

Junctions 11											
PICADY 11 - Priority Intersection Module											
Version: 11.1.0.2307											
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Filename: J4.j11

Path: \\uk-lon-fas02\projects\UNIF\Projects\BESP0016 Kent Countywide Model\KCC Model Custodian Framework\Call-off Tasks\Tonbridge & Malling and Sevenoaks LP\15 Local Modelling\July 2025 Modelling\J4 A25 _Quarry Hill Road _High Street

Report generation date: 16/09/2025 07:18:42

- »D1 - 2019 | Base | AM
- »D2 - 2019 | Base | PM
- »D3 - 2040 | LP High | AM
- »D4 - 2040 | LP High | PM
- »D5 - 2042 | Forecast Baseline | AM
- »D6 - 2042 | Forecast Baseline | PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2019 - Base											
Stream B-ACD	D1	0.5	19.48	0.30	C	26 % [Stream B-ACD]	D2	0.5	18.14	0.33	C	31 % [Stream B-ACD]
Stream A-BC		2.4	12.12	0.57	B			1.3	9.81	0.43	A	
Stream A-D		0.6	13.18	0.60	B			0.5	12.10	0.52	B	
Stream D-ABC		0.2	16.96	0.17	C			0.2	16.01	0.18	C	
Stream C-ABD		0.0	0.00	0.00	A			0.0	0.00	0.00	A	
	2040 - LP High											
Stream B-ACD	D3	1.0	44.25	0.51	E	-6 % [Stream D-ABC]	D4	1.1	47.81	0.52	E	-34 % [Stream A-D]
Stream A-BC		6.4	29.78	0.84	D			2.6	15.99	0.72	C	
Stream A-D		3.5	36.77	0.84	E			83.4	607.34	1.30	F	
Stream D-ABC		1.2	47.63	0.55	E			1.7	71.68	0.65	F	
Stream C-ABD		0.0	0.00	0.00	A			0.0	0.00	0.00	A	
	2042 - Forecast Baseline											
Stream B-ACD	D5	0.6	24.01	0.36	C	13 % [Stream B-ACD]	D6	0.8	24.89	0.42	C	12 % [Stream B-ACD]
Stream A-BC		3.0	14.85	0.65	B			1.8	11.95	0.53	B	
Stream A-D		1.1	17.40	0.68	C			0.9	16.21	0.62	C	
Stream D-ABC		0.3	21.30	0.22	C			0.3	20.40	0.22	C	
Stream C-ABD		0.0	0.00	0.00	A			0.0	0.00	0.00	A	

