



Norwich Western Link

Transport Assessment - Appendix 11 – Junction Model Results

Sub Appendix 11p – Junction 19 A1270 Broadland Northway/ Reepham Road roundabout

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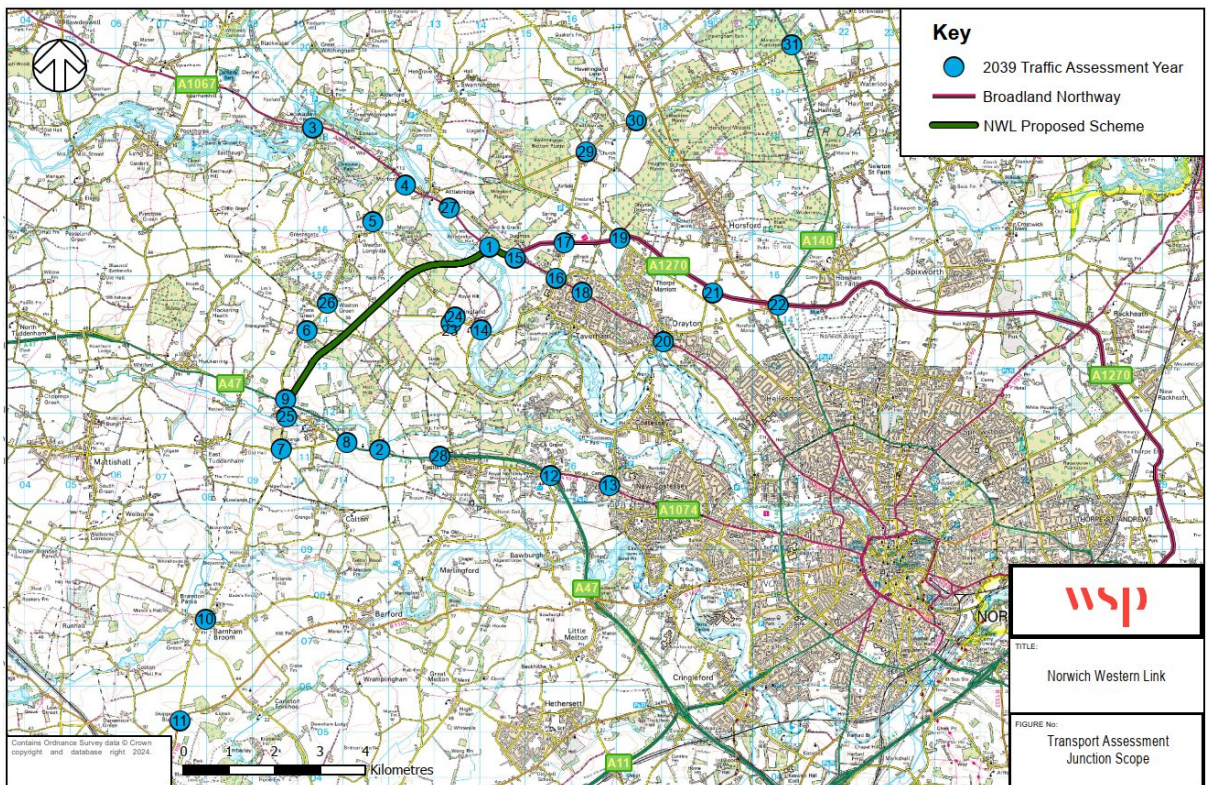
1 Junction Model Results

1.1.1 Junctions 10 modelling software output file that shows the junction capacity results for Junction 19 of the TA.

1.1.2 We have included a summary of key information shown in this document in an accessible format. However, some users may not be able to access all technical details. If you require this document in a more accessible format please contact norwichwesternlink@norfolk.gov.uk

1.1.3 The TA scope map is shown below as a location plan.

Figure 1-1 Junction Assessment Scope



1.1.4 The model results are presented for 2029 and 2039 future assessment years for AM and PM peak hours, taking 7.30-8.30am and AM peak and 5pm-6pm as PM peak.



1.1.5 The scenarios tested are as follows:

- Do Minimum – the baseline future situation with committed developments and planned highway improvements but without the Proposed Scheme.
- Do Something - the baseline future situation with the Proposed Scheme.
- Do Something + Mitigation - the baseline future situation with the Proposed Scheme added plus a package of traffic mitigation measures in the wider network (north of A1067 and south of A47 plus Honingham Lane closure).



J19 – A1270 Broadland Northway/ Reepham Road roundabout Results

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.0.1.1519

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Filename: J19_FP.j10

Path: C:\Users\NCS04445\OneDrive - WSP O365\WSP\Projects\38 NWL\Working\20240216\J19

Report generation date: 16/02/2024 12:01:50

- »2029DM, AM
- »2029DM, PM
- »2029DS, AM
- »2029DS, PM
- »2029DS_Mitigation, AM
- »2029DS_Mitigation, PM
- »2039DM, AM
- »2039DM, PM
- »2039DS, AM
- »2039DS, PM
- »2039DS_Mitigation, AM
- »2039DS_Mitigation, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2029DM										
A - Reepham Road (N)	D1	0.4	5.83	0.30	A	D2	0.3	4.33	0.20	A
B - Broadland Northway (E)		0.4	1.79	0.29	A		0.6	2.04	0.37	A
C - Reepham Road (S)		0.4	4.51	0.26	A		0.5	5.59	0.35	A
D - Broadland Northway (W)		0.6	2.10	0.38	A		0.5	1.85	0.32	A
2029DS										
A - Reepham Road (N)	D3	0.5	6.70	0.33	A	D4	0.3	5.02	0.22	A
B - Broadland Northway (E)		0.6	2.04	0.38	A		0.7	2.18	0.41	A
C - Reepham Road (S)		0.4	5.26	0.29	A		0.3	4.80	0.22	A
D - Broadland Northway (W)		1.0	2.52	0.49	A		0.7	2.16	0.42	A
2029DS_Mitigation										
A - Reepham Road (N)	D5	0.5	7.03	0.32	A	D6	0.3	5.48	0.22	A
B - Broadland Northway (E)		0.8	2.19	0.42	A		0.8	2.30	0.44	A
C - Reepham Road (S)		0.5	5.77	0.32	A		0.3	5.04	0.23	A
D - Broadland Northway (W)		1.2	2.75	0.53	A		0.9	2.42	0.48	A
2039DM										
A - Reepham Road (N)	D7	1.1	8.95	0.51	A	D8	0.3	4.67	0.22	A
B - Broadland Northway (E)		0.5	1.92	0.32	A		0.8	2.31	0.45	A
C - Reepham Road (S)		0.6	5.29	0.36	A		0.6	6.36	0.39	A
D - Broadland Northway (W)		0.8	2.40	0.45	A		0.5	1.96	0.35	A
2039DS										
A - Reepham Road (N)	D9	1.2	11.26	0.53	B	D10	0.4	5.94	0.28	A
B - Broadland Northway (E)		0.7	2.16	0.40	A		1.1	2.66	0.51	A
C - Reepham Road (S)		0.5	5.75	0.34	A		0.4	5.72	0.27	A
D - Broadland Northway (W)		1.4	3.06	0.58	A		0.9	2.43	0.48	A
2039DS_Mitigation										
A - Reepham Road (N)	D11	1.1	12.29	0.53	B	D12	0.4	6.39	0.28	A
B - Broadland Northway (E)		0.8	2.28	0.44	A		1.2	2.85	0.55	A
C - Reepham Road (S)		0.7	6.53	0.39	A		0.4	6.01	0.28	A
D - Broadland Northway (W)		1.8	3.65	0.64	A		1.2	2.78	0.54	A

