	4.2	Geom	-	4.10	0.00	N	Arm 5 Ahead	Inf
											Arm 13 Right	Inf
15/1	U		2	3	3.1	Geom	-	4.00	0.00	Y	Arm 6 Left	37.50
15/2	U		2	3	2.9	Geom	-	4.00	0.00	N	Arm 10 Ahead	Inf
15/3	U		2	3	2.9	Geom	-	4.00	0.00	N	Arm 10 Ahead	Inf
											Arm 11 Right	Inf
16/1	U		2	3	60.0	Inf	-	-	-	-	-	-
16/2	U		2	3	60.0	Inf	-	-	-	-	-	-
17/1	U		2	3	60.0	Inf	-	-	-	-	-	-
17/2	U		2	3	60.0	Inf	-	-	-	-	-	-
18/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Lane Saturation Flows**Scenario 1: '2016 AM'** (FG5: '2016 AM', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B176 High Street N)	3.77	0.00	Y	Arm 2 Left Arm 14 Ahead	23.06 Inf	6.4 % 93.6 %	1984	1984
1/2 (B176 High Street N)	3.77	0.00	Y	Arm 14 Ahead	Inf	100.0 %	1992	1992
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Swanfield Road)	3.71	0.00	Y	Arm 5 Left Arm 13 Ahead	14.31 18.07	51.8 % 48.2 %	1815	1815
4/1 (A121 Monarch's Way)	3.58	0.00	Y	Arm 15 Left	27.50	100.0 %	1871	1871
4/2 (A121 Monarch's Way)	3.58	0.00	N	Arm 15 Left	36.00	100.0 %	2028	2028
5/1	3.08	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1923	1923
5/2	3.08	0.00	N	Arm 16 Ahead	Inf	100.0 %	2063	2063
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Sturlas Way)	2.60	0.00	Y	Arm 10 Left Arm 11 Ahead	16.10 Inf	73.7 % 26.3 %	1754	1754
7/2 (Sturlas Way)	2.60	0.00	Y	Arm 11 Ahead	Inf	100.0 %	1875	1875
8/1	5.00	0.00	Y	Arm 18 Ahead	Inf	100.0 %	2115	2115
9/1 (A121 Winston Churchill Way)	3.08	0.00	Y	Arm 8 Left	44.60	100.0 %	1860	1860
9/2 (A121 Winston Churchill Way)	3.08	0.00	N	Arm 12 Ahead	Inf	100.0 %	2063	2063
9/3 (A121 Winston Churchill Way)	3.08	0.00	N	Arm 12 Ahead	Inf	100.0 %	2063	2063
10/1	3.75	0.00	Y	Arm 17 Ahead	Inf	100.0 %	1990	1990
10/2	3.75	0.00	N	Arm 17 Ahead	Inf	100.0 %	2130	2130
11/1	3.86	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2001	2001
11/2	3.86	0.00	N	Arm 12 Right	Inf	100.0 %	2141	2141
12/1	3.88	0.00	Y	Arm 2 Ahead Arm 14 Right	Inf Inf	14.5 % 85.5 %	2003	2003
12/2	3.88	0.00	N	Arm 14 Right	Inf	100.0 %	2143	2143
13/1	4.28	0.00	Y	Arm 15 Ahead	Inf	100.0 %	2043	2043
13/2	4.28	0.00	N	Arm 15 Ahead	Inf	100.0 %	2183	2183
14/1	4.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2025	2025
14/2	4.10	0.00	N	Arm 5 Ahead Arm 13 Right	Inf Inf	65.0 % 35.0 %	2165	2165
15/1	4.00	0.00	Y	Arm 6 Left	37.50	100.0 %	1938	1938

LinSig V1 style report

15/2	4.00	0.00	N	Arm 10 Ahead	Inf	100.0 %	2155	2155
15/3	4.00	0.00	N	Arm 10 Ahead	Inf	0.0 %	2155	2155
				Arm 11 Right	Inf	100.0 %		
16/1	Infinite Saturation Flow						Inf	Inf
16/2	Infinite Saturation Flow						Inf	Inf
17/1	Infinite Saturation Flow						Inf	Inf
17/2	Infinite Saturation Flow						Inf	Inf
18/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2016 PM' (FG6: '2016 PM', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B176 High Street N)	3.77	0.00	Y	Arm 2 Left	23.06	13.9 %	1974	1974
				Arm 14 Ahead	Inf	86.1 %		
1/2 (B176 High Street N)	3.77	0.00	Y	Arm 14 Ahead	Inf	100.0 %	1992	1992
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Swanfield Road)	3.71	0.00	Y	Arm 5 Left	14.31	47.2 %	1817	1817
				Arm 13 Ahead	18.07	52.8 %		
4/1 (A121 Monarch's Way)	3.58	0.00	Y	Arm 15 Left	27.50	100.0 %	1871	1871
4/2 (A121 Monarch's Way)	3.58	0.00	N	Arm 15 Left	36.00	100.0 %	2028	2028
5/1	3.08	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1923	1923
5/2	3.08	0.00	N	Arm 16 Ahead	Inf	100.0 %	2063	2063
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Sturlas Way)	2.60	0.00	Y	Arm 10 Left	16.10	72.0 %	1757	1757
				Arm 11 Ahead	Inf	28.0 %		
7/2 (Sturlas Way)	2.60	0.00	Y	Arm 11 Ahead	Inf	100.0 %	1875	1875
8/1	5.00	0.00	Y	Arm 18 Ahead	Inf	100.0 %	2115	2115
9/1 (A121 Winston Churchill Way)	3.08	0.00	Y	Arm 8 Left	44.60	100.0 %	1860	1860
9/2 (A121 Winston Churchill Way)	3.08	0.00	N	Arm 12 Ahead	Inf	100.0 %	2063	2063
9/3 (A121 Winston Churchill Way)	3.08	0.00	N	Arm 12 Ahead	Inf	100.0 %	2063	2063
10/1	3.75	0.00	Y	Arm 17 Ahead	Inf	100.0 %	1990	1990
10/2	3.75	0.00	N	Arm 17 Ahead	Inf	100.0 %	2130	2130
11/1	3.86	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2001	2001
11/2	3.86	0.00	N	Arm 12 Right	Inf	100.0 %	2141	2141
12/1	3.88	0.00	Y	Arm 2 Ahead	Inf	28.8 %	2003	2003
				Arm 14 Right	Inf	71.2 %		
12/2	3.88	0.00	N	Arm 14 Right	Inf	100.0 %	2143	2143
13/1	4.28	0.00	Y	Arm 15 Ahead	Inf	100.0 %	2043	2043
13/2	4.28	0.00	N	Arm 15 Ahead	Inf	100.0 %	2183	2183
14/1	4.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2025	2025
14/2	4.10	0.00	N	Arm 5 Ahead	Inf	67.2 %	2165	2165
				Arm 13 Right	Inf	32.8 %		
15/1	4.00	0.00	Y	Arm 6 Left	37.50	100.0 %	1938	1938
15/2	4.00	0.00	N	Arm 10 Ahead	Inf	100.0 %	2155	2155

LinSig V1 style report

15/3	4.00	0.00	N	Arm 10 Ahead Arm 11 Right	Inf Inf	0.0 % 100.0 %	2155	2155
16/1	Infinite Saturation Flow						Inf	Inf
16/2	Infinite Saturation Flow						Inf	Inf
17/1	Infinite Saturation Flow						Inf	Inf
17/2	Infinite Saturation Flow						Inf	Inf
18/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2016 + Proposed Development AM' (FG7: '2016 + Proposed Development AM', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B176 High Street N)	3.77	0.00	Y	Arm 2 Left	23.06	6.6 %	1983	1983
				Arm 14 Ahead	Inf	93.4 %		
1/2 (B176 High Street N)	3.77	0.00	Y	Arm 14 Ahead	Inf	100.0 %	1992	1992
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Swanfield Road)	3.71	0.00	Y	Arm 5 Left	14.31	51.8 %	1815	1815
				Arm 13 Ahead	18.07	48.2 %		
4/1 (A121 Monarch's Way)	3.58	0.00	Y	Arm 15 Left	27.50	100.0 %	1871	1871
4/2 (A121 Monarch's Way)	3.58	0.00	N	Arm 15 Left	36.00	100.0 %	2028	2028
5/1	3.08	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1923	1923
5/2	3.08	0.00	N	Arm 16 Ahead	Inf	100.0 %	2063	2063
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Sturlas Way)	2.60	0.00	Y	Arm 10 Left	16.10	73.2 %	1755	1755
				Arm 11 Ahead	Inf	26.8 %		
7/2 (Sturlas Way)	2.60	0.00	Y	Arm 11 Ahead	Inf	100.0 %	1875	1875
8/1	5.00	0.00	Y	Arm 18 Ahead	Inf	100.0 %	2115	2115
9/1 (A121 Winston Churchill Way)	3.08	0.00	Y	Arm 8 Left	44.60	100.0 %	1860	1860
9/2 (A121 Winston Churchill Way)	3.08	0.00	N	Arm 12 Ahead	Inf	100.0 %	2063	2063
9/3 (A121 Winston Churchill Way)	3.08	0.00	N	Arm 12 Ahead	Inf	100.0 %	2063	2063
10/1	3.75	0.00	Y	Arm 17 Ahead	Inf	100.0 %	1990	1990
10/2	3.75	0.00	N	Arm 17 Ahead	Inf	100.0 %	2130	2130
11/1	3.86	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2001	2001
11/2	3.86	0.00	N	Arm 12 Right	Inf	100.0 %	2141	2141
12/1	3.88	0.00	Y	Arm 2 Ahead	Inf	14.5 %	2003	2003
				Arm 14 Right	Inf	85.5 %		
12/2	3.88	0.00	N	Arm 14 Right	Inf	100.0 %	2143	2143
13/1	4.28	0.00	Y	Arm 15 Ahead	Inf	100.0 %	2043	2043
13/2	4.28	0.00	N	Arm 15 Ahead	Inf	100.0 %	2183	2183
14/1	4.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2025	2025
14/2	4.10	0.00	N	Arm 5 Ahead	Inf	65.6 %	2165	2165
				Arm 13 Right	Inf	34.4 %		
15/1	4.00	0.00	Y	Arm 6 Left	37.50	100.0 %	1938	1938

LinSig V1 style report

Energy v1 style report

15/2	4.00	0.00	N	Arm 10 Ahead	Inf	100.0 %	2155	2155
15/3	4.00	0.00	N	Arm 10 Ahead	Inf	0.0 %	2155	2155
				Arm 11 Right	Inf	100.0 %		
16/1	Infinite Saturation Flow						Inf	Inf
16/2	Infinite Saturation Flow						Inf	Inf
17/1	Infinite Saturation Flow						Inf	Inf
17/2	Infinite Saturation Flow						Inf	Inf
18/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2016 + Proposed Development PM' (FG8: '2016 + Proposed Development PM', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B176 High Street N)	3.77	0.00	Y	Arm 2 Left	23.06	15.4 %	1972	1972
				Arm 14 Ahead	Inf	84.6 %		
1/2 (B176 High Street N)	3.77	0.00	Y	Arm 14 Ahead	Inf	100.0 %	1992	1992
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Swanfield Road)	3.71	0.00	Y	Arm 5 Left	14.31	47.2 %	1817	1817
				Arm 13 Ahead	18.07	52.8 %		
4/1 (A121 Monarch's Way)	3.58	0.00	Y	Arm 15 Left	27.50	100.0 %	1871	1871
4/2 (A121 Monarch's Way)	3.58	0.00	N	Arm 15 Left	36.00	100.0 %	2028	2028
5/1	3.08	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1923	1923
5/2	3.08	0.00	N	Arm 16 Ahead	Inf	100.0 %	2063	2063
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Sturlas Way)	2.60	0.00	Y	Arm 10 Left	16.10	71.8 %	1757	1757
				Arm 11 Ahead	Inf	28.2 %		
7/2 (Sturlas Way)	2.60	0.00	Y	Arm 11 Ahead	Inf	100.0 %	1875	1875
8/1	5.00	0.00	Y	Arm 18 Ahead	Inf	100.0 %	2115	2115
9/1 (A121 Winston Churchill Way)	3.08	0.00	Y	Arm 8 Left	44.60	100.0 %	1860	1860
9/2 (A121 Winston Churchill Way)	3.08	0.00	N	Arm 12 Ahead	Inf	100.0 %	2063	2063
9/3 (A121 Winston Churchill Way)	3.08	0.00	N	Arm 12 Ahead	Inf	100.0 %	2063	2063
10/1	3.75	0.00	Y	Arm 17 Ahead	Inf	100.0 %	1990	1990
10/2	3.75	0.00	N	Arm 17 Ahead	Inf	100.0 %	2130	2130
11/1	3.86	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2001	2001
11/2	3.86	0.00	N	Arm 12 Right	Inf	100.0 %	2141	2141
12/1	3.88	0.00	Y	Arm 2 Ahead	Inf	28.3 %	2003	2003
				Arm 14 Right	Inf	71.7 %		
12/2	3.88	0.00	N	Arm 14 Right	Inf	100.0 %	2143	2143
13/1	4.28	0.00	Y	Arm 15 Ahead	Inf	100.0 %	2043	2043
13/2	4.28	0.00	N	Arm 15 Ahead	Inf	100.0 %	2183	2183
14/1	4.10	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2025	2025
14/2	4.10	0.00	N	Arm 5 Ahead	Inf	67.8 %	2165	2165
				Arm 13 Right	Inf	32.2 %		
15/1	4.00	0.00	Y	Arm 6 Left	37.50	100.0 %	1938	1938