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

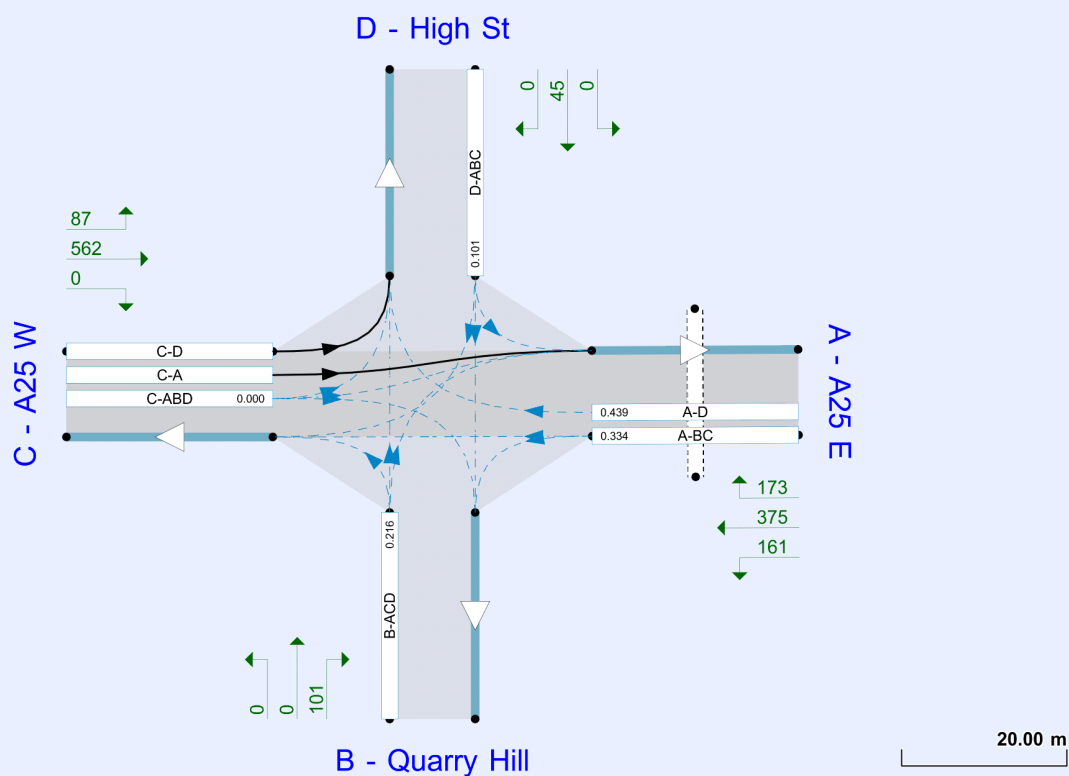
File summary

File Description

Title	
Location	
Site number	
Date	24/07/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JEGINTLSIUDZIS
Description	

Units

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



Flows show original traffic demand (PCU/hr)
Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

Analysis Options

PICADY short flare model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
PICADY 4.1	5.75					✓	Delay	0.85	36.00	20.00		

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019	Base	AM	ONE HOUR	08:00	09:30	15	✓
D2	2019	Base	PM	ONE HOUR	17:00	18:30	15	✓
D3	2040	LP High	AM	ONE HOUR	08:00	09:30	15	✓
D4	2040	LP High	PM	ONE HOUR	17:00	18:30	15	✓
D5	2042	Forecast Baseline	AM	ONE HOUR	08:00	09:30	15	✓
D6	2042	Forecast Baseline	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

D1 - 2019 | Base | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A25 Quarry Hill Road	Crossroads	Two-way	Two-way	Two-way	Two-way		9.36	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	26	Stream B-ACD	9.36	A

Arms

Arms

Arm	Name	Description	Arm type
A	A25 E		Major
B	Quarry Hill		Minor
C	A25 W		Major
D	High St		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - A25 E	6.36			100.0		-
C - A25 W	6.36			55.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Quarry Hill	One lane	3.50	50	38
D - High St	One lane	4.10	22	49

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
A - A25 E	1.00	3.00	2.90	1.00	6.00	8.00	6.00

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	632	-	-	-	-	-	-	0.241	0.344	0.241	-	-	-
B-A	538	0.096	0.244	0.244	-	-	-	0.153	0.348	-	0.244	0.244	0.122
B-C	680	0.103	0.259	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	538	0.096	0.244	0.244	-	-	-	0.153	0.348	0.153	-	-	-
B-D, offside lane	538	0.096	0.244	0.244	-	-	-	0.153	0.348	0.153	-	-	-
C-B	606	0.231	0.231	0.330	-	-	-	-	-	-	-	-	-
D-A	727	-	-	-	-	-	-	0.277	-	0.110	-	-	-
D-B, nearside lane	565	0.161	0.161	0.366	-	-	-	0.256	0.256	0.101	-	-	-
D-B, offside lane	565	0.161	0.161	0.366	-	-	-	0.256	0.256	0.101	-	-	-
D-C	565	-	0.161	0.366	0.128	0.256	0.256	0.256	0.256	0.101	-	-	-

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

Streams may be combined, in which case capacity will be adjusted.