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

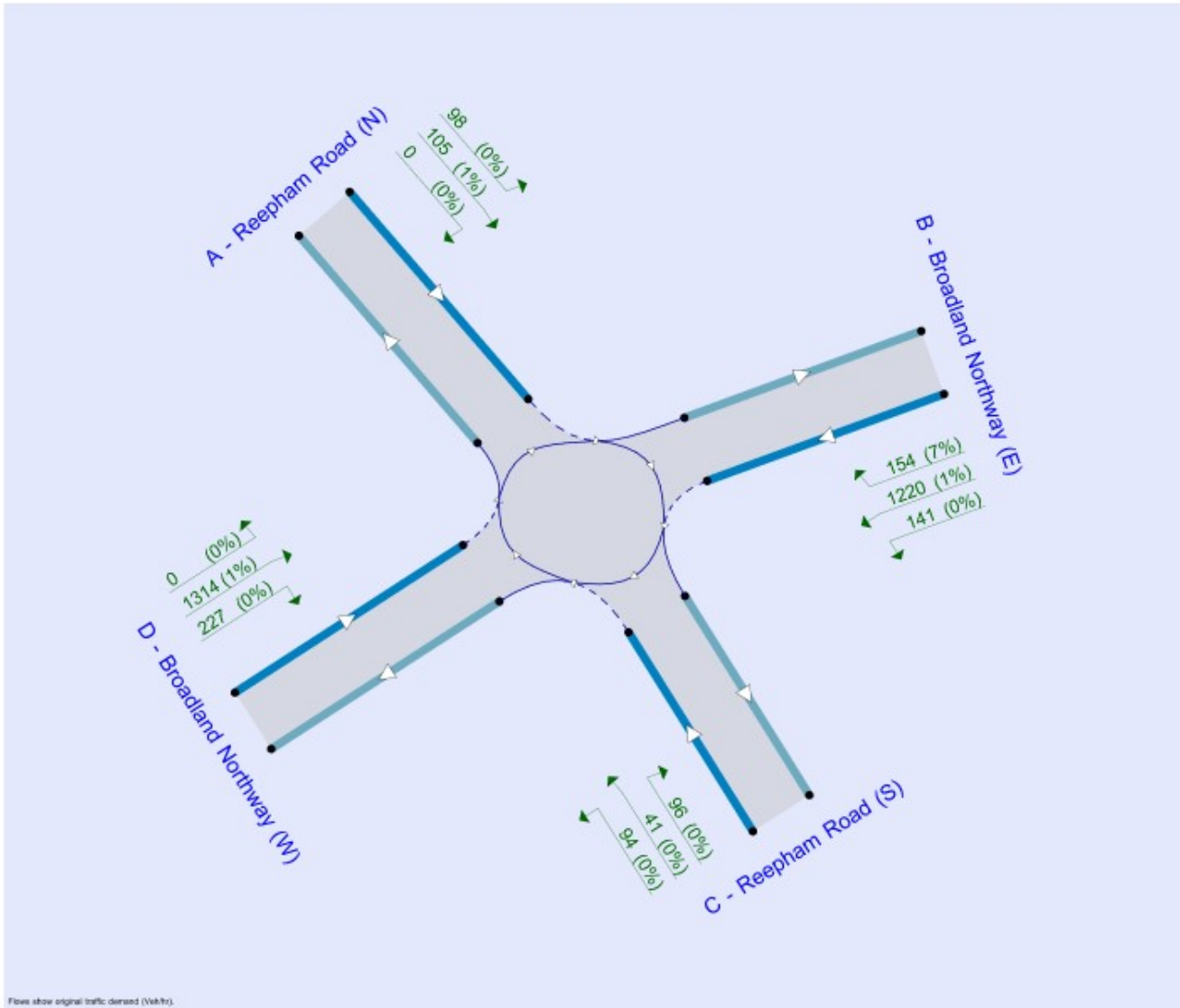
File summary

File Description

Title	Broadland Northway/ Reepham Road
Location	52.69710374451257, 1.2103662358580074
Site number	J19
Date	16/02/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INCS04445
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	Veh	PCU	perHour	s	-Min	perMin



Flows show original traffic demand (Veh/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2029DM	AM	FLAT	07:15	08:15	60	15	✓
D2	2029DM	PM	FLAT	16:45	17:45	60	15	✓
D3	2029DS	AM	FLAT	07:15	08:15	60	15	✓
D4	2029DS	PM	FLAT	16:45	17:45	60	15	✓
D5	2029DS_Mitigation	AM	FLAT	07:15	08:15	60	15	✓
D6	2029DS_Mitigation	PM	FLAT	16:45	17:45	60	15	✓
D7	2039DM	AM	FLAT	07:15	08:15	60	15	✓
D8	2039DM	PM	FLAT	16:45	17:45	60	15	✓
D9	2039DS	AM	FLAT	07:15	08:15	60	15	✓
D10	2039DS	PM	FLAT	16:45	17:45	60	15	✓
D11	2039DS_Mitigation	AM	FLAT	07:15	08:15	60	15	✓
D12	2039DS_Mitigation	PM	FLAT	16:45	17:45	60	15	✓

Analysis Set Details

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

2029DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J19	Broadland Northway/ Reepham Road	Standard Roundabout		A, B, C, D	2.68	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.68	A

Arms

Arms

Arm	Name	Description	No give-way line
A	Reepham Road (N)		
B	Broadland Northway (E)		
C	Reepham Road (S)		
D	Broadland Northway (W)		

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)	Entry only	Exit only
A - Reepham Road (N)	3.00	6.80	13.9	17.9	90.0	44.0		
B - Broadland Northway (E)	8.20	11.10	11.5	21.5	90.0	23.5		
C - Reepham Road (S)	3.00	7.00	9.9	17.6	90.0	35.0		
D - Broadland Northway (W)	8.10	10.80	10.9	20.3	90.0	17.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - Reepham Road (N)	0.408	1440
B - Broadland Northway (E)	0.653	3048
C - Reepham Road (S)	0.409	1403
D - Broadland Northway (W)	0.657	3044

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2029DM	AM	FLAT	07:15	08:15	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Reepham Road (N)		FLAT	✓	280	100.000
B - Broadland Northway (E)		FLAT	✓	808	100.000
C - Reepham Road (S)		FLAT	✓	284	100.000
D - Broadland Northway (W)		FLAT	✓	1072	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
From	A - Reepham Road (N)	0	161	119	0
	B - Broadland Northway (E)	88	0	54	667
	C - Reepham Road (S)	78	132	0	74
	D - Broadland Northway (W)	0	958	114	0

Proportions

		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
From	A - Reepham Road (N)	0.00	0.57
	B - Broadland Northway (E)	0.11	0.00
	C - Reepham Road (S)	0.27	0.47
	D - Broadland Northway (W)	0.00	0.89

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
From	A - Reepham Road (N)	0	3	1	0
	B - Broadland Northway (E)	6	0	0	2
	C - Reepham Road (S)	0	0	0	1
	D - Broadland Northway (W)	0	2	0	0

Average PCU Per Veh

		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
From	A - Reepham Road (N)	1.000	1.033
	B - Broadland Northway (E)	1.062	1.000
	C - Reepham Road (S)	1.000	1.000
	D - Broadland Northway (W)	1.000	1.023

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:15-07:30	A - Reepham Road (N)	280	287
	B - Broadland Northway (E)	808	829
	C - Reepham Road (S)	284	285
	D - Broadland Northway (W)	1072	1095
07:30-07:45	A - Reepham Road (N)	280	287
	B - Broadland Northway (E)	808	829
	C - Reepham Road (S)	284	285
	D - Broadland Northway (W)	1072	1095
07:45-08:00	A - Reepham Road (N)	280	287
	B - Broadland Northway (E)	808	829
	C - Reepham Road (S)	284	285
	D - Broadland Northway (W)	1072	1095
08:00-08:15	A - Reepham Road (N)	280	287
	B - Broadland Northway (E)	808	829
	C - Reepham Road (S)	284	285
	D - Broadland Northway (W)	1072	1095