LinSig V1 style report

15/2	4.00	0.00	N	Arm 10 Ahead	Inf	100.0 %	2155	2155
15/3	4.00	0.00	N	Arm 10 Ahead	Inf	0.0 %	2155	2155
				Arm 11 Right	Inf	100.0 %		
16/1	Infinite Saturation Flow						Inf	Inf
16/2	Infinite Saturation Flow						Inf	Inf
17/1	Infinite Saturation Flow						Inf	Inf
17/2	Infinite Saturation Flow						Inf	Inf
18/1	Infinite Saturation Flow						Inf	Inf

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2029 BASE AM'	08:00	09:00	01:00	
2: '2029 BASE PM'	17:00	18:00	01:00	
3: '2029 BASE + PROPOSED AM'	08:00	09:00	01:00	
4: '2029 BASE + PROPOSED PM'	17:00	18:00	01:00	
5: '2016 AM'	08:00	09:00	01:00	
6: '2016 PM'	17:00	18:00	01:00	
7: '2016 + Proposed Development AM'	08:00	09:00	01:00	
8: '2016 + Proposed Development PM'	17:00	18:00	01:00	

Traffic Flows, Desired

FG1: '2029 BASE AM'

Desired Flow :

		Destination					
Origin	A	A	B	C	D	E	Tot.
		0	69	20	17	27	133
	B	65	0	73	379	562	1079
	C	2	57	0	133	48	240
	D	13	804	118	0	132	1067
	E	20	658	105	178	0	961
	Tot.	100	1588	316	707	769	3480

FG2: '2029 BASE PM'

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	38	10	15	18	81
	B	71	0	57	508	743	1379
	C	7	70	0	206	80	363
	D	28	423	66	0	176	693
	E	23	461	69	135	0	688
	Tot.	129	992	202	864	1017	3204

FG3: '2029 BASE + PROPOSED AM'

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	69	20	17	27	133
	B	65	0	73	379	570	1087
	C	2	57	0	133	48	240
	D	13	804	118	0	153	1088
	E	20	664	105	178	0	967
	Tot.	100	1594	316	707	798	3515

FG4: '2029 BASE + PROPOSED PM'

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	38	10	15	18	81
	B	71	0	57	508	755	1391
	C	7	70	0	206	81	364
	D	28	423	66	0	211	728
	E	23	470	70	135	0	698
	Tot.	129	1001	203	864	1065	3262

FG5: '2016 AM'

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	58	17	14	23	112
	B	55	0	61	319	473	908
	C	2	48	0	112	40	202
	D	11	676	99	0	111	897
	E	17	553	88	150	0	808
	Tot.	85	1335	265	595	647	2927

FG6: '2016 PM'

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	34	9	13	16	72
	B	63	0	51	451	660	1225
	C	6	62	0	183	71	322
	D	25	376	59	0	156	616
	E	20	409	61	120	0	610
	Tot.	114	881	180	767	903	2845

FG7: '2016 + Proposed Development AM'

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	58	17	14	23	112
	B	55	0	61	319	480	915
	C	2	48	0	112	41	203
	D	11	676	99	0	133	919
	E	17	560	88	150	0	815
	Tot.	85	1342	265	595	677	2964

FG8: '2016 + Proposed Development PM'

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	34	9	13	16	72
	B	63	0	51	451	672	1237
	C	6	62	0	183	72	323
	D	25	376	59	0	195	655
	E	20	418	62	120	0	620
	Tot.	114	890	181	767	955	2907

Stage Timings

Scenario 1: '2016 AM' (FG5: '2016 AM', Plan 1: 'Network Control Plan 1')

Stage Stream: 1

Stage	1	2
Duration	25	24
Change Point	0	31

Stage Stream: 2

Stage	1	2
Duration	19	30
Change Point	28	53

Stage Stream: 3

Stage	1	2
Duration	18	31
Change Point	48	12

Stage Stream: 4

Stage	1	2
Duration	45	5
Change Point	50	40

Stage Stream: 5

Stage	1	2
Duration	45	5
Change Point	2	52

Stage Stream: 6

Stage	1	2
Duration	45	5
Change Point	31	21

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A121 / B176 High Street / Sturlas Way / Monarch's Way / Swanfield Road	-	-	N/A	-	-		-	-	-	-	-	-	70.2%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	70.2%
1/2+1/1	B176 High Street N Left Ahead	U	2	N/A	E		1	30	-	808	1992:1984	788+389	68.6 : 68.6%
2/1		U	N/A	N/A	-		-	-	-	85	Inf	Inf	0.0%
3/1	Swanfield Road Left Ahead	O	N/A	N/A	-		-	-	-	112	1815	423	26.4%
4/1	A121 Monarch's Way Left	U	3	N/A	H		1	31	-	380	1871	998	38.1%
4/2	A121 Monarch's Way Left	U	3	N/A	H		1	31	-	528	2028	1082	48.8%
5/1	Ahead	U	6	N/A	N		1	45	-	689	1923	1474	46.7%
5/2	Ahead	U	6	N/A	N		1	45	-	646	2063	1582	40.8%
6/1		U	N/A	N/A	-		-	-	-	265	Inf	Inf	0.0%
7/2+7/1	Sturlas Way Left Ahead	O	N/A	N/A	-		-	-	-	202	1875:1754	178+540	28.1 : 28.1%
8/1	Ahead	U	5	N/A	L		1	45	-	647	2115	1622	39.9%
9/1	A121 Winston Churchill Way Left	U	1	N/A	B		1	24	-	111	1860	775	14.3%
9/2	A121 Winston Churchill Way Ahead	U	1	N/A	B		1	24	-	393	2063	860	45.7%
9/3	A121 Winston Churchill Way Ahead	U	1	N/A	B		1	24	-	393	2063	860	45.7%
10/1	Ahead	U	4	N/A	J		1	45	-	483	1990	1526	31.7%
10/2	Ahead	U	4	N/A	J		1	45	-	112	2130	1633	6.9%

LinSig V1 style report

11/1	Ahead	U	1	N/A	A		1	25	-	536	2001	867	61.8%
11/2	Right	U	1	N/A	A		1	25	-	105	2141	928	11.3%
12/1	Ahead Right	U	2	N/A	D		1	19	-	469	2003	668	70.2%
12/2	Right	U	2	N/A	D		1	19	-	422	2143	714	59.1%
13/1	Ahead	U	3	N/A	G		1	18	-	368	2043	647	56.9%
13/2	Ahead	U	3	N/A	G		1	18	-	23	2183	691	3.3%
14/1	Ahead	U	N/A	N/A	-		-	-	-	651	2025	2025	32.1%
14/2	Ahead Right	U	N/A	N/A	-		-	-	-	963	2165	2165	44.5%
15/1	Left	U	N/A	N/A	-		-	-	-	265	1938	1938	13.7%
15/2	Ahead	U	N/A	N/A	-		-	-	-	483	2155	2155	22.4%
15/3	Ahead Right	U	N/A	N/A	-		-	-	-	551	2155	2155	25.6%
16/1		U	N/A	N/A	-		-	-	-	689	Inf	Inf	0.0%
16/2		U	N/A	N/A	-		-	-	-	646	Inf	Inf	0.0%
17/1		U	N/A	N/A	-		-	-	-	483	Inf	Inf	0.0%
17/2		U	N/A	N/A	-		-	-	-	112	Inf	Inf	0.0%
18/1		U	N/A	N/A	-		-	-	-	647	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	1	-	C		1	26	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	2	-	F		1	20	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	3	-	I		1	18	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	4	-	K		1	5	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	5	-	M		1	5	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	6	-	O		1	5	-	0	-	0	0.0%

LinSig V1 style report

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A121 / B176 High Street / Sturlas Way / Monarch's Way / Swanfield Road	-	-	516	0	0	13.1	9.0	0.0	22.1	-	-	-	-
Unnamed Junction	-	-	516	0	0	13.1	9.0	0.0	22.1	-	-	-	-
1/2+1/1	808	808	-	-	-	2.1	1.1	-	3.2	14.1	6.8	1.1	7.9
2/1	85	85	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	112	112	112	0	0	0.0	0.2	-	0.2	6.6	0.3	0.2	0.5
4/1	380	380	-	-	-	0.9	0.3	-	1.2	11.1	3.7	0.3	4.0
4/2	528	528	-	-	-	1.3	0.5	-	1.8	12.1	5.4	0.5	5.9
5/1	689	689	-	-	-	0.1	0.4	-	0.6	3.0	1.0	0.4	1.5
5/2	646	646	-	-	-	0.2	0.3	-	0.5	2.8	1.1	0.3	1.5
6/1	265	265	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	202	202	404	0	0	0.0	0.2	-	0.2	3.9	0.4	0.2	0.6
8/1	647	647	-	-	-	0.1	0.3	-	0.4	2.1	0.3	0.3	0.7
9/1	111	111	-	-	-	0.3	0.1	-	0.4	13.6	1.1	0.1	1.2
9/2	393	393	-	-	-	1.4	0.4	-	1.8	16.5	4.7	0.4	5.1
9/3	393	393	-	-	-	1.4	0.4	-	1.8	16.5	4.7	0.4	5.1
10/1	483	483	-	-	-	0.2	0.2	-	0.4	2.9	1.1	0.2	1.3
10/2	112	112	-	-	-	0.1	0.0	-	0.1	2.9	0.4	0.0	0.5
11/1	536	536	-	-	-	1.6	0.8	-	2.4	15.8	3.7	0.8	4.5
11/2	105	105	-	-	-	0.3	0.1	-	0.3	11.6	0.8	0.1	0.9
12/1	469	469	-	-	-	1.0	1.2	-	2.2	16.7	2.3	1.2	3.5
12/2	422	422	-	-	-	0.8	0.7	-	1.5	13.0	1.5	0.7	2.3
13/1	368	368	-	-	-	1.4	0.7	-	2.1	20.1	3.8	0.7	4.4
13/2	23	23	-	-	-	0.1	0.0	-	0.1	16.7	0.2	0.0	0.2

LinSig V1 style report

14/1	651	651	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
14/2	963	963	-	-	-	0.0	0.4	-	0.4	1.5	0.0	0.4	0.4
15/1	265	265	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
15/2	483	483	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
15/3	551	551	-	-	-	0.0	0.2	-	0.2	1.1	0.0	0.2	0.2
16/1	689	689	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/2	646	646	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
17/1	483	483	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
17/2	112	112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
18/1	647	647	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-
C1 Stream: 1 PRC for Signalled Lanes (%): 45.6 C1 Stream: 2 PRC for Signalled Lanes (%): 28.1 C1 Stream: 3 PRC for Signalled Lanes (%): 58.2 C1 Stream: 4 PRC for Signalled Lanes (%): 184.3 C1 Stream: 5 PRC for Signalled Lanes (%): 125.6 C1 Stream: 6 PRC for Signalled Lanes (%): 92.6 PRC Over All Lanes (%): 28.1 Total Delay for Signalled Lanes (pcuHr): 6.71 Total Delay for Signalled Lanes (pcuHr): 6.86 Total Delay for Signalled Lanes (pcuHr): 5.11 Total Delay for Signalled Lanes (pcuHr): 0.48 Total Delay for Signalled Lanes (pcuHr): 0.38 Total Delay for Signalled Lanes (pcuHr): 1.09 Total Delay Over All Lanes(pcuHr): 22.09 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60													

Stage Timings

Scenario 2: '2016 PM' (FG6: '2016 PM', Plan 1: 'Network Control Plan 1')