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

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019	Base	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A25 E		ONE HOUR	✓	799	100.000
B - Quarry Hill		ONE HOUR	✓	77	100.000
C - A25 W		ONE HOUR	✓	373	100.000
D - High St		ONE HOUR	✓	47	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - A25 E	[ONEHOUR]	50.00
B - Quarry Hill		
C - A25 W		
D - High St		

Origin-Destination Data

Demand (PCU/hr)

	To			
	A - A25 E	B - Quarry Hill	C - A25 W	D - High St
From	A - A25 E	0	138	516
	B - Quarry Hill	77	0	0
	C - A25 W	284	0	89
	D - High St	0	47	0

Vehicle Mix

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

Heavy Vehicle %

	To				
From		A - A25 E	B - Quarry Hill	C - A25 W	D - High St
	A - A25 E	0	1	16	0
	B - Quarry Hill	7	0	0	0
	C - A25 W	26	0	0	8
	D - High St	0	16	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.30	19.48	0.5	C	71	106
A-BC	0.57	12.12	2.4	B	600	900
A-D	0.60	13.18	0.6	B	133	200
D-ABC	0.17	16.96	0.2	C	43	65
C-ABD	0.00	0.00	0.0	A	0	0
C-D					82	123
C-A					261	391

D2 - 2019 | Base | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A25 Quarry Hill Road	Crossroads	Two-way	Two-way	Two-way	Two-way		6.50	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	31	Stream B-ACD	6.50	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019	Base	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A25 E		ONE HOUR	✓	587	100.000
B - Quarry Hill		ONE HOUR	✓	92	100.000
C - A25 W		ONE HOUR	✓	580	100.000
D - High St		ONE HOUR	✓	46	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - A25 E	[ONEHOUR]	50.00
B - Quarry Hill		
C - A25 W		
D - High St		

Origin-Destination Data

Demand (PCU/hr)

	To				
From		A - A25 E	B - Quarry Hill	C - A25 W	D - High St
	A - A25 E	0	146	305	136
	B - Quarry Hill	92	0	0	0
	C - A25 W	465	0	0	115
	D - High St	0	46	0	0

Vehicle Mix

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

Heavy Vehicle %

	To				
From		A - A25 E	B - Quarry Hill	C - A25 W	D - High St
	A - A25 E	0	1	9	1
	B - Quarry Hill	6	0	0	0
	C - A25 W	9	0	0	6
	D - High St	0	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.33	18.14	0.5	C	84	127
A-BC	0.43	9.81	1.3	A	414	621
A-D	0.52	12.10	0.5	B	125	187
D-ABC	0.18	16.01	0.2	C	42	63
C-ABD	0.00	0.00	0.0	A	0	0
C-D					106	158
C-A					427	640

D3 - 2040 | LP High | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A25 Quarry Hill Road	Crossroads	Two-way	Two-way	Two-way	Two-way		25.08	D

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-6	Stream D-ABC	25.08	D

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2040	LP High	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A25 E		ONE HOUR	✓	1072	100.000
B - Quarry Hill		ONE HOUR	✓	81	100.000
C - A25 W		ONE HOUR	✓	433	100.000
D - High St		ONE HOUR	✓	89	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - A25 E	[ONEHOUR]	50.00
B - Quarry Hill		
C - A25 W		
D - High St		

Origin-Destination Data

Demand (PCU/hr)

	To				
From		A - A25 E	B - Quarry Hill	C - A25 W	D - High St
	A - A25 E	0	140	607	325
	B - Quarry Hill	81	0	0	0
	C - A25 W	401	0	0	32
	D - High St	0	64	25	0

Vehicle Mix

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

Heavy Vehicle %

From	To				
		A - A25 E	B - Quarry Hill	C - A25 W	D - High St
	A - A25 E	0	1	12	0
	B - Quarry Hill	7	0	0	0
	C - A25 W	22	0	0	24
	D - High St	0	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.51	44.25	1.0	E	74	111
A-BC	0.84	29.78	6.4	D	685	1028
A-D	0.84	36.77	3.5	E	298	447
D-ABC	0.55	47.63	1.2	E	82	123
C-ABD	0.00	0.00	0.0	A	0	0
C-D					29	44
C-A					368	552

D4 - 2040 | LP High | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A25 Quarry Hill Road	Crossroads	Two-way	Two-way	Two-way	Two-way		185.28	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-34	Stream A-D	185.28	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2040	LP High	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A25 E		ONE HOUR	✓	1096	100.000
B - Quarry Hill		ONE HOUR	✓	80	100.000
C - A25 W		ONE HOUR	✓	638	100.000
D - High St		ONE HOUR	✓	82	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - A25 E	[ONEHOUR]	50.00
B - Quarry Hill		
C - A25 W		
D - High St		