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Reepham Road (N)	0.30	5.63	0.4	A	287	287
B - Broadland Northway (E)	0.29	1.79	0.4	A	829	829
C - Reepham Road (S)	0.26	4.51	0.4	A	285	285
D - Broadland Northway (W)	0.38	2.10	0.6	A	1095	1095

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	287	72	1224	942	0.305	285	169	0.0	0.4	5.594	A
B - Broadland Northway (E)	829	207	233	2896	0.286	828	1275	0.0	0.4	1.784	A
C - Reepham Road (S)	285	71	773	1087	0.262	283	288	0.0	0.4	4.489	A
D - Broadland Northway (W)	1095	274	300	2847	0.385	1092	756	0.0	0.6	2.092	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	287	72	1227	940	0.305	287	169	0.4	0.4	5.633	A
B - Broadland Northway (E)	829	207	234	2895	0.286	829	1279	0.4	0.4	1.787	A
C - Reepham Road (S)	285	71	775	1086	0.262	285	289	0.4	0.4	4.507	A
D - Broadland Northway (W)	1095	274	302	2846	0.385	1095	758	0.6	0.6	2.098	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	287	72	1227	940	0.305	287	169	0.4	0.4	5.633	A
B - Broadland Northway (E)	829	207	234	2895	0.286	829	1279	0.4	0.4	1.787	A
C - Reepham Road (S)	285	71	775	1086	0.262	285	289	0.4	0.4	4.507	A
D - Broadland Northway (W)	1095	274	302	2846	0.385	1095	758	0.6	0.6	2.098	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	287	72	1227	940	0.305	287	169	0.4	0.4	5.633	A
B - Broadland Northway (E)	829	207	234	2895	0.286	829	1279	0.4	0.4	1.787	A
C - Reepham Road (S)	285	71	775	1086	0.262	285	289	0.4	0.4	4.507	A
D - Broadland Northway (W)	1095	274	302	2846	0.385	1095	758	0.6	0.6	2.098	A

2029DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J19	Broadland Northway/ Reepham Road	Standard Roundabout		A, B, C, D	2.65	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.65	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2029DM	PM	FLAT	16:45	17:45	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Reepham Road (N)		FLAT	✓	210	100.000
B - Broadland Northway (E)		FLAT	✓	1050	100.000
C - Reepham Road (S)		FLAT	✓	350	100.000
D - Broadland Northway (W)		FLAT	✓	901	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
From	A - Reepham Road (N)	0	95	115	0
	B - Broadland Northway (E)	143	0	78	829
	C - Reepham Road (S)	57	59	0	234
	D - Broadland Northway (W)	0	778	123	0

Proportions

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
From	A - Reepham Road (N)	0.00	0.45
	B - Broadland Northway (E)	0.14	0.00
	C - Reepham Road (S)	0.16	0.17
	D - Broadland Northway (W)	0.00	0.86

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
From	A - Reepham Road (N)	0	0	1	0
	B - Broadland Northway (E)	7	0	0	2
	C - Reepham Road (S)	0	0	0	0
	D - Broadland Northway (W)	0	1	0	0

Average PCU Per Veh

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
From	A - Reepham Road (N)	1.000	1.000
	B - Broadland Northway (E)	1.070	1.000
	C - Reepham Road (S)	1.000	1.000
	D - Broadland Northway (W)	1.000	1.009

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - Reepham Road (N)	210	211
	B - Broadland Northway (E)	1050	1078
	C - Reepham Road (S)	350	350
	D - Broadland Northway (W)	901	908
17:00-17:15	A - Reepham Road (N)	210	211
	B - Broadland Northway (E)	1050	1078
	C - Reepham Road (S)	350	350
	D - Broadland Northway (W)	901	908
17:15-17:30	A - Reepham Road (N)	210	211
	B - Broadland Northway (E)	1050	1078
	C - Reepham Road (S)	350	350
	D - Broadland Northway (W)	901	908
17:30-17:45	A - Reepham Road (N)	210	211
	B - Broadland Northway (E)	1050	1078
	C - Reepham Road (S)	350	350
	D - Broadland Northway (W)	901	908

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Reepham Road (N)	0.20	4.33	0.3	A	211	211
B - Broadland Northway (E)	0.37	2.04	0.6	A	1078	1078
C - Reepham Road (S)	0.35	5.59	0.5	A	350	350
D - Broadland Northway (W)	0.32	1.85	0.5	A	908	908

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	211	53	965	1047	0.202	210	209	0.0	0.3	4.315	A
B - Broadland Northway (E)	1078	270	238	2892	0.373	1076	937	0.0	0.6	2.032	A
C - Reepham Road (S)	350	88	998	995	0.352	348	316	0.0	0.5	5.545	A
D - Broadland Northway (W)	908	227	268	2888	0.317	908	1078	0.0	0.5	1.847	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	211	53	967	1046	0.202	211	210	0.3	0.3	4.330	A
B - Broadland Northway (E)	1078	270	239	2892	0.373	1078	939	0.6	0.6	2.038	A
C - Reepham Road (S)	350	88	1000	994	0.352	350	317	0.5	0.5	5.588	A
D - Broadland Northway (W)	908	227	289	2887	0.317	908	1081	0.5	0.5	1.850	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	211	53	967	1046	0.202	211	210	0.3	0.3	4.330	A
B - Broadland Northway (E)	1078	270	239	2892	0.373	1078	939	0.6	0.6	2.038	A
C - Reepham Road (S)	350	88	1000	994	0.352	350	317	0.5	0.5	5.588	A
D - Broadland Northway (W)	908	227	289	2887	0.317	908	1081	0.5	0.5	1.850	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	211	53	967	1046	0.202	211	210	0.3	0.3	4.330	A
B - Broadland Northway (E)	1078	270	239	2892	0.373	1078	939	0.6	0.6	2.038	A
C - Reepham Road (S)	350	88	1000	994	0.352	350	317	0.5	0.5	5.588	A
D - Broadland Northway (W)	908	227	289	2887	0.317	908	1081	0.5	0.5	1.850	A

2029DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J19	Broadland Northway/ Reepham Road	Standard Roundabout		A, B, C, D	2.98	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.98	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2029DS	AM	FLAT	07:15	08:15	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Reepham Road (N)		FLAT	✓	269	100.000
B - Broadland Northway (E)		FLAT	✓	1078	100.000
C - Reepham Road (S)		FLAT	✓	280	100.000
D - Broadland Northway (W)		FLAT	✓	1348	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
	A - Reepham Road (N)	0	157	112	0
	B - Broadland Northway (E)	79	0	51	948
	C - Reepham Road (S)	74	108	0	99
	D - Broadland Northway (W)	0	1291	58	0

Proportions

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
	A - Reepham Road (N)	0.00	0.58
	B - Broadland Northway (E)	0.07	0.00
	C - Reepham Road (S)	0.26	0.38
	D - Broadland Northway (W)	0.00	0.96

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
From	A - Reepham Road (N)	0	4	1	0
	B - Broadland Northway (E)	7	0	0	3
	C - Reepham Road (S)	0	0	0	1
	D - Broadland Northway (W)	0	4	0	0

Average PCU Per Veh

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
From	A - Reepham Road (N)	1.000	1.041
	B - Broadland Northway (E)	1.068	1.000
	C - Reepham Road (S)	1.000	1.000
	D - Broadland Northway (W)	1.000	1.036

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:15-07:30	A - Reepham Road (N)	269	276
	B - Broadland Northway (E)	1078	1115
	C - Reepham Road (S)	280	281
	D - Broadland Northway (W)	1348	1394
07:30-07:45	A - Reepham Road (N)	269	276
	B - Broadland Northway (E)	1078	1115
	C - Reepham Road (S)	280	281
	D - Broadland Northway (W)	1348	1394
07:45-08:00	A - Reepham Road (N)	269	276
	B - Broadland Northway (E)	1078	1115
	C - Reepham Road (S)	280	281
	D - Broadland Northway (W)	1348	1394
08:00-08:15	A - Reepham Road (N)	269	276
	B - Broadland Northway (E)	1078	1115
	C - Reepham Road (S)	280	281
	D - Broadland Northway (W)	1348	1394