Stage Stream: 1

Stage	1	2
Duration	38	11
Change Point	0	44

Stage Stream: 2

Stage	1	2
Duration	20	29
Change Point	43	9

Stage Stream: 3

Stage	1	2
Duration	13	36
Change Point	42	1

Stage Stream: 4

Stage	1	2
Duration	45	5
Change Point	44	34

Stage Stream: 5

Stage	1	2
Duration	45	5
Change Point	5	55

Stage Stream: 6

Stage	1	2
Duration	45	5
Change Point	48	38

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A121 / B176 High Street / Sturlas Way / Monarch's Way / Swanfield Road	-	-	N/A	-	-		-	-	-	-	-	-	57.8%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	57.8%
1/2+1/1	B176 High Street N Left Ahead	U	2	N/A	E		1	29	-	610	1992:1974	831+257	56.0 : 56.0%
2/1		U	N/A	N/A	-		-	-	-	114	Inf	Inf	0.0%
3/1	Swanfield Road Left Ahead	O	N/A	N/A	-		-	-	-	72	1817	522	13.8%
4/1	A121 Monarch's Way Left	U	3	N/A	H		1	36	-	502	1871	1154	43.5%
4/2	A121 Monarch's Way Left	U	3	N/A	H		1	36	-	723	2028	1251	57.8%
5/1	Ahead	U	6	N/A	N		1	45	-	379	1923	1474	25.7%
5/2	Ahead	U	6	N/A	N		1	45	-	502	2063	1582	31.7%
6/1		U	N/A	N/A	-		-	-	-	180	Inf	Inf	0.0%
7/2+7/1	Sturlas Way Left Ahead	O	N/A	N/A	-		-	-	-	322	1875:1757	132+494	51.4 : 51.4%
8/1	Ahead	U	5	N/A	L		1	45	-	903	2115	1622	55.7%
9/1	A121 Winston Churchill Way Left	U	1	N/A	B		1	11	-	156	1860	372	41.9%
9/2	A121 Winston Churchill Way Ahead	U	1	N/A	B		1	11	-	229	2063	413	55.5%
9/3	A121 Winston Churchill Way Ahead	U	1	N/A	B		1	11	-	231	2063	413	56.0%
10/1	Ahead	U	4	N/A	J		1	45	-	585	1990	1526	38.3%
10/2	Ahead	U	4	N/A	J		1	45	-	182	2130	1633	11.1%

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11/1	Ahead	U	1	N/A	A		1	38	-	747	2001	1301	57.4%
11/2	Right	U	1	N/A	A		1	38	-	131	2141	1392	9.4%
12/1	Ahead Right	U	2	N/A	D		1	20	-	326	2003	701	46.5%
12/2	Right	U	2	N/A	D		1	20	-	265	2143	750	35.3%
13/1	Ahead	U	3	N/A	G		1	13	-	262	2043	477	55.0%
13/2	Ahead	U	3	N/A	G		1	13	-	16	2183	509	3.1%
14/1	Ahead	U	N/A	N/A	-		-	-	-	356	2025	2025	17.6%
14/2	Ahead Right	U	N/A	N/A	-		-	-	-	731	2165	2165	33.8%
15/1	Left	U	N/A	N/A	-		-	-	-	180	1938	1938	9.3%
15/2	Ahead	U	N/A	N/A	-		-	-	-	584	2155	2155	27.1%
15/3	Ahead Right	U	N/A	N/A	-		-	-	-	739	2155	2155	34.3%
16/1		U	N/A	N/A	-		-	-	-	379	Inf	Inf	0.0%
16/2		U	N/A	N/A	-		-	-	-	502	Inf	Inf	0.0%
17/1		U	N/A	N/A	-		-	-	-	585	Inf	Inf	0.0%
17/2		U	N/A	N/A	-		-	-	-	182	Inf	Inf	0.0%
18/1		U	N/A	N/A	-		-	-	-	903	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	1	-	C		1	39	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	2	-	F		1	21	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	3	-	I		1	13	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	4	-	K		1	5	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	5	-	M		1	5	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	6	-	O		1	5	-	0	-	0	0.0%

LinSig V1 style report

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A121 / B176 High Street / Sturlas Way / Monarch's Way / Swanfield Road	-	-	716	0	0	10.8	8.2	0.0	19.1	-	-	-	-
Unnamed Junction	-	-	716	0	0	10.8	8.2	0.0	19.1	-	-	-	-
1/2+1/1	610	610	-	-	-	1.6	0.6	-	2.2	13.2	5.2	0.6	5.8
2/1	114	114	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	72	72	72	0	0	0.0	0.1	-	0.1	4.2	0.1	0.1	0.2
4/1	502	502	-	-	-	0.8	0.4	-	1.2	8.8	4.3	0.4	4.7
4/2	723	723	-	-	-	1.4	0.7	-	2.1	10.3	7.0	0.7	7.7
5/1	379	379	-	-	-	0.1	0.2	-	0.2	2.3	0.4	0.2	0.6
5/2	502	502	-	-	-	0.1	0.2	-	0.4	2.7	1.0	0.2	1.2
6/1	180	180	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	322	322	644	0	0	0.1	0.5	-	0.6	6.9	1.3	0.5	1.8
8/1	903	903	-	-	-	0.1	0.6	-	0.8	3.1	1.9	0.6	2.5
9/1	156	156	-	-	-	0.9	0.4	-	1.3	29.3	2.3	0.4	2.6
9/2	229	229	-	-	-	1.4	0.6	-	2.0	31.3	3.4	0.6	4.0
9/3	231	231	-	-	-	1.4	0.6	-	2.0	31.5	3.5	0.6	4.1
10/1	585	585	-	-	-	0.2	0.3	-	0.5	3.4	1.5	0.3	1.8
10/2	182	182	-	-	-	0.1	0.1	-	0.2	3.0	0.8	0.1	0.8
11/1	747	747	-	-	-	0.2	0.7	-	0.9	4.3	0.9	0.7	1.6
11/2	131	131	-	-	-	0.1	0.1	-	0.1	3.8	0.4	0.1	0.5
12/1	326	326	-	-	-	0.6	0.4	-	1.0	11.1	1.7	0.4	2.2
12/2	265	265	-	-	-	0.1	0.3	-	0.4	5.7	0.4	0.3	0.7
13/1	262	262	-	-	-	1.5	0.6	-	2.1	28.3	3.6	0.6	4.2
13/2	16	16	-	-	-	0.1	0.0	-	0.1	23.3	0.2	0.0	0.2

LinSig V1 style report

14/1	356	356	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
14/2	731	731	-	-	-	0.0	0.3	-	0.3	1.3	0.0	0.3	0.3
15/1	180	180	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
15/2	584	584	-	-	-	0.0	0.2	-	0.2	1.1	0.0	0.2	0.2
15/3	739	739	-	-	-	0.0	0.3	-	0.3	1.3	0.0	0.3	0.3
16/1	379	379	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/2	502	502	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
17/1	585	585	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
17/2	182	182	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
18/1	903	903	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-
C1 Stream: 1 PRC for Signalled Lanes (%): 56.7 C1 Stream: 2 PRC for Signalled Lanes (%): 60.6 C1 Stream: 3 PRC for Signalled Lanes (%): 55.7 C1 Stream: 4 PRC for Signalled Lanes (%): 134.7 C1 Stream: 5 PRC for Signalled Lanes (%): 61.6 C1 Stream: 6 PRC for Signalled Lanes (%): 183.6 PRC Over All Lanes (%): 55.7 Total Delay for Signalled Lanes (pcuHr): 6.31 Total Delay for Signalled Lanes (pcuHr): 3.65 Total Delay for Signalled Lanes (pcuHr): 5.45 Total Delay for Signalled Lanes (pcuHr): 0.70 Total Delay for Signalled Lanes (pcuHr): 0.77 Total Delay for Signalled Lanes (pcuHr): 0.61 Total Delay Over All Lanes(pcuHr): 19.05 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60													

Stage Timings

Scenario 3: '2016 + Proposed Development AM' (FG7: '2016 + Proposed Development AM', Plan 1: 'Network Control Plan 1')

Stage Stream: 1

Stage	1	2
Duration	25	24
Change Point	0	31

Stage Stream: 2

Stage	1	2
Duration	19	30
Change Point	26	51

Stage Stream: 3

Stage	1	2
Duration	17	32
Change Point	47	10

Stage Stream: 4

Stage	1	2
Duration	45	5
Change Point	49	39

Stage Stream: 5

Stage	1	2
Duration	45	5
Change Point	2	52

Stage Stream: 6

Stage	1	2
Duration	45	5
Change Point	29	19

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A121 / B176 High Street / Sturlas Way / Monarch's Way / Swanfield Road	-	-	N/A	-	-		-	-	-	-	-	-	70.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	70.4%
1/2+1/1	B176 High Street N Left Ahead	U	2	N/A	E		1	30	-	815	1992:1983	800+366	69.9 : 69.9%
2/1		U	N/A	N/A	-		-	-	-	85	Inf	Inf	0.0%
3/1	Swanfield Road Left Ahead	O	N/A	N/A	-		-	-	-	112	1815	423	26.5%
4/1	A121 Monarch's Way Left	U	3	N/A	H		1	32	-	380	1871	1029	36.9%
4/2	A121 Monarch's Way Left	U	3	N/A	H		1	32	-	535	2028	1115	48.0%
5/1	Ahead	U	6	N/A	N		1	45	-	687	1923	1474	46.6%
5/2	Ahead	U	6	N/A	N		1	45	-	655	2063	1582	41.4%
6/1		U	N/A	N/A	-		-	-	-	265	Inf	Inf	0.0%
7/2+7/1	Sturlas Way Left Ahead	O	N/A	N/A	-		-	-	-	203	1875:1755	176+540	28.3 : 28.3%
8/1	Ahead	U	5	N/A	L		1	45	-	677	2115	1622	41.8%
9/1	A121 Winston Churchill Way Left	U	1	N/A	B		1	24	-	133	1860	775	17.2%
9/2	A121 Winston Churchill Way Ahead	U	1	N/A	B		1	24	-	393	2063	860	45.7%
9/3	A121 Winston Churchill Way Ahead	U	1	N/A	B		1	24	-	393	2063	860	45.7%
10/1	Ahead	U	4	N/A	J		1	45	-	483	1990	1526	31.7%
10/2	Ahead	U	4	N/A	J		1	45	-	112	2130	1633	6.9%

LinSig V1 style report

11/1	Ahead	U	1	N/A	A		1	25	-	544	2001	867	62.7%
11/2	Right	U	1	N/A	A		1	25	-	105	2141	928	11.3%
12/1	Ahead Right	U	2	N/A	D		1	19	-	470	2003	668	70.4%
12/2	Right	U	2	N/A	D		1	19	-	421	2143	714	58.9%
13/1	Ahead	U	3	N/A	G		1	17	-	368	2043	613	60.0%
13/2	Ahead	U	3	N/A	G		1	17	-	23	2183	655	3.5%
14/1	Ahead	U	N/A	N/A	-		-	-	-	641	2025	2025	31.7%
14/2	Ahead Right	U	N/A	N/A	-		-	-	-	980	2165	2165	45.3%
15/1	Left	U	N/A	N/A	-		-	-	-	265	1938	1938	13.7%
15/2	Ahead	U	N/A	N/A	-		-	-	-	483	2155	2155	22.4%
15/3	Ahead Right	U	N/A	N/A	-		-	-	-	558	2155	2155	25.9%
16/1		U	N/A	N/A	-		-	-	-	687	Inf	Inf	0.0%
16/2		U	N/A	N/A	-		-	-	-	655	Inf	Inf	0.0%
17/1		U	N/A	N/A	-		-	-	-	483	Inf	Inf	0.0%
17/2		U	N/A	N/A	-		-	-	-	112	Inf	Inf	0.0%
18/1		U	N/A	N/A	-		-	-	-	677	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	1	-	C		1	26	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	2	-	F		1	20	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	3	-	I		1	17	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	4	-	K		1	5	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	5	-	M		1	5	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	6	-	O		1	5	-	0	-	0	0.0%