Origin-Destination Data

Demand (PCU/hr)

	To				
From		A - A25 E	B - Quarry Hill	C - A25 W	D - High St
	A - A25 E	0	147	401	548
	B - Quarry Hill	80	0	0	0
	C - A25 W	638	0	0	0
	D - High St	17	65	0	0

Vehicle Mix

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

Heavy Vehicle %

	To				
From		A - A25 E	B - Quarry Hill	C - A25 W	D - High St
	A - A25 E	0	2	7	0
	B - Quarry Hill	8	0	0	0
	C - A25 W	6	0	0	0
	D - High St	0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.52	47.81	1.1	E	73	110
A-BC	0.72	15.99	2.6	C	503	754
A-D	1.30	607.34	83.4	F	503	754
D-ABC	0.65	71.68	1.7	F	75	113
C-ABD	0.00	0.00	0.0	A	0	0
C-D					0	0
C-A					585	878

D5 - 2042 | Forecast Baseline | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A25 Quarry Hill Road	Crossroads	Two-way	Two-way	Two-way	Two-way		11.46	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	13	Stream B-ACD	11.46	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2042	Forecast Baseline	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A25 E		ONE HOUR	✓	875	100.000
B - Quarry Hill		ONE HOUR	✓	83	100.000
C - A25 W		ONE HOUR	✓	437	100.000
D - High St		ONE HOUR	✓	51	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - A25 E	[ONEHOUR]	50.00
B - Quarry Hill		
C - A25 W		
D - High St		

Origin-Destination Data

Demand (PCU/hr)

	To				
From		A - A25 E	B - Quarry Hill	C - A25 W	D - High St
	A - A25 E	0	154	525	196
	B - Quarry Hill	83	0	0	0
	C - A25 W	349	0	0	88
	D - High St	0	51	0	0

Vehicle Mix

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

Heavy Vehicle %

	To				
From		A - A25 E	B - Quarry Hill	C - A25 W	D - High St
	A - A25 E	0	1	16	0
	B - Quarry Hill	7	0	0	0
	C - A25 W	25	0	0	9
	D - High St	0	17	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.36	24.01	0.6	C	76	114
A-BC	0.65	14.85	3.0	B	623	935
A-D	0.68	17.40	1.1	C	180	270
D-ABC	0.22	21.30	0.3	C	47	70
C-ABD	0.00	0.00	0.0	A	0	0
C-D					81	121
C-A					320	480

D6 - 2042 | Forecast Baseline | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A25 Quarry Hill Road	Crossroads	Two-way	Two-way	Two-way	Two-way		8.40	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	12	Stream B-ACD	8.40	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2042	Forecast Baseline	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A25 E		ONE HOUR	✓	709	100.000
B - Quarry Hill		ONE HOUR	✓	101	100.000
C - A25 W		ONE HOUR	✓	649	100.000
D - High St		ONE HOUR	✓	45	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - A25 E	[ONEHOUR]	50.00
B - Quarry Hill		
C - A25 W		
D - High St		

Origin-Destination Data

Demand (PCU/hr)

	To				
From		A - A25 E	B - Quarry Hill	C - A25 W	D - High St
	A - A25 E	0	161	375	173
	B - Quarry Hill	101	0	0	0
	C - A25 W	562	0	0	87
	D - High St	0	45	0	0

Vehicle Mix

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

Heavy Vehicle %

	To				
From		A - A25 E	B - Quarry Hill	C - A25 W	D - High St
	A - A25 E	0	2	8	1
	B - Quarry Hill	6	0	0	0
	C - A25 W	8	0	0	10
	D - High St	0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.42	24.89	0.8	C	93	139
A-BC	0.53	11.95	1.8	B	492	738
A-D	0.62	16.21	0.9	C	159	238
D-ABC	0.22	20.40	0.3	C	41	62
C-ABD	0.00	0.00	0.0	A	0	0
C-D					80	120
C-A					516	774