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Reepham Road (N)	0.33	6.70	0.5	A	276	276
B - Broadland Northway (E)	0.38	2.04	0.6	A	1115	1115
C - Reepham Road (S)	0.29	5.26	0.4	A	281	281
D - Broadland Northway (W)	0.49	2.52	1.0	A	1394	1394

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	276	69	1497	830	0.333	274	157	0.0	0.5	6.632	A
B - Broadland Northway (E)	1115	279	170	2937	0.380	1112	1602	0.0	0.6	2.038	A
C - Reepham Road (S)	281	70	1061	969	0.290	280	221	0.0	0.4	5.235	A
D - Broadland Northway (W)	1394	349	264	2871	0.466	1390	1077	0.0	1.0	2.509	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	276	69	1502	828	0.333	276	158	0.5	0.5	6.701	A
B - Broadland Northway (E)	1115	279	171	2937	0.380	1115	1607	0.6	0.6	2.044	A
C - Reepham Road (S)	281	70	1064	968	0.291	281	222	0.4	0.4	5.262	A
D - Broadland Northway (W)	1394	349	265	2870	0.486	1394	1080	1.0	1.0	2.522	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	276	69	1502	828	0.333	276	158	0.5	0.5	6.701	A
B - Broadland Northway (E)	1115	279	171	2937	0.380	1115	1607	0.6	0.6	2.044	A
C - Reepham Road (S)	281	70	1064	968	0.291	281	222	0.4	0.4	5.262	A
D - Broadland Northway (W)	1394	349	265	2870	0.486	1394	1080	1.0	1.0	2.522	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	276	69	1502	828	0.333	276	158	0.5	0.5	6.701	A
B - Broadland Northway (E)	1115	279	171	2937	0.380	1115	1607	0.6	0.6	2.044	A
C - Reepham Road (S)	281	70	1064	968	0.291	281	222	0.4	0.4	5.262	A
D - Broadland Northway (W)	1394	349	265	2870	0.486	1394	1080	1.0	1.0	2.522	A

2029DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J19	Broadland Northway/ Reepham Road	Standard Roundabout		A, B, C, D	2.58	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.58	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2029DS	PM	FLAT	16:45	17:45	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Reepham Road (N)		FLAT	✓	204	100.000
B - Broadland Northway (E)		FLAT	✓	1132	100.000
C - Reepham Road (S)		FLAT	✓	212	100.000
D - Broadland Northway (W)		FLAT	✓	1193	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
	A - Reepham Road (N)	0	94	110	0
	B - Broadland Northway (E)	137	0	81	914
	C - Reepham Road (S)	43	64	0	105
	D - Broadland Northway (W)	0	1001	192	0

Proportions

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
	A - Reepham Road (N)	0.00	0.46
	B - Broadland Northway (E)	0.12	0.00
	C - Reepham Road (S)	0.20	0.30
	D - Broadland Northway (W)	0.00	0.84

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
From	A - Reepham Road (N)	0	0	1	0
	B - Broadland Northway (E)	7	0	0	2
	C - Reepham Road (S)	0	0	0	0
	D - Broadland Northway (W)	0	1	0	0

Average PCU Per Veh

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
From	A - Reepham Road (N)	1.000	1.000
	B - Broadland Northway (E)	1.073	1.000
	C - Reepham Road (S)	1.000	1.000
	D - Broadland Northway (W)	1.000	1.007

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - Reepham Road (N)	204	205
	B - Broadland Northway (E)	1132	1160
	C - Reepham Road (S)	212	212
	D - Broadland Northway (W)	1193	1200
17:00-17:15	A - Reepham Road (N)	204	205
	B - Broadland Northway (E)	1132	1160
	C - Reepham Road (S)	212	212
	D - Broadland Northway (W)	1193	1200
17:15-17:30	A - Reepham Road (N)	204	205
	B - Broadland Northway (E)	1132	1160
	C - Reepham Road (S)	212	212
	D - Broadland Northway (W)	1193	1200
17:30-17:45	A - Reepham Road (N)	204	205
	B - Broadland Northway (E)	1132	1160
	C - Reepham Road (S)	212	212
	D - Broadland Northway (W)	1193	1200

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Reepham Road (N)	0.22	5.02	0.3	A	205	205
B - Broadland Northway (E)	0.41	2.18	0.7	A	1160	1160
C - Reepham Road (S)	0.22	4.80	0.3	A	212	212
D - Broadland Northway (W)	0.42	2.16	0.7	A	1200	1200

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	205	51	1261	926	0.221	204	189	0.0	0.3	5.007	A
B - Broadland Northway (E)	1160	290	302	2851	0.407	1158	1163	0.0	0.7	2.175	A
C - Reepham Road (S)	212	53	1076	963	0.220	211	383	0.0	0.3	4.780	A
D - Broadland Northway (W)	1200	300	253	2878	0.417	1197	1034	0.0	0.7	2.151	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	205	51	1264	925	0.222	205	190	0.3	0.3	5.023	A
B - Broadland Northway (E)	1160	290	303	2850	0.407	1160	1166	0.7	0.7	2.183	A
C - Reepham Road (S)	212	53	1079	962	0.220	212	384	0.3	0.3	4.800	A
D - Broadland Northway (W)	1200	300	254	2877	0.417	1200	1037	0.7	0.7	2.158	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	205	51	1264	925	0.222	205	190	0.3	0.3	5.023	A
B - Broadland Northway (E)	1160	290	303	2850	0.407	1160	1166	0.7	0.7	2.183	A
C - Reepham Road (S)	212	53	1079	962	0.220	212	384	0.3	0.3	4.800	A
D - Broadland Northway (W)	1200	300	254	2877	0.417	1200	1037	0.7	0.7	2.158	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	205	51	1264	925	0.222	205	190	0.3	0.3	5.023	A
B - Broadland Northway (E)	1160	290	303	2850	0.407	1160	1166	0.7	0.7	2.183	A
C - Reepham Road (S)	212	53	1079	962	0.220	212	384	0.3	0.3	4.800	A
D - Broadland Northway (W)	1200	300	254	2877	0.417	1200	1037	0.7	0.7	2.158	A

2029DS_Mitigation, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J19	Broadland Northway/ Reepham Road	Standard Roundabout		A, B, C, D	3.13	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.13	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2029DS_Mitigation	AM	FLAT	07:15	08:15	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Reepham Road (N)		FLAT	✓	240	100.000
B - Broadland Northway (E)		FLAT	✓	1209	100.000
C - Reepham Road (S)		FLAT	✓	290	100.000
D - Broadland Northway (W)		FLAT	✓	1461	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
	A - Reepham Road (N)	0	141	99	0
	B - Broadland Northway (E)	85	0	56	1067
	C - Reepham Road (S)	60	131	0	99
	D - Broadland Northway (W)	0	1397	64	0

Proportions

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
	A - Reepham Road (N)	0.00	0.59
	B - Broadland Northway (E)	0.07	0.00
	C - Reepham Road (S)	0.21	0.45
	D - Broadland Northway (W)	0.00	0.96

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
From	A - Reepham Road (N)	0	4	1	0
	B - Broadland Northway (E)	6	0	0	3
	C - Reepham Road (S)	0	0	0	1
	D - Broadland Northway (W)	0	3	5	0

Average PCU Per Veh

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
From	A - Reepham Road (N)	1.000	1.038
	B - Broadland Northway (E)	1.063	1.000
	C - Reepham Road (S)	1.000	1.000
	D - Broadland Northway (W)	1.000	1.032