LinSig V1 style report

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A121 / B176 High Street / Sturlas Way / Monarch's Way / Swanfield Road	-	-	518	0	0	13.3	9.2	0.0	22.5	-	-	-	-
Unnamed Junction	-	-	518	0	0	13.3	9.2	0.0	22.5	-	-	-	-
1/2+1/1	815	815	-	-	-	2.1	1.2	-	3.3	14.5	7.2	1.2	8.4
2/1	85	85	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	112	112	112	0	0	0.0	0.2	-	0.2	6.6	0.3	0.2	0.5
4/1	380	380	-	-	-	0.8	0.3	-	1.1	10.4	3.5	0.3	3.8
4/2	535	535	-	-	-	1.2	0.5	-	1.7	11.4	5.3	0.5	5.8
5/1	687	687	-	-	-	0.1	0.4	-	0.6	3.0	1.0	0.4	1.4
5/2	655	655	-	-	-	0.2	0.4	-	0.5	2.9	1.2	0.4	1.5
6/1	265	265	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	203	203	406	0	0	0.0	0.2	-	0.2	3.9	0.4	0.2	0.6
8/1	677	677	-	-	-	0.1	0.4	-	0.4	2.2	0.4	0.4	0.8
9/1	133	133	-	-	-	0.4	0.1	-	0.5	13.8	1.4	0.1	1.5
9/2	393	393	-	-	-	1.4	0.4	-	1.8	16.5	4.7	0.4	5.1
9/3	393	393	-	-	-	1.4	0.4	-	1.8	16.5	4.7	0.4	5.1
10/1	483	483	-	-	-	0.2	0.2	-	0.4	2.9	1.1	0.2	1.3
10/2	112	112	-	-	-	0.1	0.0	-	0.1	2.9	0.4	0.0	0.5
11/1	544	544	-	-	-	1.5	0.8	-	2.3	15.3	3.5	0.8	4.3
11/2	105	105	-	-	-	0.3	0.1	-	0.3	11.3	0.8	0.1	0.9
12/1	470	470	-	-	-	1.1	1.2	-	2.3	17.4	2.6	1.2	3.7
12/2	421	421	-	-	-	0.9	0.7	-	1.6	13.8	1.7	0.7	2.5
13/1	368	368	-	-	-	1.5	0.7	-	2.2	21.8	3.8	0.7	4.6
13/2	23	23	-	-	-	0.1	0.0	-	0.1	17.5	0.2	0.0	0.2

LinSig V1 style report

14/1	641	641	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
14/2	980	980	-	-	-	0.0	0.4	-	0.4	1.5	0.0	0.4	0.4
15/1	265	265	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
15/2	483	483	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
15/3	558	558	-	-	-	0.0	0.2	-	0.2	1.1	0.0	0.2	0.2
16/1	687	687	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/2	655	655	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
17/1	483	483	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
17/2	112	112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
18/1	677	677	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-
C1 Stream: 1 PRC for Signalled Lanes (%): 43.5 C1 Stream: 2 PRC for Signalled Lanes (%): 27.9 C1 Stream: 3 PRC for Signalled Lanes (%): 49.9 C1 Stream: 4 PRC for Signalled Lanes (%): 184.3 C1 Stream: 5 PRC for Signalled Lanes (%): 115.6 C1 Stream: 6 PRC for Signalled Lanes (%): 93.1 PRC Over All Lanes (%): 27.9 Total Delay for Signalled Lanes (pcuHr): 6.75 Total Delay for Signalled Lanes (pcuHr): 7.18 Total Delay for Signalled Lanes (pcuHr): 5.13 Total Delay for Signalled Lanes (pcuHr): 0.48 Total Delay for Signalled Lanes (pcuHr): 0.42 Total Delay for Signalled Lanes (pcuHr): 1.10 Total Delay Over All Lanes(pcuHr): 22.52 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60													

Stage Timings

Scenario 4: '2016 + Proposed Development PM' (FG8: '2016 + Proposed Development PM', Plan 1: 'Network Control Plan 1')

Stage Stream: 1

Stage	1	2
Duration	38	11
Change Point	0	44

Stage Stream: 2

Stage	1	2
Duration	18	31
Change Point	38	2

Stage Stream: 3

Stage	1	2
Duration	13	36
Change Point	3	22

Stage Stream: 4

Stage	1	2
Duration	45	5
Change Point	5	55

Stage Stream: 5

Stage	1	2
Duration	45	5
Change Point	27	17

Stage Stream: 6

Stage	1	2
Duration	45	5
Change Point	43	33

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A121 / B176 High Street / Sturlas Way / Monarch's Way / Swanfield Road	-	-	N/A	-	-		-	-	-	-	-	-	58.9%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	58.9%
1/2+1/1	B176 High Street N Left Ahead	U	2	N/A	E		1	31	-	620	1992:1972	902+239	54.3 : 54.3%
2/1		U	N/A	N/A	-		-	-	-	114	Inf	Inf	0.0%
3/1	Swanfield Road Left Ahead	O	N/A	N/A	-		-	-	-	72	1817	522	13.8%
4/1	A121 Monarch's Way Left	U	3	N/A	H		1	36	-	502	1871	1154	43.5%
4/2	A121 Monarch's Way Left	U	3	N/A	H		1	36	-	735	2028	1251	58.8%
5/1	Ahead	U	6	N/A	N		1	45	-	375	1923	1474	25.4%
5/2	Ahead	U	6	N/A	N		1	45	-	515	2063	1582	32.6%
6/1		U	N/A	N/A	-		-	-	-	181	Inf	Inf	0.0%
7/2+7/1	Sturlas Way Left Ahead	O	N/A	N/A	-		-	-	-	323	1875:1757	131+492	51.8 : 51.8%
8/1	Ahead	U	5	N/A	L		1	45	-	955	2115	1622	58.9%
9/1	A121 Winston Churchill Way Left	U	1	N/A	B		1	11	-	195	1860	372	52.4%
9/2	A121 Winston Churchill Way Ahead	U	1	N/A	B		1	11	-	229	2063	413	55.5%
9/3	A121 Winston Churchill Way Ahead	U	1	N/A	B		1	11	-	231	2063	413	56.0%
10/1	Ahead	U	4	N/A	J		1	45	-	584	1990	1526	38.3%
10/2	Ahead	U	4	N/A	J		1	45	-	183	2130	1633	11.2%

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11/1	Ahead	U	1	N/A	A		1	38	-	760	2001	1301	58.4%
11/2	Right	U	1	N/A	A		1	38	-	131	2141	1392	9.4%
12/1	Ahead Right	U	2	N/A	D		1	18	-	332	2003	634	52.3%
12/2	Right	U	2	N/A	D		1	18	-	259	2143	679	38.2%
13/1	Ahead	U	3	N/A	G		1	13	-	263	2043	477	55.2%
13/2	Ahead	U	3	N/A	G		1	13	-	16	2183	509	3.1%
14/1	Ahead	U	N/A	N/A	-		-	-	-	348	2025	2025	17.2%
14/2	Ahead Right	U	N/A	N/A	-		-	-	-	749	2165	2165	34.6%
15/1	Left	U	N/A	N/A	-		-	-	-	181	1938	1938	9.3%
15/2	Ahead	U	N/A	N/A	-		-	-	-	584	2155	2155	27.1%
15/3	Ahead Right	U	N/A	N/A	-		-	-	-	751	2155	2155	34.8%
16/1		U	N/A	N/A	-		-	-	-	375	Inf	Inf	0.0%
16/2		U	N/A	N/A	-		-	-	-	515	Inf	Inf	0.0%
17/1		U	N/A	N/A	-		-	-	-	584	Inf	Inf	0.0%
17/2		U	N/A	N/A	-		-	-	-	183	Inf	Inf	0.0%
18/1		U	N/A	N/A	-		-	-	-	955	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	1	-	C		1	39	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	2	-	F		1	19	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	3	-	I		1	13	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	4	-	K		1	5	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	5	-	M		1	5	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	6	-	O		1	5	-	0	-	0	0.0%

LinSig V1 style report

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A121 / B176 High Street / Sturlas Way / Monarch's Way / Swanfield Road	-	-	718	0	0	11.6	8.7	0.0	20.4	-	-	-	-
Unnamed Junction	-	-	718	0	0	11.6	8.7	0.0	20.4	-	-	-	-
1/2+1/1	620	620	-	-	-	1.4	0.6	-	2.0	11.8	5.0	0.6	5.6
2/1	114	114	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	72	72	72	0	0	0.0	0.1	-	0.1	4.2	0.1	0.1	0.2
4/1	502	502	-	-	-	0.8	0.4	-	1.2	8.8	4.3	0.4	4.7
4/2	735	735	-	-	-	1.4	0.7	-	2.1	10.4	7.4	0.7	8.1
5/1	375	375	-	-	-	0.1	0.2	-	0.2	2.2	0.4	0.2	0.6
5/2	515	515	-	-	-	0.1	0.2	-	0.4	2.7	1.2	0.2	1.5
6/1	181	181	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	323	323	646	0	0	0.1	0.5	-	0.6	7.1	1.3	0.5	1.8
8/1	955	955	-	-	-	0.1	0.7	-	0.8	3.1	0.8	0.7	1.5
9/1	195	195	-	-	-	1.2	0.5	-	1.7	31.6	2.9	0.5	3.4
9/2	229	229	-	-	-	1.4	0.6	-	2.0	31.3	3.4	0.6	4.0
9/3	231	231	-	-	-	1.4	0.6	-	2.0	31.5	3.5	0.6	4.1
10/1	584	584	-	-	-	0.2	0.3	-	0.5	3.4	1.7	0.3	2.0
10/2	183	183	-	-	-	0.1	0.1	-	0.2	3.0	0.8	0.1	0.8
11/1	760	760	-	-	-	1.3	0.7	-	2.0	9.3	5.3	0.7	6.0
11/2	131	131	-	-	-	0.1	0.1	-	0.2	5.4	0.8	0.1	0.9
12/1	332	332	-	-	-	0.6	0.5	-	1.1	12.5	1.7	0.5	2.3
12/2	259	259	-	-	-	0.2	0.3	-	0.5	7.2	0.5	0.3	0.8
13/1	263	263	-	-	-	1.0	0.6	-	1.6	22.0	2.6	0.6	3.2
13/2	16	16	-	-	-	0.1	0.0	-	0.1	21.5	0.2	0.0	0.2

LinSig V1 style report

14/1	348	348	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
14/2	749	749	-	-	-	0.0	0.3	-	0.3	1.3	0.0	0.3	0.3
15/1	181	181	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
15/2	584	584	-	-	-	0.0	0.2	-	0.2	1.1	0.0	0.2	0.2
15/3	751	751	-	-	-	0.0	0.3	-	0.3	1.3	0.0	0.3	0.3
16/1	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/2	515	515	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
17/1	584	584	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
17/2	183	183	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
18/1	955	955	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-
C1 Stream: 1 PRC for Signalled Lanes (%): 54.0 C1 Stream: 2 PRC for Signalled Lanes (%): 65.7 C1 Stream: 3 PRC for Signalled Lanes (%): 53.1 C1 Stream: 4 PRC for Signalled Lanes (%): 135.1 C1 Stream: 5 PRC for Signalled Lanes (%): 52.8 C1 Stream: 6 PRC for Signalled Lanes (%): 176.4 PRC Over All Lanes (%): 52.8 Total Delay for Signalled Lanes (pcuHr): 7.88 Total Delay for Signalled Lanes (pcuHr): 3.69 Total Delay for Signalled Lanes (pcuHr): 5.05 Total Delay for Signalled Lanes (pcuHr): 0.70 Total Delay for Signalled Lanes (pcuHr): 0.82 Total Delay for Signalled Lanes (pcuHr): 0.62 Total Delay Over All Lanes(pcuHr): 20.35 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60													

User and Project Details

Project:	
Title:	
Location:	
File name:	A10 Cambridge Road_College Road.lsg3x
Author:	
Company:	
Address:	
Notes:	

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7

Phase Intergreens Matrix

	Starting Phase					
	A	B	C	D	E	F
Terminating Phase	A	-	-	5	6	5
	B	-	5	-	5	5
	C	9	-	5	5	
	D	10	-	5	5	
	E	9	8	5	6	-
	F	9	8	5	6	-

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

	To Stage		
	1	2	3
From Stage	1	5	6
	2	10	5
	3	9	6

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	C D
3	E F

Give-Way Lane Input Data

Junction: Unnamed Junction											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/2 (College Road E)	5/1 (Right)	1439	0	4/1	1.09	All	2.00	-	0.50	2	2.00
4/2 (College Road W)	7/1 (Right)	1439	0	2/1	1.09	All	2.00	-	0.50	2	2.00

Lane Input Data

Junction: Unnamed Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A10 Great Cambridge Road N)	U	B	2	3	1.0	Geom	-	3.40	0.00	Y	Arm 6 Left	15.00
1/2 (A10 Great Cambridge Road N)	U	B	2	3	60.0	Geom	-	3.40	0.00	Y	Arm 7 Ahead	Inf
1/3 (A10 Great Cambridge Road N)	U	B	2	3	60.0	Geom	-	3.40	0.00	N	Arm 7 Ahead	Inf
1/4 (A10 Great Cambridge Road N)	U	D	2	3	12.0	Geom	-	3.40	0.00	N	Arm 8 Right	Inf
2/1 (College Road E)	U	F	2	3	60.0	Geom	-	2.70	0.00	Y	Arm 7 Left	15.00
											Arm 8 Ahead	Inf
2/2 (College Road E)	O	F	2	3	5.0	Geom	-	2.70	0.00	N	Arm 5 Right	30.00
3/1 (A10 Great Cambridge Road S)	U	A	2	3	15.0	Geom	-	3.50	0.00	N	Arm 8 Left	15.00
3/2 (A10 Great Cambridge Road S)	U	A	2	3	60.0	Geom	-	3.50	0.00	N	Arm 5 Ahead	Inf
3/3 (A10 Great Cambridge Road S)	U	A	2	3	60.0	Geom	-	3.50	0.00	N	Arm 5 Ahead	Inf
3/4 (A10 Great Cambridge Road S)	U	C	2	3	16.0	Geom	-	3.50	0.00	N	Arm 6 Right	30.00
4/1 (College Road W)	U	E	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Left	15.00
											Arm 6 Ahead	Inf
4/2 (College Road W)	O	E	2	3	11.0	Geom	-	3.00	0.00	N	Arm 7 Right	30.00
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