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:15-07:30	A - Reepham Road (N)	240	246
	B - Broadland Northway (E)	1209	1246
	C - Reepham Road (S)	290	291
	D - Broadland Northway (W)	1461	1509
07:30-07:45	A - Reepham Road (N)	240	246
	B - Broadland Northway (E)	1209	1246
	C - Reepham Road (S)	290	291
	D - Broadland Northway (W)	1461	1509
07:45-08:00	A - Reepham Road (N)	240	246
	B - Broadland Northway (E)	1209	1246
	C - Reepham Road (S)	290	291
	D - Broadland Northway (W)	1461	1509
08:00-08:15	A - Reepham Road (N)	240	246
	B - Broadland Northway (E)	1209	1246
	C - Reepham Road (S)	290	291
	D - Broadland Northway (W)	1461	1509

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Reepham Road (N)	0.32	7.03	0.5	A	246	246
B - Broadland Northway (E)	0.42	2.19	0.8	A	1246	1246
C - Reepham Road (S)	0.32	5.77	0.5	A	291	291
D - Broadland Northway (W)	0.53	2.75	1.2	A	1509	1509

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	246	62	1635	774	0.318	244	150	0.0	0.5	6.955	A
B - Broadland Northway (E)	1246	312	166	2939	0.424	1243	1713	0.0	0.8	2.184	A
C - Reepham Road (S)	291	73	1187	918	0.317	289	223	0.0	0.5	5.732	A
D - Broadland Northway (W)	1509	377	280	2880	0.528	1505	1196	0.0	1.1	2.734	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	246	62	1640	772	0.319	246	150	0.5	0.5	7.033	A
B - Broadland Northway (E)	1246	312	167	2939	0.424	1246	1719	0.8	0.8	2.192	A
C - Reepham Road (S)	291	73	1190	917	0.317	291	224	0.5	0.5	5.774	A
D - Broadland Northway (W)	1509	377	281	2859	0.528	1509	1199	1.1	1.2	2.753	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	246	62	1640	772	0.319	246	150	0.5	0.5	7.033	A
B - Broadland Northway (E)	1246	312	167	2939	0.424	1246	1719	0.8	0.8	2.192	A
C - Reepham Road (S)	291	73	1190	917	0.317	291	224	0.5	0.5	5.774	A
D - Broadland Northway (W)	1509	377	281	2859	0.528	1509	1199	1.2	1.2	2.753	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	246	62	1640	772	0.319	246	150	0.5	0.5	7.033	A
B - Broadland Northway (E)	1246	312	167	2939	0.424	1246	1719	0.8	0.8	2.192	A
C - Reepham Road (S)	291	73	1190	917	0.317	291	224	0.5	0.5	5.774	A
D - Broadland Northway (W)	1509	377	281	2859	0.528	1509	1199	1.2	1.2	2.753	A

2029DS_Mitigation, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J19	Broadland Northway/ Reepham Road	Standard Roundabout		A, B, C, D	2.75	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.75	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2029DS_Mitigation	PM	FLAT	16:45	17:45	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Reepham Road (N)		FLAT	✓	189	100.000
B - Broadland Northway (E)		FLAT	✓	1226	100.000
C - Reepham Road (S)		FLAT	✓	214	100.000
D - Broadland Northway (W)		FLAT	✓	1372	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
	A - Reepham Road (N)	0	87	102	0
	B - Broadland Northway (E)	145	0	92	989
	C - Reepham Road (S)	40	67	0	107
	D - Broadland Northway (W)	0	1183	189	0

Proportions

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
	A - Reepham Road (N)	0.00	0.46
	B - Broadland Northway (E)	0.12	0.00
	C - Reepham Road (S)	0.19	0.31
	D - Broadland Northway (W)	0.00	0.86

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
From	A - Reepham Road (N)	0	0	1	0
	B - Broadland Northway (E)	7	0	0	2
	C - Reepham Road (S)	0	0	0	0
	D - Broadland Northway (W)	0	1	0	0

Average PCU Per Veh

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
From	A - Reepham Road (N)	1.000	1.000
	B - Broadland Northway (E)	1.069	1.000
	C - Reepham Road (S)	1.000	1.000
	D - Broadland Northway (W)	1.000	1.006

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - Reepham Road (N)	189	190
	B - Broadland Northway (E)	1226	1254
	C - Reepham Road (S)	214	214
	D - Broadland Northway (W)	1372	1379
17:00-17:15	A - Reepham Road (N)	189	190
	B - Broadland Northway (E)	1226	1254
	C - Reepham Road (S)	214	214
	D - Broadland Northway (W)	1372	1379
17:15-17:30	A - Reepham Road (N)	189	190
	B - Broadland Northway (E)	1226	1254
	C - Reepham Road (S)	214	214
	D - Broadland Northway (W)	1372	1379
17:30-17:45	A - Reepham Road (N)	189	190
	B - Broadland Northway (E)	1226	1254
	C - Reepham Road (S)	214	214
	D - Broadland Northway (W)	1372	1379

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Reepham Road (N)	0.22	5.48	0.3	A	190	190
B - Broadland Northway (E)	0.44	2.30	0.8	A	1254	1254
C - Reepham Road (S)	0.23	5.04	0.3	A	214	214
D - Broadland Northway (W)	0.48	2.42	0.9	A	1379	1379

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	190	48	1442	853	0.223	189	194	0.0	0.3	5.444	A
B - Broadland Northway (E)	1254	314	291	2858	0.439	1251	1340	0.0	0.8	2.287	A
C - Reepham Road (S)	214	54	1159	929	0.230	213	383	0.0	0.3	5.018	A
D - Broadland Northway (W)	1379	345	281	2873	0.480	1375	1111	0.0	0.9	2.410	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	190	48	1446	851	0.223	190	195	0.3	0.3	5.475	A
B - Broadland Northway (E)	1254	314	292	2857	0.439	1254	1344	0.8	0.8	2.297	A
C - Reepham Road (S)	214	54	1162	928	0.231	214	384	0.3	0.3	5.042	A
D - Broadland Northway (W)	1379	345	262	2872	0.480	1379	1114	0.9	0.9	2.423	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	190	48	1446	851	0.223	190	195	0.3	0.3	5.475	A
B - Broadland Northway (E)	1254	314	292	2857	0.439	1254	1344	0.8	0.8	2.297	A
C - Reepham Road (S)	214	54	1162	928	0.231	214	384	0.3	0.3	5.042	A
D - Broadland Northway (W)	1379	345	262	2872	0.480	1379	1114	0.9	0.9	2.423	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	190	48	1446	851	0.223	190	195	0.3	0.3	5.475	A
B - Broadland Northway (E)	1254	314	292	2857	0.439	1254	1344	0.8	0.8	2.297	A
C - Reepham Road (S)	214	54	1162	928	0.231	214	384	0.3	0.3	5.042	A
D - Broadland Northway (W)	1379	345	262	2872	0.480	1379	1114	0.9	0.9	2.423	A

2039DM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J19	Broadland Northway/ Reepham Road	Standard Roundabout		A, B, C, D	3.57	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.57	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2039DM	AM	FLAT	07:15	08:15	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Reepham Road (N)		FLAT	✓	424	100.000
B - Broadland Northway (E)		FLAT	✓	893	100.000
C - Reepham Road (S)		FLAT	✓	374	100.000
D - Broadland Northway (W)		FLAT	✓	1222	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
From	A - Reepham Road (N)	0	189	235	0
	B - Broadland Northway (E)	92	0	66	735
	C - Reepham Road (S)	83	225	0	67
	D - Broadland Northway (W)	0	1118	104	0

Proportions

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
From	A - Reepham Road (N)	0.00	0.45
	B - Broadland Northway (E)	0.10	0.00
	C - Reepham Road (S)	0.22	0.60
	D - Broadland Northway (W)	0.00	0.91

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
From	A - Reepham Road (N)	0	3	0	0
	B - Broadland Northway (E)	3	0	0	2
	C - Reepham Road (S)	0	0	0	2
	D - Broadland Northway (W)	0	2	0	0

Average PCU Per Veh

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
From	A - Reepham Road (N)	1.000	1.032
	B - Broadland Northway (E)	1.035	1.000
	C - Reepham Road (S)	1.000	1.000
	D - Broadland Northway (W)	1.000	1.024