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7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/2	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Lane Saturation Flows

Scenario 1: '2017 + Robson Liddle Dev AM' (FG5: '2017 + RL DEV AM', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A10 Great Cambridge Road N)	3.40	0.00	Y	Arm 6 Left	15.00	100.0 %	1777	1777
1/2 (A10 Great Cambridge Road N)	3.40	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1955	1955
1/3 (A10 Great Cambridge Road N)	3.40	0.00	N	Arm 7 Ahead	Inf	100.0 %	2095	2095
1/4 (A10 Great Cambridge Road N)	3.40	0.00	N	Arm 8 Right	Inf	100.0 %	2095	2095
2/1 (College Road E)	2.70	0.00	Y	Arm 7 Left	15.00	43.6 %	1806	1806
				Arm 8 Ahead	Inf	56.4 %		
2/2 (College Road E)	2.70	0.00	N	Arm 5 Right	30.00	100.0 %	1929	1929
3/1 (A10 Great Cambridge Road S)	3.50	0.00	N	Arm 8 Left	15.00	100.0 %	1914	1914
3/2 (A10 Great Cambridge Road S)	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/3 (A10 Great Cambridge Road S)	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/4 (A10 Great Cambridge Road S)	3.50	0.00	N	Arm 6 Right	30.00	100.0 %	2005	2005
4/1 (College Road W)	3.00	0.00	Y	Arm 5 Left	15.00	14.4 %	1888	1888
				Arm 6 Ahead	Inf	85.6 %		
4/2 (College Road W)	3.00	0.00	N	Arm 7 Right	30.00	100.0 %	1957	1957
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2017 + Robson Liddle Dev PM' (FG6: '2017 + RL DEV PM', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A10 Great Cambridge Road N)	3.40	0.00	Y	Arm 6 Left	15.00	100.0 %	1777	1777
1/2 (A10 Great Cambridge Road N)	3.40	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1955	1955
1/3 (A10 Great Cambridge Road N)	3.40	0.00	N	Arm 7 Ahead	Inf	100.0 %	2095	2095
1/4 (A10 Great Cambridge Road N)	3.40	0.00	N	Arm 8 Right	Inf	100.0 %	2095	2095
2/1 (College Road E)	2.70	0.00	Y	Arm 7 Left Arm 8 Ahead	15.00 Inf	31.9 % 68.1 %	1827	1827
2/2 (College Road E)	2.70	0.00	N	Arm 5 Right	30.00	100.0 %	1929	1929
3/1 (A10 Great Cambridge Road S)	3.50	0.00	N	Arm 8 Left	15.00	100.0 %	1914	1914
3/2 (A10 Great Cambridge Road S)	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/3 (A10 Great Cambridge Road S)	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/4 (A10 Great Cambridge Road S)	3.50	0.00	N	Arm 6 Right	30.00	100.0 %	2005	2005
4/1 (College Road W)	3.00	0.00	Y	Arm 5 Left Arm 6 Ahead	15.00 Inf	21.5 % 78.5 %	1875	1875
4/2 (College Road W)	3.00	0.00	N	Arm 7 Right	30.00	100.0 %	1957	1957
5/1				Infinite Saturation Flow			Inf	Inf
5/2				Infinite Saturation Flow			Inf	Inf
6/1				Infinite Saturation Flow			Inf	Inf
7/1				Infinite Saturation Flow			Inf	Inf
7/2				Infinite Saturation Flow			Inf	Inf
8/1				Infinite Saturation Flow			Inf	Inf

Scenario 3: '2017 + Robson Liddle + Cheshunt Sports Village AM' (FG7: '2017 + RL + CSV DEV AM', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A10 Great Cambridge Road N)	3.40	0.00	Y	Arm 6 Left	15.00	100.0 %	1777	1777
1/2 (A10 Great Cambridge Road N)	3.40	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1955	1955
1/3 (A10 Great Cambridge Road N)	3.40	0.00	N	Arm 7 Ahead	Inf	100.0 %	2095	2095
1/4 (A10 Great Cambridge Road N)	3.40	0.00	N	Arm 8 Right	Inf	100.0 %	2095	2095
2/1 (College Road E)	2.70	0.00	Y	Arm 7 Left Arm 8 Ahead	15.00 Inf	43.6 % 56.4 %	1806	1806
2/2 (College Road E)	2.70	0.00	N	Arm 5 Right	30.00	100.0 %	1929	1929
3/1 (A10 Great Cambridge Road S)	3.50	0.00	N	Arm 8 Left	15.00	100.0 %	1914	1914
3/2 (A10 Great Cambridge Road S)	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/3 (A10 Great Cambridge Road S)	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/4 (A10 Great Cambridge Road S)	3.50	0.00	N	Arm 6 Right	30.00	100.0 %	2005	2005
4/1 (College Road W)	3.00	0.00	Y	Arm 5 Left Arm 6 Ahead	15.00 Inf	14.4 % 85.6 %	1888	1888
4/2 (College Road W)	3.00	0.00	N	Arm 7 Right	30.00	100.0 %	1957	1957
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2017 + Robson Liddle + Cheshunt Sports Village PM' (FG8: '2017 + RL + CSV DEV PM', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A10 Great Cambridge Road N)	3.40	0.00	Y	Arm 6 Left	15.00	100.0 %	1777	1777
1/2 (A10 Great Cambridge Road N)	3.40	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1955	1955
1/3 (A10 Great Cambridge Road N)	3.40	0.00	N	Arm 7 Ahead	Inf	100.0 %	2095	2095
1/4 (A10 Great Cambridge Road N)	3.40	0.00	N	Arm 8 Right	Inf	100.0 %	2095	2095
2/1 (College Road E)	2.70	0.00	Y	Arm 7 Left Arm 8 Ahead	15.00 Inf	31.9 % 68.1 %	1827	1827
2/2 (College Road E)	2.70	0.00	N	Arm 5 Right	30.00	100.0 %	1929	1929
3/1 (A10 Great Cambridge Road S)	3.50	0.00	N	Arm 8 Left	15.00	100.0 %	1914	1914
3/2 (A10 Great Cambridge Road S)	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/3 (A10 Great Cambridge Road S)	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/4 (A10 Great Cambridge Road S)	3.50	0.00	N	Arm 6 Right	30.00	100.0 %	2005	2005
4/1 (College Road W)	3.00	0.00	Y	Arm 5 Left Arm 6 Ahead	15.00 Inf	21.5 % 78.5 %	1875	1875
4/2 (College Road W)	3.00	0.00	N	Arm 7 Right	30.00	100.0 %	1957	1957
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2014 Base AM'	08:00	09:00	01:00	
2: '2014 Base PM'	17:00	18:00	01:00	
3: '2017 Base AM'	08:00	09:00	01:00	
4: '2017 Base PM'	17:00	18:00	01:00	
5: '2017 + RL DEV AM'	08:00	09:00	01:00	
6: '2017 + RL DEV PM'	17:00	18:00	01:00	
7: '2017 + RL + CSV DEV AM'	08:00	09:00	01:00	
8: '2017 + RL + CSV DEV PM'	17:00	18:00	01:00	
9: '2029 + RL + CSV DEV AM'	08:00	09:00	01:00	
10: '2029 + RL + CSV DEV PM'	17:00	18:00	01:00	
11: '2029 + RL DEV AM'	08:00	09:00	01:00	
12: '2029 + RL DEV PM'	17:00	18:00	01:00	

Traffic Flows, Desired**FG1: '2014 Base AM'****Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	68	1587	51	1706
	B	77	0	163	203	443
	C	1396	313	0	102	1811
	D	37	287	130	0	454
	Tot.	1510	668	1880	356	4414

FG2: '2014 Base PM'**Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	93	1415	55	1563
	B	79	0	117	246	442
	C	1657	255	0	97	2009
	D	80	311	118	0	509
	Tot.	1816	659	1650	398	4523

FG3: '2017 Base AM'

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	70	1639	66	1775
	B	80	0	168	215	463
	C	1433	323	0	132	1888
	D	47	329	154	0	530
	Tot.	1560	722	1961	413	4656

FG4: '2017 Base PM'

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	96	1462	60	1618
	B	82	0	121	255	458
	C	1712	264	0	107	2083
	D	86	330	127	0	543
	Tot.	1880	690	1710	422	4702

FG5: '2017 + RL DEV AM'

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	70	1639	70	1779
	B	80	0	168	217	465
	C	1433	323	0	140	1896
	D	56	333	172	0	561
	Tot.	1569	726	1979	427	4701

FG6: '2017 + RL DEV PM'

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	96	1462	68	1626
	B	82	0	121	258	461
	C	1712	264	0	124	2100
	D	91	332	137	0	560
	Tot.	1885	692	1720	450	4747

FG7: '2017 + RL + CSV DEV AM'

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	70	1658	70	1798
	B	80	0	168	217	465
	C	1442	323	0	140	1905
	D	56	333	172	0	561
	Tot.	1578	726	1998	427	4729

FG8: '2017 + RL + CSV DEV PM'

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	96	1487	68	1651
	B	82	0	121	258	461
	C	1733	264	0	124	2121
	D	91	332	137	0	560
	Tot.	1906	692	1745	450	4793

FG9: '2029 + RL + CSV DEV AM'

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	83	1967	83	2133
	B	95	0	200	258	553
	C	1713	384	0	166	2263
	D	67	396	205	0	668
	Tot.	1875	863	2372	507	5617

FG10: '2029 + RL + CSV DEV PM'

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	109	1685	77	1871
	B	93	0	137	293	523
	C	1964	300	0	141	2405
	D	103	377	156	0	636
	Tot.	2160	786	1978	511	5435

FG11: '2029 + RL DEV AM'

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	83	1949	83	2115
	B	95	0	200	258	553
	C	1704	384	0	166	2254
	D	67	396	205	0	668
	Tot.	1866	863	2354	507	5590

FG12: '2029 + RL DEV PM'

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	109	1660	77	1846
	B	93	0	137	293	523
	C	1943	300	0	141	2384
	D	103	377	156	0	636
	Tot.	2139	786	1953	511	5389

Stage Timings

Scenario 1: '2017 + Robson Liddle Dev AM' (FG5: '2017 + RL DEV AM', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	47	16	38
Change Point	0	56	77

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	113.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	113.7%
1/2+1/1	A10 Great Cambridge Road N Left Ahead	U	N/A	N/A	B		1	48	-	890	1955:1777	730+62	112.3 : 112.3%
1/3+1/4	A10 Great Cambridge Road N Ahead Right	U	N/A	N/A	B D		1	48:16	-	889	2095:2095	810+69	101.1 : 101.1%
2/1+2/2	College Road E Right Left Ahead	U+O	N/A	N/A	F		1	38	-	465	1806:1929	515+107	74.7 : 74.7%
3/2+3/1	A10 Great Cambridge Road S Ahead Left	U	N/A	N/A	A		1	47	-	857	2105:1914	768+150	93.4 : 93.4%
3/3+3/4	A10 Great Cambridge Road S Ahead Right	U	N/A	N/A	A C		1	47:16	-	1039	2105:2005	730+284	98.1 : 113.7%
4/1+4/2	College Road W Left Ahead Right	U+O	N/A	N/A	E		1	38	-	561	1888:1957	529+161	73.6 : 107.0%
5/1		U	N/A	N/A	-		-	-	-	853	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	716	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	726	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	1160	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	819	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	427	Inf	Inf	0.0%

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Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	198	0	43	55.3	116.1	0.9	172.3	-	-	-	-
Unnamed Junction	-	-	198	0	43	55.3	116.1	0.9	172.3	-	-	-	-
1/2+1/1	890	792	-	-	-	14.4	53.1	-	67.4	272.7	33.1	53.1	86.1
1/3+1/4	889	880	-	-	-	9.4	17.4	-	26.8	108.5	29.2	17.4	46.6
2/1+2/2	465	465	80	0	0	4.5	1.4	0.3	6.3	48.6	12.7	1.4	14.1
3/2+3/1	857	857	-	-	-	7.7	5.9	-	13.6	57.1	24.2	5.9	30.1
3/3+3/4	1039	1000	-	-	-	13.1	30.5	-	43.6	151.1	26.5	30.5	57.1
4/1+4/2	561	550	118	0	43	6.3	7.8	0.6	14.6	93.6	11.0	7.8	18.8
5/1	853	853	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	716	716	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	679	679	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1059	1059	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	810	810	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	427	427	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -26.4 PRC Over All Lanes (%): -26.4 Total Delay for Signalled Lanes (pcuHr): 172.27 Total Delay Over All Lanes(pcuHr): 172.27 Cycle Time (s): 120													

Stage Timings

Scenario 2: '2017 + Robson Liddle Dev PM' (FG6: '2017 + RL DEV PM', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	52	14	35
Change Point	0	61	80

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	105.3%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	105.3%
1/2+1/1	A10 Great Cambridge Road N Left Ahead	U	N/A	N/A	B		1	53	-	827	1955:1777	770+101	94.9 : 94.9%
1/3+1/4	A10 Great Cambridge Road N Ahead Right	U	N/A	N/A	B D		1	53:14	-	799	2095:2095	887+83	82.4 : 82.4%
2/1+2/2	College Road E Right Left Ahead	U+O	N/A	N/A	F		1	35	-	461	1827:1929	479+104	79.2 : 79.2%
3/2+3/1	A10 Great Cambridge Road S Ahead Left	U	N/A	N/A	A		1	52	-	980	2105:1914	859+124	99.7 : 99.7%
3/3+3/4	A10 Great Cambridge Road S Ahead Right	U	N/A	N/A	A C		1	52:14	-	1120	2105:2005	825+251	103.8 : 105.3%
4/1+4/2	College Road W Left Ahead Right	U+O	N/A	N/A	E		1	35	-	560	1875:1957	509+132	83.1 : 104.0%
5/1		U	N/A	N/A	-		-	-	-	1029	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	856	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	692	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	989	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	731	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	450	Inf	Inf	0.0%

LinSig V1 style report

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	171	0	43	47.5	63.3	0.9	111.7	-	-	-	-
Unnamed Junction	-	-	171	0	43	47.5	63.3	0.9	111.7	-	-	-	-
1/2+1/1	827	827	-	-	-	7.3	7.1	-	14.3	62.4	26.3	7.1	33.4
1/3+1/4	799	799	-	-	-	6.6	2.3	-	8.9	40.2	22.0	2.3	24.2
2/1+2/2	461	461	82	0	0	4.8	1.8	0.4	7.1	55.3	12.9	1.8	14.7
3/2+3/1	980	980	-	-	-	8.7	14.9	-	23.6	86.8	30.2	14.9	45.2
3/3+3/4	1120	1075	-	-	-	13.8	31.4	-	45.1	145.1	36.9	31.4	68.2
4/1+4/2	560	555	89	0	43	6.3	5.8	0.5	12.6	81.2	13.4	5.8	19.2
5/1	1029	1029	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	825	825	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	679	679	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	984	984	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	731	731	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	450	450	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -17.0 PRC Over All Lanes (%): -17.0 Total Delay for Signalled Lanes (pcuHr): 111.72 Total Delay Over All Lanes(pcuHr): 111.72 Cycle Time (s): 120													

Stage Timings

Scenario 3: '2017 + Robson Liddle + Cheshunt Sports Village AM' (FG7: '2017 + RL + CSV DEV AM', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	47	16	38
Change Point	0	56	77

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	113.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	113.7%
1/2+1/1	A10 Great Cambridge Road N Left Ahead	U	N/A	N/A	B		1	48	-	899	1955:1777	731+62	113.5 : 113.5%
1/3+1/4	A10 Great Cambridge Road N Ahead Right	U	N/A	N/A	B D		1	48:16	-	899	2095:2095	811+68	102.2 : 102.2%
2/1+2/2	College Road E Right Left Ahead	U+O	N/A	N/A	F		1	38	-	465	1806:1929	515+107	74.7 : 74.7%
3/2+3/1	A10 Great Cambridge Road S Ahead Left	U	N/A	N/A	A		1	47	-	861	2105:1914	768+149	93.9 : 93.9%
3/3+3/4	A10 Great Cambridge Road S Ahead Right	U	N/A	N/A	A C		1	47:16	-	1044	2105:2005	731+284	98.7 : 113.7%
4/1+4/2	College Road W Left Ahead Right	U+O	N/A	N/A	E		1	38	-	561	1888:1957	529+161	73.6 : 107.0%
5/1		U	N/A	N/A	-		-	-	-	857	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	721	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	726	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	1169	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	829	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	427	Inf	Inf	0.0%

LinSig V1 style report

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	198	0	43	56.7	123.3	0.9	180.9	-	-	-	-
Unnamed Junction	-	-	198	0	43	56.7	123.3	0.9	180.9	-	-	-	-
1/2+1/1	899	792	-	-	-	15.0	57.3	-	72.2	289.3	33.7	57.3	91.0
1/3+1/4	899	881	-	-	-	10.0	20.7	-	30.7	123.1	30.4	20.7	51.1
2/1+2/2	465	465	80	0	0	4.5	1.4	0.3	6.3	48.6	12.7	1.4	14.1
3/2+3/1	861	861	-	-	-	7.7	6.3	-	14.0	58.6	24.4	6.3	30.6
3/3+3/4	1044	1005	-	-	-	13.2	29.9	-	43.0	148.4	27.1	29.9	56.9
4/1+4/2	561	550	118	0	43	6.3	7.8	0.6	14.6	93.6	11.0	7.8	18.8
5/1	857	857	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	721	721	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	679	679	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1059	1059	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	811	811	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	427	427	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -26.4 PRC Over All Lanes (%): -26.4 Total Delay for Signalled Lanes (pcuHr): 180.88 Total Delay Over All Lanes(pcuHr): 180.88 Cycle Time (s): 120													

Stage Timings

Scenario 4: '2017 + Robson Liddle + Cheshunt Sports Village PM' (FG8: '2017 + RL + CSV DEV PM', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	52	14	35
Change Point	0	61	80

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	105.3%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	105.3%
1/2+1/1	A10 Great Cambridge Road N Left Ahead	U	N/A	N/A	B		1	53	-	840	1955:1777	772+100	96.4 : 96.4%
1/3+1/4	A10 Great Cambridge Road N Ahead Right	U	N/A	N/A	B D		1	53:14	-	811	2095:2095	888+81	83.7 : 83.7%
2/1+2/2	College Road E Right Left Ahead	U+O	N/A	N/A	F		1	35	-	461	1827:1929	479+104	79.2 : 79.2%
3/2+3/1	A10 Great Cambridge Road S Ahead Left	U	N/A	N/A	A		1	52	-	991	2105:1914	859+123	100.9 : 100.9%
3/3+3/4	A10 Great Cambridge Road S Ahead Right	U	N/A	N/A	A C		1	52:14	-	1130	2105:2005	826+251	104.9 : 105.3%
4/1+4/2	College Road W Left Ahead Right	U+O	N/A	N/A	E		1	35	-	560	1875:1957	509+132	83.1 : 104.0%
5/1		U	N/A	N/A	-		-	-	-	1040	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	866	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	692	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	1002	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	743	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	450	Inf	Inf	0.0%

LinSig V1 style report

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	171	0	43	49.1	71.9	0.9	121.9	-	-	-	-
Unnamed Junction	-	-	171	0	43	49.1	71.9	0.9	121.9	-	-	-	-
1/2+1/1	840	840	-	-	-	7.5	8.6	-	16.1	69.0	26.9	8.6	35.6
1/3+1/4	811	811	-	-	-	6.8	2.5	-	9.3	41.2	22.6	2.5	25.0
2/1+2/2	461	461	82	0	0	4.8	1.8	0.4	7.1	55.3	12.9	1.8	14.7
3/2+3/1	991	982	-	-	-	9.3	18.1	-	27.4	99.6	31.5	18.1	49.6
3/3+3/4	1130	1076	-	-	-	14.4	35.0	-	49.4	157.4	38.0	35.0	73.0
4/1+4/2	560	555	89	0	43	6.3	5.8	0.5	12.6	81.2	13.4	5.8	19.2
5/1	1032	1032	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	826	826	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	679	679	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	997	997	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	743	743	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	449	449	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -17.0 PRC Over All Lanes (%): -17.0 Total Delay for Signalled Lanes (pcuHr): 121.90 Total Delay Over All Lanes(pcuHr): 121.90 Cycle Time (s): 120													

Junctions 8				
ARCADY 8 - Roundabout Module				
Version: 8.0.6.541 [19821,26/11/2015] © Copyright TRL Limited, 2017				
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Filename: 170306 Theobalds Ln_Crossbrook St.arc8

Path: \\uk.wspgroup.com\central data\Projects\700198xx\70019827 - Cheshunt Sports Village\D Design and Analysis\Development\ARCADY

Report generation date: 05/06/2017 16:38:08

« (Default Analysis Set) - 2021 Base, AM

- » Junction Network
- » Arms
- » Traffic Flows
- » Entry Flows
- » Turning Proportions
- » Vehicle Mix
- » Results

Summary of junction performance

	AM			
	Queue (Veh)	Delay (s)	RFC	LOS
A1 - 2021 Base				
Arm A	5.15	24.18	0.84	C
Arm B	0.13	4.64	0.12	A
Arm C	4.07	15.84	0.81	C

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

"D1 - 2016 Base, AM" model duration: 08:00 - 09:00
 "D2 - 2016 Base, PM" model duration: 17:00 - 18:00
 "D3 - 2016 Base + Dev, AM" model duration: 08:00 - 09:00
 "D4 - 2016 Base + Dev, PM" model duration: 17:00 - 18:00
 "D5 - 2029 Base + Dev, AM" model duration: 08:00 - 09:00
 "D6 - 2029 Base + Dev, PM" model duration: 17:00 - 18:00
 "D7 - 2029 Base, AM" model duration: 08:00 - 09:00
 "D8 - 2029 Base, PM" model duration: 17:00 - 18:00
 "D9 - 2021 Base, AM " model duration: 08:00 - 09:00
 "D10 - 2021 Base, PM" model duration: 17:00 - 18:00
 "D11 - Dev, AM" model duration: 08:00 - 09:00
 "D12 - Dev, PM" model duration: 17:00 - 18:00
 "D13 - 2021 Base+ Dev, AM" model duration: 08:00 - 09:00
 "D14 - 2021 Base+ Dev, PM" model duration: 17:00 - 18:00

Run using Junctions 8.0.6.541 at 05/06/2017 16:38:08

File summary

Title	THEOBALDS LN CROSSBROOK ST
Location	Cheshunt
Site Number	
Date	10/03/2016
Version	
Status	
Identifier	
Client	
Jobnumber	70019827
Enumerator	UKCJG003 [W13UK0101]
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	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	s	-Min	perMin

(Default Analysis Set) - 2021 Base, 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)	ARCADY		✓				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
2021 Base, AM	2021 Base	AM		Varies by Arm	08:00	09:00	60	15				✓	✓	D1*1.0509

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C				18.82	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	B176 S	
B	B	Theobalds Lane	
C	C	B176 N	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

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
A	3.20	4.50	1.10	8.80	18.20	23.00	
B	4.10	5.10	1.20	11.00	18.20	24.50	
C	3.00	4.50	3.30	78.00	18.20	12.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
A	Direct	(ARCADY 6 CT10 Import)	0.00	
B	Direct	(ARCADY 6 CT10 Import)	0.00	
C	Direct	(ARCADY 6 CT10 Import)	0.00	

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)
A		(calculated)	(calculated)	0.511	1012.056
B		(calculated)	(calculated)	0.575	1297.213
C		(calculated)	(calculated)	0.593	1202.294

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 (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 - (08:00-08:15)

	To			
		A	B	C
From	A	0.000	58.850	731.426
	B	57.800	0.000	43.087
	C	795.531	146.075	0.000

Turning Proportions (Veh) - Junction 1 - (08:00-08:15)

	To			
		A	B	C
From	A	0.00	0.07	0.93
	B	0.57	0.00	0.43
	C	0.84	0.16	0.00

Turning Counts / Proportions (Veh/hr) - Junction 1 - (08:15-08:30)

	To			
		A	B	C
From	A	0.000	58.850	731.426
	B	57.800	0.000	43.087
	C	795.531	146.075	0.000

Turning Proportions (Veh) - Junction 1 - (08:15-08:30)

	To			
		A	B	C
From	A	0.00	0.07	0.93
	B	0.57	0.00	0.43
	C	0.84	0.16	0.00

Turning Counts / Proportions (Veh/hr) - Junction 1 - (08:30-08:45)

	To			
		A	B	C
From	A	0.000	58.850	731.426
	B	57.800	0.000	43.087
	C	795.531	146.075	0.000

Turning Proportions (Veh) - Junction 1 - (08:30-08:45)