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:15-07:30	A - Reepham Road (N)	424	431
	B - Broadland Northway (E)	893	911
	C - Reepham Road (S)	374	376
	D - Broadland Northway (W)	1222	1249
07:30-07:45	A - Reepham Road (N)	424	431
	B - Broadland Northway (E)	893	911
	C - Reepham Road (S)	374	376
	D - Broadland Northway (W)	1222	1249
07:45-08:00	A - Reepham Road (N)	424	431
	B - Broadland Northway (E)	893	911
	C - Reepham Road (S)	374	376
	D - Broadland Northway (W)	1222	1249
08:00-08:15	A - Reepham Road (N)	424	431
	B - Broadland Northway (E)	893	911
	C - Reepham Road (S)	374	376
	D - Broadland Northway (W)	1222	1249

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Reepham Road (N)	0.51	8.95	1.1	A	431	431
B - Broadland Northway (E)	0.32	1.92	0.5	A	911	911
C - Reepham Road (S)	0.36	5.29	0.8	A	376	376
D - Broadland Northway (W)	0.45	2.40	0.8	A	1249	1249

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	431	108	1469	842	0.512	427	177	0.0	1.0	8.740	A
B - Broadland Northway (E)	911	228	338	2827	0.322	909	1558	0.0	0.5	1.912	A
C - Reepham Road (S)	376	94	843	1058	0.355	373	404	0.0	0.5	5.253	A
D - Broadland Northway (W)	1249	312	401	2781	0.449	1246	816	0.0	0.8	2.391	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	431	108	1473	840	0.513	431	178	1.0	1.1	8.951	A
B - Broadland Northway (E)	911	228	340	2826	0.322	911	1564	0.5	0.5	1.916	A
C - Reepham Road (S)	376	94	845	1058	0.355	376	406	0.5	0.5	5.291	A
D - Broadland Northway (W)	1249	312	403	2780	0.449	1249	818	0.8	0.8	2.402	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	431	108	1473	840	0.513	431	178	1.1	1.1	8.953	A
B - Broadland Northway (E)	911	228	340	2826	0.322	911	1564	0.5	0.5	1.916	A
C - Reepham Road (S)	376	94	845	1058	0.355	376	406	0.5	0.6	5.291	A
D - Broadland Northway (W)	1249	312	403	2780	0.449	1249	818	0.8	0.8	2.402	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	431	108	1473	840	0.513	431	178	1.1	1.1	8.955	A
B - Broadland Northway (E)	911	228	340	2826	0.322	911	1564	0.5	0.5	1.916	A
C - Reepham Road (S)	376	94	845	1058	0.355	376	406	0.6	0.6	5.291	A
D - Broadland Northway (W)	1249	312	403	2780	0.449	1249	818	0.8	0.8	2.402	A

2039DM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J19	Broadland Northway/ Reepham Road	Standard Roundabout		A, B, C, D	2.90	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.90	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2039DM	PM	FLAT	16:45	17:45	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Reepham Road (N)		FLAT	✓	223	100.000
B - Broadland Northway (E)		FLAT	✓	1259	100.000
C - Reepham Road (S)		FLAT	✓	368	100.000
D - Broadland Northway (W)		FLAT	✓	970	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
	A - Reepham Road (N)	0	106	117	0
	B - Broadland Northway (E)	154	0	139	966
	C - Reepham Road (S)	65	109	0	194
	D - Broadland Northway (W)	0	832	138	0

Proportions

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
	A - Reepham Road (N)	0.00	0.48
	B - Broadland Northway (E)	0.12	0.00
	C - Reepham Road (S)	0.18	0.30
	D - Broadland Northway (W)	0.00	0.86

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
From	A - Reepham Road (N)	0	0	1	0
	B - Broadland Northway (E)	7	0	0	2
	C - Reepham Road (S)	0	0	0	0
	D - Broadland Northway (W)	0	1	0	0

Average PCU Per Veh

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
From	A - Reepham Road (N)	1.000	1.000
	B - Broadland Northway (E)	1.065	1.000
	C - Reepham Road (S)	1.000	1.000
	D - Broadland Northway (W)	1.000	1.008

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - Reepham Road (N)	223	224
	B - Broadland Northway (E)	1259	1287
	C - Reepham Road (S)	368	368
	D - Broadland Northway (W)	970	977
17:00-17:15	A - Reepham Road (N)	223	224
	B - Broadland Northway (E)	1259	1287
	C - Reepham Road (S)	368	368
	D - Broadland Northway (W)	970	977
17:15-17:30	A - Reepham Road (N)	223	224
	B - Broadland Northway (E)	1259	1287
	C - Reepham Road (S)	368	368
	D - Broadland Northway (W)	970	977
17:30-17:45	A - Reepham Road (N)	223	224
	B - Broadland Northway (E)	1259	1287
	C - Reepham Road (S)	368	368
	D - Broadland Northway (W)	970	977

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Reepham Road (N)	0.22	4.67	0.3	A	224	224
B - Broadland Northway (E)	0.45	2.31	0.8	A	1287	1287
C - Reepham Road (S)	0.39	6.36	0.6	A	368	368
D - Broadland Northway (W)	0.35	1.96	0.5	A	977	977

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	224	56	1083	999	0.225	223	228	0.0	0.3	4.655	A
B - Broadland Northway (E)	1287	322	255	2882	0.447	1284	1051	0.0	0.8	2.299	A
C - Reepham Road (S)	368	92	1145	935	0.394	365	394	0.0	0.6	6.295	A
D - Broadland Northway (W)	977	244	336	2823	0.346	975	1174	0.0	0.5	1.960	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	224	56	1086	998	0.225	224	229	0.3	0.3	4.674	A
B - Broadland Northway (E)	1287	322	256	2881	0.447	1287	1054	0.8	0.8	2.309	A
C - Reepham Road (S)	368	92	1148	934	0.394	368	395	0.6	0.6	6.363	A
D - Broadland Northway (W)	977	244	338	2822	0.346	977	1178	0.5	0.5	1.964	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	224	56	1086	998	0.225	224	229	0.3	0.3	4.674	A
B - Broadland Northway (E)	1287	322	256	2881	0.447	1287	1054	0.8	0.8	2.309	A
C - Reepham Road (S)	368	92	1148	934	0.394	368	395	0.6	0.6	6.363	A
D - Broadland Northway (W)	977	244	338	2822	0.346	977	1178	0.5	0.5	1.964	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	224	56	1086	998	0.225	224	229	0.3	0.3	4.674	A
B - Broadland Northway (E)	1287	322	256	2881	0.447	1287	1054	0.8	0.8	2.309	A
C - Reepham Road (S)	368	92	1148	934	0.394	368	395	0.6	0.6	6.363	A
D - Broadland Northway (W)	977	244	338	2822	0.346	977	1178	0.5	0.5	1.964	A

2039DS, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J19	Broadland Northway/ Reepham Road	Standard Roundabout		A, B, C, D	3.90	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.90	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D9	2039DS	AM	FLAT	07:15	08:15	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Reepham Road (N)		FLAT	✓	361	100.000
B - Broadland Northway (E)		FLAT	✓	1133	100.000
C - Reepham Road (S)		FLAT	✓	321	100.000
D - Broadland Northway (W)		FLAT	✓	1601	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
	A - Reepham Road (N)	0	178	183	0
	B - Broadland Northway (E)	82	0	58	992
	C - Reepham Road (S)	86	135	0	99
	D - Broadland Northway (W)	0	1537	64	0

Proportions

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
	A - Reepham Road (N)	0.00	0.49
	B - Broadland Northway (E)	0.07	0.00
	C - Reepham Road (S)	0.27	0.42
	D - Broadland Northway (W)	0.00	0.96

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
From	A - Reepham Road (N)	0	10	1	0
	B - Broadland Northway (E)	4	0	0	3
	C - Reepham Road (S)	0	0	0	1
	D - Broadland Northway (W)	0	2	10	0