	To			
		A	B	C
From	A	0.00	0.07	0.93
	B	0.57	0.00	0.43
	C	0.84	0.16	0.00

Turning Counts / Proportions (Veh/hr) - Junction 1 - (08:45-09:00)

	To			
		A	B	C
From	A	0.000	58.850	731.426
	B	57.800	0.000	43.087
	C	795.531	146.075	0.000

Turning Proportions (Veh) - Junction 1 - (08:45-09:00)

	To			
		A	B	C
From	A	0.00	0.07	0.93
	B	0.57	0.00	0.43
	C	0.84	0.16	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 - (08:00-08:15)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 - (08:00-08:15)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 1 - (08:15-08:30)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 - (08:15-08:30)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 1 - (08:30-08:45)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 - (08:30-08:45)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 1 - (08:45-09:00)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 - (08:45-09:00)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	0.84	24.18	5.15	C	790.28	790.28	282.52	21.45	4.71	283.36	21.51
B	0.12	4.64	0.13	A	100.89	100.89	7.69	4.58	0.13	7.69	4.58
C	0.81	15.84	4.07	C	941.61	941.61	230.04	14.66	3.83	230.46	14.69

Main Results for each time segment

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	790.28	197.57	771.78	840.10	143.70	0.00	938.64	938.25	0.842	0.00	4.63	19.813	C
B	100.89	25.22	100.38	201.17	714.30	0.00	886.33	797.70	0.114	0.00	0.13	4.577	A
C	941.61	235.40	926.29	757.17	57.51	0.00	1168.19	931.23	0.806	0.00	3.83	14.106	B

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	790.28	197.57	788.95	852.81	145.98	0.00	937.47	938.25	0.843	4.63	4.96	23.739	C
B	100.89	25.22	100.88	204.73	730.20	0.00	877.19	797.70	0.115	0.13	0.13	4.636	A
C	941.61	235.40	940.99	773.28	57.80	0.00	1168.01	931.23	0.806	3.83	3.98	15.744	C

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	790.28	197.57	789.77	853.14	146.04	0.00	937.44	938.25	0.843	4.96	5.08	24.059	C
B	100.89	25.22	100.89	204.85	730.96	0.00	876.75	797.70	0.115	0.13	0.13	4.639	A
C	941.61	235.40	941.38	774.04	57.80	0.00	1168.01	931.23	0.806	3.98	4.04	15.818	C

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	790.28	197.57	790.01	853.23	146.06	0.00	937.44	938.25	0.843	5.08	5.15	24.183	C
B	100.89	25.22	100.89	204.89	731.18	0.00	876.63	797.70	0.115	0.13	0.13	4.640	A
C	941.61	235.40	941.49	774.26	57.80	0.00	1168.01	931.23	0.806	4.04	4.07	15.844	C

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	57.91	3.86	19.813	C	B
B	1.87	0.12	4.577	A	A
C	50.18	3.35	14.106	B	B

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	72.36	4.82	23.739	C	C
B	1.93	0.13	4.636	A	A
C	58.83	3.92	15.744	C	B

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	75.43	5.03	24.059	C	C
B	1.94	0.13	4.639	A	A
C	60.21	4.01	15.818	C	B

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	76.82	5.12	24.183	C	C
B	1.95	0.13	4.640	A	A
C	60.82	4.05	15.844	C	B



Junctions 8				
ARCADY 8 - Roundabout Module				
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Report generation date: 05/06/2017 16:39:00

« (Default Analysis Set) - 2021 Base, PM

- » Junction Network
- » Arms
- » Traffic Flows
- » Entry Flows
- » Turning Proportions
- » Vehicle Mix
- » Results

Summary of junction performance

	PM			
	Queue (Veh)	Delay (s)	RFC	LOS
A1 - 2021 Base				
Arm A	7.65	32.39	0.89	D
Arm B	0.27	5.58	0.21	A
Arm C	2.07	9.76	0.68	A

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

"D1 - 2016 Base, AM" model duration: 08:00 - 09:00
 "D2 - 2016 Base, PM" model duration: 17:00 - 18:00
 "D3 - 2016 Base + Dev, AM" model duration: 08:00 - 09:00
 "D4 - 2016 Base + Dev, PM" model duration: 17:00 - 18:00
 "D5 - 2029 Base + Dev, AM" model duration: 08:00 - 09:00
 "D6 - 2029 Base + Dev, PM" model duration: 17:00 - 18:00
 "D7 - 2029 Base, AM" model duration: 08:00 - 09:00
 "D8 - 2029 Base, PM" model duration: 17:00 - 18:00
 "D9 - 2021 Base, AM" model duration: 08:00 - 09:00
 "D10 - 2021 Base, PM" model duration: 17:00 - 18:00
 "D11 - Dev, AM" model duration: 08:00 - 09:00
 "D12 - Dev, PM" model duration: 17:00 - 18:00
 "D13 - 2021 Base+ Dev, AM" model duration: 08:00 - 09:00
 "D14 - 2021 Base+ Dev, PM" model duration: 17:00 - 18:00

Run using Junctions 8.0.6.541 at 05/06/2017 16:39:00

File summary

Title	THEOBALDS LN CROSSBROOK ST
Location	Cheshunt
Site Number	
Date	10/03/2016
Version	
Status	
Identifier	
Client	
Jobnumber	70019827
Enumerator	UKCJG003 [W13UK0101]
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	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	s	-Min	perMin

(Default Analysis Set) - 2021 Base, 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)	ARCADY		✓				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
2021 Base, PM	2021 Base	PM		Varies by Arm	17:00	18:00	60	15				✓	✓	D2*1.0467

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C				20.35	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	B176 S	
B	B	Theobalds Lane	
C	C	B176 N	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

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
A	3.20	4.50	1.10	8.80	18.20	23.00	
B	4.10	5.10	1.20	11.00	18.20	24.50	
C	3.00	4.50	3.30	78.00	18.20	12.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
A	Direct	(ARCADY 6 CT10 Import)	0.00	
B	Direct	(ARCADY 6 CT10 Import)	0.00	
C	Direct	(ARCADY 6 CT10 Import)	0.00	

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)
A		(calculated)	(calculated)	0.511	1012.056
B		(calculated)	(calculated)	0.575	1297.213
C		(calculated)	(calculated)	0.593	1202.294

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 (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 - (17:00-17:15)

	To			
		A	B	C
From	A	0.000	53.382	834.220
	B	109.904	0.000	62.802
	C	734.783	33.494	0.000

Turning Proportions (Veh) - Junction 1 - (17:00-17:15)

	To			
		A	B	C
From	A	0.00	0.06	0.94
	B	0.64	0.00	0.36
	C	0.96	0.04	0.00

Turning Counts / Proportions (Veh/hr) - Junction 1 - (17:15-17:30)

	To			
		A	B	C
From	A	0.000	53.382	834.220
	B	109.904	0.000	62.802
	C	734.783	33.494	0.000

Turning Proportions (Veh) - Junction 1 - (17:15-17:30)

	To			
		A	B	C
From	A	0.00	0.06	0.94
	B	0.64	0.00	0.36
	C	0.96	0.04	0.00

Turning Counts / Proportions (Veh/hr) - Junction 1 - (17:30-17:45)

	To			
		A	B	C
From	A	0.000	53.382	834.220
	B	109.904	0.000	62.802
	C	734.783	33.494	0.000

Turning Proportions (Veh) - Junction 1 - (17:30-17:45)

	To			
		A	B	C
From	A	0.00	0.06	0.94
	B	0.64	0.00	0.36
	C	0.96	0.04	0.00

Turning Counts / Proportions (Veh/hr) - Junction 1 - (17:45-18:00)

	To			
		A	B	C
From	A	0.000	53.382	834.220
	B	109.904	0.000	62.802
	C	734.783	33.494	0.000

Turning Proportions (Veh) - Junction 1 - (17:45-18:00)

	To			
		A	B	C
From	A	0.00	0.06	0.94
	B	0.64	0.00	0.36
	C	0.96	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 - (17:00-17:15)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 - (17:00-17:15)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 1 - (17:15-17:30)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 - (17:15-17:30)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 1 - (17:30-17:45)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 - (17:30-17:45)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 1 - (17:45-18:00)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 - (17:45-18:00)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	0.89	32.39	7.65	D	887.60	887.60	403.76	27.29	6.73	405.52	27.41
B	0.21	5.58	0.27	A	172.71	172.71	15.75	5.47	0.26	15.75	5.47
C	0.68	9.76	2.07	A	768.28	768.28	120.27	9.39	2.00	120.38	9.40

Main Results for each time segment

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	887.60	221.90	861.76	836.32	33.14	0.00	995.12	991.67	0.892	0.00	6.46	23.696	C
B	172.71	43.18	171.66	84.97	809.93	0.00	831.33	761.09	0.208	0.00	0.26	5.440	A
C	768.28	192.07	760.22	872.35	109.24	0.00	1137.50	915.03	0.675	0.00	2.01	9.353	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	887.60	221.90	884.76	844.54	33.49	0.00	994.95	991.67	0.892	6.46	7.17	30.990	D
B	172.71	43.18	172.68	86.70	831.54	0.00	818.89	761.09	0.211	0.26	0.27	5.570	A
C	768.28	192.07	768.14	894.34	109.89	0.00	1137.12	915.03	0.676	2.01	2.05	9.746	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	887.60	221.90	886.38	844.64	33.49	0.00	994.94	991.67	0.892	7.17	7.48	31.963	D
B	172.71	43.18	172.70	86.80	833.07	0.00	818.02	761.09	0.211	0.27	0.27	5.578	A
C	768.28	192.07	768.23	895.87	109.90	0.00	1137.11	915.03	0.676	2.05	2.06	9.754	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	887.60	221.90	886.91	844.66	33.49	0.00	994.94	991.67	0.892	7.48	7.65	32.394	D
B	172.71	43.18	172.70	86.83	833.57	0.00	817.72	761.09	0.211	0.27	0.27	5.580	A
C	768.28	192.07	768.25	896.38	109.90	0.00	1137.11	915.03	0.676	2.06	2.07	9.756	A

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	76.86	5.12	23.696	C	C
B	3.79	0.25	5.440	A	A
C	27.97	1.86	9.353	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	103.17	6.88	30.990	D	C
B	3.96	0.26	5.570	A	A
C	30.53	2.04	9.746	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	110.15	7.34	31.963	D	C
B	3.99	0.27	5.578	A	A
C	30.83	2.06	9.754	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	113.59	7.57	32.394	D	C
B	4.00	0.27	5.580	A	A
C	30.95	2.06	9.756	A	A



Junctions 8				
ARCADY 8 - Roundabout Module				
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Report generation date: 05/06/2017 16:39:20

« (Default Analysis Set) - 2021 Base+ Dev, AM

- » Junction Network
- » Arms
- » Traffic Flows
- » Entry Flows
- » Turning Proportions
- » Vehicle Mix
- » Results

Summary of junction performance

	AM			
	Queue (Veh)	Delay (s)	RFC	LOS
	A1 - 2021 Base+ Dev			
Arm A	6.81	31.11	0.88	D
Arm B	0.17	4.79	0.14	A
Arm C	4.36	16.85	0.82	C

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

"D1 - 2016 Base, AM" model duration: 08:00 - 09:00
 "D2 - 2016 Base, PM" model duration: 17:00 - 18:00
 "D3 - 2016 Base + Dev, AM" model duration: 08:00 - 09:00
 "D4 - 2016 Base + Dev, PM" model duration: 17:00 - 18:00
 "D5 - 2029 Base + Dev, AM" model duration: 08:00 - 09:00
 "D6 - 2029 Base + Dev, PM" model duration: 17:00 - 18:00
 "D7 - 2029 Base, AM" model duration: 08:00 - 09:00
 "D8 - 2029 Base, PM" model duration: 17:00 - 18:00
 "D9 - 2021 Base, AM" model duration: 08:00 - 09:00
 "D10 - 2021 Base, PM" model duration: 17:00 - 18:00
 "D11 - Dev, AM" model duration: 08:00 - 09:00
 "D12 - Dev, PM" model duration: 17:00 - 18:00
 "D13 - 2021 Base+ Dev, AM" model duration: 08:00 - 09:00
 "D14 - 2021 Base+ Dev, PM" model duration: 17:00 - 18:00

Run using Junctions 8.0.6.541 at 05/06/2017 16:39:20

File summary

Title	THEOBALDS LN CROSSBROOK ST
Location	Cheshunt
Site Number	
Date	10/03/2016
Version	
Status	
Identifier	
Client	
Jobnumber	70019827
Enumerator	UKCJG003 [W13UK0101]
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	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	s	-Min	perMin

(Default Analysis Set) - 2021 Base+ 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)	ARCADY		✓				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
2021 Base+ Dev, AM	2021 Base+ Dev	AM		Varies by Arm	08:00	09:00	60	15				✓	✓	D9+D11