Average PCU Per Veh

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
From	A - Reepham Road (N)	1.000	1.096
	B - Broadland Northway (E)	1.039	1.000
	C - Reepham Road (S)	1.000	1.000
	D - Broadland Northway (W)	1.000	1.020

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:15-07:30	A - Reepham Road (N)	361	381
	B - Broadland Northway (E)	1133	1166
	C - Reepham Road (S)	321	322
	D - Broadland Northway (W)	1601	1638
07:30-07:45	A - Reepham Road (N)	361	381
	B - Broadland Northway (E)	1133	1166
	C - Reepham Road (S)	321	322
	D - Broadland Northway (W)	1601	1638
07:45-08:00	A - Reepham Road (N)	361	381
	B - Broadland Northway (E)	1133	1166
	C - Reepham Road (S)	321	322
	D - Broadland Northway (W)	1601	1638
08:00-08:15	A - Reepham Road (N)	361	381
	B - Broadland Northway (E)	1133	1166
	C - Reepham Road (S)	321	322
	D - Broadland Northway (W)	1601	1638

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Reepham Road (N)	0.53	11.26	1.2	B	381	381
B - Broadland Northway (E)	0.40	2.16	0.7	A	1166	1166
C - Reepham Road (S)	0.34	5.75	0.5	A	322	322
D - Broadland Northway (W)	0.58	3.06	1.4	A	1638	1638

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	381	95	1767	720	0.528	376	171	0.0	1.2	10.888	B
B - Broadland Northway (E)	1166	292	253	2883	0.405	1164	1890	0.0	0.7	2.152	A
C - Reepham Road (S)	322	80	1105	951	0.338	320	312	0.0	0.5	5.703	A
D - Broadland Northway (W)	1638	409	306	2843	0.576	1632	1119	0.0	1.4	3.029	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	381	95	1773	717	0.530	380	172	1.2	1.2	11.254	B
B - Broadland Northway (E)	1166	292	256	2881	0.405	1166	1898	0.7	0.7	2.160	A
C - Reepham Road (S)	322	80	1108	950	0.339	322	314	0.5	0.5	5.749	A
D - Broadland Northway (W)	1638	409	307	2842	0.576	1638	1122	1.4	1.4	3.058	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	381	95	1773	717	0.530	381	172	1.2	1.2	11.257	B
B - Broadland Northway (E)	1166	292	256	2881	0.405	1166	1898	0.7	0.7	2.160	A
C - Reepham Road (S)	322	80	1108	950	0.339	322	314	0.5	0.5	5.749	A
D - Broadland Northway (W)	1638	409	307	2842	0.576	1638	1122	1.4	1.4	3.058	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	381	95	1773	717	0.530	381	172	1.2	1.2	11.261	B
B - Broadland Northway (E)	1166	292	256	2881	0.405	1166	1898	0.7	0.7	2.161	A
C - Reepham Road (S)	322	80	1108	950	0.339	322	314	0.5	0.5	5.749	A
D - Broadland Northway (W)	1638	409	307	2842	0.576	1638	1122	1.4	1.4	3.058	A

2039DS, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J19	Broadland Northway/ Reepham Road	Standard Roundabout		A, B, C, D	3.02	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.02	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D10	2039DS	PM	FLAT	16:45	17:45	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Reepham Road (N)		FLAT	✓	235	100.000
B - Broadland Northway (E)		FLAT	✓	1411	100.000
C - Reepham Road (S)		FLAT	✓	238	100.000
D - Broadland Northway (W)		FLAT	✓	1353	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
	A - Reepham Road (N)	0	115	120	0
	B - Broadland Northway (E)	147	0	128	1135
	C - Reepham Road (S)	43	102	0	93
	D - Broadland Northway (W)	0	1126	227	0

Proportions

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
	A - Reepham Road (N)	0.00	0.49
	B - Broadland Northway (E)	0.10	0.00
	C - Reepham Road (S)	0.18	0.43
	D - Broadland Northway (W)	0.00	0.83

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
From	A - Reepham Road (N)	0	0	1	0
	B - Broadland Northway (E)	7	0	0	2
	C - Reepham Road (S)	0	0	0	0
	D - Broadland Northway (W)	0	1	0	0

Average PCU Per Veh

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
From	A - Reepham Road (N)	1.000	1.000
	B - Broadland Northway (E)	1.068	1.000
	C - Reepham Road (S)	1.000	1.000
	D - Broadland Northway (W)	1.000	1.006

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - Reepham Road (N)	235	236
	B - Broadland Northway (E)	1411	1439
	C - Reepham Road (S)	238	238
	D - Broadland Northway (W)	1353	1360
17:00-17:15	A - Reepham Road (N)	235	236
	B - Broadland Northway (E)	1411	1439
	C - Reepham Road (S)	238	238
	D - Broadland Northway (W)	1353	1360
17:15-17:30	A - Reepham Road (N)	235	236
	B - Broadland Northway (E)	1411	1439
	C - Reepham Road (S)	238	238
	D - Broadland Northway (W)	1353	1360
17:30-17:45	A - Reepham Road (N)	235	236
	B - Broadland Northway (E)	1411	1439
	C - Reepham Road (S)	238	238
	D - Broadland Northway (W)	1353	1360

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Reepham Road (N)	0.28	5.94	0.4	A	236	236
B - Broadland Northway (E)	0.51	2.66	1.1	A	1439	1439
C - Reepham Road (S)	0.27	5.72	0.4	A	238	238
D - Broadland Northway (W)	0.48	2.43	0.9	A	1360	1360

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	236	59	1458	846	0.279	234	199	0.0	0.4	5.894	A
B - Broadland Northway (E)	1439	360	347	2821	0.510	1435	1345	0.0	1.1	2.642	A
C - Reepham Road (S)	238	60	1306	869	0.274	237	475	0.0	0.4	5.685	A
D - Broadland Northway (W)	1360	340	301	2847	0.478	1356	1242	0.0	0.9	2.422	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	238	59	1462	844	0.279	238	200	0.4	0.4	5.938	A
B - Broadland Northway (E)	1439	360	348	2821	0.510	1439	1349	1.1	1.1	2.658	A
C - Reepham Road (S)	238	60	1310	867	0.274	238	477	0.4	0.4	5.720	A
D - Broadland Northway (W)	1360	340	302	2846	0.478	1360	1246	0.9	0.9	2.435	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	238	59	1462	844	0.279	238	200	0.4	0.4	5.938	A
B - Broadland Northway (E)	1439	360	348	2821	0.510	1439	1349	1.1	1.1	2.658	A
C - Reepham Road (S)	238	60	1310	867	0.274	238	477	0.4	0.4	5.720	A
D - Broadland Northway (W)	1360	340	302	2846	0.478	1360	1246	0.9	0.9	2.435	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	238	59	1462	844	0.279	238	200	0.4	0.4	5.938	A
B - Broadland Northway (E)	1439	360	348	2821	0.510	1439	1349	1.1	1.1	2.658	A
C - Reepham Road (S)	238	60	1310	867	0.274	238	477	0.4	0.4	5.720	A
D - Broadland Northway (W)	1360	340	302	2846	0.478	1360	1246	0.9	0.9	2.435	A

2039DS_Mitigation, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J19	Broadland Northway/ Reepham Road	Standard Roundabout		A, B, C, D	4.23	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.23	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D11	2039DS_Mitigation	AM	FLAT	07:15	08:15	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Reepham Road (N)		FLAT	✓	324	100.000
B - Broadland Northway (E)		FLAT	✓	1234	100.000
C - Reepham Road (S)		FLAT	✓	380	100.000
D - Broadland Northway (W)		FLAT	✓	1750	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
	A - Reepham Road (N)	0	149	174	0
	B - Broadland Northway (E)	87	0	72	1075
	C - Reepham Road (S)	72	188	0	99
	D - Broadland Northway (W)	0	1689	60	0