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C				22.22	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	B176 S	
B	B	Theobalds Lane	
C	C	B176 N	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

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
A	3.20	4.50	1.10	8.80	18.20	23.00	
B	4.10	5.10	1.20	11.00	18.20	24.50	
C	3.00	4.50	3.30	78.00	18.20	12.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
A	Direct	(ARCADY 6 CT10 Import)	0.00	
B	Direct	(ARCADY 6 CT10 Import)	0.00	
C	Direct	(ARCADY 6 CT10 Import)	0.00	

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)
A		(calculated)	(calculated)	0.511	1012.056
B		(calculated)	(calculated)	0.575	1297.213
C		(calculated)	(calculated)	0.593	1202.294

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 (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 - (08:00-08:15)

	To			
		A	B	C
From	A	0.000	88.850	731.426
	B	65.800	0.000	60.087
	C	795.531	155.075	0.000

Turning Proportions (Veh) - Junction 1 - (08:00-08:15)

	To			
		A	B	C
From	A	0.00	0.11	0.89
	B	0.52	0.00	0.48
	C	0.84	0.16	0.00

Turning Counts / Proportions (Veh/hr) - Junction 1 - (08:15-08:30)

	To			
		A	B	C
From	A	0.000	88.850	731.426
	B	65.800	0.000	60.087
	C	795.531	155.075	0.000

Turning Proportions (Veh) - Junction 1 - (08:15-08:30)

	To			
		A	B	C
From	A	0.00	0.11	0.89
	B	0.52	0.00	0.48
	C	0.84	0.16	0.00

Turning Counts / Proportions (Veh/hr) - Junction 1 - (08:30-08:45)

	To			
		A	B	C
From	A	0.000	88.850	731.426
	B	65.800	0.000	60.087
	C	795.531	155.075	0.000

Turning Proportions (Veh) - Junction 1 - (08:30-08:45)

	To			
		A	B	C
From	A	0.00	0.11	0.89
	B	0.52	0.00	0.48
	C	0.84	0.16	0.00

Turning Counts / Proportions (Veh/hr) - Junction 1 - (08:45-09:00)

	To			
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From	A	0.000	88.850	731.426
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Turning Proportions (Veh) - Junction 1 - (08:45-09:00)

	To			
		A	B	C
From	A	0.00	0.11	0.89
	B	0.52	0.00	0.48
	C	0.84	0.16	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 - (08:00-08:15)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 - (08:00-08:15)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 1 - (08:15-08:30)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 - (08:15-08:30)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 1 - (08:30-08:45)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 - (08:30-08:45)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 1 - (08:45-09:00)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 - (08:45-09:00)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	0.88	31.11	6.81	D	820.28	820.28	362.10	26.49	6.03	363.59	26.60
B	0.14	4.79	0.17	A	125.89	125.89	9.90	4.72	0.17	9.90	4.72
C	0.82	16.85	4.36	C	950.61	950.61	245.38	15.49	4.09	245.87	15.52

Main Results for each time segment

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	820.28	205.07	797.03	847.34	152.41	0.00	934.19	933.00	0.878	0.00	5.81	23.326	C
B	125.89	31.47	125.23	238.75	710.70	0.00	888.40	818.67	0.142	0.00	0.16	4.713	A
C	950.61	237.65	934.30	770.47	65.46	0.00	1163.47	948.49	0.817	0.00	4.08	14.806	B

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	820.28	205.07	817.85	860.72	154.96	0.00	932.89	933.00	0.879	5.81	6.42	29.948	D
B	125.89	31.47	125.88	243.54	729.26	0.00	877.73	818.67	0.143	0.16	0.17	4.787	A
C	950.61	237.65	949.88	789.34	65.79	0.00	1163.27	948.49	0.817	4.08	4.26	16.722	C

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	820.28	205.07	819.27	861.11	155.03	0.00	932.85	933.00	0.879	6.42	6.67	30.768	D
B	125.89	31.47	125.88	243.77	730.53	0.00	877.00	818.67	0.144	0.17	0.17	4.792	A
C	950.61	237.65	950.34	790.62	65.80	0.00	1163.27	948.49	0.817	4.26	4.33	16.817	C

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	820.28	205.07	819.72	861.21	155.05	0.00	932.84	933.00	0.879	6.67	6.81	31.115	D
B	125.89	31.47	125.89	243.84	730.93	0.00	876.77	818.67	0.144	0.17	0.17	4.793	A
C	950.61	237.65	950.47	791.02	65.80	0.00	1163.27	948.49	0.817	4.33	4.36	16.852	C

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	69.99	4.67	23.326	C	C
B	2.40	0.16	4.713	A	A
C	52.98	3.53	14.806	B	B

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	92.54	6.17	29.948	D	C
B	2.49	0.17	4.787	A	A
C	62.79	4.19	16.722	C	B

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	98.38	6.56	30.768	D	C
B	2.50	0.17	4.792	A	A
C	64.44	4.30	16.817	C	B

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	101.18	6.75	31.115	D	C
B	2.51	0.17	4.793	A	A
C	65.16	4.34	16.852	C	B



Junctions 8				
ARCADY 8 - Roundabout Module				
Version: 8.0.6.541 [19821,26/11/2015] © Copyright TRL Limited, 2017				
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Report generation date: 05/06/2017 16:39:52

« (Default Analysis Set) - 2021 Base+ Dev, PM

» Junction Network

» Arms

» Traffic Flows

» Entry Flows

» Turning Proportions

» Vehicle Mix

» Results

Summary of junction performance

	PM			
	Queue (Veh)	Delay (s)	RFC	LOS
A1 - 2021 Base+ Dev				
Arm A	15.09	61.14	0.95	F
Arm B	0.32	5.81	0.24	A
Arm C	2.26	10.43	0.70	B

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

"D1 - 2016 Base, AM" model duration: 08:00 - 09:00

"D2 - 2016 Base, PM" model duration: 17:00 - 18:00

"D3 - 2016 Base + Dev, AM" model duration: 08:00 - 09:00

"D4 - 2016 Base + Dev, PM" model duration: 17:00 - 18:00

"D5 - 2029 Base + Dev, AM" model duration: 08:00 - 09:00

"D6 - 2029 Base + Dev, PM" model duration: 17:00 - 18:00

"D7 - 2029 Base, AM" model duration: 08:00 - 09:00

"D8 - 2029 Base, PM" model duration: 17:00 - 18:00

"D9 - 2021 Base, AM" model duration: 08:00 - 09:00

"D10 - 2021 Base, PM" model duration: 17:00 - 18:00

"D11 - Dev, AM" model duration: 08:00 - 09:00

"D12 - Dev, PM" model duration: 17:00 - 18:00

"D13 - 2021 Base+ Dev, AM" model duration: 08:00 - 09:00

"D14 - 2021 Base+ Dev, PM" model duration: 17:00 - 18:00

Run using Junctions 8.0.6.541 at 05/06/2017 16:39:52

File summary

Title	THEOBALDS LN CROSSBROOK ST
Location	Cheshunt
Site Number	
Date	10/03/2016
Version	
Status	
Identifier	
Client	
Jobnumber	70019827
Enumerator	UKCJG003 [W13UK0101]
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	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	s	-Min	perMin

(Default Analysis Set) - 2021 Base+ 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)	ARCADY		✓				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
2021 Base+ Dev, PM	2021 Base+ Dev	PM		Varies by Arm	17:00	18:00	60	15				✓	✓	D10+D12

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	untitled	Roundabout	A,B,C				34.70	D

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
A	A	B176 S	
B	B	Theobalds Lane	
C	C	B176 N	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

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
A	3.20	4.50	1.10	8.80	18.20	23.00	
B	4.10	5.10	1.20	11.00	18.20	24.50	
C	3.00	4.50	3.30	78.00	18.20	12.00	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
A	Direct	(ARCADY 6 CT10 Import)	0.00	
B	Direct	(ARCADY 6 CT10 Import)	0.00	
C	Direct	(ARCADY 6 CT10 Import)	0.00	

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)
A		(calculated)	(calculated)	0.511	1012.056
B		(calculated)	(calculated)	0.575	1297.213
C		(calculated)	(calculated)	0.593	1202.294

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 (%)
A	DIRECT		N/A	100.000
B	DIRECT		N/A	100.000
C	DIRECT		N/A	100.000

Turning Proportions

Turning Counts / Proportions (Veh/hr) - Junction 1 - (17:00-17:15)

	To			
		A	B	C
From	A	0.000	105.382	834.220
	B	119.904	0.000	79.802
	C	734.783	51.494	0.000

Turning Proportions (Veh) - Junction 1 - (17:00-17:15)

	To			
		A	B	C
From	A	0.00	0.11	0.89
	B	0.60	0.00	0.40
	C	0.93	0.07	0.00

Turning Counts / Proportions (Veh/hr) - Junction 1 - (17:15-17:30)

	To			
		A	B	C
From	A	0.000	105.382	834.220
	B	119.904	0.000	79.802
	C	734.783	51.494	0.000

Turning Proportions (Veh) - Junction 1 - (17:15-17:30)

	To			
		A	B	C
From	A	0.00	0.11	0.89
	B	0.60	0.00	0.40
	C	0.93	0.07	0.00

Turning Counts / Proportions (Veh/hr) - Junction 1 - (17:30-17:45)

	To			
		A	B	C
From	A	0.000	105.382	834.220
	B	119.904	0.000	79.802
	C	734.783	51.494	0.000

Turning Proportions (Veh) - Junction 1 - (17:30-17:45)

	To			
		A	B	C
From	A	0.00	0.11	0.89
	B	0.60	0.00	0.40
	C	0.93	0.07	0.00

Turning Counts / Proportions (Veh/hr) - Junction 1 - (17:45-18:00)

	To			
		A	B	C
From	A	0.000	105.382	834.220
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Turning Proportions (Veh) - Junction 1 - (17:45-18:00)

	To			
		A	B	C
From	A	0.00	0.11	0.89
	B	0.60	0.00	0.40
	C	0.93	0.07	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 - (17:00-17:15)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 - (17:00-17:15)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 1 - (17:15-17:30)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 - (17:15-17:30)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 1 - (17:30-17:45)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 - (17:30-17:45)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Average PCU Per Vehicle - Junction 1 - (17:45-18:00)

	To			
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 - (17:45-18:00)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
A	0.95	61.14	15.09	F	939.60	939.60	707.66	45.19	11.79	714.59	45.63
B	0.24	5.81	0.32	A	199.71	199.71	18.86	5.67	0.31	18.87	5.67
C	0.70	10.43	2.26	B	786.28	786.28	131.09	10.00	2.18	131.23	10.01

Main Results for each time segment

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	939.60	234.90	898.53	845.73	50.92	0.00	986.04	981.31	0.953	0.00	10.27	32.702	D
B	199.71	49.93	198.46	151.69	797.76	0.00	838.33	796.05	0.238	0.00	0.31	5.616	A
C	786.28	196.57	777.50	877.06	119.16	0.00	1131.62	918.81	0.695	0.00	2.20	9.920	A

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	939.60	234.90	929.70	854.51	51.48	0.00	985.75	981.31	0.953	10.27	12.74	51.806	F
B	199.71	49.93	199.67	155.75	825.42	0.00	822.41	796.05	0.243	0.31	0.32	5.780	A
C	786.28	196.57	786.11	905.21	119.88	0.00	1131.19	918.81	0.695	2.20	2.24	10.418	B

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	939.60	234.90	933.97	854.63	51.49	0.00	985.75	981.31	0.953	12.74	14.15	57.640	F
B	199.71	49.93	199.70	156.24	829.22	0.00	820.23	796.05	0.243	0.32	0.32	5.800	A
C	786.28	196.57	786.22	909.02	119.90	0.00	1131.18	918.81	0.695	2.24	2.25	10.429	B

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

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
A	939.60	234.90	935.85	854.66	51.49	0.00	985.75	981.31	0.953	14.15	15.09	61.145	F
B	199.71	49.93	199.70	156.45	830.89	0.00	819.27	796.05	0.244	0.32	0.32	5.809	A
C	786.28	196.57	786.25	910.69	119.90	0.00	1131.18	918.81	0.695	2.25	2.26	10.431	B

Queueing Delay Results for each time segment

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	110.70	7.38	32.702	D	C
B	4.51	0.30	5.616	A	A
C	30.28	2.02	9.920	A	A

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	174.70	11.65	51.806	F	D
B	4.75	0.32	5.780	A	A
C	33.31	2.22	10.418	B	B

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	202.53	13.50	57.640	F	E
B	4.80	0.32	5.800	A	A
C	33.67	2.24	10.429	B	B

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

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A	219.73	14.65	61.145	F	E
B	4.81	0.32	5.809	A	A
C	33.82	2.25	10.431	B	B





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