Proportions

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
	A - Reepham Road (N)	0.00	0.46
	B - Broadland Northway (E)	0.07	0.00
	C - Reepham Road (S)	0.20	0.52
	D - Broadland Northway (W)	0.00	0.97

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
From	A - Reepham Road (N)	0	4	1	0
	B - Broadland Northway (E)	5	0	0	3
	C - Reepham Road (S)	0	0	0	1
	D - Broadland Northway (W)	0	3	2	0

Average PCU Per Veh

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
From	A - Reepham Road (N)	1.000	1.040
	B - Broadland Northway (E)	1.053	1.000
	C - Reepham Road (S)	1.000	1.000
	D - Broadland Northway (W)	1.000	1.029

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
07:15-07:30	A - Reepham Road (N)	324	331
	B - Broadland Northway (E)	1234	1269
	C - Reepham Road (S)	360	361
	D - Broadland Northway (W)	1750	1800
07:30-07:45	A - Reepham Road (N)	324	331
	B - Broadland Northway (E)	1234	1269
	C - Reepham Road (S)	360	361
	D - Broadland Northway (W)	1750	1800
07:45-08:00	A - Reepham Road (N)	324	331
	B - Broadland Northway (E)	1234	1269
	C - Reepham Road (S)	360	361
	D - Broadland Northway (W)	1750	1800
08:00-08:15	A - Reepham Road (N)	324	331
	B - Broadland Northway (E)	1234	1269
	C - Reepham Road (S)	360	361
	D - Broadland Northway (W)	1750	1800

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Reepham Road (N)	0.53	12.29	1.1	B	331	331
B - Broadland Northway (E)	0.44	2.28	0.8	A	1269	1269
C - Reepham Road (S)	0.39	6.53	0.7	A	361	361
D - Broadland Northway (W)	0.64	3.65	1.8	A	1800	1800

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	331	83	1979	633	0.522	326	163	0.0	1.1	11.825	B
B - Broadland Northway (E)	1269	317	234	2895	0.438	1266	2071	0.0	0.8	2.270	A
C - Reepham Road (S)	361	90	1194	915	0.394	358	307	0.0	0.6	6.454	A
D - Broadland Northway (W)	1800	450	350	2814	0.640	1793	1202	0.0	1.8	3.600	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	331	83	1988	630	0.525	331	164	1.1	1.1	12.284	B
B - Broadland Northway (E)	1269	317	237	2893	0.439	1269	2082	0.8	0.8	2.279	A
C - Reepham Road (S)	361	90	1197	914	0.395	361	309	0.6	0.6	6.527	A
D - Broadland Northway (W)	1800	450	352	2813	0.640	1800	1206	1.8	1.8	3.654	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	331	83	1988	630	0.525	331	164	1.1	1.1	12.292	B
B - Broadland Northway (E)	1269	317	237	2893	0.439	1269	2082	0.8	0.8	2.279	A
C - Reepham Road (S)	361	90	1197	914	0.395	361	309	0.6	0.7	6.527	A
D - Broadland Northway (W)	1800	450	352	2813	0.640	1800	1206	1.8	1.8	3.654	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	331	83	1988	630	0.525	331	164	1.1	1.1	12.294	B
B - Broadland Northway (E)	1269	317	237	2893	0.439	1269	2082	0.8	0.8	2.279	A
C - Reepham Road (S)	361	90	1197	914	0.395	361	309	0.7	0.7	6.527	A
D - Broadland Northway (W)	1800	450	352	2813	0.640	1800	1206	1.8	1.8	3.654	A

2039DS_Mitigation, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J19	Broadland Northway/ Reepham Road	Standard Roundabout		A, B, C, D	3.23	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.23	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D12	2039DS_Mitigation	PM	FLAT	16:45	17:45	60	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Reepham Road (N)		FLAT	✓	203	100.000
B - Broadland Northway (E)		FLAT	✓	1515	100.000
C - Reepham Road (S)		FLAT	✓	231	100.000
D - Broadland Northway (W)		FLAT	✓	1541	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
	A - Reepham Road (N)	0	98	105	0
	B - Broadland Northway (E)	154	0	141	1220
	C - Reepham Road (S)	41	96	0	94
	D - Broadland Northway (W)	0	1314	227	0

Proportions

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
	A - Reepham Road (N)	0.00	0.48
	B - Broadland Northway (E)	0.10	0.00
	C - Reepham Road (S)	0.18	0.41
	D - Broadland Northway (W)	0.00	0.85

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - Reepham Road (N)	B - Broadland Northway (E)	C - Reepham Road (S)	D - Broadland Northway (W)
From	A - Reepham Road (N)	0	0	1	0
	B - Broadland Northway (E)	7	0	0	1
	C - Reepham Road (S)	0	0	0	0
	D - Broadland Northway (W)	0	1	0	0

Average PCU Per Veh

From		To	
		A - Reepham Road (N)	B - Broadland Northway (E)
From	A - Reepham Road (N)	1.000	1.000
	B - Broadland Northway (E)	1.065	1.000
	C - Reepham Road (S)	1.000	1.000
	D - Broadland Northway (W)	1.000	1.005

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:45-17:00	A - Reepham Road (N)	203	204
	B - Broadland Northway (E)	1515	1543
	C - Reepham Road (S)	231	231
	D - Broadland Northway (W)	1541	1548
17:00-17:15	A - Reepham Road (N)	203	204
	B - Broadland Northway (E)	1515	1543
	C - Reepham Road (S)	231	231
	D - Broadland Northway (W)	1541	1548
17:15-17:30	A - Reepham Road (N)	203	204
	B - Broadland Northway (E)	1515	1543
	C - Reepham Road (S)	231	231
	D - Broadland Northway (W)	1541	1548
17:30-17:45	A - Reepham Road (N)	203	204
	B - Broadland Northway (E)	1515	1543
	C - Reepham Road (S)	231	231
	D - Broadland Northway (W)	1541	1548

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Reepham Road (N)	0.26	6.39	0.4	A	204	204
B - Broadland Northway (E)	0.55	2.85	1.2	A	1543	1543
C - Reepham Road (S)	0.28	6.01	0.4	A	231	231
D - Broadland Northway (W)	0.54	2.78	1.2	A	1548	1548

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	204	51	1638	773	0.264	203	204	0.0	0.4	6.331	A
B - Broadland Northway (E)	1543	386	332	2831	0.545	1538	1509	0.0	1.2	2.827	A
C - Reepham Road (S)	231	58	1398	832	0.277	229	473	0.0	0.4	5.962	A
D - Broadland Northway (W)	1548	387	299	2848	0.543	1543	1328	0.0	1.2	2.761	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	204	51	1643	770	0.265	204	204	0.4	0.4	6.388	A
B - Broadland Northway (E)	1543	386	333	2830	0.545	1543	1514	1.2	1.2	2.849	A
C - Reepham Road (S)	231	58	1402	830	0.278	231	475	0.4	0.4	6.008	A
D - Broadland Northway (W)	1548	387	300	2847	0.544	1548	1333	1.2	1.2	2.782	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	204	51	1643	770	0.265	204	204	0.4	0.4	6.388	A
B - Broadland Northway (E)	1543	386	333	2830	0.545	1543	1514	1.2	1.2	2.849	A
C - Reepham Road (S)	231	58	1402	830	0.278	231	475	0.4	0.4	6.008	A
D - Broadland Northway (W)	1548	387	300	2847	0.544	1548	1333	1.2	1.2	2.782	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Reepham Road (N)	204	51	1643	770	0.265	204	204	0.4	0.4	6.388	A
B - Broadland Northway (E)	1543	386	333	2830	0.545	1543	1514	1.2	1.2	2.849	A
C - Reepham Road (S)	231	58	1402	830	0.278	231	475	0.4	0.4	6.008	A
D - Broadland Northway (W)	1548	387	300	2847	0.544	1548	1333	1.2	1.2	2.782	A

